

# ALLIED RADIO

EVERYTHING IN

# ELECTRONICS

CATALOG 190

# 1960

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OUR 39<sup>th</sup> YEAR

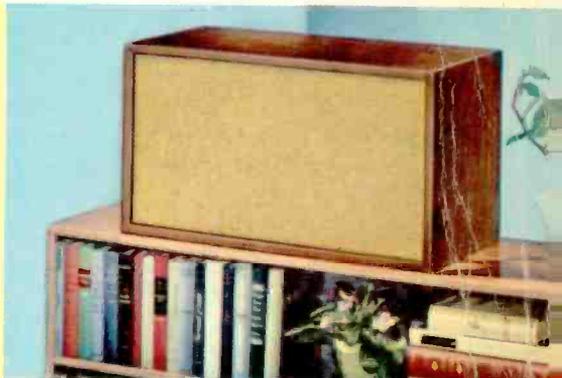


100 N. WESTERN AVENUE

CHICAGO 80, ILLINOIS

TELEPHONE: HAYmarket 1-6800

# ALLIED presents popular-priced quality hi-fi speaker equipment by *Electro-Voice*



## NEW E-V *Leyton* 2-WAY HIGH-COMPLIANCE SPEAKER SYSTEM

NET  
**\$82.81**  
\$5.00 Down

Brilliant performance keynotes the Leyton 2-way speaker system. Consists of a 12" high-compliance woofer, 8" high-frequency speaker and crossover network—installed in a space-saving, sealed air-tight enclosure that's perfect for low-boy or highboy use. Built-in level control for perfect tonal balance. Wide-range response from 40-14,000 cps. Ideal for use in pairs for stereo.

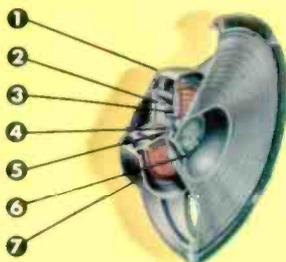
Employs "air cushion" principle for thrilling bass reproduction. Rigidly constructed of 3/4" plywood, the Leyton is beautifully finished on four sides in hand-rubbed, fine furniture veneers to match any decor. Capacity, 35 watts. Size, 14 1/2"x24x12". Specify mahogany or walnut when ordering. Shpg. wt., 29 lbs. 70 DU 265C. NET ..... 82.81

## BUDGET-PRICED WOLVERINE HIGH-FIDELITY SPEAKERS



New LS-15  
Full-Range  
15-Inch  
Speaker

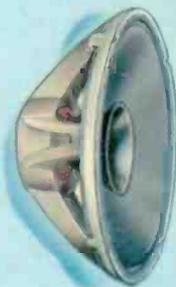
### Special Highlights



#### Check these quality features:

- ① Heavy-Duty Die-Cast Frame
- ② Efficient, Slug-Type Magnet
- ③ Edgewise-Wound Voice Coil
- ④ Durable Fiberglass Coll Form
- ⑤ Linear, Long-Throw Voice Coil
- ⑥ Radax Construction—2 Cones
- ⑦ Low-Silhouette Frame—Exceptionally Easy to Mount

EXPAND YOUR SPEAKER SYSTEM TO TWO OR THREE-WAY OPERATION WITH WOLVERINE "STEP-UP" KITS. SEE PAGE 59 FOR DETAILS



LS-12



LS-8

NET  
**\$24.01**  
\$2.00 Down

Introducing E-V's newest addition to their Wolverine line—a beautifully performing, full-range 15" speaker at moderate cost. Offers precision, Radax 2-cone design, heavy-duty construction for permanent centering of all elements, plus all of the outstanding features listed at right. Delivers exceptionally clean hi-fi response from 30 to 13,000 cps. It's perfect for use in pairs for economy-priced stereo music systems. Capacity, 20 watts. Impedance, 8 ohms. Depth, 6 11/32". Shpg. wt., 12 lbs. 70 DX 264. NET ..... 24.01

MODEL LS-12. A stand-out value, this extremely popular, precision-made 12" hi-fi speaker is so reasonably priced, you can purchase *two* for stereo and still pocket appreciable savings over the cost of many other single speakers! Features Radax construction; rugged, die-cast frame; and the many other features that have made this distinguished unit a "best seller" from the time of its introduction. Response, 40 to 13,000 cps. Capacity, 20 watts. Imp. 8 ohms. Only 3 1/2" deep. Shpg. wt., 5 1/4 lbs. 82 DX 850. NET ..... 19.11

MODEL LS-8. Same as LS-12, but 8" in diameter. Response, 50-13,000 cps. Shpg. wt., 4 1/2 lbs. 82 D 851. NET ..... 17.64

For Complete Listings of Electro-Voice Hi-Fi Components, See Pages 58-63

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# ALLIED guarantees your complete satisfaction

Every item you buy from us must satisfy in every way—or we want you to return it at once for exchange, repair or refund.

- We guarantee to bring you the world's largest stocks of quality electronic equipment at lowest prices.
- We guarantee to give you the benefit of any price reductions made after this catalog is printed.
- We guarantee that our merchandise conforms to the standards of the Electronic Industries Association and will perform as intended for such apparatus.

## You Get Every Buying Advantage at ALLIED

We save you time and money because our complete stocks permit you to fill all of your electronic needs conveniently and economically from one source. And you always buy at ALLIED at the lowest prevailing market prices.

We ship speedily and safely from the world's largest stocks of electronic equipment. Your orders are speeded to you by a skilled organization with a record of 39 years of dependable service.

We satisfy you completely with expert personal help, intelligent service and the full resources that have made us the World's Leading Electronic Supply House.

### 15-Day Trial and Money-Back Guarantee

Order any high-fidelity component, recorder, test instrument, P. A. amplifier, communications unit or any other equipment—on our regular terms. Try it under your own operating conditions. Then, if within 15 days you are not completely satisfied, return the equipment to us, and we will refund your full purchase price, less only transportation charges. This Guarantee is further backed by the Electronic Industries Association Warranty against defects in materials and workmanship. Your complete satisfaction is guaranteed.

### BUY ON ALLIED'S EASY TERMS

Everything in this catalog is sold on easy terms. You pay only \$2.00 down on orders of \$20.00 to \$50.00, \$5.00 down on orders of \$50.00 to \$200.00, and \$10.00 down on orders over \$200.00. Take up to 24 months to pay, if you wish. Open an Easy Pay account. See page 436 for full details.

*Everything in Electronics from One Dependable Source*

## ALLIED RADIO

100 N. WESTERN AVE., CHICAGO 80, ILL.

phone: HAYmarket 1-6800



THE WORLD'S LARGEST ELECTRONIC SUPPLY HOUSE

our 39th year of service

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# ALLIED *Serves You Best*

## IN ELECTRONIC SUPPLY



### WORLD'S LARGEST STOCKS AT YOUR COMMAND

Allied brings you the world's largest stocks of quality parts and equipment for electronic servicing, high-fidelity, television, radio, public address, Amateur radio and virtually every other type of electronic application. Our modern building on a full city block, provides 187,000 square feet of floor space.

More than 2000 feet of conveyor belts and nearly 1½ miles of pneumatic tubing carry transactions and merchandise on a rapid order-filling schedule. Over 40,000 separate stock items from all leading manufacturers are constantly in stock. One order to Allied will cover all your needs.



### PERSONAL HELP AND CONSULTING SERVICE

Our greatest satisfaction comes from giving you personal service. Your orders and letters are intelligently handled by people who take a genuine interest in your needs. You are invited to consult with our technical experts for guidance in your selection of merchandise. For friendly service, for guaranteed quality and value, make your selections from this catalog—recognized everywhere as the most widely used Electronics Supply Guide.



### FASTEST SERVICE IN ELECTRONIC SUPPLY

Allied's combination of the world's largest stocks, most modern facilities and skilled, *interested* people to handle your orders, assures you of fast, dependable service. Personal inspection and a final check before your order is carefully packed, insure accuracy. You save time, money and effort when you use this catalog for Everything in Electronics. Whether you order by mail or phone, you can always depend on Allied to serve you fastest and best.

# ALLIED is America's Stereo High Fidelity Center

bringing you **TRUE HIGH-FIDELITY** which is attainable  
only with **TRUE HIGH-FIDELITY COMPONENTS**

just as a Stradivarius violin creates

tonal quality of unsurpassed beauty . . .



## TRUE HIGH-FIDELITY COMPONENTS

re-create vivid, living music in your own home  
with a quality that approaches perfection



### COMPONENTS GIVE YOU THESE GREAT ADVANTAGES:

**Better Sound For Your Money.** High-fidelity components are designed and built by specialized audio manufacturers, whose primary interest lies in the creation of fine audio reproducing instruments.

**More Flexibility.** Compact in size, you can place your system components anywhere—and you can add new components at your convenience. Your *component* system will never be obsolete.

**No Need for Expensive Furniture.** Attractively styled for lasting beauty, high-fidelity components can be openly displayed in any room decor or installed in existing furniture.

**Acoustically Designed Speaker Enclosures.** Only genuine hi-fi speaker enclosures are acoustically designed to produce rich, natural bass—and only approved designs are used. These include bass reflex, folded horn, infinite baffle and ducted port types, plus the new high-compliance systems.

from a phono cartridge to a complete stereo hi-fi system . . .

**YOU GET THE MOST FOR  
YOUR HI-FI DOLLAR AT  
ALLIED . . .**



**we sell more hi-fi than anyone else in the world**  
**BECAUSE WE GIVE YOU EVERY BUYING ADVANTAGE:**

• **lowest, money-saving prices**

Allied offers the lowest prevailing market prices on all of the leading quality high-fidelity components, with special savings on our matched high-fidelity music systems, and on Allied's own, widely acclaimed Knight products. You can always be sure of maximum possible value for your hi-fi dollar, regardless of the size of your budget, when you do business with Allied.

• **easiest pay terms**

Allied's *New Easy Pay Plan* now makes it easier than ever to fit Hi-Fi into your budget. *You pay only \$2.00 down* on components priced from \$20.00 to \$50.00—*only \$5.00 down* on components or music systems priced from \$50.01 to \$200.00—*only \$10.00 down* on orders over \$200.00! For details, see Time Payment page.



• **superb lab-tested quality**

Our quality-control engineers subject all hi-fi components to be listed in our Catalog to a series of exacting tests. Every aspect of performance and dependability is evaluated. Thus, when you select your high-fidelity music components at Allied, you do so with the knowledge that you are buying quality, lab-tested products that will perform as described, to bring you the ultimate in musical enjoyment.

• **world's largest selection**

This catalog presents *everything* in hi-fi—amplifiers, tuners, speakers, record changers, turntables, cartridges, tape recorders, etc. The famous names, standard brands, and hard-to-get accessories—all are *always in stock, ready for prompt shipment to you.*



• **expert consulting service**

Our audio specialists are glad to answer any question on high-fidelity. Should you desire any assistance in choosing a hi-fi music system to fit your taste and your budget, feel free to write to Allied's Audio Division—your inquiry will bring a prompt reply.



• **best buy KNIGHT units**

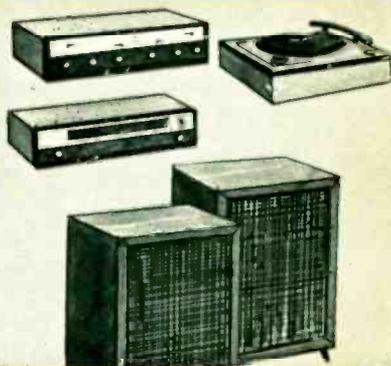
Created by Allied, these splendid components are honored as the finest values in high-fidelity. Years ahead in styling and in advanced features, Knight hi-fi components offer you the best in musical reproduction at prices well below comparable units. For your complete protection, all Knight hi-fi components are unconditionally guaranteed for one full year.

buy with absolute confidence. Allied has been the leading source of quality music system components since the very beginning of High-Fidelity. Virtually all of the hi-fi components listed in this Catalog, are made in the U.S., with the exception of some items made in England, Sweden, Switzerland and Italy. In all cases, country of origin is indicated if other than U.S. Make your selection from the pages that follow and get the finest in high-fidelity systems and components—*your complete satisfaction is absolutely guaranteed.*

**15-day trial and money-back guarantee**

Any high-fidelity system or separate component you buy at Allied may be tested under the terms of our trial guarantee. Place your order on our regular cash terms or use our Easy Pay Plan. Then check performance in your own home. If within 15 days you are not fully satisfied, return the equipment to us. We will refund your full purchase price (less only transportation charges). In addition, every high-fidelity component is also covered by the regular EIA warranty against defects in material and workmanship—for your complete protection.

...the exclusive



**A SYSTEM SAVES YOU MOST**

Each of our systems is priced to save you money *over the total price of the same individual components if purchased separately.* The exact amount you save is always stated in our descriptions.

**EXAMPLE:**

An Allied hi-fi system, with catalog prices of individual units:

<b>Knight KN-520 20-Watt Stereo Amplifier</b> .....	\$62.50
<b>Garrard RC121-II Record Changer and Base</b> .....	46.16
<b>Shure M7D Cartridge with Diamond Needle</b> .....	23.52
<b>2—Electro-Voice "Leyton" Speaker Systems</b> .....	165.62

<b>TOTAL REGULAR CATALOG PRICE</b>	<b>\$297.80</b>
<b>ALLIED SYSTEM PRICE</b>	<b>249.50</b>
<b>YOU SAVE</b>	<b>\$48.30</b>

**YOU GET MATCHED AND BALANCED, TRUE HIGH-FIDELITY COMPONENTS**

True hi-fi components are made only by manufacturers who are experts in audio design. Allied's systems consist *only* of components produced by these distinguished specialists, to assure you of the finest music reproduction possible. Components used in systems in each price category are carefully evaluated so that they match in quality and operating characteristics. Their performance as an integrated system is then verified by comparative listening tests on our renowned *Auditioner Control Console.*



**EASIEST TERMS AVAILABLE TO FIT YOUR BUDGET**

# ALLIED SYSTEM PLAN SAVES YOU MONEY . . .

**IT'S THE HI-FI PURCHASE PLAN THAT GIVES YOU THE MOST IN EVERY WAY**

On the following pages, we present an outstanding selection of Allied High-Fidelity Music Systems. Two types of systems are offered: systems for playing records and those which also include a tuner for reproduction of musical broadcasts. Each has been carefully selected to give you the most for your hi-fi dollar. Make it a point to check these splendid values.

If you prefer to make up a system of components of your own choice—study the pages where individual units are described, make a list of the components you desire, and send a letter to our Audio Division asking for a special System Plan price quotation. You'll get a prompt reply—and all "bonus" features described below will be included in your personally selected system.

## YOU GET ALL THESE ADVANTAGES WITH EVERY ALLIED SYSTEM:

### ALL CABLES INCLUDED



You get everything you need in one shipment—nothing else to buy. Speaker cables are a generous 15 feet in length—let you place your speaker system for optimum performance.

### COLOR-CODED CONNECTIONS



No technical knowledge is required. Your Allied music system is easiest to connect. Simply match the colors on receptacles to the colors on cables and plugs—you can't go wrong!

### EASY INSTRUCTIONS



To help you get the most enjoyment from the hi-fi system of your choice, an easy-to-understand instruction booklet is included. Clearly written, it features valuable information on correct placement and phasing of speakers for best stereo acoustic effect; use of controls for balancing music reproduction to suit your personal tastes; adding accessory equipment; etc. Compiled by experts, the booklet not only takes all the mystery out of high-fidelity, but it will help you realize the full capabilities of your system. Manufacturer's booklets are also included.

### PRE-SET STYLUS PRESSURE



The stylus pressure of the turntable or record changer arm is always carefully pre-set by Allied's technicians to assure correct operation. There are no critical adjustments for you to make.

### FREE 12" STEREO RECORD

Every Allied system includes a 12" stereo demonstration record containing a variety of musical selections, plus such dynamic sounds as a train in motion, a ping-pong game, etc. A hi-fi "showpiece" for demonstrating the amazing realism of stereo music systems.



## HERE ARE THE 3 EASY WAYS TO MAKE YOUR SYSTEM PLAN SELECTION

1

### CHOOSE FROM ALLIED'S LISTINGS OF MATCHED HI-FI SYSTEMS

Select an Allied-recommended music system from among the many excellent systems that are listed on the following pages. Savings are greatest in this listing, and you're almost certain to find a music system that will satisfy your personal taste and budget. Pay particular attention to the new Knight systems. Knight super-value components are created by Allied to provide you with unprecedented quality in music reproduction, at low cost. No matter which name brands you prefer, you'll find a perfectly matched Allied High-Fidelity Music System waiting for you.

2

### MAKE YOUR OWN SUBSTITUTION IN ANY ALLIED HI-FI SYSTEM

Select an Allied-recommended music system and take advantage of the substitution privilege. You may replace any one component used in any Allied hi-fi system, with another one of your own selection. For example, you may substitute any single one of these typical components: amplifier, tuner, record changer, cartridge or stereo speakers (two speakers or a pair of speaker systems, count as one component). Just add or subtract the difference in catalog price—that's all there is to it!

3

### WRITE US FOR A MONEY-SAVING SYSTEM PRICE ON COMPONENTS OF YOUR OWN CHOICE

Write to us for a price quotation on a music system made up of components of your own choice. Study the pages where individual hi-fi units are described—make a list of the components you prefer—then send a letter to our Audio Division asking for a special System Plan price quotation.

Our audio consultants will review every customer-selected system for proper matching of components (speakers correctly matched to enclosures, etc.), to assure you of peak performance.

Should you want to add a tuner, tape recorder or other accessory to any of the Allied Phono Systems shown, specify the system and the component you wish to add to it, and ask for a quotation on the entire system. Inquiries are promptly answered.

*Allied Radio  
Chosen System*  
*Dear Sir:*  
*I am very much  
interested in  
the components  
shown on page 7  
of your  
brochure.  
I wish to  
know the price  
of a system  
including  
a tuner,  
tape recorder,  
and a pair of  
speakers.  
Thank you.*



# KNIGHT "Honored for Value" STEREO HI-FI SYSTEMS



## Allied's Supreme-Value "Metropolitan II" Stereo Hi-Fi Systems

AS LOW AS

# \$239<sup>50</sup>

**YOU GET THE MOST FOR YOUR MONEY IN EVERY WAY**

- Systems Include Newest, Top-Performing Knight Stereophonic Components
- Brilliant Stereo Reproduction, with Complete, Highly Versatile Control Facilities
- Employ Compact, Beautifully Finished Speaker Systems in Mahogany, Lined Oak or Walnut
- You Can Add Harmonizing, Optional Equipment at Your Convenience

**PHONO SYSTEM ONLY.** The magnificent, new "Metropolitan II" stereo phono system offers you fabulous sound from stereo records at a genuinely modest price. Designed around new Knight stereo components, this system not only brings you a savings of \$27.67, but it completely outperforms and outclasses commercial console phonographs costing much more.

You get 40 watts of rated stereo power, with a peak power of 80 watts. More than enough to virtually fill your home with dazzling stereo sound, under any acoustic conditions. In addition, the amplifier features every control necessary for regulating stereo and monophonic sound to an infinite degree.

Here is what this remarkable system includes: new Knight KN-740 40-Watt Stereo Amplifier; new Garrard RC-210 Record Changer with Base; new Knight KN-500 Magnetic Stereo Cartridge installed in plug-in head, and with .0007" Diamond Needle; two new Knight KN-818 Deluxe 8" Speakers in KN-1280 Enclosures; plus color-coded cables and complete instructions.

The KN-740 amplifier features: luxurious styling in beige, leather-tone plastic permanently bonded to its case, with gold and charcoal-brown panel; easy-to-use controls including single-knob balance and selector controls and stereo-monophonic switch; and inputs to accommodate any stereo or monophonic signal source.

The new Garrard RC210 changer provides smooth and gentle record changing—together with the new Knight KN-500 stereo cartridge, it offers superb performance. The two KN-818 speakers provide amazingly rich, natural bass in their hand-rubbed, genuine veneer-finished enclosures.

Changer base and speaker enclosures in mahogany, lined oak or walnut—specify choice. Shpg. wt. 132 lbs.  
25 HF 513. Only \$10.00 Down. NET..... 239.50

**FM-AM-PHONO SYSTEM.** Includes all of the components above, plus the new Knight KN-135 Deluxe Stereo FM-AM Tuner. This splendid tuner offers you styling to match the KN-740 amplifier, and a host of other fine features. System savings are \$35.17! Shpg. wt., 145 lbs.  
25 HF 514. Only \$10.00 Down. NET..... 311.50

### WITH ALTERNATE SPEAKERS

**PHONO SYSTEM ONLY.** Includes all of the components of the Phono System at left, but with two Knight KN-2000 Speaker Systems, in place of the KN-280 speaker systems. \$28.87 savings! Specify finishes. Wt., 144 lbs.  
25 HF 515. Only \$10.00 Down. NET..... 309.50

**FM-AM-PHONO SYSTEM.** Same as Phono System above, but with the addition of the new Knight KN-135 Deluxe Stereo FM-AM Tuner. \$35.17 savings! Wt., 157 lbs.  
25 HF 516. Only \$10.00 Down. NET..... 382.70

# Truly Incomparable Stereo Value! You Get: Full 40 Watts Output . . . Magnetic Cartridge . . . High-Compliance Speakers . . . First Time at this Price!

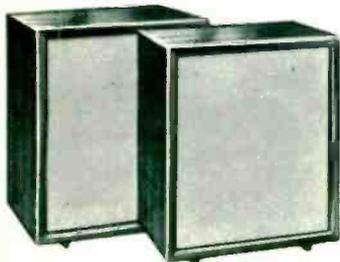
## SUPERB COMPONENTS



**NEW KNIGHT KN-740 40-WATT STEREO AMPLIFIER.** 80 watt peak stereo power. 10 important controls.



**NEW GARRARD RC-210 CHANGER.** Latest model in a famous line . . . with the new Knight KN-500 cartridge installed—tops in performance.



**KN-1280 ENCLOSURES.** With KN-818 8" speaker installed—deliver rich, low bass.

## OPTIONAL STEREO TUNER



**NEW KNIGHT KN-135 DELUXE FM-AM STEREO TUNER.** None finer! Custom styling—super-sensitive circuitry.

## ALTERNATE SPEAKER SYSTEMS



**KNIGHT KN-2000 SPEAKER SYSTEMS.** Marvelous sound; and compact size.

**SUPERBLY STYLED AND PERFECTLY BALANCED.** Carefully selected for their ability to provide excitingly real stereo sound, "Metropolitan II" phono system components also have other "plus" features. Each of the Knight components carries a full, one year guarantee—and their beautiful styling will enhance any decor. The KN-740 amplifier features a beige, leather-tone vinyl plastic permanently bonded to its case, with the panel styled in charcoal-brown and gleaming gold. The KN-1280 enclosures are available in choice of three lustrous furniture veneers, and their unobtrusive size does not disguise their ability to provide "big" sound in any room. You'll be enchanted with this extra-value system!

## SEE HOW YOU SAVE ON THIS COMPLETE SYSTEM:

New Knight KN-740 40-Watt Stereo Amplifier . . . . .	\$99.50
New Garrard RC-210 Record Changer with Base . . . . .	53.02
New Knight KN-500 Cartridge with Diamond Needle . . . . .	16.85
2—New Knight KN-818 8" Speakers in KN-1280 Enclosures . . . . .	97.80

**TOTAL REGULAR CATALOG PRICE . . . . . \$267.17**

**ALLIED SYSTEM PRICE . . . . . 239.50**

**YOU SAVE . . . . . \$27.67**

Comparable savings are also made when you order the "Metropolitan II" system with alternate speakers or optional FM-AM stereo tuner.

## If You Prefer a Furniture Installation, Select This Handsome, Low-Cost Knight KN-1400 Equipment Cabinet



Available  
in Kit Form  
or Assembled

Beautifully finished by professional craftsmen, the Knight KN-1400 Equipment Cabinet accommodates all the components of the "Metropolitan II" Phono System (and optional tuner as well), except the two KN-280 speaker systems.

Features smart, tastefully styled brass door handles; magnetic door latches; ventilated rear panel to permit a free flow of air around system components; and stylish, tapered legs tipped with brass ferrules. Compartment sizes: *top*, 6" high, 32½" wide, 14½" deep; *left*, 13" high, 18¼" wide, 14½" deep; *right*, 13" high, 13½" wide, 14½" deep. Overall size, 27x33½x16". In mahogany, limed oak or walnut veneers—specify choice. Shpg. wt., 65 lbs.

79 DZ 267C. KN-1400K Cabinet Kit. NET . . . . .	59.95
79 DZ 266C. KN-1400 Assembled Cabinet. NET . . . . .	74.95



# KNIGHT "Honored for Value" STEREO HI-FI SYSTEMS



New Knight KN-520  
20-Watt Stereo  
Amplifier



Collaro TSC-740 Changer  
with Base and KN-500  
Magnetic Cartridge



2—Knight KN-808 8"  
Speakers installed in  
Argos TSE-1 Enclosures

## Allied's Budget-Priced Stereo Hi-Fi Systems

EASY TO AFFORD . . . PERFORMANCE AND VALUE THAT ONLY ALLIED CAN DELIVER

AS LOW AS

**\$154<sup>50</sup>**

\$5.00 Down

- Full 20-Watt Stereo Power Output; 40-Watt Peaks
- Renowned British Record Changer with Base
- New KN-500 Stereo Cartridge with Diamond Needle
- Highly Popular Knight 8" Hi-Fi Speakers
- Acoustically Matched, Compact Speaker Enclosures

Unsurpassed value! Designed to provide you with the splendor of stereo sound—in your home—at lowest possible cost. This value-packed system consists of matched units, selected by Allied's experts, at savings of \$23.69 (Phono System), over the cost of the individual components purchased separately! You get centralized control facilities—separate bass, treble and volume control for each channel; plus two 10-watt channels for any stereo use, or full 20-watt output for monophonic sound sources.

Check these outstanding components: new Knight KN-520 20-Watt Stereo Amplifier; Collaro TSC-740 Record Changer with Base; new Knight KN-500 Stereo Magnetic Cartridge with .0007" Diamond Needle; two Knight KN-808 8" Hi-Fi Speakers, installed in two Argos TSE-1 Shelf-Size Speaker Enclosures; all cables and connectors. Changer base in mahogany, walnut or blonde; speaker enclosures in mahogany, walnut or blonde leatherette—specify.

**PHONO SYSTEM ONLY. Save \$23.69!** Includes all of the components described above, ready to plug in and play. Specify changer base and enclosure finishes. 78 lbs.  
25 HF 517. \$5.00 Down. NET. 154.50

**FM-PHONO SYSTEM. Save \$25.19!** Includes all components described above, plus the Knight KN-140 Basic FM Tuner. Specify changer base and enclosure finishes. 86 lbs.  
25 HF 518. \$5.00 Down. NET. 197.50

### WITH ALTERNATE SPEAKER SYSTEM

**PHONO SYSTEM ONLY. Save \$23.69!** Includes all components in the Phono System above, but with two new Knight KN-820 12" Speakers and KN-1280 Enclosures, in place of the two KN-808 speakers and TSE-1 enclosures. Specify mahogany, walnut or blonde finishes. 116 lbs.  
25 HF 519. \$5.00 Down. NET. 196.06

**FM-PHONO SYSTEM. Save \$25.19!** Includes all of the components of the Phono System described at left, with the addition of the Knight KN-140 Basic FM Tuner. Specify choice of mahogany, walnut or blonde changer base and enclosure finishes when ordering. Shpg. wt., 124 lbs.  
25 HF 520. \$10 Down. NET. 239.06

### Best-Buy Knight Monophonic



KN-810 "Mini-Fi"  
10-Watt  
Amplifier



Argos TSE-1  
Enclosure



KN-808  
8" Speaker

Garrard  
RC121-II  
Changer

G. E. VR-227  
Cartridge



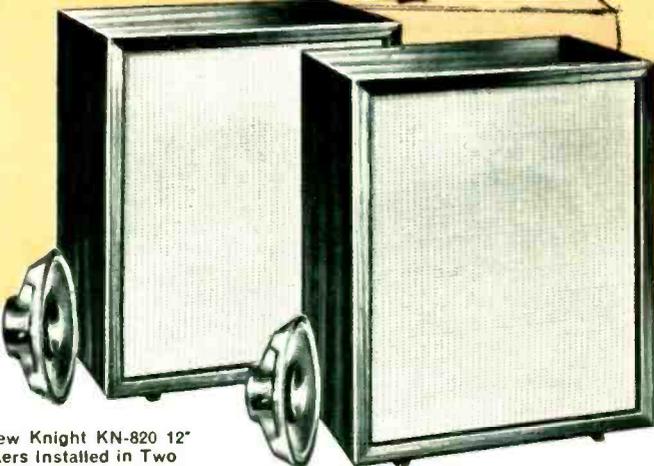
OPTIONAL  
SPEAKER  
New Knight  
KN-818 8"  
Deluxe  
Speaker



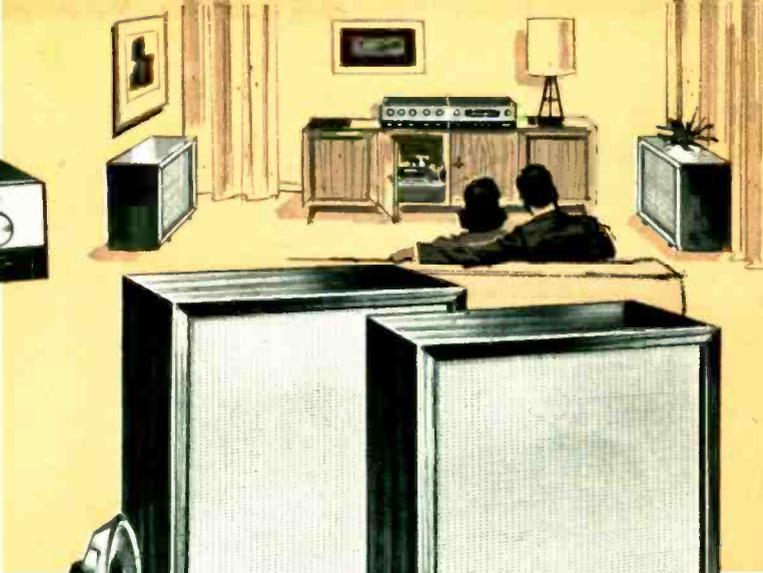
New Knight KN-728  
28-Watt Stereo  
Amplifier



Webcor 1042-1 Changer  
with Metal Base, Ceramic  
Stereo Cartridge and  
.0007" Diamond Needle



Two New Knight KN-820 12"  
Speakers Installed in Two  
Knight KN-1280 Enclosures



## Spectacular-Value Allied Stereo Hi-Fi Systems

BRILLIANT STEREPHONIC PERFORMANCE AT IMPRESSIVE SAVINGS

### High-Fidelity System

**\$99<sup>50</sup>**

\$5.00  
Down  
On Our  
Easy-Pay  
Plan

- Knight 10-Watt HI-Fi Amplifier
- Garrard Changer with Base
- G.E. Cartridge; Diamond Stylus
- Knight 8" Speaker Installed In Argos Enclosure

Priced within everyone's reach, this carefully selected array of components includes: Knight KN-610 "Mini-Fi" 10-Watt Amplifier; Garrard RC121-II Changer with Base; G.E. VR-227 Cartridge with .0007" Diamond Stylus; and Knight KN-808 8" Speaker installed in Argos TSE-1 enclosure. Amplifier has inputs for tuner or tape deck. Changer base in mahogany, blonde or walnut; enclosure in mahogany, blonde or walnut leatherette—specify choice. 50 lbs.

25 HF 530. NET. . . . . 99.50

WITH KNIGHT KN-818 SPEAKER. As above, but with the new, deluxe Knight KN-818 8" Speaker, instead of the KN-808. Shpg. wt., 53 lbs.

25 HF 531. NET. . . . . 108.50

AS LOW AS

**\$199<sup>95</sup>**

\$5.00 Down

- Full 28-Watt Stereo Power Output; 56 Watts Peak
- Rumble Filter—Loudness Contour—Other Controls
- Highly Reliable Record Changer with Metal Base
- Ceramic Stereo Cartridge with Diamond Needle
- 12" Speakers in Fine Furniture Enclosures

A stereo record-playing music ensemble that's beyond comparison at this unusually low price. You save \$24.49 (Phono System), on the total cost of components purchased separately, and you get all of the "extra" features that are a distinguishing characteristic of Allied-selected music systems. In addition to a complete array of stereo controls, the KN-728 amplifier features single-knob balance control, rumble filter, loudness contour switch and expertly engineered circuitry that provides splendid high-fidelity sound. Components offered in this fine system are: new Knight KN-728 28-Watt Stereo Amplifier; Webcor Model 1042-1 Record Changer with Metal Base, and Ceramic Stereo Cartridge with .0007" Diamond Needle; and two new Knight KN-820 12" Speakers, installed in two Knight KN-1280 Enclosures. Speaker enclosures in mahogany, blonde or walnut furniture veneers—specify choice when ordering.

**PHONO SYSTEM ONLY. Save \$24.49!** Includes all of the components described above. Metal changer base is styled in brown. Specify choice of enclosure finishes when ordering. Shpg. wt., 110 lbs.  
25 HF 525. \$5 Down. NET. . . 199.95

**FM-AM-PHONO SYSTEM. Save \$31.44!** Includes all of the components described above, plus the new Knight KN-135 FM-AM Stereo Tuner. Specify choice of enclosure finishes when ordering. Shpg. wt. 123 lbs.  
25 HF 526. \$10 Down. NET. . 272.50

### WITH ALTERNATE SPEAKER SYSTEM

**PHONO SYSTEM ONLY. Save \$24.49!** Includes all components in Phono System above, but with two KN-800A 12" Speakers and KN-1265 Enclosures, in place of KN-820 speakers and KN-1280 enclosures. Specify enclosure finishes. Wt., 128 lbs.  
25 HF 527. \$10 Down. NET. . 305.05

**FM-AM-PHONO SYSTEM. Save \$31.44!** Includes all of the components of the Phono System described at left, with the addition of the new Knight KN-135 FM-AM Stereo Tuner. Specify speaker enclosure finishes when ordering. Shpg. wt., 141 lbs.  
25 HF 528. \$10 Down. NET. . 377.60



# KNIGHT "Honored for Value" STEREO HI-FI SYSTEMS



## Allied's Finest . . . Deluxe-Quality 60-Watt Stereo Systems

AS LOW AS

# \$439<sup>50</sup>

Save up to \$60.26

### THE FINEST IN PERFORMANCE AT SUBSTANTIAL SAVINGS

- Packs an Extra Power Punch—Full 60 Watts of Stereo Realism
- Deluxe Garrard Record Changer—New Knight Stereo Magnetic Cartridge
- Knight 12" High-Compliance Speakers—Acoustically Matched Enclosures
- Exclusive Knight "Luxury Styling" Blends with Modern Decors

**PHONO SYSTEM.** Allied proudly presents a brilliant array of superb hi-fi components in this choice stereophonic system—and at savings of \$60.26 over the total cost of components purchased separately. A real connoisseur's dream, this deluxe combination offers every desirable stereo function and control. Truly an ensemble designed with the future in mind, it opens the door to the magic experience of concert-hall realism right in your home. Brings you the most breathtaking music reproduction you have ever heard.

System includes: new Knight KN-760 Deluxe 60-Watt Stereo Amplifier; Garrard RC88-4 4-Speed Record Changer with Base; new Knight KN-500 Magnetic Stereo Cartridge installed in Garrard Plug-In Head, with Single, .0007" Diamond Stylus; two new Knight KN-600HC High Compliance Speakers installed in two new Knight KN-1275 Enclosures; color-coded cables and plugs; 2—15' lengths of speaker cable; complete instructions; and FREE 12" LP Stereo Demonstration Record.

A full set of dual stereo controls is featured in the Knight KN-760 amplifier—stereo or monophonic sound can be regulated to suit personal listening tastes and room acoustics. The new Knight KN-500 magnetic cartridge plays stereo as well as monophonic records. The KN-1275 enclosures with the Knight KN-600HC high-

compliance speakers provide excellent stereo reproduction. Changer base and speaker enclosures available in mahogany, limed oak, or walnut—specify choice of finish when ordering. Shpg. wt., 253 lbs.

25 HF 521. *Only \$10.00 Down.* NET..... 439.50

**FM-AM-PHONO SYSTEM.** *Save \$73.71!* All components above with the addition of the new Knight KN-125 Deluxe Stereo FM-AM Tuner. Shpg. wt., 274 lbs.

25 HF 522. *Only \$10.00 Down.* NET..... 566.00

### WITH ALTERNATE SPEAKERS

**PHONO SYSTEM.** *Save \$60.26!* Includes all of the premium-quality high-fidelity components of the Phono System above (No. 25 HF 521), but with two new Knight KN-3000 High-Compliance Speaker Systems in place of KN-600HC speakers and KN-1275 enclosures. The KN-3000 units are available in 3 handsome furniture finishes—specify mahogany, limed oak or walnut when ordering. Shpg. wt., 155 lbs.

25 HF 523. *Only \$10.00 Down.* NET..... 428.70

**FM-AM-PHONO SYSTEM.** *Save \$73.71.* As above, but with the addition of the new Knight KN-125 Deluxe Stereo FM-AM Tuner. Shpg. wt., 176 lbs.

25 HF 524. *Only \$10.00 Down.* NET..... 555.20

Equipment Cabinet Not Included in Above Systems—See Page 11 for Selection

**Knight Hi-Fi Components are Unconditionally Guaranteed for One Full Year**

# Now... At Allied's Special System Plan Price... You Can Afford the Very Best: Thrilling Full-Dimensional Stereo Hi-Fi with Famous Knight Components

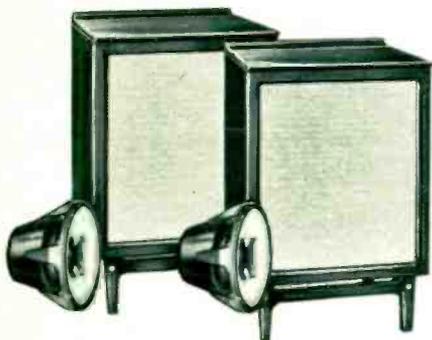
## A SUPERB BLEND OF THE FINEST IN STEREO HIGH-FIDELITY COMPONENTS



**Knight KN-760 Amplifier.** Features a tremendous 152-watt peak-power reserve; unique stereo separation control; less than 1% distortion.



**Garrard RC88-4 Changer and Knight KN-500 Stereo Cartridge.** Famous British-made automatic record changer with Knight magnetic stereo cartridge installed. Includes base.



**Knight KN-600HC Speakers and KN-1275 Enclosures.** High-compliance 12" coaxial speakers in handsome, acoustically correct enclosures.

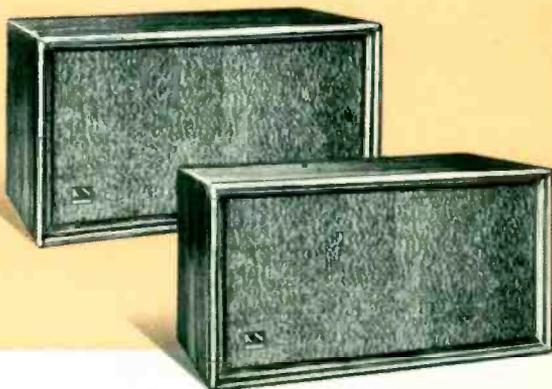
### OPTIONAL STEREO FM-AM TUNER



**Knight KN-125 Tuner.** Permits thrilling reception of FM and AM stereo as well as monophonic broadcasts. Matches KN-760 amplifier.

Allied's famous System Plan—plus the unsurpassed value of Allied's own Knight components—combine to bring you giant double savings in every Knight music system. Whether you choose from Allied's carefully selected music ensembles, or make up your own combination—you'll get the finest for less with Knight. See introductory pages at beginning of this section for information on how to save the most on the system of your choice.

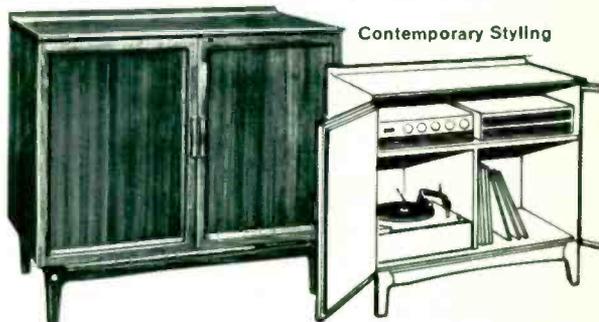
## ALTERNATE SPEAKER SYSTEMS



### KN-3000 High-Compliance Speaker Systems

Ideal where space is at a premium, these precision-built bookshelf speaker systems represent an excellent alternate choice for the stereo system on facing page. Incorporating special, high-compliance 12" woofers and twin push-pull electrostatic radiators, KN-3000 systems faithfully reproduce the mightiest orchestral crescendos. Finished on four sides in lustrous veneers.

### Matching Knight KN-1500 Equipment Cabinet



This smartly designed cabinet, offered in either kit form or assembled, is ideal for housing the components of the stereo system on the preceding page. Perfectly matches the KN-1275 enclosures. Sturdily constructed of hard-wood panels throughout—finished in lustrous hand-rubbed furniture veneers. In mahogany, limed oak or walnut—specify. Wt., 80 lbs.  
70 DZ 412C. KN-1500K Cabinet Kit. NET..... 84.50  
70 DZ 409C. KN-1500 Assembled Cabinet. NET.... 99.50

Use Express Shipment for Hi-Fi Equipment 11

featuring:  
**SCOTT**  
**ELECTRO-VOICE**  
**GARRARD**  
**SHURE**

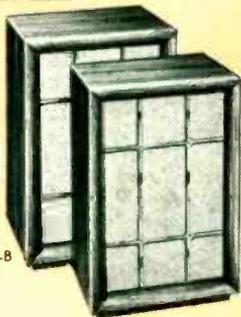


Scott 299 Stereo Amplifier



Garrard 4HF,  
Shure M3D

2—E-V 12TRX-B  
Speakers in  
"Marquis"  
Enclosures



**40-Watt Stereo Hi-Fi Phono System**

Scott 299 40-Watt Stereo Amplifier & Case	\$209.90
Garrard 4HF Manual Player & Base	63.26
Shure M3D Cartridge—Diamond Needle	44.10
2—Electro-Voice 12TRX-B 12" Speakers	129.36
2—Electro-Voice "Marquis" Enclosures	123.48
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>\$570.10</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>479.00</b>
<b>YOU SAVE</b>	<b>\$91.10</b>

**SYSTEM PRICE**  
**\$479<sup>00</sup>**  
 \$10.00 Down

Sparkling stereo sound with this excellent array of matched and balanced components! Scott's 299 amplifier delivers 20 watts per channel for 40-watt stereo output, with 80 watts of peak power. The smooth-operating Garrard 4HF manual player is a "first-choice" unit—together with Shure's M3D cartridge, you'll get breathtaking sound from your stereo records. Matched E-V speakers and enclosures sound as good as they look! Player base and speaker enclosures in mahogany, limed oak or walnut—specify choice when ordering. Shpg. wt., 183 lbs.  
 25 HF 501. *Only \$10.00 Down.* NET 479.00

featuring:  
**SCOTT**  
**STEPHENS**  
**GARRARD**  
**SHURE**

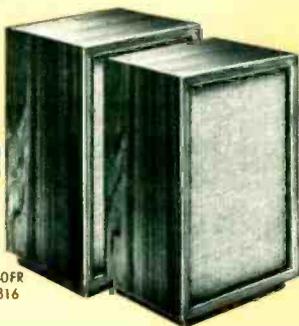


Scott 222 Stereo Amplifier



Garrard RC-210  
with Shure M7D

2—Stephens 80FR  
Speakers in 816  
Enclosures



**24-Watt Stereo Hi-Fi Phono System**

Scott 222 24-Watt Stereo Amplifier & Case	\$149.90
Garrard RC-210 Record Changer & Base	53.02
Shure M7D Cartridge—Diamond Needle	23.52
2—Stephens 80FR 8" Speakers	67.00
2—Stephens 816 Enclosures	103.00
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>\$396.44</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>321.50</b>
<b>YOU SAVE</b>	<b>\$74.94</b>

**SYSTEM PRICE**  
**\$321<sup>50</sup>**  
 \$10.00 Down

A superb stereo record playing system, composed of some of the finest components available. Scott's beautifully styled 222 amplifier delivers 12 watts output per channel for 24 watts of stereo power, with 48 watts peak power. The RC-210 is Garrard's newest record changer—a model of precision design. Shure's M7D cartridge with .0007" diamond needle, is a first-quality unit. The Stephens combination of 8" high-compliance speakers in 816 enclosures, provides splendid stereo sound. Changer base and enclosures in mahogany, blonde or walnut—specify choice. Shpg. wt., 142 lbs.  
 25 HF 502. *Only \$10.00 Down.* NET 321.50

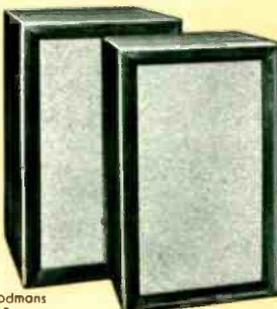
featuring:  
**PILOT**  
**GOODMANS**  
**LESA**  
**G.E.**



Pilot 240 Stereo Amplifier



Lesla CD2/21  
G. E. VR-227



**40-Watt Stereo Hi-Fi Phono System**

Pilot 240 40-Watt Stereo Amplifier	\$129.50
Lesla CD2/21 Record Changer & Base	44.70
G.E. VR-227 Cartridge—Diamond Needle	24.45
2—Goodmans Dual-Axiette Speaker Systems	165.62
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>\$364.27</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>284.95</b>
<b>YOU SAVE</b>	<b>\$79.32</b>

**SYSTEM PRICE**  
**\$284<sup>95</sup>**  
 \$10.00 Down

A magnificent system, composed of selected audio components. Pilot's 240 amplifier provides 20 watt output per channel for 40 watts of stereo sound, with 80 watts peak power. The Italian-made Lesla changer combines attractive continental styling with efficient design. Goodmans Dual-Axiette speaker systems feature 8" speakers with free-edge cones. Changer base and enclosures in mahogany, blonde or walnut—specify choice. Wt., 160 lbs.  
 25 HF 503. *Only \$10.00 Down.* NET 284.95

# FAMOUS-NAME COMPONENTS . . .

## 30-Watt Stereo Hi-Fi Phono System

Bell 3030 30-Watt Stereo Amplifier & Case . . . . .	\$146.95
Collaro TC99 Record Changer & Base . . . . .	63.26
G.E. VR-227 Cartridge—Diamond Needle . . . . .	24.45
2—Wharfedale WS-2 Speaker Systems . . . . .	175.42
<b>TOTAL REGULAR CATALOG PRICE . . . . .</b>	<b>\$410.08</b>
<b>ALLIED SYSTEM PLAN PRICE . . . . .</b>	<b>329.50</b>

**YOU SAVE \$80.58**

**SYSTEM PRICE**  
**\$329.50**

**\$10.00 Down**

Thrilling sound from stereo records is yours with this highly efficient system. You get 15-watt output from each channel of Bell's 3030 amplifier, for 30 watts of stereo sound, with 60 watts peak power. The deluxe Collaro changer provides velvet-smooth record changing; top-rated G.E. cartridge has .0007" diamond needle. The British-made Wharfedale speaker systems offer clean, natural sound. Changer base and enclosures in mahogany, blonde or walnut—specify choice. Shpg. wt., 95 lbs.  
25 HF 510. *Only \$10.00 Down. NET.* 329.50

featuring:

**BELL  
COLLARO  
G.E.  
WHARFEDALE**



Bell 3030 Stereo Amplifier



2—Wharfedale WS-2 Speaker Systems



Collaro TC99 with G.E. Cartridge

## Low-Cost 14-Watt Stereo Hi-Fi Phono System

Bell 2212 14-Watt Stereo Amplifier . . . . .	\$ 68.55
Garrard "T" Mk. II Manual Player & Base . . . . .	36.36
Sonotone 8T4A-SD Ceramic Turnover Cartridge with Diamond and Sapphire Needles . . . . .	11.47
2—Knight KN-808 8" Speakers . . . . .	19.90
2—Argos TSE-1 Leatherette-Finish Enclosures . . . . .	32.34
<b>TOTAL REGULAR CATALOG PRICE . . . . .</b>	<b>\$168.62</b>
<b>ALLIED SYSTEM PLAN PRICE . . . . .</b>	<b>129.95</b>

**YOU SAVE \$38.67**

**SYSTEM PRICE**  
**\$129.95**

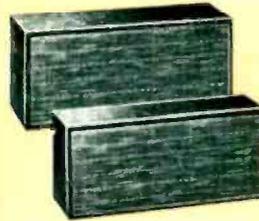
**\$5.00 Down**

Here's a beautifully performing stereo system at remarkably low cost. Bell's 2212 amplifier provides 14-watt output per channel for 28 watts of stereo sound, with 28 watts peak power. Garrard's famous "T" manual player is exceptionally smooth and quiet; Sonotone's turnover cartridge has .0007" diamond and .003" sapphire needles. Player base and speaker enclosures in mahogany, blonde or walnut—specify choice. Shpg. wt., 75 lbs.  
26 HF 511. *Only \$5.00 Down. NET.* 129.95

featuring:

**BELL  
GARRARD  
SONOTONE  
KNIGHT**

Bell 2212 Stereo Amplifier



2—Knight KN-808 Speakers in Argos TSE-1 Enclosures



Garrard "T" Mk II

## Deluxe 40-Watt Stereo Hi-Fi Phono System

Fisher X-101A 40-Watt Stereo Amplifier & Case . . . . .	\$219.45
Rek-O-Kut N33H "Rondine" Turntable . . . . .	69.95
Rek-O-Kut 120 Pickup Arm . . . . .	27.95
Pickering 380-A Cartridge—Diamond Needle . . . . .	34.50
2—Acoustic Research AR-2 Speaker Systems . . . . .	192.00
<b>TOTAL REGULAR CATALOG PRICE . . . . .</b>	<b>\$543.85</b>
<b>ALLIED SYSTEM PLAN PRICE . . . . .</b>	<b>469.00</b>

**YOU SAVE \$74.85**

**SYSTEM PRICE**  
**\$469.00**

**\$10.00 Down**

Magnificent stereo sound from this deluxe system! Fisher's X-101A amplifier delivers 20 watts output per channel for 40 watts of stereo sound, with 80 watts peak output. The N33H turntable employs a hysteresis-synchronous motor of latest design for extremely reliable operation. The lightweight 120 pickup arm features tubular aluminum construction for low tracking pressures. AR-2 speaker systems provide remarkably clean sound. Less turntable base. Enclosures in mahogany, blonde or walnut—specify choice. Wt., 126 lbs.  
25 HF 512. *Only \$10.00 Down. NET.* 469.00

featuring:

**FISHER  
REK-O-KUT  
PICKERING  
AR**

Fisher X-101A Stereo Amplifier



2—Acoustic Research AR-2 Speaker Systems



Rek-O-Kut N33H Turntable



120 Arm, Pickering 380-A Cartridge

**YOU MAY MAKE ONE SUBSTITUTION** when selecting your system—either the amplifier, changer, cartridge or speakers (2 speaker systems count as 1 component), for a unit of your choice. Add or subtract the difference in price.

**15-DAY TRIAL. MONEY-BACK GUARANTEE** with any Allied Music System. Place your order on our regular cash terms or use our Easy Pay Plan—your complete satisfaction is absolutely guaranteed.

**SAVE!****DO-IT-YOURSELF STEREO HI-FI SYSTEMS**

**SAVE TWO WAYS!** You save more—in two important ways—when you choose an Allied-recommended "do-it-yourself" stereo hi-fi system. You save because the cost of these systems is far less than the total cost of components purchased separately—and you save by assembling the amplifier yourself. The same excellent quality is yours in these easy-to-assemble Knight-Kit components as in quality factory-built units!



Knight-Kit 20-Watt Stereo Amplifier Kit



Knight-Kit 20-Watt Stereo Amplifier Kit

Garrard RC121-II Changer and Base, G.E. VR-227 Cartridge, Diamond Needle



Garrard RC121-II Changer &amp; Base, Shure M7D Cartridge, Diamond Needle



Free 12" Stereo Demonstration Record Included

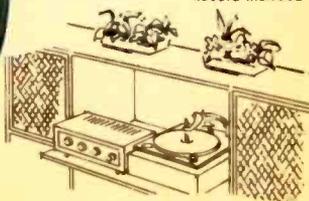
Free 12" Stereo Demonstration Record



2—New Knight KN-820 Wide-Range 12" Speakers



2—Argos TSE-1 Shelf-Type Speaker Enclosures



2—Knight KN-808 8" Speakers:

**20-Watt Stereo Hi-Fi Phono System**

Knight-Kit 20-Watt Stereo Amplifier Kit.....	\$44.50
Garrard RC121-II Record Changer & Base.....	46.16
G.E. VR-227 Cartridge—Diamond Needle.....	24.45
2—Knight KN-820 12" Speakers.....	33.90

TOTAL REGULAR CATALOG PRICE..... \$149.01  
 ALLIED SYSTEM PLAN PRICE..... 129.95

**YOU SAVE.....\$19.06**

**20-Watt Stereo Phono System with Enclosures**

Knight-Kit 20-Watt Stereo Amplifier Kit.....	\$44.50
Garrard RC121-II Record Changer and Base.....	46.16
Shure M7D Cartridge—Diamond Needle.....	23.52
2—Knight KN-808 Full-Range 8" Speakers.....	19.90
2—Argos TSE-1 Speaker Enclosures.....	32.34

TOTAL REGULAR CATALOG PRICE..... \$166.42  
 ALLIED SYSTEM PLAN PRICE..... 139.95

**YOU SAVE.....\$26.47**

**SYSTEM PRICE**

**\$129.95**

\$5.00 Down

This beautifully balanced stereo phono system, featuring the popular Knight-Kit 20-watt stereo amplifier kit, is perfect for the budget-minded "do-it-yourselfer". You get 20 watts rated power, stereo or monophonic, with 40 watts peak power. A versatile, advanced-design unit, the amplifier features a complete array of controls and inputs. Flexible, and employing newest components, this system is a remarkable value! There's no easier or more exciting way to become the proud owner of a stereophonic music system.

Garrard's RC121-II 4-speed changer offers ultra-smooth, quiet operation—together with G.E.'s new VR-227 cartridge (.0007" diamond needle), it captures the full magic of any stereo or monophonic microgroove record. You can install the new KN-820 12" speakers in enclosures you've built yourself (system includes a booklet with detailed construction plans on 8 enclosures), or custom-install the speakers in walls of the room. Changer base in mahogany, limed oak or walnut—specify choice. Shpg. wt., 47 lbs.  
 25 HF 535. Only \$5.00 Down. NET.....129.95

**SYSTEM PRICE**

**\$139.95**

\$5.00 Down

Selected by Allied's experts to bring you the most for your money, this super-value stereo ensemble features the Knight-Kit 20-watt stereo amplifier for 20 watts of stereo or monophonic sound with any signal source.

Other components employed in this system were carefully chosen to complement the quality of this fine amplifier. Shure's M7D "Custom Dynetic" magnetic stereo cartridge employs a .0007" diamond needle, and has been singled out by audio authorities as an outstanding stereophonic component. The Garrard RC121-II changer is considered a hi-fi standard.

The two Knight KN-808 speakers, made in Great Britain to Allied's rigid specifications, have enjoyed enormous success. In the compact Argos enclosures, they provide rich, distinct bass reproduction. Enclosures can be used in horizontal or upright position—perfect for mounting on shelves in small apartments. Changer base in mahogany, blonde or walnut leatherette—specify. Shpg. wt., 75 lbs.  
 25 HF 536. Only \$5.00 Down. NET.....139.95

# FEATURING QUALITY *knight-kit* COMPONENTS

**EASIEST TO ASSEMBLE.** No previous experience is necessary to assemble any Knight-Kit and have a fully professional unit. You get world-famous, crystal-clear instructions . . . and only Knight-Kits give you the big plus in kit design, "Convenience-Engineering"; resistors carded and numbered for easy selection; wires pre-cut to correct lengths, stripped and color-coded; small parts packaged in "see-through" plastic bags; etc.



Knight-Kit 20-Watt Stereo Amplifier Kit



Knight-Kit 40-Watt Stereo Amplifier Kit



Garrard RC121-II Changer and Base, G.E. VR-227 Cartridge, Diamond Needle

Free 12" Stereo Demonstration Record

2—Knight KN-2000 High-Compliance Speaker Systems

## Deluxe 20-Watt Stereo Phono System

Knight-Kit 20-Watt Stereo Amplifier Kit	\$44.50
Collaro TSC-740 Record Changer & Base	46.60
Knight KN-500 Cartridge—Diamond Needle	16.85
2—Knight KN-820 12" Speakers	33.90
2—Knight KN-1280 Floor-Type Enclosures	59.90
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>\$201.75</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>179.50</b>

**YOU SAVE . . . \$ 22.25**

### SYSTEM PRICE

**\$179.50**

\$5.00 Down

This first-choice system features the Knight-Kit 20-watt stereo amplifier kit, and it is matched in quality by an outstanding array of components. Together they form an unexcelled stereo phono system that will provide you with years of listening enjoyment. The British-made Collaro TSC-740 is a smooth operating record changer that has gained wide acceptance among hi-fans. With Knight's new KN-500 stereo cartridge installed in plug-in head, it provides sparkling sound from stereo records.

The new Knight KN-820 12" speakers represent a pace-setting standard of design in units of this size. They incorporate a number of highly desirable new features—two-cone construction for optimum reproduction of sound; heavy, die-cast frames; etc. Together with the full-size, floor-type KN-1280 enclosures, they provide magnificent, living sound. Available in choice of finish to complement any decor. Changer base and speaker enclosures in mahogany, blonde or walnut—specify choice when ordering. Shpg. wt., 111 lbs.

25 HF 537. Only \$5.00 Down. NET. 179.50

## Deluxe 40-Watt Stereo Phono System

Knight-Kit 40-Watt Stereo Amplifier Kit	\$79.50
Garrard RC121-II Record Changer & Base	46.16
G.E. VR-227 Cartridge—Diamond Needle	24.45
2—Knight KN-2000 Speaker Systems	169.00
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>\$319.11</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>285.00</b>

**YOU SAVE . . . \$ 34.11**

### SYSTEM PRICE

**\$285.00**

\$10.00 Down

The finest in musical entertainment from stereo records can be yours with this splendid system. The new, deluxe Knight-Kit amplifier has a rated power output of 40 watts stereo or monophonic with 80-watt peak power output. Easy to build, it features inputs and controls for handling any stereo or monophonic signal source. In addition, a special center channel output permits connecting another speaker for use in 3-channel stereo systems, or for connecting an extension speaker. Styling leaves nothing to be desired. Giant savings, too—you save by assembling the amplifier, and you save on Allied's famous system price.

G.E.'s latest cartridge, installed in the plug-in head of the Garrard RC121-II changer, makes an important contribution to overall system performance. Superb sound is assured by the use of the two Knight KN-2000 3-way, high-compliance speaker systems. Finished on all 4 sides, these units can be used in upright or horizontal positions. Changer base and speaker systems in mahogany, blonde or walnut—specify choice when ordering. Shpg. wt., 138 lbs.

25 HF 538. Only \$10.00 Down. NET. 285.00



# DO-IT-YOURSELF STEREO HI-FI SYSTEM BUYS

YOU SAVE MORE THIS TRULY EASY WAY



Knight-Kit  
40-Watt Stereo  
Amplifier Kit

Garrard RC88-4  
Changer & Base,  
Knight KN-500  
Cartridge



Free 12" Stereo  
Demonstration  
Record



2—Knight KN-600HC  
12" High-Compliance  
Coaxial Speakers



## 40-Watt System with High-Compliance Speakers

Knight-Kit 40-Watt Stereo Amplifier Kit	\$79.50
Garrard RC88-4 Record Changer & Base	63.16
Knight KN-500 Cartridge—Diamond Needle	16.85
2—Knight KN-600HC 12" Coax Speakers	119.90

TOTAL REGULAR CATALOG PRICE \$279.41

ALLIED SYSTEM PLAN PRICE 259.50

YOU SAVE \$19.91

### SYSTEM PRICE

**\$259<sup>50</sup>**

\$10.00 Down

Featuring an amplifier that delivers 40 watts of crisp, undistorted stereo sound, this fine system is composed of carefully matched and balanced components. Amazingly versatile, the Knight-Kit amplifier can accommodate any stereo or monophonic input, and its unique center-channel output feature, will enable you to connect a third speaker for extension use in another room or for filling the "hole in the middle."

Garrard's RC88-4, the dean of high-fidelity record changers, has a well-founded reputation as an instrument of unquestioned quality. With the new KN-500 cartridge installed in its pickup arm, you're assured of splendid reproduction from stereo records. Knight's new KN-600HC 12" speakers are a radical departure from conventional speaker design. Employ a 1/2" thick polystyrene cone, with an axially mounted horn tweeter. You can install the speakers in enclosures you have built yourself (system includes a booklet with detailed construction plans on 8 enclosures); or custom-install the speakers in walls. Changer base in mahogany, blonde or walnut—specify. Wt., 103 lbs.

25 HF 539. Only \$10.00 Down. NET 259.50

## Deluxe 40-Watt Stereo Phono System

Knight-Kit 40-Watt Stereo Amplifier Kit	\$79.50
Garrard RC210 Record Changer & Base	53.02
Pickering 380C Cartridge—Diamond Needle	29.85
2—Knight KN-800A 3-Way 12" Speakers	89.90
2—Knight KN-1265K Speaker Enclosure Kits	79.00

TOTAL REGULAR CATALOG PRICE \$331.27

ALLIED SYSTEM PLAN PRICE 299.50

YOU SAVE \$31.77

### SYSTEM PRICE

**\$299<sup>50</sup>**

\$10.00 Down

Highlighted by the Knight-Kit deluxe 40-watt stereo amplifier, this system employs an array of carefully selected, quality-matched components. You make a substantial savings by building the amplifier and enclosure kits yourself—and you get the benefit of Allied's System Plan savings. Furthermore, you'll enjoy outstanding performance from the amplifier in any stereophonic or monophonic application. Its full 40-watt output assures you of superb music reproduction. Garrard's newest changer, the RC210, provides smooth, quiet operation. Pickering's new 380C cartridge features precise design and undistorted reproduction. The KN-800A speakers offer true 3-way design, with separate elements for reproducing bass, mid-range and treble; KN-1265K enclosure kits are unusually easy to assemble and gracefully styled. Together, these "blue ribbon" Knight components form an unexcelled audio combination. Changer base and enclosure kits in mahogany, blonde or walnut—specify choice when ordering. Shpg. wt., 145 lbs.

25 HF 540. Only \$10.00 Down. NET 299.50



Knight-Kit  
40-Watt Stereo  
Amplifier Kit

Garrard RC210  
Changer & Base,  
Pickering 380C  
Cartridge



Free 12" Stereo  
Demonstration  
Record



2—Knight KN-1265K  
Speaker Enclosure Kits

2—Knight KN-800A  
3-Way 12" Speakers

# featuring quality *knight-kits*

ASSEMBLE YOUR OWN AND ENJOY THE BEST

## Ultra-Deluxe 60-Watt Stereo Phono System

Knight-Kit Deluxe Stereo Preamplifier Kit	..... \$64.95
Knight-Kit 60-Watt Stereo Basic Amplifier Kit	..... 84.50
Rek-O-Kut K-33H Turntable Kit & Base	..... 65.85
Audax 12" Pickup Arm Kit	..... 15.50
Shure M7D Cartridge—Diamond Needle	..... 23.52
2—Knight KN-3000 Speaker Systems	..... 259.00
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>..... \$513.32</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>..... 479.50</b>

**YOU SAVE....\$33.82**

**SYSTEM PRICE** The finest music system employing kits available! You get 60 watts of power for stereo or monophonic use, with 120-watt peak power, from the Knight-Kit basic stereo amplifier; and the deluxe Knight-Kit stereo preamp features controls and inputs for every existing signal source. Additionally, to provide you with a truly substantial savings, a total of 4 kits are featured in this super-power system! You save by assembling the kits yourself—System Plan price permits you to save over the total price of individual components bought separately!

The Audax pickup arm kit can be assembled in minutes. Rek-O-Kut's turntable kit features hysteresis-synchronous motor for silk-smooth operation, and dynamically balanced turntable. Knight's new KN-3000 speaker systems feature high-compliance, 12" woofer and 2 Janszen electrostatic tweeters for the ultimate in reproduction. Turntable base is unfinished; speaker systems in mahogany, blonde or walnut—specify choice. Shpg. wt., 173 lbs.

25 HF 542. Only \$10.00 Down. NET..... 479.50

## Deluxe 60-Watt Stereo Phono System

Knight-Kit Deluxe Stereo Preamplifier Kit	..... \$64.95
Knight-Kit 60-Watt Stereo Basic Amplifier Kit	..... 84.50
Garrard RC88-4 Record Changer & Base	..... 63.16
Knight KN-500 Cartridge—Diamond Needle	..... 16.85
2—Knight KN-800A 3-Way, 12" Speakers	..... 89.90
2—Knight KN-1265K Enclosure Kits	..... 79.00
<b>TOTAL REGULAR CATALOG PRICE</b>	<b>..... \$398.36</b>
<b>ALLIED SYSTEM PLAN PRICE</b>	<b>..... 369.50</b>

**YOU SAVE....\$28.86**

**SYSTEM PRICE** A stereo record playing system of remarkable quality—yours, for far less than you thought possible! Offering the tremendous reserve power of the Knight-Kit stereo basic amplifier (60 watts for stereo or monophonic applications, with 120-watt peaks), and the unexcelled control facilities of the Knight-Kit deluxe stereo preamp—performance is truly impressive!

Other advanced-design components include the Garrard RC88-4 changer, a British-made unit of unquestionable merit; the new Knight KN-500 stereo cartridge, made to the most rigid of specifications; the two KN-800A 3-way, 12" speakers, used in countless hi-fi music installations; and the two KN-1265K speaker enclosure kits. Easy to build, these fine enclosures have many expensive furniture touches. Paired with the Knight speakers, they provide superb sound. Professionally styled to complement any motif. Changer base and speaker enclosure kits in mahogany, blonde or walnut—specify when ordering. Shpg. wt., 168 lbs.

25 HF 541. Only \$10.00 Down. NET..... 369.50

Knight-Kits Are Best—By Design



Knight-Kit Deluxe Stereo Preamp



Knight-Kit 60-Watt Stereo Basic Amplifier



Audax 12" Pickup Arm Kit: Shure M7D Cartridge



Rek-O-Kut K-33H Turntable Kit & Wood Base



Free 12" Stereo Record



2—Knight KN-3000 Speaker Systems



Knight-Kit 60-Watt Basic Stereo Amplifier



Knight-Kit Deluxe Stereo Preamp



Free 12" Stereo Record



Garrard RC88-4 Changer & Base, with Knight KN-500 Cartridge



2—Knight KN-800A 12" 3-Way Speakers  
2—Knight KN-1265K Enclosure Kits

# LOWEST COST DO-IT-YOURSELF *knight-kit* HI-FI SYSTEMS

FEATURING EASY-TO-ASSEMBLE, TOP-QUALITY KNIGHT-KITS



Knight-Kit 18-Watt Amplifier Kit



Garrard RC121-II Changer & Base;  
G.E. VR-227 Cartridge



Knight KN-820 12" Speaker;  
Knight KN-1280 Speaker Enclosure

## Low-Cost 18-Watt Hi-Fi Phono System

Knight-Kit 18-Watt Amplifier Kit	\$39.95
Garrard RC121-II Record Changer & Base	46.16
G.E. VR-227 Cartridge—Diamond Needle	24.45
Knight KN-820 12" Speaker	16.95
Knight KN-1280 Speaker Enclosure	29.95

TOTAL REGULAR CATALOG PRICE ..... \$157.46  
ALLIED SYSTEM PLAN PRICE ..... 139.50

**YOU SAVE \$17.96**

### SYSTEM PRICE

**\$139<sup>50</sup>**

\$5.00 Down

Composed of selected, highly rated components, this system provides 18 watts of rated output, with 36 watts of peak power. The versatile Knight-Kit amplifier offers distortion-free, high-fidelity response. G.E.'s cartridge plays stereo or monophonic microgroove records, monophonically. For stereo, just add another amplifier and speaker system. Changer base and enclosure in mahogany, limed oak or walnut finish—specify choice when ordering. Shpg. wt., 72 lbs.

25 HF 533. Only \$5.00 Down. NET ..... 139.50

## Popular 18-Watt Hi-Fi Phono System

Knight-Kit 18-Watt Amplifier Kit	\$39.95
Garrard RC88-4 Record Changer & Base	63.16
G.E. VR-227 Cartridge—Diamond Needle	24.45
Knight KN-800 3-Way, 12" Speaker	44.95
Knight KN-1265K Speaker Enclosure Kit	39.50

TOTAL REGULAR CATALOG PRICE ..... \$212.01  
ALLIED SYSTEM PLAN PRICE ..... 185.00

**YOU SAVE \$27.01**

### SYSTEM PRICE

**\$185<sup>00</sup>**

\$5.00 Down

An excellent 18-watt phono system, featuring some of our best-selling components. You save by assembling the amplifier and enclosure kits yourself—and you save by purchasing components in system form. The Knight-Kit 18-watt amplifier offers superb music reproduction. G.E.'s cartridge plays stereo and monophonic microgroove records, monophonically—for stereo, just add another amplifier and speaker. Changer base and enclosure kit in mahogany, limed oak or walnut—specify. 83 lbs.

25 HF 534. Only \$5.00 Down. NET ..... 185.00

## Super-Value 12-Watt Hi-Fi Phono System

Knight-Kit 12-Watt Amplifier Kit & Cover	\$23.90
Collaro TSC-740 Record Changer & Base	46.60
G.E. VR-227 Cartridge—Diamond Needle	24.45
Knight KN-808 Wide-Range 8" Speaker	9.95
Argos TSE-1 Shelf-Type Enclosure	16.17

TOTAL REGULAR CATALOG PRICE ..... \$121.07  
ALLIED SYSTEM PLAN PRICE ..... 99.50

**YOU SAVE \$21.57**

### SYSTEM PRICE

**\$99<sup>50</sup>**

\$5.00 Down

A top-quality hi-fi phono system that gives you 12 watts of power output, with 24-watt peak power! G.E.'s cartridge plays stereo and monophonic microgroove records, monophonically—for stereo, just add another amplifier and speaker system. Changer base in mahogany, blonde or walnut; enclosure in mahogany or blonde leatherette—specify choices. Shpg. wt., 48 lbs.

25 HF 532. Only \$5.00 Down. NET ..... 99.50

Allied is Headquarters for Hi-Fi



Knight-Kit 18-Watt Amplifier Kit



Garrard RC88-4 Record Changer with Wood Base;  
G.E. VR-227 Cartridge,  
.0007" Diamond Needle



Knight KN-800 12" Speaker;  
Knight KN-1265K Enclosure Kit



Knight-Kit 12-Watt Amplifier with Cover



Collaro TSC-740 Changer with Base; G.E. VR-227 Cartridge, Diamond Needle



Knight KN-808 8" Speaker; Argos TSE-1 Enclosure



**HONORED  
FOR VALUE**

# KNIGHT®

A PRODUCT OF ALLIED RADIO

## high-fidelity components



### more for your money in every way

Built to Allied's highest standards, Knight components give you more in performance, more in enduringly attractive styling, and more in overall quality. They are expressly designed to give you maximum value for your high-fidelity dollar.

### your finest values

Allied's long leadership as supplier of high-fidelity components and systems to music lovers the world over enables us to bring true hi-fi performance to everyone—at prices to fit every budget. From our lowest-cost Knight component, to the most deluxe, you'll find these values are unmatched. Buy from Allied with complete confidence.

### highest quality throughout

Knight components are developed on the basis of careful product research to meet the needs of music lovers everywhere. Leading electronic and acoustic laboratories are consulted on features and performance—and skilled engineers employ every advancement in audio science in designing these extraordinary high-fidelity units.

### GUARANTEED FOR ONE FULL YEAR

#### 15-Day Trial, Money-Back Guarantee

If within 15 days you are not fully satisfied with your Knight component, return it. We will refund your full purchase price, less only transportation charges. Knight hi-fi units are also covered by Allied's 1-year guarantee against defects in material and workmanship.

#### Specifications Verified and Guaranteed

Final specifications are established and verified by the Knight development-engineering team, and manufacturing is entrusted to experienced, well-equipped facilities in the United States or England. Performance is guaranteed to meet or exceed our published specifications.

buy **KNIGHT** with confidence

BUY ON ALLIED'S NEW EASY TERMS



# KNIGHT



## Remarkable Knight KN-740 40-Watt Stereo Amplifier

UNEQUALED IN VALUE AND PERFORMANCE

NET

\$5.00 Down **\$99<sup>50</sup>**

### "HONORED FOR VALUE" FEATURES

- Newly Developed 6L6GC High-Power Output Tubes for Remarkably Low Distortion—Even at Peak Power
- Finest Quality Output Transformers for Increased Frequency Response at Both Low and High Frequencies
- Every Necessary Control for Full Enjoyment of Both Stereo and Monophonic Program Material
- Wide-Range Balance Control For Outstanding Stereo Under Any Conditions
- DC on Preamp Tube Filaments for Hum-Free Operation
- Housed in "Luxury Styled" Case to Blend Harmoniously with any Decor
- Allied's Famous Unconditional One-Year Guarantee on All Parts, Labor, and Specifications
- Made in U.S.—Features Premium Quality Parts and Finest Workmanship

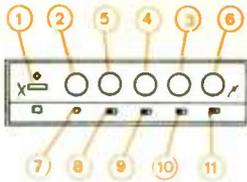
Incorporating every basic control necessary for full stereo flexibility, the KN-740 stereo amplifier represents a thrilling new achievement in quality, versatility, and value! The advanced skills of Knight engineering have combined years of experience in the design of audio equipment with the finest components available—resulting in an amplifier that provides an exciting new "plus" in stereophonic hi-fi performance. Featuring exclusive Knight "Luxury Styling" this superb amplifier delivers 20 watts output per channel—a full 40 watts of stereo as well as monophonic sound.

The unusually high degree of control flexibility is highlighted by the use of a special "stereo separation control." This unique feature puts a continuously variable transition from stereo to monophonic reproduction at your command. As the control is advanced, channel separation is progressively decreased, producing the effect of increased "middle" within the stereo sound effect. Lets you range from monophonic to panoramic stereo sound. Incorporated in the output stage of each stereo channel are two newly developed 6L6GC high-power output tubes plus a massive high-fidelity output transformer. The smooth, wide-range frequency response remains uniform even at relatively high power levels. A master volume control adjusts listening level of both channels simultaneously—converts to contour loudness control at the flick of a switch.

Perfect stereo balance is easily obtained with the single-knob balance control—even in rooms where optimum speaker placement is impossible. Regulates each speaker system from full volume to complete silence. A simplified rotary program selector switch instantly chooses any desired sound source—Tape Head, Magnetic Phono, Ceramic Phono, Tuner, or Auxiliary. A handy channel reversing control provides the correct orientation necessary for proper stereo effect. A highly efficient rumble filter is included to eliminate low-frequency rumble from worn or warped records. Handsomely styled in beige leather-tone case with harmonizing gold and charcoal-brown panel. *Unconditionally guaranteed for one full year.* Made in U.S. 4¼x15¾x12". U.L. Approved. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt. 35 lbs.

92 SU 429. Only \$5.00 Down. NET ..... 99.50

### EVERY DESIRED STEREO FUNCTION



1. Large, attractive pilot light indicator.
2. Selector switch for instant choice of program material.
3. Master treble control.
4. Single-knob balance control.
5. Master bass control.
6. Master volume control.
7. Unique stereo separation control.
8. Stereo-Monophonic switch.
9. Channel reverse switch.
10. Rumble filter.
11. Loudness-Contour Switch.

## More for Your Stereo Dollar Than Ever Before



There is no finer engineering than Knight engineering—and no better example than the KN-740! Allied's 39 years of experience stand behind the functional design and superb value offered in this outstanding amplifier. Expert craftsmanship combined with honest value give you more amplifier for less money. Its top features, premium-quality components, and unconditional guarantee are Allied exclusives. You can depend on Knight for brilliant performance at remarkably low cost.

### SPECIFICATIONS

**Rated Power Output:** 40 watts (20 watts per channel).

**Peak Power Output:** 108 watts (54 watts per channel).

**Frequency Response:**  $\pm 1$  db, 30 to 20,000 cps at 20 watts.

**Harmonic Distortion:** Less than 0.9% at full rated output.

**IM Distortion:** Less than 3% at full rated output.

**Hum and Noise:** 70 db below full rated output (Aux); -70 db (Tuner); -52 db (Phono); -45 db (Tape).

**Sensitivity:** Aux, Ceramic Phono, and Tuner Inputs, 200 mv; Magnetic Phono, 4.5 mv; NARTB Tape Head, 3.5 mv. (Figures denote input sensitivity specifications for full rated output).

**Tube Complement:** 5—12AX7/ECC83 premium-type twin-triodes; 4—6L6GC improved-type screen-grid tetrodes; 1—5A5A high-efficiency rectifier.

**Output Impedances:** 4, 8, and 16 ohms each channel.



**GUARANTEED FOR  
ONE FULL YEAR**

### CHECK THESE LATEST, DELUXE-VALUE FEATURES



#### NEW HIGH POWER OUTPUT TUBES

Advanced-type 6L6GC tetrodes are used in push-pull output circuit for increased power with exceptionally low distortion.



#### MASSIVE OUTPUT TRANSFORMERS

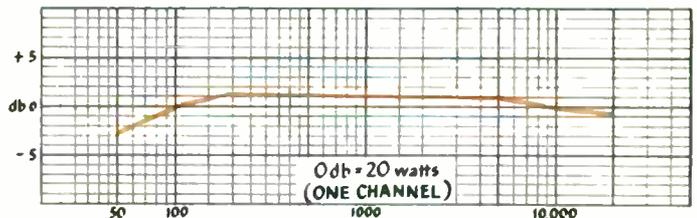
Feature highly efficient, grain-oriented steel laminations—provide superb bass response and clean highs at all levels.



#### NEW STEREO SEPARATION CONTROL

Provides continuously variable transition from stereo to monophonic operation. Helps fill the "hole in-the-middle".

### POSITIVE PROOF OF SUPERB STEREO HI-FI RESPONSE



The Knight KN-740 40-watt stereo amplifier offers extremely clean response—even at high power outputs. A controlled roll-off attenuates the high-frequency response in the ultra-sonic range. Highly stable, it utilizes adequate feedback and damping to permit perfect operation with electrostatic speakers, long speaker lines, temporary speaker disconnection, etc. An amazingly low distortion level—even during peak power surges—makes this the ideal unit for use with the new high-compliance, low-efficiency speakers.



# KNIGHT



**KN**  
**728**

## New Feature-Packed Knight 28-Watt Stereo Amplifier

NET

**\$82<sup>50</sup>**

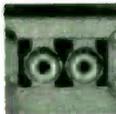
\$5.00 Down

### "HONORED FOR VALUE" FEATURES

- 14-Watt Per Channel Output for Full 28-Watt Stereo Power
- Full Set of Controls & Inputs for Every Stereo/Mono Source
- DC on Filaments of Preamp Tubes For Hum-Free Operation



**Balance Control.** For perfect stereo sound in any room. Eliminates "holes" and "dead spots" in the stereo effect.



**Tape Head Input.** Enables you to play back recorded stereophonic tapes direct from tape heads on tape decks.



**Loudness Contour Switch.** Provides correct tonal balance for listening at moderate and low volume levels.



**Top Flexibility.** Use the KN-728 for stereo records, tapes, broadcasts—plus regular monophonic sources.

The new and skillfully designed Knight KN-728 28-Watt Stereo Amplifier is a carefully engineered, highly capable component. An outstanding value, it provides 28 watts of stereo or monophonic sound—peak power is 56 watts. Its input-paralleling switch permits instant switching from stereo to 28-watt monophonic operation. Additionally, its dual preamp control section features master volume, single-knob balance, stereo reverse and rumble filter. Complete control facilities of the preamp sections will enable you to regulate stereo sound with unsurpassable ease. Front panel and knobs are styled in harmonizing buffed gold and brown finish.

The wide-range balance control permits you to use your stereo music system in any room, large or small—even where one of the speakers cannot be placed for optimum stereo effect—and still get perfect stereophonic sound spread without "holes" or "dead spots". Two tape recorder outputs permit "off-the-air" stereo tape recordings. Hum is reduced to inaudible levels by DC operation of all preamp tube filaments. The KN-728 is ideal for use as the "heart" of a stereophonic music system of exceptional quality and performance, at an unusually modest price.

Handsomely styled to complement its efficient circuitry, the KN-728 includes dark brown, leather-tone case, with front panel in charcoal-brown and gold. It's suitable for placement in any decor. *Output Impedances:* 4, 8 and 16 ohms per channel; two tape recorder outputs. *Tubes:* 4—6V6GT, 4—12AX7, 12AU7; EZ81/6CA4 rectifier. Made in U.S. Size, 3½x14x11". U.L. Approved. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 15 lbs. 92 SU 433. Only \$5.00 Down. NET ..... 82.50

### SPECIFICATIONS

**Rated Power Output:** 28 watts (14 watts per channel).

**Peak Power Output:** 56 watts (28 watts per channel).

**Response:** ±1 db, 35-18,000 cps.

**Distortion:** harmonic, 1% at 1000 cycles measured at 14 watt output; I.M., 3% maximum.

**Hum & Noise:** 70 db below full output each channel.

**Inputs (per channel):** NARTB Tape Head, Magnetic Phono, Ceramic (or Crystal) Phono, Tuner, and Auxiliary.

**Controls:** Selector (Tape Pre, RIAA, Tuner, Aux); Balance/Stereo-Mono switch; Master Volume; Bass; Treble; Off-On. 4 slide switches: Input Paralleling, Stereo Reverse, Rumble Filter and Loudness Contour switch.



**GUARANTEED FOR ONE FULL YEAR**



## Big Value in a New Knight Stereo FM-AM Tuner

NET

**\$79<sup>50</sup>**

\$5.00 Down

### "HONORED FOR VALUE" FEATURES

- Separate FM and AM Tuning Knobs—Flywheel Weighted
- Has Jack to Permit Use With FM Multiplex Adapter
- Four, Easy-to-Use Controls on Front Panel
- New 50-Ohm, Low-Noise Antenna Terminals for Use in Noisy or Fringe Areas
- Beautifully Styled to Match All Other Knight Components in Appearance



**Separate AM & FM Controls**  
Located on opposite sides of the front panel, separate FM and AM controls make tuning easy.



**Ideal for Noisy Areas**  
New 50-ohm antenna terminals permit use of shielded coax cable for noisy or fringe areas.



**Ready for Multiplex**  
New, FM multiplex adapter jack on rear panel ready to accept plug-in, multiplex adapter unit.

The new KN-135 stereo FM-AM tuner combines engineering excellence and brilliant performance at moderate cost. Newly designed and beautifully styled, it brings you superb reception of stereo FM-AM broadcasts, as well as FM reception only or AM reception only. The KN-135 also includes an output jack for an FM multiplex adapter. Separate FM and AM tuning controls permit quick, convenient selection of stations. A perfect companion to the KN-728 stereo amplifier on the preceding page, the KN-135 is designed to match it in appearance and performance.

Highly efficient, limiter-discriminator FM circuitry offers good noise rejection and excellent sensitivity for clear reception of weak or distant FM stations; and its AM circuitry is of comparable quality. Four easy-to-use switches located on the front panel for all tuner functions, including automatic frequency control (AFC), for "lock-in" tuning of FM stations. Has dual high-impedance outputs for stereo or monophonic tape recording of broadcast material directly from tuner.

New, low-noise 50-ohm antenna terminals (in addition to regular 300-ohm antenna terminals), permit the use of shielded, coaxial antenna lead-in for noisy or fringe-area use. Case is styled in dark, leather-tone finish; front panel is color-styled in charcoal-brown and gold.

Includes case, two 36" audio cables, built-in AM loopstick antenna and FM folded-dipole antenna. Made in U.S. Size, 3 $\frac{3}{8}$ "x11 $\frac{1}{8}$ "x9". U.L. Approved. 92 Su 431. Only \$5.00 Down. NET **79.50**

### SPECIFICATIONS

- FM Sensitivity:** 4 microvolts for 20 db of quieting.
- AM Sensitivity:** 10 microvolts for 20 db signal-to-noise ratio.
- FM Bandwidth:** 180 kc.
- FM Response:**  $\pm 0.5$  db, from 20 to 20,000 cps.
- High-Impedance Outputs:** two for FM; two for AM.

- Four Front-Panel Switches:** AM Off-Stereo-Mono; FM Off-Stereo-Mono; Power Off-On; and AFC Off-On. Separate knobs for FM Tuning and AM Tuning.
- Rear Panel: FM Multiplex Output Jack; 300-ohm Antenna Terminals; 50-Ohm Antenna Terminals.**
- Tubes:** 2—12AT7, 2—6CB6, 6AU6, 6AL5, 6BE6, 6AS8; plus selenium rectifier.



GUARANTEED FOR ONE FULL YEAR



# KNIGHT



## Knight KN-760 Deluxe 60-Watt Stereo Amplifier

NET

... FOR A NEW DIMENSION IN STEREO REALISM

\$5.00 Down **\$149<sup>95</sup>**

### "HONORED FOR VALUE" FEATURES

- Unique Stereo Separation Control Eliminates "Hole-In-the-Middle" Effect—Provides Fingertip Control of the Stereo Sound Panorama
- Special "Center Channel" Speaker Output is Provided for Adding a Center Full-Range Speaker or Monophonic Extension Speaker in Another Room
- Extremely Low Distortion Level—Actually Unmeasurable at Normal Room Volume
- Silicon Diode Power Supply for Superior Regulation—Long, Trouble-Free Life for Years to Come
- Massive Output Transformers Assure Extended High and Low Frequency Response
- Unconditionally Guaranteed for One Full Year—The Finest Knight Stereophonic Amplifier
- Exclusive Knight "Luxury Styling" Blends with any Decor

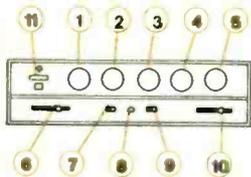
Breathtaking in both performance and styling, the KN-760 Deluxe Stereo Amplifier represents a masterpiece of audio engineering. Delivers a phenomenal 60 watts output—a *peak punch of 152 watts*—producing unparalleled stereophonic realism under any acoustic conditions. This superlative unit actually meets even the most critical requirements of the broadcast or recording studio as well as those of the most discerning audiophile.

An extremely high degree of control flexibility is provided by the use of a special "stereo separation control"—permitting a continuously variable transition from stereo to monophonic operation. By gradually decreasing the inter-channel separation, this unique control adjusts the stereo sound spread to the proper degree of separation between channels—even where conditions necessitate exceptionally wide spacing between speakers. In addition, a special center or "third channel" output is provided for the connection of an additional speaker (as recommended by leading hi-fi authorities) to fill the "hole-in-the-middle". Ideal, too, for adding a remote speaker to reproduce a blend of both channels monophonically.

Further versatility is afforded by the separate bass and treble controls provided on each channel. Concentrically clutch-mounted for convenience, these controls may be adjusted separately to compensate for speaker differences or acoustic variations in the listening area. The clutch feature permits easy simultaneous regulation of controls after initial balancing. Newly developed, highest quality 6L6GC output tubes are combined with extra-heavy high-fidelity transformers to produce a virtually flawless audio output on each stereo channel. Distortion is so low that it is inaudible at full power—virtually unmeasurable at normal room listening volume.

Featuring exclusive Knight "Luxury Styling", the KN-760 incorporates specially designed, individually turned all-aluminum knobs, clearly marked controls, and highly attractive panel. With vinyl-clad, mar-proof case styled in beige leather-tone—panel in harmonizing gold and charcoal-brown. *Unconditionally guaranteed for one full year.* Made in U.S. 4 $\frac{3}{8}$ "x15 $\frac{3}{4}$ "x15 $\frac{1}{8}$ ". U.L. Approved. For 110-120 v., 50-60 cycle AC. Shpg. wt., 35 lbs. 92 SU 434. Only \$5.00 Down. NET. . . . . 149.95

**MOST COMPLETE STEREO CONTROL AVAILABLE**



1. Convenient, one-knob Input selector.
2. Dual-concentric bass tone controls.
3. Stereo balance control.
4. Dual-concentric treble tone controls.
5. Master volume control.
6. Stereo reverse and function selector switch.
7. Bridge-T rumble filter.
8. Stereo separation control.
9. Bridge-T scratch filter.
10. 4-position Loudness-Contour selector switch.
11. Pilot Light Off-On Indicator.

**The Finest Stereo Value at any Price**



Feature for feature and dollar for dollar, Knight components, with 39 years of electronics experience behind their design, lead the field in value. The all-new KN-760 Stereo Amplifier represents an outstanding example of famous Knight precision craftsmanship. This superb amplifier offers the very finest quality, yet is priced to fit your budget. Sure to please the most discriminating of music lovers, it's a notable achievement in hi-fi design.

**SPECIFICATIONS**

**Rated Power Output:** 60 watts (30 watts per channel).

**Peak Power Output:** 152 watts (76 watts per channel).

**Frequency Response:**  $\pm 0.5$  db, 25 to 20,000 cps at 60 watts.

**Harmonic Distortion:** Less than 0.75% at full rated output.

**IM Distortion:** Less than 2% at 30 watts.

**Hum and Noise:** 74 db below full rated output (Aux); -74 db (Tuner); -54 db (Phono); -47 db (Tape).

**Sensitivity:** Aux, Ceramic, Phono, and Tuner Inputs, 200 mv; Magnetic Phono, 4.5 mv; Tape Head, 3.55 mv. (Figures denote sensitivity for full rated output.)

**Tube Complement:** 6—7330/ECC83/12A X7 premium-type twin triodes; 4—6L6GC improved-type screen-grid tetrodes; selenium-bridge filament rectifier; silicon-bridge HV rectifier.

**Output Impedances:** 4, 8, and 16 ohms each channel; plus center-channel output.



**GUARANTEED FOR ONE FULL YEAR**

**"VERSATILITY—PLUS" HIGHLIGHTS THE KN-760**

**New Stereo Separation Control**



Provides variable transition from stereo to monophonic. Eliminates "hole-in-the-middle" effects.

**"Center-Channel" Output Terminals**



Permits adding a center channel speaker or extension speaker to reproduce both channels mixed.

**Loudness Contour**



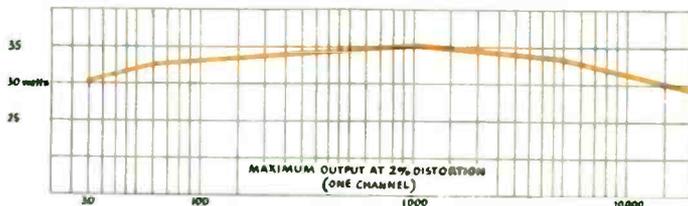
Provides choice of three different contour adjustments for various levels of listening volume.

**Concentric Tone Controls**



Allow tonal adjustments on each channel separately to correct for unmatched speakers.

**OUTSTANDING POWER RESPONSE**



Proof of the KN-760's superior performance is graphically depicted above. Exceptional response and phenomenally low distortion make it ideal for the most critical applications; it's perfect for use with new high-compliance speaker systems. It passes the test for quality and dependable performance in the home as well as laboratories, schools, theaters—anywhere flawless reproduction is required.



## New Knight Deluxe Stereo FM-AM Hi-Fi Tuner

ONLY  
**\$139<sup>95</sup>**  
 \$5.00 Down

### "HONORED FOR VALUE" FEATURES

- New, Adjustable DSR corrective feedback circuit—acclaimed by leading national electronic publications and audio authorities—for complete command of FM signal quality and cleanest reception.
- New Fingertip Multiplex Control—permits instant switching from FM or AM to FM Multiplex.
- New Low-Noise 50-Ohm Antenna Input for fringe-area FM reception.
- New Safety Interlock—cuts off AC power when chassis is removed from case.
- New, extra-bright EM840 cathode ray, bar-type tuning indicators.
- Handsome new enclosure with smart color-styled dial and panel
- Superb performance and specifications, backed by Allied's unconditional, one-year guarantee.

### FEATURES NO OTHER TUNER HAS—AT ANY PRICE

From the moment you tune in a station, you'll know that the new KN-125 Stereo Tuner is something very special. Providing crystal-clean FM-AM reception, it challenges the future in features and design, and offers you pure listening pleasure. A number of outstanding circuit developments place this exceptional unit in a class by itself. Among them you'll find: New Adjustable DSR to provide you with the most complete command over FM signal quality ever available in any tuner. This control allows you to adjust the modulation of the FM carrier for perfect reception of any FM station, *regardless of the station's transmitter settings!* No matter what the quality of the transmitted signal is, your personal reception is flawless.

The new Fingertip Multiplex Control is a front panel switch that automatically turns on any associated multiplex adapter that is self-powered. It switches audio circuits to feed FM multiplex stereo to your amplifiers (or stereo amplifier), with fingertip ease. No knob twirling—no hunting for wires behind the chassis—*just flip a switch for FM-FM stereo reception.* (Watch for FCC approval of FM multiplex stereo—a precision Knight Multiplex Adapter is being readied for this announcement.)

New low-noise 50-Ohm Antenna Input (for use with shielded antenna lead-in), provides noise-free FM reception in fringe areas. Enables you to obtain maximum signal-to-noise ratio for optimum reception. Sensitivity at these terminals is 1.2 microvolts for 20 db of quieting.

The AM section of the KN-125 features: tuned RF stage; 3-position AM bandwidth switch; 10-kc whistle filter; separate tuning indicator. Check the specifications on the following page—you'll find that this tuner is actually two superb tuners, in one compact case!

Smart, functional color styling enables you to display the KN-125 in any room, regardless of furnishing mode. Beige vinyl plastic is permanently bonded to its metal case; panel is gold and charcoal-beige anodized aluminum for lasting beauty.  
 Made in U.S. Size, 4 $\frac{3}{8}$ x15 $\frac{3}{4}$ x13 $\frac{1}{8}$ ". U.L. Approved. For 110-120 v., 50-60 cycle AC. Shpg. wt., 21 lbs.  
 92 SU 428. Only \$5.00 Down. NET. . . . . 139.95

## NEW FINGERTIP MULTI- PLEX CONTROL

For use when multiplex transmission is authorized by the FCC. Allows you to switch instantly from FM or AM reception to FM stereo multiplex operation; controls both audio and AC power from a single front panel switch.



## NEW ADJUSTABLE DSR CONTROL

Dynamic Sideband Regulation provides the most complete control of signal quality ever available in an FM tuner. Adjusts modulation of FM carrier for optimum reception of any FM station, regardless of station transmitter settings!



## SPECIFICATIONS

**FM Section:** Tuned RF stage, two limiters, discriminator, automatic frequency control (AFC).

**Sensitivity:**  $2\frac{1}{2}$   $\mu$ v for 20 db of quieting. Sensitivity at 50-ohm terminals is 1.2  $\mu$ v for 20 db of quieting.

**DSR Modulation Range:** Variable from full transmitter modulation to 0.25 of full modulation.

**Harmonic Distortion:** Unmeasurable (below residual noise).

**IM Distortion:** Less than 0.25% for signal inputs over 20  $\mu$ v.

**AM Section:** Tuned RF stage, 10-kc whistle filter.

**AM Sensitivity:** 4  $\mu$ v for 20 db signal-to-noise ratio.

**Controls:** AM Tuning; FM Tuning; Selector (FM, FM-AM Stereo, AM); AM Bandwidth Selector (Sharp, Medium, Broad); DSR Adjust; Multiplex Switch; AFC Off-On; DSR Off-On; and Off-On.

**Antenna Inputs:** 300 and 50-ohm.

**Outputs:** Four cathode-follower outputs—2 equipped with level controls.

**Other Features:** Gear-driven tuning capacitors; flywheel tuning; DSR indicator light.

**Tubes:** 12, plus 2—EM840 Lorenz cathode-ray, bar-type tuning indicators; EZ90 rectifier.



**GUARANTEED FOR  
ONE FULL YEAR**

# The Years-Ahead Stereo Tuner

## WITH KNIGHT-PIONEERED EXTRA-VALUE FEATURES

Offering phenomenal reception, this distinguished stereo FM-AM tuner features the widely praised DSR corrective feedback circuit, used in conjunction with a new variable control, for superb musical performance. Designed expressly for those who wish to own the finest in audio equipment, the KN-125 deluxe tuner offers you something extra in unique, new features and distinctive appearance. In addition, premium-grade components throughout, plus individual sweep alignment and precise inspection, give you further assurance that the new KN-125 tuner fully measures up to our published specifications.

## DSR BRINGS YOU OPTIMUM FM RECEPTION



### THESE ACTUAL OSCILLOSCOPE PHOTOS PROVE IT

Unretouched photos taken at  $\pm 150$  kc deviation—over-modulated to double the FCC maximum—and at a signal strength of only 18 microvolts. A 1000-cycle test tone was transmitted.

- (A) High-quality FM tuner without DSR. Note the distorted peaks and valleys shown on the oscilloscope screen.
- (B) The KN-125 under identical conditions, with DSR switched "off". Distortion is still evident, though not as severe.
- (C) KN-125 under same test conditions, with DSR "on". Scope shows a perfect picture, free of distortion and identical to broadcast signal.



### New 50-Ohm Input—Ideal for Noisy or Fringe-Area Use.

In addition to the standard 300-ohm antenna input, the KN-125 features 50-ohm antenna input. Permits use of shielded coaxial cable for maximum signal-to-noise ratio and noise-free reception.



"Magic-Eye" Tuning Indicators. Newest, EM840 "tuning eye" cathode-ray tubes are used for precise FM and AM tuning. A vivid beam of blue light opens in the center when you're "off" station—closes to narrow width when you're "on" station. This highly effective visual tuning feature assures you of center-channel reception.

## SAVE ON THESE KNIGHT TUNER & AMPLIFIER COMBINATIONS

**NEW KN-125 STEREO TUNER AND NEW KN-740 40-WATT STEREO AMPLIFIER.** Two of the finest stereo components available—at \$11.95 combination-offer savings. Add only a stereo speaker system for reception of stereo broadcasts—add speakers and stereo changer for dazzling stereo reproduction from records. Shpg. wt., 56 lbs.  
20 SZ 105-2. \$10.00 Down.. 227.50

**NEW KN-125 STEREO TUNER AND NEW KN-760 60-WATT STEREO AMPLIFIER.** Save \$16.40. These two remarkable components can be used to form a stereo music center of unexcelled quality. Add only a stereo speaker system and record changer. Shpg. wt., 61 lbs.  
20 SZ 106-2. \$10.00 Down.. 273.50





# KNIGHT



**KN**  
**520**

## New Knight Economy 20-Watt Stereo Amplifier

NET

**\$5.00 Down** **\$62<sup>50</sup>**

### TRUE STEREO HIGH-FIDELITY AT REMARKABLY LOW COST

An outstanding unit, priced to fit any budget, the KN-520 20-Watt Stereo Amplifier features dual 10-watt amplifier-preamp sections for stereo records and broadcasts—and can be used as a complete 20-watt monophonic amplifier. Unusually low in cost, it's perfect for use as the heart of an economy-priced stereo music system.

#### "HONORED FOR VALUE" FEATURES

- New Hi-Fi Output Tubes for Distortion-Free Performance
- DC on Preamp Filaments—Normally Found Only on More Expensive Amplifiers
- Inputs for Magnetic and Ceramic Stereo Cartridges, Plus Tuner Input
- Separate Bass and Treble Controls for Each Channel
- Trim, Low-Silhouette Styling

Delivers 20 watts of stereo or monophonic sound—peak power is 40 watts. Has three pairs of concentric controls to permit precise individual adjustment of each channel—two bass controls; two treble controls; and two volume controls. The separate tone controls provide a wide range of adjustment to compensate for even greatly dissimilar tonal characteristics between the speakers used for each channel. Concentric volume control allows individual channel balance plus overall volume control.

Four new 7408 audio output tubes, specifically designed for use in high-fidelity circuits, provide splendid reproduction at extremely low distortion. The KN-520 has RIAA-equalized inputs for stereo magnetic cartridge and stereo ceramic cartridge, plus tuner input and auxiliary AC receptacle. Neatly styled metal case is finished in dark brown, with brushed brass front panel; dark brown knobs have gold inserts.

Check its frequency response, power output and the numerous excellent, *guaranteed* specifications listed below—you'll be convinced of the value and quality of this remarkable unit. Made in U.S. Size, 3½x14½x10½". U.L. Approved. For 110-120 v., 50-60 cycle AC. Shpg. wt., 15 lbs.

92 SX 432. Only \$5.00 Down. NET ..... 62.50



**Separate Tone Controls**  
Separate bass and treble controls for each channel—for stereo systems using 2 different speakers.



**New Output Tubes**  
Employs new 7408 audio output tubes specially designed for finest performance in high-fidelity circuits.



**Dual Preamp Sections**  
Have inputs for both magnetic or ceramic stereo cartridge (4-millivolt sensitivity), plus tuner input.

#### SPECIFICATIONS

- Power:** 20 watts; 10 per channel.
- Peak Power:** 40 watts.
- Frequency Response:** ± 1 db, 40 to 15,000 cps at average room level.
- Distortion:** Less than 1.5% at 50 cps; 0.5% at 20,000 cps.
- Hum & Noise:** Better than 52 db below full output (tuner and ceramic phono); better than 40 db below full output (phono).

- Controls:** Function/Mode (Tuner—Stereo, Reverse, Monophonic A, Monophonic B; Phono—Stereo, Reverse, Monophonic AB mixed); concentric Bass (-10 to +9); concentric Treble (-10 to +9); concentric Volume/Loudness-Off/On.
- Inputs (3 Pairs):** Magnetic Phono, Ceramic Phono, Tuner.
- Input Sensitivity:** Phono, 4 mv; Tuner, 300 mv.
- Output Impedances:** 8 and 16 ohms.
- Tubes:** 4—12AX7, 4—7408; 2 rect.



**GUARANTEED FOR ONE FULL YEAR**

Rare Buy FM Hi-Fi Tuner



**ULTRA-COMPACT**  
The KN-140 is so well-planned and precisely designed, that it has the look and feel of a fine camera.



Guaranteed for One Full Year



## Ultra-Compact Knight Basic FM Tuner — A Wonderful Buy

NET

**\$44<sup>50</sup>**

\$2.00 Down

- Actual Size: 2 1/4" High, 9" Wide, 7 1/4" Deep—Use it Anywhere
- Clear, Sparkling FM Reception
- Automatic Frequency Control "Locks In" Stations
- Tape Recorder Output and Jack for Multiplex Adapter

Can be used to play through hi-fi systems, TV sets, tape recorders, table-model AM radios, and similar units having input jacks. Automatic frequency control (AFC) for effortless tuning—FM stations "lock in" when their dial setting is approached. AFC can be turned off to permit tuning weak stations. Illuminated dial scale and weighted tuning flywheel for ease in station selection. Soft brown "leather-tone" finish, with gleaming brushed brass panel, complements any home decorative motif. *Unconditionally guaranteed by Allied for one full year.*

A model of simplicity and functional design, the Knight KN-140 Basic FM Tuner employs careful layout of parts and extremely neat wiring to achieve an unusual compactness of size, with outstanding performance. It provides excellent FM reception with its built-in, line cord antenna—with a simple dipole antenna (or other external FM antenna), its performance easily equals tuners costing up to twice its modest price! You can use the KN-140 anywhere you would ordinarily place a book; table top, shelf, mantel, etc. Ideal for use as an extra tuner—makes a marvelous gift!

**SPECIFICATIONS:** Sensitivity: 5µv for 20 db of quieting. Audio Output: Approximately 0.5 volt. Hum and Noise: -40 db. IF Bandwidth: 180 kc. Controls: Tuning; Off-On-AFC. 3 Outputs: Amplifier, Tape Recorder and Multiplex. Circuit features grounded-grid RF amplifier; ratio detector. Made in U.S. Size, 2 1/4 x 9 x 7 1/8". U.L. Approved. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 7 1/2 lbs.

92 SX 425. Only \$2.00 Down. NET ..... 44.50

## True Hi-Fi Amplifier at Biggest Savings

- True HI-FI Performance and Control Flexibility
- Versatile—Five Inputs
- Flat Frequency Response, Low Distortion
- Ideal for Budget-Priced Home Music Systems

Guaranteed For One Full Year



## Knight "Mini-Fi" 10-Watt Amplifier — An Unusual Value

NET

**\$34<sup>50</sup>**

\$2.00 Down

The big-value KN-610 "Mini-Fi" 10-watt amplifier is one of the finest and most economical units of its type. A highly rated amplifier, it blends ease of operation and top-notch circuitry with genuine high-fidelity reproduction of sound. Has inputs for NARTB-equalized tape head playback; FM or FM-AM radio tuner; magnetic, crystal or ceramic phono cartridge; etc. Bass and treble controls allow you to vary music to suit your personal listening tastes and room acoustics. Case is styled in brown with gold panel.

**Rated Output:** 10 watts; 20-watt peaks. **Distortion (at rated output):** harmonic, less than 2%; IM, less than 3%. **Response:** ±1 db, 30 to 20,000 cps at rated output. **Hum & Noise:** -80 db. **5 Inputs:** Tuner, Auxiliary, Magnetic Phono, Tape Head, Crystal Phono. **Controls:** Selector (Aux, Tuner, NARTB Tape, RIAA Phono, Crystal Phono); Volume; Bass; Treble. **Output Impedances:** 4, 8 and 16 ohms; high impedance for tape recorder. 2—EL84/6BQ5 output tubes. Made in U.S. Size, 4 3/4 x 10 3/4 x 6 3/4". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt. 10 lbs.

92 SX 435. Only \$2.00 Down. NET ..... 34.50



# QUALITY-RENOWNED STEREO AND



H. H. Scott components have an outstanding record of engineering leadership and offer an uncompromising standard of performance. Superior design and long-term reliability makes every Scott unit a superlative high-fidelity value.

## Every Stereo Advantage



Convenient phase reverse switch compensates for improperly phased tape recordings or speakers.



Unique and attractive indicator light control panel instantly shows mode of operation.

NET  
**\$199<sup>95</sup>**  
Less Case

### MODEL 299 40-WATT STEREO AMPLIFIER

Skillfully engineered and unusually versatile, the Model 299 offers dual 20-watt power sections, dual preamps and latest stereo features. Use it for stereo discs or stereo tapes; for stereo FM-AM broadcasts; for reproduction of monophonic records or any other monophonic sound source through both amplifier sections to utilize the combined power output of both channels. Separate bass and treble controls for each channel permit adjustment to compensate for differences in speaker system response. Phase reversal switch corrects for reversed phasing on stereo discs and tapes; 2-channel balance control; optional center-channel output; etc.

*Response:* 20-30,000 cps. *Output (per section):* 20 watts; 40 watts peak. *Harmonic Distortion:* 0.8%. *Hum:* -80 db. *Inputs:* 2—low-level Magnetic; Tape Head; Tuner; Tape; Extra; provision for using mike. *Outputs:* 4, 8, 16-ohm each channel; Tape Recorder. *Controls:* Function Selector (Balance A, Balance B, Stereo, Reverse Stereo, Monaural Records; Channel A, Channel B); Bass, each channel; Treble, each channel; Balance; Loudness; Loudness-Volume; Scratch Filter; Rumble Filter; Channel A and Channel B Magnetic Inputs 1 and 2; On-Off; Phase Reversal Switch; Input Selector Switch (Orig. Col. Orig. AFS, Eur-78, RIAA, NARTB Tape, Tuner, Extra). 4—7189 output tubes. 4 3/4 x 15 1/2". Less case; see opposite page. For 105-125 v., 50-60 cycle AC. Shpg. wt., 35 lbs. 91 SU 657. Only \$5.00 Down. NET..... 199.95



Model 130

A deluxe stereo preamp of unexcelled flexibility and up-to-the-minute design. Provides every necessary control for superb stereo performance.

### MODEL 130 DELUXE STEREO PREAMPLIFIER

One of the most advanced preamps available! In addition to the array of control features offered in the Model 299 Amplifier above, the Model 130 Stereo Preamp also offers complete stereo tape recorder control facilities. Features main recorder outputs on each channel plus stereo playback/monitor provision—switched in and out from front panel. *Output:* 2 1/2 v.; maximum, 10 v., each channel. *Response:* 19 to 35,000 cps. *Harmonic Distortion:* less than 0.15% at rated output. *Hum:* -80 db.

If desired, the 130 may be used as an electronic crossover at 800 cps. An optional "center channel output" is provided for connection to a third amplifier and speaker. Gold panel. 4 3/4 x 15 1/4 x 12 1/2". Less case; see opposite page. For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 15 lbs. 91 SU 658. Only \$5.00 Down. NET..... 169.95



Model 330-D

An outstanding-quality stereophonic FM-AM tuner featuring highly sensitive reception from separate wide-band FM and wide-range AM sections, plus highly attractive customized styling.

### NEW MODEL 330-D BASIC FM-AM STEREO TUNER

Superbly designed, highly sensitive tuner. Has complete, separate AM and FM sections for reception of stereo broadcasts. FM section includes multiplex output jack. Features signal strength meter for simple, accurate tuning. *FM Section:* 2  $\mu$ v sensitivity for 20 db quieting; 1  $\mu$ v with 72-ohm antenna. Wide-band design; 2-mc detector; automatic gain control. 80 db rejection of spurious response from cross modulation by strong local signals permits using this tuner in any location, even close to FM transmitters. *AM Section:* 1  $\mu$ v sensitivity for usable aural output; new, extremely effective detector; 10-kc whistle filter; 4 v. audio output for 100% modulation. *Controls:* FM Tuning; AM Tuning; Function Selector (Off, Mono, Stereo, Stereo Phase Reverse); Selector (FM, AM Wide Range, AM Normal, AM Distance). Separate main and recorder outputs, each channel. 11 tubes; 2 diodes; 6X5 rectifier. Size: 4 3/4 x 15 1/4 x 12 1/2". Less case; see opposite page. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 17 lbs. 94 SU 897. Only \$10.00 Down. NET..... 224.95

### 311-D BASIC FM TUNER

Moderately priced FM tuner featuring silver-plated front end for high sensitivity. Insures outstanding reception—even in the weakest signal areas. Temperature compensated circuit is absolutely drift free. Has automatic gain control; signal strength meter; illuminated lucite tuning dial. Wide-band circuitry consists of 150-kc IF passband, 2-mc detector bandwidth; 2 stages of full limiting; 80 db rejection of spurious response. Separate tape recorder and multiplex output. *Sensitivity:* 2  $\mu$ v for 20 db quieting; 1  $\mu$ v with matched 72-ohm antenna. *Max. Audio Output:* 4 v. for 75-kc deviation. *Controls:* Off-On; Level; Tuning. 6 tubes; 2 diodes; 6X4 rectifier. 4 3/4 x 13 3/4 x 9 3/4". Less case; see listing on opposite page. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 15 lbs. 92 SU 899. \$5.00 Down. NET..... 124.95

### 310-C BASIC FM TUNER

Frequently used in professional broadcast monitors, the 310-C fulfills the most exacting hi-fi requirements. Features wide-band circuit, heavy silver plating in RF and mixer, 3 stages of full limiting, etc. Temperature compensated. Has 150-kc IF passband and 2 mc limiters and detector. Noise Suppressor eliminates FM "hiss". Signal strength meter. Low-impedance output permits use of long leads. Tape recorder output. *Sensitivity:* 1 1/2  $\mu$ v on 300-ohm input with 20 db of quieting, 85 db rejection of cross modulation. *Max. Audio Output:* 4 v. for 75-kc deviation. *Controls:* Tuning; Off-On; Distant-Normal; Level; Noise Suppressor. 9 tubes; 3 diodes; 6X5 rectifier. 4 3/4 x 13 3/4 x 9 3/4". Less case; next page. For 105-125v., 50-60 cycle AC. 14 lbs. 92 SU 898. \$5.00 Down. NET..... 174.95



Model 311-D



Model 310-C

# MONOPHONIC HI-FI COMPONENTS



Model 320

NET  
**\$139.95**

Less Case

## Perfectly Matched High-Fidelity Components

All the traditional excellence and superior quality characteristic of Scott components is featured in this top-value stereo amplifier and matching tuner—priced to fit the most moderate budget.



Model 222

NET  
**\$139.95**

Less Case

### NEW MODEL 320 BASIC FM-AM TUNER

A splendid new FM-AM tuner with a remarkable array of features. Highly sensitive and stable, this top-value unit is designed to provide selective, drift-free FM reception and full-fidelity, wide-range AM reception. Fully equipped for the addition of a multiplex stereo adapter for single-station FM stereo reception.

**FM Section:** Features silver-plated subchassis with grounded-grid RF amplifier for low-noise performance and high sensitivity; 2 stages of limiting; wide-band ratio detector; automatic gain control; etc. **AM Section:** Includes RF amplifier; automatic volume control; 10-kc whistle filter; new tuning circuit exceeding 10-kc in bandwidth for maximum fidelity on AM broadcasts; etc.

**Rear Panel Connections:** Channel A output; channel A tape output; channel B output; channel B tape output; multiplex stereo input, channel A; multiplex stereo input, channel B; audio output to multiplex adapter; FM multiplex output. **FM Sensitivity:** 2.5  $\mu\text{v}$  for 20 db of quieting. **Audio Output:** 4 v. for 100% modulation on AM and FM. **Controls:** Level; Normal-Monophonic/Multiplex-Stereo; Tuning; Selector (AM Normal, AM Wide, FM, Off). 8 tubes; 2 diodes; 6X4 rectifier. 5x1 $\frac{1}{2}$ x1 $\frac{1}{2}$ " $\frac{1}{2}$ ". Less case, below. For 105-125 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

92 SU 866. Only \$5.00 Down. NET..... 139.95

### NEW MODEL 222 24-WATT STEREO AMPLIFIER

A versatile, twin-channel stereo amplifier with an unusually high degree of control flexibility. Provides 12 watts output per channel for a full 24 watts of stereo or monophonic reproduction. A special center channel output is included to permit use of a third speaker to eliminate any "hole-in-the-middle" effect—ideal, too, for adding a remote speaker to system. Other features include separate tone controls for each channel to compensate for speaker differences or poor acoustics; special circuitry to enable the listener to compare the volume of each channel; special calibration of the tone controls allowing amplifier to be used as an electronic crossover; DC on all preamp filaments to prevent hum; etc.

**Response:** 20-30,000 cps. **Harmonic Distortion:** 0.8%. **Hum and Noise:** -80 db. **Controls:** Equalization Selector; Input Selector; Stereo Selector (Balance A, Balance B, Monophonic Records, Stereo, Reverse Stereo, Channel A, Channel B); Channel A Bass; Channel A Treble; Channel B Bass; Channel B Treble; Scratch Filter; Volume-Loudness; Stereo Balance; Master Volume. **Output Impedances:** 4, 8, and 16 ohms. 4-6BQ5 output tubes. 4 $\frac{3}{4}$ x1 $\frac{1}{2}$ x1 $\frac{1}{2}$ " $\frac{1}{2}$ ". Less case, below. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 30 lbs.

92 SU 865. Only \$5.00 Down. NET..... 139.95

### MODEL 99-D 22-WATT AMPLIFIER

Many important features make the 99-D an excellent choice for hi-fi music ensembles. Unusually versatile, it offers a wide array of extras, such as: "Quik-Set" control settings; speaker switch for selecting either of two speakers or both speakers at once; tape recording monitor-playback switch for use with 3-head recorders; tape recorder output and monitoring jacks; input selector switch for two magnetic pickups—allows connecting both a record changer and turntable.

**Output:** 22 watts; 44-watt peaks. **Response:** Flat from 20 to 30,000 cps. **Harmonic Distortion:** less than 0.8%. **Hum:** -80 db. **Output Impedances:** 4, 8 and 16 ohms. **Controls:** Selector-Equalizer (Eur 78, Orig Lon, Orig AES, RIAA-NARTB-RCA Ortho, Orig Col, NARTB Tape, Tuner, Tape); Mag 1 or 2; Rumble Filter; Scratch Filter; Volume-Loudness; Loudness; Input Level; Bass; Treble; Off-On. 4 $\frac{3}{4}$ x1 $\frac{1}{2}$ x1 $\frac{1}{2}$ " $\frac{1}{2}$ ". Less case, see below. For 105-125 v., 50-60 cycle AC. Shpg. wt., 20 lbs.

94 SU 582. \$5.00 Down. NET... 109.95

### MODEL 250 40-WATT BASIC AMPLIFIER

An excellent, laboratory-quality 40-watt basic amplifier. Provides clean and undistorted, 40-watt power output on music waveforms. Instantaneous peak power, 80 watts. Long-time continuous maximum output, 35 watts. Less than 0.5% harmonic distortion; less than 0.1% first-order intermodulation distortion. An unusually fine choice for the critical audiophile.

**Response:** from 12 to 60,000 cps with controlled cut-off characteristics beyond. **Hum:** 85 db below full rated output. **Controls:** Input Level, Hum Balance, DC and AC Balance. Includes self-balancing phase inverter which automatically balances output circuit. Two input circuits of 0.2 and 0.5 megohms, require 0.5 and 1.5 volts input respectively, for full output. **Speaker Output Impedance:** 4 to 24 ohms.

Uses two 6CA7 push-pull parallel output tubes. With case. Size, 6 $\frac{1}{2}$ x13x11". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 22 lbs.

91 SU 677. \$5.00 Down. NET... 129.95



Model 99-D



Model 250

### CASES FOR SCOTT UNITS

Trim and attractive, these beautifully styled cases permit the use of Scott components in decorative table-top, shell and bookcase installations. Two types of cases are available: professionally hand-rubbed wood in lustrous mahogany, blonde or walnut furniture finishes; sturdy steel cases incorporating a highly attractive imitation leather finish. Both types feature decorative metal ventilating louvers to allow adequate circulation of air. Chassis slide in from front of case for fast, easy installation. Av. shpg. wt., 1 $\frac{1}{2}$  lbs.

### Metal with Leather Finish

No.	Type	HWD	Finish	For:	EACH
94 SX 577	C	4 $\frac{3}{4}$ x15 $\frac{1}{2}$ x12"	Leather	99-D, 222, 320, 330-D, 299, 130	9.95
94 SX 578	D	4 $\frac{3}{4}$ x13 $\frac{1}{2}$ x10 $\frac{1}{2}$ "	Leather	310-C, 311-D	9.95

### Wood with Mahogany, Blonde or Walnut Finish

94 SX 580	CW	5 $\frac{1}{8}$ x15 $\frac{1}{2}$ x12 $\frac{1}{4}$ "	Mahog.	99-D, 222, 320, 330-D, 299, 130	19.95
94 SX 590	DW	5 $\frac{1}{8}$ x13 $\frac{1}{2}$ x9 $\frac{1}{2}$ "	Mahog.	310-C, 311-D	19.95
94 SX 581	CWB	5 $\frac{1}{8}$ x15 $\frac{1}{2}$ x12 $\frac{1}{4}$ "	Blonde	99-D, 222, 320, 330-D, 299, 130	19.95
94 SX 591	DWB	5 $\frac{1}{8}$ x13 $\frac{1}{2}$ x9 $\frac{1}{2}$ "	Blonde	310-C, 311-D	19.95
91 SX 678	CWW	5 $\frac{1}{8}$ x15 $\frac{1}{2}$ x12 $\frac{1}{4}$ "	Walnut	99-D, 222, 320, 330-D, 299, 130	19.95
91 SX 679	DWW	5 $\frac{1}{8}$ x13 $\frac{1}{2}$ x9 $\frac{1}{2}$ "	Walnut	310-C, 311-D	19.95



# BOGEN . . . YEARS AHEAD IN



DB230A



ST-662

NET  
**\$189<sup>50</sup>**  
Less Cage

## BOGEN 'Deluxe' STEREO TWINS

NET  
**\$189<sup>50</sup>**  
Less Cage

### Model DB230A 60-Watt Stereo Amplifier

- Full Stereo and Monophonic Controls
- Exclusive Feedback Tone Control Circuits
- Advanced-Design Speaker Phasing Switch
- Premium-Quality Audio Output Tubes

Deluxe stereo amplifier-preamplifier for controlling all stereo and monophonic sources—tapes, records, FM-AM radio broadcasts, etc. Rated at 30 watts per channel, the DB230A delivers a powerful output of 60 watts for breathtaking stereo or monophonic reproduction; 120-watt peaks. Makes a beautifully matching companion unit to the Model ST-662 FM-AM Stereo Tuner listed at right.

Some of its many fine features include: feedback tone control circuits for low distortion; premium-type 6AV5GA audio tubes used in power output stages; stereo phasing switch for precise setting of speakers to suit individual listening tastes; full array of easy-to-operate controls; DC-powered tube filaments; smart styling to complement any decorative scheme; etc.

**Frequency Response:**  $\pm 1/2$  db, 20 to 20,000 cps. **Distortion:** harmonic, less than 1% at rated output; IM, less than 2%. **Hum:** -85 db. **Ten inputs (5 per channel):** Magnetic Phono; Ceramic-Crystal Phono; Tape; Tuner, Auxiliary. **Controls:** Input Selector (Tape, US78, RIAA, Tuner, Auxiliary); Bass; Treble; Loudness; Hi and Lo Filters; Stereo-Monophonic switch; Channel 1 Tape Preamp Off-On; Channel 2 Tape Preamp Off-On; Balance; Volume; Power Off-On; Phasing; Cartridge (Stereo-Monophonic). **Output impedances:** 4, 8, 16, and 32 ohms per channel. Employs four 6AV5GA output tubes.

Handsome two-tone gray panel; attractively accented by white and gold knobs. Less cage; takes CEG type listed below.  $5\frac{3}{4} \times 15 \times 13\frac{3}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 39 lbs. 89 SU 330. Only \$5.00 Down. NET..... 189.50

### Model ST-662 FM-AM Stereo Tuner

- Excellent Sensitivity—High Selectivity
- Separate Tuning Eye Indicators for FM & AM
- Automatic Volume Control on Both FM & AM
- Individual, Built-in FM and AM Antennas

An ideal companion unit to the Model DB230A amplifier listed at left. Excellent sensitivity and high selectivity assure clear reception of stereo and monophonic FM-AM broadcasts. Separate tuning eye indicators for FM and AM allow pin-point tuning. Automatic frequency control on FM assures utmost ease in tuning. Can be momentarily switched off to permit tuning of weak or distant stations. Automatic volume control on both FM and AM. Slide switch on rear of chassis permits convenient use of the Model ST-662 stereo tuner in monophonic high-fidelity music systems. Has built-in provision for adding FM multiplex adapter for FM stereo reception. Separate IF stage for AM minimizes crosstalk between channels.

**Sensitivity:** FM,  $2\frac{1}{2}$  microvolts for 30 db of quieting; AM (with built-in loopstick antenna), 100 microvolts for 20 db signal-to-noise ratio. **Audio Output:** 1 volt cathode follower. **Controls:** Tuning; Selector (Off-On, Stereo, AM, FM, AFC out). **Outputs:** AM, FM, Monophonic, Multiplex. **Tubes:** 6AB4, 2—12AT7, 3—6AU6, 2—6BA6, 6BE6, 2—EM840 tuning eye indicators; 2—matched 1N542 crystal diodes; 1N541 crystal diode; EZ80 rectifier. **Frequency Range:** FM, 88 to 108 mc; AM, 520 to 1640 kc. **Selectivity:** FM, 180 kc, 3 db down; AM, 10 kc, 3 db down. **Frequency Response:** FM,  $\pm 0.5$  db, 20 to 18,000 cps; AM,  $\pm 3$  db, 20 to 4500 cps.

Includes line-cord antenna for FM; loopstick antenna for AM. Two-tone gray panel; white and gold knobs. Size (HWD),  $4\frac{3}{4} \times 15 \times 12\frac{1}{4}$ ". Less cage; takes BEG type listed below. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 19 lbs. 91 SU 660. Only \$5.00 Down. NET..... 189.50

## FAMOUS TOP-RATED HIGH-FIDELITY COMPONENTS



DB130-A

### DB130-A 35-WATT AMPLIFIER

This powerful 35-watt amplifier offers exceptional versatility plus full-toned, perfectly-balanced reproduction.

**Output:** 35 watts with 1.5% IM distortion. **Harmonic Distortion:** 0.3%. **Response:**  $\pm 0.5$  db, 15-30,000 cps. **Hum:** (below rated output): Magnetic Inputs, -60 db; other inputs, -80 db. **Output Impedance:** 4, 8 and 16 ohms. **Inputs:** High-level Magnetic Phono; Low-level Magnetic Phono; Tuner; Tape; Tape Monitor; Auxiliary Crystal Phono. **Controls:** On-Off; Loudness-Contour; Bass; Treble; Selector (Phono, Radio, Tape, Aux.); 7-pos. Equalizer; 3-pos. Low Filter; 3-pos. High Filter Gain; 3-position Speaker Selector.

$4\frac{3}{4} \times 15 \times 12\frac{1}{4}$ ". 2—6AV5GA/GT in output. Less BEG cage, below. For 110-120 v., 60 cycle AC. Shpg. wt., 24 lbs. 91 SU 666. \$5.00 Down. NET..... 129.50

### T661 BASIC FM-AM TUNER

Deluxe styling and truly outstanding performance are skillfully blended in the makeup of this splendid tuner. FM section has extremely sensitive and selective circuitry employing Foster-Seeley discriminator and dual limiter; low-noise front section consists of tuned RF mixer and two IF stages. Has FM-AM tuning indicator.

**Sensitivity:** FM,  $2\frac{1}{2}$  microvolts for 30 db of quieting; AM, 5 microvolts for 20 db signal-to-noise ratio. **Selectivity:** FM, 180 kc, 3 db down; AM, 10 kc, 3 db down. **Audio Output:** 1 volt. **Controls:** Selector (On-Off, AM, FM, AFC Out); Tuning, 9 tubes; 2 matched 1N542 crystal diodes; 6X4 rectifier. Built-in FM and AM antennas.  $4\frac{3}{4} \times 12 \times 12\frac{1}{4}$ ". Less cage; takes AEG type, below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 16 lbs. 91 SU 665. \$5.00 Down. NET..... 139.50



T661

### METAL CAGES FOR BOGEN COMPONENTS

91 SX 630. AEG. For T661. $4\frac{3}{4} \times 12 \times 12\frac{1}{4}$ ". 2 lbs. NET.....	6.00
91 SX 617. BEG. For DB130-A, ST662, DB212, ST442. $4\frac{3}{4} \times 15 \times 12\frac{1}{4}$ ". 2 lbs. NET.....	7.50
91 SX 618. CEG. For DB230-A. $5\frac{3}{4} \times 15 \times 13\frac{3}{4}$ ". 2 lbs. NET.....	8.00
89 SX 336. ENCL. For RC412. $5\frac{1}{2} \times 16\frac{1}{2} \times 12\frac{1}{2}$ ". 2 lbs. NET.....	8.50
89 SX 335. ENB1. For SRB20. $5\frac{1}{2} \times 16\frac{1}{2} \times 12\frac{1}{2}$ ". 2 lbs. NET.....	8.50

# STYLING AND PERFORMANCE



DB212



ST442

NET  
**\$119<sup>95</sup>**  
Less Cage

## BOGEN 'Top Value' STEREO TWINS

NET  
**\$149<sup>50</sup>**  
Less Cage

### Model DB212 24-Watt Stereo Amplifier

- Delivers 12 Watts Per Stereo Channel
- Provides Excellent Control Flexibility
- Features Speaker Phasing Control Switch
- Accommodates Any Stereo/Mono Source

A moderately priced stereo amplifier-preamplifier—actually three units on one compact chassis. It is a complete stereo preamplifier with two separate 12-watt amplifier sections; a complete 24-watt monophonic amplifier; and a 24-watt amplifier which serves as a single stereo channel, plus a complete stereo preamplifier which may be used to convert any existing monophonic amplifier to serve as the second stereo channel. Handsome and versatile, the DB212 accommodates any stereo or monophonic music source—tapes, records, FM-AM broadcasts, etc. Among its many excellent features are: a speaker phasing switch for eliminating any "hole-in-the-middle" effect during stereo use; simplified controls for ease of operation; etc. Makes an ideal power unit for ST442 tuner listed at right.

**Power Output:** 24 watts (2—12 watt channels). **Frequency Response:** ±1 db, 20 to 20,000 cps. **Harmonic Distortion:** 0.5% at rated output. **Noise & Hum:** -80 db. **Controls:** Selector (Tape, Phono, Radio Tuner, Auxiliary); Function (Monophonic; Channel 1, Channel 2, Channels 1 and 2; Stereophonic; Normal, Inverted); Volume; Bass; Treble; Hi-Filter; Lo Filter; 2-position Speaker Phasing; Off-On, NARTB tape and RIAA-phono equalization. **Output Impedances:** 4, 8, and 16 ohms per channel. **Sensitivity:** Tuner, Auxiliary, and High Tape—0.25 v.; Magnetic, and Low Tape—8 mv. Four 6V6 output tubes.

Attractive two-tone gray panel with beautifully contrasting white and gold knobs. Size (HWD): 4¼x15x12¼". Less cage; takes BEG type listed on facing page. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 20 lbs.  
91 SU 613. Only \$5.00 Down. NET..... 119.95

### Model ST442 FM-AM Stereo Tuner

- Excellent Sensitivity on Both Channels
- Handy Tuning Meter for FM and AM Stations
- Convenient, Built-in FM and AM Antennas
- Provision for Adding Multiplex Adapter

Perfect companion unit to the DB212 amplifier described at left, this beautifully performing stereo tuner offers excellent sensitivity for thrilling FM and AM stereo and monophonic reception. Included among its many features are: a tuning meter for precise settings of FM and AM stations; automatic frequency control to "lock" in stations; built-in FM and AM antennas to strengthen reception; provision for adding a multiplex stereo adapter; automatic volume control on each channel; cathode follower; etc. Trim appearance and matching color styling make the ST442 ideal for use with the DB212. Blends harmoniously with any decorative motif.

**Sensitivity:** FM, 1.5 microvolts for 30 db of quieting at 75 ohm input; 3.0 microvolts for 30 db of quieting at 300 ohm input. AM (with built-in loopstick antenna), 100 microvolts for 20 db signal-to-noise ratio. **Audio Output:** cathode follower. **Controls:** Selector (Stereo FM-AM, FM, AM, Multiplex), AFC out; FM Tuning; AM Tuning; Power Off-On. **Tubes:** 6AB4, 12AT7, 2—6AU6, 2—6BA6, 6BE6, 12AU7, 2—matched 1N542 crystal diodes; 1N541 crystal diode; EZ80 rectifier. **Frequency Range:** FM, 88 to 108 mc; AM, 520 to 1640 kc. **Frequency Response:** FM, ±0.5 db, 20 to 18,000 cps; AM, ±1½ db, 20 to 4500 cps. **Outputs:** AM, FM, Multiplex. **Antennas:** FM, built-in line antenna; AM, built-in ferrite loopstick; provision for addition of external antennas.

Handsome front panel is finished in attractive two-tone gray with contrasting gold and white knobs. Size (HWD): 4¾x15x12¼". Less cage; takes BEG type listed on facing page. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 17 lbs.  
89 SU 332. Only \$5.00 Down. NET..... 149.50

## NEW BOGEN & "CHALLENGER" STEREO TUNER/AMPLIFIERS

### SRB20 STEREO TUNER/AMPLIFIER

NET  
**\$199<sup>50</sup>**  
Less Cage

Excellent stereo FM-AM tuner/amplifier on one chassis. Consists of a stereo FM-AM tuner plus a 20-watt stereo amplifier (10 watts per channel)—you need add

only the speakers of your choice for exciting stereo reproduction. Excellent features include: separate bass and treble controls for each channel; provision for multiplex adapter; controls to accommodate addition of record player; etc. It's an ideal choice for the economy-minded music lover.

**Power Output:** 20 watts (10 watts per stereo channel). **Frequency Response:** FM, ±1 db, 20-20,000 cps. **Noise and Hum:** FM, -58; AM, -48. **Sensitivity:** FM, 4 microvolts. **Distortion:** FM, 1.5%; AM, 3%. **Controls:** Function Selector, Dual Volume, Dual Bass, Dual Treble, FM Tuning, AM Tuning, Off-On, FM-AFC, AM-Multiplex. **Output Impedances:** 4, 8, and 16 ohms. 15 tubes plus 3 crystal diodes and rectifier. Stereo-monophonic switch in rear.

Complete with separate, built-in FM and AM antennas. Attractively styled to complement any furnishing mode. 5½x16½x12½". Less cage; takes ENB1 type listed on facing page. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 24 lbs.  
89 SU 333. \$5.00 Down. NET..... 199.50

### RC412 STEREO TUNER/AMPLIFIER

NET  
**\$169<sup>50</sup>**  
Less Cage

The "Challenger" by Bogen. Budget-priced stereo FM-AM tuner/amplifier unit. Consists of a 12-watt amplifier (6 watts per stereo channel) and stereo FM-AM

tuner—on one compact, attractive chassis. All you need to complete your system are the speakers of your choice, plus a record player if desired. Features: provision for a multiplex stereo adapter; highly simplified controls for ease of operation; built-in FM and AM antennas; etc. Dual volume controls permit precise balance of channels.

**Power Output:** 12 watts (6 watts per stereo channel). **Frequency Response (FM):** ±1 db, 30-15,000 cps. **Noise and Hum:** FM, -58 db; AM, -48 db. **Sensitivity:** FM, 4 microvolts. **Distortion:** FM, 1.5%; AM, 3%. **Controls:** Function Selector, Dual Volume, Bass, Treble, FM Tuning, AM Tuning, Off-On, FM-AFC, AM-Multiplex. **Output Impedances:** 4, 8, and 16 ohms. 14 tubes plus 3 crystal diodes and rectifier. Stereo-Monophonic switch in rear.

Includes built-in FM and AM antennas. Handsome black panel, contrasted in white and gold. 5½x16½x12½". Less cage; takes ENC1 type listed on facing page. For 110-120 v., 50-60 cycle AC. Wt., 20 lbs.  
89 SU 334. \$5.00 Down. NET..... 169.50



SRB20

A STEREO PHONIC  
—FM-AM Tuner  
—Preamplifier  
—Power Amplifier  
ALL IN A SINGLE  
COMPACT UNIT!



RC412

Choose Your Own Music System Featuring Bogen Components—Write for Price



A-230 "Ballad" Stereo Amplifier



T-230 "Sonnet" Stereo FM-AM Tuner

NET

**\$109<sup>95</sup>**

Less Case

**Two New, Matched Stereo Components**

Perfectly matched in appearance and performance, these two new Harman-Kardon components can be used to form a stereo music ensemble of incomparable quality.

NET

**\$119<sup>95</sup>**

\$5.00 Down

**MODEL A-230 "BALLAD" 30-WATT STEREO AMPLIFIER**

A superb new stereo amplifier incorporating dual preamp sections and dual 15-watt-per-channel amplifier sections. Excellent features include: friction-clutch bass and treble controls for regulating tone of each channel separately or both channels together; provision for adding a third speaker to your system for 3-channel stereo or extension use; tape outputs for stereo recording; etc.

*Output:* 15 watts each channel at less than 1% harmonic distortion; 36 watts per channel peak power. *Response:* ±1 db, 15 to 70,000 cps at normal listening levels. *Hum & Noise:* 80 db below 15 watts at minimum volume. RIAA record and NARTB tape playback equalization. *Controls:* concentric Treble; concentric Bass; Loudness; Balance; Mode (Stereo Reverse, Stereo, Monophonic, Monophonic Right, Monophonic Left); Function Selector (Tape Lo/Phono Lo, Phono Hi, Tuner, Aux/Tape Hi); Rumble Filter; Contour; 2 Speaker Selector Switches; illuminated pushbutton Off-On. 4—EL84 output tubes. *Output Impedances:* 8 and 16 ohms per channel. 4 3/4 x 13 1/4 x 11 1/2". Less case, below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 18 lbs.

92 SU 875. Only \$5.00 Down. NET.....109.95

92 SX 882. Metal Case for Above. Shpg. wt., 2 lbs. NET.....7.95

**MODEL T-230 "SONNET" STEREO FM-AM TUNER**

Designed with skill and precision, the T-230 stereo tuner is an excellent companion component to the A-230 described at left. Offers outstanding reception; incorporates separate AM and FM sections; has jack for accepting multiplex adapter. Styled in striking brushed copper, with ventilated matte black case, it adds an interesting touch to any room interior or furnishing mode.

*FM Section:* 3 1/2 μv sensitivity for 20 db of quieting. Low-noise front end consisting of grounded-grid, cathode-fed RF amplifier, double-tuned overcoupled RF interstage, and low-noise grid-fed triode mixer followed by wideband, transitionally coupled IF stages. Armstrong circuit with pentode limiter, wide-band Foster-Seeley discriminator and automatic frequency control (AFC). *AM Section:* Terminal sensitivity, 10 microvolts. Low-noise, high-gain RF pentode followed by a pentagrid converter, wide-band IF stage and high-perveance crystal detector with quick-action automatic volume control (AVC). *Controls:* FM Tuning, Function Selector (Off-On, FM, FM-AFC, AM, Stereo); AM Tuning, 3 Outputs: AM-FM Monophonic and FM Stereo; AM Stereo; FM Multiplex. 9 tubes; diode AM detector; silicon rectifier. Size, 4 3/4 x 13 1/4 x 12 1/4". Includes case. For 110-120 v., 50-60 cycle AC. Shpg. wt., 13 lbs.

92 SU 876. Only \$5.00 Down. NET.....119.95

**NEW MODEL A-260 "CHORALE" 60-WATT STEREO AMPLIFIER**

A splendid new stereo amplifier of unusual versatility—can be used to reproduce every stereo or monophonic program source with unsurpassed fidelity. Has dual preamps and dual 30-watt amplifier sections. Features selector switch for adding a third channel speaker or extension speaker; concentric, friction-clutch tone controls; special tape output for stereo recording; DC filaments in preamp sections; speaker phasing switch, plus a complete array of other controls. Illuminated, pushbutton off-on switch permits turning the A-260 on or off without affecting previous control settings. Employs 10 tubes; 4 silicon diode rectifiers; 2 silicon rectifiers for bias and filament supply.

*Output:* 30 watts per channel at less than 1/2% harmonic distortion. *Response:* ±0.5 db, 15 to 30,000 cps at 1 watt. *Hum:* —95 db. *Output Impedances:* 4, 8 and 16 ohms per channel. *Controls:* concentric Treble; concentric Bass; Loudness; Mode (Reverse, Stereo, Monophonic, Monophonic Right, Monophonic Left); Selector (Aux 1, Aux 2, Tuner, Phono, Tape Head); Rumble Filter; Scratch Filter; Contour; 2 Speaker Selector switches; Tone Control Bypass Switch; Balance; Off-On. 6 dual stereo inputs. 4 3/4 x 15 1/4 x 13 3/4". Less case, below. For 110-120 v., 50-60 cycle AC. 35 lbs.

92 SU 877. \$5.00 Down. NET.....199.95

92SX883. Case for A-260. 3 lbs. NET 12.95

**NEW MODEL ST-360 "MADRIGAL" STEREO FM-AM TUNER**

One of the finest stereo tuners available, the ST-360 is a marvel of pushbutton convenience. Has separate AM and FM front ends—all functions except tuning, are operated by pushbuttons. Highly efficient, separate electronic bar tuning indicators for AM and FM. On FM, harmonic and 1M distortion, and drift are virtually unmeasurable. Remarkable sensitivity permits distant station reception; superior signal-to-noise ratio. *FM Section:* Sensitivity, 0.95 μv for 20 db of quieting. Armstrong circuit with "Gated Beam" limiter, Foster-Seeley discriminator, AFC, 3 wide-band IF stages, etc. *AM Sec-*

*tion:* low-noise, high-gain RF pentode-pentagrid converter, 2 broadband IF stages—infinite impedance detector, 10-kc whistle filter, separate AVC circuit, etc. *Controls:* AM Tuning; FM Tuning; pushbuttons for AM Noise Filter, AM, Stereo AM-FM, Stereo Multiplex, FM, FM-AFC, and Off-On. 2 cathode-follower outputs. 16 tubes; selenium rectifiers. 4 3/4 x 15 1/4 x 12 3/4". Less case, below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 26 lbs.

89 SU 310. \$5.00 Down. NET.....199.95

92SX846. Case for ST-360. 3 lbs. NET 12.50

**MODEL F-250 "LYRIC" BASIC FM TUNER**

A remarkably sensitive FM tuner. Employs 2 tuned circuits connecting the RF stage to a low-noise triode mixer for excellent sensitivity, with broad bandpass for lowest signal distortion. 3 broadly coupled IF stages provide the high gain necessary for full limiting of weak signals. "Gated Beam" for uniform limiting at all signal levels.

*Sensitivity:* 0.95 μv for 20 db of quieting. *Controls:* FM Tuning; Selector (Off-On, FM, FM-AFC, Aux, Multiplex). Tuning eye; 2 cathode follower outputs. 10 tubes; rectifier. 4 3/4 x 15 1/4 x 13 3/4". Less case. For 110-120 v., 50-60 cycle AC. 23 lbs.

91 SU 649. \$5.00 Down. NET.....129.95

91SX650. Case for F-250. 3 lbs. NET 12.50



A-260



ST-360

Two advanced-design hi-fi components that complement each other in styling and superior performance—ideal for a deluxe stereo system.

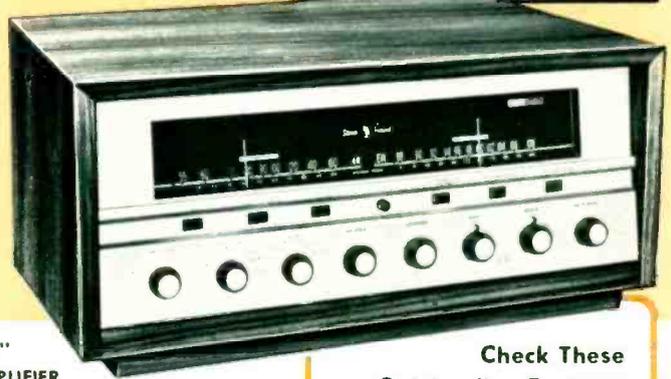


F-250

# HIGH-FIDELITY COMPONENTS

harman kardon

Harman-Kardon stereo and monophonic hi-fi components are renowned for their unusually handsome styling and excellence of specification. Encompassing all price ranges, any H-K component you choose, will provide you with uncompromising high-fidelity performance, as well as smart, modern appearance.



## NEW MODEL TA-230 "STEREO FESTIVAL" STEREO FM-AM TUNER/30-WATT STEREO AMPLIFIER

NET  
**\$259<sup>95</sup>**  
Less Case

A successful crystallization of H-K's hi-fi know-how, in a superb stereo instrument. This complete stereo center features dual preamps with every desirable input and control facility. Two 15-watt amplifier sections, plus separate FM and AM tuners. *Audio features:* Clutch bass and treble controls permit adjustment of bass and treble separately for each channel, or simultaneously for both channels. Silicon rectifier power supply provides excellent regulation for improved transient response and highly stable tuner performance. DC heated preamp filaments insure freedom from hum. Speaker phasing switch corrects for improperly recorded stereo program material. Four new 7408 audio output tubes deliver distortion-free power from a conservatively operated circuit. *Tuner features:* Separate electronic tuning bars for FM and AM; new, swivel high-Q ferrite loopstick for increased AM sensitivity; provision for adding FM multiplex adapter; flywheel weighted tuning for FM and AM.

*Output:* 15 watts per channel at less than 0.6% harmonic distortion. *Output Impedances:* 8 and 16 ohms per channel. *Response:*  $\pm 0.5$  db, 15 to 30,000 cps at 1 watt, *FM Sensitivity:*  $2\frac{1}{2}$   $\mu$ v for 20 db of quieting. 15 front-panel controls. 4 pairs of inputs; 2 tape outputs, plus multiplex output. 20 tubes; 4 silicon rectifiers; 1 germanium diode detector. Size,  $6\frac{1}{2} \times 15\frac{1}{2} \times 12\frac{3}{4}$ ". Less case, below. Front panel in copper, brass or satin chrome finish—specify when ordering. For 110-120 v., 50-60 cycle AC. Shpg. wt., 35 lbs.  
92 SU 867C. Only \$10.00 Down. NET 259.95  
92 SX 868. Metal Case. 2 lbs. NET 12.95  
92 SX 881. Wood Walnut Case. 3 lbs. NET 29.95

## Check These Outstanding Features

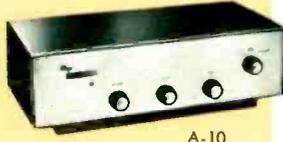
- 1 Complete array of inputs and controls for accommodating any stereo or monophonic signal source—15 front-panel controls.
- 2 Separate, highly sensitive FM and AM tuners, with separate tuning eye indicators and outputs for stereo tape recording.
- 3 A Harman-Kardon first—front panel in your choice of brushed copper, gleaming brass, or highly attractive, satin-chrome finish.
- 4 Dual amplifier sections employ four new 7408 output tubes in self-biased, push-pull circuit for 60-watt peak stereo output.



FA-10



F-10



A-10

## GUIDE LINE ECONOMY-PRICED HI-FI COMPONENTS

### MODEL FA-10 "SONATA" FM TUNER-AMPLIFIER

Modestly priced, 3-in-1 unit that offers a sensitive FM tuner, 10-watt amplifier and equalized tape and record preamp control section—all on one chassis. Tuner employs broadband Foster-Seeley discriminator with limiter and automatic frequency control. Amplifier has RIAA-equalized magnetic phono input and NARTB-equalized tape head input. *FM Sensitivity:* 4  $\mu$ v for 20 db of quieting. *Output:* 10 watts at less than 1% harmonic distortion. *Response:*  $\pm 1/2$  db, 15 to 30,000 cps at 2 watts. 2—EL84 output tubes. With case,  $4\frac{1}{2} \times 13\frac{1}{2} \times 11$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 18 lbs.  
91 SU 607. Only \$5.00 Down. NET 114.95

### MODEL F-10 "TEMPO" BASIC FM TUNER

Has Armstrong circuit with limiter and broadband Foster-Seeley discriminator. Distortion is remarkably low; excellent capture ratio. AFC for "lock in" tuning of FM stations—no drifting. *Sensitivity:* 4  $\mu$ v for 20 db of quieting. 5 tubes. With case,  $4 \times 12\frac{1}{2} \times 6\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 10 lbs.  
91 SX 606. Only \$5.00 Down. NET 69.95

### MODEL A-10 "ALLEGRO" 10-WATT AMPLIFIER

Embodies every important characteristic of a fine hi-fi amplifier; styling matches the "Tempo" tuner above. *Controls:* Off-On/Loudness; Treble; Bass; Selector (Aux/Tuner, RIAA Phono, Tape Head). *Output:* 10 watts at less than 1% harmonic distortion. *Response:*  $\pm 0.5$  db, 15-30,000 cps. 2—EL84 output tubes. With case,  $4 \times 12\frac{1}{2} \times 6\frac{1}{2}$ ". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 11 lbs.  
91 SX 608. Only \$2.00 Down. NET 49.95



A-220 20-Watt Stereo Amplifier

Priced within everyone's reach, the A-220 incorporates dual stereo preamps and two 10-watt power amplifiers

### NEW MODEL A-220 "LUTE" 20-WATT STEREO AMPLIFIER

NET **\$799<sup>5</sup>**  
\$5.00 Down

- Peak Power of 20 Watts for Each Channel
- Accepts Magnetic & Ceramic Stereo Cartridges
- Employs 4 New 7408 Beam Power Output Tubes
- Sleek, Beautiful Copper and Gray Styling

The "Lute" is a handsomely styled, complete stereo amplifier incorporating dual stereo preamps and two hum-free, distortion-free 10-watt power amplifiers. An excellent value for the low-cost stereo music system, it incorporates four 7408 hi-fi audio output tubes, 2 per channel, for clean, usable power and wide response. Illuminated, pushbutton Off-On switch turns set "on" or "off" without disturbing other controls. Dramatically styled in brushed copper and gray.

*Output:* 10 watts each channel at less than 2% harmonic distortion. *Peak Power Output:* 20 watts per channel. *Response:*  $\pm 1$  db, 20 to 20,000 cps. *Output Impedances:* 8 and 16 ohms per channel. *Hum:* -70 db. 3 *Dual Inputs:* Magnetic Phono; Crystal or Ceramic Phono; Tuner/Aux. *Controls:* ganged Treble; ganged Bass; Balance; pushbutton Off-On; Loudness and Function Selector (Stereo Phono Reverse, Stereo Phono Normal, Monophonic Phono, Monophonic FM, Monophonic AM, Stereo Tuner Normal, Stereo Tuner Reverse). Two stereo tape outputs. 8 tubes; silicon diode rectifier. With case,  $4\frac{3}{8} \times 14\frac{1}{2} \times 10\frac{1}{2}$ ". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 14 lbs.  
92 SU 880. Only \$5.00 Down. NET 799.50

# FISHER... A Tradition

Engineered for the Professional . . .  
Designed for the Home



Two superb stereophonic instruments from one of the most famous names in High-Fidelity. Built to the highest standards, the 101-R Stereo Tuner and X-101A Stereo Amplifier will provide years of outstanding performance.



## Model 101-R Stereo FM-AM Tuner

NET  
**\$229.50**

- Independent FM and AM Sections with Separate "Micro-Ray" Tuning Indicators
- 4 IF Stages for Unsurpassed FM Sensitivity
- AM Section Has Broad and Sharp Tuning

\$10.00 Down

A stereo FM-AM tuner of superior quality and design, and with a remarkable array of deluxe features. Has entirely independent FM and AM sections for stereo or monophonic use. **FM Section:** Sensitivity, 0.75 microvolts for 20 db of quieting. "Micro-Ray" tuning indicator; gear-driven flywheel tuning. Gold Cascade RF amplifier stage, four IF stages for maximum gain and bandwidth with minimum distortion. Automatic interstation noise suppression; automatic gain control holds audio output constant within 1 db. Wide-band ratio detector uses a pair of matched germanium diodes for maximum AM suppression and minimum distortion. Low-impedance audio output stage.

**AM Section:** Sensitivity, 3 1/2 microvolts for 0.5 volt output. Tuned RF stage for maximum signal-to-noise ratio, and 1F rejection. 2 IF stages with 3 IF transformers for high gain. Two-position bandwidth selector; "Micro-Ray" tuning indicator; 10-ke whistle filter.

**Controls:** AM Tuning; AM Selector (Power Off-On, AM Off, Broad, Sharp); FM Selector (FM Off, Tune, Listen); FM Tuning. Two FM output level adjustments; AM output level adjustment. **Outputs:** FM Output, FM Recording, AM Output, AM Recording, FM-AM Output, FM-AM Recording, FM Multiplex. 12 tubes; 2 diodes; 2 tuning indicators; EZ81/6CA4 rectifier. Less cabinet, below. 4 1/4 x 15 1/4 x 13". For 105-125 v., 50-60 cycle AC. Shpg. wt., 20 lbs.

91 SU 683. Only \$10.00 Down. NET ..... 229.50

## New Model X-101A 40-Watt Stereo Amplifier

NET  
**\$194.50**

- Full 40-Watt Stereo Output; 75-Watt Peaks
- Inputs for Every Existing Signal Source
- Concentric Bass and Treble Controls for Ganged or Individual Channel Operation

\$5.00 Down

Masterfully designed, dual 20-watt stereo amplifier with integrated, dual preamp sections. Offers controls and inputs for any stereo or monophonic sound source; stereo channels can be used in parallel or individually for monophonic operation. Recording jacks are provided on both channels for stereo or monophonic tape recording, without interrupting normal listening. Record-monitor jack on Channel A. Single-knob channel balance control; loudness contour switch. Concentric bass and treble controls for independent regulation in each channel, or both channels simultaneously.

**Output:** 20 watts per channel for 40-watt stereo; effortlessly handles peaks up to 75 watts. **Response:** flat from 20 to 20,000 cps. **Distortion:** 0.7% at rated output; 1M, 2% at rated output. **Hum & Noise:** 80 db below rated output. **Crosstalk:** 50 db between channels. **Sensitivity:** 3 mv for Phono, 2 mv for Tape, 0.2 volt for high level.

**12 Inputs (2 each):** LP-78-RIIA 1; RIAA 2; Tape; Tuner; Aux 1; Aux 2. **Output Impedances:** 4, 8 and 16 ohms each channel. **Controls:** Selector (LP, 78, RIAA 1, RIAA 2, Tape, Tuner, Aux 1, Aux 2); Output Selector (Stereo Reverse, Stereo, Channel A plus B, Channel B plus A); On-Off/Master Volume; Channel Balance; Rumble; Filter; Loudness Control; Bass; Treble; 4 Input Level adjustments. Four 7189/EL84/6BQ5 output tubes. Less cabinet, below. 4 1/4 x 15 1/4 x 13". For 105-125 v., 50-60 cycle AC. Shpg. wt., 30 lbs.

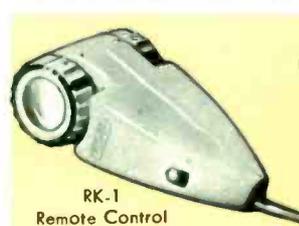
92 SU 872. Only \$5.00 Down. NET ..... 194.50



## NEW FM-100 BASIC FM TUNER

An incredibly sensitive new FM tuner, the FM-100 features "Micro-Gap" cascode RF stage, dual-triode mixer-oscillator, four wide-band 1F stages and a wide-band ratio detector. New muting control eliminates side-band response, interstation noise, and unwanted, weak or noisy signals. **Sensitivity:** Only 0.8 microvolts for 20 db of quieting. **Signal-to-Noise Ratio:** 60 db for 100 microvolt input. **IF Bandwidth:** 6 db down at 220 kc. **Controls:** Selector (Off-On, FM, Multiplex Stereo, Main Channel, Multiplex Channel); Muting; Multiplex Separation; and FM tuning. "Micro-Ray" indicator for pinpoint station tuning; 8 tubes plus 4 germanium diodes; FM84 tuning indicator; EZ80 rectifier. Size, 4 1/4 x 15 1/4 x 13". Less cabinet, below. For 105-125 v., 50-60 cycle AC. Shpg. wt., 18 lbs.

89 SU 320. Only \$5.00 Down. NET ..... 159.50



RK-1  
Remote Control

**RK-1 STEREO REMOTE CONTROL.** For 400-CA stereo preamp on next page. Permits remote control of channel balance and volume. 2 control dials, one for each channel. With 30-ft. cable. 4" long. 1 1/2 lbs.

92 S 848. NET ..... 17.95

**PR-66 STEREO PREAMPLIFIER.** Not illus. Dual-channel preamp, RIAA-equalized for low-level stereo cartridges; equalization for 2 stereo tape heads or mikes. 2 phono input jacks; 2 low-impedance output jacks. 5 1/2 x 8 x 1 1/4". For 105-125 v., 50-60 cycle AC. 4 lbs.

91 S 686. Only \$2.00 Down. NET ..... 29.95

**PR-6 PREAMPLIFIER.** RIAA-equalized for phono; NARTB-equalized for tape head playback. For low-level magnetic cartridge, tape deck or mike. 3 1/2 x 3 1/4 x 3 1/4". For 105-125 v., 50-60 cycle AC. 1 1/2 lbs.

98 S 528. NET ..... 12.95



PR-6  
Preamp

## METAL AND WOOD CABINETS FOR FISHER COMPONENTS

Beautifully styled in the classic tradition, these cabinets are the product of the same skilled workmanship that goes into the excellent music reproducing instruments listed on both of these pages. Cabinets are styled to complement the distinctive, brushed brass panels of Fisher hi-fi components. Metal cabinets have a simulated leather finish; the Model 10-U hand-rubbed hardwood cabinet is available in three finishes to cover most traditional or modern decors—mahogany, blonde and walnut. Specify choice when ordering.

Stock No.	Model No.	Cabinet	For	Size (HWD)	Wt., Lbs.	NET EACH
92 SX 838C	10-U	Wood	X-101A amplifier, 400-CA preamp, 101-R FM-AM tuner	6x15 1/4 x 9 1/4"	8	24.95
89 SX 316	MC-1	Metal	FM-100 FM tuner, 100-T FM-AM tuner/preamp	5 1/2 x 15 1/4 x 11 1/4"	5	15.95
92 SX 864	TA-6	Metal	600 FM-AM tuner/amplifier, 202-T FM-AM tuner/preamp	5 1/2 x 17 1/4 x 13 1/4"	5	17.95

# of Excellence in High-Fidelity

FISHER



Two new Fisher stereo components, each of which features a dazzling array of controls and design innovations.

## Model 600 Stereo FM-AM Tuner/ 40-Watt Amplifier

NET  
**\$349.50**  
\$10.00 Down

- On One Chassis — Stereo FM-AM Tuner, 40-Watt Total Stereo Amplifier, Audio Control
- Has a Total of 24 Inputs and Outputs
- FM Multiplex, Tape Input & Output Jacks

A magnificent instrument, the "600" is designed for the discerning audio enthusiast. Add only stereo speaker systems and record changer, to have a complete stereo music ensemble, capable of handling any existing stereo or monophonic signal source.

**FM Section:** Cascode RF stage for high sensitivity and maximum signal-to-noise ratio—only 1  $\mu$ v provides ample limiting. Low-noise triode mixer for minimum drift; 3 high-gain IF stages with low time constant limiter for maximum gain and selectivity. Wide-band ratio detector and separate limiter for minimum distortion and best noise suppression. "Micro-Ray" bar-type tuning indicator for precise tuning. **AM Section:** High-gain RF stage, pentagrid mixer and oscillator, and IF stage. Rotatable, effective ferrite antenna. Two bandwidth (10 kc and 4 kc) positions selected by front-panel switch. 10-kc whistle filter. Separate "Micro-Ray" bar-type tuning indicator.

**Audio Section:** Two 20-watt audio channels for 40 watts of stereo power output; 70-watt peaks. **Response:**  $\pm 1$  db. 25-20,000 cps. **Hum & Noise:** -90 db. **Harmonic Distortion:** less than 0.5% at rated output. **Output Impedances:** 4, 8 and 16 ohms per channel. 5 input level adjustments. Less cabinet, see preceding page. 4 $\frac{1}{2}$ x17x14 $\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 40 lbs. 92 SU 863. Only \$10.00 Down. NET. 349.50

## Model 400-CA Stereo Preamp

NET  
**\$174.50**  
\$5.00 Down

- 16 Inputs, 4 Outputs & 11 Controls
- Correct Equalization for All Stereo and Monophonic, Tape or Disc Recordings
- Separate or Ganged, Bass and Treble

Superbly designed, the 400-CA Stereophonic Master Audio Control offers virtually unlimited flexibility. Provides 16 input jacks on rear apron for any combination of stereo and monophonic applications. Four output jacks, and a total of 11 controls, give you unsurpassed versatility. Provides correct equalization for all stereo and monophonic tape and disc recordings.

**16 Inputs (8 pairs):** Eur-RIAA 1; RIAA 2; Tape; Mic; Monitor; Tuner; Aux 1; Aux 2. **4 Outputs (2 pairs):** Main (for 2 amplifier-speaker systems in stereophonic or monophonic operation); and Recorder (for stereo or monophonic recording). **11 Controls:** 4 Input Selector pushbuttons (with jeweled indicator lamps); 6-pos. Equalization Selector (Eur. LP, RIAA 1, RIAA 2, Tape, Mic); 6-pos. Output Selector (Stereo Reverse, Stereo, Channel A plus B, Channel A only, Channel B plus A, Channel B only; Master Volume/On-Off; Channel Balance; Loudness Contour; Rumble Filter; Bass; Treble; and four Input Level adjustments. **Response:** flat from 20 to 25,000 cps. **Distortion:** less than 0.15% for 2-v. output; less than 0.3% for 5-v. output. **Hum & Noise:** absolutely inaudible—better than 85 db for high-level inputs. 6 tubes: EZ80/6V4 rectifier, plus selenium rectifier. Less cabinet, see preceding page. 4 $\frac{1}{2}$ x15 $\frac{1}{2}$ x9". For 105-125 v., 50-60 cycle AC. Shpg. wt., 10 lbs. 92 SU 885. Only \$5.00 Down. NET. 174.50



## MODEL 300 STEREO BASIC AMPLIFIER

Tremendous reserve power from this new 60-watt stereo basic amplifier. **Output:** 30 watts-per-channel for 60 watts of stereo power; handles 160 watt peaks. **Response:** flat from 20 to 20,000 cps. **Distortion:** harmonic, better than 0.1% at full rated output,  $\pm 1$  db; IM, less than 0.08%. **Hum & Noise:** -100 db. **Inputs:** 2 for each channel—one for standard flat response; one with controlled response for electrostatic speakers. **Output Impedances:** 4, 8 and 16 ohms per channel. 4—EL34/6CA7 output tubes. With cover, 6 $\frac{1}{2}$ x16 $\frac{1}{2}$ x7 $\frac{1}{4}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 36 lbs. 92 SU 847. \$5.00 Down. NET. 169.50

**NEW MODEL SA-100 50-WATT STEREO BASIC AMPLIFIER** Not illus. **Output:** 25 watts per channel for 50 watts of stereo power; 100 watts peak. **Response:**  $\pm 1$  db. 20-20,000 cps. **Hum:** -90 db. 4—7189 output tubes. With cover, 6 $\frac{1}{2}$ x12 $\frac{1}{2}$ x7 $\frac{1}{4}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 25 lbs. 89 SU 317. \$5.00 Down. NET. 119.50



## NEW 100-T STEREO TUNER/PREAMP

Skillfully engineered stereo FM-AM tuner with dual preamp sections. Perfect for use with either of the stereo basic amplifiers described at left. **FM Section:** 3 IF stages for high gain and selectivity; wide-band ratio detector; cascode-type RF stage with maximum signal-to-noise ratio. "Micro-Ray" tuning indicator. **AM Section:** Rotatable ferrite loop antenna; tuned RF amplifier for high gain and high signal-to-noise ratio; automatic volume control, and distortion-free detector. "Micro-Ray" tuning indicator.

**Preamplifiers:** 7 inputs for magnetic and ceramic cartridges, tape recorder, tuner, etc.; 4 outputs—2 for tape recorder, 2 for power amplifiers. 14 front panel controls. 13 tubes, plus 2 germanium diodes; 2 tuning indicators and rectifier. Less cabinet; see preceding page. 4 $\frac{1}{2}$ x15 $\frac{1}{2}$ x11 $\frac{1}{2}$ ". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 25 lbs. 89 SU 315. \$10.00 Down. NET. 239.50



## NEW 202-T STEREO TUNER/PREAMP

Offering the ultimate in high-fidelity performance, the 202-T combines a stereo FM-AM tuner and Master Control Stereo Preamp. **FM Section:** Sensitivity, effective limiting below 1  $\mu$ v; noise is only 0.1% of full modulation. Capture ratio, 2.3 db. 4 IF stages, with extra-wide-bandpass, including a dual dynamic limiter and wide-band ratio detector. Logarithmic "Micro-Ray" tuning indicator; interstation muting circuit. **AM Section:** Tuned RF stage, 5  $\mu$ v sensitivity; temperature-compensated converter stage; 2 IF stages with 3 IF transformers; 2 positions of bandwidth; delayed AVC; 10-kc whistle filter. "Micro-Ray" tuning indicator.

**Master Audio Control:** 18 front-panel controls; 4 outputs; 7 level-set controls on rear panel; plug-in jack for RK-1 Remote Control; etc. 20 tubes, 4 germanium diodes. Less cabinet, see preceding page. 4 $\frac{3}{4}$ x15 $\frac{1}{2}$ x12 $\frac{1}{4}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 25 lbs. 89 SU 314. \$10.00 Down. NET. 349.50



BELL . . . WORLD RENOWNED

THE DELUXE STEREO TWINS



MATCHED STYLING

The low-silhouette design and highly attractive, rich saddle tan finish exemplify the ultra-smart styling of the Bell line of fine high-fidelity components—complement any decorative motif.

MODEL 3030 30-WATT STEREO AMPLIFIER

NEW MODEL 3070 FM-AM STEREO TUNER

NET

\$146<sup>95</sup>

Only \$5.00 Down

Versatile 30-watt amplifier that becomes two 15-watt amplifiers for stereo at the flick of a switch. Inputs for all stereo sources. Deluxe features include: "magic touch" on-off/loudness control; RIAA phono equalization; NARTB tape equalization; three equalization positions on left channel for all monophonic records; etc. *Rated Power*, 30 watts stereo or monophonic; peak power is 60 watts. *Frequency Response*: ±0.5 db. 20-20,000 cps. *Distortion*: harmonic, 0.5%. *Hum*: 79 db below 15 watts. *Dual Inputs* (5): Tape Head, Magnetic and Ceramic Phono, Tuner, Auxiliary. *Controls*: 6-position selector switch—Tape, EUR, RIAA, LP, Tuner, Auxiliary; Noise Filter—Off, Hi, Lo, Both; Balance Control combined with Monoaural switch; Off-On/Loudness control switch; Level Control with Stereo Reverse; Bass (+15 db—20 db at 50 cps); Treble (+12 db—16 db at 10,000 cps); Rear Chassis—Tuner Set Level, Output Parallel Switch, Hum Balance Control. *Dual Outputs* (4): 4, 8, 16 ohms and high impedance. 11 tubes. 4 1/2 x 16 x 11". For 110-120 v., 60 cycle AC. Shpg. wt., 22 lbs.

91 SU 656-Only \$5.00 Down. NET. . . . . 146.95

NET

\$137<sup>15</sup>

Only \$5.00 Down

Beautifully styled, sensitive FM-AM stereo tuner—makes an ideal companion for the 3030 amplifier listed at left. Consists of an FM section and an AM section—on one compact chassis. Has many deluxe features: electronic tuning bar for separate FM and AM sections; automatic frequency control (AFC) that "locks in" the FM station of your choice; easy-to-read logging scale that helps pin-point the desired station; stereo-selector switch that permits you to feed any monophonic signal through both channels of your stereo amplifier; output jack for multiplex adapter; 10 kc heterodyne filter on AM; etc. *Sensitivity*: FM, 6 microvolts for 20 db quieting; AM, 20 microvolts. *Selectivity*: FM, 6 db down at 200 kc; AM, 6 db down at 11.5 kc. *Output* (both sections): 2.5 volts at 100% modulation. *Controls*: AM Tuning, Power (Off-On), Selector (AM, Stereo, FM), AFC (Off-On), FM Tuning, Hum and Noise, FM, 50 db below 100% modulation. 10 tubes: 2—12M84 tuning indicators. *Size* (HWI): 4 1/2 x 16 x 11 1/2". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.

92 SU 893-Only \$5.00 Down. NET. . . . . 137.15

Bell "PACEMAKER" Stereo & Monophonic Hi-Fi Components



Model 2222

2222 STEREO FM-AM TUNER

Budget-priced, smartly designed stereo tuner. Assures clear reception of FM alone, AM alone, or FM-AM stereo broadcasts. Among its many features are: automatic gain controls (AGC) in each section to maintain equal volume of the signal going to the amplifier; automatic frequency control (AFC) for "lock in" FM tuning; provision for addition of multiplex output adapter; etc.

*Sensitivity*: FM, 6 microvolts for 20 db signal-to-noise ratio; AM, 20 microvolts. *Selectivity*: FM, 6 db down at 200 kc; AM, 6 db down at 11.5 kc. *Output*: 2.5 volts at 100% modulation. *Controls*: AM Tuning; Off-On; Selector (AM, Stereo, FM); AFC Off-On; FM Tuning. Nine tubes plus rectifier.

*Size*, 3 1/2 x 14 1/4 x 10". For 110-120 v., 50-60 cycle AC. Shpg. wt., 11 lbs. 92 SU 830. \$5.00 Down. NET. . . . . 107.75



Model 2221B

2221B 20-WATT STEREO AMPLIFIER

An economically priced stereo high-fidelity amplifier. Delivers 10 watts per channel for 20 watts of stereo or monophonic reproduction. Accommodates any music source—tapes, records, broadcasts, etc. Single knob balance control lets you maintain balance between matched or unmatched speakers.

*Power Output*: 20 watts (10 watts per channel); 40 watts peak. *Response*: ±1 db. 20-20,000 cps. *Hum*: 65 db below 10 watts. *Inputs*: Magnetic and Ceramic Phono, Tape Head, Tuner, Aux. *Dual Outputs*: 4, 8, 16 ohms and Hi-Z for recording. *Controls*: Selector, Balance, Volume, Bass, Treble; also has Lo-Noise Filter, Hi Filter, Stereo Reverse, and Output Combining Switch.

9 tubes; rectifier. 3 1/2 x 14 1/4 x 11". For 110-120 v., 60 cycle AC. 14 1/2 lbs. 92 SU 417. \$5.00 Down. NET. . . . . 97.95

2216 BASIC FM HI-FI TUNER

Moderately priced tuner for true high-fidelity reception of FM broadcasts. Makes an excellent unit for matching with your present AM tuner for FM-AM stereo broadcasts. Features include: multiplex stereo adapter jack; built-in line cord FM antenna; sensitive, drift-free circuit; easy-to-read logging scale; automatic frequency control (AFC) that "locks in" stations; etc. Neat, eye-catching styling matches any decor.

*Sensitivity*: 6 microvolts for 20 db signal-to-noise ratio. *Selectivity*: 6 db down at 200 kc. *Hum and Noise*: 50 db below 100% modulation. *Output*: 2.5 volts at 100% modulation. *Controls*: Power On-Off, AFC On-Off; Tuning. *Tubes*: 6AB4, 6ECC85/6AQ8, 2—6AT6, 6AL5, 6AV6; E280/6V4 rectifier.

*Size*, 3 1/2 x 11 1/4 x 10". For 110-120 v., 50-60 cycle AC. Shpg. wt., 9 lbs. 92 SX 831. \$5.00 Down. NET. . . . . 68.55

2212 14-WATT STEREO AMPLIFIER

Low in cost, the compact 2212 is the ideal stereo-monophonic amplifier for the budget-minded music lover. Delivers 7 watts per channel for 14 watts of exciting stereo or monophonic sound. Accommodates tapes, records and broadcasts—stereo or monophonic. Smart, handsome styling.

*Power Output*: 14 watts (7 watts per channel); 28 watts peak. *Response*: ±2 db. 30-15,000 cps. *Dual Inputs*: tuner, or tape pre-amplifier output; phono (ceramic or crystal). *Dual Outputs*: 4, 8, and 16 ohms; also high impedance for recording. *Controls* (5): Selector (stereo phono reverse, normal, monophonic phono, AM, FM, stereo tuner normal and reverse); Volume; Balance; Bass; and Off-On/Treble. 7 tubes plus rectifier.

*Size*, 3 1/2 x 11 1/4 x 9 3/4". For 110-120 v., 60 cycle AC. Shpg. wt., 10 1/2 lbs. 92 SU 829. \$5.00 Down. NET. . . . . 68.55



Model 2216



Model 2212

# FOR HIGH-FIDELITY SOUND



## THE CARILLON STEREO TWINS



Outstanding performance combined with ultra-deluxe styling—designed for the finest stereo music system.



NET

**\$186<sup>15</sup>**

Only \$5.00 Down

### Distinguished Styling . . . By Design

Unusually distinctive styling keynotes the "Carillon" series of stereo high-fidelity components. Each a masterpiece of design—together, an outstanding choice for the music lover.

NET

**\$215<sup>55</sup>**

Only \$10.00 Down

#### NEW MODEL 6070 STEREO FM-AM TUNER

High sensitivity combined with distinctive styling exemplifies the 6070 Carillon FM-AM stereo tuner. It's the ideal companion unit for the 6060 amplifier described at right. Providing exceptional performance, this top-quality component features separate meters for pin-point tuning accuracy on FM and AM. A convenient logging scale is provided to help you make an accurate log of stations on either the FM or AM band. Retuning to your favorite stations is made easy when you keep a record of their exact locations as indicated on the logging scale. A switch is provided for turning the automatic frequency control (AFC) off for tuning a weak signal adjacent to a strong one.

**Sensitivity:** FM (300 ohm terminal), 1.1 microvolts for 20 db quieting; AM, 3.5 microvolts for 20 db signal-to-noise ratio. **Selectivity:** FM, 6 db at 200 kc; AM, 8.5 kc (narrow), 19 kc (wide). **Distortion:** FM, less than 1% at 100% modulation; AM, less than 1% at 30% modulation. **Frequency Response:** FM,  $\pm 0.5$  db 20-20,000 cps; AM, 20-8,000 cps. **Frequency Range:** FM, 88-108 mc; AM, 535-1640 kc. **Hum and Noise:** FM, 60 db below 100% modulation; AM, 50 db below 100% modulation. **Controls (A):** FM Tuning; AM Tuning; AM and FM Level Set (rear panel). **Switches (B):** Power On-Off; AM Bandwidth, wide-narrow; Function (AM-Stereo-FM); AFC, On-Off. **AM and FM Output:** cathode follower. **Tuning Indicators (2):** meter. **Tube Complement:** 6ES8, 6DJ8, 3-6AU6, 2-6BN8, 6BE6, 3-6BA6; 1Z80 rectifier.

Handsome saddle tan finish. Size, 5x16x10 $\frac{1}{4}$ ". For 110-120 volts, 60 cycle AC. Shpg. wt., 19 lbs. 92 SU 896. Only \$5.00 Down. NET . . . . . 186.15

#### MODEL 6060 60-WATT STEREO AMPLIFIER

Engineered for outstanding stereo reproduction, the 6060 Carillon delivers 30 watts per channel for 60 watts of superb stereo or monophonic hi-fi sound. Some of its many exceptional features include: continuously variable loudness control to automatically compensate for bass and treble at low listening levels; separate bass and treble controls for each channel; speaker selector switch for controlling an additional set of stereo speaker systems in another room; push-pull on-off switch to eliminate repeated settings; etc.

**Power Output:** 60 watts (30 watts per channel); 120 watt peaks. **Response:**  $\pm 1$  db, 15 to 30,000 cps at 30 watts. **Hum:** 71 db below rated output. **Distortion:** less than 1%. **Dual Inputs (7):** Microphono; NARTB Tape Head; Magnetic Phono; Ceramic Phono; Tuner; Tape Preamplifier; Auxiliary. **Controls (8):** Selector (Mike, Tape Head, RIAA, LP, EUR, Tuner, Tape Amp, Aux); Left Channel Bass; Left Channel Treble; Balance; Continuously Variable Loudness; Right Channel Bass; Right Channel Treble; Level Control combined with Push-Pull Power On-Off Switch; **Level Switches (3):** Lo Filter: 40 cps cutoff. Off, 80 cps cutoff; Hi Filter: 8 kc cutoff. Off, 4 kc cutoff; Function: Stereo Reverse, Stereo, Monophonic; Stereo Speaker Selector; AB, A, B. **Rear Chassis:** individual left and right Level Set controls for tuner, tape amp inputs; 2 AC convenience outlets operated by AC power switch. **Dual Outputs:** 4, 8, 16 ohms and high impedance for recording. **Tubes:** 4—EL34/6CA7, 6—ECC83/12AX7; 5V3 rectifier.

Rich, saddle tan finish to complement any decor. Size, 6 $\frac{1}{2}$ x16x11 $\frac{1}{4}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs. 92 SU 828. Only \$10.00 Down. NET . . . . . 215.55

### Bell Quality Monophonic High-Fidelity Components

#### 2315 12-WATT HI-FI AMPLIFIER

Compact 12-watt amplifier with controls—perfect for the moderately priced home music system. "Magic Touch" switch combined with loudness control gives unexcelled convenience—permits turning amplifier on or off without disturbing loudness setting. Handsomely styled in rich saddle tan.

**Power Output:** 12 watts; 20-watt peaks. **Response:**  $\pm 0.5$  db, 20-20,000 cps. **Distortion:** harmonic, less than 0.5%; IM, less than 3%. **Hum:** 75 db below 12 watts. **Inputs (6):** 2—low-level Magnetic or Tape Head, Crystal or Ceramic Phono, high-level Magnetic. **Tuner, Aux. Controls:** "Magic Touch" Off-On/Loudness; Bass; Treble; Level; Selector-Equalizer (Tape, RIAA, 78, EUR Radio, Aux); Phono/Tape input selector (low-level Mag. Tape and Ceramic/Crystal; low-level Mag. Tape or high-level Mag). Rumble filter switch. Hum balance adjustment. **Impedances:** 4, 8, 16 ohms and recording. Five tubes plus rectifier. Two convenience AC outlets.

Size, 4x13 $\frac{1}{2}$ x9". For 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs. 94 SX 736. \$5.00 Down. NET . . . . . 68.55

#### 2520M FM-AM BASIC HI-FI TUNER

Superb styling and true hi-fi FM reception, plus full-range AM broadcast listening are yours with this well-designed tuner. Features built-in multiplex stereo adapter jack. Superior FM sensitivity is provided through the use of Armstrong circuit with dual limiters and a Foster-Seely discriminator. "Floating Touch" tuning control makes selection of the desired station remarkably easy. Dual output jacks are provided for feeding a tape recorder simultaneously while listening to the tuner. Saddle tan finish.

**Sensitivity:** FM, 3.5 microvolts for 20 db quieting; AM, 20 microvolts for 20 db signal-to-noise ratio. **Selectivity:** FM, 6 db down at 200 kc; AM, 6 db at 11.7 kc. **Response:** FM,  $\pm 1$  db, 20-20,000 cps; AM,  $\pm 3$  db, 20-5000 cps. **Power Output:** 2 volts at 30% modulation. **Controls:** Selector (Off, AM, FM with AFC, FM without AFC); Tuning. 7 tubes plus rectifier. Multiplex adapter jack.

Size, 4 $\frac{1}{2}$ x13x10 $\frac{1}{4}$ ". For operation from 110-120 volts, 60 cycle AC. With antennas for FM and AM. Shpg. wt., 14 lbs. 92 SU 894. \$5.00 Down. NET . . . . . 93.10



2315



2520M

Choose Your Own Music System Featuring Bell Components—Write for Price

# Outstanding High-Fidelity Components

by *Sherwood*,



Highly Rated by a  
Leading Consumer Publication

## MODEL S-5000 40-WATT STEREO AMPLIFIER

NET  
**\$189<sup>50</sup>**  
Less Case

New, skillfully designed 40-watt stereo amplifier with every important control and input essential to stereo or monophonic operation. It offers: 5 modes of operation selectable by function switch which also operates a corresponding group of indicator lights; friction-locked shafts for bass and treble controls for adjustment of one channel separately, or both channels simultaneously; 12 inputs; 2 cathode-follower recording outputs; selectable damping factors for use with today's highly popular, compact speaker systems; etc. **Rated Output:** 20 watts per channel for stereo (40-watt peaks), at 1/2% harmonic or 1 1/2% IM distortion (60:7 kc/4:1). **Response:** ± 1/2 db, 20 to 20,000 cps. **Controls:** Phono Level, Rumble Filter, Scratch Filter and Presence; Selector (Tape, Phono, FM, MX, AM, TV, Aux); Balance; concentric Bass; concentric Treble; Loudness; Function Selector (Power Off-On, Stereo Normal, Stereo Reverse, Mono S1, Mono S2, Mono S1 & 2); Tape Monitor switch; Loudness In-Out switch. **Output Impedances:** 4, 8 and 16 ohms per channel. Four 7189 output tubes. 4x14x13 1/2". Less case, below. For 110-120 v., 60 cycle AC. Shpg. wt., 29 lbs.  
92 SU 856. Only \$5.00 Down. NET.....189.50



With Noise-Muting  
FM Interchannel Hush Feature

## MODEL S-2200 FM-AM-MULTIPLEX STEREO TUNER

NET  
**\$179<sup>50</sup>**  
Less Case

A perfect companion to the S-5000S, the new S-2000 tuner fulfills today's stereo reception requirements with separate reception of FM and AM broadcasts—and goes one step further in preparing for FM multiplexing broadcasts. Provides front panel control and space for plugging in an FM multiplex adapter. Other features include: push-button selection of FM, AM or Multiplex operation; AFC for "lock-in" FM tuning; light-bar tuning eyes for FM and AM; indicator lights for FM multiplex; etc.

**FM Section:** Sensitivity, 0.95 μv for 20 db of quieting, 3 cascaded limiters; Foster-Seely balanced discriminator; delayed AGC applied to RF stage; AFC; and interchannel noise muting with front panel level control. **AM Section:** Superhet circuit with 2 tuned RF circuits, double-tuned IF stage, delayed AVC applied to RF, mixer and IF stages, 10-kc filter, dual wide-narrow selectivity. **Outputs:** Cathode-follower audio, FM multiplex, 12 tubes; 2—EM84 tuning eyes; 6V4/EZ80 rectifier. Size, 4x14x12 1/2". Less case, at right below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 17 lbs.  
92 SU 887. Only \$5.00 Down. NET.....179.50

## Other Top-Rated Sherwood Components



S-2000-II



S-3000-II



S-1000-II

### NEW S-2000-II FM-AM BASIC TUNER

Has same features as the S-2200 above, but does not have separate tuning for AM and FM. Has single 6BR5/EM80 tuning eye, AM section has choice of either 15-kc wide "hi-fi" bandpass or sharply selective 5-kc bandwidth for listening to weaker stations without noise and interference. **Controls:** Off-On/FM-AM Selector; Interchannel FM Hush; FM and AM Tuning (flywheel); AFC On-Off; AM Wide-AM Narrow slide switch, 11 tubes; 6V4 rectifier, 4x14x10 1/2". Less case, below. For 110-120 v., 50-60 cycle AC. Wt., 15 lbs.  
92 SU 889. \$5.00 Down. NET....145.50

### NEW S-3000-II BASIC FM TUNER

Sherwood's outstandingly sensitive FM circuit (0.95 μv for 20 db quieting), is featured in this fine unit, together with Interchannel Hush, noise-muting system for eliminating "hash" between FM channels and AFC. The S-3000 also has a front panel "local-distance" switch; makes FM reception practical beyond 100 miles. **Controls:** Off-On/ Interchannel Hush; AFC On-Off; FM Tuning (flywheel); and Distant-Local slide switch. "Feather-ray" tuning eye, 9 tubes; 6X4 rectifier. Less case, 4x14x10 1/2". For 110-120 v., 50-60 cycle AC. 14 lbs.  
92 SU 870. \$5.00 Down. NET....105.50

### S-1000-II 36-WATT AMPLIFIER

Monophonic amplifier combining functional styling with complete control flexibility. Has inverse feedback and special output transformer to attain undistorted output (below 1/2% at 36 watts) **Output:** 36 watts; 72-watt peaks. **Response:** ± 1/2 db, 20 to 20,000 cps at 36 watts. **Hum & Noise:** Volume control, -90 db; radio input, -80 db; Phono, -60 db. **Inputs:** 2—Magnetic Phono, Tape Head or Mike, 4—Tuner, Tape Recorder, TV, etc. Four E184 output tubes, 4x14x10 1/2". Less case, below. For 110-120 v., 60 cycle AC. 20 lbs.  
92 SU 855. \$5.00 Down. NET....109.50

### New S-4400 36-Watt Amplifier with Dual Preamp Sections



S-4400  
"Add-On" Amplifier

Features the exact controls, front panel and dual preamplifiers offered in the S-5000 stereo amplifier described above. However, a single 36-watt amplifier section is offered instead of two 20-watt amplifiers. Perfect for converting monophonic hi-fi systems to stereo use; excellent for use with the Model S-360C (below), to provide a 72 watt stereo amplifier-preamp system; may also be used with any other monophonic amplifier for stereo. Four 7189 output tubes. Size, 6x13 1/2 x 4 1/4". Includes metal cage. For 110-120 v., 60 cycle AC. Shpg. wt., 16 lbs.  
92 SU 862. \$5.00 Down. NET....159.50

NEW MODEL S-360C 36-WATT BASIC AMPLIFIER. Amplifier section is identical to the S-4400 described above, but less all controls, 4—7189 output tubes. Size, 6x13 1/2 x 4 1/4". Includes metal cage. For 110-120 v., 60 cycle AC. Shpg. wt., 16 lbs.  
92 SU 890. \$5.00 Down. NET....65.50

Use these two magnificent components to form the heart of a stereo music system of unexcelled quality.

### METAL CASES FOR ALL SHERWOOD COMPONENTS

In choice of black or brown "Flexitone" finishes—a durable, cork-like finish, spattered with gold. Contrasts beautifully with white panels and gold-finished bezels of Sherwood units. Shpg. wt., 3 lbs.

Stock No.	Color	Fits	Size (HWD)
92 SX 891	Brown Flexitone	S-5000 S-2200	4 1/2 x 14 x 13"
89 SX 318	Black Flexitone	S-5000 S-2200	4 1/2 x 14 x 13"
92 SX 892	Brown Flexitone	S-4400 S-2000-II S-3000-II S-1000-II	4 1/2 x 14 x 10 1/2"
89 SX 319	Black Flexitone	S-4400 S-2000-II S-3000-II S-1000-II	4 1/2 x 14 x 10 1/2"

NET EACH .....5.00

# Top-Quality High-Fidelity Components by Pilot



580

## Perfection in Performance

Designed, engineered and produced to extremely high standards, Pilot audio components are renowned for their excellent specifications and beautiful styling. They provide unquestioned high-fidelity performance, and are among your best values.



240

### NEW MODEL 580 STEREO FM-AM TUNER

NET **\$179.50**  
\$5.00 Down

- New "Centra-Tune" FM Tuning Indicator—Separate AM Tuning Indicator
- Separate, Independent FM and AM Sections; Provisions for FM Multiplex Reception

New, first-quality stereo tuner with independent FM and AM sections. May be used for FM or AM alone, or simultaneously for reception of FM-AM stereo broadcasts. Will provide FM multiplex stereo reception with external multiplex when available. FM section of the 580 features a low-noise, dual-triode golden-grid cascade RF amplifier with interstage circuit tuning. Freedom from drift is assured by means of temperature-compensated oscillator circuit. The wide-band detector (1000-kc wide), makes tuning completely non-critical. In addition, the 580 has a "Centra-Tune" FM tuning indicator for precise, "on station" tuning. High gain IF circuitry comprises two IF stages and two limiters, with excellent impulse noise suppression. Styled in black and brass.

AM section has a high-gain pentode RF amplifier with interstage tuning, triode-pentode oscillator-mixer, and steep-skirted IF stage. A germanium diode detector is used for maximum detection efficiency and extremely low distortion. Separate AM tuning indicator; 10-kc whistle filter; temperature-compensated AM oscillator. *FM Sensitivity:* 1.5  $\mu$ v. *AM Sensitivity:* 3  $\mu$ v. Dual cathode follower outputs permit use of long cables without signal loss. 10 tubes; 2 indicator tubes; 4 diodes; 1 rectifier. Size, 5x14 $\frac{1}{2}$ x11". Includes case. For 105-120 v., 60 cycle AC. Shpg. wt., 24 lbs.

92 SU 886. Only \$5.00 Down. NET..... 179.50

### NEW MODEL 240 30-WATT STEREO AMPLIFIER

NET **\$129.50**  
\$5.00 Down

- New "Trolak" Bass and Treble Controls for Each Channel Individually or Together
- Automatic Shut-Off Feature on Power Switch
- Gleaming Gold and Black Color Styling

You get a host of features with this marvelous new, 30-watt stereo amplifier. Offers 15 watts per channel output for stereo use, or full 30-watt output for monophonic use. New "Trolak" separate, concentric bass and treble controls, permit adjustment for each channel individually or simultaneously. Speaker selector control switch permits addition of extension speaker for "3-channel" stereo sound or remote use. Automatic shut-off switch permits record changer to turn off the amplifier automatically, after the last record has played. Highly attractive black and brass styling.

*Output:* 15 watts per channel; 30 watts total. *Response:*  $\pm 1$  db, 20-20,000 cps. *Harmonic Distortion:* less than 1%. *Sensitivity for Full Output:* Phono, 3 mv; Tuner, Multiplex, Tape, 110 mv. *Hum & Noise:* -80 db. *Controls:* Speaker Selector (Main, All, Ext.); Automatic Shutoff Out-In; Loudness Out-In; Volume/Off-On; Stereo Balance; concentric Bass (calibrated LP, RIAA, NAB, AES, Tape Head); concentric Treble (calibrated NAB, LP, RIAA, Tape Head, AES); Mode (Stereo Normal or Reverse, Monophonic Channel A or Channel B); Input Selector (Phono Turntable, Phono Record Changer, FM-AM, Multiplex, Tape Recorder). *Outputs:* 8 or 16 ohms, plus Tape. 4—EL84 output tubes; GZ34 rect. 5 $\frac{1}{2}$ x14 $\frac{1}{4}$ x10 $\frac{1}{4}$ ". For 105-120 v., 60 cycle AC. With case, 23 lbs.

92 SU 871. Only \$5.00 Down. NET..... 129.50

### NEW 216-A STEREO PREAMPLIFIER

A professional-quality stereo preamp that features 2 illuminated VU meters to indicate tape recording output level or to visually balance both channels of a stereo system; separate tape output gain controls for tape recording for each channel independently; meter function switch which allows VU meters to be used for tape recording, or to adjust listening balance without affecting tape signal, etc. *Audio Output:* 1 volt. Has 14 inputs. 4 outputs: 2—audio; 2—tape recorder. 12 controls. 5 $\frac{1}{2}$ x14 $\frac{1}{2}$ x11". With case. For 105-120 v., 60 cycle AC. Shpg. wt., 20 lbs.

92 SU 842. \$5.00 Down. NET.... 199.50

### NEW 245-A 40-WATT STEREO AMPLIFIER

An impressive new amplifier, superbly supported by performance, specifications and features of the highest caliber. Includes: concentric bass and treble controls on each channel to permit simultaneous or individual adjustment; 7 pairs of inputs for all signal sources; speaker selector for adding a third set of speakers; automatic amplifier/record changer shut-off; dramatic gold and black styling; etc. *Output:* 20 watts per channel; 40 watts total. *Response:*  $\pm 1$  db, 20-20,000 cps. *Harmonic Distortion:* less than 1%. *Hum:* -80 db. *Outputs:* 8 and 16 ohms; Tape, 4—EL84 output tubes. 5 $\frac{1}{2}$ x14 $\frac{1}{2}$ x12 $\frac{1}{2}$ ". With case. For 105-120 v., 60 cycle AC. 30 lbs.

92 SU 840. \$5.00 Down. NET.... 199.50

### NEW 680 STEREO FM-AM TUNER

A deluxe, professional stereo tuner. Features FM and AM sections, with provisions for adding an external FM multiplex demodulator. *FM Section:* 1  $\mu$ v sensitivity; wide-band detector; temperature compensated oscillator; 3 IF stages and 2 limiters; interstation noise suppression; tuning meter. *AM Section:* 2  $\mu$ v sensitivity; high-gain pentode RF amplifier; 2 steep-skirted IF stages with front-panel bandwidth control; 10-kc whistle filter; tuning meter; etc. Channel A and Channel B level set controls. 14 tubes; 4 diodes; rectifier. 5x14 $\frac{1}{2}$ x12 $\frac{1}{2}$ ". With case. For 105-120 v., 60 cycle AC. Shpg. wt., 25 lbs.

91 SU 681. \$10.00 Down. NET.... 219.50

### NEW 260 STEREO BASIC AMPLIFIER

Not illustrated. A deluxe, 80-watt unit, engineered to give you tremendous reserve power, clean response and hum-free operation. Perfect for use with the 216-A stereo preamp described at left. Features output transformers of special, high-efficiency design with interleaved windings and grain-oriented steel. *Output:* 40 watts per channel; 80 watts per channel peak. *Response:* flat from 20 to 20,000 cps. *Distortion:* less than 0.5% at 35 watts per channel. *Hum & Noise:* -90 db. *Output Impedances:* 8 and 16 ohms per channel. 4—EL34/6CA7 output tubes. 6 $\frac{1}{2}$ x15 $\frac{1}{2}$ x7". With cover. For 105-120 v., 60 cycle AC. 35 lbs.

91 SU 639. \$5.00 Down. NET.... 139.50



216-A



245-A



680

**McIntosh**

# World Famous Hi-Fi Components



**Model C20 Stereo Preamplifier**

NET  
**\$22500**  
\$10.00 Down

Highly advanced in control flexibility, the C20 stereo preamp-compensator is masterfully designed to provide complete command over any stereo or monophonic music system's performance. 15 pairs of stereo inputs make this exceptional unit compatible with professional recording or broadcast installations as well as the most elaborate home high-fidelity systems. 2 banks of stereo phono inputs are provided—each consisting of 3 pairs of inputs to accommodate any stereo or monophonic cartridge. Also has 4 pairs of Tape Head inputs (2 High, 2 Low); 2 pairs of stereo Tuner inputs; plus Stereo Tape, Aux and Tape Monitor provisions; phone jacks on front panel for attaching portable tape players or recorders.

Response:  $\pm 1/2$  db. 20-20,000 cps. Distortion: Less than 0.2%. Hum and Noise: -85 db. Controls: Mode Selector (Reverse, Stereo, Left, Right, etc.); Balance; Phase Reverse; HF Cutoff (Flat, 9 kc, 5 kc); Aural Compensator; Volume/Off-On; Input Selector (Aux, Tape, Tuner 1 or 2, Phono 1 or 2 Stereo or Monophonic; Tape Head 1 or 2; Record Compensators; Bass; Treble; Rumble Filter; Playback-Record Switch; Tape Compare Switch. 4 AC outlets.  $4\frac{1}{4} \times 14\frac{1}{4} \times 12"$ . Less cabinet. For 110-120 v., 50-60 cycle AC. Wt., 17 lbs. 92 SU 836. Only \$10.00 Down. NET **225.00**

91 SX 695C. Wood Cabinet for C20. Specify mahogany or walnut. Shpg. wt., 5 lbs. NET **25.00**



**Model MR-55A Basic FM-AM Tuner**

NET  
**\$24900**  
\$10.00 Down

For the audio connoisseur. Two years in the making, the MR-55A sets new standards in distortion-free FM-AM reception. AM Section. Sensitivity:  $1\frac{1}{2}$   $\mu$ v. Distortion: less than 1% at 100% modulation. Exceptionally strong automatic volume control; less than 4 db audio output change with input changes from 10 to 100,000 microvolts. 3 positions of AM sensitivity; 3 positions of bandwidth. Front end has 21 kc constant bandwidth, band pass input. Whistle filter: 70 db rejection at 10 kc.

FM Section. Sensitivity: 3  $\mu$ v at 100% modulation for a total of less than 3% total noise and distortion. Frequency response:  $\pm 3$  db, 20-20,000 cps. Capture ratio: 1 to 0.8. 4 IF amplifiers. IF bandwidth; 200 kc; flat on top. 2 limiters; 2-mc limiter and detector bandwidth. Ultra-sonic muting. Distortion-free automatic frequency control with separate detector; completely variable. Hum: 70 db below full signal. Controls: Off/FM AFC; AM Sensitivity; Off-On/Volume; FM Listen-Tune; AM Broad-Medium-Sharp; Phono. Outputs: Main, Multiplex. Input for phono. Size:  $4\frac{1}{4} \times 14\frac{1}{4} \times 12"$ , 12" deep. Less cabinet, below. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 27  $\frac{1}{2}$  lbs. 89 SU 301. Only \$10.00 Down. NET **249.00**

91 SX 695C. Wood Cabinet for MR-55A. Specify mahogany or walnut. Shpg. wt., 5 lbs. NET **25.00**



**MC-30 30-WATT BASIC AMPLIFIER**

Offers flawless monophonic reproduction. Circuit uses "unity coupling" for greater power output without distortion. Ideal in pairs for use with C20 preamplifier, above, for deluxe stereo systems; or any other quality preamp or tuner with full set of controls. Only 0.5 v. input is required for full 30-watt output. Response:  $\pm 0.1$  db, 20 to 30,000 cps. Distortion: Harmonic, less than  $1/2$ % at 30 watts; IM, less than 0.5%. Hum & Noise: -90 db. Output Impedances: 4, 8, 16, 600 ohms and 70.7 v. 2-1614's in push-pull output. Black and chrome styling blends harmoniously with any decor. Size  $8 \times 13 \times 8"$ . For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 36 lbs. 93 SU 895. \$5.00 Down. NET **143.50**

**MC-60 60-WATT BASIC AMPLIFIER**

Offers exceptional reserve power capacity—provides faithful monophonic reproduction of the entire audio range. Perfect in stereo pairs with C20 preamp, above. Output: 60 watts continuous. Response:  $\pm 0.1$  db, 20 to 30,000 cps at 60-watt output. Distortion: harmonic, less than 0.3% at 60-watt output; IM, less than 0.5%. Hum & Noise: 90 db or more below rated output. Output Impedances: 4, 8, 16, 600 ohms and 70.7 v. Input Impedance:  $1/2$  meg for  $1/2$ -volt input and 0.13 meg for 2  $1/2$ -volt input. Tubes: 2-12AX7, 12AU7, 12BH7, 2-6550 output tubes; 2-5U4GA rectifiers. Chrome and black styling.  $8 \times 14 \times 10"$ . For 110-120 v., 50-60 cycle AC. Shpg. wt., 44 lbs. 93 SU 899. \$5.00 Down. NET **198.50**

## GENERAL ELECTRIC

## AMPLIFIERS AND TUNER



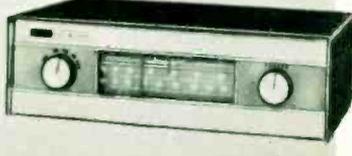
**MS-2000 28-WATT STEREO AMPLIFIER**

Features handsome styling, full control facilities and excellent specifications. Rated Power: 28 watts stereo or monophonic; peak power is 56 watts. Response:  $\pm 1/2$  db, 20-20,000 cps. Harmonic Distortion: Less than 1%. Inputs: Stereo Phono (magnetic); Stereo Tape Head; Monophonic Phono (magnetic); Stereo Tuner (may be used for stereo or monophonic ceramic cartridges); Monophonic Aux. Controls: Input Selector; Mode Selector (Stereo, Reverse, Monophonic, etc.); Volume; Contour; Balance; Bass; Treble; Rumble Filter. Saddle brown finish. Size:  $5\frac{1}{4} \times 15 \times 12"$ . For 110-120 v., 60 cycle AC. Shpg. wt., 17 lbs. 89 SU 302. \$5.00 Down. NET **137.15**



**MS-4010 40-WATT STEREO AMPLIFIER**

Deluxe version of model MS-2000 at left. Features same fine specifications but offers a full 20 watts-per-channel output for a clean 40 watts of stereo or monophonic reproduction; peak power is 80 watts. Has speaker phasing switch on rear panel. The MS-4010 also features DC heaters on preamp and tone amplifier tubes to eliminate possible AC hum. Use of a separate DC supply for power stage screens provides maximum output stability at all frequencies. Handsomely styled in saddle brown with silver trim around recessed control panel.  $5\frac{1}{4} \times 15 \times 12"$ . For 110-120 v., 60 cycle AC. Shpg. wt., 17 lbs. 89 SU 303. \$5.00 Down. NET **176.35**



**FA-10 BASIC FM-AM TUNER**

An outstanding FM-AM tuner that combines excellent performance with attractive design. Choice of outputs for use with virtually any hi-fi amplifier. FM Section. Sensitivity: 2.5  $\mu$ v for 20 db quieting. Frequency: 200-kc bandwidth, 6 db down. Selectivity Response:  $\pm 2$  db, 20-15,000 cps. Noise Level: -55 db. AM Section. Sensitivity: 200  $\mu$ v for 20 db signal to noise ratio. Selectivity: 7 kc bandwidth, 6 db down. Controls: Off-AM-FM-FM AFC; Tuning. Beautifully styled in rich, saddle brown finish to complement any motif.  $5\frac{1}{8} \times 15\frac{1}{2} \times 10\frac{1}{4}"$ . For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 15  $1/2$  lbs. 89 SU 304. \$5.00 Down. NET **127.35**

# Tops in Quality — Kit or Assembled

*dynakit*  
For Audio Perfection

Performance Acclaimed  
at the Recent Brussels  
Worlds Fair



A sensational new stereo amplifier that provides outstanding full-fidelity performance in the home as well as critical broadcast and recording applications.

## New! "Stereo 70" 70-Watt Basic Amplifier Kit

NET  
**\$99<sup>95</sup>**  
\$5.00 Down

- Meets the Exacting Requirements of the Most Discriminating Listener
- Patented Dynaco Circuit on Fully Pre-Assembled Printed Circuit Board

Dynakit presents a thrilling new basic stereo amplifier with superlative features and specifications. Designed to please the most exacting audio connoisseur, this deluxe unit delivers 70 watts output (35 watts per channel) in either stereo or monophonic operation—actually handles 160 watt peaks with ease! Exceptionally easy to assemble (average construction time is about 5 hours), the Stereo 70 features a completely wired and assembled printed circuit section. Critical wiring is eliminated insuring excellent performance.

**Frequency Response:**  $\pm 1/2$  db. 10 to 40,000 cps. **Power Response:** 20 to 20,000 cps without exceeding 1% distortion within 1 db of 70 watts. **IM Distortion:** Less than 1% at 70 watts. **Hum and Noise:** Better than 90 db below rated output. **Sensitivity:** 1.3 v. rms for 70 watts output. **Output Impedances:** 4, 8, and 16 ohms. **Damping Factor:** 15. **Channel Separation:** 55 db or better. **Tube Complement:** 4—6X4 outputs; 2—7199 drivers; GZ34 rect.; selenium rect.

Provisions are included for powering two Dynakit preamps (see accessories, below) for complete stereo control. May also be used with PAS-2 Stereo Preamp at right, or any other good quality control unit. Also features matched tubes, dual Dyna "Biases" for non-critical adjustment, fuse pot, stereo-monophonic switch, etc.  $6\frac{1}{2} \times 9\frac{1}{2} \times 13"$ . For 110-120 v., 60 cycle AC. Shpg. wt., 32 lbs.

92 SU 873. Only \$5.00 Down. NET..... 99.95  
89 SU 323. Above, Factory Wired. \$5.00 Down. NET..... 129.95

### MARK III BASIC AMPLIFIER KIT

Even a beginner can easily assemble this deluxe, 60-watt basic monophonic amplifier! Top features include: choke filtering for absolute minimum noise; premium KT88 matched output tubes; etc.

**Response:**  $\pm 1/2$  db. 6 to 60,000 cps. **Distortion:** IM, less than 1% at 60 watts. Harmonic, less than 1% from 20 to 20,000 cps at 60 watts.  $\pm 1$  db. **Noise:** -90 db. **Output Impedances:** 4, 8, and 16 ohms. **Tube Complement:** 6AN8, 2—KT88; GZ34 and selenium rectifiers.  $6\frac{1}{2} \times 9 \times 9"$ . For 110-120 volts, 60 cycle AC. 28 lbs.

83 SU 004. \$5.00 Down. NET..... 79.95  
89 SU 324. Mark III Basic Amplifier. Above, factory wired. \$5.00 Down. NET..... 99.95

### DYNAKIT ACCESSORIES

83 SX 005. PAM-1 Monophonic Preamp Kit. Requires PS-1 power supply below when used with other than a Dynakit basic amplifier. Brown 7 lbs. NET..... 34.95  
89 SU 327. Wired Model..... 59.95  
83 S 038. PS-1 Power Supply Kit. Powers 2 preamps.  $2\frac{1}{2}$  lbs. 8.95  
89 S 329. Wired Model..... 14.95  
83 S 037. DSC-1 Stereo Control Kit. For preamps above. Brown. 2 lbs. NET..... 12.95  
89 S 328. Wired Model..... 18.95

### MARK IV BASIC AMPLIFIER KIT

An all-new, economically priced basic monophonic amplifier kit that carries traditional Dynakit quality throughout.

**Power Output:** 40 watts; 80 watts peak. **IM Distortion:** less than 1% at 40 watts. **Frequency Response:**  $\pm 1/2$  db. 10 to 40,000 cps. **Hum and Noise:** better than 90 db below 40 watts. **Output Impedances:** 4, 8, and 16 ohms. **Tube Complement:** 2—6X4, 7199, GZ34 and selenium rectifiers.  $6\frac{1}{2} \times 14 \times 5"$ . For 110-120 volts, 60 cycle AC. 20 lbs.

89 SU 321. \$5.00 Down. NET..... 59.95  
89 SU 325. Mark IV Basic Amplifier. Above, factory wired. \$5.00 Down. NET..... 79.95

### TA-12 STERODYNE ARM-CARTRIDGE

A high-quality, integrated stereo arm and cartridge combination. Low-inertia gimbal movement permits tracking at 2 grams. Plug-in magnetic cartridge has .0007" diamond stylus. **Response:**  $\pm 2$  db. 30-15,000 cps. **Compliance:**  $5 \times 10^{-6}$  cm/dyne. **Separation:** 22 db. **Output:** 7 mv. 2 lbs.

89 RC 257. \$2.00 Down. NET..... 49.95  
**STEREO CARTRIDGE ONLY.** Same as cartridge described in TA-12 arm-cartridge unit above, but has standard  $1/2"$  mounting centers for installation in other pickup arms. Shpg. wt., 3 oz.  
89 RC 223. \$2.00 Down. NET..... 29.95  
.0007" DIAMOND REPLACEMENT STYLUS. For above cartridges. Shpg. wt., 2 oz.  
89 RC 243. NET..... 14.95



A Handsomely Styled—  
Versatile Stereo Control Unit

## New! PAS-2 Stereo Preamplifier

NET  
**\$59<sup>95</sup>**  
\$5.00 Down

- 7 Stereo Inputs for Excellent Versatility
- 2 Pre-Assembled Printed Circuit Sections
- Unique "Dyna Blend" Control Assures Perfect Stereo Separation

Incorporating the patent-pending circuit made famous in the renowned Dynakit monophonic preamplifier, plus a built-in power supply, the PAS-2 represents a top stereo performer. Featuring every essential stereo control, this versatile unit provides every operating convenience for music system regulation. Includes "Dyna Blend" control to provide variable channel separation to suit any acoustic conditions—eliminates any hole-in-the-middle effect.

**Frequency Response:**  $\pm 1/2$  db. 6 to 60,000 cps. **IM Distortion:** less than 0.05% at normal output. **Noise:** less than 3  $\mu$ v equivalent noise input on RIAA. **Controls:** Selector, Volume, Balance, Blend, separate Bass and Treble for each channel, Tape Monitor switch, Power Switch, Loudness, Scratch Filter. **Inputs:** 3 stereo low level—RIAA Phono, NARTB Tape Head, Special (for second phono, tape head or mike); 4 stereo high level—FM Multiplex, FM-AM, Auxiliary, Tape Monitor. **Outputs:** Audio, Tape Recorder. **Tube Complement:** 4—12AX7/ECC83; 6X4 rectifier; selenium rectifier.

Tube filaments are DC operated. Has 4 AC convenience outlets. All critical circuit phases are pre-assembled on two printed circuit boards—assembly time is reduced to approximately 8 hours. With textured vinyl case. Size,  $4 \times 13 \times 8"$ . For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs.

89 SX 313. Only \$5.00 Down. NET..... 59.95  
89 SX 326. Above, Factory Wired. \$5.00 Down. NET..... 99.95



Mark III



Mark IV



TA-12

# EICO

## ENGINEERED FOR TOP-QUALITY



HF81 28-Watt Stereo Amplifier

Check These Quality Features

- ✓ Rated Output is 28 Watts Stereo or Monophonic; 56 Watts on Peaks
- ✓ Separate Bass and Treble Tone Controls for Each Channel
- ✓ Dual, Built-in Preamp Sections with Full Array of Controls
- ✓ Employs Four EL84 Power Output Tubes; High-Quality Transformers

### Model HF81-K 28-Watt Stereo Amplifier Kit

NET

**\$6995**

\$5.00 Down

A low-cost, 28-watt stereo amplifier kit that incorporates built-in dual preamps for accommodating any stereo or monophonic signal source. Dual Williamson-type output sections for outstanding response. Though easy to build, the Model HF81-K has a host of desirable features. Carefully designed input circuit provides high gain necessary for tape head playback and low-output magnetic cartridges without hum or noise; NARTB tape head equalization; separate high-level inputs for AM tuner, FM tuner and FM multiplex adapter unit; ganged level controls and separate balance control; independent bass and treble tone controls for each channel; neat, attractive styling for use in any decor.

**Rated Power Output:** 14 watts per channel for 28 watts of stereo or monophonic sound, with 56 watts peak power. **Frequency Response:** ±0.5 db, 10 to 100,000 cps, measured at 1 watt each channel. **IM Distortion:** 0.5% at 5 watts each channel. **Harmonic Distortion:** less than 1% from 30 to 10,000 cps, at 8 watts per channel. **Input Sensitivity:** mag phono, 4 mv; tape head, 2 mv; microphone, 6 mv; tuner and auxiliary, 0.5 volt. **Hum & Noise:** mag phono, 60 db; tape head, 51 db; mic, 57 db; tuner and auxiliaries, 75 db, below full rated output.

**Output Impedances:** 4, 8, 16 and 32 ohms per channel. **Tubes:** 4—ECC83/12AX7, 2—ECC82/12AU7, 4—EL84; 2—EZ81 rectifiers. 4½x15x10½". With all parts, tubes, cover and instructions. Less solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 24 lbs.

83 SU 970. Only \$5.00 Down. NET. . . . . 69.95  
 MODEL HF81. As above, but factory-wired.  
 89 SU 337. Only \$5.00 Down. NET. . . . . 109.95



### New Model HFT94-K Basic AM Tuner Kit

NET

**\$3995**

\$2.00 Down

Designed for use in hi-fi music systems, the HFT94 AM tuner features a choice of "hi-fi" wide bandpass to 14 kc, or narrow bandpass to 7 kc for weak or distant stations. Tuned RF stage and built-in ferrite loop antenna help provide high selectivity and sensitivity—very little signal is required to achieve acceptable signal-to-noise ratio. High-Q filter eliminates 10-kc whistle. Pin-point "eye-tronic" station tuning is featured with a pre-wired DM70 traveling eye indicator; contracts into an "exclamation point" at the exact center of each broadcast channel. Pre-aligned RF and IF coils. **Sensitivity:** 3 µv for 1-v. output, 20 db signal-to-noise ratio. **Controls:** concentric knob for Volume/Off-On and Wide-Normal Selector; Tuning. **Outputs:** low-impedance; plus tape recording, 4 tubes; DM70 tuning eye; 6x4 rectifier; CK885 diode. 3½x12x8¼". With cover. Less solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

89 SX 340. Only \$2.00 Down. NET. . . . . 39.95  
 MODEL HFT94. As above, but factory-wired.  
 89 SX 341. Only \$5.00 Down. NET. . . . . 65.95



### Model HFT90-K Basic FM Tuner Kit

Less Case

**\$3995**

\$2.00 Down

Offering excellent performance at moderate cost, this basic FM tuner kit features temperature-compensated components for drift-free operation. Has pre-wired and pre-aligned front end for exceptional ease of assembly; traveling tuning indicator that contracts into an "exclamation point" at center of the broadcast channel; cathode follower and FM multiplex outputs; automatic gain control; stabilized, low-limiting threshold for excellent performance from weaker signals; and broad-band ratio detector for improved capture ratio and easier tuning. **Sensitivity:** 1½ microvolts for 20 db of quieting. **Controls:** Tuning; Level/Off-On. 6 tubes; DM70 tuning indicator; 6x4 rectifier. Size, 3½x12x8¼". Less solder and cover. For 110-120 v., 50-60 cycle AC. Shpg. wt., 10 lbs.

87 SX 245. Only \$2.00 Down. NET. . . . . 39.95  
 MODEL HFT90. As above, but factory-wired. Less cover.  
 89 SX 338. Only \$5.00 Down. NET. . . . . 65.95  
 87 SX 246. Type E3 Cover for Above. Shpg. Wt., 3 lbs. NET. . . . . 3.95

## NEW MODEL AF4-K 8-WATT STEREO AMPLIFIER KIT



Check These Features

- ✓ Concentric, Clutch-Operated Level and Tone Controls
- ✓ 8-Watt Output for Stereo or Mono use; 16 Watts Peak

NET

**\$3895**

\$2.00 Down

A new, economy-priced amplifier kit that provides 8 watts of output for stereo or monophonic use, with 16 watts of peak power. Independent, concentric level, and bass and treble tone controls may be operated separately or together with built-in clutch. Tape output jack permits "off-the-air" tape recordings; "service selector" switch allows parallel or separate operation of power amplifiers for stereo or monophonic use, respectively. An adequate control section permits stereo channel balancing, channel reverse, monophonic operation, etc. Neat, "low-silhouette" styling.

**Response:** ±0.5 db, 30 to 20,000 cps. **Distortion:** harmonic, 0.3% 100 to 20,000 cps at ½ watt; IM, 0.6% at ½ watt. **Hum & Noise:** -74 db. **Output Impedances:** 4, 8, 16 and 32 ohms per channel. **Tubes:** 2—12DW7, 2—EL84 output; EZ81 rectifier. With cover, 3½x12x8¼". Less solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 13 lbs.

89 SX 342. Only \$2.00 Down. NET. . . . . 38.95  
 MODEL AF4. As above, but factory-wired.  
 89 SX 343. Only \$5.00 Down. NET. . . . . 64.95

# PERFORMANCE AT LOW COST



HF86 28-Watt Stereo Basic Amplifier

HF87 70-Watt Stereo Basic Amplifier



## MODEL HF87-K 70-WATT STEREO BASIC AMPLIFIER KIT

New stereo basic amplifier kit that provides 70 watts of stereo or monophonic sound, with 140 watts peak power. Employs cathode-coupled, phase inverter-driven circuit; output stage has ultra-linear connected, push-pull 6L34 output tubes. *Response:*  $\pm 0.5$  db, 5 to 100,000 cps. *Distortion (at 70 watts):* harmonic, less than 1%; 1M. *Hum:* -90 db. *Controls:* Channel 1 Level, Channel 2 Level, Stereo-Mono switch, Off-On. *Output Impedances:* 4, 8, 16 and 32 ohms per channel. 6x15x11". Less solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 32 lbs.

89 SU 346. Only \$5.00 Down. NET..... 74.95  
89 SU 347. Model HF87. Factory-wired. \$5.00 Down. NET..... 114.95

## MODEL HF86-K 28-WATT STEREO BASIC AMPLIFIER KIT

An excellent value, this new basic stereo amplifier kit provides 28 watts output for stereo or monophonic use, with 56 watts of peak power. Employs Williamson-type circuit with push-pull 6L84 output stage in each amplifier section for excellent stability. Includes level control for each input. *Response:*  $\pm 0.5$  db, 10 to 100,000 cps. *1M Distortion:* 1.5% at 28 watts. *Harmonic Distortion:* less than 1%. *Hum:* -90 db. *Controls:* Channel 1 Level; Channel 2 Level, Stereo-Mono switch; Off-On. *Output Impedances:* 4, 8, 16 and 32 ohms per channel. *Tubes:* 2-12DW7, 4-6L84; E281 rectifier. 5x13 1/2 x 9". Less solder. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 16 lbs.

89 SX 344. Only \$2.00 Down. NET..... 43.95  
89 SX 345. Model HF86. Factory-wired. \$5.00 Down. NET..... 74.95

## Model HF85-K Stereo Preamp Kit

NET

**\$3995**

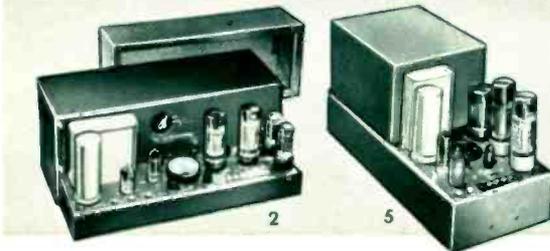
\$2.00 Down

New, self-powered stereo preamplifier kit that offers virtually every control and switching facility currently in use in stereo or monophonic music systems. Perfect for use with either of the Eico basic stereo amplifiers described at left. Offers extremely low distortion, bordering on the unmeasurable. Separate low-level input in each channel for magnetic phono, tape head and microphone. RIAA-phonograph equalization; choice of proper NARTB tape head equalization for all tape speeds. Separate high-level inputs for AM tuner, FM tuner and FM multiplex. Two auxiliary A inputs (1 in each channel), and 2 auxiliary B inputs (1 in each channel). Independent bass and treble controls in each channel, may be operated separately or together with built-in clutch. Loudness control for listening at low volume levels. Mode selector permits listening to each channel separately, reversing channels, and choosing stereo or monophonic operation.

Also features low-impedance output to tape recorder; hum balance control. *Response:*  $\pm 0.3$  db, 5 to 200,000 cps at any level up to 3-V RMS output. *Sensitivity (input for 2 v. RMS output at 1000 cps):* Mag Phono, 1 mv; Mic, 1 mv; Tape Head, 0.5 mv; High-Level inputs, 0.17 v. *Hum & Noise:* Mag Phono, -60 db; Mic, -60 db; Tape Head, -50 db; High-Level inputs, -75 db. *Tubes:* 5-12AX7/ECC83; 6x4 rectifier. With cover. 3 1/2 x 12 x 8 1/4". For 110-120 v., 50-60 cycle AC. Shpg. wt., 10 lbs.

83 SX 976. Only \$2.00 Down. NET..... 39.95  
89 SX 339. Model HF85. Factory-wired. \$5.00 Down. NET..... 64.95

# OUTSTANDING HI-FI COMPONENTS



## MODEL 2 40-WATT BASIC AMPLIFIER

Deluxe-quality, 40-watt monophonic basic amplifier. Ultra-linear circuit with 80 watts peak power. Switch permits 20-watt triode operation to protect low-power speaker systems. Employs transmitting-type oil input capacitor, choke, telephone-quality electrolytic, and 6AU4-GTA heater cathode rectifiers that provide protection from starting surge voltages, improved regulation and thorough filtering. Built-in meter and switch for Bias, DC Balance, AC Balance, Variable damping. *Response:* at 40 watts,  $\pm 0.1$  db, 20-20,000 cps;  $\pm 1$  db, 15-45,000 cps. *Hum:* -90 db. *Distortion:* harmonic, less than 0.1%; 1M, less than 0.5%. *Output Impedances:* 4, 8 and 16 ohms. *Tubes:* 12AX7/ECC83, 6CG7, 2-6CA7/6L34; 2-6AU4-GTA rectifiers. 6 1/2 x 15 x 9 1/2". With cage. For 110-120 v., 50-60 cycle AC. Shpg. wt., 46 lbs.

99 SU 006. Only \$10.00 Down. NET..... 219.00

## MODEL 5 30-WATT BASIC AMPLIFIER

Similar to Model 2 monophonic amplifier above, but has lower output rating. Offers full 30-watt output, with 60-watt peak power. By altering two connections inside the chassis, 18-watt triode operation (for low-power speaker systems), can be attained. *Response:*  $\pm 0.2$  db, 20 to 20,000 cps. All other specifications and features same as Model 2. *Tubes:* 6B116, 6CG7, 2-6L34/6CA7; GZ34 rectifier. Size, 7 3/4 x 15 1/4 x 6". Less cage, below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 35 lbs.

92 SU 810. Only \$5.00 Down. NET..... 147.00

METAL CAGE FOR ABOVE. Perforated, gold-finished. Shpg. wt., 1 lb.  
92 S 811. NET..... 7.50

**marantz**



## New Model 7 Stereo Console Preamp

NET

**\$24900**

Less Case

New, self-powered stereo preamplifier of the highest quality. Features remarkable control versatility, ease of operation and professional workmanship throughout. *Rear Panel Features:* Output level sets; 3 pairs of outputs; tape-head equalizer adjustments; 6 AC convenience outlets; 9 pairs of inputs; and system grounding point. *Front Panel Controls:* 8-pos. Selector (Mic, Phono 1, Phono 2, NARTB Tape Head, FM-AM, FM Multiplex, TV, Auxiliary); 5-pos. Mode (Stereo, Stereo Reverse, Channel A, Channel B, Channel A + B); Volume; Balance; Two Treble controls, one for each channel; two Bass controls, one for each channel; Phono Equalizer (effective on Phono positions only—settings are RIAA, old COL LP, early 78); Tape Playback or Monitor; High Filter; Rumble Filter; and 15 amp Off-On switch.

*Frequency Response:*  $\pm 1/2$  db, 20-20,000 cps. *1M Distortion:* 0.1%. *Total Noise:* in 20-20,000 cps audio range, 80 db below 10 mv phono input with RIAA curve; hum is far below thermal noise. *Tubes:* 6-12AX7/ECC83. Size, 5 3/4 x 14 1/4 x 8 1/2". Less cabinet, below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 16 lbs.

92 SU 826. Only \$10.00 Down. NET..... 249.00

WOOD CABINET FOR ABOVE. In mahogany, blonde or walnut—specify choice when ordering. Shpg. wt., 4 lbs.

92 SX 827C. NET..... 24.00

Express Shipment is Recommended for High-Fidelity Equipment



# KNIGHT

## World-Famous High-Fidelity Speakers

SMOOTH FREQUENCY RESPONSE—LOW DISTORTION—PRICED TO FIT ANY BUDGET

### Tested in Leading Acoustic Laboratories

Quality-famous Knight hi-fi speakers are built to the most exacting laboratory standards by skilled American and British craftsmen. In addition to testing on the finest equipment available, these speakers have been given exhaustive in-the-home listening tests under a wide variety of conditions. All are unconditionally guaranteed to meet published specifications—your assurance of superlative quality and peak performance.



### GUARANTEED FOR ONE FULL YEAR

All parts, workmanship, and performance specifications of Knight High-Fidelity Speakers are unconditionally guaranteed for one full year from date of purchase.

**KN**  
**800A**



#### FULL RANGE



Woofer



Mid-Range



Tweeter

Special 3-element design insures smooth coverage of the entire audible range.



**New Tweeter**  
All-new tweeter with exponential horn.

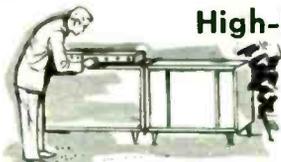
**Rigid Cast Frame**  
Rugged, all-new cast frame for high stability.

#### SPECIFICATIONS

- Free Air Resonance: 50 cycles.
- Power Capacity: 25 watts.
- Overall Response: 35 to 15,000 cps.
- Magnet: 1 3/4 lbs. ceramic.

### Knight 12" 3-Way

### High-Fidelity Speaker



Superbly Designed  
Now Better Than  
Ever in Performance

NET

**\$44<sup>95</sup>**

\$2.00 Down

- All-New, Ruggedized Construction
- Three Separate Radiating Elements
- Heavy-Duty Ceramic Magnet
- Precision Electrical Crossover
- Wide-Angle Tweeter Diffraction Horn

Allied's world-famous 12" 3-way hi-fi speaker—now featuring a new, deluxe construction for better-than-ever performance. Incorporated in the efficient 3-way design of this highly popular speaker is an all-new high-frequency tweeter assembly. The ultra-smooth treble response of this driver is evenly distributed over a wide listening area by the use of an exponential-type rectangular cross-section diffraction horn. Recommended for use in almost any type of speaker enclosure—perfect for use in pairs in stereo installations.

The 12" bass-cone of the woofer is suspended in an improved, rigid cast frame for permanent, exact voice coil alignment and maximum structural stability. A specially constructed conical radiator is employed for clean mid-frequency response. A mechanical crossover provides separation between bass and mid-range elements. A built-in electrical crossover smooths the transition from mid-range to tweeter. The bass and mid-range cones employ a new heavy-duty 1 3/4 lb. ceramic magnet for smooth solid response.

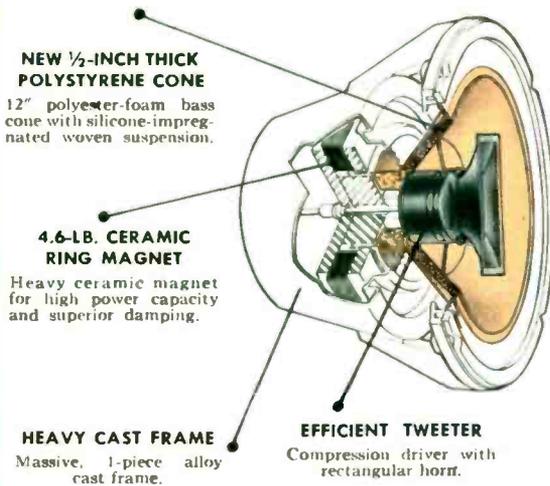
An L-pad level control—attached to tweeter on a 30" cable—permits adjusting high frequency brilliance to match room acoustics. Complete with calibrated dial and control knob. Diameter, 12 1/8"; depth required, 8". Impedance, 16 ohms. *Unconditionally guaranteed for one full year.* Made in U. S. Shpg. wt., 12 lbs.  
70 DX 298. Only \$2.00 Down. NET..... 44.95

**KN-810A 15" 3-Way Speaker.** Similar to KN-800A above, but has 15" woofer. Response, 30-15,000 cps. Resonant frequency, 40 cps. Speaker diameter, 15 1/8"; depth, 9". *Unconditionally guaranteed for one full year.* Made in U. S. Shpg. wt., 15 lbs.  
70 DX 299. Only \$5.00 Down. NET..... 54.95

# NEW KNIGHT High-Compliance 2-Way Speaker

OUTPERFORMS SPEAKERS COSTING AS MUCH AS DOUBLE ITS PRICE

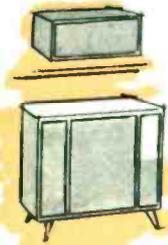
THIS "X-RAY VIEW" SHOWS YOU WHY



## SPECIFICATIONS

- Free Air Resonance: 25 cycles.
- Nominal Impedance: 8 ohms.
- Resonance in 2.5 cu. ft. Closed Baffle: 46 cycles.
- Power Capacity: 50 watts.
- Overall Response: 25-18,000 cycles.
- Woofer Magnet: 4.6 lbs. ceramic.

## OUTSTANDING BASS RESPONSE IN ANY TYPE OF ENCLOSURE



The unique design of the KN-600HC assures peak performance in virtually any enclosure. Size and type of loading are not critical. An amazingly low resonant frequency—25 cps—provides boom-free bass in the smallest baffle.

## BUILT FOR LASTING QUALITY

A heavy-duty 4.6 lb. ceramic magnet, plus an advanced method of voice coil winding, provides the KN-600HC with a degree of precision construction and efficiency quite unique among units of its kind.

## Knight 12" 2-Way High-Compliance Speaker

With New 1/2"-Thick Polystyrene Cone

NET  
**\$59<sup>95</sup>**

Only \$5.00 Down.

- A Marvel of Modern-Day Acoustical Engineering
- 1/2"-Thick Polyester-Foam Bass Cone Provides Excellent Low-Frequency Response
- 2 Separate Driver Systems for Smooth Response
- Employs Efficient Compression-Type Driver-Tweeter, Matched to Woofer
- Rectangular Horn Gives Wide-Angle Coverage

Acoustic science's latest achievement—a two-way high-compliance speaker system in a single unit. Ideally suited for even the most compact "infinite baffle" enclosures, the KN-600HC is unsurpassed for limited space applications—perfect in pairs for stereo. Incorporating a revolutionary new concept in audio technology, this amazing speaker features a 12" polyester plastic-foam cone—actually 1/2" in thickness. This feature, plus a special silicone-impregnated woven suspension, provides an amazing degree of cone rigidity. The ultra-high compliance of this cone permits it to follow the sound pulses from the amplifier accurately—with excellent recovery—free of breakup or spurious resonances. Heavy 4.6-lb. ceramic magnet offers high power handling capacity and excellent damping.

Startlingly realistic "presence" is achieved through careful matching of low and high-frequency elements. A compression-type tweeter is employed for low-distortion output in the high-frequency range. Treble response is distributed over a wide area by an exponential-type rectangular diffraction horn. Includes electrical crossover to tweeter and brilliance control for adjusting tweeter to match room acoustics. Frequency response, 25 to 18,000 cps; power capacity, 50 watts. Impedance, 8 ohms. Diameter, 12 1/4"; depth required, 9 1/2". *Unconditionally guaranteed for one full year.* Made in U.S. Shpg. wt., 30 lbs.  
70 DU 229. Only \$5.00 Down. NET..... 59.95

New

# KNIGHT Economy High-Fidelity Speakers



### CERAMIC MAGNET

Employs slug-type ceramic magnet for efficient concentration of flux density in speaker air gap, low leakage and great strength.

### DUAL-CONE DESIGN

Two cones divide the sound—woofer for maximum bass, and a second, smaller cone for full-range sound in mid to high-frequency ranges.

Low-Cost Unit  
Offering  
Expensive-Speaker  
Features

ONLY  
**\$16<sup>95</sup>** GUARANTEED  
FOR ONE  
FULL YEAR

### SPECIFICATIONS

- Frequency Response: 40 to 14,000 cps.
- Resonance: 60 cps.
- Power Handling Capacity: 20 watts; 40-watt peaks.
- Impedance: 8 ohms.
- Mechanical Crossover: 1800 cps.
- Magnet Weight: 12 oz.
- Magnet Material: Ceramic.
- Voice Coil Diameter: 2".
- Flux Density: 11,400 gauss.
- Voice Coil: Edge-wound copper ribbon.
- Frame: Die-cast zinc.



### Low-Cost Knight 12" Speaker

- Rigid, Heavy-Duty Die-Cast Metal Frame
- Efficient, Slug-Type Ceramic Magnet
- Edge-Wound 2" Voice Coil on Durable, Fiberglass Form
- Use in Pairs for Superb Stereo Sound at Low Cost

Introducing a new economy champion—the Knight KN-820 12" hi-fi speaker with dual-cone construction. Priced so low, you can buy two of these excellent speakers for less than you would pay for most single speakers! Carefully made to rigid specifications, the KN-820 employs two cones for richer sound; large cone for full, smooth bass, and smaller cone for efficient reproduction of mid-range to high-frequency sounds. Other top-quality features that verify the value of this fine unit are: edgewise-wound voice coil; perfectly molded fiberglass coil form; voice coil assembly sealed against dust; slug-type ceramic magnet, and rigid, cast-metal frame for permanent centering of all sound-reproducing elements. Get the most for your hi-fi dollar with this magnificent bargain! Made in U.S. Shpg. wt., 5 lbs.

70 DX 223. NET ..... 16.95

## NEW KN HIGH-FREQUENCY PACKAGE



Crossover Network

H-F Unit



### SPECIFICATIONS

- Response: 3,000 to 19,000 cps.
- Crossover: 3000 cps.
- Dispersion: 180°.
- Capacity: (in conjunction with woofer): 25 watts.
- Magnet Weight: 6 oz.
- Impedance: 16 ohms.

### Tweeter, Crossover, L-Pad Combination

ONLY  
**\$18<sup>95</sup>**

New, high-frequency components package for converting any single-cone speaker into a highly efficient, 2-way system with amazingly clean high-frequency response. Lab-tested and certified specifications prove its superiority, and its low price is eloquent testimony to its value. You'll be delighted with the vast improvement in sound! Components include: KN VHF Tweeter, L-C type Crossover Network in sealed can, and integral L-pad Level Control. The tweeter employs a cast exponential horn and diffraction principle to achieve wide dispersion of highs. Generous 6-oz. magnet and efficient design permit unusually high output free of distortion. Can be mounted inside cabinet (tweeter cut-out template supplied), or can be placed atop cabinet. Made in U.S. Shpg. wt., 3 lbs.

70 D 425. NET ..... 18.95



Wide-Range  
High-Fidelity  
Sound

### Knight KN-808 8" Speaker

ONLY  
**\$9<sup>95</sup>**

- Top Quality at Lowest Cost
- High-Compliance Type Cone

A best-selling speaker, the KN-808 is an excellent choice for low-cost music systems—perfect for use in pairs in stereo systems. Carefully built to Allied's specifications by British craftsmen, the KN-808 features high-compliance cone for bass reproduction with astonishing fidelity. Its small size makes it perfect for use in a wide variety of space-saving enclosures. Response, 50 to 12,000 cps. Power handling capacity, 15 watts. Imp., 16 ohms. Wt., 3 lbs.

82 D 808. NET ..... 9.95

# Superb New KNIGHT Deluxe 12" & 15" Speakers

## TWEETER

Compression-type tweeter with phase-correction chamber for clean highs.

## MAGNET

Massive magnet structures assure high concentration of magnetic flux in voice coil gap.

## WOOFER

Woofers cone with specially treated, resilient edge, has virtually free-cone suspension.



Precision Built to  
Allied's Specifications  
by British Craftsmen

## SPECIFICATIONS



## New, Improved KN-812A & KN-815A Hi-Fi Speakers

AS LOW AS

**\$69<sup>50</sup>**

\$5.00 Down

The finest in advanced acoustic design, these new high-compliance, high-efficiency speakers deliver superb reproduction. Outstanding in every detail, they are precisely built by British craftsmen and feature three elements for ultra-smooth bass, mid-range and treble reproduction. Vacuum-formed woofer cone with chemically treated edge-suspension has 25/35 cps resonance.

New, mid-frequency radiator cone is mounted in center of woofer; new tweeter with rectangular exponential horn provides wide-angle high-frequency dispersion. In addition, the custom-quality double-section, 2-coil, 2-capacitor crossover network is mounted directly onto the rigid, die-cast frame. Mechanical crossover at 2000 cps; electrical crossover, 5000 cps. Wired-in, L-pad high-frequency level control on 72" cable. Extra-heavy metal frame keeps aluminum voice coil permanently centered. Massive magnet structures assure high concentration of magnetic flux in voice coil gap for distortion-free reproduction of even the most powerful bass passages. Magnet material is highly efficient Alcomax III. Impedance, 16 ohms.

MODEL KN-812A 12" SPEAKER. Shpg. wt., 34 lbs.  
70 DU 251. Only \$5.00 Down. NET ..... 69.50  
MODEL KN-815A 15" SPEAKER. Shpg. wt., 36 lbs.  
70 DU 249. Only \$5.00 Down. NET ..... 89.50

### KN-812A

Free Air Resonance: 35 cycles  
Overall Response: 30-20,000 cps.  
Magnet Weight: 3½ lbs.  
Magnet Material: Alcomax III.  
Crossover Network: Dual-Coil, dual-capacitor, with high-frequency level control on 72" cable.  
Power Capacity: 50 watts.  
Total Flux: 185,000 maxwells.

### KN-815A

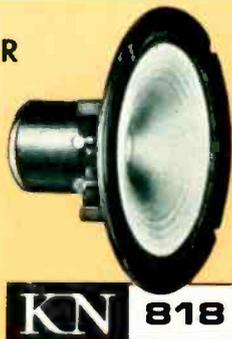
Free Air Resonance: 25 cycles.  
Overall Response: 25-20,000 cps.  
Magnet Weight: 6¼ lbs.  
Magnet Material: Alcomax III.  
Crossover Network: Dual-coil, dual-capacitor, with high-frequency level control on 72" cable.  
Power Capacity: 50 Watts.  
Total Flux: 227,000 maxwells.

## NEW KNIGHT KN-818 DELUXE 8" HI-FI SPEAKER

Almost incredible in its ability to reproduce the true sounds of loud orchestral passages, drums, etc., the KN-818 is a magnificent example of precision design in an 8" speaker. It features a vacuum-formed, hyperbolic cone with silicone-treated edge suspension; rigid frame of die-cast metal; and 1.4-lb. Alcomax III magnet. It's perfect for use in small enclosures. 16 ohms. Wt., 10 lbs.  
70 DX 224. NET ..... 18.95

## SPECIFICATIONS

Free Air Resonance: 73 cycles.  
Overall Response: 40-15,000 cps.  
Magnet Weight: 1.4 lbs.  
Magnet Material: Alcomax III.  
Power Capacity: 20 Watts integrated program material.  
Cone: Vacuum-formed, hyperbolic cross-section.



Knight Hi-Fi Speakers Are Featured in Allied Music Systems

**KN**  
**2000**



Place on Shelves



... or on the Floor

**CHECK THESE DELUXE FEATURES**

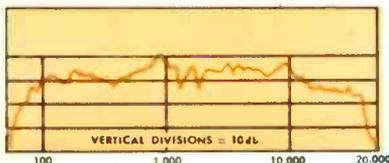


**1** Has ultra-compact, sealed, acoustically damped enclosure. Finished on four sides in hand-rubbed furniture veneers.

**2** 12" high-compliance woofer—has long-throw, edge-wound ribbon voice coil for rich bass response.

**3** Quality constructed special-design 8" mid-range speaker—self-enclosed at rear in metal casing.

**4** Compression high-frequency driver with integral exponential horn—provides wide-angle dispersion.



**SPECIFICATIONS**

- Frequency Response:** 40-19,000 cps.
- Harmonic Distortion:** Less than 2% from 50-15,000 cps at average room level.
- Power Handling Capacity:** 20 watts; 40-watt peaks.



# KNIGHT High-Compliance

## Famous KN-2000 3-Way Speaker System

NET  
**\$84<sup>50</sup>**  
Only \$5.00 Down

- 12" High-Compliance Woofer with Long-Throw Voice Coil for Superior Bass Response
- 8" Mid-Range Speaker, Self-Enclosed in Special Metal Housing, Provides Thrilling Presence
- Compression-Type Tweeter with Exponential Horn for Wide-Angle High-Frequency Dispersion

Widely acclaimed for its superlative performance, the world-famous Knight KN-2000 3-way speaker system represents an unusually fine value for the budget-minded, quality-conscious music lover. This fully integrated speaker system, in a compact, bookshelf-type enclosure, is the perfect choice for limited-space applications—ideal for use in pairs with stereophonic music systems. Consists of an acoustically sealed, handsomely finished enclosure containing a 12" high-compliance woofer, 8" mid-range unit, and a high-frequency tweeter assembly—completely wired and assembled. Also incorporated is an L-C crossover network with L-pad high-frequency level control for adjusting brilliance to suit personal listening tastes. Styled to harmonize with any decor, the KN-2000 system can be used in either low-boy or high-boy position.

The 12" high-compliance woofer has a long-throw voice coil which permits long linear excursions for exceptional bass response; features virtually free-cone suspension. Employs a 1 1/4-lb., high efficiency Indox V ceramic magnet for high flux density. The 8" mid-range, cone-type speaker is self-enclosed in a metal casing. The high-frequency assembly consists of a compression driver with an integral exponential horn for wide-angle dispersion. The encased L-C type crossover network provides attenuation at a rate of 6 db per octave. Crossover frequency between woofer and mid-range unit is 800 cps; between mid-range and tweeter, crossover occurs at 3500 cps.

Enclosure is durably constructed of 3/4" wood and all panels are carefully braced to eliminate vibrations. Finished on four sides in hand-rubbed, fine furniture veneers. Handsomely styled with natural beige, grille cloth. Impedance, 8 ohms. HWD: 13 1/2"x26 3/4"x12 3/4". Enclosure and components are not available separately. In three highly attractive finishes to match any furniture mode. Made in U.S. Specify choice of mahogany, limed oak or walnut when ordering. Shpg. wt., 45 lbs.

79 DU 258C. Only \$5.00 Down. NET ..... 84.50

**IDEAL IN PAIRS FOR STEREO MUSIC SYSTEMS**

The mid and high-frequency drivers used in the KN-2000 are specially designed for wide dispersion. This permits excellent results to be obtained when two units are used for stereo. Moreover, extended high-frequency response, provided by a compression-driven, horn-loaded tweeter, assures frequency coverage through the entire tonal range in which the stereo effect exists.

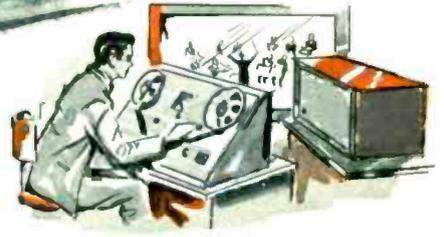


Meets the Most Critical Professional Requirements

# Shelf-Type Speaker Systems

## KN-3000 Electrostatic Speaker System

Featuring Two Remarkable New Developments



NET  
**\$129<sup>50</sup>**  
Only \$5.00 Down

1. New Knight Push-Pull Dual Electrostatic Radiators for Smooth, Wide-Range Response and Low Distortion
2. Remarkable New 12" High-Compliance Woofer with Aluminum-Weighted Cone Apex

### ELECTROSTATIC RADIATORS



A Knight exclusive! Patented Arthur Janzen design. With built-in power supply and filter network.

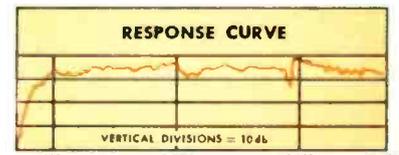
The hi-fi event of the year! An amazing new concept in acoustical engineering, the phenomenal Knight KN-3000 Electrostatic Speaker System represents a new high in the art of audio reproduction. Designed to delight the most critical hi-fi connoisseur, it combines a thrilling new achievement in high-compliance woofer construction with dual electrostatic tweeters—providing a quality of reproduction never before achieved in speaker systems of this type. Distortion is held to an amazingly low 0.5% at a full 50 watts input—*actually less than that of many high-quality amplifiers!* Solid 3/4" wood throughout, the KN-3000 is finished beautifully in your choice of three professionally hand-rubbed furniture veneers. Ideal in pairs for breathtaking stereophonic use.

### HIGH-COMPLIANCE

Woofer features weighted cone in solid cast-aluminum alloy frame. Has heavy-duty sintered ceramic magnet for extremely dense flux.



The exclusive new 12" woofer incorporates a high-compliance cone whose weight distribution is controlled with great precision by specially designed aluminum rings. Even the lowest tones of orchestral passages, organs, etc., are reproduced with a realism that must be heard to be believed. Two push-pull electrostatic radiators, renowned for their superior ability to reproduce high frequencies to beyond the audible limit, disperse sound over a wide area. This unprecedented combination of components, installed in an acoustically correct enclosure, results in nearly distortionless, truly natural sound. Finished on 4 sides, the KN-3000 may be used upright or horizontally. Impedance, 8 ohms. Size, 14x26 1/2x13". U.L. Approved. Tweeters have Off-On switch; operate from 110-120 v., 50-60 cycle AC. Specify mahogany, limed oak or walnut veneers. Made in U.S. Shpg. wt., 50 lbs. 70 DU 290C. Only \$5.00 Down. NET. 129.50



### SPECIFICATIONS

- Frequency Response: ±3 db from 30-25,000 cps.
- Harmonic Distortion: At 50 watts music input, 0.16% (4000 cps); 1.5% (15,000 cps).
- Power Handling Capacity: 50 watts; 100-watt peaks.

### IDEAL FOR PROFESSIONAL APPLICATIONS

Because of its unusually extended high and low frequency response, the KN-3000 is especially recommended for critical applications in broadcasting, recording and auditioning. Its relatively low harmonic distortion content (less than 0.5% at 10,000 cycles) and exceptionally smooth response (±1 db over most of its range) permit concentrated listening for long periods of time without fatigue.

High-quality disc or tape recordings, played through a good amplifier and KN-3000, clearly show details of vocal or instrumental technique for students. The KN-3000 has been measured under laboratory conditions. A report is available from our Audio Division.

**KN**  
**280**

# Low-Cost HIGH-COMPLIANCE SPEAKER SYSTEM

... a triumph of hi-fi response



Lustrous, hand-rubbed veneers  
—beautifully finished on  
4 sides by professional craftsmen.



## Knight KN-280 2-Way High-Compliance Speaker System

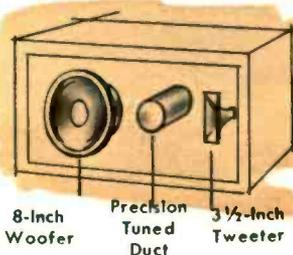
NET  
**\$59<sup>95</sup>**  
\$5.00 Down

Here's a beautifully performing, diminutively styled 2-way speaker system—priced to fit every hi-fi budget. Remarkably low in cost, the KN-280 consists of an 8" high-compliance woofer with special cone for superb bass; a 3 1/2" tweeter for sparkling highs; and a bookshelf-type enclosure that is professionally finished on four sides in lustrous, hand-rubbed fine furniture veneers. An excellent choice for limited-space applications—perfect for use in pairs for stereo reproduction. An outstanding technical achievement, and an unusual value.

Specially designed low-resonance woofer combines with tubular-duct enclosure principle to provide unusually flat, clean bass reproduction. Additional features include: 3/4-lb. Alnico 5 magnet for high flux density; high-frequency level control to adjust tweeter response. Crossover, 2000 cps.

The enclosure is attractively accented by a contoured moulding—smartly harmonizes with any furnishing motif. Available in mahogany, limed oak or walnut—specify. Made in U.S. Shpg. wt., 28 1/2 lbs.  
70 DU 230C. \$5.00 Down. NET **59.95**

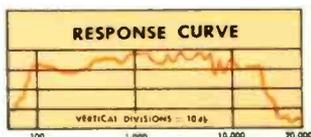
### System Highlights



### Special Woofer Cone Edge



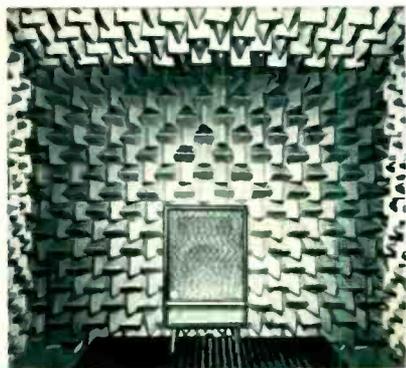
Newly developed flexible-fold suspension permits extremely long excursion for unusually flat, remarkably clean bass response from 36 cycles.



### SPECIFICATIONS

- Response:** 36-13,000 cps.
- Harmonic Distortion:** 3% maximum at average room levels, 50-10,000 cps.
- Power Capacity:** 25 watts.
- Impedance:** 16 ohms.
- Size:** 12 1/2" high, 24" wide, and 10 1/2" deep.

## ABOUT KNIGHT SPEAKER SPECS



**FREQUENCY RESPONSE**—Always measured under precisely controlled lab conditions—with the latest scientific equipment—to show the relative difference, at normal listening levels, between response curves. Speaker performance may be affected by size and acoustics of the room in which the speaker is installed; also, response is subject to change by adjustment of amplifier tone, loudness compensation and level controls.

**MAGNET**—Weight and magnet material are important considerations. Generally, the heavier the magnet, the cleaner the bass. Ceramic magnets have greater power by equivalent weight than metal alloy magnets.

**POWER CAPACITY**—Given for music reproduction, rather than laboratory test signals. In this manner, you may more readily judge the performance you will enjoy under actual home listening conditions.

# VALUE-PACKED SPEAKER ENCLOSURES

# KNIGHT

... for superior hi-fi reproduction

## Speaker Enclosure and Enclosure Kit

AS LOW AS **\$39.50** Kit Model

- Accommodates Any 12" or 15" Speaker
- High-Performance Ducted-Port Design
- Hardwood Veneers—Choice of Finish
- Assembled or Money-Saving Kit Form

Top-quality, distinctive enclosures for 12" or 15" speakers in factory-assembled or money-saving kit form. Ideally suited for along-the-wall placement—perfect for use in pairs in economical stereo high-fidelity music systems. Employ ducted-port design for outstanding bass performance—equal to conventional bass-reflex enclosures of much greater size.

Superior features include: vibration-free, precision-cut tongue-and-groove joints; multi-coat lacquered and hand-rubbed top finish; non-resonant panels; pre-mounted speaker terminal strip; pre-cut for KN-425 tweeter and level control; 3/4" acoustically lined hardwood; etc. Smart contemporary styling—tapered legs with brass ferrules; bouclé grille cloth augmented by solid aluminum, gold anodized trim strips—accented by choice of three lustrous veneer finishes.

Kit is supplied with pre-finished panels. Assembly is a marvel of simplicity—a screwdriver is all you need. Size (HWD), 32x17 1/2 x 15. Made in U.S. Available in choice of mahogany, limed oak or walnut—specify when ordering. Shpg. wt., 35 lbs.

MODEL KN-1265K. Kit form.  
70 DU 402C. Only \$2.00 Down. NET..... 39.50

MODEL KN-1265. Assembled form.  
70 DZ 401C. Only \$2.00 Down. NET..... 54.50



Choice of  
3 Handsome  
Finishes

**KN 1265K**

## Knight KN-1280 Speaker Enclosure

NET **\$29.95** \$2.00 Down

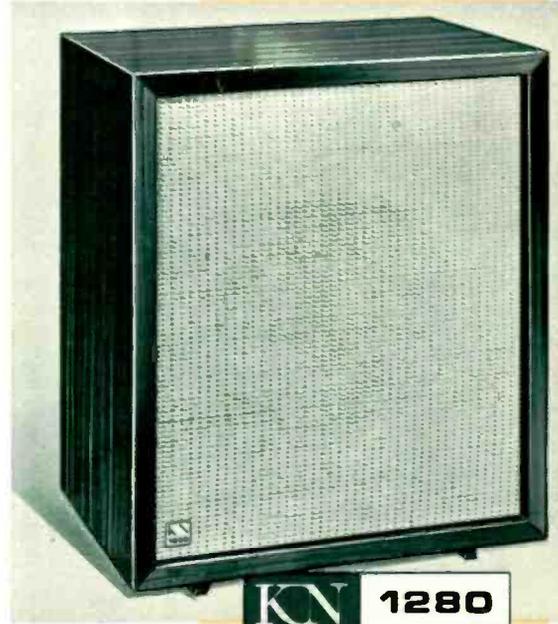
- Accommodates Any 12" Speaker
- Sturdy 3/4" Plywood Construction
- Choice of 3 Fine-Furniture Veneers
- Finished Edges—Mitred Corners

Extremely attractive, bass-reflex enclosure for 12" speakers—featuring genuine hardwood veneers—at remarkably low cost. Provides exceptionally smooth bass reproduction. Compact size—only 24" high, 19 1/4" wide, and 13 3/4" deep. Perfect for use in limited-space applications; recommended for use in pairs in budget-priced stereo high-fidelity music systems.

Rigidly constructed of heavy 3/4" plywood, the KN-1280 has expertly finished edges and crafted mitred corners for remarkable durability and resonance-free performance. A special cutout is provided—complete with cover plate—to accommodate the Knight KN-425 high-fidelity tweeter (listed elsewhere in this section). Additional features of this top-notch unit include: convenient 8" adapter board to permit installation of an 8" speaker instead of a 12" speaker; professionally finished, hand-rubbed top for added beauty; custom-fitted acoustic lining, etc.

Offered in three handsome finishes, this neat, space-saving enclosure will blend harmoniously with any motif. Highly attractive, matching grille cloth accents the overall decor. Made in U.S. Available in choice of mahogany, limed oak or walnut—specify when ordering. Shpg. wt., 33 lbs.

70 DU 280C. Only \$2.00 Down. NET..... 29.95



Excellent  
Performance  
At Low Cost

**KN 1280**



Available As  
Pre-Finished  
Kits Or Fully  
Assembled



KN-1215K



KN-1400K



## KNIGHT Custom-Crafted High-Fidelity

### Model KN-1215K Speaker Enclosure Kit

ONLY  
**\$54<sup>50</sup>**  
\$5.00 Down

Distinctive appearance and smooth performance characterize the KN-1215K enclosure kit. Accommodates any 12" or 15" speaker, and includes an adapter board for mounting of tweeter components. Dual ducted-port design provides rich, low-distortion bass response. It's ideal for use in pairs in stereo music systems. Remarkably easy to assemble—all you need is a screwdriver. Rigid tongue-and-groove construction features the use of  $\frac{3}{4}$ " thick panels for optimum, vibration-free performance. Unusually attractive in appearance with lustrous, hand-rubbed furniture veneers; striking bouclé-weave grille cloth; and ultra-smart tapered legs, tipped with brass ferrules. The KN-1215K is styled to complement any decorative scheme. Stands 27" high, 32" wide, 16" deep. Specify mahogany, limed oak or walnut. Wt., 75 lbs.

79 DZ 265C. Only \$5.00 Down. NET..... 54.50

KN-1215 ENCLOSURE. As above, factory assembled.  
79 DZ 264C. Only \$5.00 Down. NET..... 69.50

### Model KN-1400K Equipment Cabinet Kit

ONLY  
**\$59<sup>95</sup>**  
\$5.00 Down

Immensely useful and elegantly styled, the KN-1400K will accommodate all components of a music system except the speaker. It houses a record changer on base; tuner and amplifier; and has plenty of room for record storage. Its fine console appearance is enhanced by the use of hardwood veneers, hand-rubbed by professional craftsmen for lasting beauty. Assembly is just as easy as putting together the KN-1215K speaker enclosure kit described at left—all you need is a screwdriver. Other features of this deluxe cabinet include: rigid, tongue-and-groove construction; smartly styled brass door handles; magnetic latches on doors; ventilated rear panel to provide free flow of air; etc. Compartments: top, 6x32 1/2x14 3/8"; left, 13x18 1/4x14 3/8"; right, 13x13 3/4x14 3/8". Overall, 27x33 1/2x16". In mahogany, limed oak or walnut—specify. 65 lbs.

79 DZ 267C. Only \$5.00 Down. NET..... 59.95

KN-1400 CABINET. As above, factory assembled.  
79 DZ 266C. Only \$5.00 Down. NET..... 74.95

### Knight Furniture Components Offer You Extra Value Features



#### AMAZINGLY EASY TO ASSEMBLE

A screwdriver is all you need to quickly and easily assemble these fine furniture components. All screw holes are pre-drilled. Parts are precision-cut and precisely pre-fitted. All outer surfaces and all exposed inner surfaces are expertly pre-finished by master furniture craftsmen.



#### PRECISION WOOD-WORKING

The finest machine tools—in the hands of experienced wood craftsmen—insure a degree of exacting workmanship never before achieved in furniture kits. The ease of assembly will amaze you. Each piece is pre-fitted to insure perfect assembly—even if you've had no previous experience.



#### UNSURPASSED FOR "EXTRAS"

Extra-value "plus" features are yours with every Knight furniture kit. Speaker enclosures are equipped with glass-fiber acoustic insulation; terminal strips installed with soldered inside leads attached; level control mounting holes pre-drilled to correct size; crystal-clear instructions; etc.



**KNIGHT**

*Top Quality and  
"Luxury Styling"  
at Lowest Cost*



KN-1275K



KN-1500K

## Speaker Enclosures and Equipment Cabinets

### Model KN-1275K Speaker Enclosure Kit

**NET \$59.95**  
\$5.00 Down

A superlative new concept in versatility combined with handsome, modern furniture styling! Special design permits using the KN-1275K with a 15" woofer, any 12" speaker including coaxials and triaxials, and most two and three-way systems. 15" woofers mount in bottom—12" speakers in front panel. A removable adapter board is provided for driver components. Board may be left in place for infinite baffle operation or adjusted to provide any size port if a tuned bass-reflex enclosure is desired. Features 3/4" hardwood panels—custom-styled exterior of rich, pre-finished, furniture veneers with smart bouclé-weave grille cloth and gold-finish trim. Mitered front molding is pre-assembled for professional appearance. Unit assembles easily—requires only a screwdriver. 33x21x20 1/4". Specify mahogany, limed oak or walnut. Wt., 70 lbs.

70 DZ 406C. Only \$5.00 Down. NET ..... 59.95

KN-1275 ENCLOSURE. As above, factory assembled.  
70 DZ 403C. Only \$5.00 Down. NET ..... 74.95

### Model KN-1500K Equipment Cabinet Kit

**NET \$84.50**  
\$5.00 Down

A deluxe new equipment cabinet that transforms your music system into a striking customized installation. Styled to match the KN-1275K enclosure at left, this handsome piece features the finest genuine furniture veneers—oil finished for lasting beauty. The precision-fitted doors have special hinges to permit full opening. Doors fit perfectly against front of KN-1275K enclosures—when units are used in combination—without possibility of marring furniture. Has smart white enamel interior; finished panel for custom mounting amplifier and tuner; etc. Plenty of rear ventilation for equipment. Assembles with remarkable ease in an evening's time—all you need is a screwdriver. Top compartment, 8x34 1/2 x 16 1/8"; left, 16x15 1/4 x 16 1/8"; right, 16x15 1/4 x 16 1/8". Overall size, 33x36x20 1/4". Available in mahogany, limed oak or walnut—specify. 80 lbs.

70 DZ 412C. Only \$5.00 Down. NET ..... 84.50

KN-1500 CABINET. As above, factory assembled.  
70 DZ 409C. Only \$5.00 Down. NET ..... 99.50

### You'll Enjoy the Very Finest in Custom-Crafted Cabinetry



#### LASTING BEAUTY

The deluxe Knight furniture kits above feature elegant, fashionable contemporary styling with just a touch of highly popular Danish influence. They incorporate finely crafted moldings and handsome oil-finished woods—carefully matched by expert craftsmen.



#### A MARVEL OF EASY ASSEMBLY

Large, clear step-by-step photographs and carefully prepared written instructions show you precisely how to do fast, easy assembly on your Knight furniture kits. Guesswork is eliminated. An evening's time will bring you the pride of owning the lasting beauty of fine-quality furniture.



#### MADE-TO-MEASURE QUALITY

Each compartment of the KN-1500K equipment cabinet has been carefully designed to permit housing virtually any component grouping. Even if your music system incorporates a professional turntable, you'll find it installs easily with all the beauty of a "custom fit."

# NEW Low Resonance Sealed Speaker Systems by *Electro-Voice*



## New Royal, Regal and Esquire Speaker Systems

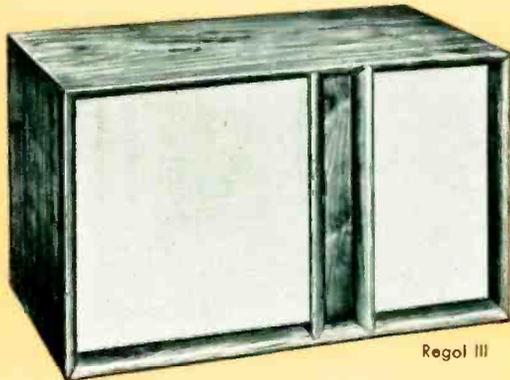
### Ultra-Compact . . . Perfect for Stereo

A new series of speaker systems that represents an outstanding achievement in the blending of beautiful furniture styling with extended hi-fi audio reproduction. All three speaker systems require amplifiers rated at least 25 watts per channel.



Royal 400

Gives you bass so low you can feel it . . . from an ultra-compact enclosure that is acoustically matched to its specialized speaker components.



Regal III



Esquire 200

### NEW "ROYAL 400" 3-WAY SPEAKER SYSTEM

NET **\$244<sup>51</sup>**  
\$10.00 Down

- Employs Specially Designed 18" Woofer, 8" Mid-Range Speaker and Tweeter
- Outstanding Bass—Efficient Mid-Range for "Presence"—Crystal-Clear Treble

Luxuriously styled and offering phenomenal response, the "Royal 400" is one of the finest, ultra-compact speaker systems available. The special 18" woofer provides one complete, additional octave of bass—for a given excursion of the cone, it moves 2½ times more air than an equivalent 12" system! Features much greater power handling capacity than the average system of this size; long-throw voice coils insure lineal operation at highest levels of sound. Two of these exceptional speaker systems, used in a stereo music installation, insure a perfect fusion of all tonal ranges to form a curtain of stereo sound. The full 3-way system includes: 18" woofer of special design; 8" mid-range speaker in totally isolated cavity to prevent distortion; crossover network at 3500 cps into a diffraction-compression, very-high-frequency tweeter. Response is flat from 30 to 19,000 cps. Power handling capacity, 70 watts. Impedance, 8 ohms.

Size, 27½" high, 25½" wide, 15" deep. Bold, imaginative styling, enhanced by lustrous, hand-rubbed finish. In mahogany, limed oak and walnut—specify choice when ordering. Shpg. wt., 103 lbs. 70 DZ 266C. Only \$10.00 Down. NET **244.51**

### NEW "REGAL III" 3-WAY SPEAKER SYSTEM

NET **\$144<sup>55</sup>**  
\$5.00 Down

A deluxe, extended-range 3-way speaker system housed in an elegantly styled, sealed enclosure. Features a 12", super-low frequency woofer with long-throw voice coil; mid-range diffraction horn; very-high-frequency diffraction horn; and two L-C type crossover networks with two level controls. One of the crossovers divides sound at 1000 cps and feeds a mid-range diffraction horn. At 3500 cps, the system crosses over to the smaller, very-high-frequency diffraction horn. The two level controls for adjusting presence and brilliance, are concealed behind a readily accessible, hinged door located on the front of the speaker enclosure. Permit quick and easy balancing of sound to suit personal listening tastes and room acoustics.

Used in pairs for stereo music systems, the "Regal III" provides maximum spread of sound over a wide area, with no spatial distortion. Response is flat from 35 to 19,000 cps. Power handling capacity, 50 watts. Impedance, 8 ohms. Size, 13½" high, 24" wide, 13½" deep. Available in mahogany, limed oak or walnut—specify choice when ordering. Shpg. wt., 32 lbs. 79 DU 306C. Only \$5.00 Down. NET **144.55**

### NEW "ESQUIRE 200" 3-WAY SPEAKER SYSTEM

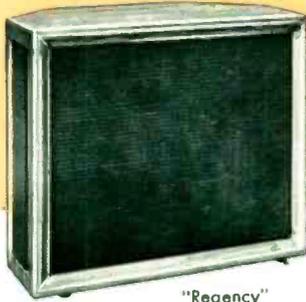
NET **\$108<sup>78</sup>**  
\$5.00 Down

An economy version of the "Regal III" system described above, the new "Esquire 200" is a wonderful value for any low-cost music installation. Achieves extended bass response and dynamic range without sacrificing efficiency. Styling is simple and attractive—graces any room decor. Finished on all 4 sides, it can be used horizontally on shelf, or vertically on floor. Components employed in this compact enclosure include: special-design, 12" woofer with 1½-lb. double-power ceramic magnet; direct-radiator, 8" mid-range driver; very-high-frequency, compression-diffraction type tweeter; plus 2-section, crossover network with single level control.

The 8", horn-loaded driver is tailored to afford maximum dispersion and smoothest response—has new shallow design. First crossover point is at 200 cps to the 8" unit; above 3500 cps, the very-high-frequency, compression-diffraction driver is employed.

Frequency response is flat from 40 to 18,000 cps. Power handling capacity, 35 watts. Impedance, 8 ohms. Size, 14" high, 25" wide, 13½" deep. Available in mahogany, limed oak or walnut—specify choice when ordering. Shpg. wt., 40 lbs. 70 DU 267C. Only \$5.00 Down. NET **108.78**

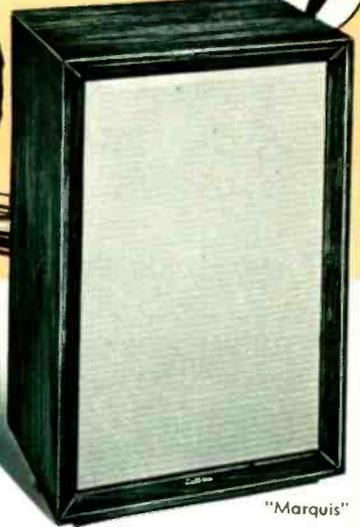
# Speaker Enclosures, Kits and Assembled by *Electro-Voice*



"Regency"



"Aristocrat"



"Marquis"

Expertly engineered and acoustically correct, Electro-Voice speaker enclosures in kit or factory-assembled form. Whichever you choose, you can be sure of outstanding performance and value.

### KD4 "REGENCY" UNFINISHED ENCLOSURE KIT

Functional and smartly styled, folded horn enclosure kit for use in a corner or against the wall. The "Regency" will improve the bass response of any 12" or 15" speaker (particularly effective with E-V 12" and 15" speakers), and can be used to make up a 2 or 3-way system. All lumber parts are precisely cut to size—you need only a few simple tools to build this distinctively styled enclosure. Exterior surfaces in clear-grained korina, ready for finishing in the color of your choice. Includes grille cloth; less metal trim below.  $29\frac{3}{4} \times 33\frac{1}{2} \times 19"$ . Shpg. wt., 55 lbs.

81 DZ 786. Only \$5.00 Down. NET..... 71.54

MODEL AK5 TRIM AND GRILLE KIT. For above. Consists of lacquered, antique-brass finish crossbar grille.  $24 \times 29\frac{1}{2}"$ . Shpg. wt., 3 lbs.

81 DX 798. NET..... 5.88

### KD6 "ARISTOCRAT" UNFINISHED ENCLOSURE KIT

An extremely popular, folded-horn corner enclosure kit. Extends bass range one full octave and increases power-handling capacity of speakers in the lower range by as much as 50%. For use with any 12" speaker (E-V 12" series is recommended); can be used to make up 2 or 3-way systems. Includes grille cloth; less metal trim. below. Size,  $29\frac{3}{4} \times 19 \times 15\frac{1}{4}"$ . Shpg. wt., 36 lbs.

81 DU 788. Only \$2.00 Down. NET..... 38.22

MODEL AK6 TRIM AND GRILLE KIT. For above. Consists of lacquered, antique-brass finish crossbar grille.  $24 \times 16"$ . Shpg. wt., 3 lbs.

81 DX 799. NET..... 4.70

### NEW KD9 "MARQUIS" UNFINISHED ENCLOSURE KIT

NET  
**\$3528**  
\$2.00 Down

- Folded-Horn Counterpart of the "Aristocrat"
- For Placement Anywhere Along the Wall
- Accepts E-V or Any Other 12" Speaker
- Adaptable for Use as 2 or 3-Way System

Low cost, do-it-yourself kit version of the popular "Marquis" enclosure described below. Similar in performance and appearance to the "Aristocrat", this folded-horn enclosure can be placed anywhere along the wall—does not require corner placement for extended bass response. Accommodates any Electro-Voice or other 12" speaker, and can be used for 2 or 3-way systems without modification.

Vertical parallel porting slots extend the low-frequency response range of 12" speakers by nearly an octave. Efficiency below the 100-cycle point is increased by nearly 40% over that of comparably-sized bass reflex enclosures.

The KD9 is ideal for use with the "Aristocrat" enclosure when converting to a stereo music system. Includes a full set of clearly written instructions, grille cloth, glue, screws and nails; less metal trim, below. Size,  $29\frac{3}{4} \times 19 \times 14\frac{1}{2}"$ . Shpg. wt., 50 lbs.

70 DU 268. Only \$2.00 Down. NET..... 35.28

MODEL AK6 TRIM AND GRILLE KIT. For above.  $24 \times 16"$  grille. Wt., 3 lbs.  
81 DX 799. NET..... 4.70

## Factory-Assembled & Finished E-V Enclosures

### "REGENCY" SPEAKER ENCLOSURE

Combines the advantages of folded-horn performance with flexibility of placement. The "Regency" accommodates E-V or any other 12" or 15" speakers, and can be used to make up a 2 or 3-way system. Its integral "built-in corner" provides optimum results when placed either in a corner or against a wall of the room. Response down to 30 cps. Styled in lowboy motif. In choice of 3 handsome finishes; brushed brass grille.  $29\frac{3}{4} \times 33\frac{1}{2} \times 19"$ . Shpg. wt., 87 lbs.

81 DZ 422. Mahogany. NET..... 127.40

81 DZ 423. Lined Oak. NET..... 137.20

81 DZ 864. Walnut. NET..... 137.20

### "ARISTOCRAT" SPEAKER ENCLOSURE

Extremely popular, folded-horn corner enclosure. Accommodates E-V or any other 12" speaker, and can be used to make up a complete 2 or 3-way speaker system. Gracefully styled, the "Aristocrat" truly augments bass reproduction—no boominess, no "muddy" sound. Its extended bass range, down to 35 cps, assures proper balance of lows and highs for most enjoyable listening. Choice hardwood veneers in three beautiful finishes. Brushed brass grille.  $29\frac{3}{4} \times 19 \times 16\frac{1}{2}"$ , 44 lbs.

81 DZ 295. Mahogany. NET..... 70.56

81 DZ 296. Lined Oak. NET..... 77.42

81 DZ 862. Walnut. NET..... 77.42

### "MARQUIS" SPEAKER ENCLOSURE

Enjoy outstanding high-fidelity reproduction with this along-the-wall, folded-horn counterpart of the popular "Aristocrat". Features vertical porting slots for extended bass response down to 40 cps. For E-V or other 12" speakers, or 2 or 3-way systems. The "Marquis" employs the proven principle of increased, reflected speaker inductance to lower the "Q" of the rear air-loaded mass. Three attractive finishes—selected veneers.  $29\frac{3}{4} \times 19 \times 14\frac{1}{2}"$ , 50 lbs.

79 DZ 310. Mahogany. NET..... 61.74

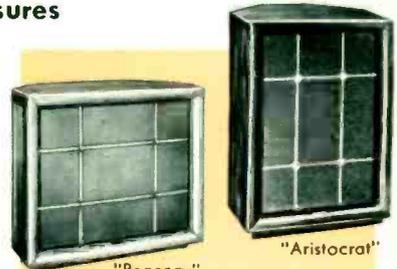
79 DZ 311. Lined Oak. NET..... 67.62

79 DZ 312. Walnut. NET..... 67.62

### "CORONET" SPEAKER ENCLOSURE

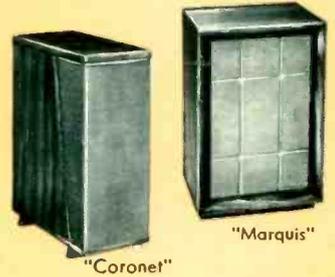
A dramatic accomplishment of balanced reproduction in compact, space-saving form. Smooth, clean design is accented by brushed brass trim; complements any furnishing mode. Ideal for use in pairs for economical, high-quality stereo. May be used with an 8" full-range speaker or 2-way system for excellent sound. Rear port extends bass response below 100 cycles for superb small-speaker reproduction. Outstanding performance from 70 cps to beyond audibility. Enclosure top resists burns and stains.  $25 \times 9\frac{1}{2} \times 17\frac{1}{2}"$ . In mahogany, lined oak or walnut veneers—specify.  $19\frac{1}{2}$  lbs.

79 DU 303C. \$2.00 Down. NET..... 34.79



"Regency"

"Aristocrat"



"Coronet"

"Marquis"



# Hi-Fi Speakers and Speaker Systems by *Electro-Voice*



12TRXB  
15TRXB

12TRX  
15TRX

## TRX 3-Way High-Fidelity Speakers

Beautifully performing speakers employing three concentrically mounted sections—Super Sonax VHF driver, Radax mid-range, and large bass cone with double flux ceramic magnet, for a superb standard of sound reproduction. Deliver rich, vibrant bass, full-bodied mid-range response and ultra-clean treble. E-V's famous TRX speakers have a well-established reputation for extraordinary high-fidelity performance.

### MODEL 12TRXB 12" 3-WAY HI-FI SPEAKER

Popular, 12" 3-way speaker—excellent for use in moderately priced custom installations or for modernization of existing music systems. Features concentric mounting of all elements for wide-angle dispersion and an edgewise-wound voice coil for lower transient distortion. Has 12" woofer with 1½-lb. double flux ceramic magnet (total flux: 100,000 maxwells), Radax-type mid-range speaker, T35B tweeter, and brilliance control. Power capacity, 20 watts. Frequency response (in Aristocrat enclosure), ±3½ db, 35-18,000 cps. 6¼" depth. Impedance, 16 ohms. Shpg. wt., 14 lbs.

81 DX 239. Only \$5.00 Down. NET..... 64.68

### MODEL 15TRXB 15" 3-WAY HI-FI SPEAKER

Moderate cost high-fidelity 15" speaker employing 1½-lb. double flux ceramic magnet. Total flux: 100,000 maxwells. Features 3-way concentric-mounted sections consisting of a 15" woofer with Radax-type "Whizzer" mid-range element, T35B "Super Sonax" VHF tweeter, and HF level control. Frequency response, ±3½ db, 30-18,000 cps (in Regency or Empire enclosure). Power handling capacity, 20 watts. Resonance, 38-48 cps. Impedance, 16 ohms. 7¾" depth. Shpg. wt., 17 lbs.

81 DX 761. Only \$5.00 Down. NET..... 77.42

### MODEL 12TRX 12" 3-WAY HI-FI SPEAKER

An outstanding 12" three-way speaker employing a 5-lb. double flux ceramic magnet. The 12" woofer provides phenomenal bass response; Radax-type mid-range element insures vivid realism; highest audible frequencies are faithfully reproduced by the T35 tweeter. Includes X36 crossover network, and AT37 HF control that compensates for room furnishings—allows matching to room acoustics. Total flux: 176,000 maxwells. Frequency response (in Aristocrat enclosure), ±3½ db, 30-19,000 cps. Capacity, 25 watts. 8" depth. Impedance, 16 ohms. Shpg. wt., 30 lbs.

81 DU 236. Only \$5.00 Down. NET..... 122.50

### MODEL 15TRX 15" 3-WAY HI-FI SPEAKER

E-V's finest, custom-engineered 3-way high-fidelity speaker. Uses extra-large 5-lb. double flux ceramic magnet. Total flux: 244,000 maxwells. Consists of 15" woofer with Radax-type "Whizzer" mid-range element; T35 "Super-Sonax" very-high-frequency tweeter; X36 crossover network; and the AT37 HF level control. Uses 2½" aluminum voice coil. Response, ±3½ db, 30-19,000 cps (in Regency or Empire enclosure). 35-45 cps. 30 watts. 9¼" depth. 16 ohms. Shpg. wt., 43 lbs.

81 DU 235. Only \$5.00 Down. NET..... 146.02

## "STEREON" Speaker Systems

This space-saving, dollar-saving method of stereo reproduction uses your present speaker system, plus a "Stereon" for full, breathtaking stereophonic sound.

"STEREON IA". Employs MT30B, T35B and 2—AT37 level controls. For normal-efficiency speaker system, such as one with SP15B. Must be used with XX3 control filter, below. 25x7½x17½". Specify mahogany, lined oak or walnut. 33 lbs.

79 DU 301C. \$5.00 Down. NET..... 97.51

"STEREON III". Similar to above, but for high-efficiency system, such as one with an SP15. Has MT30, T35 and 2—AT37 level controls. Must be used with XX3, below. Specify finish. Shpg. wt., 37 lbs.

79 DU 302C. \$5.00 Down. NET..... 126.91

XX3 "STEREON" CONTROL FILTER. Distributes audio to single or multiple "Stereon" system. Input impedance: 8 ohms, each channel. 5½x4¾x5¼". Shpg. wt., 8 lbs.

79 D 322. \$2.00 Down. NET..... 29.40

XT-1 STEREO MIXER TRANSFORMER. Accessory for center channel of stereo systems. For either 8 or 16 ohm systems. Size, 4¾x3¾x3¼". Shpg. wt., 2½ lbs.

70 D 269. NET..... 13.22



"Stereon IA"

"Stereon III"



XX3 Control Filter



Model XT-1

## Low-Frequency Woofers

An excellent selection of quality low-frequency woofers featured in Electro-Voice high-fidelity speaker systems. All have unusually low cone resonance for superior performance. Can also be used as woofers in custom two and three-way sound systems. Cones employed are treated for moisture and fungus resistance. Model 12WK and Model 15WK woofers are recommended for "K" horn and phase-loaded systems only; require cavity behind the driver. Model 12WK and Model 15WK have 3.2 ohms DC impedance; all others have 16 ohms impedance. Each woofer listed employs a double flux ceramic magnet for exceptionally smooth reproduction, except Model 12W and Model 12WK (employ Alnico V magnets). All woofers in this listing are rated at 20 to 40 watts. Figures listed under mag. wt. designate magnet weight in pounds.

Stock No.	Mfr's Type	Mag. Wt.	Res. Freq.	Watts	Wt., Lbs.	NET EACH
81 DX 397	12BW	1½	40-50	20	12	34.30
81 DU 285	12W	3	35-45	22	23	64.68
82 DU 801	12WK	3	30-40	25	23	64.68
81 DX 762	15BW	1½	38-48	20	15	42.14
81 DU 286	15W	4¾	25-35	30	38	87.22
81 DU 428	15WK	4¾	29	30	38	87.22

## MID-RANGE AND HIGH-FREQUENCY COMPONENTS PACKAGES

Stock No.	Type	Description of Components	Lbs.	NET
81 D 835	BB1	For 2-way systems (LF driver with treble driver), and coaxial speakers having 1-2-lb. magnets. Includes T35B VHF driver, X36 crossover, AT37 level control, wiring harness.	5	36.26
81 D 858	BB2	For 2-way systems (LF driver with treble driver), and coaxial speakers having 3-lb. magnets or greater. Includes T35 VHF driver, X36 crossover, AT37 level control, wiring harness.	5	49.00
81 DX 834	BB3	For existing LF drivers and coaxial speakers having 1-2-lb. magnets. Includes T10A driver, 8HD horn, X85 crossover, AT37 level control, wiring harness.	14	84.28
81 DU 859	BB4	For existing LF drivers and coaxial speakers having 3-lb. magnets or greater. Includes T25A driver, 8HD horn, X8 crossover, AT37 level control, wiring harness.	19	111.72

# Hi-Fi Speakers and Components by *Electro-Voice*

## DELUXE 12" & 15" RADAX SPEAKERS

**MODEL SP12.** Moderately-priced 12" speaker with 3000 cps crossover. Bass cone resonance, 35-45 cps. Uses "Whizzer" high-frequency, wide-dispersion radiator for extended treble, 100° dispersion. Employs 3-lb. Alnico V magnet. Total flux: 176,000 maxwells. Response,  $\pm 5$  db, 30-13,000 cps. 2" aluminum voice coil. Rated, 25 watts. Impedance, 16 ohms. Depth, 7 $\frac{3}{4}$ ". Shpg. wt., 23 lbs. 81 DU 279. Only \$5.00 Down. NET **64.68**

**MODEL SP15.** Top-performing 15" Radax speaker with 2 $\frac{1}{2}$ " aluminum voice coil, 4 $\frac{3}{4}$ -lb. double flux ceramic magnet (total flux: 244,000 maxwells) provides remarkably distinct bass. Bass cone resonance, 35-45 cps. Uses "Whizzer" HF radiator. Response,  $\pm 5$  db, 30-13,000 cps. Crossover, 3000 cps. Rated, 30 watts. Requires 13 $\frac{1}{2}$ " diameter baffle opening. Depth, 9". Shpg. wt., 38 lbs. 81 DU 280. Only \$5.00 Down. NET **87.22**

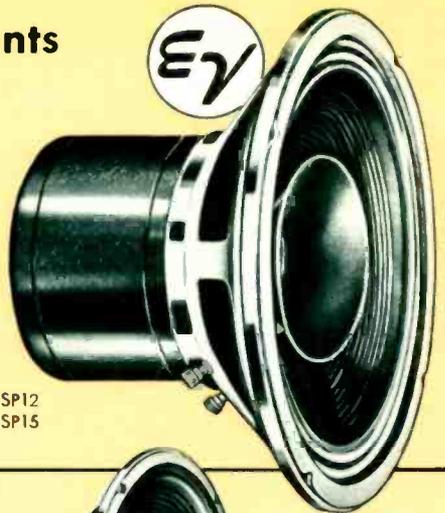
## ECONOMY 12" & 15" RADAX SPEAKERS

**MODEL SP12B.** 12" speaker with 1 $\frac{1}{2}$ -lb. ceramic magnet. Flux: 100,000 maxwells. Response,  $\pm 5$  db, 30-13,000 cps. Rated 20 watts. Crossover, 3500 cps. Imp., 16 ohms. Depth, 6". Wt., 12 lbs. 81 DX 278. Only \$2.00 Down. NET **34.30**

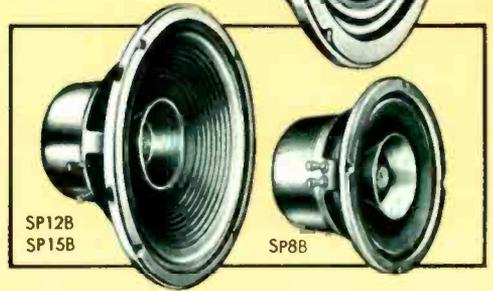
**MODEL SP15B.** 15" speaker with 1 $\frac{1}{2}$ -lb. ceramic magnet. Flux: 100,000 maxwells. Frequency response, 30-13,000 cps. Rated 20 watts. Crossover, 3500 cps. Voice coil impedance, 16 ohms. Depth, 7 $\frac{3}{4}$ ". Shpg. wt., 15 lbs. 81 DX 760. Only \$2.00 Down. NET **42.14**

## MODEL SP8B 8" RADAX SPEAKER

8" version of above. Excellent for limited space hi-fi applications. Bass resonance, 65-75 cps. 1 $\frac{1}{2}$ -lb. magnet. Total flux: 100,000 maxwells. Response,  $\pm 5$  db, 50-13,000 cps. Rated 20 watts. Crossover, 4000 cps. Impedance, 16 ohms. Depth, 4 $\frac{3}{4}$ ". Wt., 9 lbs. 81 D 277. Only \$2.00 Down. NET **28.91**



SP12  
SP15



SP12B  
SP15B

SP8B



8HD

AT37, AT37B

T250

6HD

T10A

T25A

## MID-RANGE HORNS, DRIVERS & CROSSOVERS

**MODEL 8HD DIFFRACTION HORN.** For use with T10A, T25A or T250 drivers. 600 cycle cutoff, 800 cycle crossover frequency. Die-cast construction. 15x4 $\frac{1}{2}$ x8 $\frac{1}{2}$ ". Shpg. wt., 4 lbs. 81 D 429. NET **17.64**

**MODEL 6HD DIFFRACTION HORN.** Similar to above, but fiberglass. 400 cps cutoff, 600 cps crossover. 20x3 $\frac{1}{2}$ x12 $\frac{1}{2}$ ". Shpg. wt., 6 lbs. 81 DX 491. Only \$2.00 Down. NET **21.56**

**MODEL AT37 LEVEL CONTROL.** 16-ohm L-pad, for adjustment of mid-range and tweeter output. Mahogany finish. Wt., 6 oz. 81 D 437. NET **3.82**

**81 D 838.** Model AT37B. As above, but blonde. NET **3.82**

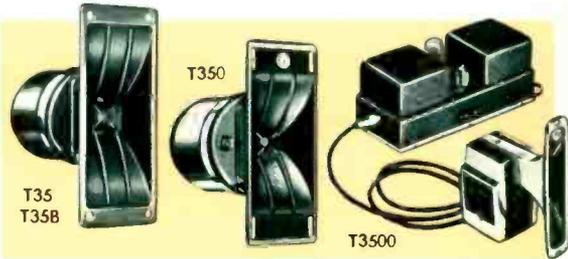
**MODEL T10A HIGH-FREQUENCY DRIVER.** For ultra-clean, extended response. Use with 8HD or 6HD HF diffraction horn and crossover network. Response,  $\pm 5$  db, 400-13,000 cps. 25 watts. 16 ohms.  $\frac{3}{8}$ -lb. magnet. 5 $\frac{1}{2}$ " dia. 3 $\frac{3}{4}$ " deep. Throat,  $\frac{3}{8}$ ". 7 lbs. 81 D 424. Only \$2.00 Down. NET **41.65**

**MODEL T25A HIGH-FREQUENCY DRIVER.** Similar to above, but 30 watts. 1-lb. magnet. 4 $\frac{3}{4}$ " deep. Shpg. wt., 9 lbs. 81 D 288. Only \$5.00 Down. NET **56.84**

**MODEL T250 HIGH-FREQUENCY DRIVER.** Similar to above, but for 35 watts. 3-lb. magnet. 5 $\frac{1}{4}$ " deep. Shpg. wt., 9 lbs. 82 DX 800. Only \$5.00 Down. NET **79.38**

**CROSSOVER NETWORKS.** All are  $\frac{1}{2}$ " section (types 12 db), except X825.  $\frac{1}{4}$ " (6 db); X2635,  $\frac{1}{4}$ " and  $\frac{1}{2}$ " Impedance, 16 ohms.

Stock No.	Type	Crossover	Lbs.	Down	EACH
82 D 802	X125	300	4	\$2.00	31.36
81 D 415	X825	800	3		18.62
81 D 293	X8	80C	6	2.00	31.34
81 D 416	X6	600	6	2.00	38.22
81 D 289	X336	300-500	9	2.00	38.22
81 D 436	X36	3500	3		9.31
81 D 404	X2635	200-600-3500	10	5.00	73.50



T35  
T35B

T350

T3500

## POPULAR HIGH-FREQUENCY TWEETERS

**MODEL T35 "SUPER-SONAX" VERY-HIGH FREQUENCY TWEETER.** Delivers remarkably clean, extended high-frequency response—3500 to 19,000 cps. Adds at least one more octave of highs. Features wide-angle (180°) dispersion horn; cutoff, 1500 cps. Uses molded-phenolic impregnated, linen diaphragm. Use with X36 crossover and AT37 level control. For system rated at 20 watts or over. Has  $\frac{3}{8}$ -lb. magnet. Crossover, 3500 cps. Impedance, 16 ohms. Horn size, 5 $\frac{1}{2}$ " long by 2" wide. Pot size, 2 $\frac{1}{4}$ " diameter, 3 $\frac{1}{4}$ " deep overall. Less AT37 level control and X36 crossover, left. Shpg. wt., 3 lbs. 81 D 434. Only \$2.00 Down. NET **34.30**

**MODEL T35B VHF TWEETER.** Same as Model T35 above but for systems with speakers rated under 20 watts. Ideally suited for custom installation in moderately priced high-fidelity speaker systems. Has molded-phenolic impregnated, linen diaphragm. Dispersion, 180°; cutoff, 1500 cps. Impedance, 16 ohms. X36 crossover network required (see listing in column at left). Pot size, 2 $\frac{1}{4}$ " diameter; 3" depth overall. Shpg. wt., 3 lbs. 81 D 432. Only \$2.00 Down. NET **21.56**

**MODEL T350 VERY-HIGH FREQUENCY DRIVER.** Ideal for use in deluxe multi-way speaker systems having extended bass range. Provides extended treble response beyond audibility. Employs diffraction horn principle with special Avdon Sonophase throat design for 180° dispersion pattern. Capacity, 50 watts; handles 100-watt peaks. Impedance, 16 ohms. Frequency response:  $\pm 2$  db, 2000 to 21,000 cps. Magnet weight, 1 lb. Recommended crossover, 3500 cps (see listing at left). Horn is 7 $\frac{1}{2}$ " long, 2 $\frac{1}{4}$ " wide. Pot diameter, 3 $\frac{1}{2}$ ". Overall depth, 4 $\frac{3}{4}$ ". Shpg. wt., 8 lbs. 82 DX 337. Only \$5.00 Down. NET **58.80**

**MODEL T3500 "IONOVAC" IONIZED AIR, VERY-HIGH FREQUENCY TWEETER.** Employs ionized air for dazzling reproduction of treble frequencies. Frequency response:  $\pm 2$  db, 2000 to 40,000 cps. Recommended crossover, 3500 cps (see listing at left). Dispersion pattern, 180°. Power capacity, 50 watts; handles 100-watt peaks. Impedance, 16 ohms. Driver assembly, 9x3 $\frac{1}{2}$ x7"; electronic unit, 5 $\frac{1}{2}$ x5x13 $\frac{1}{2}$ ". Baffle opening, 1 $\frac{1}{2}$ x6". Shpg. wt., 15 lbs. 82 DU 338. Only \$5.00 Down. NET **147.00**



# Full-Range 8" and 12" Speakers

Model 312



Employs University's renowned "Diffaxial" design for crystal-clear treble.



UXC-123



6201

## Model 312, 12" Diffaxial Speaker

- True 3-Way Design for Exceptional High-Fidelity Reproduction
  - 12" Woofer, Diffusicone Mid-Range Unit, and Super-Tweeter, with Built-In L-C Crossover
- NET  
**\$71.54**  
 \$5.00 Down

Brilliant, 12" Diffaxial speaker for unexcelled, wide-range reproduction of sound. Contains University's patented, multi-element "Diffusicone" feature for full-bodied mid range; incorporates super-tweeter for clean, brilliant highs. The Hypersonic HF-206 super-tweeter is true-axially projected through the center of the 12" woofer. Employs 2-lb., Alnico 5 "W" magnet, and duralumin voice coil suspension in woofer section for highly efficient, smooth bass response.

Mechanical crossover at 1000 cycles and built-in L-C electrical crossover network at 5000 cycles, segregate the input into the three frequency ranges handled by each section of the Model 312. Includes variable brilliance control for matching treble frequencies to room acoustics and personal listening tastes.

Frequency Response: 40 cps to beyond audibility. Power handling capacity, 25 watts. Impedance, 8-16 ohms. Brilliance control is wired to 36" cable. Depth, 8". Shpg. wt., 11 lbs.

95 DX 188. Only \$5.00 Down. NET. 71.54

**MODEL UXC-123 12" DIFFAXIAL.** An integrated, 3-way speaker that offers high efficiency, and uniform wide-angle dispersion. Unusually low in cost, the UXC-123 employs a uni-sectional Diffusicone element and UXT-5 reciprocating-flare super-tweeter, mounted through the center axis of the woofer, to attain true, wide-angle dispersion. Built-in brilliance control for adjustment to room acoustics. Mechanical crossover at 1000 cps; electrical crossover at 5000 cps. 1 1/4-lb. Alnico V permanent magnet. Power handling capacity, 25 watts. Impedance, 8-16 ohms. Frequency response extends from 45 to 17,500 cycles. Size, 12 1/4" diameter; 8 1/4" deep. Brilliance control comes complete with mounting plate and knob, pre-wired to 3-ft. cable. Shpg. wt., 9 lbs.

95 DX 585. Only \$5.00 Down. NET. 65.17

**MODEL 6201 DUAL-RANGE, 12" COAXIAL SPEAKER.** Highly popular, top-quality 12" hi-fi speaker. Provides clean, natural performance across the audio spectrum without annoying harmonic distortion of fundamental tones. True coaxial operation is provided by a compression-type tweeter and 2500-cycle electrical crossover network. The tweeter, with compression driver and reciprocating-flare horn, is axially mounted through the center of the woofer. "W" shape, 1 1/2-lb. Alnico V magnet and specially treated, 1-piece moulded woofer diaphragm provide exceptionally smooth low-frequency transient response. Includes brilliance control with 3-ft. cable. Excellent frequency response—45 to 15,000 cps. Capacity, 25 watts. Imp. 8-16 ohms. 8 3/4" depth. Wt., 10 1/4 lbs.

95 DX 176. Only \$5.00 Down. NET. 56.59

## Popular 12" Full-Range Speakers



UXC-122

Diffusicone-12

6200

**MODEL UXC-122 12" DIFFAXIAL.** Low cost, 12" Diffaxial speaker employing University's uni-sectional Diffusicone, high-frequency element with 1000-cps mechanical crossover. Coaxial horn loading at the apex of the cone extends mid-range and high-frequency response. Low frequencies are reproduced by specially molded, one-piece woofer diaphragm. Has extra-large voice coil. Provides uniform, wide-angle sound dispersion by means of radial projector plus aperture diffraction for full fidelity at all listening points off speaker axis. Employs 1-lb. Alnico V magnet. Response, 45 to 13,000 cps. Power handling capacity, 25 watts. Impedance, 8-16 ohms. Depth, 4 3/4". Shpg. wt., 5 1/4 lbs.

95 DX 584. Only \$2.00 Down. NET. 34.79

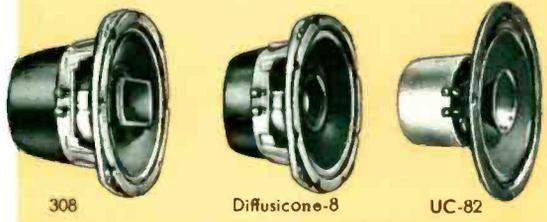
**MODEL DIFFUSICONE-12 12" EXTENDED-RANGE DIFFAXIAL.** Rich, clear bass without boominess, is provided by this low-cost, 2-way 12" Diffaxial speaker. Dual horn-loading at apex of cone extends mid-range and high-frequency response—mechanical crossover at 1000 cps. Offers smooth, wide-angle dispersion. It's perfect for the low-cost hi-fi system; recommended for use in pairs for stereo music systems. Frequency response, 40 to 14,000 cps. Power handling capacity, 30 watts. Employs 24-oz. Alnico V magnet. Impedance, 8-16 ohms. Depth, 4 1/2". Shpg. wt., 6 lbs.

95 DX 182. Only \$2.00 Down. NET. 38.95

**MODEL 6200 EXTENDED-RANGE, 12" SPEAKER.** Economy-priced 12" speaker. Special, shallow design for flush mounting in ceilings, walls, etc. Excellent for high-fidelity use, radio-phono replacement, public address, etc. Employs duralumin dome at cone apex. Frequency response, 45-10,000 cps. Impedance, 8-16 ohms. Power handling capacity, 30 watts. 12 1/4" diameter. Only 4" deep. 5 1/4 lbs.

95 DX 180. Only \$2.00 Down. NET. 27.44

## Efficient, Wide-Range 8" Speakers



308

Diffusicone-8

UC-82

**NEW SERIES "200" MODEL 308 3-WAY 8" DIFFAXIAL.** Improved, very compact, highly efficient Diffaxial speaker. Designed specifically for the smaller hi-fi installation, the 308 is perfect for use where space is at a premium and quality reproduction is desired. Features special-design 8" woofer with extra-large voice coil, for excellent bass response. Has multi-element Diffusicone mid-range unit, compression type tweeter and built-in 5000-cps electrical crossover. True-axial construction; tweeter is projected through center of woofer. Frequency response, 40-15,000 cps. Magnet wt., 1 1/4 lbs. Impedance 8-16 ohms. Power handling capacity, 25 watts. 8 3/4" diameter; 5 1/2" deep. Shpg. wt., 5 lbs.

95 D 189. Only \$2.00 Down. NET. 41.16

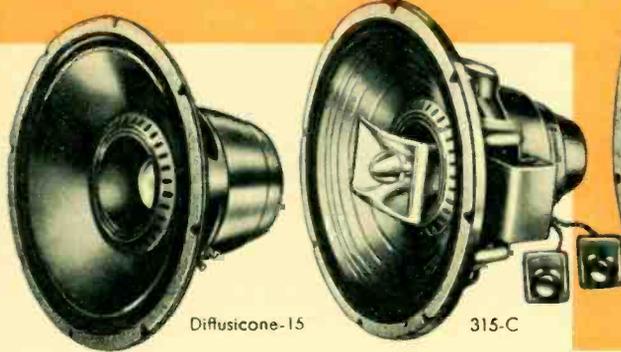
**NEW SERIES "200" MODEL DIFFUSICONE-8 8" DIFFAXIAL.** Low-cost, 2-way 8" speaker. Highly suitable for the smaller hi-fi installation, or where space is at a premium. Wide-angle dispersion is achieved by dual coaxial horn acting as radial projector, plus aperture diffraction. Diffusicone element provides better-than-average reproduction. Frequency response, 40 to 13,500 cps. Magnet wt., 1 lb. Power handling capacity, 25 watts. Impedance, 8-16 ohms. 8 3/4" diameter. Depth, 4 1/4". Shpg. wt., 4 3/4 lbs.

95 D 183. Only \$2.00 Down. NET. 27.44

**NEW MODEL UC-82 WIDE-RANGE, 8" DIFFAXIAL.** An excellent, low-cost wide-range 8" speaker, expressly designed for use in today's compact speaker enclosures. Perfect for use in pairs in stereo systems. Features 2-way Diffaxial design and 5000-cps mechanical crossover for extended-range, mid and high frequency reproduction. Frequency response, 45 to 14,000 cps. Capacity, 25 watts. Impedance, 8-16 ohms. Only 4 1/4" deep. Shpg. wt., 3 1/2 lbs.

70 D 235. NET. 16.61

# Full-Range 15" Speakers



Diffusicone-15

315-C

**MODEL DIFFUSICONE-15 15" DIFFAXIAL.** Low-cost, 2-way, Diffaxial 15" speaker. Diffusicone element (special, diffusing-type cone at the apex of the main cone), assures wide-angle dispersion of treble frequencies. Dual horn-loading extends mid- and high-frequency response evenly throughout the listening area, crossing over mechanically at 1000 cps. Rich, clear bass, without boominess, is provided by the sturdily constructed 15" woofer with specially molded cone. A 1½-lb. Alnico V magnet also contributes to the excellent bass response. Frequency response from 30 to 14,000 cycles. Power handling capacity, 30 watts. Impedance, 8-16 ohms. 15½" dia.; 7¼" deep. Shpg. wt., 8¼ lbs.  
95 DX 539. Only \$2.00 Down. NET ..... 44.10

**MODEL 315-C SUPER 3-WAY 15" DIFFAXIAL.** The greatly improved version of earlier 315—of the finest 3-way speakers available. Large, theater-type woofer cone features high excursion, dual-spider piston and anti-breakup, low-resonance diaphragm, for rich natural bass. Multi-element Diffusicone mid-range section, crosses over at 1000 cps. Treble is covered by heavy-duty T-50 Hypersonic driver and axially mounted, reciprocating flare wide-angle H-600 tweeter horn. Provides exceptionally uniform sound distribution throughout the entire audio range. Response is 25 cps to inaudibility. 2 balance controls for mid-range and treble adjustment. Magnet wt., 6½ lbs. Power handling capacity, 50 watts. Impedance, 8-16 ohms. 12" deep. Shpg. wt., 34½ lbs.  
81 DU 947. Only \$5.00 Down. NET ..... 152.88



Model 6303

Second in performance capabilities only to the 315-C, this 15", 3-way speaker is a rare value.

## 3-Way 15" Diffaxial Speaker

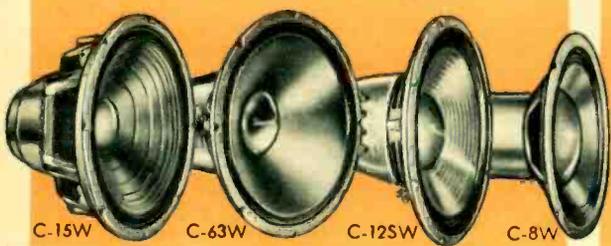
- NET **\$81.34**
- True 3-Way Construction—Woofer, Diffusicone Mid-Range Unit, Plus Super Tweeter
  - Built-In Crossover with Brilliance Control
- \$5.00 Down • Offers Thrilling, Extended-Range Reproduction

A tremendous value, the 6303 is a medium-power version of University's Model 315-C triaxial speaker described at left. Moderately priced, it's an excellent choice for any home music system, delivering performance of superb quality. Integrally constructed on a rugged frame, it features 3 reproducing elements—15" cone, Diffusicone element, and super tweeter.

Its rich, sonorous bass is augmented with full-bodied mid-range by the multi-element Diffusicone, which crosses over mechanically at 1000 cps. At 5000 cps, an L-C electrical crossover network directs the high and ultra-high frequencies to the famous UXT-5 super tweeter with reciprocating-flare horn. The UXT-5 is axially mounted in the center of the woofer for purest treble.

Has 2-lb. Alnico V magnet. Frequency response 40 cps to beyond audibility. Power handling capacity, 30 watts. Impedance, 8-16 ohms. Depth, 10". Includes brilliance control. 12 lbs.  
95 DU 538. Only \$5.00 Down. NET ..... 81.34

## Outstanding Low-Frequency Woofers



C-15W

C-63W

C-12SW

C-8W

**UNIVERSITY'S DUAL VOICE COIL DESIGN.** Two of the woofers described below, the C-15W and C-12SW, employ a dual voice coil—two electrically independent voice coils on a single woofer. This special feature uses the non-directionality of bass frequencies by eliminating the need for a second woofer in stereo music systems. Each channel of the stereo amplifier can be connected to one coil each of the dual voice coil woofer, while the higher, directional frequencies are fed to two smaller "add-on" speakers.

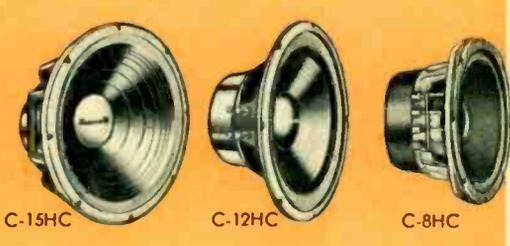
**MODEL C-15W 15" WOOFER.** Features special-design voice coil permitting greater cone excursion for deep bass. Dual-spider piston and 6-lb. magnet assure clean response from below 25 to 1500 cps. Capacity, 50 watts. Dual impedance voice coil assembly permits use in any system of 4 to 20 ohms. Depth, 10½". Shpg. wt., 26¼ lbs.  
95 DU 185. Only \$5.00 Down. NET ..... 83.30

**NEW MODEL C-12SW 12" WOOFER.** Features built-in low-pass filter for adjustment of response to 700, 2500 or 5000 cps—suits crossover requirements of most tweeters. Response, 40 to 6000 cps. Capacity, 30 watts. 1½-lb. magnet. Imp., 8 ohms. 6½" deep. 7¼ lbs.  
79 DX 244. Only \$2.00 Down. NET ..... 38.71

**MODEL C-63W 15" WOOFER.** Employs unique, built-in low-pass filter. Permits adjusting treble cut-off point at 700, 2500 or 5000 cps to suit crossover requirements of most tweeters. 1½-lb. magnet. Response, 30 to 6000 cps. Capacity, 30 watts. Includes brilliance control. Impedance, 8 ohms. Depth, 10". Shpg. wt., 10 lbs.  
81 DU 563. Only \$2.00 Down. NET ..... 48.02

**MODEL C-8W 8" WOOFER.** May be used as a low-cost, mid-range speaker. Response, 50 to 5000 cps when properly baffled. Capacity, 25 watts. Imp. 8 ohms. 4¼" deep. Shpg. wt., 3 lbs.  
95 D 192. NET ..... 14.70

## Latest High-Compliance Woofers



C-15HC

C-12HC

C-8HC

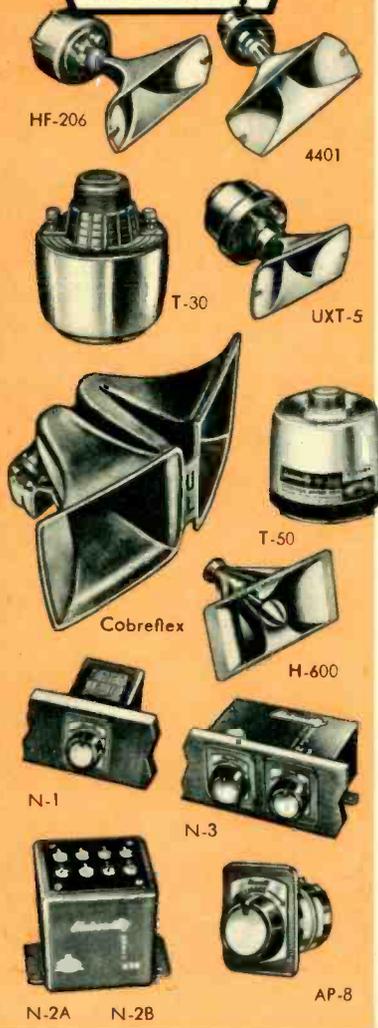
**HIGH-COMPLIANCE WOOFERS.** Moderately priced, high-compliance woofers designed for ultra-linear response. Deliver rich, remarkably clean reproduction throughout the lower frequency range. Have unusually low cone resonance. Feature Hiflux Uniferrox-7 magnet material in a specially constructed suspension structure—assures positive transient control during maximum excursions. All have dual-impedance voice coil (described at left), to permit use in any system of 4 to 8 ohms or 10 to 20 ohms. For maximum fidelity, University's high-compliance woofers should be used in properly designed enclosures. Recommended enclosure plans are supplied with each unit.

**MODEL C-15HC 15" WOOFER.** A high-compliance, low-resonance woofer which yields astounding bass depth. Features Hiflux Uniferrox-7 magnet material in specially designed twin-spider suspension assembly. Recommended for use in high-fidelity systems employing amplifiers which are capable of delivering output of 10 watts or more. Cone resonance, 15 cps. Response to 800 cps. Impedance, 4 to 20 ohms. Depth, 8¼". Shpg. wt., 24¼ lbs.  
81 DU 812. Only \$5.00 Down. NET ..... 87.71

**MODEL C-12HC 12" WOOFER.** High compliance, ultra-linear 12" woofer. Recommended for use in hi-fi systems employing amplifiers which are capable of delivering output of 15 watts or more. Response to 2500 cps. Cone resonance, 18 cps. Impedance, 4 to 20 ohms. Depth, 5½". Shpg. wt., 8½ lbs.  
81 DX 811. Only \$2.00 Down. NET ..... 48.51

**NEW MODEL C-8HC 8" WOOFER.** Same construction features as the units described above. Designed to provide bass response from 40 cps in the smallest enclosure. Response, 38 to 2200 cps. Capacity, 30 watts. Impedance, 4-8 ohms. 4¼" deep. Shpg. wt., 7½ lbs.  
70 D 236. \$2.00 Down. NET ..... 39.15

# Top-Quality Speaker Components



## Tweeters, Horns, Drivers and Crossover Networks

**MODEL HF-206 HYPERSONIC TWEETER.** Extends high-frequency response far beyond audible range. Die-cast aluminum wide-angle, "reciprocating flare" horn for uniform 120° horizontal and 50° vertical dispersion. Driver mechanism capacity, 25 to 50 watts. Response, 3500 cps to inaudibility. Requires N-1 or N-2B crossover. Imp., 8 ohms. 6x3½x6½". 3½ lbs.

95 D 190. \$2.00 Down. NET. 32.34

**MODEL 4401 TWEETER.** A quality tweeter at low cost. Sturdy, one-piece die-cast horn using "reciprocating flare" principle for 120° horizontal and 50° vertical dispersion. Efficient driver mechanism and duralumin voice coil suspension in hermetically sealed unit. Response, 2000 to 15,000 cps. Requires N-1 or N-2B crossover. Capacity, 25 watts. 8 ohms. 2½x6x6½". Wt., 2 lbs.

95 D 167. NET. 17.64

**MODEL T-30 MID-RANGE AND HIGH-FREQUENCY DRIVER.** For use with Cobreflex or H-600 horns. Provides mid-range in 3 and 4-way systems, or serves as tweeter in 2-way systems. Requires N-2A crossover network. Response, 200 to 15,000 cps. Capacity, 50 watts in multi-speaker systems. Impedance, 8 ohms. 1½"-18 throat; 3½" diameter; 3¼" deep. Wt., 2½ lbs.

81 D 589. \$2.00 Down. NET. 29.40

**MODEL UXT-5 SUPER TWEETER.** A compact, super-tweeter assembly. Unusually smooth response at 5000 cps crossover point, or above. Employs efficient compression driver unit coupled to "reciprocating flare" horn. Recommended for use with either the N-1 high-pass filter or N-2B crossover. Response from 4500 to 17,500 cps. Capacity; 25 watts in 2-way systems. 50 watts in 3-way systems. Impedance, 8 ohms. 4¼x2½x4". Shpg. wt., 1¼ lbs.

81 D 564. \$2.00 Down. NET. 20.58

**MODEL T-50 HYPERSONIC DRIVER.** Heavy-duty driver unit for use with the H-600 horn. Provides response from 600 cps to beyond audibility. Requires N-2A crossover network. Capacity, 50 watts in multi-speaker systems. Imp., 8 ohms. 1½"-18 throat; 4¼" dia.; 4¼" deep. Wt., 5 lbs.

81 D 948. NET. 48.51

**MODEL COBREFLEX HORN.** Perfect for use as a mid-range horn, in 3-way speaker systems when used with the T-30 driver unit. Its 27" exponentially flared air column permits crossover as low as 350 cps. Twin-flare design for uniform wide-angle dispersion; 120° horizontal and 60° vertical. Aluminum die casting. 1½"-18 throat. 10¼x18½x9¼". Shpg. wt., 10¼ lbs.

95 DX 184. \$2.00 Down. NET. 22.54

**MODEL H-600 MID-RANGE AND HIGH FREQUENCY HORN.** Top-rated 600-cycle cutoff, wide-angle horn. One-piece, die-cast design. For use with N-2A crossover and T-30 or T-50 driver units. Combines "reciprocating flare" principle with hemispherical deflection for uniform sound from 600 cps to beyond audibility. Accepts driver unit with standard 1½"-18 throat. 7¼x8¼x4¼". Shpg. wt., 2½ lbs.

81 D 949. NET. 18.62

**MODEL N-1 ADJUSTABLE HIGH-PASS FILTER.** With built-in brilliance control. For dividing audio between woofer and tweeter in 2-way systems. Crossover and impedance combinations: 2500, 5000 and 10,000 cps at 8 ohms; 1250, 2500 and 5000 at 16 ohms; also 5000 and 10,000 cps at 4 ohms. Use with N-2A crossover in 3-way systems. Fits panels to 1", 3½x3¼x3". Shpg. wt., 1¼ lbs.

95 D 193. NET. 13.72

**MODEL N-3 "ACOUSTIC BATON" 3-WAY CROSSOVER NETWORK.** Adjustable network for 3-way speaker systems. Connections for either 350 or 700 cps crossover between mid-range and woofer. Tweeter crossover is 5000 cps. Built-in presence and brilliance controls. Fits panels up to ¾" thick. 8 ohms. 7x5x3". Wt., 5½ lbs.

95 D 196. \$2.00 Down. NET. 31.36

**MODEL N-2A CROSSOVER NETWORK.** For any combination of speakers, in a great variety of voice coil impedances and crossover points. Can be used with N-1 or N-2B for 3-way speaker systems. 6 db, 2-way network. May be used in pairs as 12 db network or singly as 12 db low or high-pass filter. Crossover: 300 or 700 cps at either 8 or 16 ohms; 700 cps at 4 ohms. Less brilliance control; use AP-8 below. Size: 3¼x3¼x3". Shpg. wt., 2¼ lbs.

95 D 194. NET. 17.64

**MODEL N-2B CROSSOVER NETWORK.** For use with any combination of speakers, in varied voice coil impedances and popular crossover points. Can be used with the N-2A for 3-way speaker systems. 6 db, 2-way network. Used in pairs as 12 db network, or singly as 12 db low or high-pass filter. Crossovers: 1250, 2500 and 5000 cps at 8 ohms; 2500 or 5000 cps at 16 ohms; 2500 cps at 4 ohms. Less brilliance control; use AP-8 below. 3½x3¼x3". 2¼ lbs.

95 D 195. NET. 13.72

**MODEL AP-8 LEVEL CONTROL.** Highly efficient attenuator pad for balancing sound to room acoustics and taste. For use with N-2A and N-2B crossovers. Fits panels to ¾". Impedance: 8-16 ohms. Shpg. wt., 7 oz.

95 D 132. NET. 3.87

## Low-Cost "Kwikit" 12" and 15" Speaker Enclosure Kits

Enclosures of superior acoustic design in kit form. Complete with attractive front panel trim and grille cloth. Selected wood panels are cut exactly to size, of ¾" fully cured lumber, ready for furniture finishing. Precision-made parts assure positive airtight construction for maximum enclosure efficiency. Design combines direct speaker radiation, reflex principle and rear horn loading to produce uniform response in all parts of the listening area. Self contained folded horn extends to front of enclosure, projecting low frequencies out into the room. "Kwikits" are independent of room placement, and may be used against a flat wall, in a corner, or above floor level.

**MODEL KEN-15 "KWIKIT."** Accepts any 15" speaker (or 12" speaker with adapter board listed below). Pre-cut for same mid-range and high-frequency components as the KEN-12, but baffle board will also accommodate 8" speaker. Same fine construction and features as the KEN-12. Size, 35¼" high, 29" wide, 18½" deep. Shpg. wt., 68 lbs.

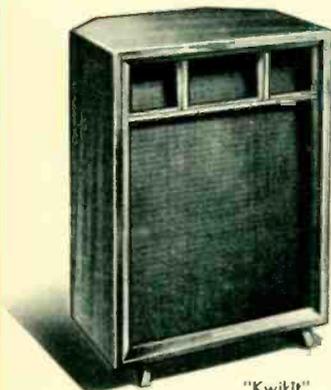
81 DZ 829. \$5.00 Down. NET. 58.31

**ADAPTER BOARD.** Permits mounting 12" speaker in the KEN-15. 1½ lbs.

82 DX 299. NET. 1.19

**MODEL KEN-12 "KWIKIT."** Has tilted baffle board for any 12" speaker; pre-cut for University H-600 horn and T-30 or T-50 drivers, and 4401, UXT-5 or HF-206 tweeters. Heavy ¾" wood panels for rigidity, pre-cut and drilled. Mitered and braced for sturdiness of construction—exterior and interior parts are precision-cut to fit snugly together. Includes decorative, front moldings plus a highly attractive, textured grille cloth. Size 29½" high, 21½" wide, 15½" deep. Shpg. wt., 45 lbs.

81 DU 828. \$2.00 Down. NET. 43.85



"Kwikit" Unfinished Speaker Enclosure Kits

# and Compact Speaker Systems



## New 2-Way, High-Efficiency Speaker System

As Low as  
**\$55.81**  
\$5.00 Down

MODEL S-80. Compact, modestly priced hi-fi speaker system. Offers excellent wide-range response—perfect for use in monophonic or stereo music system applications. The small size of the S-80 makes it ideal for bookshelf installation, and since it is finished on all four sides, it can be used in a wide variety of upright or horizontal installations. Selected University components include: C-8W 8" woofer; 3 1/4" direct-radiator tweeter; and L-C type crossover network (crossover point, 2500 cps). Enclosure employs ported phase-inverter principle for clean, smooth bass response. 1/2" wood panels for sturdiness without distortion-causing resonances. Power handling capacity, 25 watts. Impedance: 8-16 ohms. Styling is simple and neat—harmonizes beautifully with any room interior. Size, 11 1/2" high, 21 3/4" wide, 9 1/4" deep. Shpg. wt., 17 lbs.

70 DU 237. Mahogany. Only \$5.00 Down. NET ..... 58.75  
70 DU 238. Walnut. Only \$5.00 Down. NET ..... 58.75  
70 DU 239. Unfinished. Only \$5.00 Down. NET ..... 55.81

S-80

Two-Way,  
High-Efficiency  
Speaker System



## Radiation Resistance Loaded, 3-Way System

AS LOW AS  
**\$93.59**  
\$5.00 Down

MODEL RRL-8. A new and beautifully styled, high-compliance speaker system, employing some of University's latest components. Tastefully designed, the cabinet features a molded front edging with matching grille cloth—suitable for installation in any room. Superb quality of sound, matches the elegant appearance of the RRL-8. Components include: new, 8" ultra-linear response, high-compliance woofer; two 3 1/2" direct radiator tweeters; L-C type crossover network (crossover point, 2500 cps); and variable brilliance control. 1/4" hardwood enclosure features radiation resistance loading and tubed port for clean, full bass response to below 40 cps. Highboy, lowboy or bookshelf installation. Available in 3 beautiful, fine-furniture veneers, plus an economy-priced, unfinished model. Veneered models are finished on all 4 sides. Power handling capacity, 30 watts. Impedance: 8-16 ohms. Size, 12x22 1/4x10 3/8". Shpg. wt., 28 lbs.

70 DU 240. Mahogany. Only \$5.00 Down. NET ..... 97.51  
70 DU 242. Lined Oak. 70 DU 241. Walnut. NET EACH. 100.45  
70 DU 243. Unfinished. Only \$5.00 Down. NET ..... 93.59

RRL-8

3-Way  
High-Compliance  
Speaker System



## Radiation Resistance Loaded, 3-Way System

AS LOW AS  
**\$117.55**  
\$5.00 Down

MODEL RRL-12. Full-range performance from this new, attractively styled, compact speaker system. The RRL-12 accomplishes unusual breadth, depth and clarity of sound with its custom-designed components and enclosure. Perfect for use in pairs in stereo systems, or for a high-performance monophonic music system. Its compact size is adaptable to any installation—finished on all 4 sides for lowboy or highboy use, bookshelf, mantel, etc. 3/4" hardwood, fine furniture veneers and classic simplicity of lines allow the RRL-12 to harmonize with traditional or contemporary decors. Components in the special-design, radiation resistance loaded enclosure include: new 12" ultra-linear response, high-compliance woofer; 3 1/4" direct-radiator speaker; new "Sphericon" super-tweeter; L-C type crossover network and variable brilliance control. Power handling capacity, 40 watts. Response from 35 cps to inaudibility. Impedance: 8-16 ohms. Size, 13 3/4" high, 25" wide, 12 1/2" deep. Shpg. wt., 38 1/2 lbs.

70 DU 244. Mahogany. Only \$5.00 Down. NET ..... 117.55  
70 DU 246. Lined Oak. 70 DU 245. Walnut. NET EA. 121.47

RRL-12

12" Woofer,  
3 1/4" Speaker  
and Super-Tweeter



## New All-In-One Stereophonic Speaker System

### TMS-2 Trimensional Stereo Speaker System

AS LOW AS  
**\$252.84**  
\$10.00 Down

- Single Cabinet, Integrated Stereo System
- Stereo "Spread" Is Easily Controlled by Means of Deflector Doors
- Employs Special, Dual Voice Coil Woofer

University's new, single cabinet stereo system—employs the acoustic properties of surrounding walls for impressive stereo sound from virtually any point, in any room. A 12" woofer mounted facing the rear of the cabinet directs bass frequencies against a wall which reflects them evenly across the room. Separate mid-range and treble assemblies for each channel, project sound from the sides of the cabinet. All frequencies are deflected in proper relationship, to rear and side walls of the room, to create multiple stereo sound sources. Stereo "spread" (i.e., wider or narrower), is controlled by adjusting the two deflector doors.

The unique design of the TMS-2 allows you to place it in a corner or anywhere along a wall. With deflector doors closed, it can be used as an outstanding, wide-range monophonic speaker system. Components include: C-12HC 12" dual voice coil woofer; two special-design, 8" mid-range speakers; two compression-type, wide-angle tweeters; and two N-3 crossovers with presence and brilliance controls. Size (with deflector doors closed), 25" high, 30" wide, 12 1/2" deep. Shpg. wt., 92 lbs.

79 DZ 097. Mahogany. Only \$10.00 Down. NET ..... 252.84  
79 DZ 098. Walnut. Only \$10.00 Down. NET ..... 257.74

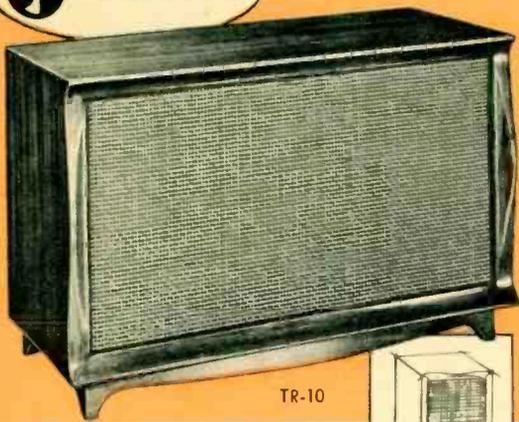


TMS-2 With  
Doors Closed

Full, balanced stereo sound spread throughout the listening room . . . place it along a wall or in a corner . . . no critical listening positions.

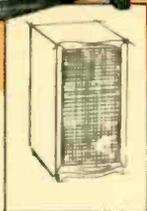


# JENSEN HIGH-FIDELITY SPEAKER



TR-10

Beautifully styled, compactly designed 3-way speaker system. Completely finished on four sides to complement any decorative scheme. Excellent for use in monophonic or stereo hi-fi systems—performs equally well in lowboy or highboy position.

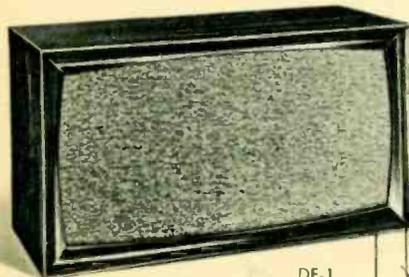


**"FLEXAIR" SPEAKER SYSTEMS**  
 Jensen "Flexair" speaker systems feature specially engineered woofers, designed to extend bass response down to very low frequencies in the very bottom highly damped super-low resonance at the very bottom of the audio range—16 to 20 cycles. Exceptional linearity plus large cone movements deliver superb bass.

## MODEL TR-10 "TRI-ETTE" 3-WAY SPEAKER SYSTEM

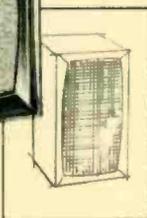
NET  
**\$119.50**  
 Less Base

Diminutive speaker system of exceptional quality—performs on a par with much larger units. Unique "Flair Line" styling and the rich beauty of natural woods combine to complement any decor. Handsomely finished on four sides. May be placed either on its side or end for lowboy or highboy positioning. Ideal for monophonic music systems—delivers exciting reproduction when used in pairs for stereo system. Includes P12-NF 12" "Flexair" woofer, P8-UM mid-range unit, RP-103A tweeter, ST-946 balance control and A-645 crossover—installed. 25-15,000 cps. Crossovers, 600 and 4000 cps. 16 ohms. 30 watts; 60 watt peaks. 13 $\frac{7}{8}$ x25x11 $\frac{1}{4}$ ". Specify mahogany, tawny ash or walnut. Less base, below. Wt., 45 lbs.  
 79 DU 333C. Only \$5.00 Down. NET **119.50**  
 ST-945 BASE. For above. 2" high. Specify finish. Wt., 5 lbs.  
 70 DX 260C. NET **5.45**  
 70 DU 231. TR-10—Unfinished Hardwood. NET **89.50**



DF-1

Bookshelf-size speaker system—beautifully finished for lowboy or highboy use

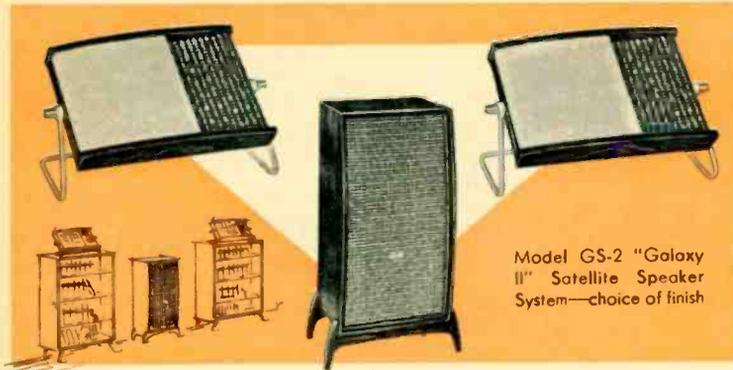


## NEW DF-1 "DUETTE" TWO-WAY SPEAKER SYSTEM

NET  
**\$79.50**  
 Less Base

- Features High-Compliance Woofer and Tweeter
- Provides Full-Range Response—36-14,000 cps
- Available in Choice of 3 Handsome Finishes

Expertly designed, compact 2-way high-compliance speaker system. Consists of an 8" "Flexair" woofer, P35-VAH 3 $\frac{1}{2}$ " tweeter, coupling element, terminal panel and H-F control—installed in tube-vented, "Bass-Superflex" enclosure. Response, 36-14,000 cps; crossover at 2000 cps. Capacity, 25 watts. Imp., 16 ohms. 3 $\frac{1}{2}$ " plywood; 12 $\frac{1}{2}$ x24x10 $\frac{1}{2}$ ". Specify mahogany, tawny ash or walnut. 28 $\frac{1}{2}$  lbs.  
 70 DU 255C. Only \$5.00 Down. NET **79.50**  
 ST-972 BASE. For above. 3 $\frac{3}{4}$ ". Specify finish. Wt., 1 $\frac{1}{4}$  lbs.  
 70 DX 253C. NET **7.50**  
 70 DU 232. DF-1—Unfinished Hardwood. NET **59.95**  
 KDF-1 TWO-WAY SPEAKER KIT. For use in custom installations. Includes DF-1 components (above). Less enclosure. Wt., 7 $\frac{3}{4}$  lbs.  
 70 DX 256. Only \$2.00 Down. NET **29.75**

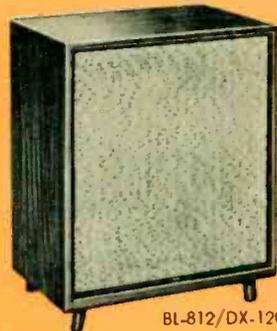


Model GS-2 "Galaxy II" Satellite Speaker System—choice of finish

## NEW GS-2 "GALAXY II" SATELLITE STEREO SPEAKER SYSTEM

Extremely compact, complete stereo speaker system at moderate cost. Consists of a B-21 Bass-Center unit, two S-21 Satellite units—plus two 20-ft. connecting cords and plugs, swivel yokes, mounting brackets and hardware. May be used in any stereo system to provide response of 36-14,000 cps.  
 The Bass-Center unit requires less than one square foot of floor or bookshelf space. Employs a P8-QF dual-channel high-compliance 8" "Flexair" woofer which smoothly reproduces frequencies from 36 to 350 cps.  
 Each Satellite has a P6-TM mid-range speaker and P35-VAH 3 $\frac{1}{2}$ " tweeter. Simply plug into terminal panel of Bass-Center unit for 350 to 14,000-cycle reproduction

Hardwood Satellites are 11 $\frac{1}{2}$ x7 $\frac{1}{2}$ x6 $\frac{1}{2}$ "—may be mounted on walls or in horizontal position. Center unit (fine furniture veneer) is 12 $\frac{1}{2}$ x24x11 $\frac{1}{4}$ ". Capacity, 25 watts. Impedance, 16 ohms. Specify mahogany, tawny ash or walnut. Shpg. wt., 47 $\frac{3}{4}$  lbs.  
 70 DZ 252C. \$5.00 Down. NET **169.50**  
 ST-972 BASE. Wood base for bass-center unit, above. Specify finish. 1 $\frac{1}{4}$  lbs.  
 70 DX 253C. NET **7.50**  
 KTG-2 "GALAXY II" SPEAKER KIT. For use in custom installations. Includes GS-2 Galaxy II components (above), less enclosures. Shpg. wt., 21 lbs.  
 70 DU 254. \$5.00 Down. NET **92.50**



BL-812/DX-120

## BL-812/DX-120 SPEAKER SYSTEM

Quality "Duax" 12" speaker installed in BL-812 "Bass-Ultraflex" enclosure. Offers excellent performance at moderate cost. Response, 40-13,000 cps. "Mechanical crossover" at 4000 cps. Impedance, 16 ohms. Power handling capacity, 20 watts. 24 $\frac{1}{2}$ x19x12 $\frac{3}{4}$ ". Shpg. wt., 34 lbs.  
 20 SA 166. Mahogany. NET **87.00**  
 20 SA 167. Walnut. EACH **87.00**  
 MODEL BL-812 ENCLOSURE ONLY. Accommodates any 8" or 12" speaker. Has cutouts for Jensen 2-way system kits. Fine hardwood veneers. 24 $\frac{1}{2}$ x19x12 $\frac{3}{4}$ ". Wt., 26 lbs.  
 82 DU 362. Mahogany. NET **59.50**  
 82 DU 364. Walnut. EACH **59.50**

# SYSTEMS AND ENCLOSURES



## MODEL CN-100 3-WAY SPEAKER SYSTEM

NET  
**\$149.50**  
 \$5.00 Down

- Smooth Hi-Fi Response from 20-15,000 cps
- Special "Flexair" Woofer Delivers Rich Bass
- Attractive "Flair Line" Styling Fits Any Decor
- Mahogany, Tawny Ash or Walnut Veneers

A beautifully styled three-way speaker system providing performance completely beyond its cost and size. Delivers clean high-fidelity response from 20 to 15,000 cps. Employs these components: P12-NF "Flexair" 12" woofer, P8-UM mid-range unit, RP-103A compression-type tweeter, ST-946 balance control and A-645 crossover—installed in the handsome BF-100 "Flair Line" speaker enclosure.

The specially designed "Flexair" woofer, installed in the unique bass-superflex enclosure, assures rich bass reproduction. Ultra-smart "Flex Line" styling blends harmoniously with any decorative scheme. Available in mahogany, tawny ash or walnut natural wood veneers—specify choice.

Capacity, 30 watts; 60 watt peaks. Crossovers, 600 and 4000 cps. Impedance, 16 ohms. Size, 31½x21x18¼". Wt., 70 lbs.  
 70 DZ 261C. Only \$5.00 Down. EACH.....149.50

MODEL BF-100 SPEAKER ENCLOSURE. Same as enclosure of CN-100 speaker system, above. Has tube-loaded port for extended bass. Takes 12" speaker or 2 or 3-way speaker systems. Specify mahogany, tawny ash or walnut. Shpg. wt., 41 lbs.  
 70 DZ 262C. Only \$5.00 Down. EACH.....72.50

## MODEL SS-100 SINGLE 3-WAY SPEAKER SYSTEM

NET  
**\$179.95**  
 \$5.00 Down

An ideal unit if you wish to start with an exceptionally fine monophonic speaker system and add another for stereo later. System consists of a P12-NF 12" "Flexair" woofer, P8-UM mid-range unit, RP-103A tweeter, ST-946 balance control, A-645 crossover and DC-3 Stereo Director Chassis—completely mounted in a hand-

somely designed, "Flair Line" speaker enclosure. Equal in performance to one of the sections of the DS-100 described below, right.

Employs "Stereo Director"—an important advance in audio design that eliminates the need for critical positioning of the enclosure for best stereo over a given area. Two SS-100 systems will deliver perfect reproduction—even when placed along adjacent walls.

Frequency response, 20 to 15,000 cps. Power handling capacity, 30 watts; 60 watt peaks. Crossover frequencies are 600 and 4000 cps. Impedance, 16 ohms. Size, 31½" high; 21" wide; 18¼" deep. Attractively finished in choice of mahogany, tawny ash or walnut veneers—specify when ordering. Shpg. wt., 70 lbs.  
 70 DZ 263C. Only \$5.00 Down. EACH.....179.95



Model CN-100  
 3-Way High-Fidelity Speaker System

Choice of Mahogany, Tawny Ash or Walnut Finishes



Model SS-100  
 Single 3-Way Speaker System



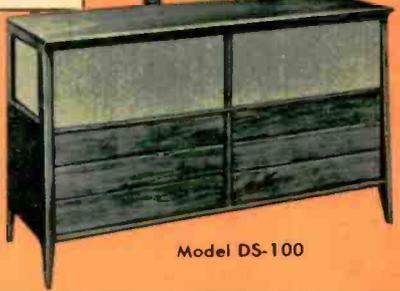
Place enclosure wherever you please—"Stereo Director" rotates for optimum sound at your favorite listening position.



Model TP-250



Model SS-200



Model DS-100

## TP-250 "TRI-PLEX II" 3-WAY SYSTEM

An outstanding speaker system styled in sleek "Flair Line" lowboy cabinetry. Provides a high standard of audio fidelity—can be used for monophonic reproduction, or as one side of a stereo music system.

Consists of P15-LF 15" "Flexair" woofer, RP-41 compression driver mid-range unit, RP-302A super tweeter, 2—ST-947 balance controls, and A-640 crossover—completely installed in handsome speaker enclosure.

Response, 16 cps to beyond audibility. Capacity, 40 watts. Crossovers, 600 and 4000 cps. Impedance, 16 ohms. Size, 30½x34½x18¼". Shpg. wt., 107 lbs.  
 79 DZ 110. Mahogany, NET  
 79 DZ 111. Walnut. EACH... 294.50

## SS-200 "CUSTOM" 4-WAY SYSTEM

Finest of the quality Jensen "systems for stereo." Offer exceptionally realistic audio reproduction when used in pairs—deliver life-like stereo. Beautiful walnut "Flair Line" styling complements any decor.

Consists of P15-LF 15" "Flexair" woofer, P8-RM mid-range unit, RP-41 driver, RP-302A supertweeter, 2—ST-947 balance controls, A-2440 crossover, and DC-4 Stereo Director—completely installed, ready to play.

Response is 16 cps to beyond audibility. Crossovers at 200, 400 and 4000 cps. Power handling capacity, 40 watts. Impedance, 16 ohms. Size, 36½" high; 32¼" wide; 23" deep. Shpg. wt., 132 lbs.  
 79 DZ 107. NET..... 439.50

## DS-100 DUAL 3-WAY SYSTEM

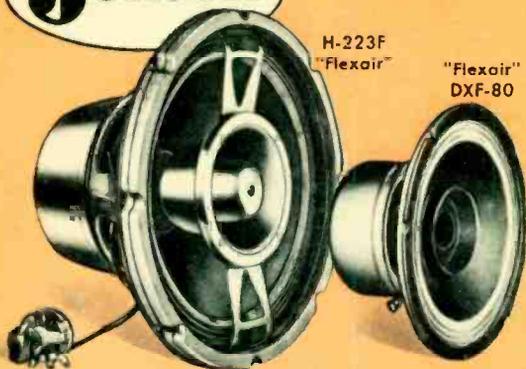
Two complete speaker systems in one handsome enclosure—for outstanding stereo sound. Carefully engineered to deliver rich bass, full mid-range and sparkling highs.

Each of the two 3-way sections consists of a P12-NF 12" "Flexair" woofer, P8-UM mid-range unit, RP-103A tweeter, ST-946 balance control, A-645 crossover, and DC-3 stereo director chassis. Completely installed.

Crossover frequencies are 600 and 4000 cps. Response is 20 to 15,000 cps. Impedance (each channel): 16 ohms. Power capacity (each channel): 30 watts. Size (HWD), 31½x52x18¼". Shpg. wt., 170 lbs.  
 79 DZ 141. Mahogany, NET  
 79 DZ 142. Walnut. EACH... 369.50



# RENOWNED JENSEN HIGH-FIDELITY



H-223F  
"Flexair"

"Flexair"  
DXF-80

Famous Jensen "Flexair" Speakers. Designed for smooth reproduction throughout the entire audible range. Special damping action permits super-low resonances—provides clean, boom-free base in any type of enclosure.

## MODEL H-223F 12" COAXIAL SPEAKER

NET

**\$72.50**

\$5.00 Down

A top-quality true 2-way coaxial type speaker. Employs Jensen's famous "Flexair" woofer for exceptional low-frequency response (to 20 cycles in BF-100 enclosure). Woofer cone with special damped suspension is capable of extremely high movement without distortion—even in small enclosures. Incorporates a built-in, efficient L-C type crossover network at 2000 cps—plus a concentrically mounted, reflexed compression driver tweeter. Extends audio range to 15,000 cps. Provides crystal-clear treble reproduction. Power handling capacity, 30 watts. Impedance, 16 ohms. Requires baffle opening of 10 1/2"; depth of 7 3/4" behind baffle. Supplied complete with wired-in balance control for tweeter. Shpg. wt., 13 lbs.

79 DX 128. \$5.00 Down. NET ..... 72.50

## NEW MODEL DXF-80 FULL-RANGE 8" SPEAKER

NET

**\$24.50**

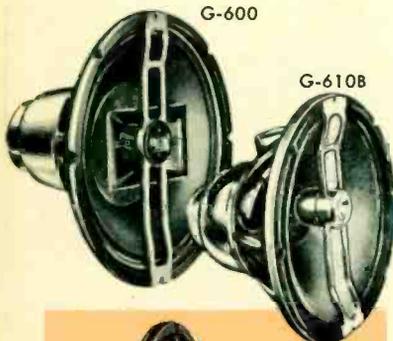
\$2.00 Down

A powerful, full-range speaker employing an 8" "Flexair" woofer for super-clean bass response. Ideal for use in smaller enclosures. Perfect for bookshelf-type mountings in budget priced stereo systems, etc. Actually provides low-distortion bass reproduction down to 36 cycles! An auxiliary, concentrically mounted whizzer-cone element extends response to 14,000 cps. Has high-efficiency DP Alnico V 3/4 lb. magnet. Capacity, 20 watts. Can be driven to full room volume with a 10-watt amplifier. Impedance, 16 ohms. Shpg. wt., 5 1/4 lbs.

70 D 257. \$2.00 Down. NET ..... 24.50

G-600

G-610B



## MODELS G-610B AND G-600 15" TRIAXIAL SPEAKERS

MODEL G-600 15" TRIAX. Embodying the same operating principles as the G-610B, the G-600 is a low-cost version with somewhat lighter construction. Highly efficient woofer employs a 3 1/2 lb. magnet. Response, 30 cps to beyond audible range. Bore-mounted compression driver for mid-frequencies, has separate horn for 900-4000 cps range. Super-tweeter handles the range from 4000 cps through the upper limits of audibility. Has dual crossover network with wired balance controls. Capacity, 35 watts. Impedance, 16 ohms. Depth, 11 1/4". Shpg. wt., 36 1/4 lbs.

82 DU 350. \$5.00 Down. NET ..... 134.50

MODEL G-610B 15" TRIAXIAL. An outstanding 3-way speaker. Has three elements, electrically and acoustically independent, built into a single unit, each designed for peak performance in its portion of the audio spectrum. Response, 25 cps to beyond audible range. Employs heavy woofer and two compression driver horn-loaded elements for mid-frequency and high-frequency channels. Includes dual crossover network with wired balance controls. Crossovers at 600 and 4000 cps. Capacity, 40 watts. Impedance, 16 ohms. Magnet weight, 6 1/2 lbs. Depth, 10 3/4". Shpg. wt., 46 lbs.

70 DU 228. \$10.00 Down. NET ..... 252.75

## MODELS K-210 AND K-80 2-WAY COAXIAL SPEAKERS

MODEL K-210 12" COAXIAL SPEAKER. Economy-priced, 12" coax speaker. Ideal for use as a replacement unit in TV sets and radio consoles employing older, single-cone 12" speakers. Offers the same fine construction as the K-80 unit at right, but includes provision for easily adding the ST-946 high-frequency balance control on opposite page. Features direct-radiator tweeter unit and built-in electrical crossover network. Frequency response, 45 to 14,000 cps. Power capacity, 14 watts. Impedance, 8 ohms. Magnet wt., 1/2 lb. Shpg. wt., 7 lbs.

82 DX 062. \$2.00 Down. NET ..... 27.50

MODEL K-80 8" COAXIAL SPEAKER. A low-cost coax speaker that features electrically and acoustically independent woofer and tweeter units. Perfect for use wherever a small hi-fi speaker with excellent performance is needed. Electrical crossover from woofer cone at 3000 cycles, to high-frequency tweeter element. Offers smooth, distortion-free wide-angle high-frequency response. Magnet weight, 1/2 lb. Power handling capacity, 12 watts. Impedance, 16 ohms. Frequency response, 50 to 14,000 cps. Shpg. wt., 4 lbs.

82 D 354. NET ..... 17.75

## DUAX AND UNAX HIGH-FIDELITY SPEAKERS

MODEL UX-80 UNAX 8" SPEAKER. Frequency response, 50 to 12,000 cps. Power handling capacity, 12 watts. Impedance, 8 ohms. 1/2-lb. magnet. Shpg. wt., 4 lbs.

82 D 357. NET ..... 14.50

MODEL UX-120 UNAX 12" SPEAKER. Frequency response, 40 to 12,000 cps. Power handling capacity, 14 watts. Impedance, 8 ohms. 1/2-lb. magnet. Shpg. wt., 5 1/2 lbs.

82 DX 358. NET ..... 17.95

MODEL DX-120 DUAX, 2-ELEMENT 12" SPEAKER. Features two coordinated cones driven by the same voice coil. Has mechanical crossover at 4000 cps. Offers wider response than single-cone speakers of the same size. Resonance, 48-50 cps. Frequency response, 40 to 13,000 cps. Power handling capacity, 20 watts. Employs magnet weighing 1 lb. Impedance, 16 ohms. Depth, 7 3/4". Shpg. wt., 7 1/4 lbs.

82 DX 355. \$2.00 Down. NET ..... 27.50

## "FLEXAIR" WOOFERS

THE "FLEXAIR" PRINCIPLE. Patented Jensen Flexair woofers are designed to extend bass response to extremely low frequencies. Highly damped, they feature super-low resonances down to 16 and 20 cps. They have a high degree of linearity and large cone movements. Even in relatively small enclosures, they deliver excellent, low-distortion bass.

MODEL P12-NF 12" WOOFER. Frequency range (in Jensen Bass Superflex enclosure), 20-2000 cps. Free-air resonance, 20 cps. Power handling capacity, 30 watts. Impedance, 16 ohms. 1 1/4-lb. magnet. Shpg. wt., 8 1/2 lbs.

79 DX 130. \$2.00 Down. NET ..... 42.00

MODEL P15-LF 15" WOOFER. Has frequency range (in Jensen Bass-Superflex enclosure), 16-2000 cps. Special damped suspensions permit double-peak excursions of 1" without distortion. Free-air resonance, 16 cps. Capacity, 40 watts. Impedance, 16 ohms. 3 1/2-lb. magnet. Shpg. wt., 18 1/2 lbs.

79 DX 129. \$5.00 Down. NET ..... 69.75

NEW MODEL P8-QF 8" WOOFER. Has frequency range (in 2,000 cu. in. bookshelf-size enclosure) of 36-2000 cps. Woofer cone has full 3/4" travel. Free-air resonance, 43 cps. Capacity, 25 watts. Impedance, 16 ohms. 3/4-lb. magnet. Shpg. wt., 5 1/4 lbs.

70 D 258. \$2.00 Down. NET ..... 22.50



# SPEAKERS AND ACCESSORIES



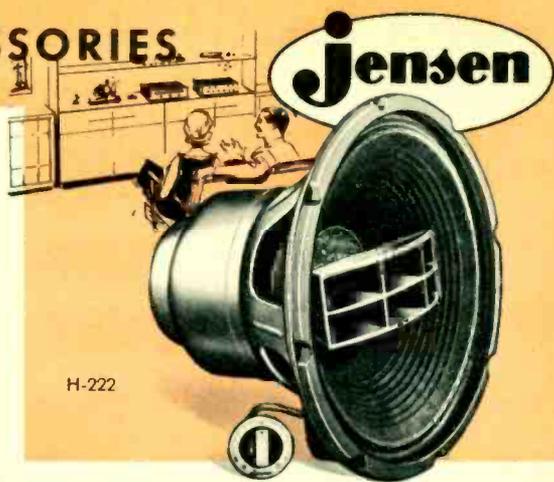
## MODEL H-222 12" COAXIAL SPEAKER .

**NET \$62.50**  
**\$5.00 Down**

A highly popular 12" true coaxial speaker of outstanding quality. Provides an exceptional standard of hi-fi reproduction and wide-range coverage. Features a compression-driver tweeter similar to Model RP-102 described below. Driver unit is loaded by a 6-cell Hypex horn; insuring maximum efficiency, minimized distortion, and an exceptionally wide-angle dispersion of high frequencies. Covers the audio range from 2000 cps through 15,000 cps smoothly and with high efficiency. Model ST-946 level control is included—permits adjusting "brilliance" of high frequencies to match room acoustics.

Incorporated in the construction of this fine-quality coaxial speaker is a special, Improved, two-channel electrical crossover network—assures proper filtration of bass from above, and treble from below the 2000 cps crossover frequency. Crossover network is built-in—requires no additional mounting space inside enclosure.

The 12" woofer cone flawlessly covers the audible spectrum from 30 cps through 2000 cps. Utilizes a 1 1/4-lb. heavy-duty, high-energy, DP-Alnico-5 magnet to reproduce the dynamic range of even the most powerful percussive passages with utmost clarity and tonal separation. The H-222's overall power handling capacity is 25 watts. Impedance, 16 ohms. Shpg. wt., 13 lbs.  
**82 DX 068. Only \$5.00 Down. NET 62.50**



H-222

**Top-Value in a 12" Coaxial Speaker. Reproduces 30 to 15,000 cps with peak efficiency and superb tone.**

## Speakers, Tweeters, and Crossovers

**MODEL P8-UM 8" MID-RANGE SPEAKER.** A low-cost, 8" direct-radiator, mid range speaker. For reproducing the 600 to 4000 cps range. Employs closed housing for isolation; has DP-Alnico-5 magnet. For speaker systems up to 30 watts. Depth, 4 1/2". Impedance, 16 ohms. Shpg. wt., 3 lbs.  
**79 D 131. NET 7.50**

**MODEL P8-RM 8" MID-RANGE SPEAKER.** An 8", direct-radiator, mid-range speaker for uniform output in the 200 to 4000 cps range. Ideal for mid-range use in 3-way systems and upper low-frequency range in 4-way systems. Employs closed housing for isolation; has 1/2-lb. DP-Alnico-5 magnet. For systems up to 40 watts. Depth, 4 1/2". Imp., 16 ohms. Wt., 3 1/2 lbs.  
**79 D 132. NET 12.50**

**MODEL RP-201 MID-RANGE UNIT.** Reproduces from 600 to 4000 cps. Compression-type driver unit is loaded by a cast-aluminum Hypex horn. Has cloth-base, plastic diaphragm for internal damping. Angle of coverage, 115°. Capacity, 35 watts. For use with A-61 network, at right. Impedance, 16 ohms. 4 1/2 x 1 1/2 x 1 1/4". Shpg. wt., 9 lbs.  
**82 DX 367. \$2.00 Down. NET 42.60**

**MODEL RP-103A COMPRESSION TWEETER.** Compression-driver, horn-loaded high-frequency unit. For use with 2000 and 4000 cycle crossover networks. Frequency range, 2,000 to 15,000 cps. Capacity, 30 watts. Impedance, 16 ohms. Die-cast horn flanged for panel mtr.; cutout 2x6", 3x7 1/2 x 6 3/8". Shpg. wt., 3 lbs.  
**79 D 134. NET 16.50**

**MODEL RP-102 TWEETER.** Response, with A-204 crossover network, 2000 to 15,000 cps. Cast aluminum 6-cell Hypex horn, with cloth-base plastic diaphragm for internal damping. Capacity, 35 watts. Impedance, 16 ohms. 4x7 1/2 x 9 1/4". Wt., 6 1/2 lbs.  
**82 D 368. \$2.00 Down. NET 28.35**

**MODEL RP-302A SUPER TWEETER.** Jensen's finest unit. Compression-driver, horn-loaded ultra-high-frequency tweeter for the frequency range above 4000 cps to inaudibility. For use in 3-way and 4-way speaker systems. Power handling capacity (with suitable crossover network), 40 watts. Impedance, 16 ohms. O.D., 2 3/4"; 3 3/4" long. With mtg. plate. Wt., 2 1/4 lbs.  
**79 D 135. \$2.00 Down. NET 35.00**

**MODEL A-61 CROSSOVER NETWORK.** Two-channel, 600-cycle type. Impedance, 16 ohms. 5 1/2 x 6 3/4 x 4 3/4". 5 1/4 lbs.  
**82 D 373. \$2.00 Down. NET 19.75**

**MODEL A-204 CROSSOVER NETWORK.** Two-channel, 2000-cycle type. 16 ohms. 4 1/2 x 4 1/2 x 3 3/4". Wt., 2 1/4 lbs.  
**82 D 374. NET 13.00**

**MODEL A-402 CROSSOVER NETWORK.** As above, but crossover point is 4000 cps. 3 lbs.  
**82 D 375. NET 10.90**

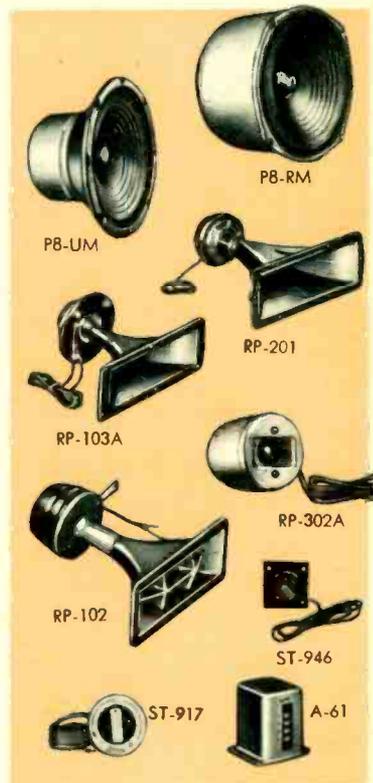
**MODEL A-645 3-WAY CROSSOVER NETWORK.** For 3-way systems. Crossover frequencies, 600 and 4000 cps. Power rating, 30 watts. 16 ohms. 2x4x5 1/4". 2 1/2 lbs.  
**79 D 138. NET 15.00**

**BALANCE CONTROLS.** Adjustable, wire-wound l-pads, with bar knob and metal escutcheon plate. Mount in 1 1/4" hole. Have 36° leads. Impedance, 16 ohms. Power capacity, 35 watts. Shpg. wt., 12 oz.

**MODEL ST-917.** For mid-frequencies.  
**82 D 372. NET 5.25**

**MODEL ST-901.** For high-frequencies. 25-watt capacity in 2-way speaker systems.  
**82 D 371. NET 5.00**

**MODEL ST-946.** For adjusting output of tweeter in 2-way and 3-way systems with power rating up to 30 watts.  
**79 D 136. NET 3.50**



## JENSEN SPEAKER COMPONENT KIT PACKAGES

For mounting in your own home-built enclosure or custom-built cabinet. Ideal for installing in closets, walls and existing furniture cabinets. Model BF-100 Bass-Superflex cabinet is especially designed for the KT-33 kit; BF-200 cabinet houses KT-44 and KT-32 kits. Building plans for suitable acoustic enclosures included with all kits.

net is especially designed for the KT-33 kit; BF-200 cabinet houses KT-44 and KT-32 kits. Building plans for suitable acoustic enclosures included with all kits.

Stock No.	Model No.	Description	Components	Wt., Lbs.	NET EACH
82 DU 382	KT-32	3-Way Triplex	P15-I-L woofer, RP-201 & RP-302 tweeters, A-61 & A-402 crossovers, ST-901 & ST-917 balance controls.	43	169.50
79 DU 120	KT-33	3-Way Spkr. Kit	P12-NF woofer, P8-UM mid-range, RP-103A tweeter, ST-946 balance control, A-645 crossover.	21	80.00
79 DZ 121	KT-233	Stereo TWINKit	2—KT-33 kits (as above), plus 2—DC-3 Stereo Director chassis.	48	160.00
79 DU 122	KT-44	4-Way Spkr. Kit	P15-LF woofer; P8RM mid-range; RP-41 mid-range; RP-302A tweeter; A-2440 crossover; ST-947 balance controls.	41	192.50
79 DZ 123	KT-244	Stereo TWINKit	2—KT-44 kits (as above), plus 2—DC-4 Stereo Director chassis.	99	385.00



# New Enclosures & Hi-Fi Speakers



Model C49 "Dale"



Model C46 "Minigon"

Finished on four sides to complement any decor



Perfect for stereo use



Model C48 "Madison"

Can be used as lowboy or highboy enclosure



LE8



LE10



LE30

## The Latest in Compact Design . . .

Ultra-smart styling and superb acoustic design keynote these space-saving speaker enclosures. All have cutouts to accommodate Lansing's LE8 or LE10, LE30 and LX3 speaker components. Ideal for stereo systems when used in pairs.

### C49 "DALE" SPEAKER ENCLOSURE

A diminutively styled speaker enclosure for placement on any bookshelf or table. Features solid, wood-welded joints to minimize vibration. Has built-in hangers for wall mounting. Finished on three sides in hand-rubbed veneers. 12x23 $\frac{1}{2}$ x11 $\frac{1}{4}$ ". Specify mahogany, light walnut or natural birch. Shpg. wt., 28 lbs.  
70 DU 458C. Only \$5.00 Down. NET. . . . . 60.00  
MODEL D49LE8 SPEAKER SYSTEM. Above enclosure with LE8 speaker (below) installed. Specify finish. Shpg. wt., 39 lbs.  
20 SA 159C. Only \$5.00 Down. NET. . . . . 117.00

### C46 "MINIGON" SPEAKER ENCLOSURE

Distinctively styled shelf-type enclosure employing popular radial refraction design. Features rigid, vibration-free wood-welded joints. Finished on four sides in hand-rubbed veneers. Has built-in hangers for mounting on wall. Size (HWD): 12 $\frac{1}{4}$ x32x15 $\frac{3}{4}$ ". Specify mahogany, light walnut or natural birch. Shpg. wt., 51 lbs.  
70 DZ 460C. Only \$5.00 Down. NET. . . . . 120.00  
MODEL D46LE8 SPEAKER SYSTEM. Above enclosure with LE8 speaker (below) installed. Specify finish. Shpg. wt., 62 lbs.  
20 SA 160C. Only \$5.00 Down. NET. . . . . 177.00

### C48 "MADISON" SPEAKER ENCLOSURE

Tastefully styled enclosure for highboy or lowboy placement on any shelf—has built-in hangers for convenient mounting on wall, if desired. Attractively finished on four sides in lustrous, hand rubbed veneers. Has rugged, wood-welded joints. 11 $\frac{1}{4}$ x23 $\frac{1}{4}$ x13 $\frac{1}{4}$ ". Specify mahogany, light walnut or natural birch. Shpg. wt., 33 lbs.  
70 DU 459C. Only \$5.00 Down. NET. . . . . 60.00  
MODEL D48LE8 SPEAKER SYSTEM. Above enclosure with LE8 speaker (below) installed. Specify finish. Shpg. wt., 44 lbs.  
20 SA 161C. Only \$5.00 Down. NET. . . . . 117.00

### LINEAR-EFFICIENCY SPEAKER COMPONENTS

An excellent selection of brilliantly performing speaker components designed to deliver remarkably full response. Special cone suspension and large voice coils provide full dynamic range. All fit special cutouts in any of the speaker enclosures listed above.

MODEL LE8. Quality 8" linear-efficiency hi-fi speaker. Clean response from 30-15,000 cps. Depth, 4 $\frac{3}{8}$ ". Wt., 10 lbs.  
70 D 466. Only \$5.00 Down. NET. . . . . 57.00

MODEL LE10. Excellent 10" ultra-linear high-fidelity woofer. Depth, 4 $\frac{3}{8}$ ". Shpg. wt., 15 lbs.  
70 DX 467. Only \$5.00 Down. NET. . . . . 52.80

MODEL LE30. Superb high-frequency tweeter. Diameter, 5 $\frac{1}{8}$ ". Depth, 2 $\frac{5}{16}$ ". Shpg. wt., 4 lbs.  
70 D 464. Only \$5.00 Down. NET. . . . . 52.80

MODEL LX3. Crossover network for use with LE10 and LE30, above. Size, 3 $\frac{1}{4}$ x3 $\frac{1}{4}$ x2 $\frac{3}{8}$ ". Shpg. wt., 3 lbs.  
70 D 465. NET. . . . . 17.40

## Excellent Enclosures for 8", 12" or 15" High-Fidelity Speakers



C38

In Mahogany or Light Walnut



C36

### MODEL C38 SPEAKER ENCLOSURE

Space saving, lowboy bass reflex speaker enclosure. Smart styling and rich, hand-rubbed finish complement any room interior. Accommodates 8", 12" or 15" speaker. Ideal for use with Model D131, D130, D123, D208, D216 (listed on the following page), or any other similar speaker. Compact size allows it to be used almost anywhere—perfect for use in pairs in stereo music systems. Size: 24 $\frac{1}{2}$ " high, 23 $\frac{3}{4}$ " wide, and 15 $\frac{1}{2}$ " deep. Available in mahogany or light walnut to harmonize with any color scheme. Shpg. wt., 47 lbs.  
82 DZ 114. Mahogany. Only \$5.00 Down. NET. . . . . 66.00  
82 DZ 168. Light Walnut. Only \$5.00 Down. NET. . . . . 72.00

### MODEL C36 SPEAKER ENCLOSURE

Simple, gracefully styled highboy bass reflex enclosure. For small rooms and apartments; use in pairs for stereo. Takes 8", 12" or 15" speaker. Size (HWD): 29 $\frac{1}{2}$ x19 $\frac{1}{2}$ x15 $\frac{1}{2}$ ". Shpg. wt., 47 lbs.  
82 DZ 844. Mahogany. Only \$5.00 Down. NET. . . . . 66.00  
82 DZ 846. Light Walnut. Only \$5.00 Down. NET. . . . . 72.00

# Hi-Fi Speakers and Components

## Highly Popular Full-Range Hi-Fi Speakers

- AS LOW AS • Can Be Used Either Singly or as Top-Performing Woofers  
**\$78.00** • Wide-Range Frequency Response, from 30 to 17,000 Cycles  
 • Deliver Remarkably Rich, Vibrant Bass—Silk-Smooth Highs  
 \$5.00 Down • Feature Highest Quality 4-Inch Aluminum Voice Coil

Superb, precision-built full range speakers. Provide remarkably distinct bass and extremely smooth, extended treble when used alone. Can also be used as a woofer in two and three-way high-fidelity music systems. Combine excellent design and construction to assure superior reproduction of sound. Frequency response:  $\pm 5$  db. 30 to 17,000 cps. Magnetic circuit, 11 lbs. Feature 4" aluminum voice coil and hydraulically formed, 4" duraluminum center dome for magnificent range and clarity. Impedance, 16 ohms.

D131 12" SPEAKER. Capacity, 20 watts. Resonance, 39 cps. Depth, 5". Wt., 21 lbs.  
 82 DU 129. Only \$5.00 Down. NET. 78.00

D130 15" SPEAKER. Capacity, 25 watts. Resonance, 37 cps. Depth, 5½". Wt., 23 lbs.  
 82 DU 125. Only \$5.00 Down. NET. 84.00

### Economy Full-Range Speakers, Tweeter and Crossover Networks

D208 8" SPEAKER. Similar to D130, above. Response, 40-13,000 cps. Cap., 12 watts. Resonance, 55 cps. 2" voice coil, 3½ lb. magnetic circuit 8 ohms. Depth, 2¼". 6 lbs.  
 82 D 126. Only \$2.00 Down. NET. 29.70

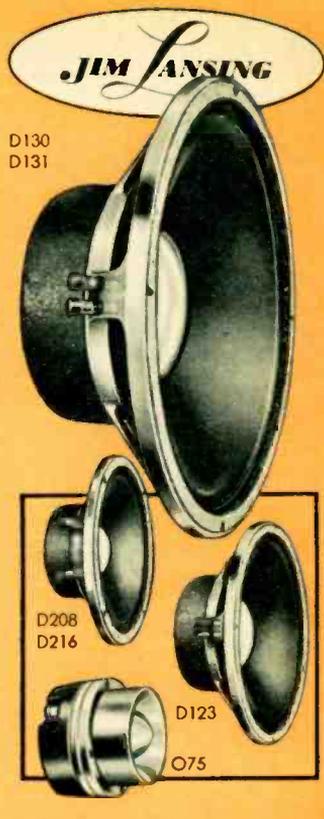
D216 8" SPEAKER. Same as D208, above, but 16 ohms.  
 82 D 113. Only \$2.00 Down. NET. 29.70

D123 12" SPEAKER. An extended-range 12" speaker featuring ultra-shallow frame design—only 3¾" deep. Response,  $\pm 5$  db. 30-15,000 cps. 3" voice coil. Capacity, 20 watts. Resonance, 35 cps. Magnetic circuit, 5½ lbs. Imp., 16 ohms. Shpg. wt., 12 lbs.  
 82 DX 112. Only \$5.00 Down. NET. 59.40

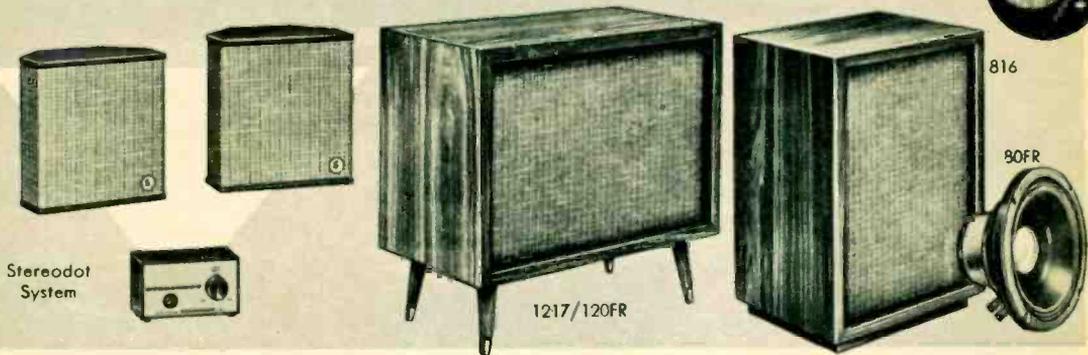
O75 TWEETER. Crossover, 250G cps. 16 ohms. Length, 3¼". Shpg. wt., 8 lbs.  
 82 D 118. Only \$5.00 Down. NET. 59.40

N2600 CROSSOVER. Not illus. For use with O75, above, and D130, D131, D123 and D216 speakers. Crossover, 2500 cps. Dual impedance, 16 or 32 ohms. 4¼"x6x3¼". Wt., 3¼ lbs.  
 82 D 199. Only \$2.00 Down. NET. 24.60

N2400 CROSSOVER. Not illus. As above, but 16 ohms. Shpg. wt., 3½ lbs.  
 82 D 239. Only \$2.00 Down. NET. 22.50



## STEPHENS HI-FI SPEAKERS AND SPEAKER SYSTEMS



### STEREODOT SPEAKER SYSTEM

Use your present hi-fi speaker system as the foundation for a brilliantly-performing stereo speaker system with these ultra-compact "Stereodots." Consists of two special 8" speakers installed in enclosures, complete with one filter network and mid-channel level control. Each enclosure is only 10" high x 10" wide x 6" deep—an ideal pair for limited-space applications.

Expertly designed to provide exciting listening, the "Stereodots" deliver amazingly realistic reproduction from 200 to 15,000 cycles; your present speaker system serves as middle channel and also handles bass.

Rated 25 watts program material, 50 watts peak. Impedance, 16 ohms. Available in choice of mahogany, blonde or walnut to complement any decorative scheme. Specify finish when ordering. Sold only in pairs. Shpg. wt., per pair, 24 lbs.

70 DU 227C. \$5.00 Down. PR... 139.50

### LOW-BOY BASS-PLANE SYSTEM

1217/120FR. Optimum performance and attractive low-boy styling with this speaker system. Consists of the Model 1217 enclosure and Model 120FR 12" high-fidelity speaker. Completely wired and ready to play. This system is ideal for placement along any wall or in a corner for rich, crystal-clear tonal response from 30 to 15,000 cps.

The high-compliance speaker is expertly designed to eliminate distortion and improve transient response. Features free-cone suspension for exceptional clarity.

Handles 30 watts; 60 watt peaks. Imp., 61 ohms. 9½-lb. magnet structure. Enclosure is selected, high-quality hardwood, 25½"x29½"x11¼". Specify mahogany, blonde or walnut. Shpg. wt., 72 lbs.  
 70 DZ 226C. \$5.00 Down. NET. 147.50

MODEL 120FR 12" SPEAKER. Above speaker, less enclosure. Shpg. wt., 15 lbs.  
 82 DX 291. \$5.00 Down. NET. 60.00

### UPRIGHT BASS-PLANE SYSTEM

816/80FR. Economically priced high-fidelity speaker system designed to deliver clear, extended bass response. Features the attractively finished Model 816 ducted vent enclosure with the high-compliance, internally air-damped 80FR 8" speaker installed. May be used in a corner or against any wall without impairment of tonal quality.

Tastefully styled, the enclosure is constructed of genuine hardwood to eliminate vibration or rattling. Speaker employs free-cone suspension for clean reproduction. Response is 40 to 15,000 cps.

Capacity, 25 watts; 50 watts peak. Impedance, 16 ohms. 4-lb. magnet structure, 24½"x15¼"x11¼". Specify mahogany, blonde or walnut veneer. Wt., 49 lbs.  
 70 DU 225C. \$5.00 Down. NET. 85.00

MODEL 80FR 8" SPEAKER. Above speaker, less enclosure. Shpg. wt., 6½ lbs.  
 82 D 290. \$2.00 Down. NET. 33.50

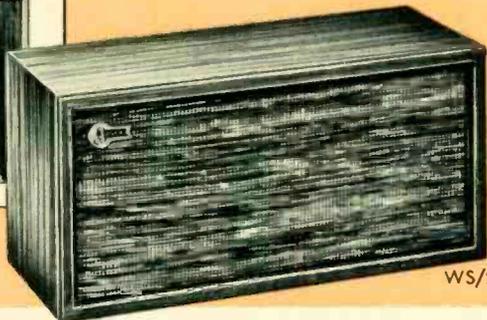
Choose Your Own Music System Featuring Stephens Speakers—Write for Price

# WHARFEDALE HI-FI SPEAKERS AND SPEAKER SYSTEMS

Imported from Great Britain



Lowboy or Highboy



WS/2

Full Hi-Fi Response in an Exceptionally Compact Speaker—Beautifully Styled to Take Its Place in Any Furnishing Mode



Beautifully Performing Speaker System Featuring Unique "Acoustic Filter"

W/AF/1  
W/AF/2

## NEW WS/2 Two-Way 8" Hi-Fi Speaker System

**NET \$77.91**  
\$5.00 Down  
UNFINISHED. An excellent two-way high-fidelity speaker system at low cost. Ready for finishing in the color of your choice, this space-saving system consists of an 8" low-frequency and mid-range unit, 3" tweeter, and genuine birch hardwood enclosure—completely wired and assembled. Expertly engineered to perform brilliantly in either a lowboy or highboy position, the WS/2 is ideal for monophonic music systems—perfect for use in pairs for breathtaking stereo reproduction. Also makes an exceptionally fine "add on" speaker system unit for use with any high-fidelity speaker system for realization of full-dimensional stereophonic sound.

Exterior surfaces of the enclosure are smoothly sanded, ready to accept any stain or paint to harmonize with your decorative scheme. (Finishing kits, for obtaining a professional furniture finish, are listed elsewhere in this catalog—see index.) Only 11" high, 23" wide, and 10 1/2" deep, the WS/2 is suited for placement on any mantel or bookshelf—or any other limited-space area.

The special 8" speaker and 3" tweeter are perfectly matched and integrated in the enclosure and are not available separately. System impedance is 16 ohms. Shpg. wt., 25 lbs.

70 DU 454. Only \$5.00 Down. NET **77.91**

FINISHED. Same top-performing 8" two-way high-fidelity speaker system as described above, but handsomely finished on four sides to enhance the decor of any room. May be used in lowboy or highboy position. Perfectly matched and integrated speakers and enclosure are not available separately. Available in choice of mahogany, blonde or walnut—specify when ordering. Shpg. wt., 25 lbs.

70 DU 456C. Only \$5.00 Down. NET **87.71**

## 10" and 12" Two-Way Hi-Fi Speaker Systems

AS LOW AS

**\$161.21**

\$5.00 Down

MODEL W/AF/1. Slender, gracefully styled speaker system—ideal for use in pairs in stereo installations. Consists of the superb Wharfedale W10/FSB 10" speaker and special 3" tweeter with level control, mounted in the unique "Acoustic Filter" enclosure. A patented design, the enclosure has two separate internal chambers, isolated from each other by a horizontal partition with five 1/4" slits. One chamber contains the woofer and tweeter—sound originating here is "filtered" through the slits and into the other chamber, which acts as an acoustic vent. As a result, reproduction is remarkably clean and free of cabinet resonances. Frequency response, 25 to 18,000 cps. Impedance, 16 ohms. Size, 30x17x12". Heavy hardwood construction. Available in choice of mahogany, limed oak or walnut—specify when ordering. Wt., 60 lbs.

79 DZ 157C. Only \$5.00 Down. NET **161.21**

MODEL W/AF/2. Similar in construction to Model W/AF/1 listed above. Consists of Wharfedale's super 12"/FS/AL 12" speaker and super 3" tweeter with variable level control—completely installed in handsome enclosure. Ideal for positioning against any wall for optimum high-fidelity reproduction. Employs "Acoustic Filter" principle described above for optimum performance. Use in pairs for superb stereo sound. Size, 36 3/4" high; 23" wide; and 15 3/8" deep. Impedance, 16 ohms. Available in choice of mahogany, limed oak or walnut—specify when ordering. Shpg. wt., 95 lbs.

79 DZ 402C. Only \$10.00 Down. NET **220.50**

ENCLOSURE ONLY. Speaker enclosure described in Model W/AF/2 above. Specify mahogany, limed oak or walnut. Shpg. wt., 72 lbs.

79 DZ 450C. Only \$5.00 Down. NET **97.02**

## W20 2-WAY HIGH-COMPLIANCE SYSTEM

A deluxe 2-way speaker system delivering remarkably clean response from 20 to 20,000 cps. Ideal for use in pairs in stereo music systems. May be used in either lowboy or highboy positioning against any wall.

Consists of a 12" high-compliance woofer, Super 5 high-frequency speaker with an LC crossover network which crosses at 1000 cycles, and a vibration-free enclosure. A treble control is included to permit adjustment of tweeter response to suit personal listening tastes. Specially matched and integrated, the speakers and enclosure of the W20 are not available separately.

Birch hardwood enclosure is handsomely finished on four sides to complement any decor. Resonant frequency, 30 cps. Impedance, 15 ohms. Size, 14x23 1/2 x 12". Available in choice of mahogany, blonde or walnut—specify. Shpg. wt., 40 lbs.

70 DU 457C. \$5.00 Down. NET **171.01**

## NEW 12" COAXIAL SPEAKER

An outstanding high-fidelity speaker, the Coaxial 12 employs a special magnet design with concentric gaps for superb reproduction. Ideal for use in monophonic systems—perfect for use in pairs in stereo systems.

Tweeter section has a constant impedance wirewound volume control with recessed escutcheon and 3-ft. flexible cable.

Has wide-range response, Bass resonance, 25.30 cps. Total flux of woofer section, 155,000 maxwells; tweeter, 44,000 maxwells. Imp., 16 ohms. Depth, 7". Requires 10 7/8" baffle opening. Shpg. wt., 26 lbs.

70 DU 455. \$5.00 Down. NET **136.71**

## NEW 8" AND 12" HI-FI SPEAKERS

SUPER 12"/FS/AL 12" SPEAKER. Superior performing 12" speaker designed to deliver exceptionally smooth, realistic hi-fi response. Features special foam construction cone. Total flux, 190,000 maxwells. Resonance, 30-38 cps. Impedance, 16 ohms. Diameter, 12 1/2". Depth, 7". Requires 10 3/8" baffle opening. Shpg. wt., 22 lbs.

82 D 136. \$5.00 Down. NET **87.71**

## SUPER 8"/FS/AL 8" SPEAKER

An excellent 8" full-range speaker. Employs aluminum voice coil. Bass resonance, 55-65 cps. Total flux, 60,000 maxwells. Impedance, 8 ohms. Depth, 4". Requires 7" baffle opening. Shpg. wt., 5 lbs.

82 D 135. \$2.00 Down. NET **25.77**

## NEW SUPER 3 HIGH-FIDELITY TWEETER

Delivers exceptionally clean, high-frequency response—from 3000 to 20,000 cycles. Ideal for addition to existing speaker systems. Crossover, 3000 cps. Impedance, 8 or 16 ohms. Total flux, 54,000 maxwells. Diameter, 3 3/4". Baffle opening required, 3". Depth, 2 3/4". Shpg. wt., 4 1/2 lbs.

82 D 145. \$2.00 Down. NET **25.77**

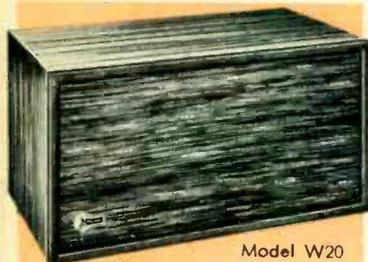
## 1000 CPS CROSSOVER NETWORK

Not illustrated. Crossover network used to divide the bass and treble between loudspeakers at low impedance. Crossover, 1000 cps. Attenuation, 9 db per octave. Impedance, 16 ohms. Shpg. wt., 2 1/2 lbs.

82 D 142. NET **17.88**

3000 CYCLE CROSSOVER NETWORK. As above, but for 3000 cycles.

82 D 143. NET **17.88**



Model W20



12" Coaxial

12"/FS/AL;  
8"/FS/AL

Super 3

# GOODMANS SPEAKERS AND SPEAKER SYSTEMS

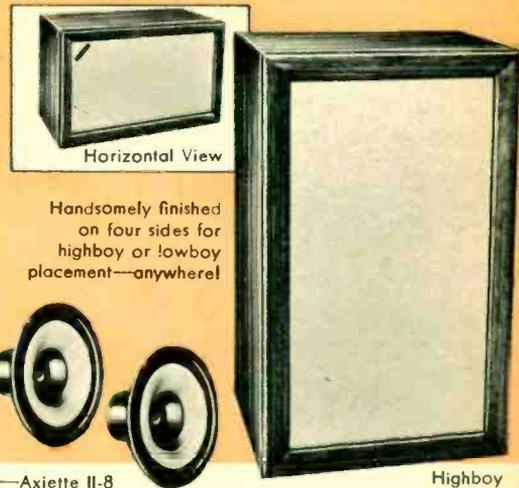
Imported from Great Britain

## Dual 8" Hi-Fi Speaker System

**NET \$82.81**  
**\$5.00 Down**

A beautifully performing, space-saving speaker system. Consists of two Axiette II-8 8" hi-fi speakers installed in a bookshelf-type enclosure. Beautifully finished on four sides in gleaming hand-rubbed veneers, the system can be used in either the lowboy or highboy position—on a shelf, bookcase or in a room divider. Delivers exceptionally clean response from 30 to 18,000 cps—ideal for use in pairs for stereo reproduction. Available in choice of three popular colors to blend harmoniously with any decor. Speakers feature hyperbolic free edge cone suspensions and rugged, die-cast frame constructions for dazzling performance. Capacity, 30 watts. Impedance, 8 ohms. 11x23½x11¼". Specify mahogany, blonde or walnut. Shpg. wt., 37 lbs.  
**70 DU 468C. Only \$5.00 Down. NET. . . . . 82.81**

**AXIETTE II-8 8" HI-FI SPEAKER.** Highly efficient, wide-range 8" high-fidelity speaker at moderate cost. Delivers clean, remarkably smooth response over the entire audio spectrum from 30 to 18,000 cycles. Features hyperbolic free edge cone suspension and heavy-duty, die-cast frame construction for optimum performance. Ideal for use in pairs in stereo music systems. Power handling capacity, 15 watts. Resonance, 55 to 65 cps. Requires 7" baffle opening diameter. Impedance, 16 ohms. Depth, 4". Shpg. wt., 5 lbs.  
**79 D 163. Only \$2.00 Down. NET. . . . . 26.46**



Horizontal View  
 Handsomely finished on four sides for highboy or lowboy placement—anywhere!

2—Axiette II-8

**TETRAXIOM 575 15" 4-WAY SPEAKER**  
 An outstanding 4-way speaker. Has four electrically and acoustically independent elements built into a single unit. Response, 20 cps to beyond audible range. Employs heavy woofer, horn-loaded Midax mid-range unit and 2 Trebax high-frequency horns. Includes dual crossover network with wired balance controls. Crossovers at 950 and 5000 cps. Capacity, 50 watts. Total flux, 308,000 maxwells. Voice coil dia.: 3" for woofer, 1½" for Midax, 1" for Trebax horns. 16 ohms. Depth, 11". 50 lbs.  
**79 DU 158. \$10.00 Down. NET. 227.85**

**TETRAXIOM 355.** As above, but capacity is 40 watts; 240,000 maxwells. 45 lbs.  
**79 DU 159. \$5.00 Down. NET. . . . . 192.57**

**TRIAXIOM 3-WAY HI-FI SPEAKERS**  
 Expertly designed 12" 3-way speakers featuring free-edge cone suspension and efficient magnet systems. Response, 20-20,000 cps. Crossovers at 2000 and 5000 cps. Voice coil dia.: woofer and mid-range, 3"; Trebax horn, 1". Resonance, 35 cps. Impedance, 16 ohms.

**MODEL 212 12" SPEAKER.** Capacity, 25 watts. Total flux, 178,000 maxwells. Magnet wt., 1½ lbs. Depth, 7". Wt., 20 lbs.  
**79 DX 160. \$5.00 Down. NET. . . . . 68.11**

**MODEL 412 12" SPEAKER.** Capacity, 35 watts. Total flux, 240,000 maxwells. Magnet wt., 3½ lbs. Depth, 8¾". Wt., 31 lbs.  
**79 DU 295. \$5.00 Down. NET. . . . . 90.65**

**TREBAX HI-FI TWEETERS**  
 Excellent tweeters containing built-in volume control and crossover network assembly. Ideal for 2 or 3-way systems. Response from 2500 to 25,000 cps. Employs 1" aluminum voice coil. Impedance, 16 ohms.

**MODEL 50XL.** Capacity, 50 watts. 5 lbs.  
**70 D 469. \$2.00 Down. NET. . . . . 45.57**

**MODEL 35XL.** Capacity, 35 watts. 4 lbs.  
**70 D 470. \$2.00 Down. NET. . . . . 38.71**

**AUDIOM 12" AND 15" SPEAKERS**  
 (Not illustrated.) 12" and 15" woofers delivering exceptionally smooth bass and mid-range response from 20 to 5000 cps. Perfect choice for 2, 3 and 4-way stereo and monophonic speaker systems requiring crossovers at 200, 500, 750, 950, 1250, 2500 or 5000 cycles. Virtually free edge cone suspension and die-cast frames. Imp., 16 ohms.

**AUDIOM 652 12" SPEAKER.** Voice coil diameter, 3". Total flux, 240,000 maxwells. Power capacity, 35 watts. Resonance, 30 to 35 cps. Shpg. wt., 24 lbs.  
**70 DU 473. \$5.00 Down. NET. . . . . 68.11**

**AUDIOM 755 15" SPEAKER.** Voice coil diameter, 3". Total flux, 240,000 maxwells. Power capacity, 40 watts. Resonance, 25 cps. Shpg. wt., 27 lbs.  
**70 DU 474. \$5.00 Down. NET. . . . . 76.44**

**MIDAX H950 MID-RANGE TWEETER**  
 Beautifully performing compression-type driver and horn. Handles 50 watts in 2 or 3-way speaker systems. Response, 400-13,000 cps. Recommended crossover: 950 cps in 2-way systems; 5000 cps in 3-way systems. Impedance, 16 ohms. Depth, 12½". Shpg. wt., 13 lbs.  
**79 DX 167. \$2.00 Down. NET. . . . . 47.53**

**CROSSOVER NETWORKS**  
 (Not illustrated.) Top-performing, twin-section LC crossover networks for use in Goodmans 2 and 3-way speaker systems. 12db per octave. Impedance, 16 ohms.

**XL-5000V.** 5000 cps crossover with level control. Shpg. wt., 3 lbs.  
**79 D 168. NET. . . . . 13.23**

**XL-950V.** 950 cps crossover with level control. Shpg. wt., 4½ lbs.  
**79 D 169. \$2.00 Down. NET. . . . . 26.95**

**XO-950/5000.** Crossovers at 950 and 5000 cps. Shpg. wt., 7½ lbs.  
**79 D 170. \$2.00 Down. NET. . . . . 27.44**



**NEW S10-30 STEREOSPHERE HI-FI SPEAKER**

Delivers superb response from 300 to 20,000 cps—ideal for use with your present speaker system for excellent stereo reproduction. Only 10" diameter—set it anywhere or hang it on a wall—rotates, swivels or tilts to provide omnidirectional hi-fi sound when used with IDM network, below. Capacity, 30 watts. Less network, below. Shpg. wt., 10 lbs.  
**70 DX 471. Only \$5.00 Down. NET. . . . . 77.91**

**IDM-30 CROSSOVER NETWORK.** (Not illus.) Frequency-dividing, isolation and mixer network. Handles up to two S10-30 speakers, above. Crossover at 300 cycles. Shpg. wt., 7 lbs.  
**70 D 472. \$2.00 Down. NET. . . . . 38.71**



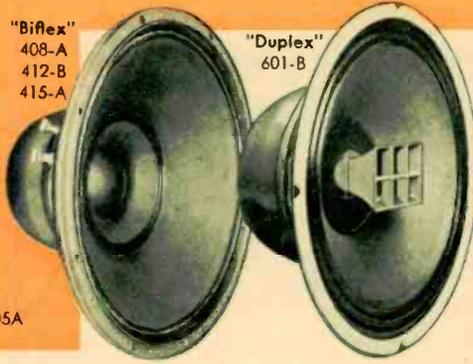
# Latest ALTEC Hi-Fi Components

New, precisely designed 15", 2-way speaker. Succeeds Altec's world-famous 604-D model.



605A

"Biflex"  
408-A  
412-B  
415-A



"Duplex"  
601-B

## "BIFLEX" FEATURE

Employs multiple concentric compliances on a single cone. Entire cone area is used for bass; smaller, central cone area, for reproducing highs.

## "DUPLIX" FEATURE

Consists of two magnetically, mechanically and electrically independent high and low-frequency units, mounted in a single frame.

### NEW MODEL 605A 15" "DUPLIX" SPEAKER

- NET **\$177.00**  
\$5.00 Down
- Employs "Duplex" Construction—Two Complete Speakers on Single Frame
  - Provides Breathtaking Hi-Fi Sound
  - Magnificent, Professional Design

One of the most carefully engineered speakers available, the 605A 15" "Duplex", sets a new professional listening standard. An improved version of Altec's superb 604-D, it provides breathtaking purity of sound from 20 to 22,000 cps, with unusually smooth response in the highs, controlled linearity, and clean transient response in the lows. The 605A is actually two mechanically and electrically independent speakers mounted on a single frame.

Base section features new high-compliance, woofer cone suspension. Low cone resonance of only 25 cps for clean reproduction of lowest bass notes; high-flux density magnetic field for optimum damping. Edge-wound, insulated copper ribbon, 3" voice coil for high efficiency. Treble section features lighter, edge-wound 1.75" aluminum voice coil, integral aluminum alloy diaphragm, and true exponential multi-cellular horn for smooth 40° vertical x 90° horizontal distribution of highs. Capacity: 35 watts; 50 watts peak. Crossover, 1600 cps. Magnet wts., ½ lb. and 2¼ lbs. Voice coil impedance, 16 ohms. Shpg. wt., 37 lbs.  
70 DU 476. Only \$5.00 Down. NET ..... 177.00

### NEW "BIFLEX" ECONOMY SPEAKER SERIES

Unique, "Biflex" multiple concentric compliance feature provides entire area of the speaker cone for propagation of low frequencies; permits the smaller, central cone area to operate independently for more efficient reproduction of highs. Below 1000 cps, stiffness of the mid-cone compliance is such that it couples the inner and outer sections into a single, moving element. Above 1000 cps, the cone "uncouples", permitting the inner section to operate independently. Employ Alnico V magnets, edge-wound aluminum voice coils for high efficiency, and deep magnetic gaps for maintaining good cone control with extremely low distortion. 408-A: ¾-lb. magnet, 1¾" voice coil; 412-B: 1½-lb. magnet, 3" voice coil; 415-A: 2¼-lb. magnet, 3" voice coil. Impedance, all units, 8 ohms.

Stock No.	Type	Size	Response	Capacity	Depth	Lbs.	EACH
70 D 477	408-A	8"	60-16,000 cps	15 watts	3¾"	6	31.00
70 DX 478	412-B	12"	40-15,000 cps	20 watts	5¾"	15	54.00
70 DU 479	415-A	15"	30-14,000 cps	25 watts	7"	25	67.00

### NEW MODEL 601-B "DUPLIX" 12" SPEAKER

Employs the same 2-way construction as the 605A at left. Offers superb hi-fi reproduction. Response, 40 to 22,000 cps. Capacity, 20 watts; 30 watts peak. Voice coil diameters: 3" (low-frequency); ¾" (high-frequency). Crossover, 3000 cps. Magnet wts.: 1½-lb. and 2¼-oz. Impedance, 8 ohms. Depth, 5¾". Shpg. wt., 20 lbs.  
70 DU 480. Only \$5.00 Down. NET ..... 120.00



Model 353-A

### NEW MODEL 353-A 50-WATT STEREO AMPLIFIER

- NET **\$199.50**  
\$5.00 Down
- Remarkable Array of Features with Outstanding Control Flexibility
  - Dual Mike Inputs for Stereo Recording
  - 100 Watts Stereo Peak Program Power

A premium-quality and exceptionally versatile, 50-watt stereo amplifier—provides outstanding performance with any stereo or monophonic signal source. Seven pairs of inputs, complete control facilities, and matricing network for 3-channel stereo sound, give you unequalled command of musical performance. Features: auxiliary speaker connections for stereo or monophonic use; feedback-type equalization, plus feedback around all tubes for minimum distortion; AC circuit breaker for thermal overload protection; DC heater supply to low-level signal tubes; tape recorder outputs independent of volume and tone controls; mike inputs for stereo recording.

Power Output: 25 watts per channel for stereo; 50 watts monophonic; 100 watts peak. Response: ±1.0 db. 20-20,000 cps at 25 watts; ±0.5 db. 10-30,000 cps at 1 watt. Distortion: less than 1% at 25 watts. 1000 cps, each channel. 7 Pairs of Inputs: Magnetic Phono. Ceramic Phono. Tape Head. Tape Recorder. Tuner. Microphone. Multiplex. 6 Outputs: Channel A and Channel B Recorder. Left and Right Speaker, Center Channel Speaker, Auxiliary Speaker. Dual Output Impedances: 8 and 16 ohms. Includes controls for 2 and 3-channel stereo plus Rumble Filter. Loudness Contour, etc. Tubes: 5—12AX7, 4—6L6GC; silicon rectifiers. Size, 5½"x15"x11¼". For 110-120 v., 60 cycle AC. Shpg. wt., 35 lbs.  
89 SU 312. Only \$5.00 Down. NET ..... 199.50



Monterey Jr. & Sr.

### NEW "MONTEREY JR" MODEL 835-A SPEAKER SYSTEM

- ONLY **\$79.50**  
\$5.00 Down
- New, economy-priced, compact 2-way speaker system. Ruggedly designed, ported bass-reflex enclosure houses Altec's 402-A 8" controlled linear-suspension speaker; 2000-cycle, capacitor-type crossover network; and 2000-A direct-radiator cone tweeter. A single Monterey Jr. is excellent for monophonic music systems—used in pairs, these compact systems make an ideal stereo speaker system. Finished on all 4 sides—can be placed horizontally or vertically. Frequency Range: 20 to 18,000 cps. Power handling capacity, 15 watts. Impedance, 16 ohms. Size, 11¼" high, 23" wide, 11¼" deep. In mahogany, blonde or walnut veneers—specify when ordering. Shpg. wt., 24 lbs.  
70 DU 482C. Only \$5.00 Down. NET ..... 79.50

### NEW "MONTEREY SR" MODEL 834-A SPEAKER SYSTEM

Highly efficient, high-compliance 2-way speaker system. Compact and neatly styled, the 834-A is finished on all 4 sides—features furniture veneers over ¾" plywood panels. Bass reflex enclosure, ported for optimum low-frequency response, includes: two 402-A 8" speakers; 3000-cycle, L-C type crossover network with level control; and Altec's famous 3000-B high-frequency speaker with sectoral horn. Perfect for use in pairs for stereo music systems, the Monterey Sr. can be used with larger Altec systems for the near ultimate in stereo sound with no diminution of quality. Frequency Range: 20 to 22,000 cps. Capacity, 20 watts. Impedance, 8 ohms. Size, 14" high, 26" wide, 14½" deep. In mahogany, blonde or walnut veneers—specify choice when ordering. Shpg. wt., 45 lbs.  
70 DZ 481C. Only \$5.00 Down. NET ..... 174.00

# G.E. Hi-Fi Speakers & Speaker Systems



## NEW MODEL G-501 EXTENDED-BASS SPEAKER SYSTEM

New, ultra-compact 2-way speaker system of distinctive appearance and offering full, natural audio reproduction. The acoustically engineered, 1-cu. ft. enclosure employs a high-compliance 12" woofer, cone-type tweeter, and integrated, 2000-cps crossover network for unusually clean sound. Each G-501 system is made to close tolerances so that paired systems provide excellent, matched stereo reproduction. The tastefully styled enclosure may be used on its end or side—matches any traditional or contemporary home decor. Woofer employs treated cloth cone suspension, with special curve in cone to prevent spurious vibrations, and long aluminum-base voice coil for high power handling capacity and linearity. Provides up to 4 times the low-frequency power output of conventional speakers in comparable enclosures. Response, 45 to 16,000 cps. Power handling capacity, 25 watts. Crossover, 2000 cps. Magnets: woofer, 14½-oz. Alnico PM ring; tweeter, 0.9-oz. high-efficiency cup-type. Size, 13x22x9¼". Shpg. wt., 24 lbs.

70 DU 277. Model G-501M. Mahogany. NET  
70 DU 278. Model G-501W. Walnut. EACH ..... 83.30



New Model G-501  
"Stereo Classic" Extended-Bass  
Two-Way Hi-Fi Speaker System

## MODEL LH-6 SHELF-TYPE 2-WAY SPEAKER SYSTEM

Specifically designed for limited-space applications, the LH-6 offers excellent performance at moderate cost, from an enclosure only one-half cubic foot in volume. Provides smooth, extended bass response with minimum distortion. Features specially designed, high-compliance 6" woofer, 2¾" tweeter and electrical crossover network, crossing over at 1500 cps. Enclosure is infinite baffle type, with heavy acoustical lining. Response, 50 to 15,000 cps. Capacity, 20 watts. Imp., 8 ohms. 9x17½x8¾". Shpg. wt., 16 lbs.

79 DU 200. LH-6M. Mahogany. NET  
79 DU 201. LH-6B. Blonde Oak. EACH ..... 56.35



Model LH-6  
Shelf-Type  
Speaker System

## Famous G.E. High-Fidelity Speakers

MODEL A1-401 12" "GOLDEN CO-AX" COAXIAL SPEAKER. Combines a 12" woofer, 2¾" tweeter (with pressure equalizer to reduce distortion) and built-in mechanical-electrical crossover network into one unit. Advanced design—provides remarkably smooth, extended response and wide dispersion. Baffle plate has golden finish. Crossover, 1500 cycles. Response, 40 to 15,000 cycles. Capacity, 25 watts. Imp., 8 ohms. 21.3 oz. magnet. Shpg. wt., 9 lbs.

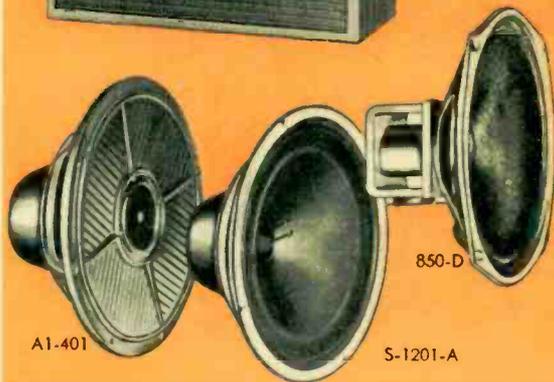
81 DX 519. Only \$2.00 Down. NET ..... 49.25

MODEL S-1201-A 12" SPEAKER. This unusually popular 12" speaker has been highly recommended by nationally known consumer research organizations. Provides very clean, smooth frequency response over the range of 45 to 13,000 cps. Non-warping aluminum-base voice coil. Power handling capacity, 25 watts. Cone resonance, 70 cps. 14.5 oz. magnet. Imp., 8 ohms. Shpg. wt., 7 lbs.

81 DX 510. Only \$2.00 Down. NET ..... 24.45

MODEL 850-D 8" SPEAKER. An unusually fine, low-cost 8" speaker for replacement use in radios and TV sets, or limited-space hi-fi systems. Response, 50-12,000 cps. Aluminum-base voice coil. 6.8 oz. magnet. Capacity, 15 watts. Impedance, 8 ohms. Shpg. wt., 3 lbs.

81 D 518. NET ..... 10.73



A1-401

850-D

S-1201-A

## New KLH Model Six 2-Way Speaker System

A high-performance, complete-range 2-way speaker system offering exceptionally smooth performance from 32 to over 16,000 cps. Employs two direct-radiator speakers—12", low-frequency woofer with special acoustic suspension; and smaller, cone-type tweeter, with suspension of liquid butyl rubber. Unique mounting—woofer frame and magnet assembly are cast right on front panel of the cabinet. Frame is cast of fiberglass-reinforced, epoxy resin material and steel tubing. Completely encapsulated tweeter is also cast on front panel. When the dynamic system of the woofer is mounted in its frame, front panel functions as part of frames of both speakers!

Neutral bouclé grille cloth is mounted over panel and entire assembly is pressure-glued into fiberglass-filled, sealed cabinet. In addition to the woofer and tweeter, the Model Six employs an L-C type crossover network with air-core coil and oil-filled capacitors. Has 3-position switch to permit balancing between low and high-frequency sections. Crossover point, 1500 cps. Power handling capacity, 75 watts. Impedance, 8 ohms. Size, 12¼x23½x11½". Has ¼" veneered plywood. Shpg. wt., 36 lbs.

72 DU 790. Mahogany. NET ..... 129.00

72 DU 792. Walnut. NET ..... 134.00

70 DU 475. Unfinished. NET ..... 119.00



KLH

## Bozak High-Fidelity Speakers

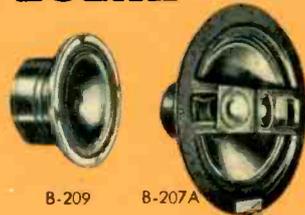
MODEL B-207A 12" COAXIAL SPEAKER. This brilliant speaker uses a dual tweeter, the B-200X, mounted inside the B-199A 12" woofer. Acoustical slot between the tweeters for wide dispersion of upper-middle frequencies. Designed specifically for infinite baffling, it provides true-pitch bass and clean transients. Frequency response extends from 40 to 16,000 cps. With built-in crossover filter (6 db per octave). Cone resonance, below 40 cycles. Power handling capacity, 15 watts; 30-watt peaks. Voice coil impedance, 8 ohms. Sturdy, cast-aluminum frame is designed to fit either 12" or 15" cutouts. Depth behind panel, 7". Shpg. wt., 15 lbs.

81 DU 742. \$5.00 Down. NET ..... 83.85

MODEL B-209 6" MID-RANGE SPEAKER. Recommended for use in 3-way speaker systems, the B-209 features unrivaled ability to recreate the mid-ranges. Since intelligibility of speech and individuality of musical instruments depend on the vital mid-range, this specially designed unit is a "must" in 3-way systems. Features: felted paper pulp, variable-density diaphragm; rubberized cloth edge suspension; foam rubber abutment under the dome; superior construction throughout. For 3-way systems up to 50 watts. Response, 200 to 3500 cps. Impedance, 8 ohms. Ribbon wire voice coil on ½" aluminum form. 1½-lb. Alnico V magnet. Depth, 3½". Shpg. wt., 7 lbs.

81 D 743. \$2.00 Down. NET ..... 48.00

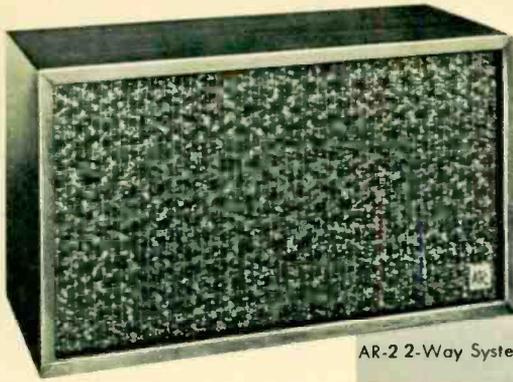
## BOZAK



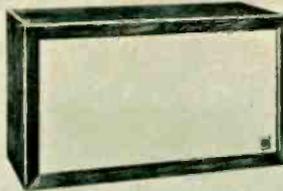
B-209

B-207A

# Top-Rated AR Speaker Systems

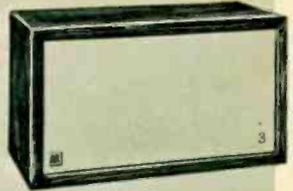


AR-2 2-Way System



AR-1 Speaker System

Exceptionally clean, extended low frequency response  
Occupies minimum space



AR-3 3-Way System

Featuring radiator-type tweeters for ultimate high frequency response

## AR-2 ACOUSTIC SUSPENSION SPEAKER SYSTEM

AS LOW AS **\$89.00**  
 • Highly Rated by National Independent Research Publication  
 • Ultra-Clean Bass in Limited Space  
 \$5.00 Down • 10" Woofer; 2-5" Tweeters

Popular, low-cost woofer-tweeter system for medium-priced hi-fi systems. Acoustic-suspension design provides full, low-distortion bass reproduction in small-size enclosure. Employs the sealed-in air of cabinet as a pneumatic spring for the speaker cone during large excursions on very low bass notes. Components are mounted in a sealed, fiberglass-filled cabinet of braced 3/4" hardwood veneer. Due to its remarkably clean reproduction, the AR-2 is used by broadcasters, recording studios, etc. as a monitor speaker. Received a high rating by an independent research publication.

Requires 10 clean watts of audio power. Features 10" woofer and tweeter assembly composed of two 5" tweeters. Does not require a separate tweeter. Response (at 10 watts):  $\pm 3$  db, 42-14,000 cps, down 10 db at 30 and 16,000 cps. Dispersion: 90° horizontal. Harmonic Distortion (at 10 watts): under 2% to 60 cps.; under 3% to 50 cps. Impedance: 8 ohms. Size: 13 1/2" high x 11 1/2" deep x 24" long. Shpg. wt., 33 lbs.

82 DU 038. Mahogany. Only \$5.00 Down. NET	96.00
82 DU 039. Blonde. Only \$5.00 Down. NET	90.00
82 DU 255. Walnut. Only \$5.00 Down. NET	102.00
79 DU 292. Unfinished. Only \$5.00 Down. NET	89.00

## AR-1 ACOUSTIC SUSPENSION SPEAKER SYSTEM

Radically different system featuring air-damped 12" woofer, plus 8" mid-range and high-frequency unit and crossover network. Employs the same acoustic suspension and pneumatic damping operation as the AR-2 at left. Response:  $\pm 1 1/2$  db, 38-1000 cps;  $\pm 5$  db, 30-13,000 cps. Impedance: 4 ohms. Requires 20 clean watts for moderate level in an average room; at least 30 watts for high levels and large rooms. 14x25x11 1/4". Shpg. wt., 52 lbs.

82 DZ 033. Mahogany. Only \$5.00 Down. NET	185.00
82 DZ 034. Blonde. Only \$5.00 Down. NET	185.00
82 DZ 253. Walnut. Only \$5.00 Down. NET	194.00
70 DZ 210. Unfinished. Only \$5.00 Down. NET	172.00
AR-1 W. As above, less 8" mid-range and treble unit. 47 lbs.	
82 DZ 043. Mahogany. Only \$5.00 Down. NET	145.00
82 DZ 254. Walnut. Only \$5.00 Down. NET	154.00

## NEW AR-3 ACOUSTIC SUSPENSION SPEAKER SYSTEM

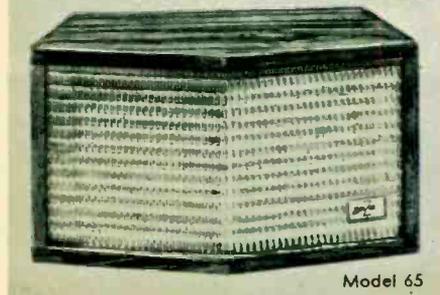
Combines the excellent bass qualities of the AR-1 with a dramatically new mid and high-frequency speaker system. 2 hemispherical radiator tweeters (2" for mid-range; 1 1/4" for highs) and 12" woofer in a sealed-in cabinet brilliantly reproduce the entire audible sound spectrum. Crossover at 1000 and 7500 cps. Frequency Response: 38-20,000 cps,  $\pm 2$  db. Requires 20 clean watts. Impedance: 4 ohms. Size: 14x25x11 1/4". Shpg. wt., 60 lbs.

79 DZ 397. Mahogany. Only \$10.00 Down. NET	216.00
79 DZ 399. Walnut. Only \$10.00 Down. NET	225.00

## High-Fidelity Electrostatic Tweeters



Janszen



Model 65

### "THE AH!" ELECTROSTATIC SUPER TWEETER

NET  
**\$49.95**  
 \$2.00 Down

- Built-In Crossover Network and Power Supply
- 180° Sound Dispersion—Perfect for Stereo Use
- Realistic Natural Sound—No Harsh Peaks
- For Use with Any Speaker—Easy Installation

Unusually low in cost, this unique electrostatic tweeter is designed for use with any woofer in music systems employing 15 to 50-watt high-fidelity amplifiers. With virtually unmeasurable distortion and providing an amazing sense of presence, it generates sound in phase, in all portions of a flat plane. Radiation area is 62 square inches. Provides crystal-clear sound from 600 cps to beyond the extreme treble frequencies—creates this stunning illusion of presence without adding any "color" of its own to the sound being reproduced. Because of its omnidirectionality, many dramatic spatial effects can be attained by angling two "ah!" tweeters in stereo music systems. Achieves wide separation without "hole-in-the-middle" acoustic effect. Ideal for use with acoustic suspension woofer systems like AR-1 shown above. Matches 8-16 ohm outputs. Walnut enclosure is beautifully hand-rubbed—measures 7 3/4" high, 15 7/8" wide, 5 3/4" deep. Plugs into AC outlet for polarizing voltages—for 110-120 volts, 50-60 cycle AC. Manufactured in U.S. Shpg. wt., 8 lbs.

72 DX 787. Only \$2.00 Down. NET **49.95**

### JANSZEN MODEL 65 ELECTROSTATIC TWEETER

NET  
**\$91.50**  
 \$5.00 Down

Amazing electrostatic tweeter that reproduces high frequencies with remarkably low distortion. Contains two Janszen electrostatic elements individually checked for distortion and matched for output within 1 db. Specifically designed to match the efficiency of most high quality direct radiator woofers. Suited to set atop woofer enclosures like AR-1 above, etc. Music is reproduced to beyond 30,000 cps without audible or measurable distortion. Superb transient response assures that all instruments, even those having similar harmonic characteristics, are reproduced with positive individuality—without shrillness or peaking of any kind. Cabinet includes two radiators, power supply and high-pass filter. Smart walnut finish matches any decor. High Frequency Dispersion Coverage: 60°. Frequency Response: 700 cps to beyond 30,000 cps. Power Handling Capacity: Up to 56 watts. Impedance: 8 ohms. Electrical Crossover Frequency: 700 cps. High-pass filter prevents low frequencies from entering tweeter. Walnut finish. 6 3/4 x 12 3/4 x 8 1/2". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 10 lbs.

70 DU 453. Only \$5.00 Down. NET **91.50**

# "Rondine" Turntables by

# REK-O-KUT



Arm, Base and Motor Board Available Separately

Less Arm And Base

N-33H

K-33H

Self-Lubricating Motor

Assembles in 30 Minutes

... No Special Tools Required!

### K33H TURNTABLE KIT

**NET \$49<sup>95</sup>**  
**\$2.00 Down**  
 Assemble this excellent 33 $\frac{1}{3}$  rpm, 12" turntable in just 30 minutes—using only a few simple tools. Employs a highly efficient hysteresis synchronous motor built to Rek-o-Kut specifications. Crown-spindle belt drive; has specially woven endless belt with thickness held to micro-tolerances. Belt tension is adjustable for control of noise level. Solid, cast-aluminum turntable is lathe-turned and tapered to permit easy record handling. Includes strobe disc; ribbed rubber turntable mat. Noise level: 52 db below average recording level. Finished in silver-tone aluminum. Requires 4" clearance below motor-board. Includes mounting template. Less base, motor board and arm. For 110-120 v., 60 cycle AC. Shpg. wt., 15 lbs.  
**89 RX 542. Only \$2.00 Down. NET..... 49.95**

**MODEL K-33 TURNTABLE KIT.** As above, but employs a heavy-duty 4-pole induction motor. Noise Level: 47 db below average recording level. Requires 5" below motor board. Gray and two-tone aluminum styling. Less base, motor board and arm. Shpg. wt., 15 lbs.  
**89 RX 536. Only \$2.00 Down. NET..... 39.95**

### NEW N-33H 33 $\frac{1}{3}$ RPM TURNTABLE

**NET \$69<sup>95</sup>**  
**\$5.00 Down**

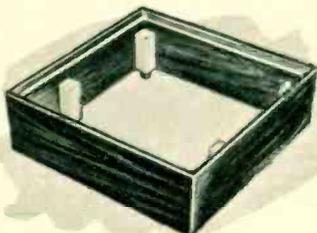
- Custom-Built Hysteresis Synchronous Motor
- Built-in Strobe Disc for Checking Speed
- Award-Winning Decorator Styling
- Always Maintains Constant Speed

Precision-built 33 $\frac{1}{3}$  rpm, 12" turntable. Designed to provide outstanding performance in any music system, the N-33H features a self-lubricating, hysteresis synchronous motor of latest design. Maintains constant speed; has a special winding to reduce coasting of the turntable. Table is driven by a specially woven fabric belt with thickness held to  $\pm .001$ ".

Belt tension is adjustable for least noise. Turntable is of solid, lathe-turned cast aluminum, tapered for easy handling of records. Permanently affixed strobe disc permits a quick, accurate check of turntable rotation. Motor board is styled in decorator gray and two-tone aluminum.

**Noise Level:** 53 db below average recording level. Turntable includes ribbed rubber mat to insure maximum traction. Size of motor board, 15 $\frac{1}{2}$ x15". Turntable requires clearance of 4" below motor board. Less base (below, at left) and arm. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 17 lbs.  
**89 RX 535. Only \$5.00 Down. NET..... 69.95**

### REK-O-KUT ACCESSORIES



**UNIVERSAL WOOD BASES.** Accommodate all Rek-O-Kut turntables.  $\frac{3}{4}$ " panels. 16 $\frac{3}{4}$ x16 $\frac{3}{4}$ ". Require motor board (below). 8 lbs.  
**89 RX 612. Model BW. Walnut. NET. 19.95**  
**89 RX 625. Model BU. Unfn. NET. 10.95**

**MOTOR BOARDS.** Every Rek-O-Kut turntable except Model N-33H requires the use of a motor board. MB-2 is solid walnut; ML-3 and MK-3 in white lacquer; MK-1 and MB-1, unfinished. Shpg. wt., 3 lbs.

No.	Type	For Model	NET
89 RX 644	MB-1	B-12, B-12GH	2.95
89 RX 626	MB-2	B-12H, B-12GH	3.95
89 RX 627	ML-3	L-34, L-37	8.50
89 RX 628	MK-3	K-33, K-33H	7.95
89 RX 629	MK-1	K-33, K-33H	4.95

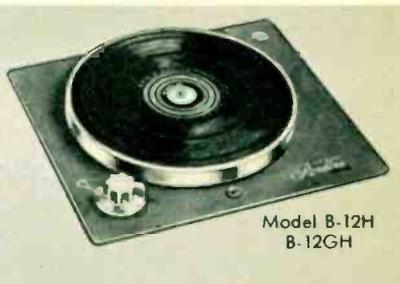
**MODEL X-16 16" EXTENSION.** For mounting 16" arms on Rek-O-Kut bases. 14 oz.  
**89 R 622. NET..... 6.95**



Model L-34  
L-37

### MODEL L-34 2-SPEED TURNTABLE

**NET \$59<sup>95</sup>**  
**\$5.00 Down**  
 Dual-speed, low-priced 33 $\frac{1}{3}$  and 45-rpm 12" turntable designed to professional specifications. Ideal for high-fidelity installations as well as commercial radio station use. Noise level 40 db below average recording level for minimum rumble. Constant-speed 4-pole induction motor. Idler disengages in off position to prevent flat spots. Has ground and hand-lapped shaft which turns on heavy ball-thrust bearing. Lathe-turned cast aluminum turntable is lab-tested for perfect balance. Retractable 45-rpm hub. Includes a ribbed rubber turntable mat and permanently affixed strobe disc. Rigid, pressed-steel chassis finished in silver-tone aluminum. Size, 15x12". Requires 5" clearance below motor panel. Less base, motor board and arm. For 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.  
**96 RX 686. \$5.00 Down. NET..... 59.95**  
**MODEL L-37 TURNTABLE.** As above, but with 33 $\frac{1}{3}$  and 78-rpm speeds. Shpg. wt., 15 lbs.  
**96 RX 694. NET..... 59.95**



Model B-12H  
B-12GH

### MODEL B-12H 3-SPEED TURNTABLE

**NET \$129<sup>95</sup>**  
**\$5.00 Down**  
 Professional-quality three-speed 12" turntable. Employs superior craftsmanship throughout—all critical parts are case-hardened and ground to a micro-finish. Single knob selects from speeds of 33 $\frac{1}{3}$ , Off, 45, Off, or 78 rpm. Custom-built, self-lubricating, hysteresis-synchronous motor. Solid cast-aluminum turntable is lathe-turned and dynamically balanced. Turntable shaft is polished and hand-lapped in the bearing well for a perfect fit. **Noise level:** -57 db. **Wow:** better than NARTB specs of  $\pm 2/10$  of 1%. Retractable 45-rpm hub; strobe disc, 17 $\frac{1}{4}$ x16". Requires 6 $\frac{1}{2}$ " below motor board. Less base, motor board and arm. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 20 lbs.  
**96 R 687. \$5.00 Down. NET..... 129.95**  
**MODEL B-12GH TURNTABLE.** Professional quality turntable as above, except has fewer custom features. **Noise:** -53 db. 18 lbs.  
**89 RU 534. \$5.00 Down. NET..... 99.95**

SEE REK-O-KUT PICKUP ARM LISTING IN THIS CATALOG

IMPORTED  
FROM  
GREAT BRITAIN



Model RC210

Garrard



Model 4HF

## Garrard High-Fidelity Record Playing Equipment

### NEW! MODEL RC210 4-SPEED AUTOMATIC CHANGER

NET

**\$48<sup>51</sup>**

\$2.00 Down

- Accepts All Standard Cartridges
- Finest Quality Parts and Workmanship
- Intermixes 10" and 12" Records in Order of Size
- Handles Records Smoothly and Gently

An all-new addition to the world-renowned line of top-quality Garrard automatic record changers. Fully wired for stereo, this superb unit utilizes the highly-advanced Garrard center drop mechanism for smooth, trouble-free operation. Records of the same speed may be stacked in order of decreasing size—12", 10", etc.—for convenient intermix playing.

Incorporating three "legs" fastened to the mounting plate, the changer is supported solidly in a level playing position, without being mounted on a base. Unit may also be mounted conventionally on a furniture base or mounting board (see opposite page) for added flexibility. Controls are located on the front of the mounting plate for maximum accessibility. All are convenient "side/slide" design for positive, highly simplified operation. Speed selector instantly chooses 16 $\frac{3}{4}$ , 33 $\frac{1}{3}$ , 45, or 78-rpm playing speeds. Separate controls are employed for "Manual Off/On" and "Automatic Off/On" functions. No complicated switching to achieve desired method of operation. Beautiful black, chrome and white color styling.

All levers, drive mechanism components, position selectors, and gears are ruggedly built, yet work with such precision that the unit handles delicate stereo records gently and accurately at all times. Minimum mounting space, 14 $\frac{1}{2}$ " wide, 13" deep; 5" above and 3 $\frac{3}{4}$ " below motor board. Supplied with 1 plug-in head, 2 color-coded output cables. Less cartridge and 45-rpm automatic spindle. For 100-130 v., 60 cycle AC. Shpg. wt., 15 $\frac{1}{2}$  lbs.

89 RX 572. Only \$2.00 Down. NET..... 48.51

### MODEL 4HF MANUAL 4-SPEED PLAYER

NET

**\$58<sup>31</sup>**

\$5.00 Down

- Precision-Balanced 12" Turntable
- Precision, Transcription-Type Tone Arm
- Variable "Plus" or "Minus" Speed Control
- Fully Automatic "Start-Stop" Mechanism

Music lovers will appreciate the excellent performance of this deluxe, top-quality turntable and pickup arm combination. The precision-balanced 12" turntable and transcription-type arm are installed on a convenient mounting plate. The pickup arm is wired to accept any standard stereo or monophonic cartridge with  $\frac{1}{2}$ " mounting centers. Plays all four speeds—16 $\frac{3}{4}$ , 33 $\frac{1}{3}$ , 45, and 78-rpm. Features a variable "plus" or "minus" speed adjustment on each of the four speeds—insures "concert-pitch" performance from your favorite recordings.

A convenient automatic "start-stop" mechanism is built into the pickup arm—simply lift the arm and swing it slightly to the right to start; entire mechanism automatically shuts off when record has finished playing. A handy push-button control defeats automatic "start-stop"—switches unit to fully manual operation. Incorporates a special center spindle housing with a reservoir lubricating system for smooth performance. Heavy-duty turntable is employed to assure quiet, rumble-free reproduction.

Handsome finished in black, chrome, and white to complement any decorative scheme. Harmonizes beautifully with custom installations. Minimum mounting space required: 17 $\frac{1}{2}$ " wide, 13 $\frac{1}{2}$ " deep; 3 $\frac{3}{4}$ " above, and 3 $\frac{3}{4}$ " below mounting board. Supplied complete with two plug-in heads. Arm is 3-wire type. Has two color-coded audio output cables with phono plugs. Less cartridge. For 100-130 or 200-250 volts, 60 cycle AC. Shpg. wt., 15 lbs.

89 RX 508. Only \$5.00 Down. NET..... 58.31

### OTHER GARRARD UNITS



Model 301

### POPULAR MODEL 301 PROFESSIONAL TURNTABLE

NET

**\$87<sup>22</sup>**

\$5.00 Down

report of its factory test. Operates at 33 $\frac{1}{3}$ , 45 and 78 rpm speeds. With strobe card.

An integral lubrication system forces additional lubricant, under pressure, into mechanism automatically. A resistor-capacitor network prevents shutoff noise from being transmitted through the system and amplified.

Built-in, automatic shutoff brake prevents "free-wheeling" of turntable after it is switched off. Dynamically-balanced, precision-machined 6 $\frac{1}{2}$ -lb. turntable of cast aluminum is non-magnetic. Less than 0.2% wow; flutter is less than .05%. Vibration-proof mounting on special springs acts as a safeguard against transference of acoustic vibrations back through turntable—permits easy leveling of unit.

Size, 16x13 $\frac{3}{4}$ "; requires 2 $\frac{1}{2}$ " above, 3 $\frac{1}{2}$ " below mounting board. Less arm and cartridge. For 100-130 or 200-250 v., 60 cycle AC. Shpg. wt., 20 lbs.  
96 RZ 912. \$5.00 Down. NET..... 87.22

### FAMOUS MODEL T MK-II "CREST" MANUAL PLAYER

NET

**\$31<sup>85</sup>**

\$2.00 Down

both stereo and monophonic reproduction.

Features a heavy, rubber-padded steel turntable for rumble-free reproduction. Pickup-arm tracks with high degree of accuracy—has safety arm rest and lock for maximum ease of portability. Unit spring-mounts on base or mounting board for easy leveling and freedom from jarring and vibration.

Incorporates a rugged, dependable 4-pole motor and beltless idler-wheel drive mechanism—insures smooth, quiet performance.

Wow and flutter are minimized. Convenient, automatic "start-stop" switch is activated when pickup arm is lifted—shuts entire unit off at end of recording.

Minimum mounting space: 14 $\frac{1}{2}$ " wide, 12 $\frac{1}{2}$ " deep; 3" above and 2 $\frac{1}{4}$ " below mounting board. Supplied with two plug-in heads. Less cartridge. For operation from 100-130 volts, 60 cycle AC. Shpg. wt., 14 lbs.  
89 RX 506. \$2.00 Down. NET..... 31.85



Model T Mk-II

## Complete Garrard Accessories

WOOD BASES. In mahogany, limed oak or walnut wood-grained finish—specify choice when ordering. 4 lbs.

FOR RC88-4, RC98-4.  $3\frac{3}{4} \times 15\frac{1}{4} \times 13\frac{1}{4}$ "  
 89 RX 600C. EACH. 4.85  
 FOR RC121/II.  $3\frac{3}{4} \times 14\frac{1}{4} \times 12\frac{3}{4}$ "  
 89 RX 601C. EACH. 4.51  
 FOR RC210.  $3\frac{3}{4} \times 14\frac{1}{4} \times 13$ "  
 89 RX 636. EACH. 4.51  
 FOR 4HF.  $4\frac{1}{2} \times 17\frac{1}{2} \times 15\frac{3}{4}$ "  
 89 RX 603C. EACH. 4.95  
 FOR 301.  $6\frac{1}{2} \times 21 \times 16\frac{3}{4}$ "  
 89 RX 604C. EACH. 21.75  
 FOR T Mk II.  $3\frac{3}{4} \times 14\frac{1}{4} \times 12\frac{3}{4}$ "  
 89 RX 602C. EACH. 4.51

WOOD MOUNTING BOARDS. Unfinished mounting boards drilled and cut for mounting Garrard changers and turntables. Shpg. wt..  $1\frac{1}{2}$  lbs.

Stock No.	For	EACH
95 RX 666	RC88-4, RC98-4	1.50
94 RX 496	RC121/II	1.50
89 RX 642	RC210	1.50
96 RX 913	301	4.95
94 RX 956	T Mk II	1.50
89 RX 605	4HF	1.50

45-RPM AUTOMATIC SPINDLES. For automatic changing of 45-rpm records. Shpg. wt.. 10 oz.

Stock No.	For	EACH
95 R 664	RC88-4	3.72
94 R 594	RC121/II, RC210	3.72

EXTRA PLUG-IN HEAD. Wired for stereo. Less cartridge. Shpg. wt.. 6 oz.

89 R 550. For Garrard RC88-4, RC98-4 and T Mk II. NET. 1.47  
 89 R 551. For Garrard RC121/II, 4HF and RC210. NET. 1.47



RC88-4



RC121-II

Garrard

IMPORTED FROM GREAT BRITAIN

### RC88-4 "TRIUMPH" CHANGER

NET **\$58.31**  
 \$5.00 Down  
 Deluxe British-made changer combining latest design refinements with traditionally precise Garrard craftsmanship. Wired for stereo and monophonic. Plays 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 and 78 rpm records. Automatic operation is quick and gentle; smooth-acting slide switch converts changer to manual operation instantly. Weighted turntable is covered by protective rubber pad; idler-wheel drive disengages when changer is off. Heavy-duty 4-pole motor and oversize traction wheel for silent, hum-free operation. Minimum mtg. space: 15 $\frac{1}{2}$ " W, 13 $\frac{1}{4}$ " D, 3 $\frac{3}{8}$ " below and 5 $\frac{1}{4}$ " above mounting board. With 2 plug-in heads, automatic spindle, spindle for manual play, 45 rpm manual spindle adapter, line cord and plug, output cable and phono plug. Less cartridge and 45-rpm automatic spindle. For operation from 100-130 v., 60 cycle AC. Shpg. wt.. 16 lbs.

89 RX 500. \$5.00 Down. NET. 58.31

### RC98-4 "CROWN" CHANGER

Variable-speed version of Model RC88-4 4-speed changer, above. Has all features listed above, and "plus-minus" control on all speeds. With 45-rpm automatic spindle. Less cartridge. Wt., 17 lbs.  
 89 RX 502. \$5.00 Down. NET. 68.11

### RC121-II "RENEW" CHANGER

NET **\$41.65**  
 \$2.00 Down  
 • Smooth-Functioning Jam-Proof Mechanism  
 • Heavy-Duty Turntable—Dependable 4-Pole Motor  
 • Mixes 10" and 12" Discs

Garrard's highly popular, economy model 4-speed automatic changer. Incorporating many of the RC88's fine features, the "Renew" is an ideal choice for budget high-fidelity systems as well as for replacement or modernization purposes. Completely wired for both stereo and monophonic disc reproduction. Convenient switch chooses either manual or fully automatic operation. "Simpli-Mix" feature permits both 12" and 10" records to be stacked simultaneously in order of size. Action of changing mechanism is smooth and easy—records slip onto rubber-matted turntable silently and without "jamming."

Arm height and stylus pressure are easily adjusted from top of changer. Minimum mounting space: 14 $\frac{1}{2}$ " wide, 13" deep; 4 $\frac{1}{4}$ " above and 3 $\frac{3}{8}$ " below mounting board. With one plug-in head and manual 45-rpm spindle adapter. Has color coded audio output cables. Less cartridge and automatic 45-rpm spindle. For 100-130 volts, 60 cycle AC. Shpg. wt., 14 lbs.  
 89 RX 504. \$2.00 Down. NET. 41.65

## V-M and FAIRCHILD Record Playing Equipment

### POPULAR V-M RECORD CHANGERS

4-speed changers for stereo and monophonic use. Feature stereo-monophonic switch; full inter-mix of 10" and 12" records; automatic shut-off; etc. Models 1227 and 1201 have 2-pole motor; 1229 and 1202, 4-pole. Size: with base, 8 $\frac{3}{4}$ "x13 $\frac{1}{4}$ "x12 $\frac{3}{4}$ "; without base, 8 $\frac{3}{4}$ "x13 $\frac{1}{4}$ "x12 $\frac{3}{4}$ ". Black (\*gray) and white; gold trim. For 110-120 v., 60 cycle AC.

89 RX 549. Model 1227. One-piece arm; base; ceramic stereo turnover cartridge with dual sapphire styli. 14 $\frac{1}{2}$  lbs. NET. 44.80  
 89 RX 527. Model 1201. As above, less base. Shpg. wt., 10 $\frac{1}{4}$  lbs. NET. 40.00  
 89 RX 579. Model 1229\*. Base, plug-in head. Less cartridge. Wt., 14 $\frac{1}{2}$  lbs. NET. 44.80  
 89 RX 529. Model 1202\*. As above, less base. Shpg. wt., 10 $\frac{1}{4}$  lbs. NET. 40.00

### FAIRCHILD HIGH-FIDELITY COMPONENTS

PROFESSIONAL TURNTABLE SYSTEM. Offers superlative specifications—plus big \$17.00 savings. Consists of famous Fairchild 412-1 33 $\frac{1}{3}$ -rpm turntable and 282 stereo pickup arm, mounted on hardwood base finished in handsome oiled teak with white top. Turntable features time-proven double-belt drive and self-lubricating hysteresis-synchronous motor. Precision-built—exceeds rigid NARTB specifications. Model 282 pickup arm is designed specifically for the SM-1 stereo cartridge at right—also accepts other standard-size stereo and monophonic cartridges. Takes records to 12". Has plug-in slide, 2 independent shielded output cables, etc. Less cartridge (listed elsewhere in this section). For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 51 lbs.  
 89 RZ 587. Complete Pkg., Only 125.00

### V-M ACCESSORIES

45-RPM SPINDLE. Adapts changers at left for automatic changing of 45-rpm discs. Shpg. wt., 8 oz.  
 96 R 329. NET. 2.31  
 FIBER SPIDERS. Adapts 45-rpm discs with 1" centers for stacking on conventional center spindles. Shpg. wt., 3 oz.  
 96 R 244. NET PER PKG. OF 12. 25c  
 MOUNTING BOARD. Unfinished. Size, 15 $\frac{1}{2}$ "x15 $\frac{1}{2}$ ". Shpg. wt., 3 lbs.  
 95 RX 511. NET. 1.20  
 PLASTIC BASE. Shpg. wt., 3 lbs.  
 89 RX 643. NET. 1.80  
 EXTRA PLUG-IN HEAD. Accepts any cartridge with  $\frac{1}{2}$ " mounting centers. Wt., 6 oz.  
 89 R 556. NET. 55c



Model 1227



SAVE \$17.00

PROFESSIONAL-QUALITY TURNTABLE-ARM-BASE COMBINATION OFFER

# NEW WEBCOR STEREO HI-FI DISKCHANGERS



SHURE  
M7D Cartridge

Model 1031-21  
"Imperial" 4-Speed  
Record Changer

## "IMPERIAL" DELUXE FEATURES

**Multi-Purpose Selector Switch**  
Easy-action speed and mode selector. Provides instant selection of any speed—16½, 33½, 45 and 78—lets you choose either automatic or manual operation quickly and effortlessly.



**Convenient Weight Adjustment**  
A valuable aid that permits the adjustment of stylus pressure from five to eleven grams—specially designed to minimize both record and stylus wear.



**Versatile Tone Arm**  
Incorporates quality features found in professional-type tonearms. Includes: easy-grip handle; lightweight construction; and exceptionally attractive styling.



NET  
**\$61<sup>55</sup>**  
\$5.00 Down

## "Imperial" 1031-21/Shure M7D Diskchanger

- Precision Workmanship Throughout—Custom Features
- Excellent High-Fidelity Performance—Diamond Needle
- Distinctive Golden Beige and Brown Color Styling

A quality-built automatic changer with top-performing magnetic cartridge for playing stereo and monophonic records. Features precision workmanship, ultra-convenient operation and distinctive styling. An excellent choice for moderately priced stereo high-fidelity music systems—ideal for replacement or modernization purposes.

Offers many deluxe features. A specially designed 4-pole, 4-coil motor provides smooth, hum-free operation. Exclusive "anti-rumble ribs" absorb vibrations to eliminate rumble. Automatic intermix of 10" and 12" records—stacked in any sequence—at the 33½ rpm speed. An extra-long turntable bearing reduces rumble and wow. Automatic motor shut-off after last record is played. Includes the highly popular Shure M7D "Custom Dynetic" magnetic stereo cartridge with .0007" diamond LP needle.

One-piece tone arm has top mounted counter-balance that provides accurate weight adjustment for correct stylus pressure. Convenient tone arm handle permits precise needle set-down during manual operation.

Has 9" rubber-matted turntable that prevents slippage and cushions precious records. A special "torsion spring" action permits moving tone arm at any time without damaging changer. Attractive golden beige and brown finish complements any decor. Mounting space: 14½" wide, 13½" deep; 5½" above, 4" below mounting board. With two 36" phono cables, AC cord and plug, and Shure M7D cartridge. Less base, below. For 110-120 volts, 60 cycle AC. Shpg. wt., 11½ lbs.

89 RX 574. \$5.00 Down. NET..... 61.55

MODEL 1031-1. Same as above, but has Sonotone ceramic, turnover stereo cartridge (.0007" diamond stylus for stereo and monophonic LP's and .003" sapphire stylus for standard 78 rpm records).

89 RX 583. \$5.00 Down. NET..... 55.50

MODEL 1031-27. Same changer as above, but less stereo cartridge. Supplied with two plug-in heads. (See cartridge listing elsewhere in this section.)

89 RX 575. \$2.00 Down. NET..... 45.38



1041-27

"Custom"  
on Base

## "Custom" 1041 and 1042 4-Speed Diskchangers

Economy version of the "Imperial" series above. Features include: precision-built motor; adjustable stylus pressure; automatic shut-off after last record; 8" rubber-matted turntable; etc. Plays 16½, 33½, 45 and 78 rpm speeds. Handsome golden beige and brown finish. Size with base, 9x14½x13½". Same mounting space required as "Imperial," above. With two 36" cables. For 110-120 v., 60 cycle AC.

1041-1. Has Astatic ceramic turnover stereo cartridge with .0007" diamond and .003" sapphire styli. 2-pole motor. With metal base. Shpg. wt., 15 lbs.

89 RX 576. Only \$2.00 Down. NET..... 48.14

1041-1. Same as Model 1042, above, but less base. Shpg. wt., 10½ lbs.

89 RX 577. Only \$2.00 Down. NET..... 40.80

1042-1. Has G.E. VR227 magnetic stereo cartridge with single .0007" diamond needle. 4-pole, 4-coil motor. With metal base. Shpg. wt., 15 lbs.

89 RX 582. Only \$5.00 Down. NET..... 61.19

1041-21. Same as Model 1042-21, above, but less base. Shpg. wt., 10½ lbs.

89 RX 581. Only \$5.00 Down. NET..... 54.03

1041-27. Similar to Model 1042-21, above, but less cartridge. Supplied with one plug-in head. 4-pole, 4-coil motor. Less base, at right. Shpg. wt., 10½ lbs.

89 RX 580. Only \$2.00 Down. NET..... 39.33

## WEBCOR CHANGER ACCESSORIES



METAL BASE. Attractive metal base for Webcor record changers listed on this page. Brown finish. Shpg. wt., 4 lbs.

89 RX 639. NET..... 5.68

PRE-CUT MOUNTING BOARD. Heavy, plywood mounting board for custom installing Webcor changers listed on this page. Has pre-drilled holes; unfinished. Overall size, 15½x13½x½". Shpg. wt., 3 lbs.

89 RX 640. NET..... 1.96

AUTOMATIC 45-RPM SPINDLE. Automatically changes 45-rpm records without need for individual spider adapters in each record. Easily slips over center spindle of Webcor changers for conversion to fully automatic 45-rpm changing action. Wt., 8 oz.

89 R 552. NET..... 2.94

45-RPM SPIDER INSERTS. Lightweight metal inserts, easily snapped into place in large center-hole of 45-rpm records. Shpg. wt., package of 10, 6 oz.

96 R 471. Pkg. of 10, NET..... 46c

EXTRA PLUG-IN HEAD. Plug-in head for Model 1031-27 and 1041-27 record changers. Less cartridge. Shpg. wt., 6 oz.

89 R 562. NET..... 78c

# QUALITY RECORD CHANGERS AND TURNTABLES

**Collaro**



Model TSC-740 Changer; Wired for Stereo and Monophonic Use

Model TC-99 Transcription Changer



## New Model TC-99 Transcription Changer

NET \$58<sup>31</sup> • Extra-Heavy, 6-lb. Deluxe Turntable  
 \$5.00 Down • Heavy-Duty 4-Pole Induction Motor  
 • Automatic and Manual Start-Stop Switch

A deluxe, four-speed automatic record changer with many superior features found in quality turntables. Factory-wired to reproduce both stereo and monophonic discs. Full manual operation, plus positive automatic intermix of 12", 10" and 7" records of the same speed. Has an extra-heavy, 12" cast, 6-lb. transcription-type turntable; vibration-free 4-pole induction (shaded) motor with interleaved shields for silent, hum-free operation.

Four speeds played are 33 1/3, 45 and 78 rpm—plus 16 2/3 rpm for "talking book" records. Incorporates an expertly designed, two-piece counterbalanced arm that can be adjusted to minimize record and stylus wear; 5-pin plug-in head accepts all standard stereo and monophonic cartridges. Special muting switch and RC network are employed for silence during change cycle and switching.

Accommodates all record sizes up to and including 12". Other features include: less than 0.15% wow; less than 0.04% flutter; rumble of -50 db; freedom from resonance; automatic shut-off after last record is played; and rubberized turntable pad to protect records. An ideal unit for custom installations—its handsome black satin finish harmonizes beautifully with any decorative surrounding.

Size, 12x13 1/2"; requires 5" above, 3 1/2" below mounting board. Supplied complete with plug-in head and two audio leads. Less base (listed below, left) and cartridge. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 19 1/2 lbs.  
 89 RU 584. Only \$5.00 Down. NET 58.31

## Model TSC-740 "Coronation" Changer

NET \$41<sup>65</sup>  
 \$2.00 Down  
 Quality 4-speed changer, wired for stereo or monophonic use. For automatic record changing, stack 10", and 12" records in order of decreasing size—"Sensi-magic" feature determines record size before setting record down. Features: two-piece transcription-type arm; 4-pole motor; choice of 16 2/3, 33 1/3, 45 and 78 rpm speeds; automatic shut-off after last record is played; heavy, rim-weighted turntable; "muting switch" and "pop-filter." Ideal for custom installations.

Handsome gray and black two-tone finish. Size, 12x13 1/2"; requires 5" above, 2 1/4" below mounting board. Less cartridge (see cartridge listings in this section) and base (listed below). For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.  
 89 RX 521. Only \$2.00 Down. NET 41.65

MODEL TSC-840 "CONTINENTAL" CHANGER. Deluxe 4-speed record changer with all of the features above, plus: extra heavy-duty 4-pole, shaded-pole motor; micro-finished motor shaft; less than 0.25% flutter; automatic idler disengagement; Intermixing of 10" and 12" records. Plays 78, 45, 33 1/3 and 16 2/3 rpm discs.

Attractively finished in gray and black. Size, 12x13 1/2"; requires 5" above, 2 3/4" below mounting board. Supplied less cartridge (see cartridge listings in this section) and base (below). For 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.  
 89 RX 523. Only \$2.00 Down. NET 48.51

## COLLARO ACCESSORIES



Wood Base

BASES. Handsomely finished wood bases for Collaro changers and turntables. Size, 15 1/2 x 13 1/4 x 4". Av. shpg. wt., 3 lbs. Specify mahogany, limed oak or walnut finish.

89 RX 607C. For changers. NET 4.95  
 89 RX 608C. For TP-59. EA.  
 89 RX 609C. For 4TR-200.

UNFINISHED MOUNTING BOARDS. Pre-cut mounting board; ideal for custom-installing Collaro changers and turntables. Overall size, 15 1/2 x 13 1/4 x 1/2". Shpg. wt., 1 1/2 lbs.

91 RX 556. For Changers. NET 1.50  
 89 RX 610. For TP-59. EA.  
 89 RX 611. For 4TR-200.

45-RPM SPINDLE. For Collaro changers. Automatically changes 45-rpm records without need for individual spider adapters in each record. Shpg. wt., 1 1/2 lbs.  
 93 R 483. NET 3.23

EXTRA PLUG-IN HEAD. For TC-99, TSC-740, TSC-840, TP-59. Wt., 6 oz.  
 89 R 555. NET 1.92



Model TP-59 Manual Player



Model 4TR-200 Turntable

## MODEL TP-59 TURNTABLE WITH ARM

NET \$28<sup>91</sup>  
 \$2.00 Down  
 Low-cost, 4-speed manual player for stereo and monophonic use. Incorporates many of the precision features of the Model 4TR-200 turntable listed at right. Four speeds played are 33 1/3, 45 and 78 rpm—plus 16 2/3 rpm for "Talking Book" records. Ideal for custom installation in budget-priced music systems.

Features: heavy, 12" rubber-covered turntable; 4-pole dynamically balanced motor; transcription-type tone arm with plug-in shell; automatic start and stop mechanism. Accepts all standard stereo and monophonic hi-fi cartridges. Gray and black finish.

Size, 13 1/2 x 12"; 3" above, 3 1/2" below mounting board. Less cartridge. For 110-120 v., 60 cycle AC. Shpg. wt., 15 lbs.  
 89 RX 525. \$2.00 Down. NET 28.91

## MODEL 4TR-200 TURNTABLE

NET \$48<sup>51</sup>  
 \$2.00 Down  
 Moderately priced, professional-quality 12" turntable. Plays all four speeds—16 2/3, 33 1/3, 45 and 78 rpm. Beautifully finished black panel harmonizes with any surrounding—an excellent choice for custom installations. Takes any standard stereo arm and cartridge.

Features a non-magnetic, rubber-matted turntable weighing 8 1/2 pounds. Precision machined and engineered for extremely low levels of wow and flutter. Has heavy-duty 4-pole motor and 4-idler drive system. Speed change has "OFF" position between each speed—stops motor during speed change.

Size, 17 1/4 x 14 1/2"; requires 3" above, 3 1/2" below mounting board. For 110-120 v., 60 cycle AC. Shpg. wt., 12 lbs.  
 89 RX 526. \$2.00 Down 48.51

Express Shipment Recommended for High-Fidelity Equipment



**MADE IN SWITZERLAND**

Famous Swiss-made record playing equipment—tops in performance; low in cost.



TDK-101

**New Thorens "TD" Turntable in Thrifty Kit Form**

**NEW MODEL TDK-101 TURNTABLE**

**NET \$47.50**  
 \$2.00 Down  
 New, top-value 33 1/3 rpm turntable in easy-to-assemble form. You can finish it in minutes using only common household tools. Same excellent machining found on more expensive Thorens units. Employs efficient 4-pole motor, ultra-compliant belt and extra-large idler for constant speed operation. Mirror-finished main bearing shaft and single, ball-thrust bearing insure lowest wow, rumble and flutter. Speed is adjustable within ±3%, while a record is playing. Built-in strobe disc permits setting to exact speed. Idler is automatically disengaged when unit is switched off. 15x12". Requires 3 1/2" below mtg. board. Less arm, mtg. board and base (below). For 110-120 v., 60 cycle AC. Shpg. wt., 18 lbs.  
 89 RU 546. NET ..... 47.50

**MODEL WBK WOOD BASE.** For above. Specify mahogany, blonde or walnut. Wt., 5 lbs.  
 89 RX 623C. NET ..... 9.00

**UNFINISHED MOUNTING BOARD FOR TDK-101 KIT.** Shpg. wt., 3 lbs.  
 89 RX 633. NET ..... 4.50

**THORENS**



TD-184



TD-124

**THORENS Record-Playing Equipment**

**NEW MODEL TD-184 MANUAL PLAYER**

**NET \$75.00**  
 \$5.00 Down  
 Precisely made, 4-speed semi-automatic manual player. Simply dial 7", 10" or 12" record size—turntable starts revolving, and arm literally floats down into the record groove. 4-pole motor; shuts off at end of record. Turntable seated on nylon ball-thrust bearing for minimum wow, rumble and flutter. Wired for stereo use. Arm has 2-gram tracking force; accommodates any stereo or monophonic cartridge. Size, 15x12"; requires 2 1/2" below motor board. Less cartridge and base (below). For 110-120 and 200-250 v., 60 cycle AC. Shpg. wt., 20 lbs.  
 89 RU 571. \$5.00 Down. NET ..... 75.00

**MODEL CD-43NS CHANGER.** Not illus. Unique rear-driven turntable featuring direct-drive, 4-pole induction-type motor. 3-speed; wired for stereo use. 4 controls: Record Size Selector, Start-Stop, Repeat, Reject and Pause-Timer. Base size, 12x15". Requires 3 1/4" below mtg. board; 6" above. Less cartridge and base (below). For operation from 100-120 and 200-250 volts. 50-60 cycle AC. Shpg. wt., 25 lbs.  
 93 RU 333. \$5.00 Down. NET ..... 79.95

**MODEL TD-124 TURNTABLE**

**NET \$99.75**  
 \$5.00 Down  
 Professional-quality, 4-speed turntable on rigid base plate. Built-in wood panel allows mounting any 12" or 16" pickup arm. Highly accurate, built-in turntable level—4 leveling screws accessible from top of unit; eddy current brake for effective speed adjustment without rumble; illuminated strobe; speed adjustable ±3%; single On-Off and speed control; extremely low noise level. Instantaneous cueing. Base plate, 15 1/2 x 12 1/2"; depth required, 2 3/4". Less arm, base and mtg. board. With AC cord and pickup arm cable. For 100-120 v., or 200-250 v., 50-60 cycle AC. Shpg. wt., 32 lbs.  
 94 RU 722. \$5.00 Down. NET ..... 99.75

**MODEL TD-134 4-SPEED MANUAL PLAYER.** Not illus. Quality 4-speed player. Has pickup arm wired for stereo—accepts all popular makes of stereo and monophonic cartridges. Base plate, 14 1/2 x 11 1/4"; requires 3 1/4" below mounting board. Less base, mtg. board and cartridge. With AC cord and output cable. For operation from 110-120 and 200-250 volts. 50-60 cycle AC. Wt., 17 lbs.  
 93 RX 335. \$5.00 Down. NET ..... 59.95

**THORENS ACCESSORIES. \*Specify mahogany, blonde or walnut; †specify mahogany or blonde.**

Stock No.	For	Description	Wt.	NET
96 R 829	CD-43NS	Automatic 45-rpm spindle	1 lb.	5.95
89 RX 632C	CD-43NS	Wood base†	5 lbs.	6.00
96 RX 823	CD-43NS	Unfinished mounting board	3 lbs.	3.00
89 RX 630C	TD-124	Wood base*	5 lbs.	9.00
89 RX 631C	TD-184, TD-134	Wood base*	5 lbs.	6.00
93 RX 487	TD-124	Unfinished mounting board	3 lbs.	4.50
93 RX 386	TD-184, TD-134	Unfinished mounting board	3 lbs.	4.50

**Studio-Quality GRAY Turntables and Pickup Arm**



212SX ARM



Model 33H

Model HSK-33



**MODEL 212SX 12" PICKUP ARM**

Incorporates "viscous-dampened" (fluid controlled) suspension for faithful transcription—only the stylus vibrates, not the arm. Arm is micro-balanced for maximum tracking stability. Tracks as low as 1 1/2 grams; adjustable to 15 grams. Damping "floats" arm down slowly if accidentally dropped. Slide assembly with 4 leads for stereo cartridges. Shpg. wt., 2 lbs.  
 89 RX 256. \$2.00 Down. NET ..... 34.00

**MODEL 216SX PICKUP ARM.** As above, but 16". Shpg. wt., 2 3/4 lbs.  
 89 RX 254. \$2.00 Down. NET ..... 36.50

**SPS EXTRA SLIDE ASSEMBLY.** For both arms above. Shpg. wt., 2 oz.  
 89 R 559. NET ..... 4.60

**MODEL 33H 12" TURNTABLE**

Deluxe, precision-built 33 1/3-rpm turntable for critical audio use. Features a hysteresis-synchronous motor driving a 1" thick cast-aluminum table. Nylon-belt drive assures best motor isolation. Has 1/2" steel base plate pre-drilled for Gray Model 212SX pickup arm described at left. Size, 16x14 1/4"; requires 3" below mounting board. Less arm and base (listed below). For 110-120 v., 60 cycle AC. Shpg. wt., 18 lbs.  
 93 RX 386. \$5.00 Down. NET ..... 79.95

**MODEL 33C WOOD BASE.** In mahogany, blonde or walnut—specify choice. 4 lbs.  
 89 RX 634C. \$2.00 Down. NET ..... 23.95

**WOOD BASE.** Unfinished. Wt., 4 lbs.  
 89 RX 641. NET ..... 10.95

**NEW MODEL HSK-33 TURNTABLE KIT**

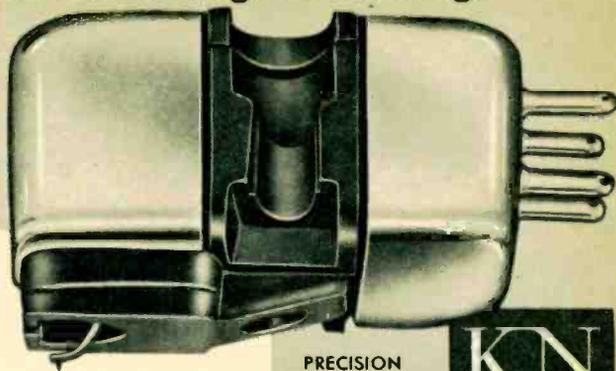
A beautifully styled, 33 1/3-rpm turntable kit. Employs hysteresis-synchronous motor; dynamically balanced, with shaft held to tolerance of ±0.0001". Speed deviation does not exceed ±0.3%; wow and flutter does not exceed 0.2%. Woven fabric driving belt; optimum motor isolation. 15 1/2 x 18". Requires 3" below mounting board. Less base (listed below), and arm. For 110-120 volts, 60 cycle AC. Wt., 13 lbs.  
 89 RX 547. \$2.00 Down. NET ..... 49.50

**WOOD BASE.** Specifically designed for use with Model HSK-33, above. Available in choice of mahogany, blonde or walnut formica veneers—specify. Shpg. wt., 4 lbs.  
 89 RX 548C. NET ..... 17.95

# New KNIGHT KN-500 Stereo Magnetic Cartridge

**Unconditionally Guaranteed . . .**

by Allied to provide magnificent performance . . . use it on our 15-day trial plan . . . prove its superiority under your own operating conditions!



PRECISION  
DIAMOND  
NEEDLE



ONLY  
**\$16<sup>85</sup>**

- 4-Coil, Moving Magnet Design
- Front & Back Mu-Metal Shield
- Polished Diamond LP Needle
- Tracks As Low As 1 1/2 Grams

Though remarkably low in cost, this exceptional-quality magnetic cartridge provides phenomenal stereo performance—and it's available exclusively from Allied. Manufactured to the most critical standards, the KN-500 features high compliance, wide response, low distortion, superior separation, and high output—no transformer is required. Ideal for the finest systems.

Improves the performance of over 90% of the music systems in use today. An outstanding array of features keynotes this superior stereo performer. Utilizes up-to-the-minute quadruple coils with advanced design moving magnet principle. The spring-loaded coil design assures perfect electrical contact between stylus assembly and generator mechanism for equal, clean response.

Has 8-way mu-metal front-and-back shielding that virtually eliminates hum. Corrosion-resistant alloy tension wire maintains compliance at highest value for minimum record wear and lowest distortion. Employs a carefully inspected, polished .0007" diamond needle—fully compatible for monophonic LP's as well as all stereo recordings. Tracks loud bass passages with extreme accuracy; entirely free of annoying high-frequency peaks. Negligible magnet leakage eliminates turntable attraction.

Fits all tone arms with standard 1/2" mounting centers. Shpg. wt., 2 oz.  
89 RC 220. ONLY . . . . . **16.85**

See additional listings in the cartridge section for Model KN-500 stereo magnetic cartridge installed in popular plug-in heads.

REPLACEMENT NEEDLE. Low-cost, easily replaceable .0007" polished diamond stylus for above; reseats perfectly for continued top performance. Shpg. wt., 2 oz.  
89 RC 222. ONLY . . . . . **7.50**

## SPECIFICATIONS

**Frequency Response:** ±3 db, 20 to 20,000 cps.

**Compliance:** 4x10<sup>-6</sup> cm/dyne.

**Output Level:** 9 mv at 10 cm/sec.

**Channel Isolation:** Over 20 db.

**Tracking Pressure:** 1 1/2 to 3 grams in professional-quality arms; may be used at pressures up to 8 grams without damage to cartridge.

## QUALITY MANUAL PLAYERS AND CHANGERS

**Bogen**



Made in Switzerland

### BOGEN MODEL B60 HI-FI MANUAL PLAYER

**NET** A beautifully performing manual player—wired for stereo and monophonic use. Has a continuously variable speed from 29 to 86 rpm with notches for 16 2/3, 33 1/3, 45 and 78 rpm speeds. Accommodates records up to 16". Some of its superior features include: heavy-duty, 4-pole constant velocity motor with balanced 1 1/4" rubber-padded turntable; smooth-action tone arm with micrometer-type gauge for precise stylus pressure adjustment; precision 3.2-lb. steel turntable; phenolic plug-in head that accepts any stereo or monophonic cartridge; etc. Tone arm is raised or lowered by a linkage to minimize record and stylus wear—valuable aid for cueing of records. Wow and flutter: less than 0.20% at 33 1/3 rpm. Minimum mounting space required: 15 1/16x13; 4" above, 2 1/4" below mounting board. Supplied complete with shockmounts, 45-rpm adapter, strobe disc, 2 audio output cables, and phenolic plug-in head. Less base (below) and cartridge. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 18 lbs.  
89 RX 913. Only \$2.00 Down. NET . . . . . **49.95**

**MODEL PB6 WOOD BASE.** Wood base for Model B60, above. Has handsome walnut finish. Shpg. wt., 5 lbs.  
89 RX 905. NET . . . . . **5.25**

**MODEL H4 PLUG-IN HEAD.** Extra plug-in head for Model B60, above. Constructed of aluminum. Less cartridge. Shpg. wt., 6 oz.  
89 R 557. NET . . . . . **4.00**

**LESA**



Made in Italy

### LESA MODEL CD2/21 4-SPEED CHANGER

**NET** Precision-designed, quality 4-speed record changer at modest cost—wired for both stereophonic or monophonic use. Includes many deluxe features: heavy-duty 4-pole motor; jam-proof tone arm mechanism; automatic record size selector; extra-heavy turntable with removable, protective pad; constant speed change cycle; automatic motor shut-off after last record is played; and built-in resistor and capacitor network to eliminate switch noise. Plays up to eight records of any size—with automatic intermix. Ultra-smart, continental styling; handsome two-tone neutral finish. 11 1/2x13 1/2"; requires 3 1/4" above, 5" below mounting board. With plug-in head. Less base and cartridge. For 110-120 v., 60 cycle AC. Shpg. wt., 18 lbs.  
89 RX 578. Only \$2.00 Down. NET . . . . . **39.95**

**BASE.** Wood base for above. Specify choice of mahogany, blonde or walnut when ordering. Shpg. wt., 4 lbs.  
89 RX 637C. NET . . . . . **4.75**

**PRE-CUT MOUNTING BOARD.** For above. Unfinished. Wt., 1 1/2 lbs.  
89 RX 638. NET . . . . . **2.00**

**45-RPM AUTOMATIC SPINDLE.** For above. Shpg. wt., 10 oz.  
89 R 560. NET . . . . . **3.75**

**EXTRA PLUG-IN HEAD.** For above. Shpg. wt., 6 oz.  
89 R 561. NET . . . . . **2.40**



**NEW!**



Series VR-22



Series VR II Cartridges

A Professional-Quality Pickup Arm for Outstanding Performance from Both Stereo and Monophonic Recordings



TM-2G Pickup Arm

**GENERAL ELECTRIC Cartridges and Arms**

**NEW G.E. STEREO CARTRIDGE**

Model VR-227 • Triple Shielded for Greatly Reduced Hum  
**\$2445**  
 • New Stylus Assembly Only \$2.00 Down for Positive Centering

Already famous for quality in the field of high-fidelity, General Electric now introduces the latest, improved version of their popular stereophonic variable reluctance cartridge. A product of advanced engineering techniques, these units are manufactured to the highest standards—assuring superb audio reproduction.

In addition to all-new triple shielding, the VR-22 series incorporates lower inductance to guard against any possible hum pickup. Also featured is a new, advanced-design stylus assembly for positive centering—assures correct stereo channel separation of up to 30 db. Other features include low distortion, easily replaceable stylus, etc. Output is 6 mv (nominal) per channel at 5 cm/sec. Can be used with both 3 and 4-wire systems. Mounting centers: 1/2" and 1/4".

MODEL VR-227. Has .0007" diamond stylus. Response, ±3 db. 20 to 18,000 cps. Recommended tracking force, 6 grams. Compliance: vertical, 2x10<sup>-6</sup> cm/dyne; lateral 3x10<sup>-6</sup> cm/dyne. Shpg. wt., 3 oz. 89 RC 201. \$2.00 Down. NET ... 24.45

MODEL VR-225. Has .0005" diamond stylus. For turntable use in a professional-type pickup arm. Response, ±3 db. 20 to 20,000 cps. Recommended tracking force, 3 grams. Compliance: vertical, 2.5x10<sup>-6</sup> cm/dyne; lateral 4x10<sup>-6</sup> cm/dyne. 3 oz. 89 RC 219. \$2.00 Down. NET ... 27.39

**REPLACEMENT STYLI FOR ABOVE**

Shpg. wt., 2 oz.	Stock No.	Type	For	Tip	NET
	89 RC 241	VR-222	VR-227	.0007" Diamond	9.75
	89 RC 242	VR-221	VR-225	.0005" Diamond	11.71

**SERIES VR II MONOPHONIC HI-FI MAGNETIC CARTRIDGES**

VR II high-compliance monophonic cartridges—famous for brilliant performance. Tracking force is only 4-6 grams in a professional-type arm (6-8 grams in a changer using a triple-play cartridge). Frequency response is smooth over the entire range of 20 to 20,000 cps. Cartridges are fully shielded in mu-metal and incorporate specially wound coils to suppress hum and noise pickup.

Output (nominal) is 22 mv at 10 cm/sec (1000 cps). Clip-in styli are easily and independently replaceable. Mounting centers: 1/2" and 3/8". In tables below, "S"—sapphire; "D"—diamond. Av. shpg. wt., 3 oz.

**TRIPLE-PLAY TYPES**

Stock No.	Type	Stylus Tips	NET
72 RC 851	4G-050	S-.001" S-.003"	9.75
72 RC 852	4G-052	D-.001" S-.003"	19.55
72 RC 853	4G-053	D-.001" D-.003"	30.33

**SINGLE STYLUS TYPES**

Stock No.	Type	Stylus Tip	NET
72 RC 854	4G-040	S-.003"	7.35
72 RC 855	4G-041	S-.001"	7.35
72 RC 856	4G-063	D-.003"	17.59
72 RC 857	4G-061	D-.001"	17.59

**REPLACEMENT STYLI FOR VR II SERIES**

Av. shpg. wt., 2 oz.

Stock No.	Type	Stylus	Radius	NET
72 R 858	4G-01S	Sapphire .001"	1.96	
72 R 859	4G-02S	Sapphire .0025"	1.96	
72 R 860	4G-03S	Sapphire .003"	1.96	
72 RC 861	4G-01D	Diamond .001"	9.75	
72 RC 862	4G-02D	Diamond .0025"	9.75	
72 RC 863	4G-03D	Diamond .003"	9.75	

**REPLACEMENT STYLI FOR SERIES GC AND CL STEREO CARTRIDGES**

Stock No.	Type	For	Tip	NET
79 RC 702	ST7D	GC-7, CL-7	D-.0007"	9.75
79 R 703	ST7S	CL-7	S-.0007"	2.45
79 RC 706	ST5D	GC-5	D-.0005"	11.71

**G. E. Preamplifiers and Rumble Filter**



A1-203



UPX-0038



A1-903

A1-203 "TRANSISTUBE" PREAMP. Allows using mike or any magnetic cartridge with amplifiers not having necessary inputs. Extremely low hum, noise and microphonic levels. Uses 12AX7 and NPN transistor. RIAA cartridge equalization. Includes gain control. Has 3 input impedances, 2 sensitivity positions. 10 mv sensitivity for 1 v. output. 3/4x3/4x6". With 2-ft. cable. For 110-120 v., 50-60 cycle AC. Shpg. wt., 3 1/2 lbs. 81 S 857. \$2.00 Down. NET ... 21.51

UPX-0038 PREAMP. Permits use of mike or magnetic cartridge with amplifiers not equipped with preamps. 32 db gain with 18 db bass boost (at 50 cps) on "Phono"; flat (30-15,000 cps) on "Mike." With 2-ft. output cable and 6SC7. 3/4x3/4x3/4". For 110-120 v., 60 cycle AC. 1 1/2 lbs. 93 S 749. NET ... 11.71

A1-903 RUMBLE FILTER. Effectively filters out turntable rumble and vibration, and sub-audio surges that might damage speaker. Cutoff of 12 db/octave below 50 cps. Insert between pickup and preamp. With 19" output cable. 2x2 1/2x3 1/2". 10 oz. 99 R 865. NET ... 8.33

**MODEL TM-2G 12" PICKUP ARM**

NET

**\$2935**

\$2.00 Down

Professional-quality pickup arm for peak performance with stereo discs. Ideal for critical monophonic use, too. Accommodates all G.E. stereo and VR II cartridges. Featuring superior static balance, the TM-2G maintains constant lateral equilibrium—even if the turntable is not level! The shock resistant arm incorporates micro-ball bearings for reduced friction—lightweight construction assures minimum inertia.

This expertly engineered unit features a unique two-step tracking force adjustment—arm is balanced to zero force, then precisely adjusted to any force from 0 to 6 grams for accurate tracking. Includes arm rest and removable cartridge head. Height adjustable. 3/4-2 1/4". Has 4-terminal board with ground. Plays records up to 12". Less cartridge. Shpg. wt., 1 1/2 lbs. 79 R 704. \$2.00 Down. NET ... 29.35

**G. E. MODERNIZATION ASSEMBLIES & STYLI FOR RPX SERIES**

**REPLACEMENT "CLIP-IN-TIP" STYLI**

For stylus replacement in single or triple-play RPX "Clip-In-Tip" cartridges. 2 oz.

Stock No.	Mfr's Type	Stylus	Radius
65 RC 992	RPJ-01D	Diamond	.001"
65 RC 993	RPJ-02D	Diamond	.0025"
65 RC 994	RPJ-03D	Diamond	.003"
NET EACH ... 9.75			
65 R 995	RPJ-01S	Sapphire	.001"
65 R 996	RPJ-02S	Sapphire	.0025"
65 R 997	RPJ-03S	Sapphire	.003"
NET EACH ... 1.96			

**STYLI MODERNIZATION ASSEMBLIES**

For converting G.E. triple-play cartridge types RPX-050, .052, .053, .047 to "Clip-In-Tip". Once installed, only the tips need be replaced when worn. "S"—Sapphire; "D"—Diamond. Shpg. wt., 2 oz.

Stock No.	Type	Stylus Tips	NET
65 R 988	RPJ-010A	S-.001" S-.003"	3.50
65 RC 991	RPJ-012A	D-.001" D-.003"	19.55
65 RC 989	RPJ-013A	D-.001" S-.003"	11.71
65 R 987	RPJ-007A	S-.001" S-.0025"	3.50
65 RC 990	RPJ-011A	D-.001" D-.0025"	19.55

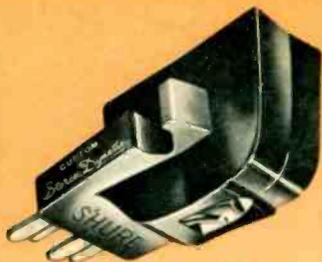
**SINGLE-TIPPED REPLACEMENT STYLI**

Replacement single-tipped styli for G.E. cartridge types RPX-040, .041, .061, and .063. (These cartridges cannot be converted for use with "Clip-In-Tip" styli.) Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Stylus	Radius
65 R 281	RPJ-005	Sapphire	.001"
65 R 261	RPJ-006	Sapphire	.0025"
65 R 295	RPJ-001	Sapphire	.003"
NET EACH ... 2.06			
99 RC 815	RPJ-004	Diamond	.001"
99 RC 817	RPJ-002	Diamond	.0025"
99 RC 816	RPJ-003	Diamond	.003"
NET EACH ... 10.29			

RKP-009B REPLACEMENT PARTS KIT. For triple-play cartridges. Includes washers, spring and knobs. Shpg. wt., 4 oz. 72 R 744. NET ... 29c

RGB-001 STYLUS BRUSH. Soft bristle brush for cleaning stylus assemblies. Reduces distortion, saves records. 2 oz. 65 R 972. NET ... 10c



Model M7D

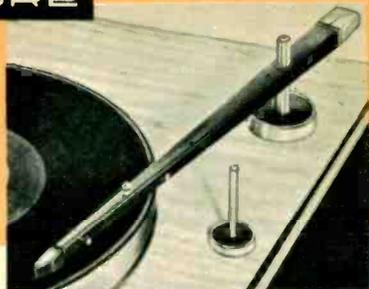


Model M3D

SHURE

NEW!

Stereo Dynetic Arm and Cartridge



## SHURE Stereo High-Fidelity Components

### "CUSTOM" DYNETIC CARTRIDGE

NET  
**\$23<sup>52</sup>**  
\$2.00 Down

**MODEL M7D.** Highly popular, custom-quality stereo magnetic cartridge with .0007" diamond stylus (user-replaceable). Designed for use in both record changers and turntables. Exceptionally high compliance and low tracking force insure peak performance—greatly reduce record and stylus wear. "Needle talk" is held to an absolute minimum. Provides top-fidelity from both stereo and monophonic discs.

*Frequency Response:* 20 to 15,000 cps. *Channel Separation:* better than 20 db at 1000 cps. *Output Voltage:* 5 millivolts per channel at 1000 cps. *Recommended Tracking Force:* 4 to 7 grams. *Vertical and Lateral Compliance:* 3.5x10<sup>-6</sup> cm/dyne. *Recommended Load Impedance:* 47,000 ohms. *Terminals:* 4-terminal output with independent ground for each channel. Grounds may be connected together for 3-wire pickup arms.

Has standard 1/2" and 3/8" mtg. centers—fits virtually all popular record changers and professional pickup arms (except "Studio Dynetic"). Shpg. wt., 3 oz.  
79 RC 242. \$2.00 Down. NET..... 23.52

### "PROFESSIONAL" DYNETIC CARTRIDGE

NET  
**\$44<sup>10</sup>**  
\$2.00 Down

**MODEL M3D.** Professional-quality, hand-assembled magnetic stereo cartridge with .0007" diamond stylus (user-replaceable). Expertly constructed, the M3D is ideal for the discerning audiophile and studio engineer alike. All specifications are guaranteed within rigid laboratory tolerances. In addition to all the outstanding features of the popular M7D cartridge at left, this fine pickup features a frequency response of 20-15,000 cps. ± 3 db; and an extremely high degree of vertical and lateral compliance; 4.0x10<sup>-6</sup> cm/dyne.

Recommended load impedance is 47,000 ohms. Cartridge is 4-terminal type—ground terminals may be combined for 3-wire pickup arms. 1/2" mtg. centers. 3 oz.  
79 RC 215. \$2.00 Down. NET..... 44.10

### DIAMOND REPLACEMENT STYLI

Stock No.	Type	For	Wt.	NET
79 RC 712	N3D	M3D	2 oz.	22.05
79 RC 713	N7D	M7D	2 oz.	11.76
89 RC 239	N21	M212, M216	2 oz.	24.25

### STEREO DYNETIC ARM AND CARTRIDGE

NET  
**\$87<sup>71</sup>**  
\$5.00 Down

**MODEL M212.** Latest version of the famous Shure "Studio Dynetic" integrated pickup arm and cartridge. Now fully adapted for stereo discs, the M212 "Stereo Dynetic" features an extremely light tracking force and an amazing degree of stylus compliance. Actually tracks stereo recordings at 1 1/2 gram! Moving magnet design has high permeability shield and humbucking arrangement of coils prevents hum pickup. Arm pivots on ruby thrust bearing—cartridge on sleeve-and-cap jeweled bearings.

*Frequency Response:* ± 2 1/2 db. 20 to 20,000 cps. *Channel Separation:* better than 20 db at 1000 cps. *Output Voltage:* 5 mv per channel at 1000 cps. *Tracking Force:* Continuously adjustable from 1 1/2 to 2 1/2 grams. *Vertical and Lateral Compliance:* 9x10<sup>-6</sup> cm/dyne. *Recommended Load Impedance:* 47,000 ohms. Includes Model M212 stereo cartridge and .0007" diamond stylus (user-replaceable). Shpg. wt., 1 lb.

89 RC 250. \$5.00 Down. NET..... 87.71  
MODEL M216. As above, but 16" arm. 1 1/4 lbs.  
89 RC 251. \$5.00 Down. NET..... 87.71

## Famous PICKERING Stereo Turntable & New Cartridge



"Gyropoise" Turntable

### MODEL 800 "GYROPOISE" TURNTABLE

NET  
**\$59<sup>85</sup>**  
\$5.00 Down

A unique turntable developed specifically for stereo and monophonic microgroove records. The "Gyropoise" 800 features just one speed—33 1/3 rpm. Completely eliminates vertical rumble—revolves in magnetic suspension, with precision accuracy, on a bearing of air. No stiff, mechanical linkage—no vertical bearing! Since vertical vibration is a problem in the reproduction of sound from stereophonic records, the "Gyropoise" 800 principle of operation surmounts this handicap with its unique suspension, and provides a turntable with almost complete absence of distortion! Flutter and wow are virtually eliminated by the use of a unique, super-cushion idler. Vertical period of spring suspension is below 5 cps; compound vertical rumble attenuation is 12 db below reference level.

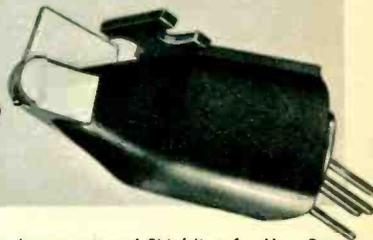
*Noise:* better than 65 db below standard reference level. *Speed Accuracy:* ±0.2% total speed variation. Has precision, built-in leveling adjustment with indicator. Foam rubber turntable mat; takes up to 12" records. Fully synchronous motor. Panel size, 13 1/2 x 13 1/2"; requires 1 1/8" above and 3" below panel. Base plate, 3/4" thick. Includes 3-hr. turntable and mechanism. Less base and pickup arm. For 110-120 v., 60 cycle AC. Shpg. wt., 13 1/2 lbs.  
89 RX 532. Only \$5.00 Down. NET..... 59.85

WOOD BASE FOR "GYROPOISE" 800. Size (HWD). 5 3/8 x 14 1/4 x 14 3/4". Specialty mahogany, blonde or walnut. Shpg. wt., 5 1/2 lbs.  
89 RX 533C. NET..... 15.00

NEW

### MODEL 380 "FLUXVALVE" STEREO CARTRIDGE

Features the Completely New, Easily Replaceable, "V-Guard" Stylus Assembly



NET  
**\$29<sup>85</sup>**  
\$2.00 Down

- Complete Mu-Metal Shielding for Hum-Free Performance from Microgroove Records
- "V-Guard" Replaceable Stylus Assembly
- Complete with .0007" Diamond Needle

**MODEL 380C.** The newest addition to Pickering's fine line of stereo components, renowned for superb high-fidelity performance. Hermetically sealed and completely encapsulated in a mu-metal shield, the 380C cartridge is designed to provide hum-free operation in automatic record changers or manual players. New and exclusive "V-Guard" stylus assembly permits quick and easy user-replacement of the .0007" diamond stylus (included). *Frequency Response:* flat from 20 to 20,000 cps. *Channel Separation:* 25 db. Push-pull magnetic-type generator provides an output of 10 millivolts at 5 cm/second of recorded level per channel, using 4 output terminals. *Recommended Tracking Force:* 3 to 7 grams. Fits all standard pickup arms—has 3/8" and 1/2" mounting centers. Shpg. wt., 2 oz.  
89 RC 291. Only \$2.00 Down. NET..... 29.85

**MODEL 380A.** As above, but for use in turntables. *Recommended Tracking Force:* 2 to 5 grams.  
89 RC 292. Only \$2.00 Down. NET..... 34.50

DIAMOND REPLACEMENT STYLI FOR PICKERING CARTRIDGES. Wt., 2 oz.  
89 RC 244. Model D-3807C. For 380C cartridge. NET..... 15.00  
89 RC 245. Model D-3807A. For 380A cartridge. NET..... 19.65  
94 RC 734. Model D-3707C. For 371 cartridge. NET..... 12.00

# STEREO-MONOPHONIC PICKUP ARMS & CARTRIDGES



## GRADO PICKUP ARM AND CARTRIDGE

PICKUP ARM. Skillfully designed one piece balanced arm. Hand-rubbed, gun stock walnut with finely-machined anodized aluminum fittings. Overhang micrometer adjustment,  $\pm 1/4$ ". Tracking error:  $\pm 0.8\%$ . Micrometer tracking force adjustment to 0.1 grain for maximum accuracy. Less cartridge, below. Has 4 leads.  $1 1/4$  lbs.  
72 RX 746. 12". \$2.00 Down. NET 29.95

STEREO CARTRIDGE. Masterfully reproduces recorded music. Smooth response from 10-35,000 cps. Lateral compliance.  $8 \times 10^{-6}$  cm/dyne. 4-gram tracking force. Has .0007" diamond stylus (factory-replaceable). 4-terminal  $1/2$ " mtg. ctrs. Requires transformer, below. Shpg. wt., 2 oz.  
79 RC 214. \$2.00 Down. NET 49.50  
79 RC 241. Stereo Transformer. NET 23.50

## REK-O-KUT PICKUP ARMS

An outstanding pair of pickup arms. Special pivot with double set of ball bearings assures virtually friction-free horizontal motion and excellent stability. Acoustical sectioning prevents resonance. Adjustable height and tracking force. Take monophonic or 3 or 4-terminal stereo cartridge. With 1 lead. Less cartridge,  $2 1/4$  lbs.  
72 RX 750. S-120. 12" arm. NET 27.95  
72 RX 751. S-160. 16" arm. NET 30.95

PS-20 EXTRA PLUG-IN HEAD. 4-cond. 4 oz.  
72 R 752. NET 5.95

STEREO CONVERSION KITS. Not illustrated. Quickly convert your Rek-O-Kut monophonic arm for stereo. 2 lbs.  
72 R 716. SC-12. For A-120. NET 17.95  
72 R 717. SC-16. For A-160. NET 19.95

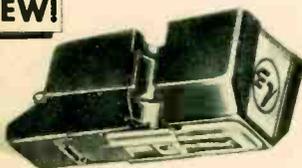
## NEW G.E. TM-2G 12" PICKUP ARM

Professional-quality pickup arm for optimum performance with stereo or monophonic recordings. Accommodates all G.E. stereo and VR-II series cartridges.

An outstanding feature of the TM-2G is its superior static balance. Once adjusted, it maintains constant lateral equilibrium even if turntable is not perfectly level. Incorporates micro ball bearings for reduced travel friction—lightweight construction assures minimum inertia. Has two-step tracking force adjustment that precisely adjusts from 0-6 grams.

Includes arm rest and removable cartridge head. Length  $12 1/2$ ". Height, adjustable from  $3/4$  to  $2 1/4$ ". 4-terminal board with ground. Takes records up to 12". Less cartridge. Shpg. wt.,  $1 1/4$  lbs.  
79 R 704. Only \$2.00 Down. NET 29.35

**NEW!**



## E-V SERIES 31 CARTRIDGES

MODEL 31MD-7. Expertly designed ceramic cartridge for full, faithful stereo or monophonic reproduction. For magnetic input. Features clean separation, good compliance, low distortion. Tracking force is only 2-4 grams for transcription turntable use; 4-6 grams for record changer. Response: 20-20,000 cps,  $\pm 2.5$  db. Vertical and Lateral Output, 10 millivolts. Compliance:  $3.5 \times 10^{-6}$  cm/dyne. 4-terminal.  $1/2$ " mtg. centers. With .0007" diamond stylus (user-replaceable). Shpg. wt., 3 oz.

89 RC 206. Only \$2.00 Down. NET 23.52

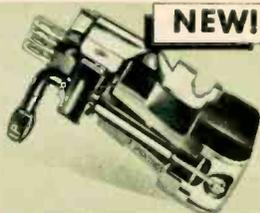
MODEL 31D-7. Same as 31MD-7 above, but for ceramic input.

89 RC 226. Only \$2.00 Down. NET 21.95

MODEL D7-7 REPLACEMENT STYLUS. .0007" diamond for above. Shpg. wt., 2 oz.

89 RC 235. NET 5.88

**NEW!**



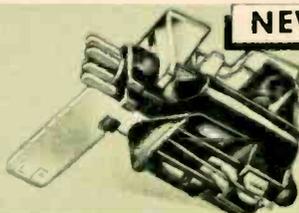
## SONOTONE TURNOVER CARTRIDGE

MODEL 8TA4-SD. Outstanding new ceramic cartridge for both stereo and monophonic operation. Features turntable rumble suppression, full frequency response, superior compliance and excellent channel separation. Unaffected by magnetic fields, temperature or humidity; needs no preamplification. User-replaceable turn-over stylus with .0007" diamond and .003" sapphire tips. Frequency Response: 20 to 15,000 cps, gradual roll-off beyond. Channel separation: Better than 20 db. 3 to 6 grams tracking force. Compliance:  $3 \times 10^{-6}$  cm/dyne. 0.3 volts output. Has 4 terminals; mounts on  $1/16$ " and  $1/8$ " centers. Shpg. wt., 3 oz.  
89 RC 211. NET 11.47

N-8TA-SD. Replacement diamond-sapphire stylus for above. 2 oz.

89 RC 237. NET 7.35

**NEW!**



## DUOTONE TURNOVER CARTRIDGE

MODEL GPS-73-SD. New, low-cost turnover crystal cartridge for stereo and monophonic records. Features exclusive "Floating Needle Action" for greater vertical and lateral needle movement. Nullifies needle talk and pinch effect; aids in perfect tracking.

One volt output permits use without preamp stage. Response: 40-15,000 cps. Compliance:  $4 \times 10^{-6}$  cm/dyne. Channel Separation: 25 db at 1 kc. Tracking Pressure: 2 to 4 grams. Employs .0007" diamond and .003" sapphire stylus (user-replaceable). 4-terminal wiring. Universal mounting; fits any phonograph, record changer, etc. 3 oz.

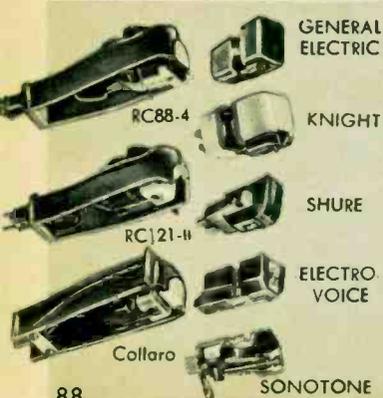
79 RC 235. NET 14.41

MODEL 846-DS REPLACEMENT STYLUS. For above. .0007" diamond, .003" sapphire tips. Shpg. wt., 2 oz.

79 RC 222. NET 6.44

## Popular Stereo Cartridges Installed in Plug-In Heads

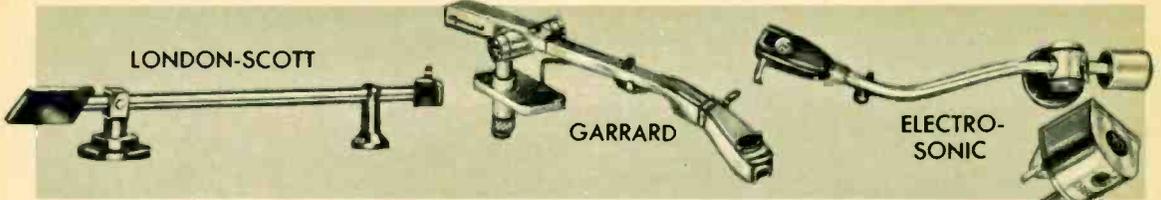
An outstanding selection of famous, top-quality cartridges installed in plug-in heads to permit immediate use—plug-in head is free and there's no installation charge! When ordering, be sure to indicate the cartridge Stock No. which applies to your changer or player. Av. shpg. wt., 5 oz.



Stock No.	Cartridge	Fits	EACH
89 RC 203	G. E. VR-227	Garrard RC88-4, RC98, TMK-II	24.45
89 RC 204	G. E. VR-227	Garrard RC121-II, 4HF, 210	24.45
89 RC 205	G. E. VR-227	Collaro TSC-740, TSC-840, TC99, TP59	24.45
79 RC 231	Shure M7D	Garrard RC88-4, RC98, TMK-II	23.52
79 RC 232	Shure M7D	Garrard RC121-II, 4HF, 210	23.52
89 RC 216	Shure M7D	Collaro TSC-740, TSC-840, TC99, TP59	23.52
89 RC 230	Knight KN-500	Garrard RC88-4, RC98, TMK-II	16.85
89 RC 231	Knight KN-500	Garrard RC121-II, 4HF, 210	16.85
89 RC 232	Knight KN-500	Collaro TSC-740, TSC-840, TC99, TP59	16.85
89 RC 208	E-V 31MD-7	Garrard RC88-4, RC98, TMK-II	23.52
89 RC 209	E-V 31MD-7	Garrard RC121-II, 4HF, 210	23.52
89 RC 210	E-V 31MD-7	Collaro TSC-740, TSC-840, TC99, TP59	23.52
89 RC 213	Sonotone 8TA4-SD	Garrard RC88-4, RC98, TMK-II	11.47
89 RC 214	Sonotone 8TA4-SD	Garrard RC121-II, 4HF, 210	11.47
89 RC 215	Sonotone 8TA4-SD	Collaro TSC-740, TSC-840, TC99, TP59	11.47

Make Allied Your Headquarters for Hi-Fi Accessories

# PICKUP ARMS AND STEREO CONVERSION KITS



## LONDON-SCOTT ARM & CARTRIDGE

**MODEL 1000.** An integrated combination of arm and magnetic cartridge, carefully made to uncompromised standards of design. Provides superior stereophonic and monophonic reproduction; employs a single .0005" polished diamond stylus (factory-replaceable). Tip mass of less than 1 milligram guarantees extremely precise tracking with minimum record wear. Frictionless bearings minimize lateral tracking force.

Compliance of 3.5x10<sup>-6</sup> assures excellent fidelity. Frequency response is 20 to 18,000 cps. ±2 db. Channel separation better than 20 db. Tracking force, 3.5 grams. Output per channel, 7 mv at 5 cm/sec. Overall length, 12½". Height adjustable from 1½" to 2½". With arm rest. 1½ lbs.  
79 RC 707. \$5.00 Down. NET... 89.95

## GARRARD TPA/12 PICKUP ARM

Precisely made Garrard low-cost transcription arm for use with either stereophonic or monophonic recordings up to 16" in diameter. Carefully engineered combination of static balance and spring loading provides maximum vertical freedom. Employs precision spring-loaded, cone-type, ball-bearing pivots for practically friction-free movement. Arm requires only a single mounting hole, and has a fixed length and tracking angle. Tracking force is easily adjustable. Takes any stereo cartridge; less cartridge. In gleaming chrome and white enamel. Shpg. wt., 2 lbs.  
79 R 708. NET... 19.11

**EXTRA PLUG-IN HEAD.** For Garrard TPA/12 arm, above. Shpg. wt., 6 oz.  
89 R 551. NET... 1.47

## ELECTRO-SONIC (ESL) ARM-CARTRIDGE

S-1000 "GYRO-BALANCE" ARM. Stereo pickup arm featuring "Gyro-Balance" construction. Tracks at 2 grams with cartridge, below. Less cartridge, 2 lbs.  
72 RX 753. \$2.00 Down. NET... 34.95  
**EXTRA PLUG-IN HEAD.** 2 oz.  
79 R 711. NET... 2.95

**MODEL C-100 "GYRO-JEWEL" CARTRIDGE.** Response, 20-20,000 cps. Output: 2 mv per channel. Requires pair of TM-100 transformers, below. Tracks at 2-4 grams. With .0007" diamond stylus (factory-replaceable). Shpg. wt., 3 oz.  
79 RC 709. \$5.00 Down. NET... 69.95

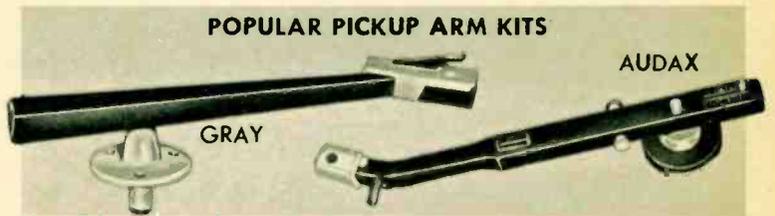
**TM-100 TRANSFORMERS.** For above; increase output to 8 mv. Shpg. wt., 3 oz.  
79 S 710. PKG. OF TWO... 15.00



## FAIRCHILD ARM & CARTRIDGE

**MODEL 282 ARM.** Handsome, skillfully engineered pickup arm. New spring suspension makes feather-light tracking possible—stylus pressure adjustment to below 1 gram. With two plug-in cartridge slides; takes any cartridge. Includes 6-ft. cables with molded plugs potted in arm post. Less cartridge. Shpg. wt., 6 lbs.  
72 RX 873. \$2.00 Down. NET... 42.50

**NEW MODEL SM-1 CARTRIDGE.** Employs rotating magnet principle for flawless reproduction from stereo and monophonic records. Better than 25 db channel separation. Response: 10 to 20,000 cps. With gram gauge and .0006" diamond stylus (user-replaceable). Output: 15 mv each channel at 7 cm/sec (does not require transformer). Mounts on ½" or ¾" centers. 3 oz.  
89 RC 218. \$2.00 Down. NET... 34.95



## POPULAR PICKUP ARM KITS

### NEW GRAY PICKUP ARM KIT

**MODEL SAK-12.** Save by assembling your own professional quality pickup arm. The Gray SAK-12 Kit contains all the famous engineering features of the widely accepted Gray 212-SP factory-assembled model. Gently tracks records, flawlessly reproducing sound with a minimum of record wear. Dual viscous damping feature in both lateral and vertical planes isolates the cartridge and reduces resonance. Only the stylus vibrates, not the arm. Overall length: 12". Tracking force is adjustable from 0 to 15 grams. Accommodates all cartridges. 4-terminal wiring. Attractive bone-white and black finish. Requires ⅝" mounting hole. Less cartridge. Shpg. wt., 2 lbs.  
89 RX 253. \$2.00 Down. NET... 23.95

**EXTRA PLUG-IN HEAD FOR ABOVE.** 2 oz.  
89 R 258. Model SPS. NET... 4.60

### AUDAX STEREO PICKUP ARM KITS AND STEREO CONVERSION KIT

**PICKUP ARMS.** Here's a pair of quality stereo-monophonic pickup arms in money-saving kit form—all you need for assembly is a screwdriver. Employ simple one-piece construction with no loose parts. Precision-made vertical and lateral pivot systems permit remarkably free arm motion. Arm channel structures change width between pivot and head to prevent audible resonance. Selector index permits adjustment of force for all popular cartridges. Less cartridge. Have three wires. 2½ lbs.  
72 R 748. KTS-16. 16". NET... 18.50  
72 R 747. KTS-12. 12". NET... 15.50

**KTS CONVERSION KIT.** Converts KT-12 and KT-16 pickup arms for stereo. 1 lb.  
72 R 749. NET... 4.95

## Stereo Conversion Kits for Changers and Turntables

### PICKERING MODEL 603 KIT

Quickly convert your changer or manual pickup arm for stereo with this low-cost, universal kit. For 3-wire cartridges. Everything you need is supplied with the kit. Includes all cable, plugs, clips, and instructions. All connections are made with plugs and clips supplied—no soldering is required. Less cartridge. Shpg. wt., 1 lb.  
91 S 539. NET... 2.98

**MODEL 604.** Same as above, but for 4-wire cartridges.  
89 S 255. NET... 3.98

### GARRARD MODEL SCK-1 KIT

Complete conversion kit for modernizing most Garrard changers for stereo. Converts the following models: RC121, RC88, RC98 and T Mk II. Kit consists of plug-in head, female connector, pickup arm cable, terminal block, output cables, hardware and detailed instructions. No soldering. Less cartridge. Shpg. wt., ½ lb.  
79 R 248. NET... 4.85

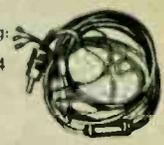
**MODEL SCK-2.** As above, but for Garrard RC121-11. Shpg. wt., ¾ lb.  
79 R 249. NET... 4.85

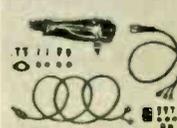
### BOGEN MODEL SCK KIT

(Not illus.) Has all accessories to convert Bogen manual players to stereo. Adapts all Model B50-16, B20, and B21 record players that now have a two-prong cartridge head and pickup arm assembly—lets you play stereo as well as monophonic discs.

Kit includes plug-in head, three-prong plug, output cable, three-prong tie strip, all mounting hardware needed. Simple solder connections. With instruction manual. Less cartridge. Shpg. wt., ½ lb.  
79 R 245. NET... 3.95

**Fast, Easy . . .  
Economical**

Pickering: 603, 604 

Garrard SCK-1 

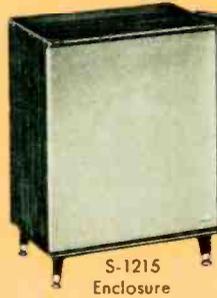
# W

## WELLCOR

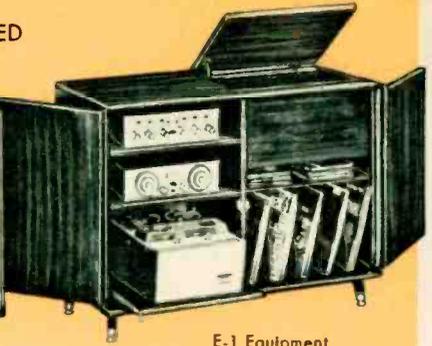
VERSATILE CABINETRY  
... ARTISTICALLY CRAFTED



LE-5 Equipment Cabinet



S-1215 Enclosure



E-1 Equipment Cabinet

### Famous WELLCOR Hi-Fi Equipment Cabinets & Speaker Enclosures

"COSMOPOLITAN" SERIES. Low-cost equipment cabinet and speaker enclosure (described below), specifically designed for people of discriminating taste who do not wish to make a substantial investment in furniture. Tastefully styled, the LS-1215 enclosure and LE-5 equipment cabinet are available in three natural wood veneers.

#### MODEL LS-1215 SPEAKER ENCLOSURE

An excellently designed, ducted-port bass reflex enclosure. Accommodates a 15" speaker, with removable adapter ring supplied for 12" speaker. Has covered cutouts for mounting additional tweeters and horns. Made of seasoned 3/4" plywood throughout. Ducted-port design brings out the full response of any speaker. Styled in latest contemporary design, suitable for use with any decor. Size, 32 1/2" high, 20" wide, 18" deep. Shpg. wt., 44 lbs.

70 DZ 214. Mahogany. \$2.00 Down. NET	46.50
70 DZ 215. Lined Oak. \$2.00 Down. NET	48.35
70 DZ 216. Walnut. \$2.00 Down. NET	48.35

#### MODEL LE-5 EQUIPMENT CABINET

Attractive, functional and compact, the LE-5 employs three-tier design for housing hi-fi components. Gives you more than adequate space for any two components. (amplifier, tuner, preamp), plus an easy-slide, sliding phono drawer. Hinged door employs a magnetic latch. At home in any decor, the fine appearance of this cabinet belies its remarkably low price. Inside compartment dimensions: upper, 6x18 1/2 x 16 1/2"; center section 6x18 1/2 x 16 1/2"; phono drawer, 12 1/2 x 18 1/2 x 16 1/2". Overall size, 32 1/2" high, 20" wide, 18" deep. In three beautiful veneers. Shpg. wt., 50 lbs.

70 DZ 211. Mahogany. \$5.00 Down. NET	57.50
70 DZ 212. Lined Oak. \$5.00 Down. NET	60.00
70 DZ 213. Walnut. \$5.00 Down. NET	60.00

"CONTINENTAL" SERIES. Masterpieces of fine furniture design, the speaker enclosure and equipment cabinet described below, are designed for the most demanding of hi-fi cabinet users. Finished in rich, natural wood veneers, they represent luxurious design at its best, plus the lasting beauty of truly fine furniture.

#### MODEL S-1215 SPEAKER ENCLOSURE

A distinctively styled enclosure that sounds as good as it looks. Speaker board is precut for mounting 15" speaker; removable adapter ring for 12" speaker is supplied. Acoustically padded interior; covered cutouts for mounting of additional tweeters and horns. Marching grille cloth is designed to accent the beauty of natural wood finishes. Includes all necessary mounting hardware, plus 4" self-leveling legs. Size, 32x24x20". Shpg. wt., 52 lbs.

70 DZ 220. Mahogany. \$5.00 Down. NET	72.00
70 DZ 221. Lined Oak. \$5.00 Down. NET	79.50
70 DZ 222. Walnut. \$5.00 Down. NET	79.50

#### MODEL E-1 EQUIPMENT CABINET

A beautiful equipment cabinet, featuring top-quality construction and fresh, contemporary styling. Accommodates record changer or tuntable, tuner, amplifier (or preamp), and tape recorder on slide-out shelf. Recessed, hinged doors have magnetic latches and distinctively styled, brass door pulls. Blank panel for custom mounting of components is included; adjustable shelf for tuner/amplifier compartment. Compartment sizes: changer, 10 1/4 x 20 3/4 x 17"; tuner/amplifier, 13 x 20 3/8 x 16 1/2"; tape recorder, 13 x 20 3/8 x 18 1/2". 5-partition compartment for records, 32 x 38 1/2 x 20". Wt., 116 lbs.

70 DZ 217. Mahogany. \$5.00 Down. NET	157.50
70 DZ 218. Lined Oak. \$5.00 Down. NET	172.50
70 DZ 219. Walnut. \$5.00 Down. NET	172.50



4471



4712 Equipment Cabinet



6004/413 Enclosure

## ARISTO-BILT

### Unfinished Hi-Fi Cabinets

#### MODEL 4471 EQUIPMENT CABINET

Beautiful, solidly built equipment cabinet featuring louvered doors. Attractively sets off your hi-fi components, as well as providing large area for book and record storage. Constructed of solid, durable Ponderosa pine, sanded, ready for finish of your choice. Two compartments: top, 9 1/2 x 33 3/4 x 14 3/4"; bottom, 12 1/2 x 33 3/4 x 14 3/4". Styling easily blends with any interior motif. Sliding doors. Overall size: 24 3/4" high, 35" wide, 16" deep. Supplied less leg set listed at right. Shpg. wt., 48 lbs.

70 DZ 272. \$2.00 Down. NET	24.15
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#### MODEL 4712 EQUIPMENT CABINET

An attractive, low-cost showcase for your hi-fi components or for record storage. Sliding louvered doors cover lower portion of cabinet. Two compartments: upper, 9 1/2 x 33 3/4 x 14 3/4"; lower, 12 1/2 x 33 3/4 x 14 3/4". 24 3/4 x 35 x 16". Top-quality Ponderosa pine, ready for finish. Less legs, below. 47 lbs.

70 DZ 273. NET	19.90
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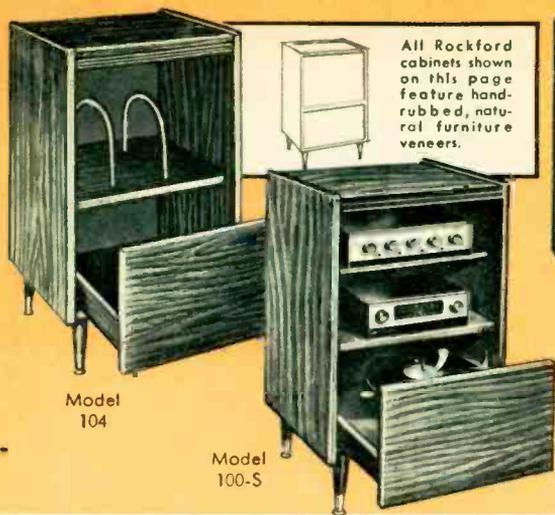
MODEL 413 LEG SET. Tapered wood legs, 5/4" long. Brass ferrules; screw-in mounting. 4 to set. Shpg. wt., 3 lbs.

70 DX 295. NET	3.27
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#### MODEL 6004/413 SPEAKER ENCLOSURE

Advanced styling, sturdy construction and excellent acoustic performance from this low-cost bass reflex enclosure. Panel cut out to accommodate any 12" speaker. Matches all the Aristo-Bilt units shown. Sturdy, 1/2" and 3/4" plywood paneling; no annoying reverberations. Luxurious design is accented by deluxe woven plastic grille cloth. Finely sanded, ready for finishing or painting in the color of your choice. Overall size: 30" high, 26" wide, 16" deep. With 5/8" legs. Shpg. wt., 36 lbs.

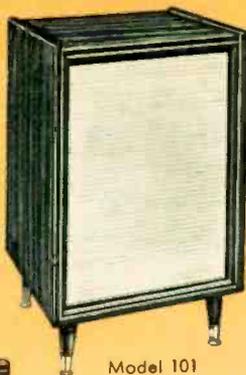
70 DZ 275. \$2.00 Down. NET	24.90
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Model 104

Model 100-S

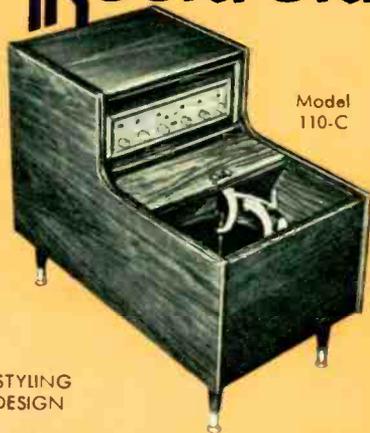
All Rockford cabinets shown on this page feature hand-rubbed, natural furniture veneers.



Model 101

COMBINE BEAUTIFUL STYLING WITH FUNCTIONAL DESIGN

# ROCKFORD



Model 110-C

## Low-Cost, Top-Quality ROCKFORD Hi-Fi Cabinets

### MODEL 104 COMBINATION RECORD AND EQUIPMENT CABINET

Both a functional and artistic addition to your listening room. Roomy record compartment neatly stores 100 LP's. Sliding bottom drawer is large enough to accommodate your choice of record changer, turntable or tape deck. Drop front rolls down, conceals record storage compartment when not in use.

Skillfully constructed of woods selected by experienced furniture craftsmen. Glistening hand-rubbed veneers add to its distinctive appearance. Sturdy legs, tipped with gleaming brass ferrules, add to the stylishness of your own decorative scheme. Matches Model 101 Enclosure at right.

Overall size, (HWD): 33x20x18". Record compartment is spacious 13½x18½x16½". Contains 2 metal dividers for convenient record filing. Bottom compartment is 10x18½x16". Available in mahogany, blonde or walnut finishes—specify when ordering. Shpg. wt., 55 lbs. 70 DZ 209C. \$2.00 Down. NET... 49.95

### MODEL 101 DUAL-DUCTED SPEAKER ENCLOSURE

Excellent choice in an expertly crafted speaker enclosure. Accommodates 12" speaker; Includes adapter board for tweeter mounting. Dual-ducted acoustic port design diffuses smooth, rich bass tones. Sturdy ¾" panels provide optimum in vibration-free performance. 6" legs tipped with brass swivel ferrules. Plastic grille cloth. 33x20x18". Specify mahogany, blonde or walnut finish. Shpg. wt., 50 lbs. 72 DZ 785C. \$2.00 Down. NET... 49.95

### MODEL 100-S EQUIPMENT CABINET

Budget-priced unit for tuner and amplifier, with slide-out phono drawer cut for Garrard RC121-II changer. (See right below for other mounting boards.) Matches Model 101 Enclosure listed above. Top section has adjustable shelf—measures 13½x18½x16½". Phono drawer, 10x18½x16". Overall size, 33x20x18". Specify mahogany, blonde or walnut. Shpg. wt., 49 lbs. 72 DZ 786C. \$5.00 Down. NET... 52.50

### MODEL 110-C CHAIRSIDE EQUIPMENT CABINET

The height of convenience—chairside control of your hi-fi system from your armchair! A masterpiece of functional design. The 110-C lets you play records and adjust controls on your tuner and amplifier without rising from your chair. Sliding drawer exposes changer compartment with mounting board pre-cut for Garrard RC121-II changer. Size, 3½" below and 6½" above board. 16½" wide, 15½" deep. (See listings of mounting boards for other changers, below.) Top compartment has blank panel for custom mounting and is 6½x16½x14". Lower compartment has same dimensions. 14x18x30" less legs. Includes 6" legs tipped with brass ferrules. Specify mahogany, blonde or walnut. 47 lbs.

70 DZ 208C. \$5.00 Down. NET... 59.95

MOUNTING BOARDS. Specify finish, 1½ lbs.  
70 DX 450C. For RC88 (in 110-C)... 2.25  
79 DX 293C. For RC88 (in 100-S)... 2.25  
70 DX 451C. Blank; for 110-C... 1.50  
79 DX 294C. Blank; for 100-S... 1.50

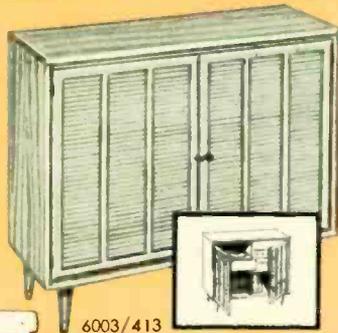


6001/413

## ARISTO-BILT

### MODEL 6001/413

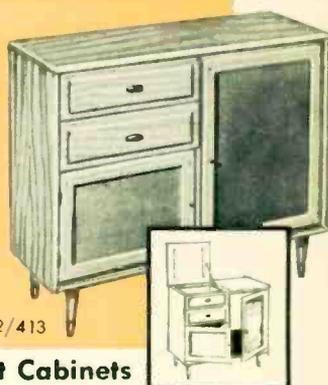
Elegantly styled and beautifully crafted—embodies the latest in functional, modern design. Has three sections: upper left with removable panel for tuner, amplifier, etc., is 10½x16½x15½"; upper right with pull-out drawer for record changer or player is 10½x16½x15½"; and bottom, consisting of a louvered sliding door cabinet, perfect for record storage or books, is 12½x33½x15½" in size. Overall size, 30x35x16". With 5½" legs. Made of choice-grade Ponderosa pine. Shpg. wt., 48 lbs. 70 DZ 274. \$2.00 Down. NET... 28.20



6003/413

### MODEL 6003/413

Two swing-out, louvered doors expose 4 roomy compartments in this top-value equipment cabinet. Upper left, with easy-action sliding phono drawer, is 10½x16½x15½" in size. Upper right, with removable panel, has a space 14½x16½x15½" in size. Lower left storage space is 12½x16½x15½"; lower right storage space, 8½x16½x15½". Made of choice-grade, kiln-dried Ponderosa pine—smoothly sanded, ready for finishing. Overall size, 30x35x16". With 5½" legs. Shpg. wt., 48 lbs. 70 DZ 296. \$2.00 Down. NET... 37.45



6002/413

### MODEL 6002/413

A gracefully styled equipment cabinet with a surprising amount of space. Lift-top phono compartment is 9½x16½x5½" in size. Two louvered doors, with attractive, woven plastic fabric, conceal other compartments. Upper right compartment, with removable panel is 14½x16½x15½". Lower left storage space is 12x16½x15½" in size; lower right storage space, 8½x16½x15½" in size. Overall size, 30x35x16". Smooth-sanded, choice-grade Ponderosa pine, ready for finishing. With 5½" legs. Wt., 48 lbs. 70 DZ 297. \$2.00 Down. NET... 35.60



## VIDAIRE High-Fidelity Controls



A



B



C



D



E



F



G



H

### SPEAKER PHASING SWITCH

**A** MODEL SP-5. For use with stereo speaker systems. Switch reverses polarity of one stereo speaker to insure proper phasing for the best stereo effect. Brass plate mounts on speaker enclosure or control panel. Solder terminals. With hardware. Panel.  $2\frac{1}{2} \times 2\frac{1}{8}$ ". Shpg. wt., 4 oz.  
89 S 113. NET ..... 1.05

### 2-SPEAKER SELECTOR SWITCH

**B** MODEL RS-10. Connects remote speaker to radio, TV or hi-fi set. Permits listening enjoyment in any room, porch or patio without "blasting" at source. Has 3 positions—turns on either speaker, or both. Brass plate is gold finished. With knob, and instructions. Solder terminals. Size.  $2\frac{1}{2} \times 2\frac{1}{8}$ ". Shpg. wt., 8 oz.  
94 S 474. NET ..... 98c

### SPEAKER FADER CONTROL

**C** MODEL RF-10. For variable distribution of volume between main speaker and remote. Decreases gain of one speaker while increasing gain of the other, etc. For 4-8 ohm speakers—rated 5-watts audio. Gold finished plate. With hardware; instructions. Solder terminals.  $2\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{4}$ ". 8 oz.  
94 S 473. NET ..... 1.15

### SPEAKER VOLUME CONTROL

**D** MODEL AL. L-pad speaker volume control. Mounts on enclosure or control panel. Brass finish. Rated 10-watts audio. With hardware. Solder terminals. Panel  $2\frac{1}{2} \times 2\frac{1}{8}$ ". Wt. 8 oz.  
89 S 108. AL-8. 8 ohms.  
89 S 107. AL-16. 16 ohms.  
NET EACH ..... 3.57

MODEL AT. As above, but T-pad type.  
89 S 110. AT-8. 8 ohms.  
89 S 109. AT-16. 16 ohms.  
NET EACH ..... 5.37

### SPEAKER SELECTOR SWITCHES

**E** MODEL MS-6. Convenient, low-cost selector switch for easy switching of up to 6 hi-fi or PA speakers. Constant impedance—switches speakers on or off providing 42 operating combinations. Ideal for multi-speaker installations. Brass plated. With hardware. Solder terminals. Panel  $3\frac{1}{2} \times 2\frac{3}{8}$ ". Shpg. wt., 8 oz.  
94 S 438. NET ..... 2.10

**F** MODEL MS-7. As above but mounts vertically. Designed to fit electrical-type wall boxes. With hardware. Solder terminals. Panel size  $4\frac{1}{2} \times 2\frac{3}{8}$ ". Wt., 8 oz.  
89 S 111. NET ..... 2.64

### DELUXE SPEAKER VOLUME CONTROLS

**G** MODEL BSL. Deluxe L-pad type speaker volume control with "On-Off" switch. Fits standard wall boxes. Attractive satin brass finish. Rated 10-watts audio. With hardware. Solder terminals. Plate.  $4\frac{1}{2} \times 2\frac{3}{8}$ ". Shpg. wt., 8 oz.  
89 S 102. BSL-8. 8 ohms.  
89 S 101. BSL-16. 16 ohms.  
NET EACH ..... 6.30

MODEL BST. As above, but T-pad type.  
89 S 104. BST-8. 8 ohms.  
89 S 103. BST-16. 16 ohms.  
NET EACH ..... 7.17

**H** MODEL JL. Similar to above, but less "On-Off" switch and with phone jack outputs on panel for "Phones" and "Speaker." Ideal for remote hi-fi listening, classrooms, auditoriums, hospitals, and other applications where both speakers and/or headphones may be used. L-pad controls volume of both outputs simultaneously. Attractive satin brass panel fits standard electrical-type wall boxes. Rated 10-watts audio. With hardware. Screw terminals. Panel  $4\frac{1}{2} \times 2\frac{3}{8}$ ". Shpg. wt., 8 oz.  
89 S 106. JL-8. 8 ohms.  
89 S 105. JL-16. 16 ohms.  
NET EACH ..... 7.77

## SWITCHCRAFT High-Fidelity Controls

### MULTI-SPEAKER SELECTOR

**J** MODEL 655. Seven position switch mounted on an attractive natural brushed-brass wall plate. Selects any of 3 speakers, all, or any 2 of 3 from any desired location. Fits standard electrical-type wall box. Constant impedance. Smart ivory knob with black and white lettered escutcheon. Has screw terminals—comes with hardware. Plate size.  $2\frac{3}{4} \times 4\frac{1}{4}$ ". Shpg. wt., 8 oz.  
89 S 808. NET ..... 5.26

### SPEAKER VOLUME CONTROL

**K** Custom-styled control for remote speakers. Size and appearance match Model 655 above. Constant-impedance T-pad regulates volume of any speaker(s) from any desired location. Rated 15 watts audio. Has screw terminals—no soldering. Comes with hardware. Shpg. wt., 8 oz.  
89 S 806. Model 651. 8 ohms.  
89 S 807. Model 652. 16 ohms.  
NET EACH ..... 8.82

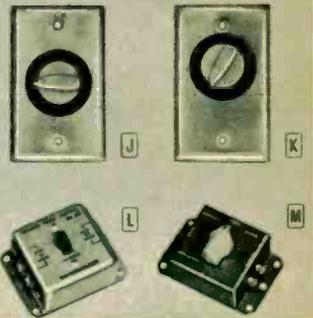
### SPEAKER PHASE CONTROL

**L** MODEL 665. For stereo or multiple speaker installations. Provides proper phasing of speakers at the flick of a switch. Mounted in attractive tan-finished, completely shielded housing. Comes complete with 4 mounting screws—mounts on cabinet or wall. Has screw terminals for ease of wiring—requires no soldering. Size.  $1\frac{1}{2} \times 2 \times 2$ ". Shpg. wt., 10 oz.  
89 S 805. NET ..... 1.47

### STEREO-MONOPHONIC SELECTOR

**M** MODEL 662. A versatile accessory for any stereo-monophonic music system. Provides instant switching from stereo to monophonic operation at amplifier input; permits reversing stereo channels at the flick of a switch. Has 2 phono jack inputs, 2 phono jack outputs. In tan-finished, shielded housing—mounts on cabinet, record player, etc. With hardware.  $1\frac{1}{2} \times 2 \times 2$ ". Wt., 10 oz.  
89 S 802. NET ..... 2.06

### SWITCHCRAFT



## High-Fidelity Accessories

### REMCON REMOTE SWITCH KIT

**N** Remote Off-On control for music systems. Kit consists of control unit (into which hi-fi system is plugged) and 3 switches with wall plates for standard AC boxes. Control handles 10 amps at 115 v. AC. Wiring to switches carries only 6 volts (supplied by control unit). Parallel wiring—as many switches as desired may be added. With instructions. For 110-120 v., 50-60 cycle AC. Shpg. wt., 1 $\frac{1}{2}$  lbs.  
94 S 435. NET ..... 11.75

### Accessories for Remcon Switch

100' 3-COND. CABLE. 2 lbs. 47 T 360. NET ..... 2.43  
TYPE S-1 EXTRA SWITCH. 4 oz. 94 S 436. NET ..... 35c  
TYPE PL-1 EXTRA WALL PLATE. 4 oz. 94 S 437. NET ..... 30c

### ROFLEX SHEATHED CABLE

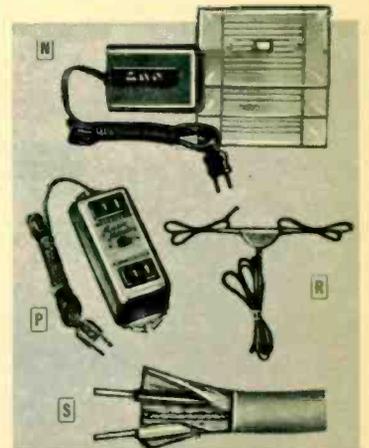
**S** For long speaker lines in indoor or outdoor applications. No. 14. 2-conductor solid. Thermoplastic insulated. Min. order 100 ft. Wt., 100 ft., 7 lbs.  
47 W 549. PER 100' ..... 6.23

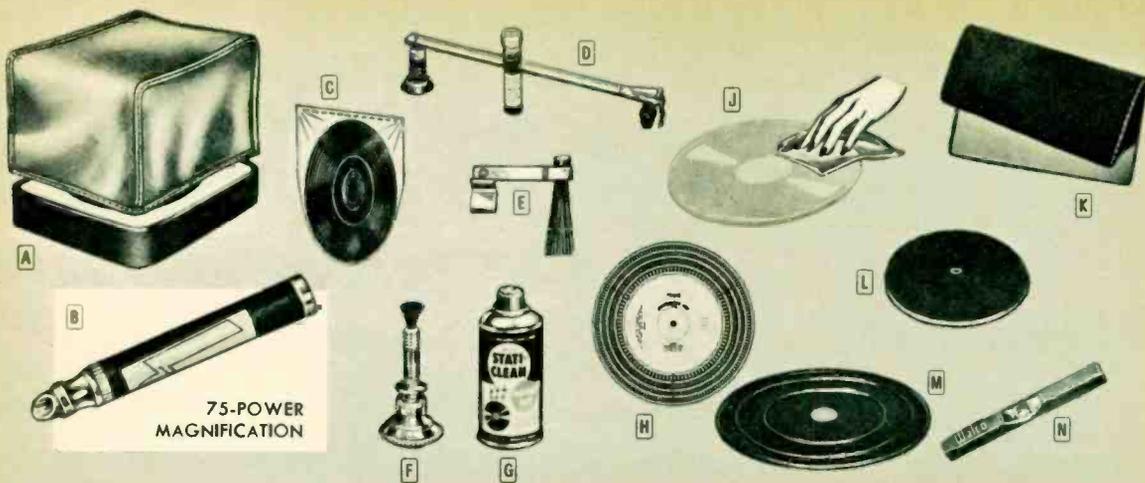
### NEW AUTOMATIC "MUSIC MINDER"

**P** MODEL 500. For use with music systems employing automatic record changers. When your changer shuts off (after the last record has played), the entire system is turned off. Permits you to fall asleep to your favorite records, etc., without leaving your amplifier on indefinitely. Simply plug the changer into one outlet on the "Music Minder" and the amplifier into the other one. Slide switch has Manual position for non-automatic operation. Size:  $6\frac{1}{2} \times 2 \times 1\frac{1}{2}$ ". Shpg. wt., 2 lbs.  
91 S 568. NET ..... 7.06

### FM TWIN-LINE ANTENNA

**R** Low cost, folded dipole type indoor antenna designed for FM reception. Eliminates need for outdoor antenna in many locations. Perfect for use where concealed antenna would be desirable, or where outdoor antenna installation is not feasible. Simply place under rug, behind cabinet or in any other out-of-the-way location. Antenna consists of 300 ohm twin-line with 6 ft. lead-in wire. Shpg. wt., 6 oz.  
92 C 019. NET ..... 1.23





## SELECTED RECORD CARE ACCESSORIES

### PLASTIC CHANGER COVER

**A** UNIVERSAL MODEL. For all record changers. Protects record changer from harmful effects of dust, moisture, etc. Made of durable, high-quality plastic for dependable service. Shpg. wt., 6 oz.

94 R 495. NET ..... 98c

**TURNABLE MODEL.** Fits all turntables. Cover size, 22x16½x9". Wt., 6 oz.

95 R 649. NET ..... 1.25

### STYLUS INSPECTION MICROSCOPE

**B** Pocket-size stylus inspection microscope. For checking stylus tip to detect imperfections and signs of wear. Approximately 75-power magnification. An easy-to-use "must" item for the serious record collector. Has groove for convenient centering of stylus tip in microscope field. Has sturdy metal barrel; adjustable objective lens. Imported from Japan. Size, 3¼" long x ½" dia. Shpg. wt., 8 oz.

65 RC 440. NET ..... 1.39

### WALCO PLASTIC DISC COVERS

**C** Protective sleeves for 10" and 12" records. Made of durable polyethylene plastic with thermoset seams to resist tearing. Prevent scratching of delicate record surfaces; seal out dust and moisture; end finger marking of records. Shpg. wt., 7 oz.

65 R 515. Pkg. of 15, 10" sleeves.

65 R 516. Pkg. of 15, 12" sleeves.

NET PER PACKAGE ..... 58c

### ESL "DUST BUG" RECORD BRUSH

**D** Lightweight plastic arm with fine nylon brush, pad-type dust collector, and vial of pad cleaning fluid. Arm is suction-cup mounted to base. Nylon bristles loosen dust and dirt in record grooves and pad picks up particles. Fluid cleans pad and dissipates static. Shpg. wt., ¼ lb.

94 R 529. For Changers. NET ..... 4.75

94 R 528. For Turntables. NET ..... 5.75

### WALCO CLIP-ON RECORD BRUSH

**E** Soft camel's hair brush for mounting on pickup arm; brushes record ahead of stylus to remove dust from grooves. Selected, lightweight fibers will not scratch record surfaces. Saves stylus and records. Easy to attach—simply clip in place. Does not interfere with tone arm tracking or stylus pressure. Shpg. wt., 3 oz.

69 R 226. NET ..... 49c

### "KLEENEEDLE" BRUSH

**F** Automatic record changer needle brush. Brush is positioned to face upward. Whenever pickup arm is cycled, stylus is wiped over brush. Removes accumulations of dust, lint, etc., from stylus tip—minimizes distortion in record reproduction and reduces record and stylus wear. Base has adhesive pad for easy mounting on any surface. Shpg. wt., 4 oz.

96 R 769. NET ..... 98c

### WALCO ANTI-STATIC RECORD SPRAY

**G** Easy-to-use, anti-static record spray. Deposits thin anti-static film on record surface. Aids in preventing records from accumulating damaging and noise-producing dust and lint. In handy 6 oz. aerosol spray can. Shpg. wt., 7 oz.

65 R 525. NET ..... 88c

### 4-SPEED STROBOSCOPIC CARD

**H** Use with any 50 or 60-cycle neon, argon or fluorescent lamp, or low-wattage incandescent lamp. Accurately checks 16½, 33½, 45 or 78 rpm speeds. Quickly tells you when equipment needs adjustment. Easy to use—simply place on record changer or turntable as with any record. Turntable is accurately revolving at desired speed when appropriate band of dots appears to be stationary. Shpg. wt., 2 oz.

69 R 915. NET ..... 20c

### JENSEN ANTI-STATIC "SILCLOTH"

**J** Anti-static, silicone-treated record wiping cloth. Deposits microscopic film—prevents records from attracting noise-producing lint and grit. Helps maintain quiet, pop-free reproduction. In handy, plastic storage case. Shpg. wt., 5 oz.

65 R 531. NET ..... 59c

### ACOUSTIC ISOLATION PAD

**K** Designed to minimize acoustic feedback, reduce excess noise and protect furniture finishes from heat. Place under record changer bases, tape recorders, amplifiers, etc., to absorb vibration. Made of highly resilient urethane foam. Size, 13½x16½". Shpg. wt., ¾ lb.

69 R 234. NET ..... 1.00

### PROTECTIVE TURNTABLE MATS

**L** 12" Diameter. Low-priced, foam rubber record player mat. Fits any turntable or changer. Cushions record drop on automatic changers. 12" dia.; ¼" thick. 4 oz.

69 R 233. NET ..... 69c

9½" Diameter. Shpg. wt., 4 oz.

69 R 280. NET ..... 59c

### WEATHERS "DISCUSHION"

**M** MODEL P-684. Unique idea in record pads. Protects grooves from scratches, dust on turntable, etc. Has 3 circular ridges, in graduated heights, centered 7", 10" and 12" from spindle hole. A 12" record rides on the outside ridge; 10" record on center ridge; 7" on inside ridge. Only rim of record touches ridge. Dia., 12". 5 oz.

93 R 710. NET ..... 2.98

### WALCO TURNTABLE LEVEL

**N** For accurate levelling of turntables and record changers; insures correct tracking of lead-in and changer trip grooves, and prevents excessive record and stylus wear. Gold-finish. Shpg. wt., 4 oz.

69 R 225. NET ..... 59c



**P** LEKTROSTAT RECORD CLEANING KIT. Ideal for thoroughly and safely removing grease, lint and dust from record grooves. Kit contains plastic bottle (1½ fluid oz.) of anti-static detergent fluid, and tufted wiping pad. Solution is applied to record; then wiped with pad. Shpg. wt., 5 oz.

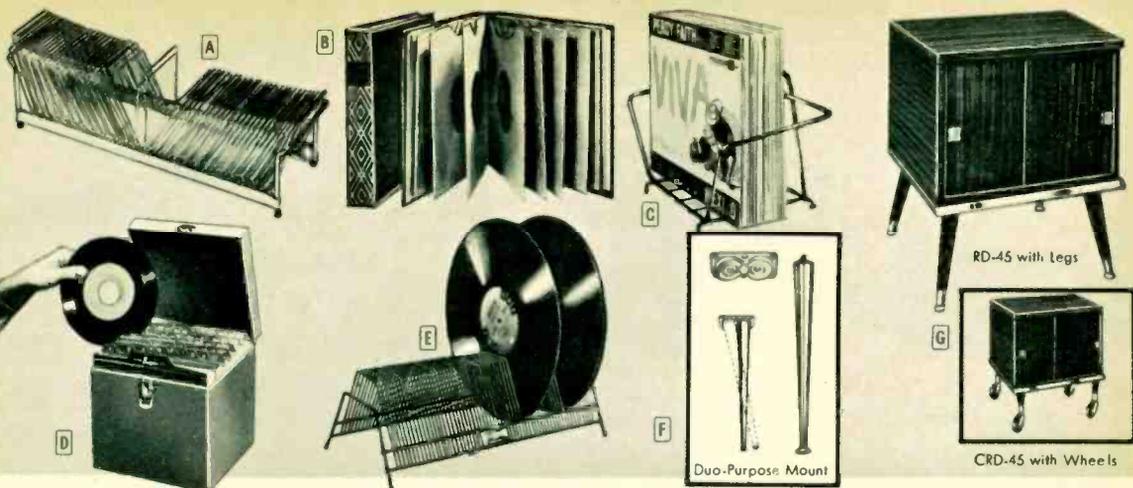
64 R 866. NET ..... 1.96

**R** ANTI-STATIC "ATOMIC JEWEL". Highly effective static neutralizer. Consists of a tiny jewel on a clip. Makes records dust resistant by neutralizing static electric charges which attract dust. Weighs less than 1/50th of an ounce. Clips to tone arm, but does not interfere with tracking. Reduces record noise; increases record and stylus life. Shpg. wt., 3 oz.

96 R 768. NET ..... 2.94

**S** FEDTRO TURNTABLE LEVEL. High-quality level for precise levelling of turntables and record changers. Permits quickly checking the turntable both in the "off" position, and dynamically when the turntable is spinning. Water bubble level shows slightest tilt in cross hairs—aims in improving tracking accuracy. Helps preserve records—adds to the life of the styli—greatly improves fidelity. A "must" for the serious record collector. Shpg. wt., 6 oz.

79 R 239. List. \$3.50. NET ..... 1.95



## QUALITY PHONOGRAPH ACCESSORIES

### NEW 7", 10" & 12" RECORD RACK

**A** "PIC-A-DISC." Low-cost, uniquely styled record holder. Minimizes record warpage. Features individually hinged wire record retainers that permit convenient, immediate selection of the desired record. Holds fifty 7", 10" or 12" records in jackets. Steel; finished in brass. 5 lbs.  
92 RX 751. NET. 4.98

### RECORD ALBUMS

**B** STANDARD, 12-pocket album. Wine color fabricoid cover. Index. Wt., 1½ lbs.  
96 R 850. 10" Size. EACH ..... 68c  
3 or More, EACH ..... 61c  
96 RX 851. 12" Size. EACH ..... 85c  
3 or More, EACH ..... 76c  
SPANISH-GRAINED, 12 Kraft-paper envelopes in binder. Maroon leatherette cover; gold stamped back. With index. Wt., 2 lbs.  
96 R 856. 10" Size. EACH ..... 90c  
3 or More, EACH ..... 81c  
96 R 857. 12" Size. EACH ..... 1.06  
3 or More, EACH ..... 96c  
FOR 7" RECORDS. Holds 12. Cover in simulated leather; gold stamping. With record index. Shpg. wt., 1 lb.  
96 R 845. Red. NET ..... 45c  
96 R 846. Brown. EACH ..... 41c  
3 or More, EACH ..... 41c

### NEW BROWSING RECORD RACK

**C** MODEL 63 BROWSER RACK. Compactly designed record holder at low cost. Holds up to forty records in jackets. Ideal for both home or store-counter use. Durable, all-steel construction; highly attractive, gleaming brass finish. Complete with ball feet to protect furniture or counter-top surfaces. Shpg. wt., 2½ lbs.  
92 RX 748. NET. 1.49

### DISC STORAGE & CARRYING CASES

**D** For travel or home storage. 7" case holds 80 records; 12" case holds 36 records. Metal construction; plastic handles. Green and gray two-tone wrinkle finish.  
MODEL 49—7" CASE. Shpg. wt., 4 lbs.  
96 RX 849. NET. 3.95  
MODEL 46-P—12" CASE. Wt., 7 lbs.  
95 RX 894. NET. 4.90

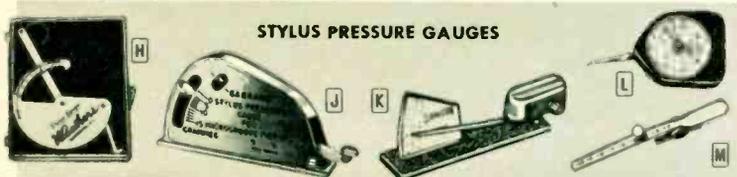
### RECORD HOLDER

**E** FLAT-TOP RECORD HOLDER. Accommodates sixty 7", 10" or 12" records with or without jackets. Brass finish complements any style of room decoration. Only 16½" long—ideal for limited space applications. Dividers are of heavy gauge steel with brass plating. Plastic-tipped legs. 16½x8x5½". Shpg. wt., 3 lbs.  
94 RX 942. NET. 2.59

### RECORD STORAGE CABINETS

**G** UNIVERSAL WOODCRAFTERS, MODEL RD-45. An extra-spacious phonograph table and record storage cabinet with sliding doors, at a remarkably low price. Strongly constructed of ¾" plywood with ½" Duolux doors. Available in highly attractive mahogany or blonde furniture veneers to blend harmoniously with any decor. Interior provides space for storing 7", 10" and 12" records. Has removable dividers. Holds about 100 LP albums. Tapered legs have brass ferrules and levelers. 27x22x20". Shpg. wt., 32 lbs.  
92 DU 850. Mahogany. NET ..... 18.50  
92 DU 851. Blonde. EACH ..... 18.50  
MODEL CRD-45. Same cabinet as above, but with 3" plastic wheels. 26" high. Wt., 34 lbs.  
92 DU 852. Mahogany. NET ..... 19.95  
92 DU 853. Blonde. EACH ..... 19.95

**F** TAPERED BRASS LEG KITS. Low-cost, seamless metal leg kits, in 4 handy lengths. For installing under do-it-yourself tables, cabinets, etc. Kits include 4 tapered legs, 4 duo purpose brackets (for mounting legs in straight or angle position), and screws. Handsome brass finish.  
79 D 196. 3¼" Kit. Wt., 2 lbs. NET ..... 3.19  
79 D 197. 6" Kit. Wt., 3 lbs. NET ..... 3.39  
79 D 198. 12" Kit. Wt., 4 lbs. NET ..... 3.98  
79 D 199. 14" Kit. Wt., 5 lbs. NET ..... 4.19



### STYLUS PRESSURE GAUGES

**H** WEATHERS STYLUS GAUGE. Simple-to-operate, accurate measure of stylus pressure. Indicates stylus force in grams. Calibrated from 0 to 10 grams for extreme accuracy. Shpg. wt., 5 oz.  
69 R 232. NET. 2.00

**J** GARRARD STYLUS PRESSURE GAUGE. Accurately measures weight exerted by a stylus upon a record. Markings in one gram intervals to 15 grams. All moving parts are lightweight alloy, sealed for added protection. Ideal aid for increasing record and needle life. Shpg. wt., 5 oz.  
96 R 504. NET. 2.45

**K** CLARKSTAN STYLUS PRESSURE GAUGE. Sensitive gauge featuring two scales. One scale is calibrated in grams from 0 to 28.4; other scale is calibrated from 1 to 4 ounces. Shpg. wt., 5 oz.  
85 R 029. NET. 1.76

**L** SCHERR DYNAMOMETER STYLUS PRESSURE GAUGE. Top-quality, dynamometer-type pressure gauge. Extremely accurate and easy to use. Scientifically calibrated in markings from 2 to 15 grams. Highly reliable readings. To operate, simply place knob under cartridge and raise. Precision-made in France. Shpg. wt., 12 oz.  
79 RC 246. NET. 11.65

**M** WALCO STYLUS PRESSURE GAUGE. Unique, easy-to-operate "microbalance" pressure gauge. Valuable aid for increasing record and stylus life. Uses laboratory-balance principle to achieve extreme accuracy from 2 to 10 grams. No springs or cams are employed. Simply set the correct weight for your cartridge (as recommended by the cartridge manufacturer) on the gauge. Then adjust the counterweight on pickup arm until arm is in balance. Shpg. wt., 6 oz.  
89 R 151. NET. 1.00

### Protect Your Records



### UNIQUE "DEXTRA-FIX" PICKUP ARM POSITIONER

Precision-made accessory for use with any turntable. The "Dextra-Fix" gently and accurately raises or lowers the pickup arm with a lever-type control, to permit precise placement of the pickup arm on any desired section of a record. Prolongs record and stylus life by eliminating accidental dropping of arm. Simple to install and operate—adjusts to any pickup arm height. An invaluable aid for the audiophile. With instructions. Shpg. wt., 5 oz.  
89 R 150. NET. 4.25



2-piece portable stereo ensemble that sets up in any room in a matter of moments. Plays all speeds.

Automatic changer intermixes all sizes

## Top Values In Stereo Phonos

### Deluxe Stereo Automatic Phono

NET  
**\$124.50**

- 2—8" Woofers; 2—4" Tweeters
- Wide Response; 30-20,000 Cps.
- Deluxe Changer with Intermix Feature
- Plays All Speeds and All Sizes

Only \$5.00 Down

Superbly-styled, deluxe portable phono that delivers exciting stereo reproduction. Features smooth-operating, 4-speed record changer and powerful 15-watt stereo amplifier with 2 separate speaker systems. Rumble-free changer has positive drive mechanism for constant speed without vibration. Automatically intermixes all size records of the same speed—then shuts off by itself after last disc has played. Long-life cartridge with dual sapphire styli even makes your old 78's sound better than ever. Dual 7½-watt amplifiers provide up to 30 watts peak power, give amazing realism to high passages. Detachable speaker systems each contain 8" woofer, 4" tweeter and crossover. 2—8 ft. speaker cables allow you to spread speakers as far as 17 ft. apart. Dual controls for individual channel adjustment of loudness, bass and treble. Stereo balance control to eliminate hole-in-middle effect. Beautifully designed case is leatherette; in contrasting smoked gray and silver tweed. Supplied complete with 45 rpm spindle. Size (HWD), 9¼x25x19½". Underwriters' Laboratories Approved. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs.

89 RU 467. List, \$164.95. \$5.00 Down. NET 124.50

### Stereophonic Automatic Phono

NET  
**\$84.50**

- Dual Speaker Systems; 4 Speakers
- Turnover Cartridge With Sapphire Styli
- Automatic Shut-Off After Last Record
- Includes Stereo Balance Control

Only \$5.00 Down

An extraordinary buy in a portable stereo phono. Includes two separate speaker systems; each with 2—4" speakers that realistically reproduce all the rich bass and treble overtones. Precision-built changer automatically intermixes all size records of the same speed. Heavy-duty motor and positive drive mechanism assure constant speed, without annoying rumble or vibration. After last record has been played, idler is automatically disengaged, switch shifts into neutral position. Auxiliary speaker detaches from front of main unit—15-ft. cable allows wide speaker placement. Long-life, turnover cartridge with dual styli. Dual-channel amplifier provides peak power up to 10 watts per channel. Excellent tonal quality and wide frequency response with low distortion. Three handy knobs provide complete stereo control. Dual controls for individual channel adjustment of volume and tone. Single stereo balance control eliminates hole-in-middle effect. Wood case in Erin green and galaxy white. With 45 rpm spindle. 9½x8¾x22¾". Underwriters' Laboratories Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 31 lbs.

89 RU 468. List, \$104.95. \$5.00 Down. NET 84.50

### Portable Stereo Phono

### 4-SPEED MONOPHONIC PHONOS



Modern, handsomely styled portable phono for brilliant stereo sound. Two Alnico V 4" PM speakers—one in main unit, other in removable lid, allow optimum spacing for excellent stereo. Two-channel stereo amplifier with 2 tubes and selenium rectifier produces wide range reproduction. Famous BSR 4-speed automatic changer features smooth, quiet operation. Plays all record sizes, all speeds. Intermixes 10 and 12" records of same speed. Automatically shuts off after last record has been played. Has rubber turntable mat to protect grooves of your records. Turnover stereo cartridge with dual sapphire styli. Lightweight pickup arm is cushioned for record protection. Slim-line, luggage-type carrying case is constructed of quality wood, covered with attractive simulated leather. Removable cover with auxiliary speaker has 12-ft. connecting cord and plug. Individual volume controls for each channel. Colonial black and white. 8½x14½x17". For 105-125 v., 60 cycle AC. Shpg. wt., 22 lbs. \$5.00 Down.

89 RU 462. List, \$69.95. NET 51.95

### BOGEN VP-17X TRANSCRIPTION PLAYER

### SINGLE-PLAY 4-SPEED PORTABLE

An extremely versatile combination of player, amplifier, and speaker in a portable unit. Has built-in 10-watt amplifier, plus microphone input with separate gain control—makes an excellent portable P.A. system. Has outstanding Bogen B50-16 turntable—features continuously variable speed from 16 to 86 rpm. Plays all records up to 16" dia., with splendid sound quality and minimum record wear. Lever has lock-in positions for 16½, 33½, 45, 78 rpm. Heavy 4-pole motor and balanced turntable reduce wow, hum and rumble to negligible values. Precision-built pickup arm equipped with G.E. variable reluctance cartridge with dual sapphire styli. 12" Alnico V speaker is mounted in removable lid of carrying case; has 25 ft. of cable. 2 jacks for external speakers. Separate bass and treble controls; scratch and noise filter. ½" plywood luggage-type carrying case. Mic response, 50-10,000 cps; phono and radio, 40-12,000 cps. 12½x17x16¼". For 110-120 v., 50-60 cycle AC. Shpg. wt., 40 lbs. \$5.00 Down.

95 RU 959. List, \$181.90. NET 136.43

Low cost manual portable phonograph that's just right for the den, recreation room, or children's room. Attractively styled unit plays 7, 10, and 12" records at speeds of 16½, 33½, 45, and 78 rpm. Constant-speed, quiet operating motor. Metal turntable has built-in adapter for 45 rpm records, as well as rubber mat that protects record grooves from scratches, dust on turntable, etc. Lightweight cushioned pickup arm has turnover cartridge with two sapphire styli. One needle plays conventional 16½, 33½, and 45 rpm. other plays 78's. Expertly designed amplifier with one tube and selenium rectifier provides crisp, clear sound. High-quality Alnico V PM dynamic speaker delivers faithful sound reproduction. Two controls: Off/On-Volume; Tone. Modern, slim-lined luggage type case is tastefully styled in white and black. Covering is durable, simulated leather. Has comfort-grip handle for easy carrying. Size (HWD), 6½x12¾x10½". For operation from 110-117 volts, 60 cycle AC. Shpg. wt., 12 lbs.

89 RU 466. List, \$24.95. NET 17.95

# SELECTED STEREO HIGH FIDELITY RECORDS

**SAVE 20% OFF LIST**

Enlarge your stereo record collection—at big 20% savings off the regular list price. The records listed below offer the ultimate in brilliantly realistic stereo—each one is a thrilling adventure in full dimensional sound. All are 12", 33½ rpm speed, engineered and recorded with painstaking care. *Note: Stereo records must be played with a stereo cartridge. When ordering, give Stock No., Record No., and Record Title. Av. shipg. wt., 10 oz.*

**Convert to Stereo.** If you now have a hi-fi system, you may easily convert it for stereo records by adding a stereo cartridge to your changer or turntable, plus another amplifier and speaker for the second sound channel. If you have a stereo tape system, conversion is simple—all you do is plug a changer or turntable equipped with a stereo cartridge, into the phono inputs.



## ABC PARAMOUNT

Record No.	Record Title
ABCS-218	EYDIE GORME VAMPS THE ROARING 20's. Don Costa Orch.
ABCS-221	HEAVENLY SOUNDS IN HI-FI. Ferrante and Teicher.
ABCS-224	HI-FI IN AN ORIENTAL GARDEN. Authentic oriental music.
ABCS-235	SOUTH PACIFIC IN JAZZ. Featuring Tony Scott Quartet.
ABCS-246	EYDIE IN LOVE. Ballads in the Gorme style.
ABCS-249	MELACHRINO'S MAGIC STRINGS. George Melachrino Orch.
ABCS-248	EXCITING SOUNDS FROM ROMANTIC PLACES. Leo Diamond
ABCS-275	STASH! STAN WOLOVIC & THE POLKA CHIPS. Lively polkas.

26 RR 756. Specify Record No. and Title. NET EACH ..... 3.98

## DOT

Record No.	Record Title
DLP-25016	THE GOLDEN INSTRUMENTALS. Billy Vaughn Orch. Hit pops.
DLP-25068	HYMNS WE LOVE. Vocals by Pat Boone.
DLP-25100	SAIL ALONG SILVER MOON. Billy Vaughn Orch.
DLP-25108	RAGTIME PIANO 1917-18. Johnny Maddox at the keyboard.
DLP-25118	STAR DUST. Pat Boone sings romantic tunes.
DLP-25122	JOHNNY MADDOX PLAYS THE MILLION SELLERS. All time hits.
DLP-25156	BILLY VAUGHN PLAYS. Instrumental music.
DLP-25164	MR. MUSIC MAKER. Lawrence Welk and His Champagne Music.

26 RR 754. Specify Record No. and Title. NET EACH ..... 3.98

## BEL CANTO

Record No.	Record Title
SR-1002	ALOHA TO JAZZ. Music by the Polynesians; B. Collette.
SR-1903	BEER BARREL POLKA TIME. Razzberry Reynolds and Band.
SR-1007	INTRODUCING SI ZENTNER AND HIS DANCE BAND.
SR-1011	HIGH NOON CHA CHA CHA. Film music to dance to.
SR-1012	NEW SOUNDS OF ORRIN TUCKER. Orrin Tucker and Orch.
SR-1013	DREAM—ORRIN TUCKER. Relaxing instrumental selections.
SR-1014	SWING FEVER—SI ZENTNER. Si Zentner and Orch.
SR-1018	STRICTLY FOR DANCING—MAX PILLAR. Dance melodies.

26 RR 758. Specify Record No. and Title. NET EACH ..... 4.76

## CONCERTDISC

Record No.	Record Title
CS-21	RE-PERCUSION. The Percussive Art Ensemble.
CS-22	SOUND IN THE ROUND. Ping-pong. Planes, Subway, Rain, etc.
CS-23	MY FAIR LADY AND GIGI SELECTIONS. Instrumental.
CS-24	DANCING AND DREAMING. The Jay Norman Quintet.
CS-25	FOURCRACKER SUITE, ROMAN CARNIVAL; DIE M'SINGER.
CS-29	FAVORITE SHOW TUNES. Sorkin Strings with B'way music.
CS-36	SILK, SATIN & STRINGS. Radiant Velvet Orch. 15 tunes.
CS-42	SYMPHONY OF THE DANCE. Classical dances.

26 RR 757. Specify Record No. and Title. NET EACH ..... 4.76

## LONDON

Record No.	Record Title
PS-106	GEMS FOREVER. Mantovani and His Orchestra.
PS-110	ROS ON BROADWAY. Edmondo Ros and delicate Latin flavor.
PS-117	ALL TIME TOP TWELVE. Ted Heath and His Music.
PS-124	FILM ENCORES. Mantovani plays music from the films.
PS-133	CONCERT ENCORES. Mantovani plays the light classics.
PS-137	CUBAN MOONLIGHT. Stanley Black and Cuban rhythms.
PS-147	CONTINENTAL ENCORES. Mantovani; pops from Europe.
PS-151	FROM DAVID WITH LOVE. Vocals by David Whitfield.

26 RR 750. Specify Record No. and Title. NET EACH ..... 3.98

## MERCURY

Record No.	Record Title
SR-90001	CARMEN SUITE; L'ARLESIEUNNE SUITES 1 & 2. Detroit Sym.
SR-90002	CONCERTO IN F; RHAPSODY IN BLUE. Eastman-Rochester Orch.
SR-90009	MUSIC OF LEROY ANDERSON. VOL. 1. Eastman-Rochester Orch.
SR-90016	GAITE PARISIENNE; GRADUATION BALL. Minneapolis Sym.
SR-90054	1812 OVERTURE; CAPRICCIO ITALIEN. Minneapolis Sym.
SR-90195	SCHEHERAZADE. Minneapolis Symphony Orchestra.

26 RR 764. Specify Record No. and Title. NET EACH ..... 4.76

## FAIRLANE

Record No.	Record Title
S-501	HAVE HORNS; WILL DIXIELAND. The Dixieland Ramblers.
S-502	PIPE ORGAN SPECTACULAR. James Magnuson plays top pops.
S-505	IT'S COCKTAIL DANCE TIME. Paul Tanner and the Fairlanes
S-506	HALF AND HALF. Henry King plays Latin and fox trots.
S-507	MERRY-GO-ROUND MUSIC. Lincoln Park Band Organ.
S-508	POLKA TIME. Stanley Makowski and All-Star Band.

26 RR 759. Specify Record No. and Title. NET EACH ..... 2.38

## RCA

Record No.	Record Title
LSP-1001	MUSIC FOR RELAXATION. Melachrino Strings.
LSP-1522	NEW GLENN MILLER ORCH. IN HI-FI. Ray McKinley Orch.
LSP-1529	CANADIAN SUNSET. Eddie Heywood at the piano.
LSP-1556	"PREZ." Selections by Perez Prado and his Orch.
LSP-1676	UNDER WESTERN SKIES. Melachrino Strings.

26 RR 761. Specify Record No. and Title. NET EACH ..... 3.98

## STEREO FIDELITY

Record No.	Record Title
SF-1600	SHOWTIME IN STEREO. Complete, authentic minstrel show.
SF-2000	JOHANN STRAUSS WALTZES. The Danube Strings.
SF-2700	MY FAIR LADY AND THE KING AND I. Instrumental.
SF-2800	AROUND THE WORLD IN 80 DAYS. Original film score.
SF-2900	THE BALLET. Scores of "Swan Lake," and "Pygmalion."

26 RR 749. Specify Record No. and Title. NET EACH ..... 2.38

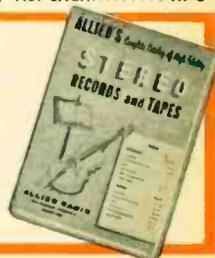
## WESTMINSTER

Record No.	Record Title
WST15008	INDIAN LOVE CALL. Rudolf Friml and Orch.
WST15011	SOUNDPROOF! Ferrante and Teicher duo-piano team.
WST15012	TABU. Ralph Font and his Orch. play Latin rhythms.
WST15023	LOVE STORY. Sy Shaffer and Orch.

26 RR 778. Specify Record No. and Title. NET EACH ..... 4.76

## FREE! Stereo Tape and Record Catalog

Yours for the asking—Allied's complete catalog of stereo tapes and stereo records. Write today for your free copy of this handy guide to good listening. Ask for Stock No. 26 RR 999.



## COMPLETE LANGUAGE COURSES FOR HOME STUDY

AS LOW AS  
**\$475**

- Choice of French, Spanish, German, Italian, English or Russian Courses
- Skillfully Recorded, 12" Long-Play Records
- Include Dictionary and Conversation Manual

Now's the time to learn another language—quickly and easily—with all the benefits of private instruction. These carefully prepared records are based on a system successfully employed by the United States Government War Department. Through their use, thousands of men, without previous preparation, have been taught to read and understand foreign languages. Regardless of education or age, practically anyone can learn. A must for those planning vacations or business trips overseas. Complete Russian and

English courses are each on a single 12", 33½ rpm record; other language courses are in sets of two 12", 33½ rpm records. Each course includes 2 books; a conversation manual, and combination grammar and dictionary. Evaluated and approved by many schools in U.S. and Canada. 3 lbs.  
26 RR 784. Russian or English—specify choice. List, \$5.95. NET PER COURSE ..... 4.75  
26 RR 785. French, Spanish, German or Italian. List, \$9.95. NET PER COURSE ..... 7.95



Be Sure To Specify Stock Number, Record Number and Record Title When Ordering

# SELECTED 2-TRACK STEREO HIGH-FIDELITY TAPES

**FREE!**  
STEREO

SAVE **25%** OFF LIST

Now's the time to add to your library of stereophonic tapes—with big 25% savings off the normal list price. Each of the recordings is a product of brilliant engineering techniques—so clear, so realistic that they rival the original performance in sheer beauty. You'll hear dazzling stereophonic sound, re-creating each instrument in its proper place, with every sound in its proper perspective. All of the tapes are recorded at standard 7½" per second speed, and are for playback on tape mechanisms employing in-line (stacked) tape heads only. Although they are designed for dual track playback, the tapes can also be played on most 4-track playback units, too. Many playback units have a switch to select 2- or 4-track operation. No matter what your musical taste, you're sure to find tapes you'll enjoy. *When ordering tapes, be sure to include Stock Number, Tape Number, and Tape Title. Av. shpg. wt., 12 oz.*

## TAPE AND RECORD CATALOG

The tapes listed below are only a sampling of our large listing of stereo tapes and records. For a complete listing of stereo tapes and records, ask for Allied's Catalog of Stereo Tapes and Records. It's yours free. Write for Stock No. 26 RR 999.

### BEL CANTO

Stock No.	Tape No.	Tape Title	List	NET
26 RR 995	STA-8	SYMPHONY FOR GLENN. Hamburg Philharmonia. Miller tunes.	\$11.95	8.98
26 RR 995	STA-20	AROUND THE WORLD IN EIGHTY DAYS. Film score.	11.95	8.98
26 RR 996	STB-19	MY FAIR LADY AND THE KING AND I. Symphonic impressions.	9.95	7.48
26 RR 996	STB-36	SOUTH PACIFIC. Symphonic impressions of famous musical.	9.95	7.48
26 RR 996	STB-47	HIGH NOON CHA CHA CHA. Film music in cha cha cha tempo.	9.95	7.48
26 RR 996	STB-48	NEW SOUNDS OF ORRIN TUCKER. Orrin Tucker and Orchestra.	9.95	7.48
26 RR 996	STB-58	BILLY VAUGHN PLAYS THE MILLIDN SELLERS. B. Vaughn Orchestra.	9.95	7.48
26 RR 996	STB-59	STARDUST. Pat Boone sings romantic melodies.	9.95	7.48
26 RR 996	STB-62	SAIL ALONG SILV'RY MOON. Billy Vaughn and Orchestra.	9.95	7.48
26 RR 997	STC-7	POLKA PARTY IN STEREO. Pollicking fun in polka time.	7.95	5.96
26 RR 997	STC-35	LAWRENCE WELK - CHAMPAGNE MUSIC. America's music king.	7.95	5.96
26 RR 997	STC-36	LAWRENCE WELK - WALTZ AND POLKA. Danceable melodies.	7.95	5.96

### CONCERTAPE

26 RR 988	22-2	FAVORITE SHOW TUNES, NO. 1. Leonard Sorkin Strings.	11.95	8.98
26 RR 988	22-6	FAVORITE SHOW TUNES, NO. 2. Leonard Sorkin Strings.	11.95	8.98
26 RR 988	24-2	DANCING AND DREAMING. Jay Norman Quintet. Smooth treatment.	11.95	8.98
26 RR 988	25-1	RE-PERCUSSIVE. Percussive Art Ensemble. Impressive sound.	11.95	8.98
26 RR 989	101-A	MUSIC OF JOHANN STRAUSS. Musical Arts Sinfonietta.	7.95	5.96
26 RR 990	501	SOUND IN THE ROUND, VOL. 1. Stereo demonstration tape.	7.95	5.96
26 RR 990	503	TEMPO NUEVO. The Concertape Orch. Melodies in the Latin mood.	7.95	5.96
26 RR 990	504	SOUND IN THE ROUND, VOL. II. Highly realistic, everyday sounds.	7.95	5.96
26 RR 990	513	MY FAIR LADY. Radiant Velvet Strings; songs from this hit show.	7.95	5.96

### CONCERTAPE

### EVEREST

26 RR 972	STBR-1009	THE HERD RIDES IN STEREO. Woody Herman and Orchestra.	10.95	8.25
26 RR 972	STBR-1011	ROCK AND ROLL SYMPHONY. Raymond Scott and Orchestra.	10.95	8.25
26 RR 972	STBR-1012	CHEROKEE. Swinin' sounds by Charley Barnett Orchestra.	10.95	8.25
26 RR 972	STBR-1014	HERMAN'S HEAT AND PUENTES BEAT. Woody Herman; Tito Puente.	10.95	8.25
26 RR 972	STBR-1015	MIKE TODD'S BROADWAY. Music from Todd productions.	10.95	8.25
26 RR 972	STBR-1019	MITCHELL AYRES - PLAYS ROMANTIC BALLADS FOR YOU.	10.95	8.25
26 RR 972	STBR-1021	MUSIC TAILORED TO YOUR TASTE. Derek Boulton and Orchestra.	10.95	8.25
26 RR 973	STBR-2001	MUSICAL VARIATIONS IN STEREO.	10.95	8.25
26 RR 974	STBR-3005	MAHLER: SYMPHONY NO. 1. London Philharmonic. Adrian Boult.	10.95	8.25
26 RR 974	STBR-3006	WILLIAMS: SYMPHONY NO. 9. London Symphony. Adrian Boult.	10.95	8.25
26 RR 974	STBR-3009	STRAVINSKY: SYMPHONY IN THREE MOVEMENTS. London Symphony.	10.95	8.25
26 RR 974	STBR-3010	SHOSTAKOVICH: SYMPHONY NO. 5, OPUS 47. Symphony Orch. of N.Y.	10.95	8.25

### Q TAPE

26 RR 993	350	SOUTH PACIFIC. New World Theatre Orchestra.	4.95	3.70
26 RR 993	351	DANCE TIME IN STEREO. New World Theatre Orchestra.	4.95	3.70
26 RR 993	353	TCHAIKOVSKY: SWAN LAKE BALLET. Nord Deutsches Symphony Orchestra.	4.95	3.70
26 RR 993	355	GLENN MILLER MOODS. Hamburg Philharmonia Orchestra.	4.95	3.70
26 RR 993	360	101 STRINGS PLAY SONGS FOR A CARIBBEAN CRUISE.	4.95	3.70
26 RR 993	362	101 STRINGS PLAY THE SOUL OF SPAIN.	4.95	3.70
26 RR 993	364	101 STRINGS PLAY A CONCERTO UNDER THE STARS.	4.95	3.70
26 RR 993	365	101 STRINGS PLAY SONGS FROM THE SILVER SCREEN.	4.95	3.70

### RCA

26 RR 980	ACS-26	1812 OVERTURE. Reiner, Chicago Symphony Orchestra.	4.95	3.70
26 RR 975	APS-105	"PREZ". Perez Prado and Orchestra.	4.95	3.70
26 RR 981	BC-41	FIEDLER. Arthur Fiedler and Boston Pops Orchestra.	6.95	5.22
26 RR 981	BC-82	NUTCRACKER SUITE. Fiedler, Boston Pops Orchestra.	6.95	5.22
26 RR 982	CCS-45	STRAUSS WALTZES. Arthur Fiedler and Boston Pops Orchestra.	8.95	6.70
26 RR 977	CPS-76	CANADIAN SUNSET. Eddie Heywood at the piano.	8.95	6.70
26 RR 977	CPS-156	HUGO WINTERHALTER GOES LATIN. Latin Tunes.	8.95	6.70
26 RR 977	CPS-168	LISBON AT TWILIGHT. The Melachro Strings.	8.95	6.70
26 RR 977	CPS-172	MUSIC FOR RELAXATION. The Melachro Strings.	8.95	6.70
26 RR 977	CPS-199	BOB AND RAY THROW A STEREO SPECTACULAR. Stereo demonstrator	8.95	6.70
26 RR 977	CPS-213	CUGAT. IN SWAIN. Spanish rhythms by Xavier Cugat and Orchestra.	8.95	6.70
26 RR 978	FPS-241	THE MUSIC FROM PETER GUNN. Famous TV Jazz score.	13.95	10.48
26 RR 979	GPS-109	SOUTH PACIFIC. Movie soundtrack with Brazzi, Gaynor, etc.	15.95	11.98

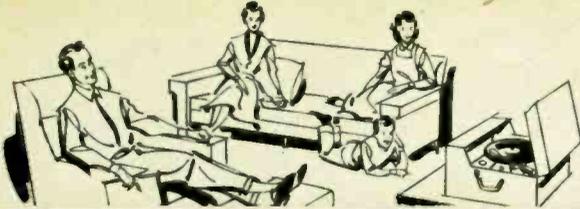
### RCA

### WESTMINSTER

26 RR 998	SWB20001	RAVEL BOLERO: CHABRIER: ESPAÑA. Vienna State Opera Orchestra.	6.95	5.22
26 RR 998	SWB20002	GERSHWIN: RHAPSODY IN BLUE. Utah Symphony Orchestra.	6.95	5.22
26 RR 998	SWB20006	ROSSINI: WILLIAM TELL OVERTURE. Vienna State Opera Orchestra.	6.95	5.22
26 RR 996	SWB20007	TCHAIKOVSKY: NUTCRACKER HIGHLIGHTS. London Philharmonic.	6.95	5.22
26 RR 998	SWB20008	DEUTSCHNEISTER ON PARADE. Selections by Austrian Orchestra.	6.95	5.22
26 RR 998	SWB20011	LIEBERT ABROAD. Richard Liebert at the Byrd Theatre organ.	6.95	5.22
26 RR 998	SWB20012	COLE PORTER: NIGHT AND DAY. Popular melodies by top composer.	6.95	5.22
26 RR 998	SWB20014	TABU. Ralph Fort and his Orchestra. Latin-American music.	6.95	5.22

### WESTMINSTER

# AUDIO BOOK "TALKING BOOK" RECORDS



- Educational
- Inspiring
- Provide Hours of Enjoyment

Enter the thrilling world of great literature with Audio Book records—an outstanding selection of 16 $\frac{2}{3}$ -rpm recordings, including many especially for children. Each "book" is complete and unabridged, with readings by outstanding artists. All are on 7" discs with a 1 $\frac{1}{2}$ " center hole, and each has up to one full hour of playing time. Require the use of a conventional microgroove stylus, and can be played on any 16 $\frac{2}{3}$ -rpm phonograph, or, with the adapter below, on any 33 $\frac{1}{3}$ -rpm unit. Specify Stock No., Book No. and Title.

26 R 799. Model A-100 Adapter. Fits on any record player—converts 33 $\frac{1}{3}$  rpm speed to 16 $\frac{2}{3}$  rpm. No wiring. Wt. 1 lb. NET ..... 1.40



Title	Lbs.	Book No.	Stock No.	NET
STORYTIME FAVORITES. 26 popular stories for children. Tenderly told by Jane Webb. (2 records)	1 $\frac{1}{2}$	C-301	26 RR 797	1.96
ALICE IN WONDERLAND. Join Alice on her visit to Wonderland. Jane Webb plays Alice. (3 rec.)	1 $\frac{1}{2}$	C-300	26 RR 796	2.62
ROBIN HOOD. The fun in Sherwood Forest with Robin and his men. Read by Michael Rye. (3 rec.)	1 $\frac{1}{2}$	C-302	26 RR 796	2.62
WIZARD OF OZ. A carefree excursion into pure whimsy. By Marvin Miller and Jane Webb. (5 rec.)	1 $\frac{1}{2}$	C-303	26 RR 795	3.97
CHILD'S GARDEN OF VERSES. 52 poems by Robert Louis Stevenson. Read by Elinor G. Hoffman. (1 rec.)	1 $\frac{1}{2}$	C-304	26 RR 798	.99
RIP VAN WINKLE and THE LEGEND OF SLEEPY HOLLOW. Told by Elinor Gene Hoffman. (1 rec.)	1 $\frac{1}{2}$	C-305	26 RR 798	.99
THE KING OF THE GOLDEN RIVER and THE GREAT STONE FACE. Two ageless legends. (1 rec.)	1 $\frac{1}{2}$	C-306	26 RR 798	.99
GULLIVER'S TRAVELS. The adventures of Gulliver come alive when told by Hal Gerard. (1 rec.)	1 $\frac{1}{2}$	C-307	26 RR 798	.99
TREASURE ISLAND. Hans Crozier in a vivid reading of this immortal yarn. (8 records)	2	C-309	26 RR 794	5.97
GREAT TALES and POEMS OF EDGAR ALLAN POE. 8 complete stories, plus poems. (4 records)	1	GI-600	26 RR 792	3.28
FAMOUS POEMS. 74 best loved poems for family enjoyment. Read by Marvin Miller. (4 rec.)	1	GI-601	26 RR 792	3.28
THE BEST OF MARK TWAIN. 17 hilarious stories and sketches. Read by Marvin Miller. (4 records)	1	GI-602	26 RR 792	3.28
BENJAMIN FRANKLIN. Complete and unabridged "Autobiography." Read by Michael Rye. (8 records)	2	GI-603	26 RR 789	5.97
DR. JEKYLL and MR. HYDE. Gene Lockhart reads Stevenson's story of good and evil. (4 records)	1	GI-605	26 RR 792	3.28
RALPH WALDO EMERSON. Lew Ayres reads a prize collection of essays, addresses and poems. (5 rec.)	1 $\frac{1}{2}$	GI-606	26 RR 791	3.97
WILLIAM SHAKESPEARE. Ronald Colman's reading of all 154 of Shakespeare's sonnets. (3 records)	1	GI-607	26 RR 793	2.62
GREAT ESSAYS. Marvin Miller reads 41 of the world's most popular essays. (8 records)	1 $\frac{1}{2}$	GL-608	26 RR 789	5.97
WALDEN. John Carradine reads the first 6 chapters from Thoreau's masterpiece. (6 records)	1	GL-610	26 RR 790	4.64
ADVENTURES OF SHERLOCK HOLMES. 4 adventures masterfully read by Basil Rathbone. (5 records)	1 $\frac{1}{2}$	GI-611	26 RR 791	3.97
THE WRITINGS and SPEECHES OF ABRAHAM LINCOLN. Read by Raymond Massey. (8 records)	2	GI-612	26 RR 789	5.97
JOSEPH CONRAD'S HEART OF DARKNESS. Distinguished reading by Dan O'Herlihy. (5 records)	1 $\frac{1}{2}$	GI-613	26 RR 791	3.97
THE COMPLETE NEW TESTAMENT. Authorized King James version. (26 records)	6 $\frac{1}{2}$	R-901	26 RR 787	19.97
THE OLD TESTAMENT. Gen., Judges, Ruth, Esther, Psa., Prov., Eccl., Sol., Isaiah. (26 records)	6 $\frac{1}{2}$	R-902	26 RR 787	19.97
THE COMPLETE NEW TESTAMENT; Catholic Edition. Read by Rev. R. I. Gannon. S.J. (30 records)	7 $\frac{1}{2}$	R-903	26 RR 786	23.30
STORIES FROM THE NEW TESTAMENT. 26 favorite stories read with charm. (2 records)	1 $\frac{1}{2}$	R-908	26 RR 788	1.96
STORIES FROM THE OLD TESTAMENT. 21 treasured stories especially for young people. (2 records)	1 $\frac{1}{2}$	R-909	26 RR 788	1.96

## General Information

### ON TAPE RECORDING EQUIPMENT

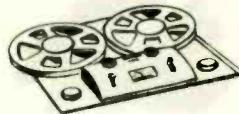
#### MICROPHONES



Nearly all tape decks are supplied without microphones, while the majority of complete recorders include them as part of the overall unit. For fine-quality home recording with your tape recorder or recording system, the use of a dynamic-type microphone in the \$40 to \$60 price range is highly

recommended. There are many different factors that must be taken into account when choosing a mike—the correct choice will assure you of recordings that you will be proud of. See microphone listings for helpful hints on selecting the microphone best suited to your needs.

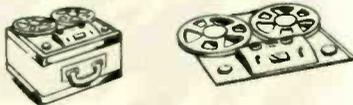
#### THE TAPE DECK IN YOUR HI-FI SYSTEM



**PLAYBACK.** If your hi-fi amplifier has a "Tape Head" input, you will not need a preamplifier for playback with a tape deck. If, however, your amplifier has a "Tape" input (one not specifically identified as a tape head input) you must have a preamp equalized for a tape deck to use with the deck.

**RECORD.** In order to use a deck for recording, you must have a recording preamplifier. The preamp in your hi-fi system is not suitable, since it does not include a bias oscillator, which is necessary in recording.

#### DECKS AND RECORDERS



A tape deck is a basic tape transporting or tape handling device. It consists of a recording and playback head, and sometimes an erase head, and must be used with associated circuitry. A tape recorder is a complete unit consisting of a tape deck and all necessary recording circuits. Some tape recorders also include complete playback circuitry and built-in speakers, while others must be used along with separate playback amplifiers and speakers.

#### STEREOPHONIC RECORDING



For stereophonic recording, use one of the complete stereo recorders listed in this catalog or select a tape deck and two identical record/playback preamps.

If you are planning to purchase a complete stereophonic recorder, before you place your order, make certain that the description of the unit you are considering states specifically that it will record stereo. Units designated mono-record/stereo-playback will play stereo tapes but cannot record stereophonically.

# NEW! 4-TRACK STEREO HI-FI TAPES



Now's the time to enlarge your stereo tape library—at big 25% savings off list price. The new 4-track stereo tapes listed below rival the original performance in sheer beauty, give you a lasting collection of wonderful music. All of the tapes listed are recorded at standard speed of 7 1/2" per second, and are for playback on tape mechanisms with 4-track heads only. *When ordering tapes, be sure to give the Stock Number, Tape Number and the Title of the tape. Av. shpg. wt., 12 oz.*

## BEL CANTO

Tape No.	Tape Title	
ST13/4TRK	OKLAHOMA/SYMPHONY FOR BLUES. New World Theatre Orchestra and Hamburg Philharmonia Orch.	
ST24/4TRK	NUTCRACKER SUITE. Hamburg Philharmonia Orchestra.	
ST35/4TRK	HAWAIIAN LULLABY. Authentic Hawaiian melodies by the Polynesians.	
ST36/4TRK	SOUTH PACIFIC. New World Theatre Orchestra and Hollywood Sound Stage Chorus.	
ST39/4TRK	PAL JOEY. Selections from the film by Bobby Sherwood and Orchestra.	
ST47/4TRK	HIGH NOON CHA CHA CHA. Movie themes played by Si Zentner and Orchestra	
ST48/4TRK	NEW SOUNDS OF ORRIN TUCKER. Orrin Tucker, Saxophone, and Orchestra.	
ST49/4TRK	DREAM. Orrin Tucker and Orchestra with Sophisticated Strings.	
ST54/4TRK	STRICTLY FOR DANCING. Max Pillar and His Orchestra. Good mixture of dance rhythms.	
ST63/4TRK	THE 101 STRINGS PLAY THE SOUL OF SPAIN. Awesome sound; stirring melodies.	
ST64/4TRK	THE 101 STRINGS PLAY CONCERTO UNDER THE STARS. Romantic potpourri.	
ST65/4TRK	THE 101 STRINGS PLAY SONGS FROM THE SILVER SCREEN. Famous film tunes.	
ST66/4TRK	THE 101 STRINGS PLAY NIGHT IN VIENNA. Favorite waltzes, etc.	
26 RR 893.	List, \$6.95. Specify Tape No. and Tape Title. NET EACH	5.22
STR 4TRK	SYMPHONY FOR GLENN. Hamburg Philharmonia plays Glenn Miller favorites.	
ST12/4TRK	HONEYMOON IN SOUTH AMERICA. Rio Carnival Orchestra.	
ST15/4TRK	FOR WHOM THE BELL TOLLS. Piano solos from the film music by Harry Sukman.	
ST19/4TRK	MY FAIR LADY/THE KING AND I. Arranged by Bennett and Lang.	
ST20/4TRK	AROUND THE WORLD IN 80 DAYS. Original Victor Young score.	
ST27/4TRK	SYMPHONY FOR TOMMY DORSEY. Famous arrangements associated with the late leader.	
ST57/4TRK	MR. MUSIC MAKER. Selections by Lawrence Welk and his Orchestra.	
ST58/4TRK	BILLY VAUGHN PLAYS THE MILLION SELLERS. Billy Vaughn and Orchestra.	
ST59/4TRK	STARBUST. Vocals by Pat Boone; orchestra and chorus conducted by Billy Vaughn.	
ST60/4TRK	BLUE HAWAII. Familiar Hawaiian melodies by Billy Vaughn and Orchestra.	
ST61/4TRK	LOVE SCENE. Famous film/land composer Elmer Bernstein and Orchestra.	
ST62/4TRK	SAIL ALONG SILVER MOON. Old-time favorites by Billy Vaughn and Orchestra.	
26 RR 894.	List, \$7.95. Specify Tape No. and Tape Title. NET EACH	5.96

## CONCERTAPE

4T-3001	SOUND IN THE ROUND. Stereo Demonstration Tape.	
4T-3002	RÉPERCUSSION. The Percussive Art Ensemble with impressive sounds.	
4T-3003	SYMPHONY OF DANCE. The Musical Arts Company. Classical dance excerpts.	
4T-3004	OPPOSITE SIDES OF MIKE. Mike Simpson and his Band. Latin and swing tunes.	
4T-3005	MUSIC OF JOHANN STRAUSS. Leonard Sorkin conducting the Sinfonietta.	
4T-3006	SILK, SATIN AND STRINGS. Caesar Giovannini and Radiant Velvet Orchestra.	
4T-3007	LET'S SWING (INVITATION TO ROSELAND). Wendell Tracy and Orchestra.	
4T-3008	CAESAR PLAYS. Caesar Giovannini and Orchestra. Romantic mood music.	
26 RR 895.	List, \$6.95. Specify Tape No. and Tape Title. NET EACH	5.22
4T-4001	GIGI—MY FAIR LADY. Caesar Giovannini and Radiant Velvet Strings.	
4T-4002	NUTCRACKER SUITE; OVERTURES BY BERLIOZ, WAGNER. Symphony of Air.	
4T-4003	SWINGIN' EASY. The Modernes play all-time favorites.	
26 RR 896.	List, \$7.95. Specify Tape No. and Tape Title. NET EACH	5.96
4T-5001	DANCING AND DREAMING. The Jay Norman Quintet. Smooth listening.	
4T-5002	FAVORITE SHOW TUNES. The Sorkin Strings and Broadway melodies.	
26 RR 897.	List, \$8.95. Specify Tape No. and Tape Title. NET EACH	6.70

## MERCURY

STA-60001	LET'S DANCE. Dance melodies played by David Carroll and Orchestra.	
STA-60027	DANCE AND STAY YOUNG. David Carroll and Orchestra.	
26 RR 886.	List, \$6.95. Specify Tape No. and Tape Title. NET EACH	5.22
DEMS-3	A MIRACLE IN SOUND. Sampler of Mercury 4-track tapes.	
26 RR 885.	List, \$7.95. Specify Tape No. and Tape Title. NET EACH	5.96
STD-60020	SARAH VAUGHAN AFTER HOURS AT THE LONDON HOUSE. Recorded at famous Chicago night club.	
STD-90012	SAINT-SAËNS: SYMPHONY NO. 3 IN C MINOR. Detroit Symphony, Paul Paray, conductor.	
STD-90054	1812 OVERTURE/CAPRICCIO ITALIEN. Minneapolis Symphony, Antal Dorati, conductor.	
26 RR 891.	List, \$7.95. Specify Tape No. and Tape Title. NET EACH	5.96

## OMEGATAPE

ST-4001	THE GLENN MILLER SOUND IN STEREO. Members of Glenn Miller Orch. and Bay Big Band.	
ST-4002	CHAMPAGNE MUSIC FOR DANCING. Lloyd Mumm and his Startight Roof Orchestra.	
ST-4003	LATIN HEAT WITH A LATIN BEAT. The Francis Bay Orchestra.	
ST-4004	AROUND THE WORLD IN 80 DAYS & BACKGROUNDS FOR BRANDO. The Omega Orchestra.	
ST-4005	STEREO DANCE TIME. Shep Fields and his Rippling Rhythm; R. Leccusant Orch.	
ST-4006	A TOAST TO TOMMY DORSEY. Members of Tommy Dorsey Orchestra and The Bay Big Band.	
ST-4007	SWINGIN' HIGH WITH ELLINGTON AND BASIE. The Bay Big Band.	
ST-4008	SWING LOW GREAT CLARINETS. The Bay Big Band. Famous swing arrangements.	
ST-4009	SYMPHONY OF THE SEA AND SYMPHONY OF THE BLUES. Brussels-International Orchestra.	
ST-4010	GIGI AND MY FAIR LADY. The Hollywood Radio City Orchestra; words and music.	
26 RR 898.	List, \$9.95. Specify Tape No. and Tape Title. NET EACH	7.48

## WESTMINSTER

4T1101	PORGY AND BESS (ORIGINAL SUITE BY COMPOSER). Utah Symphony; Maurice Abravanel.	
4T1112	BALLET AT THE OPERA. Vienna State Opera Orchestra; conducted by Armando Aliberti.	
4T1113	OVERTURES: WILLIAM TELL; ZAMPA; DONNA DIANA. Vienna State Opera Orchestra.	
4T1114	BOLERO; THE SORCERER'S APPRENTICE. Vienna State Opera Orchestra; Hermann Scherchen, Cond.	
4T1115	CHOPIN HITS IN STEREO HI-FI. A scintillating performance by the Piano Quartet.	
4T1116	OPERA FOR ORCHESTRA IN STEREO. Vienna State Opera Orchestra; conducted by Sy Shaffer.	
4T1102	LEIBERT TAKES RICHMOND. Dick Leibart at the Mighty Wurlitzer pipe organ.	
4T1103	BLUE SKIES AND OTHER FAVORITES. Eric Johnson and his Orchestra play Irving Berlin.	
4T1104	TABU. Ralph Font and his Orchestra. Exotic music; splendid hi-fi sound.	
4T1105	STANDARDS GO CHA, CHA. Ralph Font and his Orchestra.	
4T1107	INDIAN LOVE CALL. Rudolf Friml conducts his own orchestra and music.	
4T1108	WITH A SONG IN MY HEART. Rodgers and Hart music by Eric Johnson and Orchestra.	
4T1109	NIGHT AND DAY. Cole Porter favorites by Joel Herron, piano and Orchestra.	
26 RR 899.	List, \$6.95. Specify Tape No. and Tape Title. NET EACH	5.22

Write for your free copy of Allied's comprehensive catalog of stereo tapes and records—ask for Stock No. 26 R 999.

# KNIGHT VALUE-PACKED

## 2-SPEED TAPE RECORDER



With Tape, Mike and Reel



A Product of Allied Radio Corp.

### Knight KN-4050 Dual Track Recorder

- ONLY **\$99.95**  
\$5.00 Down
- Handy Push-Button Automatic Control
  - Dual Speed—7 1/2 and 3 3/4" Per Second
  - Convenient Digital Index Counter
  - Lightweight for Easy Portability

Designed for exceptional ease of operation and unusually fine tonal quality, the KN-4050 is a tremendous tape recorder value. It performs brilliantly in a wide range of applications—as a means of recording fine musical performances or as a way of improving speech habits for school, drama, or business. Handy push-button controls permit instant selection of Record, Play, Rewind, Forward and Stop at either 7 1/2" or 3 3/4" speeds.

Easy-to-read digital counter "pinpoints" any portion of a recording—an extremely useful aid to editing. You can make recordings from the microphone supplied, or directly from your hi-fi system, radio or TV set. Simply plug connector into input jack, and you're ready to record your favorite program. Special safety interlock feature prevents accidental erasure. Separate controls adjust volume and tone of unit. Re-

ording level indicator light clearly shows when volume control is exactly right for recording. Allows you to audition speakers or musical selections before recording—avoids necessity of making control changes while recording is in process. Compact, light construction; can be moved from room to room quite easily. Has built-in 4x6" speaker for clear, distinct reproduction of voice and music. External hum and noise are kept to minimum level. Powerful 5-watt amplifier. Jack is included for addition of an external speaker. Response: 50-13,000 cps at 7 1/2 ips.

Handsomely styled in gray and black leatherette. Complete with ceramic microphone, 5" reel of recording tape and 7" take-up reel. Size: 10 1/2" high, 15 1/2" wide, and 15 1/2" deep. For 110-120 volts, 60 cycle AC. Made in U.S. Ship. wt., 32 lbs. 92 RU 725. \$5.00 Down. NET... 99.95

### SPECIFICATIONS

- Power Output: 5 Watts
- Frequency Response: 50-13,000 cps, at 7 1/2 ips.
- Signal-Noise Ratio: 40 db
- Wow and Flutter: Less than 0.3%
- Inputs: 1-Microphone  
1-Phono-Radio



### KNIGHT DYNAMIC MICROPHONE

ONLY **\$24.95**  
\$2.00 Down

Low-cost, versatile microphone that's ideal for use with the Knight Tape Recorder (shown above), or any other unit. Omni-directional pick-up pattern makes it useful for such general purpose applications as paging and P.A. use, home recording, lecture work, recording of conferences, panel discussions, etc. Home recordists will appreciate the truer, clearer tone it gives to recordings; P.A. users will immediately recognize new, better than ever intelligibility in their messages.

Moving-coil dynamic element is virtually indestructible and highly resistant to humidity. Rugged, die-cast metal housing with chip-proof nickel plated finish. Wide-range response, from 60-12,000 cps. High-impedance output. With desk stand, 10-ft. cable, connector and phone plug adapter. 1 3/16 x 7 1/2" Gold and black. Made in U.S. 4 lbs. 94 S 097. \$2.00 Down. NET... 24.95

### Knight Extra-Value Recording Tape

#### 1/2 MIL "STANDARD PLAY"

Allied's own top-quality, acetate-base recording tape—at exceptionally low cost. Its precision-applied pure red-oxide recording surface assures excellent high frequency response and noise free reproduction. On transparent plastic slotted reels.

Stock No.	Feet	Reel	Lb.	1-4, EA.	5-Up, EA.
96 R 698	600	5"	1 1/2	1.32	1.19
96 R 699	1200	7"	1	1.88	1.69

#### 1 MIL "PLUS PLAY" ACETATE

Very popular recording tape that offers superior recording quality and extended playing time (as much as three hours per reel) at substantial savings. Uniformly coated with red oxide on cellulose acetate to assure excellent response and noise-free reproduction.

Stock No.	Feet	Reel	Lbs.	1-4, EA.	5-Up, EA.
96 R 981	900	5"	3/4	1.55	1.39
96 R 982	1800	7"	1 1/4	2.77	2.49

#### 1 MIL "PLUS PLAY" MYLAR

Allied's finest quality recording tape. Has Mylar plastic base for the utmost strength. Virtually impossible to tear. Completely unaffected by heat, humidity—any variance in climatic conditions. Meets the most critical professional requirements and gov't. specs.

Stock No.	Feet	Reel	Lbs.	1-4, EA.	5-Up, EA.
92 R 939	900	5"	3/4	1.92	1.73
92 R 940	1800	7"	1 1/4	3.33	2.99



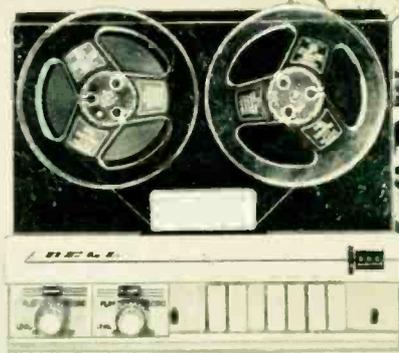
# TOP-QUALITY TAPE EQUIPMENT

Bell



T-238, T-228  
Stereo  
Recorders

Stereo and Monophonic  
Tape Transport Mechanisms  
of Unlimited Flexibility



T-210, T-221  
and T-223

## BELL Stereo Tape Decks, Portable Recorders, and Preamps

**MODEL T-238.** A versatile stereo-monophonic recording and playback unit. Incorporates a special tape transport mechanism and 2—special record-playback preamps (not available separately) to provide monophonic and 1/4-track stereo erase/record-playback, plus 1/2-track stereo playback. Components are installed in Model 200-CC carrying case. Specifications same as other Bell units (see below). 8 3/4 x 17 1/2 x 16 1/2". For 110-120 v., 60 cycle AC. Shpg. wt., 54 lbs.  
92 RZ 726. Only \$10.00 Down. NET. **333.15**

**MODEL T-228.** As above, but with 2—RP-120B record-playback preamps and T-223 tape deck for 1/2-track stereo erase/record-playback and 1/4-track stereo playback. Shpg. wt., 54 lbs.  
92 RZ 728. Only \$10.00 Down. NET. **323.35**

### SPECIFICATIONS FOR BELL TAPE DECKS AND RECORDERS

All Bell tape decks, as well as Model T-238 and T-228 stereo recorders, offer the same deluxe construction and excellent specifications. Their extensive array of custom-quality features includes: DC dynamic braking; three heavy-duty 4-pole motors; automatic tape shut-off; tape lifter to remove tape from heads during stop and fast speeds; digital footage counter; smooth operation without belts, pulleys and clutches, etc. Decks accommodate 2 preamps (Bell Model P-100 or RP-120B listed at right)—have charcoal-gray top plates with satin aluminum and embossed gold anodized trim. *Response:* ±3 db. 20-11,000 cps (overall record and playback at 3 3/4 ips); ±4 db. 50-15,000 cps (playback at 3 3/4 ips). *S/N Ratio:* Better than 50 db. *Flutter:* Less than 1/4 of 1% at 7 1/2 ips. *Distortion:* Less than 1% at maximum indicated recording level. *Controls:* Speeds: Play; Rewind; Fast Forward; Stop; Off-On Switch. Stereo decks play inline tapes only. *Speeds:* 7 1/2 and 3 3/4 ips.

**BELL TAPE DECKS.** 13 1/2 x 15 3/4". Require 5 1/4" below; 1 7/8" above mounting surface. For 110-120 v., 60 cycle AC. 21 lbs.

Stock No.	Model	Operation	DOWN	EACH
91 RU 869	T-210	Mono. record, erase, playback	\$5.00	112.65
92 RU 727	T-221	Monophonic; 1/4 and 1/2-track stereo play	5.00	142.05
92 RU 729	T-223	Monophonic; 1/2-track stereo erase/record-playback; 1/4-track stereo playback	5.00	166.55
92 R 730	BTK-200	1/4-track stereo playback conversion kit for models T-201, T-202, T-203, T-206, T-207, T-208	2.00	24.50
92 R 731	BTK-210	As above, but for models T-211, T-212, T-213, T-218	2.00	26.95

**MODEL P-100B PLAYBACK PREAMP.** NARTB tape equalization. Less than 0.1% distortion at 1-volt output. 53 db gain at 1000 cycles; output from maximum-level tape recording, 2.3 volts, when used with Bell tape decks. For 110-120 v., 60 cycle AC. 5 3/4 lbs.

91 RX 855. Only \$2.00 Down. NET. **39.15**

**MODEL RP-120B RECORD-PLAYBACK PREAMP.** NARTB record and playback equalization; attaches to Bell decks, above. 2 inputs: mike and high level; require 0.001 and 0.3 volts, respectively; for full recording level. For 110-120 v., 60 cycle AC. 9 1/4 lbs.

91 RX 854. Only \$5.00 Down. NET. **58.75**

**CARRYING CASE.** For Bell tape transport and preamps. Charcoal gray pyroxylin with trim. 8 3/4 x 17 1/2 x 16 1/2". 13 lbs.

91 RZ 855. Only \$2.00 Down. NET. **34.25**

## MAGNECORD . . . The Choice of Professionals

### NEW! 728-4 STEREO RECORDER

An extremely versatile, professional recorder of outstanding quality. Incorporates full facilities for stereo as well as monophonic recording at two speeds—3 3/4 and 7 1/2 ips. Utilizes 2-track stereo erase, record and playback heads; has provision for additional head for sound-on-sound, delayed broadcast, and other special applications. Incorporates twin, built-in record-playback preamps with individual VU meters for monitoring recording level on each channel. Features direct-drive hysteresis-synchronous motor; push-button control; fail-safe differential brakes; accurate digital counter; electrical supply and take-up torques; etc. *Frequency Response:* 40 to 15,000 cps. ±2 db. at 7 1/2 ips. *Timing Accuracy:* 0.17%. *S-N Ratio:* Better than 50 db per channel. *Cross Talk:* Down more than 55 db. *Wow and Flutter:* 0.15% at 7 1/2 ips. *Reel Size:* 10 1/2". *Output:* 2 cathode follower type (600-ohm plug-in output transformers available on special order); *Inputs:* 2—high impedance mike; 2—unbalanced bridges (low impedance, plug-in mike transformers available on special order). *Size:* 12 7/8 x 17 3/4 x 12". With case. For 110-120 volts, 60 cycle AC. Shpg. wt., 40 lbs.

92 RZ 763. \$10.00 Down. NET. **809.00**

**MODEL 728-44.** As above, but with additional 4-track stereo playback head.

92 RZ 764. \$10.00 Down. NET. **850.00**

### MODEL 101 STEREO RECORDER

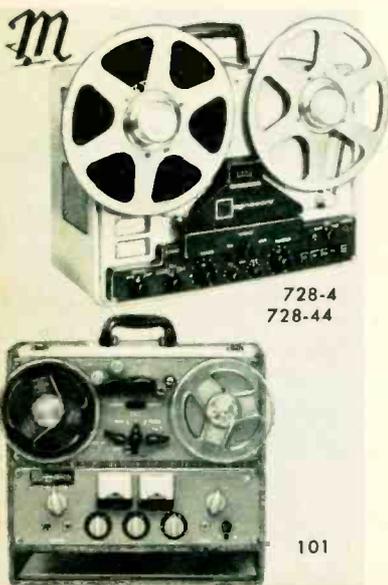
Moderately-priced, portable unit for playing commercially-recorded tapes or for making and playing your own stereo or monaural tapes. Requires two amplifiers and speakers for stereo playback. Delivers professional-quality stereo reproduction. Features include: dual record-playback preamplifiers mounted on one chassis; separate gain controls for each channel plus one master control for record and playback. Monaural-stereo switch and recording indicator located on transport panel.

**SPECIFICATIONS:** *Playback-Record Function:* Stacked stereo; half-track monaural. *Tape Speeds:* 7 1/2 and 3 3/4 ips. *Frequency Response:* ±2 db. 40-15,000 cps at 7 1/2 ips; ±2 db. 50-7500 cps at 3 3/4 ips. *Reel Size:* 5 and/or 7". *2 Inputs:* accommodates mike, tuner, TV or phono. *Preamp Output:* cathode follower, each preamp. Two meters monitor channels. Complete with handsome gray and white case. Less speaker-amplifiers and mikes. 15 3/4 x 17 3/4 x 11 1/2". For 110-120 v., 60 cycle AC. Shpg. wt., 72 lbs.

91 RZ 856. \$10.00 Down. NET. **449.95**

**MODEL 110 SPEAKER-AMPLIFIER.** For use with above. 8" full-range speaker; amplifier with Volume, Bass, Treble controls. *Response:* 20-20,000 cps. 15 3/4 x 17 3/4 x 11 1/2". Two required for stereo. Shpg. wt., 30 lbs.

91 RU 857. \$5.00 Down. NET. **129.95**



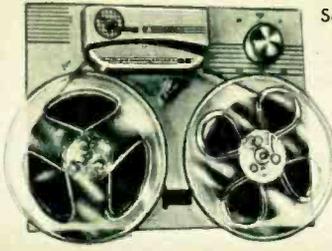
728-4  
728-44

101

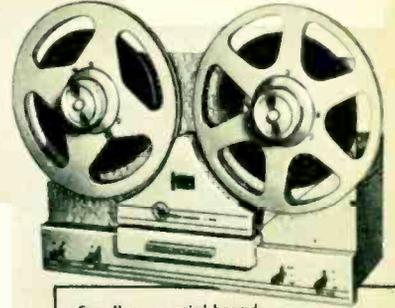
# RENOWNED VIKING TAPE RECORDING EQUIPMENT



"85" Deck  
in S-4 Cabinet



Series 85



## VIKING SERIES 85 TAPE TRANSPORT DECKS

Expertly designed tape transport mechanisms. Feature "flutter-filter" belt drive; two motors; concentric control for fast forward, rewind, forward, stop or cue; footage counter, tape lifters, 7½ and 3½ ips tape speeds, etc. *Frequency Response:* = 3 db, 30-14,000 cps. *S/N Ratio:* 50 db. *Flutter:* 0.2% average. *Maximum Reel Size:* 7". Decks will playback through any amplifier equipped with tape head preamplifiers—require PB70F preamps (below) when used with other types of amplifiers. For recording, an RP62C record-playback preamp is required for each channel—1 for monophonic, 2 for stereo. PB70F's are not necessary when RP62C's are used. For 110-120 volts, 60 cycle AC. Shpg. wt., each, 12 lbs.

For all commercial, broadcast and critical recording applications. Features exclusive "Flutter-Filter" triple belt drive. Takes 4 heads.

## SERIES 95 TRANSPORTS

A thrilling new, professional-quality series of tape decks by Viking. Designed for conventional relay rack mounting, these superb units may be used with one, two, or any combination of suitable recording and playback preamplifiers for all standard single and dual-channel applications. Model RP-62VU preamp, at left, is specifically designed for record and playback with the 95 series.

Among the many outstanding features of these fine tape transports are: provisions for any configuration of up to 4 Viking heads (any configuration other than those listed below is available on special order); "Flutter-Filter" triple-belt drive; hysteresis synchronous capstan drive motor; separate 6-pole rewind and forward motors; digital counter; dynamic brakes; dual tape speeds; and precision construction throughout.

*Response:* = 3 db, 30-14,000 cps (through RP-62VU preamp). *S/N Ratio:* 55 db or better. *Wow and Flutter:* Less than 0.1% at 7½ ips. *Speed Accuracy:* 0.5%. *Harmonic Distortion:* Less than 1% at 500 cps. *Reel Size:* 10½". *Tape Speeds:* 3¾ and 7½ ips (pulleys for 1¼-3¼ and 7½-15 ips available on order). 12¼x19"; requires 7" behind and 2" in front of panel. Less preamps. For 110-120 v., 60 cycle AC. Shpg. wt., 56 lbs.

MODEL 95R. 2-track monophonic erase and record-playback heads. **92 RZ 767. \$10.00 Down. NET. 487.65**

MODEL 95S. 2-track stereophonic erase and record-playback heads. **92 RZ 768. \$10.00 Down. NET. 513.25**

MODEL 95SQ. 2-track stereo erase and record-playback heads plus additional 4-track stereo playback head. **92 RZ 769. \$10.00 Down. NET. 546.50**

MODEL 85 RQ. Incorporates 2-track monophonic erase-record-playback, and 4-track stereo playback head arrangement. **92 RU 765. \$5.00 Down. NET. 147.50**

MODEL 85 ES. Incorporates 2-track monophonic and inline stereo erase-record-playback head arrangement. **92 RU 766. \$5.00 Down. NET. 147.00**

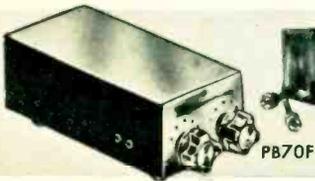
MODEL 85 ESQ. Has 2-track and 4-track monophonic and inline stereo erase-record-playback head arrangement. **91 RU 864. \$5.00 Down. NET. 172.00**

## S-4 CONSOLETTA FURNITURE CABINET

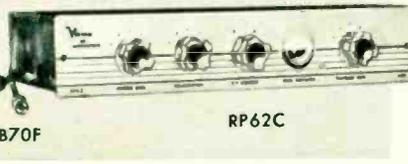
A handsomely styled console furniture cabinet to accommodate any Viking Series 85 tape deck—plus 2—RP-62C record-playback preamps. 2—PB70F playback preamps, or one of each. Incorporates convenient, removable panels at sides and bottom to facilitate mounting of components. Bottom space may be used for custom installation of power amplifier or mixer controls. Finished in walnut wood veneers. 14½x21½x11". Wt., 15 lbs.

**92 RU 773. \$2.00 Down. NET. 39.50**

## PREAMPLIFIERS AND ACCESSORIES



PB70F



RP-62C

**PB70F PLAYBACK PREAMP.** Has volume and playback-equalization controls; AC outlet for deck; hum balance adjustment. *Response:* 30-14,000 cps, ±2 db, 6½x3¾x2¼". For 110-120 v., 60 cycle AC, 7 lbs.

**91 R 820. \$2.00 Down. NET. 29.50**

**RP-62C RECORD-PLAYBACK PREAMP.** Same as PB70F, above; but with fixed recording equalization, erase bias oscillator, record level indicator, and record volume control. For recording use with Series 85 tape decks. *Dist., less than 2%. 12¼x2¼x6¾". For 110-120 v., 60 cycle AC, 7½ lbs.*

**92 R 771. \$5.00 Down. NET. 77.50**

**RP-62VU RECORD-PLAYBACK PREAMP.** Same as RP-62C, at left; but with VU instead of electron-ray recording indicator. Designed for use with Series 95 (at right) and 85 (above) tape decks. Output, 600 ohms. Matches either Viking dual-track and stereo heads, or broadcast-type full-track erase and recording heads. With 19" relay rack mounting panel. For 110-120 volts, 60 cycle AC. Shpg. wt., 7½ lbs.

**92 RX 770. \$5.00 Down. NET. 119.00**

**D381A REEL RETAINERS.** Rubber; secure reels when deck is used vertically. 5 oz.

**92 R 913. NET PER PAIR. 1.00**

## CHOOSING THE PROPER TAPE DECK AND PREAMPLIFIERS

If stereo playback is required, and amplifier(s) to be used do not have tape head preamps, use 2—PB70F's. For monophonic recording and stereo playback, use 1—RP-62C and 1—PB70F. For stereo record and play, use 2—RP62C's. The RP-62VU preamp is for recording use with the Series 95 decks, but may also be used with Series 85 in place of RP-62C.

## NEW! CS75H Student Console—Designed for Home-Study Language Courses

Functionally and mechanically equivalent to the famous Viking Student Console used in college and high school language laboratory installations, this universally accepted study aid is offered for the first time in handy portable form. Suited for home study as well as academic use in learning languages, speech and music, this versatile unit consists of a dual-channel recorder with independent control of erase and record of each. Can be used with any 3¾ ips language tape—or instructor track may be recorded from a language tape, record player or microphone. Has accurate VU-meter recording indicator.

In Practice function, Master track is heard by student and automatically re-recorded on Student track along with student responses. In Listen mode, recording made from Master track and student response are both audible for comparison. Tape control has Stop, Forward, Fast Forward, Rewind and Pause positions; function switch has Record-Master, Listen and Practice positions. Record-gain screwdriver set; listening volume adjustment. Tape speed, 3¾ ips. Less high impedance mike and headphones. 7½x14¾x12¼". For 110-120 v., 60 cycle AC. Shpg. wt., 20 lbs.

**92 RU 772. \$10.00 Down. NET 269.00**

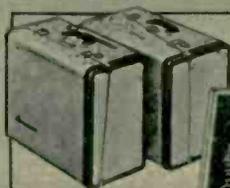


Recording Equipment Is Available on Allied's Easy Payment Plan

# SUPERSCOPE PRECISION-BUILT HI-FI TAPE RECORDING EQUIPMENT

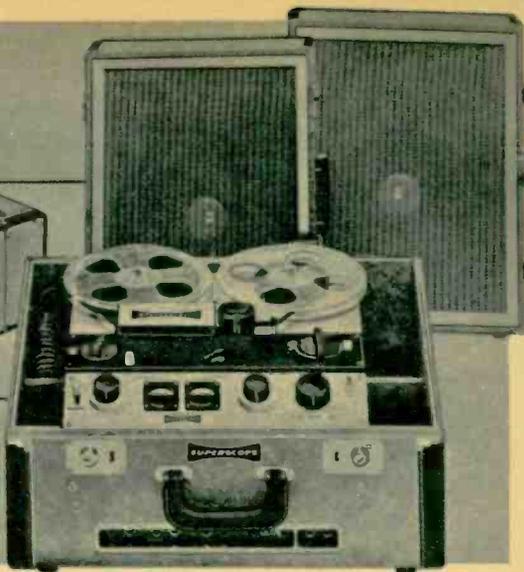


DK-555-A



Closed View

Complete  
Versatility  
of  
Operation



## Model DK-555-A Stereorecorder

NET  
**\$395.00**  
\$10.00 Down

Deluxe, dual-speed stereo recording and playback unit for custom mounting. Dual-track recorder employs a hysteresis-synchronous motor. Selector switch

allows instant change to either stereo record-playback or monophonic record-playback. Provisions for stereo or monophonic "off-the-air" recordings. Simply attach two hi-fi speakers and hear breath-taking stereo sound from your own recordings or from hundreds of tapes now available. Features: instant stop lever; 2 VU meters; recording indicator pilot light; safety lock recording button; separate tone and volume controls for each channel; etc.

Frequency response:  $\pm 2$  db, 30-16,000 cps at 7 1/2 ips;  $\pm 2$  db, 50-12,000 cps at 3 3/4 ips. Takes up to 7" reels. Inputs: 2 microphone, 2 radio. Output impedances (dual): 4, 8, 16 ohms for speakers; also has low-impedance cathode-follower line outputs for external amplifiers. Rated 8 watts (combined channels). Built-in grips on sides. Size (HWD), 8 3/4 x 15 1/2 x 13 1/4". Parts precision-made in Japan; assembled in U.S.A. Less case speakers and mikes. For 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs.

92 RU 742. \$10.00 Down. NET. 395.00

MODEL 555-A. As above, but includes Tolex vinyl, luggage-type case and monitor speaker. 10 1/2 x 19 x 15 1/4". Shpg. wt., 48 lbs.

20 SA 146. \$10.00 Down. NET. 465.00

## Model CCS-555-A Stereo Record/Playback System

NET  
**\$654.00**  
\$10.00 Down

- Includes Recorder, Carrying Case and Two Speakers
- Has Two Recording Preamps—Two Playback Amplifiers
- Separate Volume and Tone Controls for Each Channel
- Selector for Stereo or Monophonic Record-Playback

Enjoy the fascination and excitement of recording and listening to your own stereophonic tapes with this precision-made, portable stereo recording and playback system. Complete system includes Model 555-A recorder and carrying case plus two Lansing D-123 12" extended range high-fidelity speakers, individually mounted in two Lansing-designed speaker enclosures.

The Stereorecorder includes everything necessary for stereo recording. Among its many features are: individual volume and tone controls for each channel—ideal for optimum performance; two quality VU meters for maintaining desired recording levels; safety lock recording button to prevent accidental erasures of precious tapes; monitor speaker to evaluate recording; provisions for stereo or monophonic "off-the-air" recordings; etc. The entire record-playback unit is mounted in an attractive Tolex vinyl luggage-type carrying case. Parts precision made in Japan; assembled in U.S.A.

Handsome speaker enclosures combine to form a matching portable case—perfect companion-piece for the tape transport. Makes a beautifully balanced unit for easy portability to any desired location for "on-the-spot" playback of exciting stereo tapes.

Frequency response:  $\pm 2$  db, 30 to 16,000 cps at 7 1/2 ips;  $\pm 2$  db, 50 to 12,000 cps at 3 3/4 ips. Inputs: two microphone and two radio. Output impedances: 4, 8, and 16 ohms for speakers; also low-impedance cathode-follower for external amplifiers. Power output is rated at 8 watts (combined channels). Accommodates up to 7" reels.

Rugged transport carrying case has ample room for convenient storage of tapes and microphones. Size of transport case is 10 1/2 x 19 x 15 1/4". Size of both speaker enclosures when combined as one luggage-type unit, 11 1/2 x 19 1/2 x 15 1/4". Less dynamic microphones, listed below. For operation from 110-120 v., 60 cycle AC. 72 lbs.

20 SA 145-2. \$10.00 Down. NET. 654.00

MODEL DK-555-A4 STEREORECORDER. Same as Model DK-555-A listed in column at left, but has additional 4-track playback head for 4-track stereo tapes. Wt., 40 lbs.

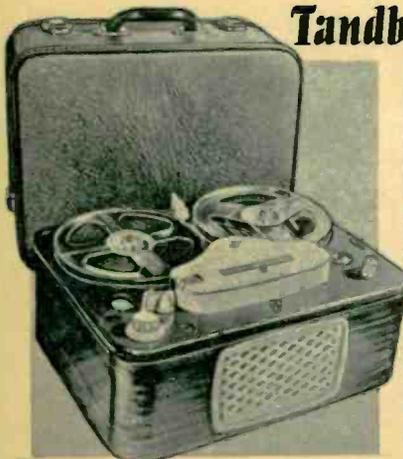
92 RU 724. \$10.00 Down. NET. 470.00

MODEL 555-A4 STEREORECORDER. Same as Model 555-A listed in column at left, but has additional 4-track playback head for 4-track stereo tapes. Shpg. wt., 48 lbs.

20 SA 144. \$10.00 Down. NET. 540.00

## Tandberg

### Model 5 High-Fidelity Tape Recorder



Deluxe, 3-speed, portable recorder for playing recorded 2 and 4-track stereo and monophonic tapes—and for making 2 and 4-track monophonic recordings. Operates at 1 1/2, 3 3/4 and 7 1/2 ips. Response: 30-17,000 cps at 7 1/2 ips. Precision-built tape mechanism features low tape tension, minimum wow and flutter, and extremely quiet operation for superior performance.

Built-in preamp has input for recording from mike, ceramic cartridge, etc. Also has a pair of inputs for stereo playback from ceramic stereo phono cartridges or for FM-AM or FM-TV stereo broadcasts. Cathode follower outputs on preamp permit use of recorder with external amplifiers if desired. Two playback amplifiers each provide 3 watts output—a switch couples outputs for 6-watt output when playing 2-track monophonic tapes. Built-in 5 1/2 x 8" speaker. With mike; less second speaker and leather case, right. 6 3/4 x 15 x 11 1/4". For 115-145 or 200-245 v., 60 cycle AC. Wt., 35 lbs.

91 RU 836. \$10.00 Down. NET. 419.50

MODEL 5-3. As Model 5 (left), but with external plug-in preamp and extra mike. For making stereo recordings. 41 lbs.

92 RU 745. \$10.00 Down. NET. 492.95

MODEL 241 STEREO RECORDING PREAMP. External plug-in preamp for making stereo recordings. Fits Model 5 (also for Models 3B and 3BF, not listed). Size, 2 1/2 x 6 x 5". Shpg. wt., 5 lbs.

90 R 920. \$5.00 Down. NET. 69.50

MODEL 4 RECORDER. Similar to Model 5, left, but for monophonic record-monophonic stereo playback. Less carrying case. 6 3/4 x 15 x 11 1/4". Shpg. wt., 27 lbs.

92 RU 746. \$10.00 Down. NET. 328.00

MODEL 4F RECORDER. Same as Model 4, but has plug-in foot pedal to permit remote control of start-stop and back spacing.

92 RU 747. \$10.00 Down. NET. 378.00

MODEL TC-54 LEATHER CASE. For Series 4 and 5 Recorders. Shpg. wt., 6 lbs.

91 RX 838. NET. 24.50

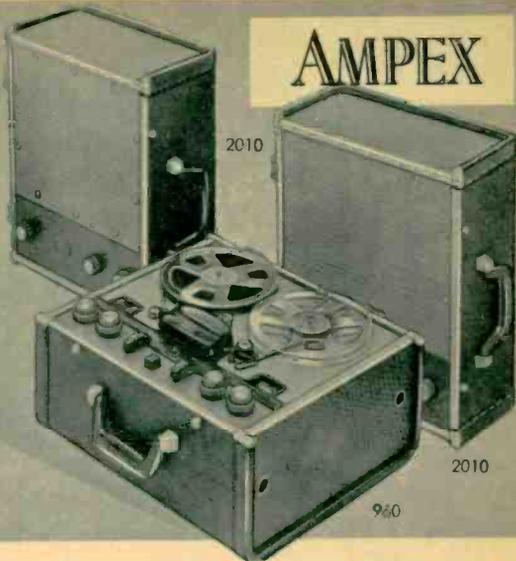
# Highest Quality TAPE RECORDING EQUIPMENT

# AMPEX



PROFESSIONAL  
"600" Series

601



2010

2010

960

## Model 601 Broadcast-Quality Recorders

Combine compact design for practical portability with AmpeX manufacturing precision. Features include provision for low-impedance input and output, faster acceleration to playing speed, illuminating record safety button and case of rugged Samsonite. Separate record and playback amplifiers; direct-reading illuminated VU meter; simultaneous recording and playback.

**SPECIFICATIONS:** Speed: 7½ ips. Reel Size: 7" maximum. Response: 30-15,000 cps; Signal-to-Noise Ratio: Over 55 db for full-track; 50 db for half-track. Flutter and Wow: 0.17%. Starting Time: less than 0.2 second. Fast Forward and Rewind: 90 seconds for full 7" reel. Power Drain: 61 watts. Less mike. Size: 8x13¼x16½". For 110-120 volts. 60 cycle AC. Shpg. wt., 35 lbs.

95 RZ 978. Dual-Track. \$10.00 Down. NET..... 595.00

95 RZ 979. Full-Track. \$10.00 Down. NET..... 595.00

95 RZ 982. Dual-Track. For custom mounting. Size: 5x12½x15½".

Less case. Shpg. wt., 31 lbs. \$10.00 Down. NET..... 545.00

95 RZ 983. Full-Track. For custom mounting. Size: 5x12½x15½".

Less case. Shpg. wt., 31 lbs. \$10.00 Down. NET..... 545.00

**MODEL 601-2 STEREOGRAPHIC RECORDER.** As above, but with stereo heads (in-line) dual preamps and meters. 8x13x24½". With case. For 110-120 volts, 60 cycle AC. Shpg. wt., 54 lbs.

91 RZ 775. Only \$10.00 Down. NET..... 995.00

**LOW-IMPEDANCE INPUT TRANSFORMER.** Plug-in type for use with Series "600". Shpg. wt., ½ lb.

95 R 981. NET..... 22.95

### MODEL 620P AMPLIFIER-SPEAKER

A quality 10-watt amplifier and special 8" speaker combination in one case. Two may be used with 601-2 for stereo. Speaker response, 65-10,000 cps. Amplifier response, ±0.5 db, 20-20,000 cps. Matching case, 13x16x8". For 110-120 v., 60 cycle AC. 28 lbs.

95 RU 980. Only \$5.00 Down. NET..... 189.50

## Model 960 "Caprice" Stereo Hi-Fi Recorder

NET  
\$650.00

\$10.00 Down

Both stereo recording and playback are featured in this outstanding dual-speed tape unit. Has 2-track record and erase heads and universal playback head with a lever to select 2 or 4-track playback. Its versatile design permits "sound on sound" recording—many unusual effects can be achieved. Ideal for taking stereo broadcasts "off-the-air"—perfect choice for building a library of professional-quality tape recordings. Accommodates up to 7" reels; operates at 7½ and 3¼ ips. Frequency response, 30 to 20,000 cps at 7½ ips. Complete with handsome, two-tone gray, scuff-resistant portable case. Size (HWD), 9x17½x15". Less playback power amplifiers and speakers (see Model 2010, listed below); less mikes. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 38 lbs.

91 RU 897. Only \$10.00 Down. NET..... 650.00

### MODEL 910 HIGH-FIDELITY RECORDER

Same as Model 960 described above, but makes monophonic recordings only. Identical stereo playback features. Less playback amplifiers and speakers (below) and mikes. Shpg. wt., 38 lbs.

91 RU 858. Only \$10.00 Down. NET..... 495.00

### MODEL 2010 MATCHING AMPLIFIER-SPEAKER

Quality 10-watt high-fidelity amplifier and special 8" speaker in acoustically designed case to match Model 960 or Model 910 recorders listed above. Two required for playback of stereophonic recordings when used with above models. Inputs for Tape, Tuner, Phono, TV. Volume and tone controls. Auxiliary AC outlet. Amplifier response, 20-20,000 cps, ±½ db. Noise level, -70 db. Gray case. 9x17½x15". For 110-120 volts, 60 cycle AC. 35 lbs.

91 RU 859. Only \$10.00 Down. NET..... 199.50

### COMPLETE AMPEX STEREO HI-FI SYSTEM

Consists of Model 960 stereo recorder and two 2010 amplifier-speaker units (listed above). Less mikes. Shpg. wt., 108 lbs.

20 RZ 148-3. Only \$10.00 Down. NET..... 995.00

## Famous AmpeX 351-C Full Track Console Recorder

- Printed Circuits and Reliable "Plug-In" Connectors
- Special Low-Noise Input Stage—Takes Non-Critical Tube
- "De-Popped" Recording Controls—Bias Build-up is Slower

Mastering-quality, full track recorder with tape speeds of 7½ and 15 ips. Frequency response: 30-15,000 cps (±2 db) at 15 ips; 30-15,000 cps (±4 db) at 7½ ips. Signal-to-noise ratio: 60 db below peak record level at both speeds. Flutter and wow less than 0.2% at 15 ips. Instantaneous starting. Rewind time: 1 minute for 2400' tape. Timing accuracy, ±0.2%. Other features include "plug-in" printed circuits for reliability and low maintenance; low-noise input stage that takes a non-critical tube; "de-popped" controls—bias build-up on recording is slower; "plus-8" output (600 ohms—2 volts); readily accessible power supply; etc.

Pushbuttons control start, stop, fast forward and rewind. Monitors tape or source during recording. Unmounted models fit standard 19" relay racks; transport requires 15¼" of rack space; electronic assembly requires 7". 48x24½x28½". With handsome wood cabinet. For operation from 110-120 v., 60 cycle AC. Wt., 260 lbs.

20 RZ 147-2. \$10.00 Down. NET. 1475.00

351-U. Above, less cabinet. 76 lbs.

91 RZ 810. \$10.00 Down..... 1350.00

CONSOLE CABINET ONLY. 92 lbs.

91 RZ 811. \$10.00 Down. NET. 206.00

Allied can supply AmpeX Model 351 recorder with any variations of head sequence or configuration; half-track, stereo, etc. Also available for 50 cycle AC operation on special order. Write, wire or phone for quotation.



Model 351-C

**PENTRON**

# TAPE RECORDING EQUIPMENT



XP-60S

## "TRIUMPH" High-Fidelity Tape Recorder

NET  
**\$199.95**  
Only \$5.00 Down

- Plays Both 2 and 4-Track Tapes
- Offers Dual Speed—7 1/2 and 3 3/4"
- Push-Button Automatic Controls
- Handy Digital Index Counter

MODEL XP-60S. Here's an excellent dual-speed high-fidelity tape recorder that records and plays monophonic tapes—also plays both 2 and 4-track stereo tapes when used with the "Stereo Mate" listed at left below. Tape speeds: 3 3/4 and 7 1/2 ips. Light in weight and well-balanced for easy portability anywhere.

Some of its quality features include: "Magic Eye" record level indicator; push-button automatic control keyboard; tape editor to eliminate headwear during fast forward or rewind; wide range 4x6" speaker and a 4" speaker; automatic shut-off; two input jacks for mike and radio. TV or phono; digital index counter; and heavy-duty 4-pole motor. Accommodates up to 7" reels.

Response: 40 to 15,000 cps at 7 1/2 ips. Handsome polished aluminum and two-tone gray leatherette case. Supplied complete with mike, reel of tape and empty take-up reel. Size, 6 1/2 x 12 1/4 x 12 1/4". For 105-120 volts, 60 cycle AC. Shpg. wt., 22 lbs.  
92 RU 736. List, \$249.95. \$5.00 Down. NET ..... 199.95

MODEL XP-60 As above, but monophonic only. Wt., 22 lbs.  
92 RU 735. List, \$219.95. \$5.00 Down. NET ..... 174.50

## "STEREO MATE" FOR XP-60S

MODEL SS-61. Second-channel amplifier-speaker for use with XP-60S for stereo playback. Volume and tone controls. Size (HWD). 6 1/2 x 12 1/4 x 12 1/4". Shpg. wt., 9 1/2 lbs.  
92 RU 737. List, \$59.95. NET 44.50

## Model TR-10S "CONCERTO" Hi-Fi Tape Recorder

NET  
**\$139.95**  
Only \$5.00 Down

Portable, dual-speed tape recorder. Records and plays monophonic tapes—plays 2 and 4-track stereo tapes when used with TA-7, below. Speeds, 7 1/2 and 3 3/4 ips. Features: "Uimagic" single lever control; neon level indicator; 6" speaker; interlock record button; tone and volume controls; 4-pole motor; etc. Response, 40-11,000 cps at 7 1/2 ips. Takes reels up to 7". Two inputs: mike or magnetic phono; radio, TV or ceramic/crystal cartridge. With mike. 11x14x17". For 105-120 v., 60 cycle AC. Wt., 25 lbs.  
92 RU 739. List, \$159.95. \$5.00 Down. NET ..... 139.95

MODEL TR-10. As above, but monophonic only. Wt., 25 lbs.  
92 RU 738. List, \$129.95. \$5.00 Down. NET ..... 109.95

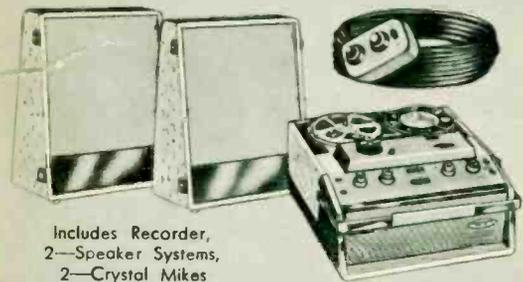
MODEL TA-7. Second-channel amplifier-speaker for use with TR-10S, above. Separate volume and tone controls. 9 1/4 x 12 1/4 x 12 1/4". For 105-120 v., 50-60 cycle AC. Wt., 12 lbs.  
92 RU 741. List, \$59.95. \$2.00 Down. NET ..... 44.50



Monophonic Record/Playback; Stereo Playback

TA-7

## COMPLETE PORTABLE STEREO HIGH-FIDELITY TAPE SYSTEMS



Includes Recorder, 2—Speaker Systems, 2—Crystal Mikes

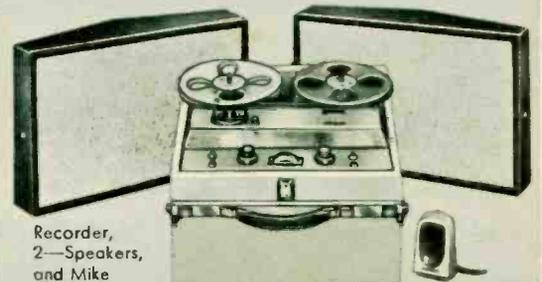
### "EMPEROR II" STEREO TAPE SYSTEM

Deluxe, dual-speed recording system—records, plays and erases both 2-track monophonic and 2 and 4-track stereo tapes. Consists of recording unit that has 2—10-watt amplifiers and 2—4x6" speakers plus two 3-way speaker systems in matching cases that lock together for easy carrying. Features automatic shutoff; digital index; heavy-duty 4-pole motor; 2—"Magic-Eye" indicators; separate volume and tone controls; etc. Speeds: 7 1/2 and 3 3/4 ips. Response: 40-15,000 cps at 7 1/2 ips. 10 1/4 x 17 1/4 x 17 3/4". With two crystal mikes. For 110-120 volts, 60 cycle AC. Shpg. wt., 65 lbs.  
20 RZ 149-2. List, \$575.00. \$10.00 Down. NET ..... 434.95

MODEL NL-4. Above recorder only. 10 1/4 x 17 1/4 x 17 3/4". Wt., 45 lbs.  
91 RU 882. List, \$500.00. \$10.00 Down. NET ..... 375.00

ES-2 SPEAKER SET. Above speaker-baffle units only. Size (locked): 16x14x9". Shpg. wt., 20 lbs.  
91 RU 883. List, \$75.00. PER SET OF TWO ..... 59.95

RC-6 REMOTE PLAYBACK CONTROL. Has balancing control, channel-reverse switch, master volume control. 15' cable. Wt., 1 lb.  
91 R 886. List, \$20.00. NET ..... 15.95



Recorder, 2—Speakers, and Mike

### TR-20 "ARISTOCRAT II" STEREO TAPE SYSTEM

A moderately priced, complete stereo playback and monophonic record/playback tape system. Consists of a tape recording unit—complete with two matching speaker-enclosure combinations that can be fastened to recording unit for ease of portability. Plays both two and four-track tapes; has half-track erase head. Takes reels to 7".

Among its many features are: 7 1/2 and 3 3/4 ips speeds; "Finger-Flite" single rotary control for Play, Record, Fast Forward, and Fast Rewind; interlock record button; automatic shut-off; two volume controls; two tone controls; digital index counter; heavy-duty 4-pole motor; and illuminated VU meter. Power output, 20 watts. Two 6" and two 4" speakers. Frequency response is 40-15,000 cps at 7 1/2 ips. Has two input jacks: one for mike or magnetic phono; the other for radio, TV or ceramic/crystal phono. Four output jacks; two for external amplifiers or head phone monitoring; two for speakers. May be used as a P.A. system by plugging mike into radio jack.

Handsome two-tone cabinet is 11 1/2 x 22 1/2 x 15 1/4" (overall). Complete with crystal mike, reel of tape and empty take-up reel. For 110-120 volts, 60 cycle AC. Shpg. wt., 42 lbs.  
92 RU 740. List, \$350.00. \$10.00 Down. NET ..... 269.95

# TOP-QUALITY KNIGHT RECORDING TAPES

Every reel of Knight recording tape is manufactured to meet Navy specs W-T-0061 for uniform sensitivity, full frequency response, tensile strength, oxide coating, and resistance to effects of moisture. In addition, Knight tape conforms to the highest standards of Allied's audio experts—your assurance of optimum performance, superior quality and superb fidelity. Guaranteed splice-free. You can depend on Knight for unsurpassed tape values.



"Plus-Play"  
1-Mil Mylar



"Plus-Play"  
1-Mil Acetate



Standard  
1 1/2-Mil  
Acetate

## KNIGHT "PLUS-PLAY" 1-Mil Mylar Tape

AS LOW AS

**\$173**

5-Lot Price

Allied's finest quality recording tape—provides 50% greater recording time than standard tapes—and has Mylar plastic base for extreme strength and break-resistance. Mylar is the most permanent medium yet developed for magnetic recording. Characteristics meet the most critical professional requirements and government specs.

Factory-fresh and splice-free, each reel is sealed in cellophane and packaged in a hinged box suitable for filing. Your cost is far below that of other high-quality tapes. The Mylar base of this outstanding tape provides exceptional reliability, even under adverse conditions—virtually unaffected by extremes in heat, cold and humidity. Mylar makes Knight "Plus-Play" superior to ordinary recording tape.

Stock No.	Foot-age	Reel Size	Wt., Lbs.	1-4, EACH	5-UP, EACH
92 R 939	900'	5"	3/4	1.92	1.73
92 R 940	1800'	7"	1 1/2	3.33	2.99

## KNIGHT "PLUS-PLAY" 1-Mil Acetate Tape

AS LOW AS

**\$139**

5-Lot Price

One of the most popular recording tapes available today. Offers superior quality, greatly extended playing time (as much as six hours per reel) and genuine savings. Much thinner than standard tape, "Plus-Play" tape is wound 1800 feet to a 7-inch reel, to provide 50% more footage than conventional recording tapes.

The additional length supplied by "Plus-Play" tape permits uninterrupted recordings of entire concerts, conferences, broadcasts, or many other events, on a single tape. Knight "Plus-Play" tape offers maximum fidelity at minimum cost. Thinner base and special coating processes are employed. Uniformly coated with red oxide on cellulose acetate—delivers excellent response. Supplied on transparent molded plastic reels.

Stock No.	Foot-age	Reel Size	Wt., Lbs.	1-4, EACH	5-UP, EACH
96 R 981	900'	5"	3/4	1.55	1.39
96 R 982	1800'	7"	1 1/4	2.77	2.49

## KNIGHT STANDARD 1 1/2-Mil Acetate Tape

AS LOW AS

**\$119**

5-Lot Price

Allied's own top-quality acetate-base recording tape—unusually low in cost, and carefully manufactured to fulfill the most critical recording requirements. Delivers outstanding results in professional as well as home recording applications. Rigid manufacturing controls protect the high quality of Knight standard-play tape.

Its pure, red-oxide surface is precision-applied to assure excellent high-fidelity response, noise-free reproduction, uniform output, as well as minimum abrasive action. You can be sure of the exceptional quality of this value-packed recording tape—its performance is comparable with that of any other brand of tape, regardless of price. Guaranteed splice-free for dependable service. Supplied on clear plastic reels.

Stock No.	Foot-age	Reel Size	Wt., Lbs.	1-4, EACH	5-UP, EACH
96 R 698	600'	5"	1/2	1.32	1.19
96 R 699	1200'	7"	1	1.88	1.69

Write for prices on Knight recording tape in larger quantities

## SPECIAL TAPE AND CASE COMBINATION OFFERS

### 5 REELS 1 1/2-MIL ACETATE WITH 5-REEL CHEST

**\$940**

6000 Ft.

Allied's super-value combination offer for tape enthusiasts. Buy five 7" reels of Knight standard-play 1 1/2-mil acetate recording tape, and receive—at reduced cost—the attractive fiber-board carrying case illustrated at right. Each reel of tape is individually boxed inside the tape chest. Case is designed for convenient portability, as well as filing and storage. Shpg. wt., 6 lbs.

91 R 731. ONLY 9.40

### 5 REELS 1-MIL ACETATE WITH 5-REEL CHEST

**\$1340**

9000 Ft.

Money-saving price on 9000 ft. of superior quality Knight 1-mil acetate "Plus-Play" recording tape. You save on the five 7" reels (1800' per reel)—and you save on the handsome fiber-board tape carrying chest. Guaranteed fresh and splice-free, each reel of tape offers as much as 6 hours of recording time. You'll find the chest ideal for storage and filing, 6 lbs.

99 R 173. ONLY 13.40

### 10 REELS 1-MIL ACETATE —FREE 10-REEL CHEST

**\$2490**

18,000 Ft.

Save on ten 7" reels (1800' per reel) of Knight "Plus-Play" 1-mil acetate recording tape—and get the free bonus of a smartly styled, durable, leatherette-covered wood carrying case. Each reel offers superior quality and extended playing time (as much as six hours per reel). Individually boxed reels of tape—guaranteed fresh and splice-free. Shpg. wt., 14 lbs.

95 RX 787. \$2.00 Down. ONLY 24.90

### 5 REELS 1-MIL MYLAR WITH 5-REEL CHEST

**\$1590**

9000 Ft.

Double savings. Save on five 7" reels of Knight "Plus-Play" 1-mil Mylar tape (1800 ft. per reel)—and save on the attractive fiber-board tape carrying chest illustrated at right. You get Allied's finest quality, splice-free tape—provides 50% greater recording time than standard tapes—and has Mylar plastic base for extreme strength and break-resistance. Shpg. wt., 6 lbs.

92 R 750. ONLY 15.90



5-Reel  
Fiber-  
Board  
Chest

Money-Saving Combination  
Offers on Top-Value Knight  
Recording Tapes With Handy  
Tape Carrying Cases



10-Reel  
Wood  
Chest

Allied is Headquarters for Recording Equipment and Accessories

# audiotape

## MAGNETIC TAPE



Standard



1-Mil Mylar



Low-Print

**STANDARD TAPE—1½-MIL ACETATE.** Plastic reels except \*NARTB aluminum (3" center opening). Av. shgp. wt., 8 oz.

Stock No.	Type	Footage	Reel Size	List	EACH	Lot Price
96 R 562	151	150'	3"	\$0.70	.46	.41†
96 R 561	351	300'	4"	1.35	.88	.79†
96 R 560	651	600'	5"	2.25	1.47	1.32†
96 R 356	1251	1200'	7"	3.50	2.29	2.06†
96 R 357	2551R*	2500'	10½"	10.90	7.12	6.41‡

†NET EACH, 10 or more. ‡NET EACH, 5 or more.

**"LONGER-RECORDING" TAPE—1-MIL ACETATE.** 50% more recording time. Plastic reels except \*NARTB alum. (3" ctr. opening). 8 oz.

Stock No.	Type	Footage	Reel Size	List	EACH	Lot Price
92 R 935	941	900'	5"	\$3.50	2.29	2.06†
92 R 936	1841	1800'	7"	5.50	3.60	3.23†
92 R 937	3641R*	3600'	10½"	12.85	8.40	7.56‡

†NET EACH, 10 or more. ‡NET EACH, 5 or more.

**"LONGER-RECORDING" TAPE—1-MIL MYLAR.** 50% more recording time. Mylar base. On plastic reels except \*NARTB aluminum reel (3" center opening). †Plastic reel in self-mailer carton. Wt., 12 oz.

Stock No.	Type	Footage	Reel Size	List	EACH	Lot Price
96 R 838	261‡	225'	3"	\$1.00	.66	.59†
96 R 955	961	900'	5"	3.60	2.35	2.12†
96 R 956	1861	1800'	7"	6.20	4.05	3.65†
96 R 958	3661R*	3600'	10½"	14.40	9.41	8.47‡

†NET EACH, 10 or more. ‡NET EACH, 5 or more.

**COLORLED BASE TAPE—1½-MIL ACETATE.** Same high quality as acetate base (left). Plastic reels. Av. shgp. wt., 8 oz.

No.	Green	No.	Blue	Footage	Reel	EACH	10-Up, EA.
96 R 736	651G	96 R 738	651B	600'	5"	1.47	1.32
96 R 737	1251G	96 R 739	1251B	1200'	7"	2.29	2.06

**LOW-PRINT TAPE.** Minimizes print-through of signal while tape is in storage. \*1½-mil acetate. †1½-mil Mylar. Av. shgp. wt., 12 oz.

Stock No.	Mfr's Type	Footage	Reel Size	List	1-4, EACH	5-9, EACH	10-Up, EACH
92 R 931	1251-M*	1200'	7"	\$4.30	2.80	2.80	2.53
92 R 930	2551R-M*	2500'	10½"	12.50	8.16	7.35	7.35
92 R 932	1271M†	1200'	7"	7.70	5.03	5.03	4.53
92 R 933	2571R-M†	2500'	10½"	16.40	10.71	9.64	9.64

**TEMPERED MYLAR TAPE.** Has twice the strength of conventional ½-mil tape. Plastic reel. Av. shgp. wt., 8 oz.

Stock No.	Type	Reel Length	List	1-9, EA.	10-Up, EA.
92 R 959	1231T	5"	1200'	\$4.75	3.11
92 R 960	2431T	7"	2400'	8.75	5.71

**TAPE RECORDER REELS.** 10½". With box. \*3" center. Wt., 8 oz.

Stock No.	Type	Description	List	1-4, EA.	5-Up, EA.
96 R 358	10RB	NARTB aluminum*			
96 R 997	10FS	Fiberglass, EIA adapterless ¾" center	\$4.00	2.62	2.35

**MYLAR SELF-TIMING LEADER TAPE.** 100 ft. of white Mylar leader tape, spaced markings for timing. Shgp. wt., 5 oz.

92 R 938. List, 55¢. NET..... 37c

# MINNESOTA MINING

## SCOTCH BRAND

### MAGNETIC TAPE



Standard



Tensitized



Extra-Play

**TYPE 111 STANDARD TAPE—1½-MIL ACETATE.** General-purpose acetate base recording tape of high quality. Supplied on high-strength molded plastic reel, except \*aluminum NAB reel (3-inch center opening). Av. shgp. wt., per reel, 8 oz.

Stock No.	Mfr's Type	Footage	Reel Size	List	1-11, EACH	12-Up, EACH
92 R 991	111-1.5	150'	3"	\$ .70	.46	.41
92 R 992	111-3	300'	4"	1.35	.88	.79
92 R 993	111-6	600'	5"	2.25	1.47	1.32
92 R 994	111-12	1200'	7"	3.50	2.29	2.06
92 R 995	111-24R*	2400'	10½"	10.90	7.13	6.41

**TYPE 190 EXTRA-PLAY TAPE—1-MIL ACETATE.** Thin acetate base provides 50% more playing time on standard size reels. \*NAB aluminum reel (3" center opening). Av. shgp. wt., 12 oz.

Stock No.	Mfr's Type	Footage	Reel Size	List	1-11, EACH	12-Up, EACH
92 R 996	190-9-100G	900'	5"	\$3.50	2.29	2.06
92 R 997	190-18-100G	1800'	7"	5.50	3.60	3.23
92 R 998	190-36R-100G	3600'	10½"	12.85	8.40	7.56

**TYPE 150 EXTRA-PLAY TAPE—1-MIL MYLAR.** Extra-strong Mylar plastic base tape. Plastic reels except \*NAB aluminum 10½" reel (3" center opening). Av. shgp. wt., 12 oz.

Stock No.	Mfr's Type	Footage	Reel Size	List	1-11, EACH	12-Up, EACH
92 R 900	150-9	900'	5"	\$3.60	2.35	2.12
92 R 901	150-18	1800'	7"	6.20	4.04	3.65
92 R 903	150-36R*	3600'	10½"	14.40	9.41	8.47

**TYPE 41-½S SPLICING TAPE.** Coated one side with non-run adhesive. 150". ½" wide, on handy dispenser. Shgp. wt., 3 oz.

96 R 232. NET..... 34c

**TYPE 120-12 HIGH-OUTPUT TAPE—1½-MIL ACETATE.** 8 to 12 db higher output. 1200'. Plastic 7" reel. Shgp. wt., 12 oz.

92 R 999. 12-Up, EACH..... 3.24 1-11, NET EACH..... 3.60

**LOW-PRINT TAPE—1½-MIL ACETATE.** Minimizes print-through during storage. 7" reel. 1200'; 10½" reel. 2400'. Shgp. wt., 12 oz.

Stock No.	Type	Reel Size	List	1-11, EA.	12-Up, EA.
92 R 917	131-12	7"		2.88	2.59
92 R 918	131-24R	10½"		8.40	7.56

**TYPE 200 TENSILIZED TAPE.** Super-strength, long-play tape. Polyester ¾-mil base. Av. shgp. wt., 12 oz.

Stock No.	Mfr's Type	Footage	Reel Size	List	1-11, EACH	12-Up, EACH
92 R 471	200-3	300'	3"	\$1.35	.88	.79
92 R 934	200-24	2400'	7"	8.75	5.71	5.14

**EMPTY PLASTIC REELS.** Supplied complete with index box. Durably made of molded high-strength plastic, completely transparent. Adequate space provided on each reel for labeling or marking. Av. shgp. wt., 4 oz.

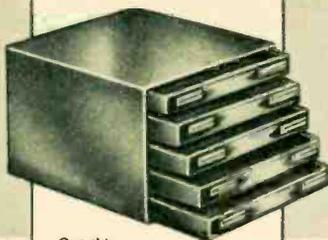
Stock No.	Reel Size	List	1-11, EACH	12-Up, EACH
96 R 237	3"	25¢	17¢	15¢
96 R 349	4"	55¢	37¢	33¢
96 R 236	5"	65¢	44¢	39¢
96 R 194	7"	75¢	50¢	45¢

**ONE-REEL MAILING BOXES.** Shgp. wt., 3 oz.

Stock No.	Reel Size	List	1-11, EACH	12-Up, EACH
96 R 324	5"	15¢	10¢	9¢
96 R 323	7"	20¢	13¢	12¢
96 R 322	10½"	30¢	20¢	18¢

# RECORDING TAPES AND ACCESSORIES

## COMBINATION OFFER



Get this handy tape storage chest. See listing at right.

## REEVES SOUNDRAFT RECORDING TAPE



"LIFETIME" TAPE—1½-MIL MYLAR. Micropolished. Plastic reels, except \*RETMA fiberglass reel. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Footage	Reel Size	NET EA.	10-Up, EA.
96 R 968	L-6	600'	5"	2.55	2.29
96 R 969	L-12	1200'	7"	4.12	3.70
92 R 954	L-24RF*	2400'	10½"	9.02	8.11

"RED DIAMOND" STANDARD TAPE—1½-MIL ACETATE. Micropolished. Acetate base. Plastic reels except \*RETMA fiberglass. 8 oz.

Stock No.	Mfr's Type	Footage	Reel Size	NET EA.	10-Up, EA.
96 R 960	SPN-1	150'	3"	.41	.38
96 R 961	SPN-3	300'	4"	.81	.73
96 R 962	SPN-6	600'	5"	1.37	1.23
96 R 963	SPN-12	1200'	7"	2.29	2.06
92 R 950	SPN-24RF*	2400'	10½"	5.56	5.00

"PLUS-50" TAPE—1-MIL MYLAR. 50% more footage. Micropolished. Mylar base. Plastic reels except \*RETMA fiberglass. 8 oz.

Stock No.	Mfr's Type	Footage	Reel Size	NET EA.	10-Up, EA.
92 R 952	PL-2	225'	3"	.69	.61
96 R 972	PL-9	900'	5"	2.28	2.20
96 R 973	PL-18	1800'	7"	3.92	3.82
92 R 953	PL-36RF*	3600'	10½"	9.15	8.23

XP-24 "PLUS 100" TAPE—½-MIL MYLAR. Extra-long play micropolished tape. Requires careful handling. 2400'. 7" plastic reel. Shpg. wt., 14 oz.

95 R 917. 10-Up, EACH 4.00 NET EACH 4.44

COMBINATION OFFERS—REELS OF TAPE IN CHESTS. Get the tape of your choice, plus a convenient case to store it in. Tape chest holds five reels. Size: 8x7¼x7¼".

No.	Mfr's Type	Tape	Reels	Lbs.	List	NET EACH
96 R 964	SPNC-7	"Red Diamond"	5—1200'	8	\$17.50	11.45
96 R 953	LC-7	"Lifetime"	5—1200'	8	31.50	20.58
96 R 952	PLC-7	"Plus-50"	5—1800'	9	30.00	19.60
96 R 959	7STC	Tape Chest Only	4	4.50	1.10	

TAPE TIMING CHART. Semi-logarithmic tape timing chart. Covers speeds from 1½ to 15", single and dual track. Wt., 6 oz.

92 R 955. List. \$1.20. NET 88c

"STANDARD 50" TAPE—1-MIL ACETATE. Micropolished, with acetate base. Both have slotted plastic reels. Shpg. wt., 8 oz.

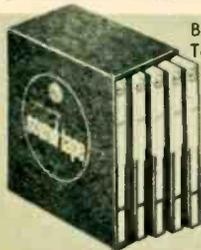
Stock No.	Mfr's Type	Tape Footage	Reel Size	NET EACH	
				1-9	10-Up
92 R 647	S5-9	900'	5"	2.15	1.93
92 R 646	S5-18	1800'	7"	3.38	3.04

SOUNDRAFT "MAGNA-SEE". See the sound track on your recorded tapes with this unique kit. Tape is run through a colloidal iron suspension, which deposits fine iron particles on the magnetic track. Deposit pattern shows you the vertical and angular head alignment, and its condition of wear. Kit includes ½-pt. can of iron suspension, jeweler's "loop", plastic tray, and a roll of transparent tape with 4 slides. Shpg. wt., 1½ lbs.

92 R 975. NET 7.95

IRON SUSPENSION. ½-pt. can of iron suspension fluid. ¼ lb.

92 R 806. NET 3.00

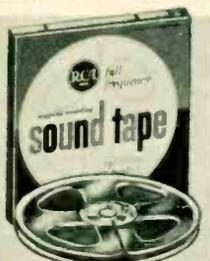


Bookshelf Tape Chest



## RECORDING TAPES

Quality Tape With Special Features



ACETATE-BASE TAPE. Quality magnetic tape for critical recording applications. Oxide coating is impregnated with dimethyl silicone, a dry lubricant, to reduce wow, flutter, squeal and tape head wear. Oxide particles are extremely small to minimize tape hiss and permit high-level recording with low distortion. Transparent plastic reels are specially slotted for fast, easy loading. Av. shpg. wt., 8 oz

Stock No.	Mfr's Type	Tape Footage	Reel Size	Mils	List	NET EACH	
						1-11	12-Up
92 R 963	250C1	900'	5"	1	\$3.50	2.29	2.06
92 R 964	251C1	600'	5"	1½	2.25	1.47	1.32
92 R 965	255C1	1800'	7"	1	5.50	3.60	3.23
92 R 966	256C1	1200'	7"	1½	3.50	2.29	2.06

FOR 5" REELS. TYPE 501C1. Handy bookshelf-type case for convenient filing and storing of your 5" tapes. Case is covered with gold-stamped, simulated red leather. Heavy chip-board construction—enclosed on five sides. 5 vertical compartments. 5¼x4¼x5¾". Shpg. wt., ½ lb.

92 R 961. List. \$1.28. NET 75c

MYLAR-BASE TAPE. Superior magnetic recording tape on a Mylar base. For use under adverse recording conditions, or where extended playing time is desired. Includes the modern features described in the acetate-base tape described at left—including the transparent, easy-loading, slotted plastic reels. Av. shpg. wt., 8 oz.

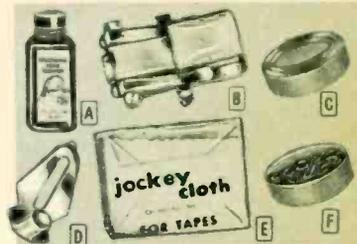
Stock No.	Mfr's Type	Tape Footage	Reel Size	Mils	List	NET EACH	
						1-11	12-Up
92 R 967	252C1	1200'	5"	½	\$4.55	2.97	2.68
92 R 968	253C1	900'	5"	1	3.60	2.35	2.12
92 R 969	254C1	600'	5"	1½	4.10	2.68	2.41
92 R 970	257C1	2400'	7"	½	7.85	5.34	4.61
92 R 971	258C1	1800'	7"	1	6.20	4.05	3.65
92 R 972	259C1	1200'	7"	1½	6.65	4.34	3.91

FOR 7" REELS. TYPE 502C1. Durable, attractive case like unit described at left, but for storage of 7" tape reels. Vertically divided into 5 compartments—each holding one 7" reel. Gold-stamped, simulated leather covering blends with any decor. Case size: 7½x4¼x5¾" deep. Shpg. wt., ½ lb.

92 R 962. List. \$1.40. NET 82c

## BOOKSHELF TAPE STORAGE CASES

## NEW! Robins Tape Recordists Kit



NET \$8.82

A complete kit of helpful, time-saving accessories for the tape recording hobbyist. Includes valuable aids for editing and splicing, as well as for cleaning and lubricating magnetic heads. Kit contains bottle of Recording Head Cleaner (Fig. A), Tape Splicer (Fig. B), 100 inch dispenser roll of splicing tape (Fig. C), Tape Threader (Fig. D), chemically-treated cloth for cleaning tapes (Fig. E), container of snap-on tool clips that prevent tape reels from unraveling (Fig. F). Also included are 30 self-adhesive reel identification labels. Tape Splicer cuts tape ends diagonally and gives splice a concave trim to prevent binding in the recording mechanism. Easy to apply labels show title, date, and reel number. Head cleaner and reduces effective recorder sensitivity and reduces noise in recordings. Tape threader greatly simplifies starting a tape on take-up reel. Wt., 1½ lbs.

92 R 648. List. \$12.00. NET 8.82



Model PL-100



Model RA-100



Model SW-80

# Nortronics . . . For Better, More Versatile Recording

## PL-100 PLAYBACK AMPLIFIER

A quality playback amplifier designed to match any high-impedance magnetic tape head. The basic unit you will need for playing stereo tapes is one of the tape head assemblies listed below. PL-100 units can be used in pairs with a stereo head or with any stereo phono cartridge. Outputs for connection to a speaker, or to the high-level input of a basic amplifier. No soldering required—a screwdriver is all you need.

**Low-level Inputs:** tape head, magnetic phono cartridge. **High-level Input:** tuner or ceramic cartridge. **Outputs:** 4, 8, 16 ohms; 1 v. cathode followers. **Equalization:** continuously variable, with NARTB and RIAA.

**Power Output:** 3 watts, push-pull triodes. **Response:** 30-15,000 cps,  $\pm 2$  db, 2% harmonic distortion.  $2\frac{1}{2} \times 5 \times 8\frac{1}{2}$ ". For 110-120 v., 60-cycle AC. Shpg. wt., 6 lbs. 92 R 980. \$2.00 Down, NET . . . . . 39.50

## RA-100 RECORDING AMPLIFIER

Universal recording amplifier—can be adjusted for use with any tape head. To record or copy stereo tapes, you will need one of the tape head assemblies listed below and two RA-100 units. The same head can be employed for both stereo record and playback by disconnecting it from the RA-100's and plugging it into the playback amplifying system. Supplies audio power, bias voltage and erase head power. Has full NARTB equalization, clearly calibrated VU meter and monitor jack. No soldering required.

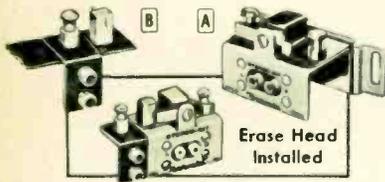
**Low-level Input:** mike, tape head or magnetic phono cartridge. **High-level Input:** tuner or ceramic cartridge. **Outputs:** audio and 65 kc bias to recording head (currents adjustable), high (10K to 20K) or low (20 to 30 ohms) impedance to erase head.  $-55$  db signal-to-noise ratio.  $2\frac{1}{2} \times 5\frac{1}{2} \times 8\frac{1}{2}$ ". For 110-120 v., 60-cycle AC. Shpg. wt., 6 lbs. 92 R 981. \$5.00 Down, NET . . . . . 57.50

## NEW SW-80 RECORD/PLAY SWITCH

Extremely convenient control center for use with any stereo tape head and RA-100 recording amplifiers listed at left. Provides instant control of stereo and monophonic record and playback operations on both two and four tracks. Selects either tracks 1 and 3 or tracks 2 and 4—no need to disconnect cables from equipment of system.

Also especially handy for track selection of more than two tracks when employing multiple track, sound-on-sound recording techniques; ideally suited for recording special effects quickly and easily.

Has 5 push-button controls: Record, Upper, Add, Lower, and Play. Record and Play interlock to prevent accidental erasure. Input signals may be monitored without recording. Allows mixing both outputs for stereo-monophonic comparison. Size (HWD):  $2\frac{1}{2} \times 5\frac{1}{2} \times 4\frac{1}{2}$ ". Shpg. wt., 2 lbs. 90 R 900. \$2.00 Down, NET . . . . . 25.50



Erase Head Installed



## 2 AND 4-TRACK STEREO AND MONOPHONIC TAPE HEADS

Professional-type tape recorder heads for general replacement or modernization applications. Feature laminated core design for superior response and sensitivity characteristics; lapped for maximum uniformity. All heads listed below are high impedance for general applications. Response of stereo heads: 30-15,000 cps, 50 db cross-talk rejection; monophonic heads: 30-13,000 cps. All erase heads have double gap giving 60 db erasure. Available in choice of base mount, side mount or rear mount—in either 2 or 4 track units. Complete with instructions. Av. shpg. wt., 6 oz.

Base Mount Stock No.	Side Mount Stock No.	Rear Mount Stock No.	Mfr's Type	Description of Head	NET EACH
90 RC 901	90 RC 902	90 RC 903	TL1D-1.2	4-Track stereo r/p	21.60
90 RC 904	90 RC 905	90 RC 906	SE-50-1	4-Track stereo erase	12.50
90 RC 907	90 RC 908	90 RC 909	TL1D-LH3	2-Track stereo r/p	21.60
90 RC 910	90 RC 911	90 RC 912	SE-100-2	2-Track stereo erase	12.50
90 R 913	90 R 914	90 R 915	SLS-1	2-Track mono r/p	8.10
90 R 916	90 R 917	90 R 918	ME-100-2	2-Track mono erase	7.50

**A STEREO TAPE HEAD ASSEMBLIES.** Compact playback-record heads—mount on side of tape unit with detachable bracket. Tape is routed through stereo assembly and then through present tape guides. May also be used monaurally. **Response:** 30-12,000 cps  $\pm 3$  db \*at 7 1/2 ips, fat 3 1/4 ips. 50 db cross-talk rejection. (Use SK-50 for the 4-track recorded stereo tapes. Size,  $1\frac{1}{4} \times 3 \times 1\frac{1}{4}$ ". Shpg. wt., 6 oz. Only \$2.00 Down. 92 RC 976. SK-100\*. 2-track, NET. 23.50 92 RC 977. SK-50\*. 4-track, NET. 26.00

**B STEREO ERASE ATTACHMENTS.** Fit on either side of tape heads. Provide excellent stereo or selective monaural erase. Shpg. wt., 2 oz. 92 RC 978. EK-100. 2-track, NET. 14.00 92 RC 979. EK-50. 4-track, NET. 14.00

## SHURE Exact-Replacement Tape Recorder Heads

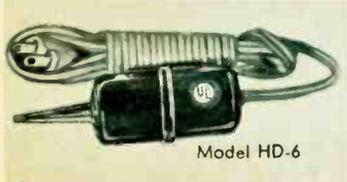
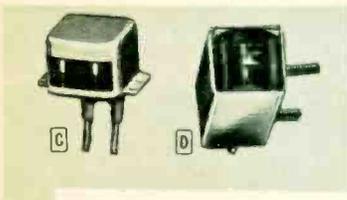
Quality tape recorder heads for modernization or replacement use. If in doubt as to the correct unit to select, send the make, model and serial number of your recorder to Allied for the proper replacement data. Fig. C is upper track record, playback erase type; Fig. D, 0.093" upper-track record, playback type. \*Has Cinch plug and 14" leads.

Stock No.	Type	Fig.	Coil Imp.	Replaces Older Type	Oz.	List	NET
65 R 366	815	C	Low	TR5, TR5H	4	\$15.00	8.82
65 R 584	815H	C	High	TR5D, TR5K, TR5C	4	15.00	8.82
92 R 982	TR21C-J	D	High	TR16A, 817	6	14.00	8.23
65 R 586	TR5B*	C	Low	TR5B	10	17.00	9.99
65 R 413	TR16*	D	High	.....	6	9.00	5.29

## SELECTED TAPE HEAD DEMAGNETIZERS

**AUDIO TYPE 400.** (Not illus.) Quickly demagnetizes tape recording heads to achieve reduced noise level and distortion. Consists of an AC magnet with pole pieces shaped to fit contour of recording heads. Extremely easy to use. Magnet diameter, 1 1/4". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 1 lb. 96 R 563. NET . . . . . 5.88

**ROBBINS MODEL HD-6.** Compact demagnetizer for removing magnetism from tape recording heads. Just place flat surface of demagnetizer pole piece on poles of head and slowly remove—quickly neutralizes any residual magnetism. 4 1/4" long; 1 1/4" diameter. For operation from 110 volts, 60 cycle AC. Shpg. wt., 1 lb. 92 R 990. NET . . . . . 7.35



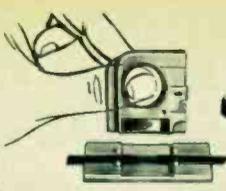
Model HD-6



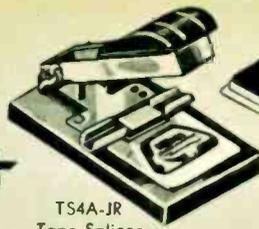
JCT-2  
Jockey Cloth



TT-1 Tape  
Threader



SP-4 Tape  
Splicer



TS4A-JR  
Tape Splicer



TS4A-DLX Splicer



TC-12 Tape Clip

## ROBINS Tape Recording Accessories

**JCT-2 JOCKEY CLOTH FOR TAPES.** Cleans, lubricates and protects tape by depositing on it a thin film of silicone. Just apply cloth while running tape through player or recorder. Reduces squeal, chatter, and head and tape wear. Cloth is washable—may be re-used. Shpg. wt., 3 oz.  
92 R 988. List, \$1.00. NET ..... 73c

**ST-500 SPLICING TAPE.** Roll of quality splicing tape, 1/2" wide. Shpg. wt., 2 oz.  
95 R 713. List, 40c. NET ..... 29c

**RK-2 REPLACEMENT KIT.** For TS4A series splicers described at right. Contains replacement cutter cartridge and 2 cutting pads. With instructions. Shpg. wt., 5 oz.  
92 R 987. List, \$1.25. NET ..... 98c

**TT-1 TAPE THREADER.** Place your tape against the reel, slip on threader, turn crank a few times, and tape is securely threaded on the reel. For reels to 7". Shpg. wt., 2 oz.  
96 R 713. List, 98c. NET ..... 79c

**TC-12 TAPE CLIPS.** Handy clips to keep tape from unwinding. In plastic box. Shpg. wt., 3 oz. 12 per pkg.  
92 R 989. List, 35c. PER PKG. .... 25c

**SP-4 TAPE SPICER.** Small, low-cost tape splicer—makes diagonal and concave trim cuts described at right under TS4A-JR. Consists of tape alignment guide and cutting surface, cutting unit, and blade cover. Shpg. wt., 2 oz.  
92 R 986. List, \$3.50. NET ..... 2.57

**HC-2 HEAD CLEANER.** (Not illustrated.) A fast, highly efficient solvent for cleaning recording heads. Easily removes dirt, grime, and accumulated oxides from heads—reduces annoying distortion. Bottle cap has attached brush applicator for added convenience. A valuable "must" for every stereo and monophonic tape enthusiast. Complete with instructions. Shpg. wt., 4 oz.  
90 R 921. List, \$1.00. NET ..... 73c

**TS4A-JR TAPE SPICER.** Compact tape splicer designed for rapid tape editing and repairing. Employs replaceable cutter cartridge with two operating positions—miter cut and trimming cut. First position cuts tape diagonally, second position presses splicing tape over diagonal cut and trims concave indentation on either side of splice to prevent binding in recording mechanism and layer-to-layer adhesion. Uses 1/2" splicing tape. Size, 2 1/4 x 5 3/4". Shpg. wt., 7 oz.  
92 R 983. List, \$6.50. NET ..... 4.78

**TS4A-DLX TAPE SPICER.** As above, with attached splicing tape dispenser and toggle-action hold down fingers. Supplied with rigid plastic dust cover and splicing tape. Size, 2 1/4 x 5 3/4". Shpg. wt., 12 oz.  
92 R 984. List, \$11.50. NET ..... 8.46

**TS4A-STD TAPE SPICER.** Same as Model TS4A-DLX above, less splicing tape and holder. Shpg. wt., 8 oz.  
92 R 985. List, \$8.50. NET ..... 6.25

## Selected Tape Recording Accessories

**A "JIFFY-RASE" BULK TAPE ERASER.** Highly efficient, easy-to-use bulk tape eraser — permits you to erase an entire reel of tape or wire at a time without using your recorder. Allows quick erasure of tapes recorded on stereo decks that do not include erase heads. Also excellent for demagnetizing tools. 5" O.D.; 3 1/2" high. For 110-120 v., 60 cycle AC. Shpg. wt., 7 lbs.  
96 R 569. Only \$2.00 Down. NET ..... 20.98

**B MICROTRAN HD-11 BULK TAPE ERASER.** Here's a unit designed to erase a complete reel of tape—quickly and efficiently. Permits making greatly improved recordings by lowering background noise levels from 3 to 6 db. Ideal for the recording enthusiast desiring clean, distortion-free tapes. Size, 3 1/2 x 4 3/4 x 7 3/4". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 8 1/2 lbs.  
92 R 941. Only \$2.00 Down. NET ..... 22.91

**C 5-REEL TAPE CARRYING CASE.** Handy tape case designed to hold five 7" reels of tape. Constructed of lightweight fiberboard; plastic handle. 7 3/4 x 7 3/8 x 3 3/4". Shpg. wt., 1 lb.  
99 R 172. NET ..... 1.49

**D 10-REEL TAPE CARRYING CASE.** Stores ten 7" reels. Constructed of wood with brown and white simulated-leather covering. Plastic handle. 8 1/2 x 8 1/2 x 8 3/4". Shpg. wt., 3 1/4 lbs.  
96 RX 580. NET ..... 5.95

**E AUDIO COLORED PLASTIC REELS.** Attractive colored plastic reels (less tape) available in popular colors. Choice of 5" and 7" sizes. Supplied in boxes. Av. shpg. wt., 4 oz.

Reel Size	Stock No.					NET EACH		
	Clear	Red	Yellow	Green	Blue	List	1-9	10-Up
5"	96 R 748	96 R 740	96 R 742	96 R 744	96 R 746	60c	39c	35c
7"	96 R 749	96 R 741	96 R 743	96 R 745	96 R 747	75c	49c	44c

**F TAPEMASTER 4 1/2" VU METER.** Make better recordings with this precision unit. Eliminates guesswork when adjusting level control. Helps prevent overload distortion. 2-color scale calibrated 0-100 in modulation percentage and -20 to +3 VU. Has dual-impedance input for use with high or low impedance circuits. Sensitivity, 200  $\mu$ a; shunts for 1.2 or 12-v. 0 VU operation. Mounts in 2 1/4" dia. hole; depth behind panel is 1 1/2". Wt., 1 lb.  
92 R 942. NET ..... 15.95

**G SCOTCH 43P PLASTIC BASE LEADER AND TIMING TAPE.** For editing and starting of tapes. 150-ft. roll. Shpg. wt., 3 oz.  
92 R 905. NET ..... 59c

**H AUDIO 30AL IDENTIFICATION LABELS.** Self-adhesive, 1/2 x 2" labels. Attach to reel for quick identification. Shpg. wt., per pkg., 4 oz. 30 identification labels per pkg.  
96 R 564. List, 20c. NET PER PKG. .... 12c

**J JIFFY-SPLICE TAPE SPICER.** Holds recording tape in alignment for cutting and splicing. Two clamping clips hold tape in place. 3/4 x 4 1/4 x 1 1/2". Shpg. wt., 5 oz.  
96 R 379. List, \$2.50. NET ..... 1.50



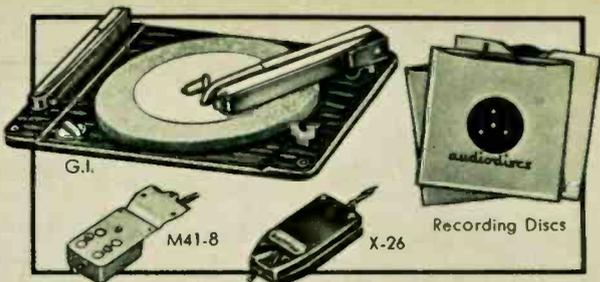
### ECHO RECORDING WIRE

High-quality .0036" stainless steel wire on die-cast spools. With plastic leaders.

Stock No.	Spool Size	Shpg. Wt.	NET EACH
96 R 145	1/2 hour	6 oz.	1.86
96 R 146	1/2 hour	8 oz.	2.82
96 R 147	1 hour	11 oz.	4.70

**EMPTA METAL SPOOL.** Holds 1-hr. wire supply. Shpg. wt., 3 oz.  
96 R 044. NET ..... 46c

# DISC RECORDERS AND ACCESSORIES



## Rek-O-Kut "Imperial" Professional Recorder

Precision Rek-O-Kut 33 $\frac{1}{3}$ -78 rpm disc recorder with M12S overhead recording lathe. Unit will accommodate all standard vertical-mounting cutting heads. Supplied with 120-line leadscrew; interchangeable with leadscrews up to 240 lines (see below). Lathe can be hand-cranked for run-in and run-off spiral grooves. Calibrated for critical timing. Model A-160, 16" playback pickup arm accommodates records up to 16" in diameter. With H-4 cutting head; response 50-10,000 cps. Less mike. Uses standard short-shank cutting needle. For 105-125 v., 60 cycle AC. Wt., 80 lbs.  
95 RZ 742. Only \$10.00 Down. NET **599.95**

MODEL M-12S OVERHEAD RECORDING LATHE. Used in "Imperial" professional recorder listed above. Interchangeable with M-12 mechanism. Less head. Shpg. wt., 20 lbs.  
95 RU 745. Only \$5.00 Down. NET **150.00**

MODEL H-4 CUTTING HEAD. For Model M-12S recording lathe, above. Impedance, 8 ohms. Shpg. wt., 1 lb.  
68 RC239. Only \$5.00 Down. NET **75.00**

MODEL M-12S-210 MICROGROOVE LEADSCREW. For Model M-12S recording lathe. 210 lines per inch. Shpg. wt., 1 lb.  
95 R 743. Only \$2.00 Down. NET **44.95**

MODEL M-12S-240 MICROGROOVE LEADSCREW. As above except 240 lines per inch. Shpg. wt., 1 lb.  
95 R 744. Only \$2.00 Down. NET **44.95**

MODEL TR-43H DUAL-SPEED RECORDING TURNTABLE. Dual speed. 12" aluminum turntable. Plays 33 $\frac{1}{3}$  and 78 rpm. Tapped for M-12S cutter. With heavy-duty, hysteresis synchronous motor. Includes 45-rpm idler. Less cutter. Shpg. wt., 21 lbs.  
91 RZ 749. Only \$5.00 Down. NET **149.95**

## G. I. Recorder-Phono Assembly

MODEL GI-R85L-LP. Low-cost recorder-phonograph assembly for cutting and playing recordings. Easily mounted in cabinet, carrying case, etc. Cuts discs up to 10" in diameter at 160 lines per inch (standard groove only) at 33 $\frac{1}{3}$  and 78 rpm, or 45 and 78 rpm, using adapter spring included for that purpose. Weighted pickup arm provides proper needle pressure for playing standard and microgroove records. Turntable is rim-driven by 4-pole motor. Convenient depth of cut adjustment. An ideal unit for replacement of older disc recorders. Size, base plate 15" W, 11 $\frac{1}{2}$ " D; height, 6 $\frac{1}{2}$ ", 2 $\frac{1}{2}$ " above. 3 $\frac{1}{4}$ " below plate. Requires high-gain amplifier or radio with 3 watts or more output. Cutter head must be connected to high impedance source. Supplied complete with crystal cutting head less cutting needle (requires short shank type) and playback styli. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 17 lbs.  
96 RX 106. List. \$62.50. \$2.00 Down. NET **37.50**

MODEL GI-R85-IP WITH MAGNETIC HEAD. Same as GI-R85L-LP, but with magnetic cutting head which connects directly to 8-ohm output of any P.A. or hi-fi amplifier. Shpg. wt., 18 lbs.  
96 RX 703. List. \$66.00. \$2.00 Down. NET **39.60**

## Astatic Disc Recording Heads and Needles

TYPE X-26 CRYSTAL. High impedance; response to 6000 cps. Includes flange for Wilcox-Gay, Knight and G.I. recorders. Connects to plate of output tube or 60,000 ohms transformer secondary. Approximate drive voltage required: 150 v. (rms). Size, 1 $\frac{1}{4}$ "x $\frac{5}{8}$ "x $\frac{3}{4}$ ". Complete with 24" leads. Shpg. wt., 1 lb.  
65 R 125. NET **7.53**

TYPE M41-8 MAGNETIC. Impedance, 8 ohms; connects directly to amplifier output. Upper frequency limit, 7000 cps. Drive voltage, 3 v. (rms). Size, 1 $\frac{1}{4}$ "x1 $\frac{1}{8}$ "x3 $\frac{3}{4}$ ". 24" leads. Shpg. wt., 1 lb.  
65 R 128. NET **7.53**

KNIGHT STEEL CUTTING NEEDLES. Short shank. Have .003" tip. Average cutting life, 20 minutes. Shpg. wt., 3 oz.  
65 R 803. Pkg. of 5. NET **59c**

KNIGHT SAPPHIRE CUTTING NEEDLE. Precision-ground and highly polished. Short shank. Has .003" tip. Av. life, 5 hrs. 2 oz.  
65 R 800. NET EACH **3.88**

## Quality Recording Discs for All Purposes

### AUDIODISC PROFESSIONAL RECORDING BLANKS

Smooth-coated on both sides of aluminum base. Red Label discs for highest quality work; Yellow Label for general purpose work in studios and schools; Blue Label for home recording. \*Large center hole for 45-rpm recordings.

Stock No.	Size	Label	Base	Wt. Ea.	Lbs. Pkg.	Std. Pkg.	NET EACH		
							Single	Lots	Std. Pkg.
69 R 085	7"	Red	.050"	5 oz.	5	25	.91	.82	
69 R 069	8"	Red	.040"	5 oz.	5	25	.71	.65	
69 R 070	10"	Red	.040"	6 oz.	8 $\frac{1}{2}$	25	1.01	.91	
69 R 071	12"	Red	.050"	9 oz.	13 $\frac{1}{2}$	25	1.67	1.50	
69 RX 072	16"	Red	.050"	1 lb.	25	25	3.01	2.70	
69 R 089	8"	Yellow	.040"	5 oz.	5	25	.61	.55	
69 R 090	10"	Yellow	.040"	6 oz.	8 $\frac{1}{2}$	25	.81	.72	
69 R 091	12"	Yellow	.050"	9 oz.	13 $\frac{1}{2}$	25	1.30	1.18	
69 RX 092	16"	Yellow	.050"	1 lb.	25	25	2.42	2.18	
69 R 065	6 $\frac{1}{2}$ "	Blue	.027"	3 oz.	6 $\frac{1}{2}$	50	.32	.29	
69 R 066	8"	Blue	.027"	4 oz.	7 $\frac{1}{2}$	50	.46	.41	
69 R 067	10"	Blue	.027"	5 oz.	10 $\frac{1}{2}$	50	.66	.59	

### REEVES SOUNDRAFT RECORDING DISCS

THE PLAYBACK. For critical recording. Double face.

Stock No.	Size	Base	Wt. Ea.	Lbs. Pkg.	Std. Pkg.	NET EACH		
						Single	Lots	Std. Pkg.
69 R 263	6 $\frac{1}{2}$ "	.040"	3 oz.	4	25	.59	.53	
69 R 265	10"	.040"	5 oz.	8	25	1.01	.91	
69 R 266	12"	.050"	8 oz.	14	25	1.67	1.50	

THE ADDITION. Standard broadcast-quality double-faced discs.

69 R 268	6 $\frac{1}{2}$ "	.040"	3 oz.	4	25	.52	.47	
69 R 270	10"	.040"	5 oz.	8	25	.81	.73	
69 R 271	12"	.050"	8 oz.	14	25	1.30	1.17	

THE BLUE DIAMOND. For general purpose recording. Double face.

69 R 273	10"	.040"	5 oz.	8	25	.68	.62	
69 R 274	12"	.050"	8 oz.	14	25	1.01	.91	
69 RX 275	16"	.060"	26 oz.	16	25	1.79	1.62	

### SEMI-PROFESSIONAL & HOME-TYPE RECORDING DISCS

Aluminum base (except paper bond base), cellulose acetate coated. Red Label is semi-professional grade.

Stock No.	Size	Label	Base	Wt. Ea.	Std. Pkg.	Wt. Pkg.	Std. Pkg.	NET EACH		
								Single	Lots	Std. Pkg.
69 R 109	6 $\frac{1}{2}$ "	Orange	†	3 oz.	6	1/2 lb.	25c	15c		
69 R 140	6 $\frac{1}{2}$ "	Red	.021"	3 oz.	5	1/2 lb.	30c	27c		
69 R 141	8"	Red	.021"	4 oz.	5	3/4 lb.	40c	36c		
69 R 142	10"	Red	.021"	4 oz.	5	1 lb.	60c	54c		
69 R 143	12"	Red	.021"	6 oz.	5	2 1/2 lbs.	73c	66c		
69 R 195	6 $\frac{1}{2}$ "	Purple	.012"	3 oz.	5	1/2 lb.	23c	21c		
69 R 196	8"	Purple	.012"	4 oz.	5	3/4 lb.	33c	30c		
69 R 197	10"	Purple	.012"	4 oz.	5	1 lb.	47c	42c		

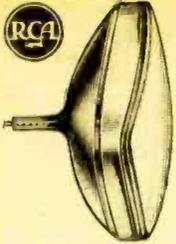
RECORD LABELS. Gummed record labels with spaces for title, artist, date, etc. Shpg. wt., per pkg., 2 oz. 50 per pkg.  
65 R 520. 4 or more Pkgs., EA. 31c NET PER PKG. **35c**

## Disc Cutting Needles

AUDIOPONTS. High-quality recording needles. For all professional and non-professional recorders. 65 R 960 has 87° included angle; 65 R 961, 70°. All types have .003" tip radius except Type No. 20, .001". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	NET EACH
65 R 960	14	Sapphire, short dural shank	4.85
65 R 967	20	As above, for microgroove	
65 R 961	14	Sapphire, long dural shank	
65 R 966	20	As above, for microgroove	
65 R 962	202	Sapphire, short brass shank	3.88
65 R 963	202	Sapphire, long brass shank	
65 R 964	34	Stellite, short brass shank	1.47
65 R 965	34	Stellite, long brass shank	

# RCA Picture Tubes—NOW ON EASY TERMS!



THERE'S AN RCA PICTURE TUBE FOR ANY BUDGET

Choice of New or Factory-Rebuilt Types

One Full Year Guaranteed

Now you can choose your replacement TV picture tube from two separate lines of fully guaranteed tubes by RCA. In addition to the famous RCA "Silverama" all-new premium tubes, RCA offers their "Monogram" line of budget-priced rebuilt units—high quality, thoroughly dependable picture tubes in which everything but the original glass envelope has been replaced. "Monogram" tubes are reprocessed and tested in the same factory as the premium "Silverama" types. Both "Silverama" and "Monogram" tubes are guaranteed for one year. Magnetic focus and deflection except telecstatic focus and magnetic deflection. \*Aluminized screens. When ordering, give Dept. and Tube Type No.

EASY PAYMENTS

Picture tubes may now be purchased on Allied's Easy Pay Plan—the most liberal plan in the entire field of electronics. See back section of catalog for complete details.

## "SILVERAMA" ALL-NEW PREMIUM TUBES

Stock No.		Shpg. Wt., Lbs.	List	NET EACH
Dept.	Tube Type			
AU3	8DP4†	4	\$32.00	25.32
AU3	10BP4A	13	26.50	19.60
AU3	10FP4A*	13	34.00	25.16
AU3	12KP4A*	17	34.50	25.58
AU3	12LP4A	17	30.00	22.22
AU3	14ATP4†	12	37.00	27.44
AU3	14EP4/14CP4/14BP4	14	31.50	23.20
AU3	14HP4†	14	33.50	24.63
AU3	14CP4A††	10	38.50	29.42
AU3	14RP4A	12	37.50	27.57
AU3	14RP4A*	12	41.00	30.18
AU3	14WP4/14ZP4*	12	37.50	27.76
AU3	16AP4A	17	48.50	35.94
AU3	16DP4A	23	45.50	33.64
AU3	16GP4B	16	48.00	35.41
AU3	16LP4A	25	45.00	33.32
AU3	16RP4/16KP4	21	36.50	26.98
AU3	16RP4A/16KP4A*	21	40.00	29.72
AU3	16TP4A	21	36.50	26.98
AU3	16WP4A	21	45.00	33.32
AU3	17AVP4/17ATP4†	17	40.00	29.68
AU3	17AVP4A/17ATP4††	17	44.00	32.60
AU3	17BP4†	17	44.00	32.60
AU3	17BP4A	21	37.00	27.51
AU3	17BP4B*	21	41.00	30.25
AU3	17BP4B†	14	48.50	35.94
AU3	17BP4B††	14	48.50	35.94
AU3	17DP4†	14	48.50	35.94
AU3	17DP4††	14	48.50	35.94
AU3	17CP4A	16	47.50	35.15
AU3	17DKP4††	14	52.00	38.54
AU3	17GP4†	16	50.00	36.85
AU3	17HP4/17RP4†	23	39.00	28.81
AU3	17HP4B/17RP4C††	23	43.00	31.75
AU3	17LP4/17VP4†	23	39.50	29.33
AU3	17LP4A/17VP4B††	23	44.00	32.34
AU3	17QP4	23	36.50	27.18
AU3	17QP4A*	23	41.00	30.25
AU3	17TP4†	16	51.50	38.09
AU3	19AP4B	24	52.50	38.88
AU3	20DP4A/20CP4A	29	44.00	32.60
AU3	20DP4C/20CP4D*	29	48.00	35.41
AU3	20HP4A/20MP4†	29	45.50	33.64
AU3	20HP4D††	29	50.00	36.85
AU3	21ACP4A/21BSP4/21AMP4A*	33	49.50	36.52
AU3	21ALP4B/21ALP4A†	33	51.50	38.15
AU3	21AP4	25	60.00	44.36
AU3	21ATP4A/21ATP4†	33	52.00	38.48
AU3	21AVP4B/21AUP4B†	33	49.00	36.26
AU3	21AVP4B/21AUP4A††	33	53.50	39.46
AU3	21AWP4*	33	49.50	36.58
AU3	21AXP22A†† (Color)	38	160.00	137.20
AU3	21BTP4††	31	52.00	38.22
AU3	21CNP4A†	33	52.50	38.94
AU3	21CEP4††	28	56.00	41.35
AU3	21CNP4A††	30	51.00	37.83
AU3	21CNP4A††	45	160.00	137.20
AU3	21CVP22* (Color)	33	56.00	41.35
AU3	21AP4	26	56.00	41.36
AU3	21DEP4A/21DEP4/21CZP4††	33	56.00	41.35
AU3	21DFP4††	30	51.00	37.83
AU3	21DI P4††	34	51.00	37.83
AU3	21DSP4††	36	46.50	34.37
AU3	21EP4A	34	50.50	37.29
AU3	21EP4B*	29	57.50	42.34
AU3	21EGP4††	36	48.00	35.28
AU3	21FP4C††	34	52.00	38.54
AU3	21MP4†	25	62.50	46.25
AU3	21WP4	31	46.50	34.23
AU3	21WP4A*	31	50.00	37.11
AU3	21XP4A*	33	52.50	38.68
AU3	21YP4†	33	47.50	35.02
AU3	21YP4A††	33	51.00	37.70
AU3	21ZP4*	33	45.50	33.45
AU3	21ZP4B*	33	49.00	36.19
AU3	24ADP4/24VP4A/24CP4A/24TP4*	43	74.50	54.88
AU3	24AEP4††	43	76.00	55.86
AU3	24AHP4††	37	81.50	60.14
AU3	24DP4A/24YP4††	43	77.50	56.84
AU3	27EP4*	62	121.50	89.50
AU3	27RP4*	62	121.50	89.50

## "MONOGRAM" FACTORY-REBUILT TUBES

Stock No.		Shpg. Wt., Lbs.	List	NET EACH
Dept.	Tube Type			
AU7	10BP4A	13	\$19.00	14.06
AU7	10FP4A*	13	25.00	18.64
AU7	12KP4A*	17	25.00	18.48
AU7	12LP4A	17	21.00	15.54
AU7	14EP4/14CP4/14BP4	14	23.00	17.18
AU7	14HP4†	14	24.50	18.29
AU7	14QP4A††	10	27.50	20.44
AU7	14RP4	12	27.50	20.44
AU7	14RP4A*	12	30.00	22.40
AU7	16AP4A	17	30.50	22.56
AU7	16DP4A	23	27.00	20.01
AU7	16CP4B	16	31.00	22.88
AU7	16LP4A	25	28.00	20.60
AU7	16RP4/16KP4	21	24.50	17.98
AU7	16RP4A/16KP4A*	21	27.00	19.94
AU7	16TP4	21	24.00	17.66
AU7	16WP4A	21	29.00	21.58
AU7	17AVP4/17ATP4†	17	30.00	22.78
AU7	17AVP4A/17ATP4A††	17	33.00	25.06
AU7	17BP4A	21	27.00	20.48
AU7	17BP4B*	21	29.50	22.51
AU7	17BVP4††	14	45.00	33.88
AU7	17GP4†	16	37.50	28.32
AU7	17HP4/17RP4†	23	29.00	22.12
AU7	17HP4B/17RP4C††	23	32.00	24.40
AU7	17LP4/17VP4†	23	28.75	21.58
AU7	17LP4A/17VP4B††	23	31.75	23.11
AU7	17QP4	23	26.75	20.21
AU7	17QP4A*	23	30.25	22.51
AU7	17TP4†	16	37.50	28.32
AU7	19AP4B	24	37.00	28.00
AU7	20DP4A/20CP4A	29	30.50	23.01
AU7	20DP4C/20CP4D*	29	33.50	24.97
AU7	20HP4A/20MP4†	29	32.50	23.74
AU7	20HP4D††	29	35.50	26.48
AU7	21ACP4A/21BSP4/21AMP4A*	33	36.50	28.06
AU7	21ALP4B/21ALP4A†	33	38.50	29.30
AU7	21AP4	25	44.50	34.10
AU7	21ATP4A/21ATP4††	33	38.50	29.57
AU7	21AVP4B/21AUP4B†	33	36.50	27.86
AU7	21AVP4B/21AUP4A††	33	39.50	30.35
AU7	21AWP4*	33	36.50	28.13
AU7	21AXP22A/21AXP22†† (Color)	38	127.00	98.40
AU7	21BTP4††	31	40.00	30.48
AU7	21CBP4A††	33	41.00	31.14
AU7	21CEP4††	28	41.50	31.78
AU7	21CVP22* (Color)	33	45.00	33.78
AU7	21EP4*	34	34.50	25.70
AU7	21EP4A*	34	34.50	25.70
AU7	21FP4C††	36	33.00	24.58
AU7	21FP4C††	34	36.00	26.80
AU7	21MP4†	25	46.50	35.53
AU7	21WP4	31	34.00	26.30
AU7	21WP4A*	31	37.00	28.52
AU7	21XP4A*	33	39.00	29.69
AU7	21YP4†	33	35.00	26.88
AU7	21YP4A††	33	38.00	28.98
AU7	21ZP4*	33	33.50	25.77
AU7	21ZP4B*	33	36.00	27.73
AU7	24ADP4/24VP4A/24CP4A/24TP4*	43	55.25	42.19
AU7	24DP4A/24YP4††	43	57.25	43.68
AU7	27MP4*	62	147.00	111.50

## WESTINGHOUSE 8" TV RECEIVER CHECK TUBE

- Completely Self-focusing
- Saves Valuable Time



Fits Most Sets

An extremely versatile 8" rectangular universal picture tube—a great aid in television servicing. Permits testing television set without using the original picture tube. Provides a positive on-the-spot substitution test for questionable picture tubes and eliminates the necessity for taking the original picture tube back to shop for servicing. Whether used in shop or on home service calls, the check tube saves time and money by providing a quick means for locating CRT or yoke troubles. The check tube is completely self-focusing. Can be used in virtually all electromagnetically deflected television sets regardless of the deflection angle. Fits 53°, 66°, 70°, or 90° yoke. No ion trap required. Ideal for electrostatic or magnetic-focus sets. The receiver check tube is lightweight and compact. A "must" for every well equipped TV service shop—a tremendous aid to the individual serviceman. Will soon pay for itself in time-saving dividends. Shpg. wt., 6 lbs.

AU5 8XP4, NET..... 21.56

Model 8YP4 Receiver Check Tube. Same as above, but with 110° magnetic deflection. Shpg. wt., 6 lbs.

AU5 8YP4, NET..... 28.91

## RCA RECEIVING TUBE MANUAL

RC-19. Latest edition. One of the most helpful books published for radio-TV servicemen. Lists characteristics and typical operating conditions of all current RCA receiving-type tubes. Covers applications and installation of tubes. Includes schematic diagrams and explanations of commonly encountered circuits. No charge with 15 receiving tubes or one TV picture tube.



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# RCA Quality Receiving Tubes

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- Finest Premium-Quality Tubes—All Types in Stock
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- Buy Tubes on Allied's Easy Payment Plan

You can be sure of complete satisfaction when you order tubes from Allied. We will replace any tube that does not give efficient performance for 12 months from date of purchase. This does not apply to burned-out or broken tubes. \*Not made by RCA—other well-known brands supplied. *Purchasers of tubes in lots of 15 or more may obtain RCA's Receiving Tube Manual at no extra cost—ask for Stock No. 37 K 575. Av. shpg. wt. per tube, 4 oz.; per 10, 2½ lbs.*



Tube Type	List Price	NET EACH In Quantities of:			Tube Type	List Price	NET EACH In Quantities of:		
		1 to 5	6 to 49	50 or more			1 to 5	6 to 49	50 or More
OZ4	\$2.15	1.20	1.05	.94	3S4	\$2.45	1.37	1.20	1.08
OZ4G	2.35	1.31	1.15	1.03	3V4	2.35	1.31	1.15	1.03
1A3	3.05	1.70	1.49	1.34	4AU6	2.15	1.20	1.05	.94
1A5GT	3.20	1.79	1.57	1.41	4BC5	2.35	1.31	1.15	1.03
1A7GT	3.70	2.07	1.81	1.63	4BC8	4.05	2.26	1.98	1.78
1AF4*	4.45	2.49	2.18	1.96	4BN6	3.05	1.70	1.49	1.34
1AX2	3.05	1.70	1.49	1.34	4BQ7-A	4.00	2.23	1.96	1.76
1B3GT	2.90	1.62	1.43	1.29	4BS8	3.85	2.15	1.89	1.70
1C5GT	3.60	2.01	1.76	1.58	4BU8	2.80	1.56	1.37	1.23
1D8GT*	4.80	2.68	2.35	2.11	4BX8*	3.45	1.93	1.69	1.52
1DN5	2.20	1.23	1.08	.97	4BZ6	2.25	1.26	1.10	.99
1G3GT/1B3GT	2.90	1.62	1.43	1.29	4C27	4.05	2.26	1.98	1.78
1H5GT	3.05	1.70	1.49	1.34	4CB6	2.30	1.29	1.13	1.02
1J3*	2.90	1.62	1.43	1.29	4CS6	2.35	1.31	1.15	1.03
1J3GT*	2.90	1.62	1.43	1.29	4CY5*	2.85	1.59	1.40	1.26
1K3	2.90	1.62	1.43	1.29	4DE6	2.50	1.40	1.23	1.11
1K3GT*	2.90	1.62	1.43	1.29	4DT6	2.25	1.26	1.10	.99
1L6	3.35	1.87	1.64	1.48	5AM8	3.30	1.84	1.62	1.46
1LA4*	4.45	2.49	2.18	1.96	5AN8	3.55	1.98	1.74	1.57
1LA6	4.10	2.29	2.01	1.81	5AQ5	2.20	1.23	1.08	.97
1LB4	4.45	2.49	2.18	1.96	5AS4A	2.10	1.17	1.03	.93
1LC5*	4.05	2.26	1.98	1.78	5AS8	3.45	1.93	1.69	1.52
1LC6	4.10	2.29	2.01	1.81	5AT8	3.25	1.82	1.59	1.43
1LD5	4.25	2.37	2.08	1.87	5AU4*	3.40	1.90	1.66	1.49
1LE3	4.25	2.37	2.08	1.87	5AV8	4.05	2.26	1.98	1.78
1LG5	4.05	2.26	1.98	1.78	5AW4*	2.80	1.56	1.37	1.23
1LH4	3.95	2.21	1.94	1.75	5AZ4	2.65	1.48	1.30	1.17
1LN5	3.95	2.21	1.94	1.75	5B8	3.90	2.18	1.91	1.72
1N5GT	3.65	2.04	1.79	1.61	5BE8	3.30	1.84	1.62	1.46
1Q5GT*	4.05	2.26	1.98	1.78	6BK7A	3.40	1.90	1.66	1.49
1R5	2.55	1.43	1.25	1.12	5BQ7A	4.00	2.23	1.96	1.76
1S4	3.65	2.04	1.79	1.61	5BR8	3.30	1.84	1.62	1.46
1S5	2.55	1.43	1.25	1.12	5BT8	3.30	1.84	1.62	1.46
1T4	2.40	1.34	1.18	1.06	5CG8	3.25	1.82	1.59	1.43
1U4	2.35	1.31	1.15	1.03	5CL8A	3.15	1.76	1.54	1.39
1U5	2.05	1.15	1.00	.90	5CM8	3.55	1.98	1.74	1.57
1V	3.65	2.04	1.79	1.61	5CQ8	3.35	1.87	1.64	1.48
1V2	2.00	1.12	.98	.88	5CZ5	2.85	1.59	1.40	1.26
1X2A	3.05	1.70	1.49	1.34	5DH8*	4.05	2.26	1.98	1.78
1X2B	3.05	1.70	1.49	1.34	5J6	2.80	1.56	1.37	1.23
2A3	6.30	3.52	3.09	2.78	5T4	7.95	4.42	3.87	3.49
2AF4-A	4.05	2.26	1.98	1.78	5T8	3.40	1.90	1.66	1.49
2B3*	2.90	1.62	1.43	1.29	5U4G	2.00	1.12	.98	.88
2BN4	2.55	1.43	1.25	1.12	5U4GA*	2.00	1.12	.98	.88
2CY5	2.80	1.56	1.37	1.23	5U4-GB	2.10	1.17	1.03	.93
2EA5*	2.80	1.56	1.37	1.23	5U8	3.30	1.84	1.62	1.46
2EN5	1.85	1.03	.91	.82	5V3	3.65	2.04	1.79	1.61
3A2	3.60	2.01	1.76	1.58	5V4GA	3.30	1.84	1.62	1.46
3A3	3.40	1.90	1.66	1.49	5V6GT	2.20	1.23	1.08	.97
3AF4A	4.05	2.26	1.98	1.78	5X4G	2.95	1.65	1.44	1.30
3AL5	1.85	1.03	.91	.82	5X8	3.30	1.84	1.62	1.46
3AU6	2.15	1.20	1.05	.94	5Y3GT	1.75	.98	.86	.77
3AV6	1.75	.98	.86	.77	5Y4GT	2.35	1.31	1.15	1.03
3B2	6.20	3.46	3.04	2.74	5Z3	3.00	1.68	1.47	1.32
3BA6*	2.15	1.20	1.05	.94	5Z4	4.95	2.77	2.43	2.19
3BC5	2.30	1.29	1.13	1.02	6A7	4.60	2.57	2.25	2.03
3BN4	2.55	1.43	1.25	1.12	6A8	5.25	2.93	2.57	2.31
3BN6	3.05	1.70	1.49	1.34	6A8GT	4.75	2.65	2.33	2.10
3BU8	2.80	1.56	1.37	1.23	6AB4	2.15	1.20	1.05	.94
3BY6	2.35	1.31	1.15	1.03	6AB5/6N5	3.70	2.07	1.81	1.63
3BZ6	2.35	1.31	1.15	1.03	6AB7	5.50	3.07	2.70	2.43
3CB6	2.25	1.26	1.10	.99	6AC5GT	4.35	2.43	2.13	1.92
3CF6	2.55	1.43	1.25	1.12	6AC7	4.65	2.60	2.28	2.05
3CS6	2.45	1.37	1.20	1.08	6AD7G	5.90	3.30	2.89	2.60
3CY5	2.85	1.59	1.40	1.26	6AF3	2.90	1.62	1.43	1.29
3DK6	2.40	1.34	1.18	1.06	6AF4	4.00	2.23	1.96	1.76
3DT6	2.20	1.23	1.08	.97	6AF4-A	4.00	2.23	1.96	1.76
3LF4	4.20	2.35	2.06	1.85	6AF6G	3.60	2.01	1.76	1.58
3Q4	2.75	1.54	1.35	1.21	6AG5	2.60	1.45	1.27	1.14
3Q5GT	3.60	2.01	1.76	1.58	6AG7	5.60	3.13	2.74	2.47

# RCA Receiving Tubes

QUANTITY PRICES ALSO APPLY TO ASSORTED TUBES

Tube Type	List Price	NET EACH In Quantities of:			Tube Type	List Price	NET EACH In Quantities of:		
		1 to 5	6 to 49	50 or More			1 to 5	6 to 49	50 or More
6AH4GT	\$3.30	1.84	1.62	1.46	6CL8A	\$3.15	1.76	1.54	1.39
6AH6	4.60	2.57	2.25	2.03	6CM6	2.55	1.43	1.25	1.12
6AH6V*	4.65	2.60	2.28	2.05	6CM7	2.75	1.54	1.35	1.21
6AK5	4.20	2.35	2.06	1.85	6CM8	3.55	1.98	1.74	1.57
6AL5	1.85	1.03	.91	.82	6CN7	2.60	1.45	1.27	1.14
6AL7GT	5.75	3.21	2.82	2.54	6CQ8	3.30	1.84	1.62	1.46
6AM4	5.90	3.30	2.89	2.60	6CR6	2.40	1.34	1.18	1.06
6AM8A	3.25	1.82	1.59	1.43	6CS6	2.35	1.31	1.15	1.03
6AN4	4.95	2.77	2.43	2.19	6CS7	2.80	1.56	1.37	1.23
6AN8	3.50	1.96	1.72	1.55	6CU5	2.30	1.29	1.13	1.02
6AQ5A	2.15	1.20	1.05	.94	6CU6/6BQ6GA*	4.35	2.43	2.13	1.92
6AQ6	2.20	1.23	1.08	.97	6CU8	3.65	2.04	1.79	1.61
6AQ7GT	4.00	2.23	1.96	1.76	6CX8	3.65	2.04	1.79	1.61
6AR5	2.60	1.45	1.27	1.14	6CY5	2.75	1.54	1.35	1.21
6AS5	2.40	1.34	1.18	1.06	6CZ5	2.80	1.56	1.37	1.23
6AS8	3.30	1.84	1.62	1.46	6D6	4.35	2.43	2.13	1.92
6AT6	1.90	1.06	.93	.84	6D8G*	3.50	1.96	1.72	1.55
6AT8A	3.20	1.79	1.57	1.41	6DA4	2.70	1.51	1.32	1.19
6AU4GTA	3.35	1.87	1.64	1.48	6DB5*	2.70	1.51	1.32	1.19
6AU5GT	4.30	2.40	2.11	1.90	6DC6	2.75	1.54	1.35	1.21
6AU6	2.10	1.17	1.03	.93	6DE4	2.80	1.56	1.37	1.23
6AU6A*	2.10	1.17	1.03	.93	6DE6	2.45	1.37	1.20	1.08
6AU8	3.50	1.96	1.72	1.55	6DE7	2.95	1.65	1.44	1.30
6AV5GA	3.80	2.12	1.86	1.67	6DG6GT	2.55	1.43	1.25	1.12
6AV6	1.65	.92	.81	.73	6DK6	2.35	1.31	1.15	1.03
6AW8A	3.55	1.98	1.74	1.57	6DN6	6.25	3.49	3.06	2.75
6AX4GT	2.65	1.48	1.30	1.17	6DQ5	7.65	4.27	3.75	3.37
6AX5GT	2.90	1.62	1.43	1.29	6DQ6-A	4.15	2.32	2.03	1.83
6AX8	3.50	1.96	1.72	1.55	6DR7	2.95	1.65	1.44	1.30
6AZ8	4.20	2.35	2.06	1.85	6DS5	2.65	1.48	1.30	1.17
6B7*	3.70	2.07	1.81	1.63	6DT5	2.95	1.65	1.44	1.30
6B8	5.15	2.88	2.52	2.27	6DT6	2.15	1.20	1.05	.94
6BA6	2.00	1.12	.98	.88	6DT8	3.75	2.10	1.84	1.66
6BA7	3.65	2.04	1.79	1.61	6E5	3.00	1.68	1.47	1.32
6BA8A	3.70	2.07	1.81	1.63	6EA8	3.15	1.76	1.54	1.39
6BC4	4.80	2.68	2.35	2.11	6EB8	3.70	2.07	1.81	1.63
6BC5	2.30	1.29	1.13	1.02	6EH5	2.35	1.31	1.15	1.03
6BC7	3.80	2.12	1.86	1.67	6EM5	3.05	1.70	1.49	1.34
6BC8	3.95	2.21	1.94	1.75	6EW6	2.30	1.29	1.13	1.02
6BD6	2.30	1.29	1.13	1.02	6F5	3.40	1.90	1.66	1.49
6BE6	2.20	1.23	1.08	.97	6F6	4.00	2.23	1.96	1.76
6BF5	3.55	1.98	1.74	1.57	6F6G	3.60	2.01	1.76	1.58
6BF6	1.80	1.01	.88	.79	6F6GT	3.65	2.04	1.79	1.61
6BG6G	6.50	3.63	3.19	2.87	6F7	6.65	3.71	3.26	2.93
6BH6	2.70	1.51	1.32	1.19	6F8G	5.10	2.85	2.50	2.25
6BH8	3.45	1.93	1.69	1.52	6FV6	2.75	1.54	1.35	1.21
6BJ6	2.60	1.45	1.27	1.14	6G6G	4.05	2.26	1.98	1.78
6BJ7	2.95	1.65	1.44	1.30	6H6	3.30	1.84	1.62	1.46
6BJ8	2.90	1.62	1.43	1.29	6J5	2.95	1.65	1.44	1.30
6BK4	7.50	4.18	3.68	3.31	6J5GT	2.55	1.43	1.25	1.12
6BK5	3.50	1.96	1.72	1.55	6J6	2.80	1.56	1.37	1.23
6BK7B	3.40	1.90	1.66	1.49	6JA6*	2.80	1.56	1.37	1.23
6BL7GTA	3.95	2.21	1.94	1.75	6J7	4.35	2.43	2.13	1.92
6BN4	2.50	1.40	1.23	1.11	6J7GT	3.65	2.04	1.79	1.61
6BN4A*	2.50	1.40	1.23	1.11	6K6GT	2.35	1.31	1.15	1.03
6BN6	3.05	1.70	1.49	1.34	6K7	4.15	2.32	2.03	1.83
6BN8	2.70	1.51	1.32	1.19	6K7GT	3.75	2.10	1.84	1.66
6BQ5	2.35	1.31	1.15	1.03	6K8	4.45	2.49	2.18	1.96
6BQ6GTB/6CU6	4.35	2.43	2.13	1.92	6L6	6.70	3.74	3.28	2.95
6BQ7A	3.95	2.21	1.94	1.75	6L6GB	4.20	2.35	2.06	1.85
6BR8A	3.30	1.84	1.62	1.46	6L6GC*	4.20	2.35	2.06	1.85
6BS8	3.75	2.10	1.84	1.66	6L7	4.80	2.68	2.35	2.11
6BU8	2.80	1.56	1.37	1.23	6N7	4.35	2.43	2.13	1.92
6BW4	1.85	1.03	.91	.82	6N7GT	4.35	2.43	2.13	1.92
6BW8*	3.30	1.84	1.62	1.46	6P5GT*	2.80	1.56	1.37	1.23
6BX7GT	4.00	2.23	1.96	1.76	6Q7	3.70	2.07	1.81	1.63
6BY5-GA	4.20	2.35	2.06	1.85	6Q7GT	3.20	1.79	1.57	1.41
6BY6	2.30	1.29	1.13	1.02	6R7	3.95	2.21	1.94	1.75
6BY8	2.65	1.48	1.30	1.17	6R8*	3.85	2.15	1.89	1.70
6BZ6	2.25	1.26	1.10	.99	6S4-A	2.05	1.15	1.00	.90
6BZ7	4.00	2.23	1.96	1.76	6S7	4.60	2.57	2.25	2.05
6BZ8	4.25	2.37	2.08	1.87	6S8GT	2.75	1.54	1.35	1.21
6C4	1.85	1.03	.91	.82	6SA7	3.70	2.07	1.81	1.63
6C5	3.00	1.68	1.47	1.32	6SA7GT	3.25	1.82	1.59	1.43
6C5GT	2.90	1.62	1.43	1.29	6SB7Y	4.95	2.77	2.43	2.19
6C6	4.35	2.43	2.13	1.92	6SC7	3.65	2.04	1.79	1.61
6C8G	5.10	2.85	2.50	2.25	6SF5	2.95	1.65	1.44	1.30
6CB5A	7.50	4.18	3.68	3.31	6SF5GT	3.20	1.79	1.57	1.41
6CB6A	2.25	1.26	1.10	.99	6SF7	4.30	2.40	2.11	1.90
6CD6GA	5.80	3.24	2.84	2.56	6SG7	4.05	2.26	1.98	1.78
6CE5*	2.35	1.31	1.15	1.03	6SH7	3.85	2.15	1.89	1.70
6CF6	2.55	1.43	1.25	1.12	6SJ7	3.55	1.98	1.74	1.57
6CG7	2.45	1.37	1.20	1.08	6SJ7GT	3.20	1.79	1.57	1.41
6CG8A	3.15	1.76	1.54	1.39	6SK7	3.40	1.90	1.66	1.49
6CH8	3.60	2.01	1.76	1.58	6SK7GT	3.05	1.70	1.49	1.34
6CK4	2.80	1.56	1.37	1.23					
6CL6	3.75	2.10	1.84	1.66					

RECEIVING TUBES CONTINUED ON NEXT PAGE

# RCA Receiving Tubes (Cont'd)

BUY RCA RECEIVING TUBES ON OUR EASY PAY PLAN

## Extra Savings When You Buy More Than 5 Tubes

The first net price column (1 to 5) is for orders of less than 6 tubes. If you buy 6 or more tubes of any one type or assorted types (and up to a total of 49), use the prices in the second net price column (6 to 49). For 50 tubes and over, use the third price column (50 or More).

Tube Type	List Price	NET EACH In Quantities of:			Tube Type	List Price	NET EACH In Quantities of:		
		1 to 5	6 to 49	50 or More			1 to 5	6 to 49	50 or More
6SL7GT	\$3.30	1.84	1.62	1.46	12AC6	\$2.20	1.23	1.08	.97
6SN7GTB	2.60	1.45	1.27	1.14	12AD6	2.40	1.34	1.18	1.06
6SQ7	3.15	1.76	1.54	1.39	12AE6A	2.05	1.15	1.00	.90
6SQ7GT	2.70	1.51	1.32	1.19	12AE7*	3.35	1.87	1.64	1.48
6SR7	2.95	1.65	1.44	1.30	12AF3	2.90	1.62	1.43	1.29
6SS7	3.85	2.15	1.89	1.70	12AF6	2.25	1.26	1.10	.99
6T4	4.35	2.43	2.13	1.92	12AH7GT	3.80	2.12	1.86	1.67
6T8A	3.35	1.87	1.64	1.48	12AJ6	2.05	1.15	1.00	.90
6U5	3.20	1.79	1.57	1.41	12AL5	1.90	1.06	.93	.84
6U8A	3.30	1.84	1.62	1.46	12AL8	4.25	2.37	2.08	1.87
6V3A	4.35	2.43	2.13	1.92	12AQ5	2.60	1.45	1.27	1.14
6V6	4.80	2.68	2.35	2.11	12AT6	1.85	1.03	.91	.82
6V6GT	2.15	1.20	1.05	.94	12AT7	3.05	1.70	1.49	1.34
6V8*	3.95	2.21	1.94	1.75	12AU6	2.15	1.20	1.05	.94
6W4GT	2.40	1.34	1.18	1.06	12AU7A	2.45	1.37	1.20	1.08
6W6GT	2.85	1.59	1.40	1.26	12AV5GA	3.85	2.15	1.89	1.70
6X4	1.65	.92	.81	.73	12AV6	1.65	.92	.81	.73
6X5GT	2.05	1.15	1.00	.90	12AV7	3.20	1.79	1.57	1.41
6X8	3.15	1.76	1.54	1.39	12AW6	3.00	1.68	1.47	1.32
6Y6G	4.50	2.51	2.21	1.99	12AX4-GTA	2.70	1.51	1.32	1.19
7A4	3.25	1.82	1.59	1.43	12AX7	2.55	1.43	1.25	1.12
7A5	3.85	2.15	1.89	1.70	12AX7A*	2.55	1.43	1.25	1.12
7A6	3.15	1.76	1.54	1.39	12AY7	5.00	2.79	2.45	2.20
7A7	3.50	1.96	1.72	1.55	12AZ7	2.75	1.54	1.35	1.21
7A8	4.45	2.49	2.18	1.96	12B4-A	2.70	1.51	1.32	1.19
7AF7	3.85	2.15	1.89	1.70	12BA6	2.00	1.12	.98	.88
7AG7	3.85	2.15	1.89	1.70	12BA7	3.95	2.21	1.94	1.75
7AH7	3.85	2.15	1.89	1.70	12BD6	2.25	1.26	1.10	.99
7AU7	2.60	1.45	1.27	1.14	12BE6	2.15	1.20	1.05	.94
7B4	3.05	1.70	1.49	1.34	12BF6	2.10	1.17	1.03	.93
7B5	4.75	2.65	2.33	2.10	12BH7-A	3.05	1.70	1.49	1.34
7B6	3.25	1.82	1.59	1.43	12BK5	3.80	2.12	1.86	1.67
7B7	3.30	1.84	1.62	1.46	12BL6	2.15	1.20	1.05	.94
7B8	3.55	1.98	1.74	1.57	12BQ6GTB/12CU6	4.45	2.49	2.18	1.96
7C4*	5.00	2.79	2.45	2.20	12BR7	2.60	1.45	1.27	1.14
7C5	3.35	1.87	1.64	1.48	12BV7	3.05	1.70	1.49	1.34
7C6	3.30	1.84	1.62	1.46	12BY7-A	3.05	1.70	1.49	1.34
7C7	3.05	1.70	1.49	1.34	12BZ7	3.05	1.70	1.49	1.34
7L5*	4.05	2.26	1.98	1.78	12C8	6.20	3.46	3.04	2.74
7L7	4.45	2.49	2.18	1.96	12CA5	2.50	1.40	1.23	1.11
7F7	3.65	2.04	1.79	1.61	12CN5	2.25	1.26	1.10	.99
7F8	4.60	2.57	2.25	2.03	12CR6	2.40	1.34	1.18	1.06
7G7	4.00	2.23	1.96	1.76	12CT8	4.05	2.26	1.98	1.78
7H7	3.90	2.18	1.91	1.72	12CU5/12CS5	2.35	1.31	1.15	1.03
7J7	5.15	2.88	2.52	2.27	12CU6/12BQ6GA*	4.45	2.49	2.18	1.96
7K7	4.45	2.49	2.18	1.96	12CX6	2.25	1.26	1.10	.99
7L7*	4.25	2.37	2.08	1.87	12D4	2.75	1.54	1.35	1.21
7N7	3.40	1.90	1.66	1.49	12DB5	2.75	1.54	1.35	1.21
7Q7	4.10	2.29	2.01	1.81	12DE8*	2.90	1.62	1.43	1.29
7R7	5.15	2.88	2.52	2.27	12DF7*	2.60	1.45	1.27	1.14
7V7	4.65	2.60	2.28	2.05	12DK7*	2.95	1.65	1.44	1.30
7W7	4.75	2.65	2.33	2.10	12DL8	4.05	2.26	1.98	1.78
7X7	5.85	3.27	2.87	2.58	12DQ6-A	4.20	2.35	2.06	1.85
7Y4	2.75	1.54	1.35	1.21	12DQ7	3.30	1.84	1.62	1.46
7Z4	2.75	1.54	1.35	1.21	12DS7	3.40	1.90	1.66	1.49
8AU8	3.55	1.98	1.74	1.57	12DT5	3.05	1.70	1.49	1.34
8AW8A	3.70	2.07	1.81	1.63	12DT7*	2.90	1.62	1.43	1.29
8BA8A*	3.65	2.04	1.79	1.61	12DT8	3.75	2.10	1.84	1.66
8BH8	3.55	1.98	1.74	1.57	12DV8	3.40	1.90	1.66	1.49
8BQ5	2.40	1.34	1.18	1.06	12DW8*	3.10	1.73	1.52	1.37
8CG7	2.50	1.40	1.23	1.11	12DZ6	2.55	1.43	1.25	1.12
8CM7	2.85	1.59	1.40	1.26	12E5	2.50	1.40	1.23	1.11
8CN7	2.60	1.45	1.27	1.14	12EG6	2.30	1.29	1.13	1.02
8CS7*	2.95	1.65	1.44	1.30	12EH5	2.35	1.31	1.15	1.03
8CX8	3.70	2.07	1.81	1.63	12EK6	2.55	1.43	1.25	1.12
8EB8	3.75	2.10	1.84	1.66	12EM6	2.90	1.62	1.43	1.29
8EM5	3.10	1.73	1.52	1.37	12EN6	3.05	1.70	1.49	1.34
9AU7	2.60	1.45	1.27	1.14	12F8	2.85	1.59	1.40	1.26
9CL8	3.15	1.76	1.54	1.39	12FK6	2.10	1.17	1.03	.93
9U8A	3.30	1.84	1.62	1.46	12FM6	1.85	1.03	.91	.82
10C8	4.25	2.37	2.08	1.87	12H6	3.05	1.70	1.49	1.34
10DE7	2.95	1.65	1.44	1.30	12J5GT	2.70	1.51	1.32	1.19
11CY7	3.00	1.68	1.47	1.32	12J7GT	4.20	2.35	2.06	1.85
12A8GT	4.75	2.65	2.33	2.10	12J8	3.30	1.84	1.62	1.46
12AB5	2.45	1.37	1.20	1.08	12K5	2.75	1.54	1.35	1.21

# RCA Receiving Tubes

QUANTITY PRICES ALSO APPLY TO ASSORTED TUBES

Tube Type	List Price	NET EACH In Quantities of:			Tube Type	List Price	NET EACH In Quantities of:		
		1 to 5	6 to 49	50 or More			1 to 5	6 to 49	50 or More
12K7GT	\$4.05	2.26	1.98	1.78	25C5	\$2.15	1.20	1.05	.94
12K8	5.25	2.93	2.57	2.31	25CA5	2.50	1.40	1.23	1.11
12L6GT	2.50	1.40	1.23	1.11	25CD6GB	5.85	3.27	2.87	2.58
12Q7GT	3.30	1.84	1.62	1.46	25DN6	5.55	3.10	2.72	2.45
12R5	2.60	1.45	1.27	1.14	25EC6*	5.70	3.18	2.79	2.51
12S8GT*	2.90	1.62	1.43	1.29	25EH5	2.30	1.29	1.13	1.02
12SA7	3.70	2.07	1.81	1.63	25F5*	2.35	1.31	1.15	1.03
12SA7GT	3.25	1.82	1.59	1.43	25L6	6.40	3.58	3.14	2.83
12SC7	3.65	2.04	1.79	1.61	25L6GT	2.25	1.26	1.10	.99
12SF5	3.05	1.70	1.49	1.34	25W4GT	2.70	1.51	1.32	1.19
12SF7	4.35	2.43	2.13	1.92	25W6GT*	3.10	1.73	1.52	1.37
12SG7	4.05	2.26	1.98	1.78	25Z5	2.90	1.62	1.43	1.29
12SH7	4.00	2.23	1.96	1.76	25Z6GT	2.90	1.62	1.43	1.29
12SJ7	3.55	1.98	1.74	1.57	26*	4.35	2.43	2.13	1.92
12SJ7GT*	3.20	1.79	1.57	1.41	27	4.35	2.43	2.13	1.92
12SK7	3.40	1.90	1.66	1.49	32ET5	2.20	1.23	1.08	.97
12SK7GT	3.05	1.70	1.49	1.34	35/51*	4.35	2.43	2.13	1.92
12SL7GT	3.75	2.10	1.84	1.66	35A5	3.50	1.96	1.72	1.55
12SN7GT	2.70	1.51	1.32	1.19	35B5	2.65	1.48	1.30	1.17
12SN7GTA*	2.70	1.51	1.32	1.19	35C5	2.15	1.20	1.05	.94
12SQ7	3.15	1.76	1.54	1.39	35L6GT	2.40	1.34	1.18	1.06
12SQ7GT	2.65	1.48	1.30	1.17	35W4	1.40	.78	.69	.62
12SR7	3.05	1.70	1.49	1.34	35Y4	2.75	1.54	1.35	1.21
12U7	2.50	1.40	1.23	1.11	35Z3	2.75	1.54	1.35	1.21
12V6GT	2.15	1.20	1.05	.94	35Z4GT	2.35	1.31	1.15	1.03
12W6GT	3.00	1.68	1.47	1.32	35Z5GT	1.85	1.03	.91	.82
12X4	1.80	1.01	.88	.79	36*	4.35	2.43	2.13	1.92
12Z3*	3.50	1.96	1.72	1.55	36AM3	1.50	.84	.73	.66
13DE7	2.95	1.65	1.44	1.30	37*	3.80	2.12	1.86	1.67
13DR7*	2.95	1.65	1.44	1.30	41	3.50	1.96	1.72	1.55
14A7	3.50	1.96	1.72	1.55	42	3.45	1.93	1.69	1.52
14AF7	3.80	2.12	1.86	1.67	43	4.70	2.63	2.30	2.07
14B6	3.30	1.84	1.62	1.46	47	8.70	4.86	4.26	3.83
14C7	3.35	1.87	1.64	1.48	50A5	3.95	2.21	1.94	1.75
14F7	3.85	2.15	1.89	1.70	50B5	2.65	1.48	1.30	1.17
14F8	4.60	2.57	2.25	2.03	50C5	2.15	1.20	1.05	.94
14Q7	4.10	2.29	2.01	1.81	50DC4	1.55	.87	.76	.68
14R7	5.15	2.88	2.52	2.27	50EH5	2.30	1.29	1.13	1.02
17AX4GT	2.70	1.51	1.32	1.19	50L6GT	2.40	1.34	1.18	1.06
17BQ6GTB	4.60	2.57	2.25	2.03	50X6	3.20	1.79	1.57	1.41
17DE4	2.85	1.59	1.40	1.26	50Y6GT	2.95	1.65	1.44	1.30
17C5*	2.35	1.31	1.15	1.03	50Y7GT	3.05	1.70	1.49	1.34
17D4	2.75	1.54	1.35	1.21	57*	4.35	2.43	2.13	1.92
17D4GT*	2.75	1.54	1.35	1.21	58*	4.35	2.43	2.13	1.92
17DQ6A	4.25	2.37	2.08	1.87	70L7GT	10.15	5.66	4.98	4.48
17H3	2.15	1.20	1.05	.94	71A*	5.10	2.85	2.50	2.25
18A5	4.15	2.32	2.03	1.83	75	5.10	2.85	2.50	2.25
18FW6	2.00	1.12	.98	.88	80	5.10	2.85	2.50	2.25
18FX6	2.15	1.20	1.05	.94	84/6Z4	2.70	1.51	1.32	1.19
18FY6	1.65	.92	.81	.73	85*	4.35	2.43	2.13	1.92
19*	3.70	2.07	1.81	1.63	117L7/117M7GT	10.15	5.66	4.98	4.48
19AU4	3.50	1.96	1.72	1.55	117N7GT	9.30	5.19	4.56	4.10
19AU4GTA*	3.45	1.93	1.69	1.52	117P7GT	9.30	5.19	4.56	4.10
19BG6-GA	6.50	3.63	3.19	2.87	117Z3	2.50	1.40	1.23	1.11
19C8*	4.45	2.49	2.18	1.96	117Z6GT	4.35	2.43	2.13	1.92
19J6	3.15	1.76	1.54	1.39	5642*	5.00	2.79	2.45	2.20
19T8	3.35	1.87	1.64	1.48	5879	3.85	2.15	1.89	1.70
19X8	3.70	2.07	1.81	1.63	5881	6.25	3.49	3.06	2.75
21EX6*	5.70	3.22	2.79	2.51	6973	4.50	2.51	2.21	1.99
24A	4.15	2.32	2.03	1.83	7025	2.95	1.65	1.44	1.30
25AV5GA	4.25	2.37	2.08	1.87	7027A	5.25	2.93	2.57	2.31
25AX4GT	2.90	1.62	1.43	1.29	7189	3.60	2.01	1.76	1.58
25BK5	3.65	2.04	1.79	1.61	7199	3.30	1.84	1.62	1.46
25BQ6GTB/25CU6	4.60	2.57	2.25	2.03					

As New Receiving Tubes are Released by Manufacturers, Allied Will Stock Them

## PREFERRED AUDIO TUBES FOR USE IN HIGH-FIDELITY AND COMMUNICATIONS CIRCUITS

Amp—Amperex, Gen—Genalex, Tung—Tungsol, Mull—Mullard, some rewring. MP in Stock No. indicates matched pair. All tubes guaranteed (except burnouts), for 12 mos. Av. wt., 4 oz.

Stock No.	Mfr.	Tube Type	Equiv. Tube	NET EACH	Stock No.	Mfr.	Tube Type	Equiv. Tube	NET EACH	Stock No.	Mfr.	Tube Type	Equiv. Tube	NET EACH
E4-6CA7	Amp	6CA7/EL34*	EL34	3.65	E4-ECC82	Amp	ECC82*	12AU7	1.44	E3-EK90	Mull	EK90	6BE6	1.49
E3-G232	Mull	G232		1.95	E3-ECC82	Mull	ECC82*	12AU7	1.28	E3-EL90	Mull	EL90	6AQ5	1.13
E3-EL34	Mull	EL34*	6CA7	3.35	E3-ECP82	Mull	ECP82	6U8	1.70	E3-EZ90	Mull	EZ90	6X4	.87
E3-EL34MP	Mull	EL34		7.23	E3-ECL82	Mull	ECL82		1.62	E3-EB91*	Mull	EB91*	6AL5	.95
E3-GZ34	Mull	GZ34	5AR4	2.27	E4-ECC83	Amp	ECC83*	12AX7	1.47	E3-ECC91	Mull	ECC91*	6J6	1.43
E3-EL37	Mull	EL37	6L6	3.11	E3-ECC83	Mull	ECC83*	12AX7	1.28	E3-EF93	Mull	EF93	6BA6	1.08
E3-EL37MP	Mull	EL37		6.75/Pr.	E4-EL84	Amp	EL84*	6BQ5	1.53	E3-EF94	Mull	EF94*	6AU6	1.08
E3-KT66*	Gen	KT66*	6L6	3.50	E3-EL84	Mull	EL84*	6BQ5	1.25	E3-EF95	Mull	EF95	6AK5	2.43
E3-DM70	Mull	DM70	1M3	1.05	E3-EL84MP	Mull	EL84		2.84/Pr.	E3-2729	Gen	2729	5879	2.95
E3-EABC80	Mull	EABC80	6AX8	1.92	E3-ECC85	Mull	ECC85	6A08	1.41	E1-1614	RCA	1614		3.77
E3-EBF80	Mull	EBF80	6N8	1.62	E4-EF96	Amp	EF96*	6267	1.62	E1-1620	RCA	1620	6I7	6.99
E4-EM80/6BR5	Amp	EM80/6BR5		1.47	E3-EF96	Mull	EF96*	6267	1.35	E1-1621	RCA	1621	6F6	2.60
E3-EZ80	Mull	EZ80	6V4	.81	E4-ECC88	Amp	ECC88	6DJ8	2.68	E1-1622	RCA	1622	6L6	3.45
E4-ECC81	Amp	ECC81*	12AT7	1.79	E3-KT88	Gen	KT88		4.95	E1-5881	RCA	5881	6L6	3.49
E3-ECC81	Mull	ECC81*	12AT7	1.55	E3-KT88MP	Gen	KT88MP		11.65/Pr	E3-5881	Tung	5881*	6L6	3.50
E3-ECH81	Mull	ECH81	6AJ8	1.83	E3-EF89	Mull	EF89		1.55	E3-6550	Tung	6550		4.95
E3-EM81	Mull	EM81	6DA5	1.41	E3-EBC90	Mull	EBC90	6AT6	1.01	E1-7189	RCA	7189		2.01
E3-EZ81	Mull	EZ81	6CA4	1.14	E3-EC90	Mull	EC90*	6C4	1.56	E3-7189	Mull	7189		1.56

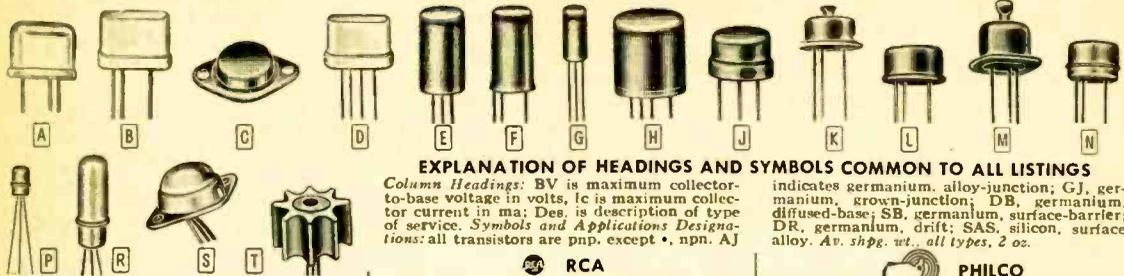
# Selected Transistors

## ALLIED—HEADQUARTERS FOR SEMICONDUCTORS

- Quantity Prices Available
- Same-Day Shipment

- Over 2000 Types in Stock
- New Types Added as Announced

- You Pay Lowest Price in Effect at Time of Shipment



### EXPLANATION OF HEADINGS AND SYMBOLS COMMON TO ALL LISTINGS

Column Headings: BV is maximum collector-to-base voltage in volts, IC is maximum collector current in ma; Des. is description of type of service. Symbols and Applications Designations: all transistors are npn, except • npn, AJ

indicates germanium, alloy-junction; GJ, germanium, grown-junction; DB, germanium, diffused-base; SB, germanium, surface-barrier; DR, germanium, drift; SAS, silicon, surface alloy. Av. shpg. wt. all types, 2 cc.

### TEXAS INSTRUMENTS

A selection of quality TI germanium transistors. Included are types for general-purpose use, as well as power transistors and special units such as the 800 phototransistor.

Stock No.	Mfr's Type	Fig.	BV (V)	IC (Ma)	Application	Des.	NET EACH
8 E 1042N185	B	20	-150 AF Out.	AJ	1.17		
8 E 1052N238	B	25	-5 HF	GJ	4.90		
8 E 1062N250	C	30	-3A AF Out.	AJ	2.95		
8 E 1072N251	C	60	-3A AF Out.	AJ	4.00		
8 E 1082N291	B	25	-200 AF Out.	AJ	1.57		
8 E 1182N364	B	30	50 Gen. Purp.	GJ	3.20		
8 E 1192N365	B	30	50 Gen. Purp.	GJ	4.80		
8EC120N366	B	30	50 Gen. Purp.	GJ	8.60		
8 E 122N368	B	30	50 Gen. Purp.	AJ	1.70		
8 E 123N369	B	30	50 Gen. Purp.	AJ	1.30		
9 E 4462N395	L	30	-250 Computer	AJ	3.10		
9 E 4772N396	L	30	-250 Computer	AJ	4.75		
9EC444N397	L	30	-250 Computer	AJ	8.10		
8 E 2202N456	C	60	-5A Power	AJ	3.50		
8 E 2212N457	C	60	-5A Power	AJ	5.60		
8EC234N458	C	80	-5A Power	AJ	10.40		
9 E 4342N511	C	40	-10A Power	AJ	4.80		
9 E 4352N511A	C	60	-10A Power	AJ	5.60		
9EC4362N511B	C	80	-10A Power	AJ	11.20		
9 E 4612N680	B	20	-150 AF Out.	AJ	6.40		
8 E 8232N1038	L	40	-1A Med. Pwr.	AJ	4.40		
8EC8242N1039	L	60	-1A Med. Pwr.	AJ	8.80		
8EC8252N1040	L	80	-1A Med. Pwr.	AJ	12.00		
8EC8262N1041	L	100	-1A Med. Pwr.	AJ	16.80		
8 E 8272N1042	AJ	60	-3A Pwr.	AJ	5.60		
8EC8282N1043	AJ	80	-3A Pwr.	AJ	9.60		
9 E 4622N1043	L	30	-250 Computer	AJ	4.80		
9 E 4632N1107	B	16	-5 Radio RF	DB	3.20		
9 E 4642N1108	B	16	-5 Radio Conv.	DB	2.60		
9 E 4652N1109	B	16	-5 Radio Osc.	DB	2.10		
9 E 4662N1110	B	16	-5 Radio IF	DB	2.60		
9 E 4672N1111	B	20	-5 Reflex IF	DB	2.60		
9 E 4682N1111A	B	27	-5 Reflex	DB	2.60		
8EC1173N25	D	15	-2VHF Telr.	GJ	24.00		
8 E 237204A	B	60	50 Gen. Purp.	GJ	6.40		
8EC115800	C	20	5 Photo.	GJ	16.00		

### GENERAL ELECTRIC

7 E 4432N43	L	30	-300 Audio	AJ	4.40		
7 E 4442N44	L	30	-300 Audio	AJ	2.90		
7 E 4482N78	M	15	20 HF Amp.	GJ	3.75		
7 E 9382N123	K	15	125 Computer	AJ	5.40		
7 E 9412N167	M	30	75 Computer	GJ	6.45		
7 E 4902N169A	M	25	20 HF Amp.	GJ	2.50		
8 E 0522N395	L	15	-200 Computer	AJ	3.40		
8 E 0532N396	L	20	-200 Computer	AJ	4.85		
8EC0542N397	L	15	-100 Computer	AJ	8.05		
8 E 0962N404	L	24	-100 Computer	AJ	2.90		
8 E 0652N450	K	12	-125 Computer	AJ	2.75		
9 E 4712N518	K	12	-125 Computer	AJ	3.65		
8 E 0642N524	L	30	-500 Audio	AJ	3.05		
8 E 0652N525	L	30	-500 Audio	AJ	3.25		
8 E 0662N526	L	30	-500 Audio	AJ	3.55		
8 E 0672N527	L	30	-500 Audio	AJ	4.15		
9 E 4722N634	L	20	300 Computer	AJ	5.00		
9 E 4732N635	L	20	300 Computer	AJ	6.65		
9EC4742N636	L	15	300 Computer	AJ	10.00		
9 E 4752N1056	L	50	-300 Computer	AJ	3.25		
9 E 4762N1057	L	45	-300 Computer	AJ	5.80		
9EC4773N636	L	6	20 Telrode	GJ	8.35		
9EC4783N37	L	6	20 Telrode	GJ	9.30		

### CLEVITE

9 E 5002N155	C	40	-3A Pwr.	AJ	2.75		
9 E 5012N242	C	40	-2A AF Pwr.	AJ	2.75		
9 E 5022N250	C	40	-3A AF Pwr.	AJ	2.75		
9 E 5032N255	C	20	-3A AF Pwr.	AJ	1.20		
9 E 5042N256	C	40	-3A AF Pwr.	AJ	1.35		
9 E 5052N257	C	40	-3A AF Pwr.	AJ	2.75		
9 E 5062N268	C	80	-3A AF Pwr.	AJ	4.00		
9 E 5072N268A	C	80	-3A Switching	AJ	4.00		
9 E 5082N297	C	60	-5A AF Pwr.	AJ	6.35		
9 E 5272N1146A	C	60	-15A AF Pwr.	AJ	5.25		
9 E 5282N1146/1514	C	40	-15A AF Pwr.	AJ	4.50		

### RCA

Stock No.	Mfr's Type	Fig.	BV (V)	IC (Ma)	Application	Des.	NET EACH
5 E 8542N104	F	30	-50 AF Amp.	AJ	2.25		
5 E 8562N105	F	25	-15 AF Amp.	AJ	3.00		
5 E 8572N109	F	25	-70 AF Amp.	AJ	1.51		
5 E 8582N139	F	16	-15 IF Amp.	AJ	1.70		
5 E 8592N140	F	16	-15 Conv.	AJ	1.77		
5 E 8602N175	F	10	-2 AF Amp.	AJ	2.42		
5 E 9852N176	G	30	-3A AF Pwr. Amp.	AJ	2.97		
5 E 8762N215	G	30	-50 AF Amp.	AJ	2.09		
5 E 8772N217	G	25	-70 AF Amp.	AJ	1.51		
5 E 8782N219	G	16	-15 AF Amp.	AJ	1.70		
5 E 8792N219	G	16	-15 Conv.	AJ	1.77		
5 E 8842N220	G	30	-2 AF Amp.	AJ	2.25		
5 E 9852N247	H	35	-10 RF Amp.	DR	3.06		
5 E 8872N269	G	25	-100 Switching	AJ	2.81		
5 E 8952N270	E	25	-150 AF Amp.	AJ	1.58		
5 E 8882N274	H	35	-10 RF Amp.	DR	3.06		
5 E 8892N301A	C	40	-3A AF Pwr. Amp.	AJ	2.93		
5 E 8932N301A	C	60	-3A AF Pwr. Amp.	AJ	4.83		
5 E 9882N331	J	30	-200 AF Amp.	AJ	2.02		
5 E 9672N351	C	40	-3A AF Pwr. Amp.	AJ	3.22		
5 E 9542N409	H	20	-10 RF Amp.	DR	2.81		
5 E 9622N4371	H	20	-10 Osc.	DR	2.97		
5 E 9632N4372	H	20	-10 Mixer	DR	2.74		
5 E 9692N4373	H	25	-10 IF Amp.	DR	1.74		
5 E 9712N4374	H	25	-10 Conv.	DR	1.81		
5 E 9682N4376	C	40	-3A AF Pwr. Amp.	AJ	3.38		
5 E 8962N384	H	30	-10 VHF Amp.	AJ	6.44		
5 E 9652N405	F	20	-70 AF Driver	AJ	1.03		
5 E 8992N406	F	20	-70 AF Driver	AJ	1.03		
5 E 9532N407	F	20	-70 AF Amp.	AJ	1.17		
5 E 9502N408	G	20	-70 AF Amp.	AJ	1.17		
5 E 9512N410	G	13	-15 IF Amp.	AJ	1.42		
5 E 9522N412	G	13	-15 Conv.	AJ	1.45		
5 E 9702N444	H	18	-10 RF Amp.	DR	1.90		
5 E 9892N561	C	80	-10A Pwr. Switch	AJ	6.44		
5 E 9722N586	E	45	-250 Switching	AJ	2.97		
5 E 9662N591	F	32	-40 AF Driver	AJ	1.16		
5 E 2672N640	H	34	-10 RF Amp.	DR	1.93		
5 E 2682N641	H	34	-10 IF Amp.	DR	1.77		
5 E 2692N642	H	34	-10 IF Amp.	DR	1.86		
5 E 9862N647	G	25	100 AF Amp.	AJ	1.77		
5 E 9702N649	E	20	100 AF Amp.	AJ	1.42		
5 E 9872N1010	G	10	2 AF Amp.	AJ	2.81		
9EC5302N1014	C	100	-10A AF Pwr. Amp.	AJ	12.08		

### MOTOROLA

High-dependability Motorola germanium transistors manufactured for use in general-design applications. Built to stringent standards to meet the most critical requirements.

5 E 9302N176	C	40	-3A AF Pwr. Amp.	AJ	2.80		
6 E 4452N297A	C	60	-500 HF Pwr.	AJ	6.00		
5 E 4722N350A	C	50	-3A Pwr. Sw. Amp.	AJ	2.85		
5 E 4732N351A	C	50	-4A Pwr. Sw. Amp.	AJ	3.00		
5 E 9312N375	C	80	-3A HF Pwr.	AJ	5.55		
5 E 4742N376A	C	50	-5A Pwr. Sw. Amp.	AJ	3.15		
5 E 4632N426	L	30	-400 Switching	AJ	4.05		
5 E 4642N427	L	30	-400 Switching	AJ	6.10		
5 E 4652N428	L	30	-400 Switching	AJ	7.50		
5 E 4502N464	L	45	-100 Audio	AJ	1.65		
5 E 4512N465	L	45	-100 Audio	AJ	1.73		
5 E 4522N466	L	35	-100 Audio	AJ	1.80		
5 E 4532N467	L	35	-100 Audio	AJ	2.25		
5 E 9392N554	C	30	-3A AF Pwr. Amp.	AJ	1.35		
5 E 9402N555	C	40	-3A AF Pwr. Amp.	AJ	1.95		
5 E 9472N618	C	80	-3A HF Pwr.	AJ	6.00		
5 E 9432N627	C	40	-10A HF Pwr.	AJ	4.50		
5 E 9442N628	C	60	-10A HF Pwr.	AJ	5.25		
5EC9452N629	C	80	-10A HF Pwr.	AJ	8.55		
5EC9462N630	C	100	-10A HF Pwr.	AJ	14.25		
5 E 4542N650	L	45	-250 Audio	AJ	1.87		
5 E 4552N651	L	45	-250 Audio	AJ	2.10		
5 E 4562N652	L	45	-250 Audio	AJ	2.40		
5 E 4572N653	L	30	-250 Audio	AJ	1.65		
5 E 4582N654	L	30	-250 Audio	AJ	1.80		
5 E 4592N655	L	30	-250 Audio	AJ	1.95		
5 E 4662N669	C	40	-3A Pwr.	AJ	2.95		
5 E 4652N1141	L	40	-200 AF Amp.	AJ	1.43		
5 E 4972N1182	L	40	-200 AF Amp.	AJ	1.50		
5 E 4982N1193	L	40	-200 AF Amp.	AJ	1.65		

### PHILCO

Selection of high-quality Philco germanium transistors for exacting requirements.

Stock No.	Mfr's Type	Fig.	BV (V)	IC (Ma)	Application	Des.	NET EACH
8 E 3012SB100	R	4.5	-5 IF, RF	SB	3.90		
8 E 3062N128	R	10	-5 RF Amp.	SB	6.30		
8 E 3122N207	P	12	-20 Audio	AJ	1.95		
8 E 3122N207A	P	12	-20 Audio	AJ	2.10		
8 E 3132N207B	P	12	-20 Audio	AJ	2.25		
8 E 3072N223	P	18	-150 Audio	AJ	1.13		
8 E 3082N224	P	25	-150 Audio, Switch	AJ	1.28		
8 E 3092N226	P	30	-150 Audio, Switch	AJ	1.14		
8 E 3022N344/SB101	R	5	-5 IF, RF, Sw.	SB	3.45		
8 E 3032N345/SB102	R	8	-5 IF, RF, Sw.	SB	4.35		
8 E 3042N346/SB103	R	5	-5 IF, RF, Sw.	SB	5.85		
8 E 3192N386	S	60	-3A Pwr.	AJ	6.75		
8 E 3202N387	S	80	-3A Pwr.	AJ	9.75		
8EC3082N1118	N	25	-50 IF, RF	SAS	19.95		
8 E 4792N1128	P	25	-150 Audio	AJ	1.43		
8 E 5872N1129	P	25	-150 Audio, Switch	AJ	1.65		
8 E 5882N1130	P	30	-150 Audio, Switch	AJ	1.43		

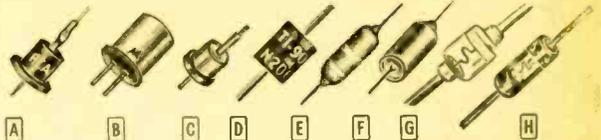
### SYLVANIA

7 E 3422N34	B	40	-50 Gen. Purp.	AJ	3.20		
7 E 3412N35	B	40	1A Gen. Purp.	AJ	1.12		
7 E 3432N68	L						

# Diodes and Rectifiers

## ALLIED—HEADQUARTERS FOR SEMICONDUCTORS

- Selection of the Most Widely Used Types
- Same Day Shipment From World's Largest Stocks
- All Shipments Made at Lowest Prices
- New Types are Stocked as Soon as Released



### COLUMN HEADS AND SYMBOLS

$I_o$ —Minimum forward current at 1 volt. PIV, peak inverse voltage. Ge, germanium. Si, silicon. PC, power contact; P.S., power supply. All ratings are given at 25° C except \*50° C and †150° C. †Electrical equivalent to 1N34A. All currents are DC. 2 oz.

### MANUFACTURER'S ABBREVIATIONS

GE—General Electric Ray—Raytheon  
 Ho—Hoffman RCA—Radio Corporation of America  
 Hu—Hughes  
 Mot—Motorola Syl—Sylvania  
 O—Ohmite Tl—Texas Instruments

Stock No.	Mfr's Type	Fig.	Mfr.	PIV	Max. Inv. Ma. @ 25° C.	$I_o$	Description	NET EACH
5 E 845	1N34	F	Ray	60	8 @ -50V	5	Ge. Gen. purp.	.52
9 E 750	1N34A	H	O	75	.03 @ 10V	5	Ge. Gen. purp.	.43
7 E 236	1N34A	G	Syl	75	.30 @ -10V	5	Ge. Gen. purp.	.50
7 E 220	1N35	G	Syl	75	.01 @ 10V	7.5	Ge. Duo diode	1.50
9 E 751	1N38A	H	O	125	.006 @ 3V	4	Ge. Gen. purp.	.83
8 E 744	1N38B	G	Syl	120	5 @ 100V	50	Ge. Gen. purp.	.85
8 E 685	1N48	G	Syl	85	833 @ 50V	40	Ge. Gen. purp.	.68
7 E 427	1N54A	G	H	75	.007 @ 10V	5	Ge. High back res.	.79
9 E 752	1N55A	H	O	170	5 @ 150V	5	Ge. Gen. purp.	1.40
7 E 428	1N55A	G	Syl	170	5 @ 150V	4	Ge. Gen. purp.	1.70
7 E 289	1N56A	G	Syl	50	.3 @ 30V	15	Ge. High cond.	.90
7 E 237	1N58A	G	Syl	115	6 @ 100V	4	Ge. High cond.	.85
9 E 753	1N60	H	O	75	.02 @ 10V	5	Ge. Vid. det. test	.33
7 E 292	1N60	G	Syl	75	.03 @ 1.5V	5	Ge. Vid. det. test	.50
8 E 687	1N63	G	Syl	125	.05 @ 50V	50	Ge. High back res.	1.10
9 E 754	1N64	H	O	25	1 @ 10V	50	Ge. Vid. det. test	.33
8 E 688	1N64	F	Ray	60	Noise, 14 db max.	5	Si. Gen. purp.	.52
5 E 785	1N66	F	Ray	60	3 @ -50V	4	Si. Gen. purp.	.52
5 E 786	1N67	F	Ray	80	.05 @ -50V	4	Si. Gen. purp.	1.04
7 E 576	1N67A	H	Hu	80	50 @ 50V	4	Ge. PC	.80
9 E 755	1N67A	H	O	100	.05 @ 50V	5	Ge. Gen. purp.	.80
5 E 828	1N68	F	Ray	100	6 @ -100V	3	Si. Gen. purp.	.99
7 E 577	1N68A	H	Hu	100	625 @ 50V	4	Ge. PC	1.04
9 E 756	1N68A	H	O	130	.625 @ 100V	5	Ge. Gen. purp.	1.04
7 E 440	1N82	G	Syl	5	Noise, 14 db max.	5	Ge. UHF mixer	1.05
5 E 917	1N82A	F	Ray	5	Noise, 14 db max.	5	Ge. UHF mixer	.95
7 E 579	1N90	H	Hu	60	5 @ 50V	5	Ge. PC	.39
7 E 580	1N95	H	Hu	60	5 @ 10V	10	Ge. PC	.52
7 E 581	1N96	H	Hu	60	5 @ 20V	20	Ge. PC	.59
9 E 757	1N98	H	O	100	1 @ 50V	20	Ge. Gen. purp.	9.4
7 E 584	1N99	H	Hu	80	50 @ 50V	10	Ge. PC	1.04

### TEXAS INSTRUMENT ECONOMY RECTIFIERS

Low-cost silicon power rectifiers. Dynamic forward voltage drop, 0.6 v. at 500 ma at 100 C. 0.25x0.2" diameter. Slipp. wt. 3 oz.

9 E 426	1N2069	D	Tl	200	2 @ 200V	750	Si. P.S.	1.10
9 E 427	1N2070	D	Tl	400	2 @ 400V	750	Si. P.S.	1.35
9 E 428	1N2071	D	Tl	600	2 @ 600V	750	Si. P.S.	1.70

### TEXAS INSTRUMENT PHOTOCELL

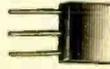
High-quality photocell. For use in light meters, etc. Converts light energy into electrical energy. 0.6x0.82" diameter. Slipp. wt. 3 oz.



Stock No.	Mfr's Type	Max. Bias	Dark Current	Light Current	Sens. @ 10V $\mu$ a/mw/cm	NET EACH
9 EC 432	1N2175	50V	100 $\mu$ a	200 $\mu$ a	22.3	20.00

### G.E. VAC-U-SEL DOUBLE-DIODES

Miniature double diodes. For TV horizontal phase detector replacement and many other applications. Currents are DC. †Voltage doubler.  $\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ ".



Stock No.	Mfr's Type	Reverse Current	Forward Current	Max. Temp.	Description	NET EACH
9 E 557	66C1	5 $\mu$ a @ -20V	0.5 ma @ 2V	85° C	Common cathode—CT	.84
9 E 558	66D1	5 $\mu$ a @ -20V	0.5 ma @ 2V	85° C	Series Connected†	.84
9 E 559	66X1	0.5 ma @ 2V	5 $\mu$ a @ -20V	85° C	Common anode	.84

Stock No.	Mfr's Type	Fig.	Mfr.	PIV	Max. Inv. Ma. @ 25° C.	$I_o$	Description	NET EACH
9 E 758	1N100	H	Hu	100	.05 @ 50V	20	Ge. Gen. purp.	1.64
7 E 586	1N116	H	Hu	60	100 @ 50V	5	Ge. PC	.15
7 E 588	1N118	H	Hu	60	100 @ 50V	20	Ge. PC	.70
7 E 589	1N126A	H	Hu	60	85 @ 50V	5	Ge. PC	.45
9 E 759	1N127A	H	O	125	3 @ 50V	20	Ge. Gen. purp.	.98
7 E 592	1N191	H	Hu	80	50 @ 50V	4	Computer—.05 us to 50K	.95
7 E 760	1N198	H	Hu	100	.01 @ 10V	5	Ge. Gen. purp.	1.10
5 E 810	1N294	F	Ray	60	8 @ -10V	5	Ge. PC	.66
5 E 812	1N295	F	Ray	40		5	Ge. PC	.36
7 E 931	1N536	C	GE	50†	4 @ PIV	750†	Si. Junction	1.05
7 E 497	1N537	C	GE	100†	4 @ PIV	750†	Si. Junction	1.20
8 E 179	1N538	A	Tl	200	5 @ 1V	750	Si. Gen. purp.	1.60
8 E 180	1N539	A	Tl	300	5 @ 1V	750	Si. Gen. purp.	2.05
8 E 173	1N540	A	Tl	400	5 @ 1V	750	Si. Gen. purp.	3.00
8 E 174	1N645	E	Tl	225	2 @ 1V	400	Si. Gen. purp.	3.20
8 E 175	1N646	E	Tl	300	2 @ 1V	400	Si. Gen. purp.	4.08
8 E 176	1N647	E	Tl	100	2 @ 1V	400	Si. Gen. purp.	5.10
8 E 177	1N648	E	Tl	500	2 @ 1V	400	Si. Gen. purp.	6.19
8 E 178	1N649	E	Tl	600	2 @ -1V	400	Si. Gen. purp.	7.20
8 E 181	1N1095	A	Tl	500	5 @ PIV	750	Si. Gen. purp.	5.25
8 E 182	1N1096	A	Tl	600	5 @ PIV	750	Si. Gen. purp.	7.05
9 E 769	1N1563A†	B	Mot	100		250	Si. Rectifier	1.72
9 E 770	1N1564A†	B	Mot	200		250	Si. Rectifier	2.10
9 E 771	1N1565A†	B	Mot	300		250	Si. Rectifier	2.25
9 E 772	1N1566A†	B	Mot	400		250	Si. Rectifier	2.80
7 E 795	1N1763	A	RCA	400	1 @ PIV	500	Si. 117 v. P.S.	1.20
7 E 796	1N1764	A	RCA	500	1 @ PIV	500	Si. 117 v. P.S.	1.50
7 E 596	HD2128†	H	Hu	60	5 @ 50V	5	Ge. PC	.36
7 E 598	HD2155	H	Hu	60	5 @ 50V	5	Ge. PC	.39
8 E 487	HB-1	B	Ho	6.8	.005 @ 3.5 V	17.0	7.5 Zener Volts	.44
8 E 488	HB-2	B	Ho	18	.005 @ 10V	5.0	20 Zener Volts	.44
8 E 489	HB-3	B	Ho	36	.010 @ 20V	2.7	40 Zener Volts	.44
8 E 490	HB-4	B	Ho	68	.020 @ 30V	0.9	75 Zener Volts	.44
8 E 491	HB-5	B	Ho	150	.040 @ 82V	3.0	170 Zener Volts	.44
8 E 492	HB-6	B	Ho	170	.075 @ 150V	1.5	300 Zener Volts	.44

### PACIFIC "VARICAP" VOLTAGE-VARIABLE CAPACITORS

Silicon PN junction device permits varying circuit capacitance through control of bias voltage. Functions like capacitor and resistor in series from 5-500 mc. with capacitance varying essentially as  $1/\sqrt{V}$  when biased in reverse direction. Hermetically sealed—glass-to-metal fused and metal-to-metal welded seals. Color coded. Min. lead length: 1/4". Max. size: .265x.140" dia. 2 oz.



Stock No.	Mfr's Type	Capacitance* @ -4 v.	Max. Voltage.	Range ( $\mu$ ud)	Typical Q @ 50 mc -4 v. DC	NET EACH
8 E 296	V15	15 mmf	-25	6.5-39	18	3.05
8 E 297	V20	20 mmf	-20	10-70	18.7	2.75
8 E 297	V27	27 mmf	-20	14-50	15.7	2.75
8 E 751	V33	33 mmf	-20	17-85	14.6	2.75
8 E 298	V39	39 mmf	-20	20-100	15.1	2.75
8 E 752	V47	47 mmf	-20	24-120	15.4	2.75
8 E 299	V56	56 mmf	-15	32-145	13.5	2.75

## SEMICONDUCTOR HANDBOOKS

**UNDERSTANDING TRANSISTORS. Allied's Handbook on Transistor Fundamentals.** By Milton S. Kiver. A comprehensive discussion of the construction, characteristics and application of transistors. An ideal reference for use in home study or school training classes. Some of the transistors discussed are: NPN, PNP, alloy junction, drift, tetrode, surface barrier, and power. Additional chapters include information on transistor symbols, basic transistor amplifier circuits, power amplifiers, RF and IF amplifiers, oscillators, etc. Clearly illustrated diagrams and circuits pictorially emphasize each chapter. 64 pages. 8 1/2 x 11". 50c

**TRANSISTORS AND SEMICONDUCTOR DIODES.** By RCA. Data on basic characteristics and theory. Diagrams of receivers, amplifiers, oscillators, etc. 23 pages. 8 1/2 x 11". 25c

**TRANSISTOR MANUAL.** 3rd edition. By G.E. Covers circuits, applications and specs. Includes several hi-fi circuits and a complete stereo sound system. Lists over 175 Jetcet transistors, new circuits, etc. Illustrated. 168 pages. Size, 5 1/2 x 8 1/2". 1.00

**ELECTRONIC SHORTCUTS FOR HOBBYISTS.** By Sylvania engineers. Tells how to build 24 devices using germanium diodes in easy-to-understand language. Of special interest to the experimenter. Amateurs, etc. Has 40 pages. Size, 6x9". 37 K 074. Postpaid in U.S.A. 35c

**GERMANIUM DIODE INDUSTRIAL USES.** By Sylvania engineers. Very comprehensive—ideal for technicians and engineers. Has circuit diagrams, germanium diode installation hints, and germanium code rating and characteristic chart. 42 pages. 6x9". 37 K 124. Postpaid in U.S.A. 35c

**SYLVANIA CRYSTAL DIODE CIRCUIT KINKS.** By Sylvania engineers. Contains 40 tried and proven circuits. Includes complete ratings and characteristics of all germanium diodes manufactured by Sylvania. 35 pages. Size, 6x9". 37 K 091. Postpaid in U.S.A. 35c

**40 USES FOR GERMANIUM DIODES.** By Sylvania engineers. Contains workable circuits and pertinent data for 40 important uses of diodes. Includes suggestions for others. 46 pages. Size, 6x9". 37 K 044. Postpaid in U.S.A. 35c

**TRANSISTOR APPLICATIONS, VOL. III.** By Raytheon. Many pages of circuits for receivers, transistor amplifiers, test equipment, etc. Also sections with information on transistor theory, printed circuits, etc. 58 pgs. 8 1/2 x 11". 37 A 139. Postpaid in U.S.A. 50c

**28 USES FOR JUNCTION TRANSISTORS.** By Sylvania engineers. Chapters on Transistorized Amplifiers, Oscillators, Control Devices, etc. Includes elementary theory. Clearly written. 43 pages. Size, 6x9". 37 K 121. Postpaid in U.S.A. 35c

**Federal Miniature Selenium Rectifier Handbook.** An extremely valuable and informative handbook for all radio-television servicemen, amateurs and experimenters. Includes full specifications and circuit applications. 80 pages. Size, 8 1/2 x 4 1/4". 37 K 106. Postpaid in U.S.A. 50c

**PHOTOCELL-SUN BATTERY HANDBOOK.** Thoroughly describes the applications and basic circuits in which photocells and sun batteries can be effectively used. Typical chapters include: Light-Powered Devices, Photometers, Unusual Relays, Light Beam Communication 9 chapters, 58 pages, 5 1/2 x 9". 37 K 129. Postpaid in U.S.A. 1.50

# Selenium and Silicon Rectifiers

## SARKES-TARZIAN RECTIFIERS

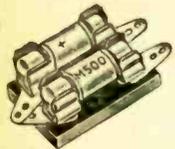
### MINIATURIZED SILICON RECTIFIERS



Type M500. Extremely small, clip-in silicon rectifier—perfect for TV replacement and miniaturization uses. Lower voltage drop (only 2 v.)

results in increased B+, more drive and sweep voltage, and more anode voltage on picture tube for greater clarity. Maximum ratings: AC input, 130 v.; peak inv.; 400 v.; DC current, 500 ma. peak current, 5000 ma. Wt., 4 oz. 4 A 697, 1-9, NET EACH. 1.48 10-49, EACH. 1.40

Type M150. As above, but 150 ma. max. Replaces Models 65 and 75 seleniums at right. With 2 clips; 10-ohm, 1-watt resistor. 4 oz. 4 A 696, 1-9, NET EACH. 89c 10-49, EACH. 85c



**Conversion Kit.** Exceptionally handy unit for use in TV sets, or any equipment now using selenium or full wave vacuum tube rectifiers. Allows conversion to silicon rectifiers with resulting higher efficiency, comparative freedom from breakdown and easier future replacement. Also excellent as part of original equipment where miniaturization and reliability are required. Rectifiers clip in or out like fuses. Conversion kit includes 2—M500 silicon rectifiers, dual mounting clip, and all necessary hardware.  $\frac{1}{4} \times 1\frac{1}{2} \times 1\frac{1}{2}$ " Shpg. wt., 6 oz. 4 A 699, NET. 3.77

Single Mounting Clip.  $\frac{1}{4} \times 1\frac{1}{2} \times \frac{1}{2}$ ". 2 oz. 4 A 699, NET. 12c

Dual Mounting Clip.  $\frac{1}{4} \times 1\frac{1}{2} \times 1$ ". 4 oz. 4 A 697, NET. 24c

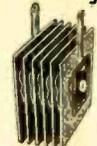
### F & K MINIATURE SILICONS



Efficiency greater than 99%. Operate -55° to +100° C. without derating. Type F-200 requires 10-ohm minimum series resistance. \*Peak inverse voltage, 14A 100° C. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Max. PIV Volts	RMS Volts	DC Max. Amps	NET EACH
4 A 878	F-2	200	70	.5	1.19
4 A 879	F-4	400	140	1	1.34
4 A 880	F-6	600	210	1.5	1.48
4 A 881	10K	100	70	.625	1.19
4 A 882	20K	200	140	.625	1.25
4 A 883	30K	300	210	.625	1.34
4 A 884	40K	400	280	.625	1.48
4 A 885	60K	600	420	.750	1.98
4 A 884	K-200	360	260	.2	.89

### SELENIUM RECTIFIERS



Highly popular, "Centre-Kooled" selenium rectifiers featuring premium quality at low cost. Widely used as replacements in radios and TV sets, Intercoms, bias supplies, amplifiers, P.A. equipment, etc. Also excellent for a wide variety of applications in original equipment. Supply plate, filament and/or bias voltages directly from or from transformer. Maximum rms input voltage, 130 volts. Conservatively rated—deliver highly dependable and efficient performance. "Centre-Kooled" design assures cool, stable operation. Maximum inverse peak voltage, 380 volts. Approximate internal voltage drop, 5 volts. Tinned solder lug terminals. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	DC MA	Size	NET EACH
4 A 631	50	50	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	.76
4 A 616	65	65	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.54
4 A 617	75	75	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.80
4 A 618	100	100	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.92
4 A 619	100A	100	$1\frac{1}{2} \times 1$ "	.83
4 A 620	150	150	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ "	1.01
4 A 621	200	200	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.25
4 A 622	250	250	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{3}{8}$ "	1.26
4 A 685	250A	250	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.07
4 A 623	300	300	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.31
4 A 686	300A	300	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.25
4 A 624	350A	350	$1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{8}$ "	1.37
4 A 627	400	400	$2 \times 2 \times 1\frac{1}{2}$ "	1.66
4 A 687	400AD	400	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.48
4 A 625	500	500	$2 \times 2 \times 1$ "	1.72
4 A 688	500AD	500	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.57

### FULL WAVE PLUG-IN SILICONS

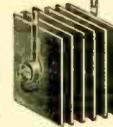


Silicon rectifier plug-ins featuring long dependable life and remarkable stability under extreme operating temperatures. Eliminate heater power losses. Operate equally well vertically or horizontally. Type S-5011A replaces tube types 80, 82, 83, 83V, 5Z3; S-5017: 0Z4, 5Y4, 5Y4, 6AX5, 6X5; S-5018: 5A4, 5AW5, 5Z4, 5T4, 5U4, 5Y3, 5W4, 5Y3, 5Z4; S-5019: 5R4; S-5034: 6AX4, 6AX4, 6BL4, 6W4, 12AX4, 17AX4, 25V4; S-5027: 6X4; S-5251: 5U4. Sizes—S-5011A, S-5017, S-5018:  $2\frac{1}{2} \times 1\frac{1}{2}$ " dia.; S-5019, S-5033:  $3\frac{1}{2} \times 1\frac{1}{2}$ " dia.; S-5207:  $1\frac{1}{2} \times 1\frac{1}{2}$ " dia.; S-5251:  $1\frac{1}{2} \times 1\frac{1}{2}$ " dia. All types fit standard octal socket except S-5011A (4-contact socket). \*Hermetically sealed. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Max PIV	RMS Volts	DC Max Amps	NET EACH
4 A 646	S-5011A	1600	1100	.750	12.87
4 A 647	S-5017	1600	1100	.750	12.87
4 A 648	S-5018	1600	1100	.750	12.87
4 A 649	S-5019*	2800	1950	.5	20.25
4 A 875	S-5033	4500	1600	.25	20.25
4 A 876	S-5207	1600	1100	.5	12.87
4 A 877	S-5251	1600	1100	.5	6.04

## IT & T-FEDERAL RECTIFIERS

### SELENIUM RECTIFIERS



An excellent selection of top-quality selenium rectifiers at unusually low prices. Fully miniaturized for limited space applications. Ideal for replacement use and for original equipment. Types 1016A and 1017A are bridge-connected. Internal voltage drops; Type 1001A—1.02 volts; 1016A and 1017A—2.4 volts; 1002A, 1003A, 1004A, 1005A, 1159A—7 volts; 1007A and 1014A—9 volts.

Types 1013 and 1512 are recommended for use in battery charging. Type 1013 is excellent for charging small 2 and 6-volt batteries of the type found in photographic equipment and portable radios. Type 1512 is ideally suited for trickle charging of 6-volt auto batteries. All units listed have locking lugs.

\*Tubular type (not illustrated); paper enclosed. Has  $1\frac{1}{2}$ " leads to permit easy installation. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	DC MA	RMS Volts	Size	NET EACH
4 A 662	1159A	20	130	$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ "	.74
4 A 606	1002A	65	130	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.78
4 A 602	1003A	75	130	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.74
4 A 668	1001A	75	20	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.40
4 A 913	1007A	75	160	$1\frac{1}{2} \times 1\frac{1}{2}$ "	2.22
4 A 915	1014A	100	160	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.28
4 A 600	1004A	100	130	$1\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{2}$ "	.98
4 A 661	1011A	100	130	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.92
4 A 603	1005A	150	130	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.00
4 A 666	1016A	300	25	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.28
4 A 660	1017A	600	25	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.46
4 A 604	1013A	450	18	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	.66
4 A 664	1512A	1800	26	$\frac{1}{4} \times 2\frac{1}{2} \times \frac{1}{2}$ "	1.92

### HI-DENSITY TYPE RECTIFIERS

Popular, high-density type selenium rectifiers. Advanced design permits remarkably high current capacity and extremely compact size. Excellent for replacement use in radios, TV set, high-fidelity components, etc. Ideally suited, too, for a wide variety of applications in original equipment of all types. Eliminate installation problems where space is exceptionally limited. Maximum rms input volts, 130. Maximum peak inverse volts, 380. Internal drop, 7 volts. All types listed have locking lugs. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	DC MA	Size	NET EACH
4 A 918	1234A-H	65-75	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	.45
4 A 919	1235A-H	100-150	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.53
4 A 675	1236A-H	250-300	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.30
4 A 676	1241A-H	350-400	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.38
4 A 677	1237A-H	450-500	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.71
4 A 920	1242A-H	550-600	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.12

## INTERNATIONAL RECTIFIER DIODES AND RECTIFIERS

### MINIATURE SELENIUM RECTIFIERS



Miniature seleniums for small power applications where relatively low voltage is required. Uses include DC filament supplies, solenoid and relay power supplies, 2 and 6-volt battery chargers, etc. All types rated at 25 v. rms max., except Type Q4B at 130 v. rms max. "H" in Type No. indicates single-plate half-wave rectifier; "B" indicates full-wave, bridge rectifier. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Max DC Volts	Min. Ohms	Size	NET EACH
4 A 822	QH	65	47	$4\frac{3}{8} \times 2\frac{1}{2} \times 1\frac{1}{2}$ "	.39
4 A 823	AH	100	22	$1\frac{1}{2} \times 1\frac{1}{2}$ "	.44
4 A 824	BH	150	15	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	.50
4 A 825	CH	250	5	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	.77
4 A 826	MH	500	5	$2 \times 2 \times 1\frac{1}{2}$ "	1.00
4 A 827	QH	100		$4\frac{3}{8} \times 2\frac{1}{2} \times 1\frac{1}{2}$ "	1.05
4 A 828	QB	100		$4\frac{3}{8} \times 2\frac{1}{2} \times 1\frac{1}{2}$ "	1.98
4 A 829	AB	180		$1\frac{1}{2} \times 1\frac{1}{2}$ "	1.26
4 A 830	BB	300		$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1.51
4 A 831	CB	600		$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	2.06
4 A 832	MB	1200		$2 \times 2 \times 1\frac{1}{2}$ "	2.32

### BATTERY CHARGING TYPES

Selenium rectifiers designed for battery charging. Half-wave type. 26 volts AC input.

Stock No.	Mfr's Type	DC Output Volts	Output Amps	Size	Shpg. Wt.	NET EACH
4 A 818	D-116G	10	2	$3 \times 3 \times \frac{1}{2}$ "	3 oz.	1.65
4 A 819	D-117P	10	2.7	$4 \times 4 \times \frac{1}{2}$ "	1 lb.	2.00
4 A 820	D-241G	10	6	$6 \times 5 \times \frac{1}{2}$ "	1 lb.	2.75
4 A 821	D-240G	10	9	$7\frac{1}{2} \times 6\frac{1}{2} \times \frac{1}{2}$ "	1 lb.	3.65



### POWER RECTIFIERS

An excellent selection of high current density selenium power rectifiers. Advanced design and manufacturing techniques permit these rugged new cells to deliver approximately twice the rectified DC output per square inch of standard cells—at no decrease in life expectancy. Permit savings of 50% in volume for a given rating. Feature unusually low forward drop and high inverse voltage rating. Excellent for use in battery chargers, rectifier type DC arc welders, etc. In AC input volts column below, \*indicates center-tapped with cathodes connected.

Stock No.	Type	Mfr's Code No.	DC Volts	Amps	AC Input V.	Size	Shpg. Wt.	NET EACH
4 A 834	J14C04	A1C1SDALD	14	0.4	*36	$1 \times 1 \times 1\frac{1}{2}$ "	1 oz.	1.67
4 A 835	J14C1	C1C1SDALD	14	1.5	*36	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	1 oz.	2.43
4 A 836	J29B04	A1B1SDALD	29	0.4	36	$1 \times 1 \times 1\frac{1}{2}$ "	1 oz.	1.97
4 A 837	J29B1	C1B1SDALD	29	1.5	36	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	2 oz.	3.19
4 A 838	J29B5	D1B1SDALD	29	4.8	36	$3 \times 3 \times 2\frac{1}{2}$ "	8 oz.	6.71
4 A 839	J29B8	P1B1SDALD	29	8.4	36	$4 \times 4 \times 2\frac{1}{2}$ "	1 lb.	8.97
4 A 840	J58B04	A2B1SDBLD	58	0.4	72	$1 \times 1 \times 1\frac{1}{2}$ "	2 oz.	3.10
4 A 841	J58B1	C2B1SDBLD	58	1.5	72	$1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ "	2 oz.	4.70
4 A 842	J58B5	D2B1SDBLD	58	4.8	72	$3 \times 3 \times 3\frac{1}{2}$ "	1 lb.	11.02
4 A 843	J58B8	P2B1SDBLD	58	8.4	72	$4 \times 4 \times 4\frac{1}{2}$ "	2 lbs.	17.63
4 A 844	J116B04	A4B1SDBLD	116	0.4	144	$1 \times 1 \times 3\frac{1}{2}$ "	3 oz.	5.00
4 A 845	J116B5	D4B1SDBLD	116	4.8	144	$3 \times 3 \times 7\frac{1}{2}$ "	2 lbs.	19.68



### SUBMINIATURE DIODES

Ultra-small selenium diodes for use wherever savings in space are important. Temperature range, -50° to +100° C. Size,  $1\frac{1}{8} \times \frac{1}{2}$ " except Type 1U1,  $\frac{3}{16} \times \frac{1}{4}$ ". Ideal for use in hearing aids, analog computers, sensitive relays, compact aircraft equipment, etc. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	PIV Volts	Forward Min. Ma	Surge (1 sec.) Ma	NET EACH
8 E 345	IS1	48	0.1	5	60c
8 E 346	2S1	96	0.1	5	96c
8 E 347	1T1	48	0.2	10	60c
8 E 348	2T1	96	0.2	10	96c
8 E 349	1U1	48	1.5	80	72c

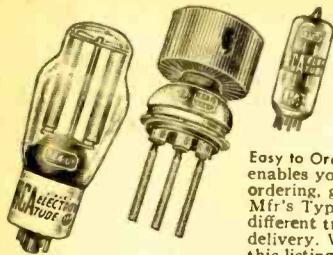
### G.E. TV RECTIFIERS

Germanium TV power rectifiers for low-voltage power supplies. Feature compact size, increased output, long life and easy installation. Extremely low voltage drop. Types IN1008 and IN1016 have single hole mounting; Type IN1024 requires three mounting holes. All half-wave except "dual" rectifier—wired for voltage-doubler applications. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Max AC Input V.	PIV	DC Output Voltage Ma	Drop	NET EACH
4 E 689	IN1008	130	380	400	3	1.50
4 E 688	IN1016*	130	380	400	0.15	3.00
8 E 089	IN1024	130	380	400	0.15	1.50



# Special Purpose Tubes



## MANUFACTURER'S ABBREVIATIONS

AMP	Amperex Elect. Corp.	RCA	Radio Corp. of Amer.
EIM	Eitel McCullough	RAY	Raytheon Mfg. Co.
GE	General Electric	SYL	Sylvania
GEN	Genalex	TAY	Taylor Tubes, Inc.
MULL	Mullard Products	TUNG	Tungsol
PEN	Penta Lab, Inc.	WES	Westinghouse

Easy to Order—Specify Department and Tube Type. This tabular presentation enables you to locate the tube types you want, quickly and easily. When ordering, give the full Stock No., which consists of the Dept. No. and the Mfr's Type No. Give the Stock No. thus: E1-OA2. Allied stocks over 800 different tube types, from 21 different manufacturers, ready for immediate delivery. Write for information on any special-purpose tube not shown in this listing. MP after tube type indicates matched pair.

## HIGH-RELIABILITY TUBES



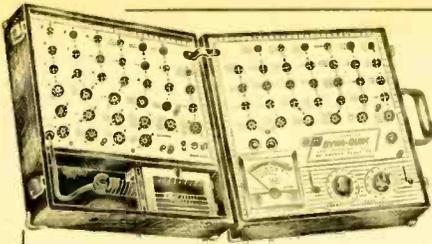
High-reliability tubes for RF, audio, Amateur and experimental uses, and other critical applications.

RCA "Premium" and G.E. "Five-Star" types are indicated by an asterisk\*, or asterisk with prototype tube in brackets, thus: 5654 \*(6AK5). Assure optimum performance of electronic equipment by minimizing tube failure.

Dept.	Stock No.	Mfr.	NET EACH	Dept.	Stock No.	Mfr.	NET EACH	Dept.	Stock No.	Mfr.	NET EACH
	Tube Type				Tube Type				Tube Type		
E1	OA2	RCA	1.26	E4	EM 80/6BR5	AMP	1.47	E1	1621	RCA	2.60
E2	OA2	RAY	1.26	E3	EZ 80	MULL	.81	E1	1622	RCA	3.45
E1	OA3	RCA	1.27	E3	ECC 81	MULL	1.55	E1	1624	RCA	5.75
E2	OA3	RAY	1.27	E4	ECC 81	AMP	1.79	E1	1625	RCA	4.30
E1	OA4G	RCA	1.68	E3	ECH 81	MULL	1.83	E1	1635	RCA	2.37
E2	OA4G	RAY	1.68	E3	EM 81	MULL	1.41	E1	2050	RCA	1.85
E2	OB2	RCA	1.32	E3	EZ 81	MULL	1.14	E2	2050	RAY	1.85
E2	OB2	RAY	1.32	E3	ECC 82	MULL	1.28	E3	R 4330	SYL	29.10
E2	OB3	RAY	1.65	E4	ECC 82	AMP	1.44	E1	5651	RCA	1.78
E1	OC3	RCA	1.27	E3	ECF 82/6U8	MULL	1.70	E2	CK 5651	RAY	1.78
E1	OD3	RCA	1.27	E3	ECL 82	MULL	1.62	E1	5654*(6AK5)	RCA	3.20
E3	1AG4	WES	3.32	E1	83	RCA	1.57	E2	CK 5654	RAY	2.85
E3	1AH4	WES	3.05	E3	ECC 83	MULL	1.28	E1	5670*(2C51)	RCA	3.90
E3	1AJ5	WES	3.20	E4	ECC 83	AMP	1.47	E3	5670*(2C51)	GE	3.90
E3	1L4	RCA	1.27	E3	EL 84	MULL	1.25	E1	5687	RCA	4.25
E3	1V6	WES	1.34	E3	EL 84 MP	MULL	2.84 pr.	E3	5687	TUNG	4.25
E1	2D21	RCA	1.46	E4	EL 84/6BQ5	AMP	1.53	E3	GL 5687	GE	4.25
E2	2D21	AMP	1.46	E3	ECC 85	MULL	1.95	E1	5696	RCA	1.90
E4	2E24	RCA	5.25	E3	EF 86	MULL	1.88	E1	5725*(6AS6)	RCA	3.35
E2	2E26	RAY	3.85	E4	EF 86	AMP	1.62	E1	5726*(6AL5)	RCA	1.45
E1	2E26	RCA	3.85	E4	ECC 88/6DJ8	AMP	2.68	E1	5726/6AL5 W*		
E2	2E30	RAY	2.95	E3	KT 88	GEN	4.95	E1	(6AL5)	RCA	1.45
E2	2X2A	RCA	2.90	E3	KT 88 MP	GEN	11.65 pr.	E3	5727*(2D21)	GE	2.80
E2	2X2A	RAY	2.55	E3	EF 89	MULL	1.55	E3	5727/2D21 W	GE	2.80
E1	3A5	RCA	1.62	E3	EBC 90/6AT6	MULL	1.01	E1	5751*(12AX7)	RCA	2.85
E2	3A5	RAY	1.62	E3	EC 90	MULL	1.56	E1	5763	RCA	2.37
E1	3B28	RCA	4.00	E3	EK 90	MULL	1.49	E1	5814A*(12AU7)	RCA	3.50
E1	3KP1	RCA	19.50	E3	EL 90/6AQ5	MULL	1.13	E3	5814A*(12AU7A)	GE	3.50
E1	3KP4	RCA	23.40	E3	EZ 90/6X4	MULL	.87	E1	5823	RCA	1.57
E1	4-65A	RCA	25.00	E3	EB 91	MULL	.95	E2	CK 5879	RAY	1.75
E1	4-125A/4D21	RCA	36.00	E3	ECC 91	MULL	1.43	E1	5881	RCA	3.49
E3	4-125A	EIM	46.00	E3	EF 93/6BA6	MULL	1.08	E3	5881	TUNG	3.50
E3	4-250A/5D22	RCA	46.50	E3	EF 94	MULL	1.08	E2	CK 5902	RAY	5.75
E3	4-250A	EIM	46.50	E3	EF 95/6AK5	MULL	2.43	E1	6005*(6AQ5)	RCA	3.67
E3	4-400A	EIM	55.00	E3	100TH	EIM	22.00	E3	6005/6AQ5 W	GE	3.70
E3	4-1000A	EIM	132.00	E3	PL 172	PEN	135.00	E1	6072*(12AY7)	RCA	4.70
E3	4CX250B	EIM	45.00	E3	250TH	EIM	33.00	E1	6073*(0A2)	RCA	3.00
E3	4CX300A	EIM	48.00	E3	304TH	EIM	60.50	E1	6074*(OB2)	RCA	3.45
E3	4CX1000A	EIM	156.00	E3	304TL	EIM	60.50	E3	6087*(5Y3GT)	GE	5.75
E2	RK 4D32	RAY	32.76	E3	502A	GE	2.03	E1	6136*(6AU6)	RCA	2.75
E1	4E27/8001	RCA	40.00	E1	Z 729	RCA	2.03	E3	6136*(6AU6)	GE	2.75
E1	4E27A/5-125B	RCA	40.00	E3	807	GEN	2.95	E1	6146	RCA	5.00
E1	4X150A	RCA	33.15	E1	807	RCA	3.00	E2	CK 6146	RAY	5.00
E3	4X250B	EIM	42.50	E2	RK 807	RAY	2.85	E1	6159	RCA	5.00
E3	4X500A	EIM	121.00	E1	809	RCA	7.40	E1	6186/6AG5 WA		
E2	5BP1A	RCA	29.85	E1	810	RCA	25.65		*(6AG5)	RCA	3.55
E2	5CP7A	RCA	31.50	E1	811A	RCA	6.90	E1	6189/12AU7		
E1	5R4GY	RCA	1.90	E2	RK 811A	RAY	6.50		WA*(12AU7)	RCA	3.70
E2	5R4GY	RAY	1.90	E1	812A	RCA	6.90	E1	6201*(12AT7)	RCA	2.75
E3	5R4GYA	GE	1.90	E2	RK 812A	RAY	6.50	E3	6201*(12AT7)	GE	2.75
E2	5UP1	RCA	14.75	E1	813	RCA	21.10	E3	6265*(68H6)	GE	4.10
E1	6AK6	RCA	1.40	E1	814	RCA	23.60	E1	6293	RCA	6.40
E1	6AS6	RCA	3.15	E1	815	RCA	23.60	E1	6328	RCA	11.90
E2	6AS6	RAY	3.15	E1	816	RCA	2.95	E1	6417	RCA	2.37
E1	6AS7G	RCA	4.45	E2	RK 816	RAY	2.65	E3	6550	TUNG	4.95
E2	6AS7G	RAY	4.45	E1	829B	RCA	19.00	E1	6679/12AT7	RCA	1.46
E4	6CA7	AMP	3.65	E2	RK 829B	RAY	18.90	E3	6679/12AT7	GE	1.46
E1	6J4	RCA	3.93	E1	832A	RCA	15.90	E1	6680/12AU7	RCA	1.19
E2	6J4	RAY	3.94	E2	833A	RCA	55.00	E3	6680/12AU7	GE	1.19
E3	7J1P/7VP1	SYL	29.00	E1	837	RCA	8.65	E1	6681/12AX7	RCA	1.22
E1	12A6	RCA	2.30	E1	866A	RCA	2.90	E3	6681/12AX7	GE	1.22
E3	GZ 32	MULL	1.95	E3	GL 866A	GE	2.90	E1	6883	RCA	5.01
E3	EL 34	MULL	3.35	E3	866JR	TAY	2.15	E1	7189	RCA	2.01
E3	EL 34 MP	MULL	7.23 pr.	E1	872A	RCA	10.65	E3	7189	MULL	1.56
E3	GZ 34	MULL	2.27	E2	RK 872A	RAY	9.90				
E3	35T	EIM	20.00	E1	884	RCA	1.85				
E3	EL 37	MULL	3.11	E2	884	RAY	1.85				
E3	EL 37 MP	MULL	6.75 pr.	E1	885	RCA	2.00				
E3	TZ 40	TAY	10.20	E1	921	RCA	3.45				
E4	EPF 60	AMP	8.75	E1	927	RCA	3.75				
E2	RK 61	RAY	4.20	E1	991	RCA	.87				
E3	KT 66	GEN	3.50	E3	1000T	EIM	137.50				
E3	DM 70/1 M3	MULL	1.05	E1	1614	RCA	3.77				
E3	EABC80	MULL	1.92	E2	1614	RAY	3.43				
E3	EBF 80	MULL	1.62	E1	1620	RCA	6.99				

## AMATEUR TUBE BULLETIN

37 A 157. HAM-103B. Latest ratings, technical data and base diagrams for 48 RCA Amateur tubes. An invaluable reference booklet for the Ham shack. 4 pages. No charge.



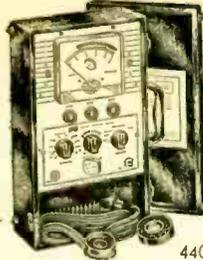
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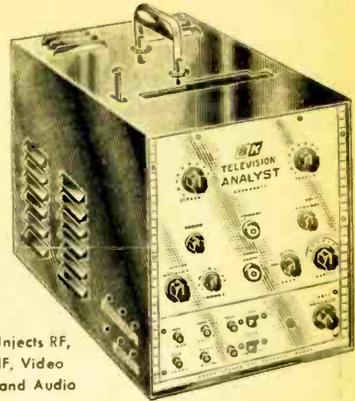
1070  
A107



675



440



Injects RF,  
IF, Video  
and Audio

### MODEL 1075 TELEVISION ANALYST

- Generates Standard Test Pattern or Any Slide Transparency
- For Color and Black and White

A miniature TV transmitter, specially designed to reduce time and labor in black-and-white and color TV trouble-shooting—one of the most valuable servicing aids ever developed. Injects RF, IF, video, or audio signal into TV set for easy isolation of defective stage. Supplied with slide transparencies which provide standard test pattern, crosshatch pattern, and white-dot pattern; generates "rainbow" and bar pattern for color television receivers.

Standard pattern allows adjusting television set for best linearity, sensitivity, AGC action, bandwidth and resolution, and for proper size and aspect ratio. White-dot and crosshatch patterns are for adjusting color convergence, color demodulators, etc. RF and IF signals are video and audio-modulated; positive and negative video signal. Separate horizontal and vertical drive pulses. 4.5-mc sound channel; 400-cycle tone generator. For channels 2-13; IF range 25-45 mc.  $16\frac{1}{2} \times 10\frac{1}{2} \times 9\frac{1}{2}$ ". For 110-120 volts, 60 cycle AC. Shpg. wt., 36 lbs.

87 FU 213. \$10.00 Down. NET. 254.75

### MODEL 650 TUBE & TRANSISTOR TESTER

Highly versatile, portable "Dyna-Quik" dynamic mutual conductance tester. Tests transistors and virtually all popular television receiving tubes. Checks each section separately—requires very little switching. Large  $4\frac{1}{2}$ " plastic-faced meter has "Good-Bad," 0-6000 and 0-18,000  $\mu$ mhos scales. 7 and 9-pin miniature tube pin straighteners and 16 spare sockets mounted on panel. Automatic line compensator. Detects shorts, grid emission, probable tube life, and gas. Accurately tests tubes under actual operating conditions of the set.

Tests Ico and forward gain ratio of junction, point contact, and barrier transistors; F/B ratio of germanium, silicon and selenium diodes. Has separate sockets for NPN and PNP type transistors. Convenient "Quik-Flip" indexed tube selector provides fast, complete tube socket and setting reference. Ideal tester for service shop and home service calls. Easily portable in sturdy, luggage-type carrying case.  $15\frac{3}{4} \times 15 \times 6\frac{1}{4}$ ". For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 22 lbs.

87 FU 280. \$5.00 Down. NET. 166.55

### MODEL 675 AUTOMATIC TUBE & TRANSISTOR TESTER

Portable, card-controlled "Dyna-Quik" dynamic mutual conductance tester. One of the quickest—and most complete—testers available. Card automatically selects connections for a fast, accurate test. Utilizes only 60 cards for testing over 500 tube types—more than 95% of all popular TV tubes. Eliminates multiple switching and roll charts. Easily kept up to date by adding cards as new tube types appear. Tests each section of multi-section tubes separately. Tests for shorts, grid emission, gas content and probable life.  $4\frac{1}{2}$ " meter has "Good-Bad" 0-6000-18,000 micromhos scales. 7 and 9 pin miniature tube pin straighteners. Automatic line compensation.

Transistor section checks leakage current and forward gain ratio of all types of junction, point contact and barrier transistors. Reads directly on meter. Measures front-to-back ratio of germanium and silicon diodes, and of selenium and silicon rectifiers, on meter percentage scale. Also checks continuity and shorts. Separate sockets for NPN and PNP type transistors. Size,  $15\frac{1}{2} \times 12\frac{1}{2} \times 6$ ". With cards and index. For 105-125 volts, 60 cycle AC. Wt., 14 lbs.

87 FU 284. \$5.00 Down. NET. 166.55

### MODEL 1070 DYNA-SWEEP CIRCUIT ANALYZER

Versatile unit for trouble shooting horizontal, vertical and sync circuits in TV sets. Injects horizontal and vertical sync pulses, grid and plate drive signals directly into output transformers. Helps isolate trouble to defective part. Checks flybacks, yokes for opens, leakage, and shorted turns. Automatic B+ boost and high voltage indicators. Vertical yoke test signal.  $9\frac{1}{2} \times 7 \times 5$ ". For 110-120 v. 50-60 cycle AC. 10 lbs.

87 FU 217. \$5.00 Down. NET. 68.55

### 440 REJUVENATOR-TESTER

Checks CRT while still in set. Detects opens, shorts, emission, cut-off voltage. Repairs shorts, opens; restores weak emission. Predicts tube life. Tests all CRT's with 1 to 12 volt filaments including new 2.34, 2.68 and 8.4 v. tubes—also 110" tubes. Checks each gun of color CRT separately. Portable leatherette-covered case.  $5 \times 7\frac{1}{2} \times 11\frac{1}{4}$ ". For 105-125 v., 60 cycle AC.  $8\frac{1}{2}$  lbs.

87 FU 218. \$5.00 Down. NET. 68.55

MODEL C40 COLOR ADAPTER. Adapts Model 400 and 350 for 110" (6.3 v. fil.) and color tubes. Checks each gun of color CRT. 1 lb. 87 F 279. NET. 9.75

MODEL CR48 ADAPTER. Adapts 400, 350 for 110" tubes with 2.34, 2.68, 8.4 v. fil. 1 lb. 87 F 216. NET. 4.85

### DYNA-SWEEP CIRCUIT ANALYZER

MODEL A107. Designed for use with Model 1075 above. Same as Model 1070 (left) but derives operating signals from 1075. These two units together comprise one of the most versatile and valuable trouble-shooting systems available. Locates trouble in vertical and horizontal output circuits; injects output signals into output transformers; checks flybacks and yokes for leakage, shorted turns, etc.  $9\frac{1}{2} \times 7 \times 5$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 10 lbs.

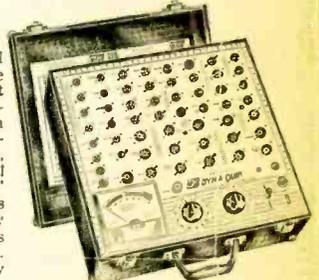
87 FU 219. \$2.00 Down. NET. 48.95

### NEW MODEL 550 DYNA-QUIK TUBE TESTER

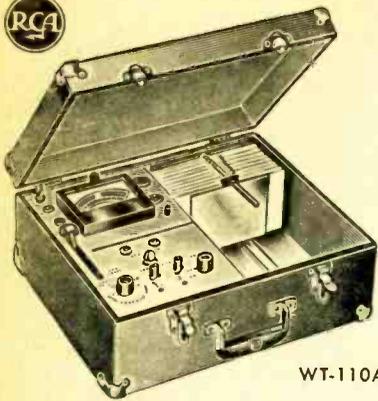
- Dynamic Mutual Conductance Tester
- Tests Tubes Under Working Conditions
- Portable—Weights Only 11 lbs.

A moderately priced, portable, dynamic mutual conductance tube tester. Features fast, accurate testing of most TV receiving tubes. Roll chart and time-consuming selector switches are eliminated. Simply insert tube into proper socket on panel—set heater and sensitivity adjustments—flip a switch for grid emission, gas content, shorts, and mutual conductance—that's all there is to it! Easy-to-read  $4\frac{1}{2}$ " meter has "Replace—?—Good" 0-6000, 0-18,000 micromhos scale. Tests tubes under actual operating conditions for a highly accurate indication of tube performance. Tests each section of dual-section tubes separately. Automatic line voltage compensator continuously monitors line voltage. Special lightweight construction permits easy portability. Built-in pin straighteners for miniature 7 and 9-pin tubes. Has detachable lid.  $15\frac{1}{2} \times 15 \times 6\frac{1}{4}$ ". For 105-125 v., 60 cycle AC. 14 lbs.

87 FU 220. \$5.00 Down. NET. 117.55



# Famous RCA Test Equipment



WT-110A

## WT-110A AUTOMATIC TUBE TESTER

For testing receiving tubes. Saves valuable time—simply insert pre-punched card into tester! Tests transconductance, gas, shorts and twin tube balance. Meter registers "RENEV—?—GOOD." Two gold-plated printed circuit boards set up a combination of 15 to 20 circuits which permit: Socket connections up to 10 pins. 220 combinations of heater voltage, 10 bias voltages, 5 plate voltages, 11 cathode resistors, 2 screen voltages, and 50 quality sensitivity ranges. Warranty includes free subscription that supplies new tube card settings. Includes 287 pre-punched vinyl plastic cards. In 7 $\frac{1}{2}$  x 14 $\frac{1}{2}$  x 17 $\frac{1}{2}$ " carrying case. With master card for punching blanks, hand punch, 24 blank cards (for replacement or new tube types) and test card. For 105-125 v., 60 cycle AC. Shpg. wt., 30 lbs.

87 FU 075. \$5.00 Down. NET. . . . 199.50

WG-324. Gas tube adapter. Permits testing gas tube types with Model WT-110A. Shpg. wt., 10 oz.

87 F 088. NET. . . . 2.95

WG-325A. 24 blank cards. Wt., 1 lb.

87 F 076. NET. . . . 2.25

WG-337A. Four adapters—for testing tubes with small 4, 5 and 6-pin bases, and small and medium 7-pin bases. Wt., 5 oz.

87 F 084. NET. . . . 7.95

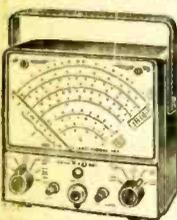
WG-338A. Tube-socket adapter for testing 7-lead, in-line subminiature tubes. 2 oz.

87 F 085. NET. . . . 2.95

WG-339A. Tube-socket adapter for testing 8-lead circular, subminiature tubes. 2 oz.

87 F 086. NET. . . . 3.50

## WV-98A SENIOR VOLTOHMIST

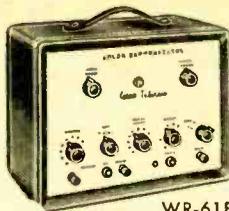


- Improved Accuracy  $\pm 3\%$
- Large 6 $\frac{1}{2}$ " Meter
- 200-Microamp Movement

Includes an outstanding array of "plus" features: easy-reading, zero-center scale; electronic protection against burn-out; rugged, 200-microamp meter movement;  $\pm 1\%$  multiplier resistors; die-cast aluminum case; etc. Has large 6 $\frac{1}{2}$ " meter with accuracy improved to  $\pm 3\%$ . Features single-unit DC-AC-Ohms probe with built-in selector switch. Excellent for measurement of complex TV waveforms—reads peak-to-peak voltages to 4200 volts.

7 ranges for each function. Reads AC rms and DC to 1500 volts. Measures resistance from 0.2 ohms to 1000 megohms. AC input impedance of 0.83 megohm and 70 mmf to 1.5 megohms and 60 mmf. Input resistance on DC is 11 megohms. Size, 6 $\frac{1}{2}$  x 7 $\frac{3}{4}$ ". With WG-299C probe, shielded cable and instruction booklet. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 7 lbs.

87 F 050. \$5.00 Down. NET. . . . 79.50



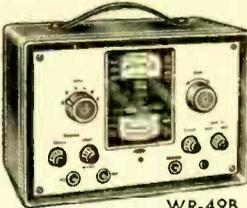
WR-61B



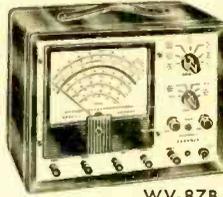
WR-46A



WP-25A



WR-49B



WV-87B



WV-37B

## WR-61B COLOR-BAR GENERATOR

For checking color TV sets, and for adjusting color phasing and matrixing. Produces 10 bars of different colors, simultaneously. Provides picture-carrier, color-subcarrier and sound-carrier frequencies on channel 3. Lu inance signals at edges of bars for checking registration of luminance and chrominance signals. "Sync level Pedestals" for checking signal ratio through the three chrominance channels to indicate potential troubles. Size: 9 $\frac{1}{4}$  x 13 $\frac{1}{2}$  x 7 $\frac{1}{2}$ ". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 18 lbs.

87 FU 065. \$10.00 Down. NET. . . 259.50

## WR-46A DOT GENERATOR

This RCA dot-bar-crosshatch is an essential instrument in color TV convergence as well as color and black-and-white linearity adjustments. Features a high level video output for driving the picture tube directly; or, the video amplifier of color or black-and-white receivers. Provides a stable, interlaced pattern of small dots (for maximum convergence accuracy) and a choice of vertical or horizontal bars and a crosshatch (for linearity adjustments). Vertical bars adjustable from 8 to 26 bars—15 horizontal bars only 2 lines wide. Fully adjustable video output voltage for direct kinescope grid or cathode connection or to a video stage. Connections are extremely simple. Direct sync from broadcast signal allows convergence adjustment independent of receiver alignment or bandpass characteristics. Polarity reversal switch. With leads and cables, 10x13 $\frac{1}{2}$ x8". For 110-120 v., 60 cycle AC. Shpg. wt., 20 lbs.

87 FZ 056. \$5.00 Down. NET. . . 179.50

## WP-25A TV ISOTAP

Isolation and autotransformer for checking TV sets at high, medium and low voltage. Selects 105-130 volts in 5-volt steps. Outputs: 105, 115 and 130 v. @ 500 VA from autotransformer winding; 105, 115 and 130 v. @ 275 VA from isolated secondary. Size, 5x5 $\frac{3}{4}$ x4 $\frac{1}{8}$ ". For operation from 50-60 cycle AC. Complete with 5-ft. line cord. Shpg. wt., 15 lbs.

62 G 516. \$2.00 Down. NET. . . . 22.00

## VTVM & VOM PROBES

WG-289 HV PROBE. Extends DC voltage range of VoltOhmysts (and other VOM's and VTVM's) to 50,000 v. Less multiplier. Shpg. wt., 1 lb.

84 F 077. NET. . . . 7.15

MULTIPLIERS. For WG-289 & WG-290. 2 oz.

84 F 079. WG-206. 1090 meg. } NET

84 F 083. WG-210. 900 meg. } EA. 2.80

WG-211 MULTIPLIER. 495-megohm multiplier resistor for WG-289 and WG-297 probes. Shpg. wt., 2 oz.

87 F 092. NET. . . . 2.80

## WR-49B RF SIGNAL GENERATOR

Covers 85 kc-30 mc in 6 ranges; all on fundamentals. Dial accurate within 1%. Built-in 400-cycle oscillator for internal or external modulation. Attenuator control of RF level; approximate range: 2000 to 1. Cathode follower type RF output at least 0.05 and 0.01 v. rms at high and low connectors respectively. With cable, 7 $\frac{1}{2}$  x 10 $\frac{1}{2}$  x 6". For 105-125 v., 50-60 cycle AC. Wt., 10 lbs.

87 FU 079. \$5.00 Down. NET. . . . 79.50

## WV-87B MASTER VOLTOHMIST

This deluxe VTVM has a 7 $\frac{1}{2}$ " mirrored-scale meter. Has the accuracy and stability necessary for many laboratory applications. Its peak-to-peak scales are useful for TV, radar work, etc. Reads peak-to-peak to 4200 volts. Response: 30 cps-3 mc. Has zero-center for FM discriminator alignment. Reads DC current to 15 amps. Measures DC voltage to 1500 in 7 ranges. Reads AC rms to 1500 volts; AC input impedances from 0.83 meg and 85 mmf to 1.5 meg and 75 mmf. DC resistance to 1000 meg in 7 ranges. Accuracy,  $\pm 3\%$  of full scale for DC;  $\pm 3\%$  of full scale for AC, 10x13 $\frac{1}{2}$ x7". With WG-299C probe and cables. For 105-125 v., 50-60 cycle AC. Wt., 9 lbs.

87 FU 066. \$5.00 Down. NET. . . 137.50

## WV-37B BATTERY TESTER

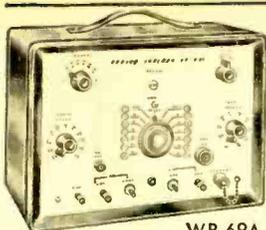
An expertly designed, quality radio-battery tester by RCA. Accurately tests virtually all types of tube-portable and transistor-portable radio batteries. Checks each battery under its recommended load condition.

Features simplified, single-switch control for fast testing. Voltage settings include: 1.5 v. Hi; 1.5 v. Lo; 4.5 v. Hi; 4.5 v. Lo; 6 v.; 7.5 v.; 9 v. Hi; 9 v. Lo; 13.5 v.; 45 v.; 67.5 v.; 75 v.; 90 v. Also has 8 blank write-in spaces for testing future types. Unit is easily modified to test industrial and special-purpose batteries.

Large, easy-to-read meter indicates battery condition in terms of "REPLACE-USABLE-GOOD." Has additional scale expressed in percentage of rated output of battery under test. Test leads and probes are permanently attached. Size, 6 $\frac{1}{8}$  x 5 $\frac{1}{4}$  x 3 $\frac{1}{4}$ ". Shpg. wt., 4 lbs.

87 F 097. \$2.00 Down. NET. . . . 24.95

# RCA Test Equipment—Kits and Wired



WR-69A

### WR-69A TV-FM SWEEP GENERATOR

This sweep generator provides video, IF and RF test and alignment signals for television channels 2 through 13—plus IF and RF signals for the FM broadcast band. Provides continuous IF coverage from 50 kc to 50 mc. Sweep width, 12 mc, continuously variable. Output flat within 0.1 db per mc of sweep width. Fundamental oscillator output on TV channels; filtered beat-frequency fundamental output on IF/VF range. Output, 0.1 volt RMS or better at all frequencies. Incorporates blanking circuit. Size: 10x13 $\frac{1}{4}$ x7 $\frac{1}{4}$ ". Complete with cables. For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 17 lbs.

87 FU 070. \$10.00 Down. NET...295.00



WR-99A

### WR-99A MARKER-GENERATOR

Crystal-calibrated marker-generator for aligning FM and TV receivers or any other type of electronic equipment operating in the 19-260 mc range. Crystal calibrator provides 240 check points for calibration at 1 or 10 mc intervals. Modulation frequencies: 1, 10, 4.5 mc, 600 cycles. Sound and picture carrier markers available simultaneously. Output: 0.1 v. min. rms on all frequencies. Double-shielded oscillator. Size, 10x13 $\frac{1}{4}$ x7 $\frac{1}{4}$ ". Provides the necessary accuracy for the critical requirements of color TV servicing. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 18 lbs.

87 FU 069. \$10.00 Down. NET...242.50

WG-304B RF MODULATOR. Crystal-type mixer. For use with WR-69A and WR-99A to check TV response from antenna to picture tube. 1 $\frac{1}{2}$ x4x2 $\frac{1}{4}$ ". Wt., 1 lb.

87 F 098. NET...12.50

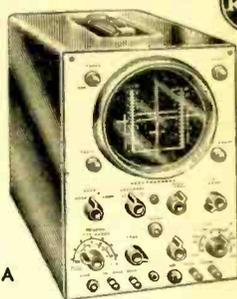


WR-70A

### WR-70A RF-IF-VF MARKER-ADDER

For RF, IF and video sweep-alignment of black-and-white and color TV sets. Four differently shaped markers: positive peak, negative peak, positive and negative peaks (wide band), and positive and negative peaks (narrow band). Use with marker and sweep generators. Marker signal is added after sweep passes through receiver—eliminates distortion of marker or sweep curve. 0-60 db attenuation of IF sweep signal for IF or video alignment. With 4 coax cables for connecting to sweep and marker generators, scope, and input and output circuits of TV receiver under test. Size, 7 $\frac{1}{2}$ x10 $\frac{1}{2}$ x6 $\frac{1}{4}$ ". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

87 FU 055. \$5.00 Down. NET...74.50



WO-91A

### WO-91A 5" OSCILLOSCOPE

- For Color or Black and White TV
- Built-in Voltage Calibrator
- Dual-Band Response

5" wide-band oscilloscope for black-and-white and color TV servicing. Features: dual-band response; wide-band position flat within  $\pm 1$  db from 10 cps to 4.5 mc and narrow-band position flat within  $-6$  db from 10 cps to 1.5 mc, and voltage-calibrated, frequency-compensated 3-to-1 step attenuator. Removable, multi-scale graph screen. Vertical polarity reversal switch. Preset vertical and horizontal sweep positions. Built-in calibration for peak-to-peak voltage measurements. Plus or minus internal sync selector. Sensitivity is 0.05 volt peak-to-peak per inch (0.018 volt rms) in narrow-band position and 0.150 volt peak-to-peak per inch (0.053 volt rms) in wide-band position. Vertical input impedance 75 mmf and 1 meg direct, and 11 mmf and 10 meg low-capacity position, with WG-300B probe supplied. 5U1 CRT, 13 $\frac{1}{2}$ x9x16 $\frac{1}{2}$ ". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 33 lbs.

84 FU 049. \$10.00 Down. NET. 239.50

WG-300B DIRECT/LOW-CAPACITANCE PROBE. Shpg. wt., 1 lb.

87 F 059. NET...9.95

WG-302A DEMODULATOR PROBE. Use with WG-300B to extend scope range to 250 mc; Input, 2.2 mV. Shpg. wt., 1 lb.

87 F 060. NET...8.50

### OTHER RCA INSTRUMENTS

WG-295B VIDEO MULTIMARKER. For use with sweep generator on black-and-white and color television receivers. Checks response of chrominance bandpass filter, and alignment of 1 and Q filters. 7 simultaneous, absorption-type markers (mc): 0.5, 1.5, 2.5, 3, 3.58, 4.1, and 4.5. Size: 5x2 $\frac{1}{2}$ x2 $\frac{1}{4}$ ". Shpg. wt., 1 lb.

87 F 054. \$2.00 Down. NET...32.50

WG-307A TV BIAS SUPPLY. Greatly simplifies both black-and-white and color TV servicing. Provides three output voltages for RF, IF and AGC adjustable from 0 to 15 volts; 1 output, 100 volts, for chrominance circuitry. Size (HWD), 2 $\frac{1}{2}$ x3x5 $\frac{1}{4}$ ". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 2 lbs.

87 F 067. \$2.00 Down. NET...22.50

## NEW RCA TEST INSTRUMENTS—KIT OR WIRED

### MODEL WO-33A OSCILLOSCOPE

- Ideal for Color TV Servicing
- Moderate Cost
- Portable

A low-cost, 3" oscilloscope ideally suited for both black and white and color TV servicing. Features dual band response. Wide band provides a response from 5.5. cps to 5.5 mc; narrow band, 20 cps to 150 kc. Both are within  $-3$  db. Has built-in peak-to-peak voltage calibrator—values are easily read on graph scale. Narrow band sensitivity is .02 volt peak-to-peak per inch (.003 volt rms). Wide band is 0.6 volt peak-to-peak per inch (0.1 volt rms). Sawtooth range is 15 cps to 75 kc. Sync circuit will lock-in at frequencies as high as 4.5 mc. Vertical input impedance 90 mmf and 1 meg direct, 50 mmf and 1 meg at panel connector, 10 mmf and 10 megs in low-capacity position. Easily portable—weighs only 14 lbs. 3AQ1 CRT. Size, 8 $\frac{1}{2}$ x6 $\frac{1}{2}$ x10 $\frac{1}{4}$ ". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 15 lbs.

87 FU 093. \$5.00 Down. NET...129.95

MODEL WO-33A (K). Same as above, but in kit form. Complete instructions included. Shpg. wt., 15 lbs.

87 FU 094. \$5.00 Down. NET...79.95



### MODEL WV-77E JR. VTVM

- 28 Ranges
- With Probes
- Color-Coded Meter Scale

Latest version of this time-tested VTVM—at an exceptionally low price. Features a fuse-protected ohms-divider network plus an electronically protected 400 microampere meter movement. Metal case with brushed aluminum panel eliminates effect of RF fields.

Ranges: resistance, 0.1000-10.000-100.000 ohms, 0.1-10-100-1000 megohms; AC rms v., 0-1.5-5-15-50-150-500-1500; AC P-P, 0-4-14-40-140-400-1400-4000; DC, 0-1.5-5-15-50-150-500-1500 volts. Accuracy:  $\pm 3\%$  of full scale on DC ranges;  $\pm 5\%$  of full scale on AC ranges. Response:  $\pm \frac{1}{2}$  db, 20 cps to 500 kc on all ranges to 400 volts.

Size, 7 $\frac{1}{2}$ x5 $\frac{1}{2}$ x4 $\frac{1}{4}$ ". Supplied complete with probes, flexible leads, and operating instructions. For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 5 lbs.

87 F 089. \$2.00 Down. NET...49.95

MODEL WV-77E (K). As above, but in kit form. Shpg. wt., 5 lbs.

83 F 999. \$2.00 Down. NET...29.95



### NEW WV-38A VOM

- 8 Ranges on DC
- 6 Ranges on AC
- Extremely Accurate
- Famous RCA Quality



A high-quality, accurate VOM designed for general usage. Features 20,000 ohms per volt input resistance on 8 DC ranges: 0-25-1.0-2.5-10-50-250-1000-5000 volts. DC accuracy  $\pm 3\%$ . 5000 ohms per volt input resistance on 6 AC ranges: 0-2.5-10-50-250-1000-5000 volts. Frequency response on 2.5, 10, 50 volt ranges is  $\pm \frac{1}{2}$  db from 10 cps to 50 kc. AC accuracy  $\pm 5\%$ . 4 ranges of AF output: 0-2.5-10-50-250 volts,  $\pm 5\%$  accuracy. Reads resistance from 0-20 megohms in 3 ranges, 8 DC current ranges: 0-50  $\mu$ amperes; 0-1-10-100-500 ma; 0-10 amps. An internal capacitor permits AF measurements in presence of DC. 6 $\frac{1}{2}$ x5 $\frac{1}{4}$ x3 $\frac{1}{8}$ ". With batteries and test leads. 5 lbs.

87 F 095. \$2.00 Down. NET...43.95

MODEL WV-38A (K). As above, but kit form. Detailed instructions. 5 lbs.

87 F 096. \$2.00 Down. NET...29.95

# Hickok Tube Testers and Oscilloscope



800

## MODEL 800 TUBE TESTER

- Fast, Accurate Operation
- Checks Transistors and Sub-miniature Tube Types

Lightweight, portable dynamic mutual conductance tube tester. Weighs only 16 pounds—ideal for professional radio and TV servicemen to use for both on-location and shop-bench jobs. Tests receiving-type tubes under simulated operating conditions; also tests out-of-circuit transistors and diodes. Includes tests for latest miniature tubes; also includes tests for 600-ma series-string-filament tubes.

An improved version of the popular 600 series testers, the 800 features an improved leakage test with direct meter readings. Easily detects hard-to-locate weak tubes. Tests for gas content and for shorts. The easy-to-read triple-scale 5" lucite-case meter has ranges of 0-3000-6000-15,000 micromhos and "REPLACE—?—GOOD". Roll chart groups most commonly-used tubes separately—making it easy to quickly locate desired tube type. Housed in red leatherette-covered case.

Cover is removable to permit easy access. Size (HWD): 16 $\frac{1}{4}$ x7 $\frac{1}{2}$ x11 $\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 21 lbs. \$5.00 Down. 87 FU 187. NET. . . . . 159.50



752

## MODEL 752 TUBE TESTER

- Fast Operation—One Switch Setting Checks Dual Tubes
- Illuminated Meter & Roll Chart

A portable unit featuring high accuracy and fast, simple operation. Tests over 2000 tube types plus germanium diodes. Tests both halves of dual tubes with single setting of selector switches. Push-button switch selects half to be tested—permits quick comparisons. Mutual conductance value is found by merely noting meter indication and multiplier setting—meter indicates value from 0-30,000 in 5 ranges. Simplified panel reduces set-up time and chance of error. Illuminated meter and roll chart. Choice of two plate and screen voltages and 4 AC signal voltages. Built-in pin straighteners for 7 and 9 pin miniature sockets. Special design avoids damage to tubes through improper settings. Black leatherette case. 18 $\frac{1}{2}$ x11 $\frac{1}{4}$ x7 $\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 26 lbs. 87 FU 192. \$10.00 Down. NET. . . . . 298.00

## MODEL 6000 TUBE TESTER

- Latest Version of Famous "600" Series
- 1-2-3 Push Button Operation Saves Time
- Speedy Transconductance Readings

Designed for accurate high-speed testing. Unique roll chart design groups the most commonly used tube types separately for faster testing. Sensitive 5" meter has 0-3000-6000-15,000 micromhos and "REPLACE—?—GOOD" ranges. Checks all receiving tubes that are normally encountered. Easy-action push buttons provide instant indication of dynamic mutual conductance and gas content. Has automatic short test—5 neon lights indicate shorts or leakage between elements and show which elements are shorted. Also features constant line voltage indication and plug-in socket replacements on RSP-4 socket plate.

In attractive red leatherette portable case with detachable lid. Panel is gold anodized with red and black lettering. Size, 16 $\frac{1}{2}$ x7 $\frac{1}{2}$ x11 $\frac{1}{4}$ ". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 21 lbs. 87 FU 181. \$5.00 Down. NET. . . . . 189.25

MODEL 6005. Similar tube tester to unit above, but with built-in 20,000 ohm/volt VOM. Shpg. wt., 22 lbs. 87 FU 182. \$10.00 Down. NET. . . . . 231.00

CRT TESTER ADAPTER. Tests gas, grid control, shorts or cathode emission. Also works as rejuvenator. Wt., 1 lb. 84 F 184. NET. . . . . 12.10



539B

## MODEL 539B TUBE TESTER

Laboratory-type dynamic mutual conductance tube tester. Measures mutual conductance under simulated operating conditions. Tests all receiving-type and voltage regulator tubes, selenium and germanium diodes. Uses 3 meters. Micromhometer with 8 ranges; 60,000-30,000-15,000-6000-3000-600 micromhos; Rectifier Diode Range; VR Range. Separate AC meter for line voltage check and separate DC volt meter for grid bias readings. 4 AC signals (.25, .5, 1, 2.5 v.). Normal and low plate and screen voltages. Reads leakage up to 50 megohms. Tests for shorts, gas, noise and gives probable tube life. Black leatherette-covered portable carrying case. Size (HWD): 16 $\frac{1}{4}$ x18 $\frac{1}{2}$ x7 $\frac{1}{2}$ ". For operation from 110-125 volts, 50-60 cycle AC. Shpg. wt., 39 lbs. 84 FU 608. \$10.00 Down. NET. . . . . 415.00

## MODEL 121 CARDMATIC TUBE TESTER

- Remarkable Speed and Accuracy
- Just Insert Cards—No Roll Chart
- Cards Automatically Set Up Test Circuit

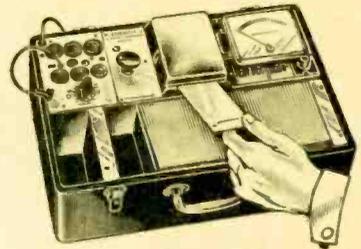
An automatic mutual conductance tube tester featuring simplified card operation for speed and accuracy. Perforated vinyl cards set up entire circuit for complete range of dynamic tests—saves time and eliminates chance for error. Features "Tailored Tests"—checks under actual operating conditions according to application. For example, a 6SN7 can be tested either as an amplifier or a multivibrator, or both together. The "Cardmatic" provides sensitive short and leakage tests, quantitative gas test, and "Knee test" to evaluate sweep circuit performance. Checks sections of twin tubes individually. Complete with 342 most popular attached cards. Case, 19 $\frac{1}{2}$ x8x13 $\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. 40 lbs. 87 FU 186. \$10.00 Down. NET. . . . . 299.50

## MODEL 675A WIDE-BAND OSCILLOSCOPE

Wide-band, high sensitivity, 5" oscilloscope for color TV as well as FM and AM use. Features 4.5-mc bandwidth and 20 rms mv/inch vertical sensitivity. Illuminated, calibrated screen with astigmatic focus provides exceptional trace detail. Vertical response within 3 db from 1 cps to 4.5 mc—flat through 3.58-mc color burst. Switch for reverse polarity of vertical trace. Voltage calibrator. Horizontal response within 3 db from 1 cps to 450 kc—sensitivity is 250 rms mv/inch. Sweep frequency, 10 cps to 100 kc. Has input for intensity modulation. 13x10x16". For operation from 110-120 v., 50-400 cycle AC. Shpg. wt., 43 lbs. 84 FU 634. \$10.00 Down. NET. . . . . 299.90



6000



121

## NEW MODEL 820 TUBE TESTER



Tests Tubes & Transistors

Has VTVM-Ohmmeter

10 Meg Input Na Batteries

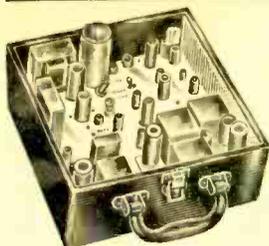
Fits In Your Tube Caddy

Low-cost, compact tube-transistor tester and vacuum tube volt-ohmmeter. Especially designed to meet the time-conserving needs of radio and TV service in the home. Easily fits into tube caddy—weighs only 4 $\frac{3}{4}$  lbs. 15 tube and transistor sockets accept nearly all radio, hi-fi and TV tubes including deflection types. Tests tubes for grid emission, heater-cathode leakage, grid current, contact potential and shorts. Also accommodates CRT adapter.

Tests both PNP and NPN transistors. Reads DC current gain and reverse current collector leakage. Leakage scale calibrated "GOOD-FAIR-BAD". Includes individual test for power transistors.

VTVM-ohmmeter employs bridge-type circuit and has built-in power supply. No batteries are required. Reads up to 750 DC volts in 4 ranges, to 100 megohms in 3 ranges. Housed in gold and black steel case. Size, 3 $\frac{1}{2}$ x8 $\frac{1}{2}$ x6". Test leads included. For operation from 110-120 v., 50-60 cycle AC. Wt. 6 $\frac{1}{2}$  lbs. 87 F 160. \$5.00 Down. NET. . . . . 99.55

# Hickok, Sprague, Precision Test Equipment



660

## MODEL 660 DOT-BAR GENERATOR

Compact, portable white dot-bar color display generator designed for "on-the-spot" adjustment of color TV receivers. Accurate color hue tests may be made even in the absence of a station signal.

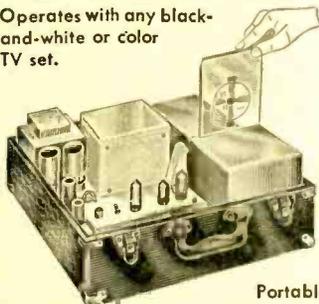
All frequencies generated are crystal-controlled and lock together for rigid stability to reduce chance for alignment error. Has an exceptionally stable timer circuit. Features switch selection of RF output up to .05 v. on TV channels 2 to 6, 300 white dots, less those in blanking; 20 vertical and 15 horizontal white crosshatch lines, less those in blanking. Color display sequence: orange, red, magenta, blue, cyan and green. RF modulated (60%) by all video outputs. Black leatherette case. With 2 crystals, output cable. 10 $\frac{1}{2}$ "x10 $\frac{1}{2}$ "x5 $\frac{1}{4}$ ". For 105-125 v., 50-60 cycle AC. 21 lbs. 87 F 175. \$10.00 Down. NET. 243.00

## 656XC TV COLOR BAR GENERATOR

Not illus. Accurate white dot crosshatch and color bar generator. Supplies a standard 100% NTSC pattern. Crystal-controlled 3.58 mc color burst. Demodulator alignment signals; R-Y, B-Y, G-Y, and G-Y at 90°. Video output, 0-2 volts p-to-p open circuit. RF output, modulated with color bar pattern, on channels 2 to 6. Produces white dot crosshatch: 20 vertical and 15 horizontal, less those in blanking; 300 dots, less those in blanking; also provides vertical and horizontal lines. Sound carrier for setting local oscillator. Leatherette-covered case. Size, 7 $\frac{1}{2}$ "x16 $\frac{1}{4}$ "x18 $\frac{3}{8}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 48 lbs. 87 F 176. \$10.00 Down. NET. 495.00

## MODEL 760 VIDEO SCANNER

Operates with any black-and-white or color TV set.



Portable

A complete cable-connected TV transmitting station. Instantly scans and produces a video or RF signal from slide. Reproduces your own test patterns. Extremely useful for TV servicing. Can also be used to project advertisements or signs on TV sets in store or in window. Will operate any black-and-white or color TV receiver. Portable—for on-location servicing.

RF output, 100,000 microvolts—enough to drive several receivers simultaneously. Video output, 2 volts peak-to-peak; choice of positive or negative output. Variable sync level; permits test of how well a TV receiver locks-in on high or low sync levels. Completely crystal controlled. Supplied with bar, dot, standard test pattern, and transparent blank slides. Size, 19 $\frac{1}{2}$ "x17x8 $\frac{1}{4}$ ". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 50 lbs. 87 FZ 185. \$10.00 Down. NET. 372.00



810

## NEW 810 TRANSISTOR-RADIO TESTER

A time-saving, radio servicing instrument; ideal for transistor radios and other AM sets. Combination RF-IF AM signal generator, single-tone audio generator, RF-IF audio signal tracer, and transistor tester. Signal tracer serves as tuned receiver for trouble-shooting 1F stages from 200-575 kc and RF stages from 550-1600 kc. Also checks audio stages. Includes built-in loudspeaker. Signal generator output from 200-575 kc for 1F alignment and 550-1600 kc for RF alignment; also 400-cycle audio output. Transistor tester checks leakage and gain. With cathode follower input probe and test leads. Portable steel case; aluminum panel. 9x11 $\frac{1}{4}$ "x7". For 105-125 v., 50-60 cycle AC. Shpg. wt., 15 lbs. 87 FU 188. \$5.00 Down. NET. 119.00

## MODEL 455A VOLT-OHM-MILLIAMMETER

Compact, portable VOM. Rugged design withstands hard use. Unique overload circuit cut-out and fuse system protects meter and components against burn-out on any function including ohms. Single switch selects function and range. Sensitivity: 20,000 ohms-per-volt AC-DC. Ranges: AC-DC v., 0-3-15-60-150-600-1200; resistances, 0 to 100 megs in 4 ranges—5 ohms center scale; current, 0-50  $\mu$ a, 0-1-10-100-1000 ma, 0-10 amps. 3x5 $\frac{1}{8}$ "x8 $\frac{1}{2}$ ". With test leads. Less batteries. Uses 1 Burgess U20 and 1 No. 2, listed at right. 5 $\frac{1}{2}$  lbs. 84 F 609. \$5.00 Down. NET. 69.50

CARRYING CASE. For 455A, above. 1/2 lb. 84 F 635. NET. 9.00



455A  
VOM



457  
VOM



## NEW MODEL 470 VTVM

- Single, AC-Ohms-DC Probe
- Readability—0.2 Ohms to 1000 Megs
- Large, Easy-to-Read 7" Meter

Reliable, lightweight VTVM featuring a 7" meter and a single-unit AC-ohms-DC probe. Ranges: DC, 0-1.5-5-15-50-150-500-1500 volts; AC (rms), 0-1.5-5-15-50-150-500-1500 volts. Peak-to-peak, 0-4-14-40-140-400-1400-4000 volts. Resistance, 0-1000-10,000-100,000 ohms; 0-1-10-100-1000 megohms. Response, 30 cps to 2.5 mc. Input resistance, 13.3 megohms. High-sensitivity transistor bias test (0 to 0.5 v. DC range). Molded case has leather carrying handle; panel is gold anodized aluminum with black and red inscriptions. 6 $\frac{1}{4}$ "x7x4". With probe and leads. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 8 lbs. 87 F 189. \$5.00 Down. NET. 89.75

## 457 VOLT-OHM-MILLIAMMETER

New 20,000 ohm/volt VOM featuring single function-range selector. DC and AC v., 0-3-15-60-150-600-1200; DC current, 0-50  $\mu$ a, 0-1-10-100-1000 ma and 0-10 amps resistance, 0-1000-10,000 ohms and 0-1-100 megs, db from —18 to +57 in 5 ranges. 3x5 $\frac{1}{8}$ "x8 $\frac{1}{2}$ ". Requires one each, batteries below. Shpg. wt., 5 $\frac{1}{4}$  lbs. 87 F 191. \$2.00 Down. NET. 43.95

BURGESS U20, 30-v. battery. Wt., 2 oz. 53 J 078. NET. 1.23  
BURGESS 2, 1 $\frac{1}{2}$ -v. battery. Wt., 6 oz. 53 J 009. NET. 14c  
CARRYING CASE. For Model 457. 1/2 lb. 84 F 635. NET. 9.00

## PRECISION 202 SIGNAL TRACER

Provides Visual and Aural Tracing

Checks All Radio and TV Sets



Moderately priced, all-purpose signal tracer for rapid servicing of radio and TV sets, hi-fi, etc. Quickly and easily checks all stages from antenna to speaker or picture tube. Permits location of intermittent components, open circuits, etc. Provides both visual and aural signal tracing with sensitive "magic eye" and built-in 5" speaker.

Three-stage preamp has cascade circuit with feedback. Preamp output provides wide-band response and voltage gain of 400 for scope or VTVM; flat from 2 cps to 300 kc to indicator eye or scope output. 3-position attenuator gives stage-to-stage gain measurements. 4-position selector switch for selecting: RF probe (below); audio probe; noise test with applied break-down voltage; watt-meter circuit for checking power drain of set under test. 7 $\frac{1}{2}$ "x10 $\frac{1}{2}$ "x6 $\frac{1}{2}$ ". Supplied with audio probe. For 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs. 84 FX 197. \$2.00 Down. NET. 36.75  
MODEL B RF PROBE. For above. Wt., 1 lb. 87 F 258. NET. 7.35

## SPRAGUE TO-5 TEL-OHMICKE

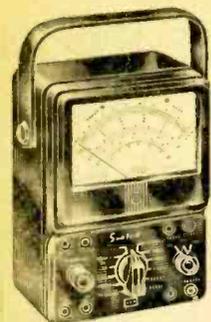


Multi-purpose bridge-type capacitor analyzer for radio-TV servicemen. Valuable time-saving aid—quickly detects open, shorted, or intermittent capacitors. Provides an accurate, multi-range capacitance and power factor measuring bridge; an insulation resistance checker for paper, mica, and ceramic capacitors; a leakage current indicator for electrolytics (tests at rated voltages); and a turns ratio scale to measure turns ratio of power and audio transformers.

Measures capacitance from 1 mmf to 2000 mfd in five ranges; electrolytic leakage from 0-60 ma in two ranges; power factor of electrolytics to 55% in three ranges. Up to 600 volts DC for electrolytic test. Magic-eye tube simplifies bridge balancing for capacitance and power factor measurements. Convenient push-button controls instantly select range—automatically discharge capacitors when released.

8 $\frac{1}{2}$ "x14 $\frac{1}{2}$ "x6 $\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 $\frac{1}{2}$  lbs. 66 FX 591 \$5.00 Down. NET. 82.22

# Simpson Test Equipment



**MODEL 260**  
VOM  
Series III

- Sensitive
- Highly Accurate
- Printed Circuit
- Easy to Operate

Highly popular—extremely dependable. Latest version of the famous 260 series. Has polarity reversing switch, 5000 ohms/v. AC sensitivity, rugged printed circuit, full-wave bridge rectifier, response to 500,000 cps. DC sensitivity, 20,000 ohms/v. Ranges: DC mv. 0-250; AC and DC v., 0-2.5-10-50-250-1000-5000; AF output v., 0-2.5-10-50-250; DC  $\mu$ a, 0-50; DC ma, 0-1-10-100-500; DC amps, 0-10; resistance, 0-20 megohms in 3 ranges.  $5\frac{1}{2} \times 7\frac{3}{8}$ ". Complete with batteries and test leads. Shpg. wt., 5 lbs.

87 F 111. \$2.00 Down. NET. .... 43.07

Model 260RT. As above, but in "roll top" case.  $6\frac{3}{4} \times 9\frac{1}{4}$ ". Shpg. wt., 9 lbs.

87 F 112. \$2.00 Down. NET. .... 48.95

Type 0247 Probe. Extends DC range of Models 260 III and 260RT III to 25,000 volts. Shpg. wt., 8 oz.

87 F 124. NET. .... 9.75

Type 0248 Probe. Extends DC range to 50,000 volts. Shpg. wt., 8 oz.

87 F 115. NET. .... 12.25

Type 8375 Test Leads. Have elbow terminals on one end, alligator clips on the other. Shpg. wt., 8 oz.

87 F 106. NET. .... 1.22

Type 7500 Spare Leads. Wt., 1 lb.

87 F 116. NET. .... 2.06

Cases for Models 260, 270 and 303. Ever-ready type case permits using meter in case. Av. shpg. wt., 2 lbs.

84 F 721. Ever-ready Case. NET. .... 9.55

84 F 782. Standard Case. NET. .... 7.59



**MODEL 269**

- 100,000 Ohms per Volt
- 33 Ranges on 7" Scale
- 4000 Volt DC Multiplier
- Extremely Accurate



240



303



270



390



372



355

Model 269. Sensitive, 100,000 ohms/volt multitester. Accurate, wide-range VOM for lab or shop. Battery-operated; 33 ranges; 7" dial; 2 controls. Ranges: DC current, 0-16-160 microamps, 0-1.6-16-160 milliamps and 0-1.6-16 amps; DC volts, 0-1.6-8-40-160-400-1600-4000 (100,000 ohms/volt); AC volts, 0-3-8-40-160-800; output volts, 0-3-8-40-160; resistance, 0-2000-20,000-200,000 ohms, 0-2-20-200 megohms. Size:  $8 \times 6 \times 3$ ". Supplied complete with test leads, 4000-v. DC probe, batteries and informative operator's manual. 6 lbs.

84 F 726. \$5.00 Down. NET. .... 86.24

Hi-Voltage Probe. Extends DC range of Model 269 to 40,000 volts. 2 lbs.

84 F 742. NET. .... 12.25

Model 262. Similar to 269, but resistance ranges, 0-500-5000-50,000-500,000 and 0-5-50-megohms; DC current, 0-80-160  $\mu$ a.; 1.6-16-160 ma and 0-1.6-16 amps. Sens.: 20,000 ohms/v. DC; 5000 ohms/v. AC. Less case, 6 lbs.

84 F 727. \$5.00 Down. NET. .... 58.31

Model 5262 Carrying Case. Vinyl case for 269 and 262.  $7 \times 8 \times 4$ ". Shpg. wt., 2 lbs.

84 F 728. NET. .... 9.55

Model 270 VOM. Outstanding accuracy, stability and repeatability. Has DC sensitivity of 20,000 ohms per volt; response from 20-25,000 cps on AC. 30 ranges. AC and DC v.: 0-2.5-5-10-50-250-1000-5000. Also, 0-250 mv. on DC. DC current: 0-50  $\mu$ a, 0-10-100-500 ma, 0-10 amps; Res.: 0-2000, 0-200,000, 0-20 megohms. -20 to +50 db, 4 ranges.  $5\frac{1}{2} \times 7 \times 3\frac{1}{8}$ ". Batteries, leads, 5 lbs.

87 F 123. \$5.00 Down. NET. .... 58.75

Model 270 RT. As above, but "roll top" case.  $5\frac{1}{2} \times 7 \times 3\frac{1}{8}$ ". Shpg. wt., 6 $\frac{1}{2}$  lbs.

87 F 149. \$5.00 Down. NET. .... 64.63

Model 390 Volt-Amp-Wattmeter. Measures power consumption of any 60 cycle AC appliance, radio or TV. Speeds trouble-shooting. Ranges: AC volts, 0-150 and 0-300; amps, 0-3 and 0-15; watts, 0-300, 0-600, 0-1500 and 0-3000. 3" meter. Size:  $5\frac{1}{2} \times 3 \times 2\frac{1}{2}$ ". With break-in plug and leads, 4 lbs.

84 F 788. \$2.00 Down. NET. .... 43.07

Model 370 AC Ammeter. (Not illus.) Ranges: 0-1-2.5-5-10-25 amperes. Built-in current transformer. 3" meter. Size:  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". Less leads. For measurement of 60 cycle AC only. Shpg. wt., 3 lbs.

84 F 794. \$2.00 Down. NET. .... 21.51

Model 240 Hammeter. Popular, low-cost VOM. Sensitivity, 1000 ohms/v. on AC and DC. DC volts, 0-3000; AC volts, 0-3000; DC ma, 0-750; ohms, 0-3000-300,000. Bakelite case,  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". Complete with battery, leads. Shpg. wt., 3 lbs.

84 F 787. \$2.00 Down. NET. .... 28.37

Model 303 VTVM. Compact, accurate VT-VM. Ranges: AC and DC volts, 0-1-2-12-60-300-1200; AC volts, 0-1-2-12-60. flat to 100 kc; resistance, 0-1000-100,000 ohms and 0-1-10-1000 megohms. Also reads decibels from -20 to +63 in 5 ranges. Large  $4\frac{1}{2}$ " dial scale with easy-to-read calibrations. Bakelite case,  $7 \times 5\frac{1}{2} \times 3\frac{1}{4}$ ". (With DC and AC-Ohms probes; less RF probe (below). For 110-120 volts, 60 cycle AC. 6 $\frac{1}{2}$  lbs.)

84 F 712. \$5.00 Down. NET. .... 66.64

Model 303 RT. As above, but in "roll top" case. Shpg. wt., 8 lbs.

84 F 725. \$5.00 Down. NET. .... 74.48

HV Probe. Extends DC range to 30 KV. 1 lb.

84 F 715. NET. .... 9.75

RF Probe. Measures RF volts. Wt., 1 lb.

84 F 716. NET. .... 7.35

Model 372 Ohmmeter. Accurate, wide-range ohmmeter. 3" meter. Basic movement has a sensitivity of 85 microamperes. Ranges: 0-500 (5 ohms center), 0-5000 (50 ohms center), 0-50,000 (500 ohms center), 0-5 megohms (50,000 ohms center), 0-50 megohms (500,000 ohms center). With batteries and test leads.  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". Wt., 3 lbs.

84 F 796. \$2.00 Down. NET. .... 27.39

Model 362 Low-Ohmmeter. (Not illus.) Accurate from 0.1-25 ohms. Tests wiring, etc. With leads.  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". 3 lbs.

87 F 107. \$2.00 Down. NET. .... 24.45

Model 373 DC Milliammeter. 0-1-5-10-25-50-100-250-1000 ma.  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". 3 lbs.

87 F 117. \$2.00 Down. NET. .... 19.55

Model 374 DC Microammeter. 0-50-100-250-500-1000  $\mu$ a.  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". 3 lbs.

87 F 118. \$2.00 Down. NET. .... 22.54

Model 375 DC Ammeter. 0-1-2.5-5-10-25 amps.  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". Wt., 3 lbs.

87 F 119. \$2.00 Down. NET. .... 19.55

Model 355 Midgettester. Miniature, highly accurate VOM. Fits in palm of hand, 10,000 ohm/volt sensitivity on AC and DC. Checks motors, relays, control circuits, house voltages, starting switches, fuses, etc. Accuracy:  $\pm 3\%$  on DC;  $\pm 5\%$  on AC. 100 microamp, self-shielded and shockproof meter movement. Handy ohms zero-adjust thumbwheel on side of case. Ranges: AC, DC v., 0-3-12-60-300-1200. Resistance: 0-10,000-100,000 ohms, 0-1-10 meg. Function, range selection by lead insertion. Styrene case.  $2\frac{3}{4} \times 4\frac{1}{2} \times 1\frac{1}{2}$ ". Batteries, leads, 2 lbs.

84 FC 734. \$2.00 Down. NET. .... 34.25

Type 6355 Case. For above. Black leather with zipper, belt loop. Shpg. wt., 3 oz.

84 F 741. NET. .... 2.89

Type 8600 Spare Leads. For above. 1 lb.

87 F 108. NET. .... 1.71

## NEW! SIMPSON "ADD-A-TESTER"



MODEL 650

Just Plug-in for complete unit



- Converts "260" into 7 Different Testers
- Self-Powered

New Simpson add-on units. Convert your Model 260 or 270 VOM to a complete test instrument simply by adding the adapters listed below. Forms a self-powered, self-contained unit. For use with any 260 or 270 meter produced since 1947.

Model 650 Transistor Tester. 2 lbs.

87 F 553. \$2.00 Down. NET. .... 26.41

Model 651 DC VTVM. Shpg. wt., 2 lbs.

87 F 554. \$2.00 Down. NET. .... 32.29

Model 652 Temperature Tester. 2 lbs.

87 F 555. \$2.00 Down. NET. .... 38.17

Model 653 AC Ammeter. Wt., 2 lbs.

87 F 556. NET. .... 18.57

Model 654 Audio Wattmeter. Wt., 2 lbs.

87 F 557. NET. .... 18.57

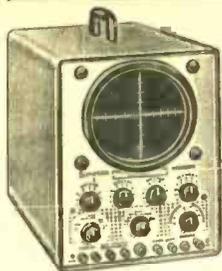
Model 655 Microvolt Attenuator. 2 lbs.

87 F 558. NET. .... 18.57

Model 656 Battery Tester. Wt., 2 lbs.

87 F 559. \$2.00 Down. NET. .... 19.55

# Simpson and Pyramid Test Equipment



458

## MODEL 458 COLORSCOPE

7" dual bandwidth oscilloscope. For black-and-white and color TV. Vernier and compensated decimal step attenuator. Horizontal sweep to 250 kc for expanding high-frequency waveform detail and color burst.

Intensity modulation input. Graph screen. Frequency response: wide-band,  $\pm 2$  db to 5 mc; narrow band,  $\pm 1$  db, 10 cycles to 200 kc. Deflection sensitivity: wide band, 25 mv rms/inch; narrow band, 10 mv rms/inch. Calibrating voltage, 6.3 volts rms. 100% response at 3.58-mc color burst frequency.  $1\frac{3}{4} \times 1 \times 1\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 32 lbs.  
84 FU 631. \$10.00 Down. NET. 225.35

TYPE 0740 VOLTAGE DOUBLER PROBE. For use with above. Detects the video signal at weak IF points and locates the weak or dead stage. Shpg. wt.,  $1\frac{1}{2}$  lbs.  
87 F 104. NET. 10.73

## MODEL 466 HANDSCOPE

Moderate-price general-purpose 5" scope. Rugged, compact and easy to carry—ideal for AM, FM or black-and-white TV servicing. Vertical response:  $\pm 1$  db from 15 to 100 kc; 6 db down at 250 kc; usable to 1 mc. Vertical sensitivity: 30 rms mv/inch max. Input resistance and capacitance: 0.1 meg, 40 mmf (at atten.x1) 0.5 meg, 35 mmf (at atten.x100). Sweep range: 15 cycles to 80 kc. Maximum input voltage, 400 v. peak. Size:  $12\frac{1}{2} \times 8 \times 16\frac{1}{2}$ ". With lead and operator's manual. For 110-120 v., 50-60 cycle AC. Shpg. wt., 24 lbs.  
87 FU 113. \$5.00 Down. NET. 142.05

## MODEL 382 ANALYZER

In-circuit horizontal system analyzer and capacitance checker. Checks High-Z systems; checks Low-Z system on comparative logging scale. Tests any transformer or yoke winding for continuity; tests for opens. Checks for opens in any capacitor of horizontal system. Direct-reading from 10 mmf to 0.1 mfd.  $4\frac{1}{2}$ " meter. With test leads,  $7\frac{3}{4} \times 7\frac{1}{2} \times 11\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 12 lbs.  
87 FX 103. \$5.00 Down. NET. 68.55

## MODEL 311 VTVM

- $4\frac{1}{2}$ " Meter for Readings at a Glance
- High Input Impedance—22 Megohms
- Zero Center Scale for FM Alignment

Highly sensitive VTVM. Easy-to-read ranges: 0-1.5-5-15-50-150-500-1500 DC volts; 22 megohms input impedance. AC voltage: 0-1.5-5-15-50-150-500-1500; 22 megohms input impedance minimum. Resistance: 0-1K-10K-100K ohms and 0-1-10-100-1000 megohms. V voltage: 0-1.5-5-15-50-150-500-1500, 30 ohms to 100 KC,  $\pm 5\%$ . Peak-to-Peak: 0-4-10-100-1400-14000. Zero center scale for discriminator alignment. Big  $4\frac{1}{2}$ " meter provides readings at a glance. Excellent accuracy for low DC voltage measurements in autorized circuitry. Sturdily constructed case. Supplied complete with single DC-AC/ohms probe, ground lead and informative manual. Size (HWD):  $7\frac{1}{2} \times 5\frac{1}{2} \times 11\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 8 lbs.  
Only \$5.00 Down. NET. 63.65

Voltage Probe. Extends DC to 30,000 v. 1 lb. NET. 10.73

Frequency Probe. Shpg. wt., 1 lb. NET. 10.73



466

- Fast Temperature Readings
- Checks Solids, Gases & Liquids
- 7" Scale
- $7\frac{1}{2}$ " Probe



382



388-3L

## MODEL 388-3L THERM-O-METER

Thermocouple thermometer. For gases, liquids or solids. Reads  $-50^{\circ}$  to  $1000^{\circ}$ F, on 7" scale. Has  $7\frac{1}{2}$ -ft. general-purpose probe (Type 0190), with provisions for 3 probes. Allows temperature readings in 3 different areas by rotating switch,  $6 \times 7\frac{1}{2} \times 2\frac{1}{2}$ ". With battery. Shpg. wt., 6 lbs.  
84 F 744. \$5.00 Down. NET. 63.21

MODEL 388. As above, but with provisions for one probe only. Shpg. wt., 6 lbs.  
84 F 738. \$5.00 Down. NET. 58.31

TYPE 0187 SURFACE TEMP. PROBE. For 388-3L and 388 above. Shpg. wt., 1 lb.  
84 F 745. NET. 6.81

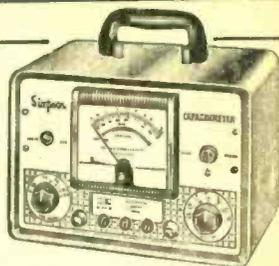
TYPE 0190 GENERAL-PURPOSE PROBE. For 388-3L and 388. Shpg. wt., 1 lb.  
84 F 746. NET. 4.85

TYPE 5262 CASE. For Models 388 and 388-3L. Shpg. wt., 5 oz.  
84 F 728. NET. 9.75

MODEL 389-3L THERM-O-METER. Same as 388-3L but employs thermistor principle of operation. Reads temperatures from  $-50^{\circ}$  to  $250^{\circ}$ F. Shpg. wt., 6 lbs.  
87 F 114. \$5.00 Down. NET. 61.25

## 385-3L TEMPERATURE METER

Not illustrated. A compact, highly accurate test instrument for servicing refrigeration equipment. Provides temperature readings from  $-50^{\circ}$ F to  $+70^{\circ}$ F on a sensitive, easy-to-read scale. Has provisions to accommodate three leads. Supplied complete with thermistor probe and an operator's manual. Size,  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". Shpg. wt., 2 lbs.  
87 F 120. \$2.00 Down. NET. 33.27



## MODEL 383-A CAPACOHMETER

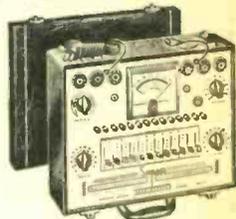
"In-or-out-of-circuit" capacitor leakage tester. Indicates leakage and measures capacitance of paper, mica or ceramic capacitors. No unsoldering is necessary—not even when capacitor is wired in parallel with a resistor. Pulse test quickly detects "borderline" capacitors.  $4\frac{1}{2}$ " meter. Indicates leakage in ohms—checks for direct short, open, or intermittent conditions in all types of bypass, coupling and blocking capacitors from 10 mmf to 10 mfd. Also detects leaks in wiring, sockets, transformers, etc. All measurements made under load conditions. Size,  $8\frac{1}{2} \times 11\frac{1}{2} \times 8\frac{1}{2}$ ". With test leads. For 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs.  
84 FX 630. \$5.00 Down. NET. 88.15

## MODEL 1000 TUBE TESTER

Test All Tubes

Large  $4\frac{1}{2}$ " Dial

Portable Case



Accurate, plate-conductance tube tester. Tests all receiving tubes, including 9-pin miniature and sub-miniatures with a linear and circular base arrangement. Tests are made under conditions simulating actual use.  $4\frac{1}{2}$ " dial indicates percentage of rated plate conductance for an accurate indication of tube condition. Also provides quick, dependable short and leakage tests—shows exact resistance values of shorts and interelement leakage. Each tube element is individually connected to the correct voltage tap—insures against tube damage during testing. Size (HWD):  $15\frac{1}{2} \times 11\frac{1}{2} \times 6"$ . For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 19 lbs.  
84 FU 723. \$5.00 Down. NET. 132.30

## PYRAMID RESISTANCE-CAPACITANCE BRIDGE

- Valuable Time-Saving Unit
- Tests Capacitors & Resistors

A quality resistance-capacitance bridge for radio-TV service use. Quickly pays for itself in time saved. In addition to testing for opens and shorts, it supplies 0 to 500 volts DC for testing capacitor breakdown.

Tests leakage of micas, papers, and electrolytics—has special amplifier to check leakage of miniature electrolytics in transistor units. Tests capacitance from 10 mmf to 2000 mfd in four ranges: 10 mmf-5000 mmf; .001 mfd-0.5 mfd; 0.1 mfd-50 mfd; and 20 mfd-2000 mfd. Tests resistance from 0.5 ohms to 200 megohms in four ranges: 0.5-500 ohms; 50-50K ohms; 5K ohms to 5 megohms; and 2 megohms to 200 megohms. Checks reactance or resistance ratio between any two capacitors, inductors, resistors; determines turns ratio of transformer windings between .05:1 and 20:1. Metal case,  $7 \times 11\frac{1}{2} \times 5\frac{1}{2}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 11 lbs.  
87 F 450. Only \$2.00 Down. NET. 44.95



RC-1

# Triplett Multi-Testers

## MINIATURE VOM



310 VOM  
with Model  
10 Adapter  
Attached

Model 310 VOM



Model  
10  
Adapter



### MODEL 310 MINIATURE VOM

- Ultra Compact—Easy To Use
- Provides Complete AC-DC Readings

Versatile, miniature VOM with 18 ranges. Extremely compact—hardly bigger than a package of cigarettes—it's ideal for on-the-spot testing. Self-shielded for checking in strong magnetic fields. Ranges: DC volts, 0-3-12-60-300-1200 at 20,000 ohms/volt; AC volts, 0-3-12-60-300-1200 at 5000 ohms/volt; DC  $\mu$ a, 0-600; DC ma, 0-6-60-600; ohms 0-20,000-200,000; megohms, 0-2-20. Accuracy 3% DC. Clear, unbreakable plastic meter window.  $4\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{8}$ ". With leads, batteries. Shpg. wt., 1 lb.

84 F 674. \$2.00 Down. NET. . . . . 33.81  
84 F 675. Model 369 Leather Case. For Model 310 only. Wt., 6 oz. NET. . . . . 3.14

### MODEL 10 ADAPTER

Miniature AC ammeter clamp-on adapter for use with above or any VOM having a 3 v. AC scale at 5000 ohms per volt. Clamp-on jaws fit around any single conductor to permit direct reading of 0-6-12-30-60-120-300 amps AC, without breaking circuit or piercing insulation.  $4\frac{1}{4} \times 3\frac{1}{4} \times 1\frac{1}{4}$ ".  $2\frac{3}{4}$  lbs.

87 F 152. NET. . . . . 14.21  
84 F 590. Model 379 Leather Case. Holds Models 310 and 10. 8 oz. NET. . . . . 5.39

### MODEL 101 LINE SEPARATOR

Plugs into AC outlet to divide two-conductor cord. Increases ammeter sensitivity 10X and 20X. Ranges (maximum) 0-0.3-0.6-1.2-1.5-3-6-12-30 amps. Plastic case. Wt., 6 oz.

87 F 153. NET. . . . . 5.39



### MODEL 630 VOM

"Unit construction" provides direct connections without cabling, thus reducing chance of shorts. All resistors, shunts, etc. are housed in molded base which is integral with switch.

- Easy-To-Read  $5\frac{1}{2}$ " Meter
- Uses 1% Precision Resistors

Popular, accurate VOM designed for industry.  $5\frac{1}{2}$ " meter with  $4\frac{3}{4}$ " scale. Uses 1% resistors, each sealed in its own molded compartment. "Unit construction"—all resistors, shunts, rectifier, and batteries are housed in molded base integral with the switch. Ranges: DC and AC volts, 0-3-12-60-300-1200-6000, DC at 20,000 ohms per volt, AC at 5000 ohms per volt; DC current, 0-60 microamps, 0-1.2-12-120 ma and 0-12 amps; resistance, 0-1000-10,000 ohms and 0-1-100 meg; db -20 to +70 in 7 ranges; output v., 0-3-12-60-300-1200-6000. Flush-mounted knob controls 20-position switch which selects both circuit and range. Plastic case.  $7\frac{3}{8} \times 5\frac{1}{2} \times 3\frac{3}{8}$ ". With batteries and 50' leads and instructions. Wt., 6 lbs.

84 F 568. \$2.00 Down. NET. . . . . 43.61



630-A



630-PL



630-NA



631



625-NA



666-R



625-N

### MODEL 630-A VOM

Lab type VOM. Features series ohmmeter circuits;  $1\frac{1}{2}\%$  resistors; mirrored scales. Accuracy:  $1\frac{1}{2}\%$  on ohms and 0-1200 DC volts; 3% on 6000 DC volts and all AC ranges. Ranges: DC and AC volts 0-3-12-60-300-1200-6000 (DC at 20,000 ohms per volt, AC at 5000 ohms per volt); DC current, 0-60 microamps, 0-1.2-12-120 milliamps, and 0-12 amps; resistance, 0-1000-10,000 ohms, and 0-1-100 megohms; db -20 to +70 in 7 ranges; output volts, 0-3-12-60-300-1200. Has  $5\frac{1}{2}$ " meter.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{3}{8}$ ". With batteries and 48" leads. Wt., 6 lbs.

84 F 574. \$5.00 Down. NET. . . . . 53.41

### MODEL 630-PL VOM

Portable VOM.  $5\frac{1}{4}$ " meter with  $4\frac{3}{4}$ " scale. AC and DC v., 6 ranges each, to 5000 v. (DC at 20,000 ohms/v., AC at 5000 ohms/v.); DC current, 0-100  $\mu$ a, 0-10-100-1000 ma, and 0-10 amps; resistance, 0-1000-10,000 ohms and 0-1-100 meg; db, -20 to +75 in 7 ranges; output v., 0-3-10-50-250-1000 at 5000 ohms/v. Accuracy:  $\pm 3\%$  on DC (2.5 v. to 1000 v.);  $\pm 5\%$  on AC-DC (at 5000 v.).  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{8}$ ". Batteries, lead, 6 lbs.

87 F 150. \$2.00 Down. NET. . . . . 43.61

MODEL 630-APL. As above, but has 4.66" mirrored scale;  $\pm 1\frac{1}{2}\%$  accuracy on DC (2.5 v. to 1000 v.);  $\pm 3\%$  on AC (3 v. to 1000 v.). Shpg. wt., 6 lbs.

87 F 151. \$5.00 Down. NET. . . . . 53.41

### MODEL 630-NA VOM

Offers unusually high accuracy. 70 ranges:  $\pm 1\frac{1}{2}\%$  on DC to 1200 v.;  $\pm 3\%$  on AC to 1200 v. Features: DC volts: 8 ranges to 6000 (10,000 ohms/v.); 8 ranges to 3000 (20,000 ohms/v.). AC volts: 6 ranges to 6000 (5000 ohms/v.); 6 ranges to 3000 (10,000 ohms/v.). DB: -20 to +77 in 12 ranges. DC microamps: 1 range to 120 (240 mv); 2 ranges to 600 (120 mv). DC milliamps: 4 ranges to 1200 (240 mv); 3 ranges to 600 (120 mv). DC amps: 1 range to 12 (240 mv); 1 range to 6 (120 mv). Resistance: 3 ranges to 100,000 ohms; 3 ranges to 100 megohms.  $7\frac{3}{8} \times 5\frac{1}{2} \times 3\frac{1}{8}$ ". Mirror scale. With leads, batteries. Wt., 6 lbs.

84 F 512. \$5.00 Down. NET. . . . . 73.01

### MODEL 631 VTVM-VOM

Battery-operated, 34-range VTVM and VOM. VTVM: 0-1.2-6-30-120 DC volts, 11 megohms input impedance. VOM: DC volts, 0-3-12-60-300-1200 at 20,000 ohms/volt; AC volts, and audio output volts, 0-3-12-60-300-1200 at 5000 ohms/volt; DC  $\mu$ a, 0-60; DC ma, 0-1.2-12-120-1200 at 250 mv; DC amps, 0-12 at 250 mv; db, -20 to +63; ohms, 0-1500-15,000; megohms, 0-1.5-15.0.  $3\frac{11}{16} \times 5\frac{1}{2} \times 7\frac{1}{2}$ ". Batteries, leads, 5 lbs.

84 F 546. \$5.00 Down. NET. . . . . 63.21

### MODEL 625-N VOM

Wide-range VOM. Large mirror scale. DC volts, 0-1.25-5-25-125-500-2000 at 20,000 ohms/volt and 0-2.5-10-50-250-1000-5000 at 10,000 ohms/volt; DC current, 0-50  $\mu$ a, 0-1-10-100-1000 ma and 0-10 amps; resistance, 0-2000-200,000 ohms, 0-40 meg. AC volts, 0-2.5-10-50-250-1000-5000 at 10,000 ohms/volt.  $5\frac{1}{2} \times 2\frac{1}{2} \times 6$ ". With batteries and leads. Wt., 3 lbs.

84 F 575. \$5.00 Down. NET. . . . . 53.41

MODEL 629 CASE. Leather case with handle. Shpg. wt., 1 lb.

84 F 561. NET. . . . . 7.06

### MODEL 666-R VOM

Pocket-sized multi-tester with 1000 ohm/volt sensitivity. Accuracy,  $\pm 3\%$ . Ranges: DC and AC volts, 0-10-50-250-1000-5000; DC ma, 0-10-100; DC amps, 0-1; ohms, 0-3000-300,000; megohms, 0-3; output volts, 0-10-50-250-1000.  $5\frac{1}{4} \times 3\frac{1}{4} \times 2\frac{1}{4}$ ". With battery and test leads. Shpg. wt., 4 lbs.

84 F 557. \$2.00 Down. NET. . . . . 28.91

### MODEL 650 VTVM

Highly accurate VTVM. Ranges: DC volts, 0-1-5-10-50-100-500-1000; AC volts, 0-1-5-10-50-100-500; resistance, 0-1000 megohms in six ranges.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{3}{8}$ ". With 2 alligator clips, AC-RF probe, ohms-DC probe and battery. For 110-120 volts, 60 cycle AC. Shpg. wt., 8 lbs.

84 F 558. \$5.00 Down. NET. . . . . 87.71

H. V. PROBE, 0-50,000 v. DC. Wt., 8 oz.

84 F 564. NET. . . . . 14.21

MODEL 659 LEATHER CARRYING CASE. For Model 650. Shpg. wt.,  $1\frac{1}{2}$  lbs.

84 F 559. NET. . . . . 10.29

### VOM ACCESSORIES

HIGH-VOLTAGE PROBE MODEL T-79-70. For Series 630 and 631 meters. Extends DC range to 30,000 volts. Shpg. wt., 8 oz.

84 F 544. NET. . . . . 14.21

MODEL 639-N CASE. Leather case for 630 and 631 meters. Front flaps permit reading an operating meter while in case.  $1\frac{1}{2}$  lbs.

84 F 569. NET. . . . . 9.00

MODEL 639-P CASE. Sponge padded, leather case for 630 and 631 meters. Top flap permits easy removal of meter.  $1\frac{1}{2}$  lbs.

84 F 562. NET. . . . . 10.29

84 F 560. Model 669 Leather Carrying Case for Model 666-R.  $1\frac{1}{2}$  lbs. NET. . . . . 10.29

87 F 158. Model 639 Leather Case for Models 630 and 631 meters.  $1\frac{1}{2}$  lbs. NET. . . . . 10.29

TESTER STAND. Holds Series 630 and 631 meters at 45 degree. Shpg. wt., 1 lb.

84 F 573. NET. . . . . 7.06

# Simpson and Pyramid Test Equipment



458

### MODEL 458 COLORSCOPE

7" dual bandwidth oscilloscope. For black-and-white and color TV. Vernier and compensated decimal step attenuator. Horizontal sweep to 250 kc for expanding high-frequency waveform detail and color burst. Intensity modulation input. Graph screen. Frequency response: wide-band,  $\pm 2$  db to 5 mc; narrow band,  $\pm 1$  db, 10 cycles to 200 kc. Deflection sensitivity: wide band, 25 mv rms/inch; narrow band, 10 mv rms/inch. Calibrating voltage, 6.3 volts rms. 100% response at 3.58-nc color burst frequency.  $13\frac{1}{2} \times 11 \times 7\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 32 lbs.  
84 F 631. \$10.00 Down. NET. . 225.35

TYPE 0740 VOLTAGE DOUBLER PROBE. For use with above. Detects the video signal at weak IF points and locates the weak or dead stage. Shpg. wt.,  $1\frac{1}{2}$  lbs.  
87 F 104. NET. . . . . 10.73

### MODEL 466 HANDISCOPE

Moderate-price general-purpose 5" scope. Rugged, compact and easy to carry—ideal for AM, FM or black-and-white TV servicing. Vertical response:  $\pm 1$  db from 15 to 100 kc; 6 db down at 250 kc; usable to 1 mc. Vertical sensitivity: 30 rms mv/inch max. Input resistance and capacitance: 0.1 meg, 40 mmf (at atten.x1) 0.5 meg, 35 mmf (at atten.x100). Sweep range: 15 cycles to 80 kc. Maximum input voltage, 400 v. peak. Size:  $12\frac{1}{2} \times 8 \times 16\frac{1}{2}$ ". With lead and operator's manual. For 110-120 v., 50-60 cycle AC. Shpg. wt., 24 lbs.  
87 FU 113. \$5.00 Down. NET. . 142.05

### MODEL 382 ANALYZER

In-circuit horizontal system analyzer and capacitance checker. Checks High-Z systems; checks Low-Z system on comparative logging scale. Tests any transformer or yoke winding for continuity; tests for opens. Checks for opens in any capacitor of horizontal system. Direct-reading from 10 mmf to 0.1 mfd.  $4\frac{1}{2}$ " meter. With test leads.  $7\frac{3}{4} \times 7\frac{1}{2} \times 11\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 12 lbs.  
87 FX 103. \$5.00 Down. NET. . . . . 68.55

### MODEL 311 VTVM

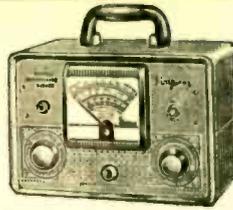
- $4\frac{1}{2}$ " Meter for Readings at a Glance
- High Input Impedance—22 Megohms
- Zero Center Scale for FM Alignment

Highly sensitive VTVM. Easy-to-read ranges: 0-1.5-5-15-50-150-500-1500 DC volts; 22 megohms input impedance. AC voltage: 0-1.5-5-15-50-150-500-1500; 2.2 megohms input impedance minimum. Resistance: 0-1K-10K-100K ohms and 0-1-10-100-1000 megohms. AF voltage: 0-1.5-5-15-50-150-500-1500. 30 cycles to 100 KC,  $\pm 5\%$ . Peak-to-Peak: 0-4-14-40-140-400-1400-4000. Zero center scale for discriminator alignment. Big  $4\frac{1}{2}$ " meter provides readings at a glance. Excellent accuracy for low DC voltage measurements in transistorized circuitry. Sturdily constructed case. Supplied complete with single DC-AC/ohms probe, ground lead and informative operator's manual. Size (HWD):  $7\frac{1}{2} \times 5\frac{1}{2} \times 4\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 8 lbs.  
87 F 121. Only \$5.00 Down. NET. . . . . 63.65

0732 High-Voltage Probe. Extends DC to 30,000 v. 1 lb.  
87 F 122. NET. . . . . 10.73  
0731 High-Frequency Probe. Shpg. wt., 1 lb.  
87 F 131. NET. . . . . 10.73

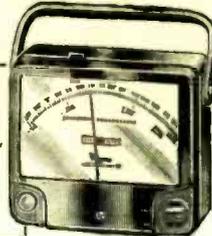


466



382

- Fast Temperature Readings
- Checks Solids, Gases & Liquids
- 7" Scale
- $7\frac{1}{2}$ " Probe



388-3L

### MODEL 388-3L THERM-O-METER

Thermocouple thermometer. For gases, liquids or solids. Reads  $-50^{\circ}$  to  $1000^{\circ}$ F, on 7" scale. Has  $7\frac{1}{2}$ -ft. general-purpose probe (Type 0190), with provisions for 3 probes. Allows temperature readings in 3 different areas by rotating switch.  $6 \times 7\frac{1}{8} \times 2\frac{1}{16}$ ". With battery. Shpg. wt., 6 lbs.  
84 F 744. \$5.00 Down. NET. . . . . 63.21

MODEL 388. As above, but with provisions for one probe only. Shpg. wt., 6 lbs.  
84 F 738. \$5.00 Down. NET. . . . . 58.31

TYPE 0187 SURFACE TEMP. PROBE. For 388-3L and 388 above. Shpg. wt., 1 lb.  
84 F 745. NET. . . . . 6.81

TYPE 0190 GENERAL-PURPOSE PROBE. For 388-3L and 388. Shpg. wt., 1 lb.  
84 F 746. NET. . . . . 4.85

TYPE 5262 CASE. For Models 388 and 388-3L. Shpg. wt., 5 oz.  
84 F 728. NET. . . . . 9.75

MODEL 389-3L THERM-O-METER. Same as 388-3L but employs thermistor principle of operation. Reads temperature from  $-50^{\circ}$  to  $250^{\circ}$ F. Shpg. wt., 6 lbs.  
87 F 114. \$5.00 Down. NET. . . . . 61.25

### 385-3L TEMPERATURE METER

Not illustrated. A compact, highly accurate test instrument for servicing refrigeration equipment. Provides temperature readings from  $-50^{\circ}$ F to  $+70^{\circ}$ F on a sensitive, easy-to-read scale. Has provisions to accommodate three leads. Supplied complete with thermistor probe and an operator's manual. Size,  $3 \times 5\frac{1}{2} \times 2\frac{1}{2}$ ". Shpg. wt., 2 lbs.  
87 F 120. \$2.00 Down. NET. . . . . 33.27

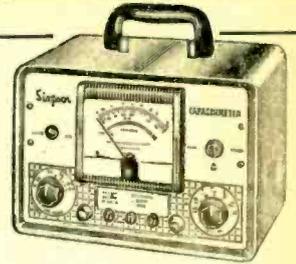


## PYRAMID RESISTANCE-CAPACITANCE BRIDGE

- Valuable Time-Saving Unit
- Tests Capacitors & Resistors

A quality resistance-capacitance bridge for radio-TV service use. Quickly pays for itself in time saved. In addition to testing for opens and shorts, it supplies 0 to 500 volts DC for testing capacitor breakdown.

Tests leakage of micas, papers, and electrolytics—has special amplifier to check leakage of miniature electrolytics in transistor units. Tests capacitance from 10 mmfd to 2000 mfd in four ranges: 10 mmfd-5000 mmfd; .001 mfd-0.5 mfd; 0.1 mfd-50 mfd; and 20 mid-2000 mfd. Tests resistance from 0.5 ohms to 200 megohms in four ranges: 0.5-500 ohms; 50-50K ohms; 5K ohms to 5 megohms; and 2 megohms to 200 megohms. Checks reactance or resistance ratio between any two capacitors, inductors, resistors; determines turns ratio of transformer windings between .05:1 and 20:1. Metal case.  $7 \times 11\frac{1}{2} \times 5$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 11 lbs.  
87 F 450. Only \$2.00 Down. NET. . . . . 44.95



### MODEL 383-A CAPACOHMETER

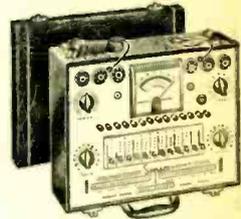
"In-or-out-of-circuit" capacitor leakage tester. Indicates leakage and measures capacitance of paper, mica or ceramic capacitors. No unsoldering is necessary—not even when capacitor is wired in parallel with a resistor. Pulse test quickly detects "borderline" capacitors.  $4\frac{1}{2}$ " meter. Indicates leakage in ohms—checks for direct short, open, or intermittent conditions in all types of bypass, coupling and blocking capacitors from 10 mmf to 10 mfd. Also detects leaks in wiring, sockets, transformers, etc. All measurements made under load conditions. Size,  $8\frac{3}{4} \times 11\frac{1}{2} \times 8\frac{1}{2}$ ". With test leads. For 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs.  
84 FX 630. \$5.00 Down. NET. . 88.15

### MODEL 1000 TUBE TESTER

Test All Tubes

Large  $4\frac{1}{2}$ " Dial

Portable Case



Accurate, plate-conductance tube tester. Tests all receiving tubes, including 9-pin miniature and sub-miniatures with a linear and circular base arrangement. Tests are made under conditions simulating actual use.

$4\frac{1}{2}$ " dial indicates percentage of rated plate conductance for an accurate indication of tube condition. Also provides quick, dependable short and leakage tests—shows exact resistance values of shorts and interelement leakage. Each tube element is individually connected to the correct voltage tap—insures against tube damage during testing. Size (HWD):  $15\frac{1}{2} \times 11\frac{1}{2} \times 6$ ". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 19 lbs.  
84 FU 723. \$5.00 Down. NET. . 132.30



RC-1

# Triplett Multi-Testers

## MINIATURE VOM



310 VOM  
with Model  
10 Adapter  
Attached

Model 310 VOM

Model  
10  
Adapter

### MODEL 310 MINIATURE VOM

- Ultra Compact—Easy To Use
- Provides Complete AC-DC Readings

Versatile, miniature VOM with 18 ranges. Extremely compact—hardly bigger than a package of cigarettes—it's ideal for on-the-spot testing. Self-shielded for checking in strong magnetic fields. Ranges: DC volts, 0-3-12-60-300-1200 at 20,000 ohms/volt; AC volts, 0-3-12-60-300-1200 at 5000 ohms/volt; DC  $\mu$ a, 0-600; DC ma, 0-6-60-600; ohms 0-20,000-200,000; megohms, 0-2-20. Accuracy, 3% DC. Clear, unbreakable plastic meter window.  $4\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{2}$ ". With leads, batteries. Shpg. wt., 1 lb.

84 F 674. \$2.00 Down. NET. .... 33.81  
84 F 675. Model 369 Leather Case. For Model 310 only. Wt., 6 oz. NET. .... 3.14

### MODEL 10 ADAPTER

Miniature AC ammeter clamp-on adapter for use with above or any VOM having a 3 v. AC scale at 5000 ohms per volt. Clamp-on jaws fit around any single conductor to permit direct reading of 0-6-12-30-60-120-300 amps AC, without breaking circuit or piercing insulation.  $4\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{2}$ ". 2% lbs.

87 F 152. NET. .... 14.21  
84 F 590. Model 379 Leather Case. Holds Models 310 and 10. 8 oz. NET. .... 5.39

### MODEL 101 LINE SEPARATOR

Plugs into AC outlet to divide two-conductor cords. Increases ammeter sensitivity 10X and 20X. Ranges (maximum) 0-0.3-0-0.6-1.2-1.5-3-6-12-30 amps. Plastic case. Wt., 6 oz.

87 F 153. NET. .... 5.39

### MODEL 630 VOM

"Unit construction" provides direct connections without cabling, thus reducing chance of shorts. All resistors, shunts, etc. are housed in molded base which is integral with switch.

- Easy-To-Read 5 1/2" Meter
- Uses 1% Precision Resistors

Popular, accurate VOM designed for industry. 5 1/2" meter with 4 3/8" scale. Uses 1% resistors, each sealed in its own molded compartment. "Unit construction"—all resistors, shunts, rectifier, and batteries are housed in molded base integral with the switch. Ranges: DC and AC volts, 0-3-12-60-300-1200-6000, DC at 20,000 ohms per volt. AC at 5000 ohms per volt; DC current, 0-60 microamps. 0-1.2-12-120 ma and 0-12 amps; resistance, 0-1000-10,000 ohms and 0-1-100 meg; db -20 to +70 in 7 ranges; output v., 0-3-12-60-300-1200-6000. Flush-mounted knob controls 20-position switch which selects both circuit and range. Plastic case.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". With batteries and 50" leads and instructions. Wt., 6 lbs.

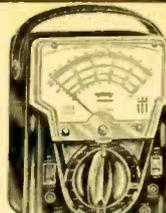
84 F 568. \$2.00 Down. NET. .... 43.61



630-A



630-PL



630-NA



631



625-NA



666-R



650

### MODEL 630-A VOM

Lab type VOM. Features series ohmmeter circuits; 1/2% resistors; mirrored scales. Accuracy: 1 1/2% on ohms and 0-1200 DC volts; 3% on 6000 DC volts and all AC ranges. Ranges: DC and AC volts 0-3-12-60-300-1200-6000 (DC at 20,000 ohms per volt. AC at 5000 ohms per volt); DC current, 0-60 microamps, 0-1.2-12-120 milliamperes, and 0-12 amps; resistance, 0-1000-10,000 ohms and 0-1-100 megohms; db -20 to +70 in 7 ranges; output volts, 0-3-12-60-300-1200. Has 5 1/2" meter.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". With batteries and 48" leads. Wt., 6 lbs.

84 F 574. \$5.00 Down. NET. .... 53.41

### MODEL 630-PL VOM

Portable VOM. 5 1/2" meter with 4 3/8" scale. AC and DC v., 6 ranges each, to 5000 v. (DC at 20,000 ohms/v. AC at 5000 ohms/v.); DC current, 0-100  $\mu$ a, 0-10-100-1000 ma, and 0-10 amps; resistance, 0-1000-10,000 ohms and 0-1-100 meg; db, -20 to +75 in 7 ranges; output v., 0-3-10-50-250-1000 at 5000 ohms/v. Accuracy:  $\pm 3\%$  on DC (2.5 v. to 1000 v.);  $\pm 4\%$  on AC (3 v. to 1000 v.);  $\pm 5\%$  on AC-DC (at 5000 v.).  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". Batteries, lead, 6 lbs.

87 F 150. \$2.00 Down. NET. .... 43.61

MODEL 630-APL. As above, but has 4.66" mirrored scale;  $\pm 1\frac{1}{2}\%$  accuracy on DC (2.5 v. to 1000 v.);  $\pm 3\%$  on AC (3 v. to 1000 v.). Shpg. wt., 6 lbs.

87 F 151. \$5.00 Down. NET. .... 53.41

### MODEL 630-NA VOM

Offers unusually high accuracy. 70 ranges:  $\pm 1\frac{1}{2}\%$  on DC to 1200 v.;  $\pm 3\%$  on AC to 1200 v. Features: DC volts: 8 ranges to 6000 (10,000 ohms/v.); 8 ranges to 3000 (20,000 ohms/v.). AC volts: 6 ranges to 6000 (5000 ohms/v.); 6 ranges to 3000 (10,000 ohms/v.). DB: -20 to +77 in 12 ranges. DC microamps: 1 range to 120 (240 mv); 2 ranges to 600 (120 mv). DC milliamps: 4 ranges to 1200 (240 mv); 3 ranges to 600 (120 mv). DC amps: 1 range to 12 (240 mv); 1 range to 6 (120 mv). Resistance: 3 ranges to 100,000 ohms; 3 ranges to 100 megohms.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". Mirror scale. With leads, batteries. Wt., 6 lbs.

84 F 512. \$5.00 Down. NET. .... 73.01

### MODEL 631 VTVM-VOM

Battery-operated, 34-range VTVM and VOM. VTVM: 0-1.2-6-30-120 DC volts, 11 megohms input impedance. VOM: DC volts, 0-3-12-60-300-1200 at 20,000 ohms/volt; AC volts, and audio output volts, 0-3-12-60-300-1200 at 5000 ohms/volt; DC  $\mu$ a, 0-60; DC ma, 0-1.2-12-120-1200 at 250 mv; DC amps, 0-12 at 250 mv; db, -20 to +63; ohms, 0-1500-15,000; megohms, 0-1.5-150.  $3\frac{1}{2} \times 5\frac{1}{2} \times 7\frac{1}{2}$ ". Batteries, leads, 5 lbs.

84 F 546. \$5.00 Down. NET. .... 63.21

### MODEL 625-NA VOM

Wide-range VOM. Large mirror scale. DC volts, 0-1-2.5-5-25-125-500-2000 at 20,000 ohms/volt and 0-2.5-10-50-250-1000-5000 at 10,000 ohms/volt; DC current, 0-50  $\mu$ a, 0-1-10-100-1000 ma and 0-10 amps; resistance, 0-2000-200,000 ohms, 0-40 meg. AC volts, 0-2.5-10-50-250-1000-5000 at 10,000 ohms/volt.  $5\frac{1}{2} \times 2\frac{1}{2} \times 6$ ". With batteries and leads. Wt., 3 lbs.

84 F 575. \$5.00 Down. NET. .... 53.41

MODEL 629 CASE. Leather case with handle. Shpg. wt., 1 lb.

84 F 561. NET. .... 7.06

### MODEL 666-R VOM

Pocket-sized multi-tester with 1000 ohm/volt sensitivity. Accuracy,  $\pm 3\%$ . Ranges: DC and AC volts, 0-10-50-250-1000-5000; DC ma, 0-10-100; DC amps, 0-1; ohms, 0-3000-300,000; megohms, 0-3; output volts, 0-10-50-250-1000.  $5\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$ ". With battery and test leads. Shpg. wt., 4 lbs.

84 F 557. \$2.00 Down. NET. .... 28.91

### MODEL 650 VTVM

Highly accurate VTVM. Ranges: DC volts, 0-1-5-10-50-100-500-1000; AC volts, 0-1-5-10-50-100-500; resistance, 0-1000 meg ohms in six ranges.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". With 2 alligator clips, AC-RF probe, ohms-DC probe and battery. For 110-120 volts, 60 cycle AC. Shpg. wt., 8 lbs.

84 F 558. \$5.00 Down. NET. .... 87.71

H. V. PROBE, 0-50,000 v. DC. Wt., 8 oz.

84 F 564. NET. .... 14.21

MODEL 659 LEATHER CARRYING CASE. For Model 650. Shpg. wt., 1 1/2 lbs.

84 F 559. NET. .... 10.29

### VOM ACCESSORIES

HIGH-VOLTAGE PROBE MODEL T-79-70. For Series 630 and 631 meters. Extends DC range to 30,000 volts. Shpg. wt., 8 oz.

84 F 544. NET. .... 14.21

MODEL 639-N CASE. Leather case for 630 and 631 meters. Front flaps permit reading and operating meter while in case. 1 1/2 lbs.

84 F 569. NET. .... 9.31

MODEL 639-P CASE. Sponge padded, leather case for 630 and 631 meters. Top flap for easy removal of meter. 1 1/2 lbs.

84 F 562. NET. .... 14.60

84 F 560. Model 669 Leather Case. Black case for Model 666-R. 1 1/2 lbs. NET. .... 5.98

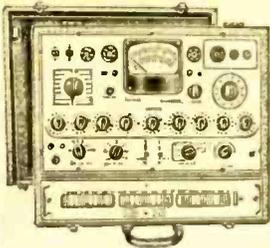
87 F 158. Model 639 Leather Case. For 630 and 631 meters. 1 1/2 lbs. NET. .... 9.21

TESTER STAND. Holds Series 630 and 631 meters at 45° angle. Shpg. wt., 1 lb.

84 F 573. NET. .... 49c

# Triplett, Millen & Pyramid Test Equipment

## TRIPLETT TEST EQUIPMENT



3444

### MODEL 3444 TUBE ANALYZER

Complete laboratory type tube analyzer in a portable case. Accurately solves the tube analysis problems encountered in research, industrial production, radio-television and communications work. Measures true Gm, without any extra compensating factors, using proper value DC electrode potentials, 5 kc signal source and a vacuum tube microammeter. Self-checking Gm circuit, checks accuracy of Gm readings obtained on tester.

Unit also checks plate current cutoff, plots tube characteristic curves by measuring plate current directly on meter and grid bias on the bias dial, tests for gas under actual operating conditions—measures to one  $\mu$ a of gas current, checks rectifiers under load and performs many other important analytical functions. Resealed socket savers are easily removable from panel for replacement. In sturdy, gray leatherette covered, wood carrying case. Size, 15 $\frac{1}{2}$ " x 18 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 24 lbs. 83 F 964, \$10.00 Down. NET.....244.51

### MODEL 666-HH VOM

A low-cost, compact 1000 ohms-per-volt VOM. Has 3" meter with sensitive 400-microampere movement. Ranges include: AC and DC volts, 0-10-50-250-1000-5000 at 1000 ohms-per-volt; DC milliamperes, 0-10-100-500; ohms, 0-2000-400,000. Accuracy is 3%. Only 3 jacks are used to cover all ranges. In rugged, high-impact black plastic case. Size, 5 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ ". Includes battery and 50' leads. Shpg. wt., 4 lbs. 84 F 555, \$2.00 Down. NET.....26.95



26.95

Model 669 Case. For Model 666-HH. 1 lb. 84 F 560, NET.....5.98



3432-A

### MODEL 3432-A SIGNAL GENERATOR

Quality signal generator for AM-FM radio and black-and-white and color TV servicing. Cathode follower output provides high stability by acting as a buffer to the oscillator. Has copper and steel shielded circuits. Covers complete frequency range from 160 kc to 110 mc (220 mc using harmonics) with no skips in frequency. Large, 6 $\frac{1}{2}$ " etched aluminum dial, with easy-to-read red and black characters, has 7 directly calibrated 160° scales. Ranges are selected with a 7 position switch.

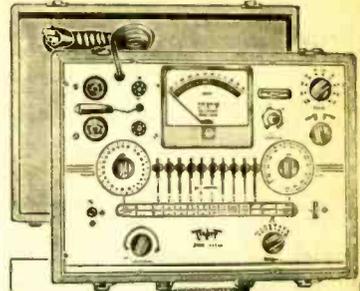
Jacks are provided for either internal modulation or audio output. Audio control provides variable modulation or A.F. output from jacks. Internal modulation is variable from 0-100% at 400 cycles. RF attenuator provides both step and fine control of RF output. With 3 ft. coaxial output cable. In heavy steel case with leather handle. Size, 15 $\frac{1}{2}$ " x 11 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ ". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt. 12 lbs. 84 F 677, \$5.00 Down. NET.....97.51

690-A

### MODEL 690-A TRANSISTOR TESTER

New, battery-operated transistor tester. Provides leakage and gain tests for all low and medium-power PNP and NPN transistors. Single switch selects transistor settings—off position prevents drain on batteries if leads are accidentally shorted. Separate calibrate and gain buttons. Precision meter has 2 easy-to-read, tri-color scales. Leakage range: 0-600 microamps, base to collector (emitter open). Transistor gain: 5 to infinity, measured as DC Beta (gain from base to collector with grounded emitter). Transistor socket and set of external leads provided for use with any basing arrangement. With 26' leads and batteries. Plastic case, 6x5 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ ". 3 lbs. 84 F 549, \$2.00 Down. NET.....28.91

Model 629 Carrying Case. Black leather case for Model 690-A. Shpg. wt., 1 lb. 84 F 561, NET.....7.06



### MODEL 3414 TUBE TESTER

- Modified Plate Conductance Tester
- Highly Sensitive Neon Short Test
- Easy-to-Read, 3-Color 4" Meter

Extremely versatile tube tester. Permits easy, rapid testing of all receiving type tubes, plus gas-filled rectifiers and ballast tubes. Filament voltages from 0.65 to 117 volts in 23 steps. Provides complete flexibility for new tube setups. Features include: modified plate conductance for closer correlation to tube characteristics; improved neon shorts test indicator; new, variable leakage test; greater circuit sensitivity for the new type tubes with low cathode current.

Faster testing is possible because of unique roll chart and switch arrangement. Burned-out tubes show up immediately without waiting for filament to heat. Has large, 4" tri-colored meter. In sturdy wood case, 6 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 11 $\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 13 lbs. 87 F 154, \$5.00 Down. NET.....77.91

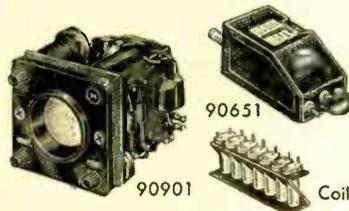
T-2247-BV CRT ADAPTER. For above. Shpg. wt., 1 lb. 84 F 539, NET.....5.29

### BOSCO SIGNAL INJECTOR



Just 6" long and weighing only 1 ounce, this versatile transistorized signal injector clips into pockets like a pen. Single pen light cell supplies power—oscillator provides a 200-cps test tone rich in harmonics for RF as well as audio frequency use. Supplied with battery. Shpg. wt., 3 oz. 87 F 470, NET.....9.95

## MILLEN TEST EQUIPMENT



90901

Coils

Model 90901 1" Scope. For Amateur or industry. Use as: Modulation indicator, null indicator, Lissajous screen, etc. Controls: Intensity, Vertical Centering, Horizontal Centering. Sensitivity: Vertical, 3.0 rms v/mm; Horizontal, 25 rms v/mm. Requires 600-950 v. DC @ 3.2 ma and 6.3 v. @ 0.6 a. 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ ". With ICPI tube. Shpg. wt., 2 lbs. 84 F 907, \$2.00 Down. NET.....38.25

Model 0651 Grid Dip Meter. Useful as oscillator, detector, wavemeter, etc. 2" meter, 7 direct reading freq. scales and 0-100 scale. Plug-in coils supplied cover 1.7 to 300 mc. 7x3 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Terminals for battery operation. Shpg. wt., 3 $\frac{1}{2}$  lbs. 84 F 662, \$5.00 Down. NET.....61.50

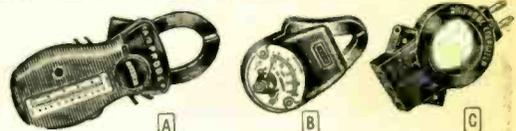
### LOW FREQUENCY COILS FOR GRID DIP METER

No.	Type	Range KC	EACH
84 F 966	46702	925-2000	6.72
84 F 967	46703	500-1050	
84 F 968	46704	325-600	
84 F 972	46705	220-350	

Model 46721 Probe. For above. Wt., 6 oz. 84 F 996, NET.....1.95

## PYRAMID AMPROBES—"SNAP-AROUND" METERS

Amprobes measure current and voltage without breaking the circuit or the insulation of conductors. Press the trigger to open probe jaws, then close them around the conductor. Meter instantly gives correct reading. Features one-hand operation with fully insulated jaws for safety and convenience. Utilize advanced printed circuitry for increased ruggedness and dependability—wires can't come loose even during rough handling. All size models employ magnifying window for easy reading from any angle in poor light; Indicator needle can be locked and read away from the conductor when using meter in difficult locations. Voltage is measured with test leads which automatically insulate plugs when leads are removed. Has dustproof D'Arsouval movements, precision balanced, 1% resistors. Accuracy is  $\pm$  3% of full scale. Light in weight, pocket-sized—easy to carry. Have rugged impact-proof plastic cases. Units are designed for 60-cycle operation, and will give dependable results from 50 to 70 cps. Model RS-3 will also measure resistance.



A

B

C

**A** Model RS-1. Reads 0.5-15-40-100 amps and 0-150-600 volts. AC. Takes conductors up to 1 $\frac{1}{2}$ " dia. Scale length, 2 $\frac{1}{2}$ ". Length, 7 $\frac{1}{2}$ ". With test leads and case. 2 lbs. 87 F 268, \$2.00 Down. NET.....39.85

**B** Amprobe Juniors. Small versions of Amprobe which "snap around" meters. Circular conductor capacity:  $\frac{1}{8}$ ". Scale length, 1.8"; overall length, 4 $\frac{1}{2}$ ". With test leads, less case (below). Shpg. wt., 1 lb.

Stock No.	Model No.	Amps	Volts
84 F 369	V10	0-10	0-125-250
84 F 373	V25	0-25	0-125-250
84 F 374	V50	0-50	0-125-250
84 F 379	V100	0-100	0-125-250
84 F 897	V525	0-25	0-150-600
84 F 898	V550	0-50	0-150-600
84 F 899	V500	0-100	0-150-600

NET EACH.....19.85

Model P-1 Leather Case. For Juniors. Shpg. wt., 12 oz. 84 F 428, NET.....2.85

**C** Model A-40 Energizer. Use as plug to divide 2-conductor cords at outlet (convenient when using Amprobes for current measurement). Increases ammeter sensitivity to 10X. Test jacks for measuring voltage under load. With case. Shpg. wt., 8 oz. 84 F 489, NET.....3.75

**A** Model RS-3. Multi-range volt-ammeter-ohmmeter. Specially designed for the maintenance field. Easy-to-read rotary scale for faster reading and greater accuracy. Has new internal core magnet with self-shielding characteristics. Has 1 resistance, 5 current and 3 voltage ranges. Reads 0.5-15-40-100-300 amps and 0-150-300-600 volts. AC. Resistance range is 25 ohms mid-scale. Tiny battery attachment plugs in for resistance measurements. Only one scale plus ohms scale visible at a time. With battery, test leads, leather case. Shpg. wt., 2 lbs. 87 F 376, \$5.00 Down. NET.....52.50

# Precision Test Equipment

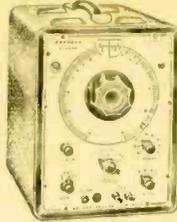


For Radio-TV Servicing  
10 Easily Read Bands  
Accuracy to 1%

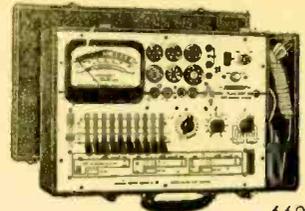
E-200C



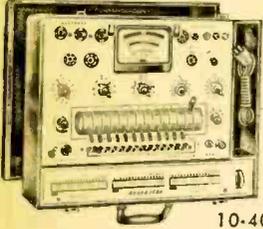
E-400



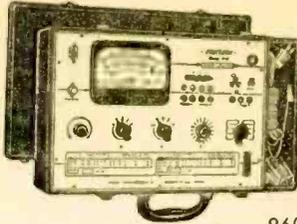
E-310



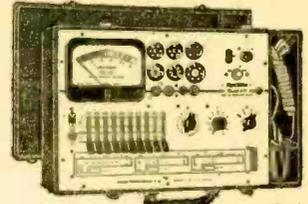
660



10-40



960



640

## E-200C SIGNAL-MARKER GENERATOR

Highly sensitive, deluxe signal-marker generator for AM, FM and TV alignment. For use with E-400 below, or any other high-quality sweep signal generator. Features utmost mechanical stability. Individually calibrated on each band against laboratory crystal standards, 1% accuracy on 10 easy-to-read ranges. Frequency coverage: 88 kc to 440 mc; to 110 mc on fundamentals. Direct-reading  $6\frac{1}{2}$ " dial has 0-1000 vernier scale.

Outputs: unmodulated RF; 400-cycle modulated RF; externally modulated RF; and 400-cycle sine wave audio output. Supplies 0-50 volts AVC-AGC voltage. Dual RF attenuators for smooth, stepless control of RF signal. Fully shielded components and transformer; AC line is RF filtered. With coax cable, "Lo-Hi" connectors, and manual. Steel cabinet.  $11\frac{1}{2} \times 13 \times 6\frac{3}{8}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 17 lbs.  
87 FU 000. \$5.00 Down. NET..... 93.10

## E-400 SWEEP GENERATOR

Deluxe portable sweep generator for television and FM servicing. Frequency range is 3-900 mc; to 240 mc on fundamentals; saves time on front-end alignment—read directly on panel dial—channel numbers 2 through 13 directly calibrated on dial. Has narrow and wide-band sweep—frequency widths: 0-1 mc and 0-15 mc. Built-in baseline reference. Self-contained multiple crystal marker-calibrator. Supplied with 2 crystals (2 mc and 4.5 mc). Special socket accommodates 4 crystals. Full vision.  $6\frac{1}{2}$ " inch dial. Phasing control. Internal retrace blanking circuit simplifies alignment—eliminates return traces. Employs ceramic and air dielectric capacitors; mica-filled, low-loss sockets; etc. With test cables, manual, and 2 crystals.  $11\frac{1}{2} \times 13 \times 6\frac{3}{8}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 24 lbs.  
87 FU 001. \$5.00 Down. NET..... 156.80

## E-310 SINE-SQUARE GENERATOR

Wide range, extremely stable signal generator. Unique instrument provides both sine and square waves from 5 cps to 600 kc in 5 bands.  $6^\circ$  fine tuning dial has 12:1 drive ratio— $85^\circ$  scale length over the 5 bands. Accuracy is within 1% from 100 cps to 600 kc; within 1 cycle below 100 cps. Output is level within  $\pm 1$  db over each band or when switching bands. Distortion is less than 1% at maximum output of 10 volts rms. Square wave rise time, 0.15  $\mu$ secs.  $9 \times 11\frac{1}{2} \times 11\frac{1}{2}$ ". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 20 lbs.  
87 FU 033. \$5.00 Down. NET..... 161.70

## NEW E-220 MARKER ADDER

Not illustrated. Greatly increases speed and accuracy of TV and FM alignment. Permits use of large-size, highly visible markers on oscilloscope screen without distorting sweep response curve.  $5\frac{1}{2} \times 7\frac{1}{4} \times 3\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. 7 lbs.  
87 F 035. \$5.00 Down. NET..... 51.45

## 660 TUBE & TRANSISTOR TESTER

Measures reverse current between collector and base with emitter open (Icbo), shorts and leakage on all RF, audio, power and tetrode transistors—both NPN and PNP types. Crystal diodes tested in special circuit for both forward and reverse current. Employs all receiving tube testing features of the Model 640 at right. Has special circuit for testing picture-producing beam current on all TV picture tubes when used with PTA and PAA picture tube adapters (listed under Model 10-60, below). Rugged 24-position rotary switch for filament voltages from  $\frac{3}{4}$  to 117 volts.  $5\frac{1}{4}$ " meter; accuracy to  $\pm 2\%$ . Leatherette-covered carrying case,  $18 \times 10\frac{1}{2} \times 6\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 16 lbs.  
87 FU 028. \$5.00 Down. NET..... 106.82

## 10-40 TUBE TESTER

Fast and accurate tube tester that offers complete testing of all modern tubetypes including subminiatures. Physically and electrically similar to Model 10-60 described at bottom of page—less specialized circuitry for testing transistors and crystal diodes. Tests overall performance based on mutual conductance, amplification factor, plate current, etc. Special low voltage short-check circuit guards against damage to tubes under test. Ultra-sensitive gas test readings on 50 microamp,  $5\frac{1}{2}$ " meter. 5-window geared roll chart. When used with PTA and PAA adapters (listed below) tests TV picture tubes for picture producing beam. Sturdy carrying case with tool compartment and removable cover.  $20 \times 15 \times 7$ ". For 110-120 v., 60 cycle AC. 25 lbs.  
87 FU 032. \$5.00 Down. NET..... 146.51

## 960 TRANSISTOR & DIODE TESTER

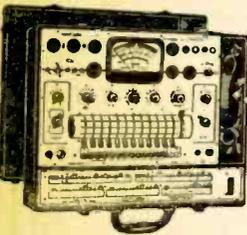
Expertly engineered portable transistor and crystal diode tester. Tests for Icbo, gain, leakage, shorts, etc., on low, medium and high-power transistors of PNP and NPN types, as well as newest tetrode transistors. Direct reading in terms of true collector current on  $5\frac{1}{2}$ " 100-microamp meter. Five Icbo ranges; 17 collector potential steps from 0.5 v. DC to 100 v. DC. Five separate injection currents for low, medium and high-power types. Reliable check of emitter collector leakage current provides basis for accurate gain tests. 17 DC voltages for reverse current tests of crystal diodes; separate forward tests. Transistor test settings on high-speed roll chart. Patch cord element selector system for future semiconductor types. Fabric-covered carrying case,  $18 \times 10\frac{1}{2} \times 6\frac{1}{4}$ ". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 15 lbs.  
87 FU 029. \$5.00 Down. NET..... 87.21

## 640 TUBE TESTER

Here's a moderately priced cathode ray conductance tube tester—checks merit, leakage and shorts in TV, FM and AM tubes; tuning eyes and gas rectifiers; etc. Checks TV picture tubes with Model PT, and PAA adapters (listed under Model 10-60, at left). Designed to test each section of multi-section and ballast resistor-type tubes. Smooth-action, 24-position rotary switch selects filament voltages from  $\frac{3}{4}$  to 117 volts—minimizes obsolescence due to new tube releases. Dual short-check sensitivity for standard and special short tests. Has handy built-in 7 and 9-pin straighteners. Easy-to-read  $5\frac{1}{4}$ " meter accurate to  $\pm 2\%$ . High-speed, 3-window roll chart; "Tube Finder" feature. Leatherette-covered, solidly constructed carrying case with tool compartment and hinged, removable cover. Has etched, satin-brushed aluminum panel.  $18 \times 10\frac{1}{2} \times 6\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 16 lbs.  
87 FU 027. \$5.00 Down. NET..... 77.91

## 10-60 ELECTRONAMIC TUBE AND TRANSISTOR CHECKER

Advanced, highly versatile instrument that meets the needs of industrial users as well as the well-equipped service shop. Provides comprehensive tests for Icbo, gain, leakage, shorts, etc., on all transistors. 22 collector potential steps from 0.5 v. DC to 160 v. DC. Offers complete testing of all modern tube types including subminiatures. Tests voltage regulator tubes for both voltage regulation and current limits. Ultra-sensitive gas test readings directly on 50 microamp,  $5\frac{1}{2}$ " meter. Checks actual beam current of TV picture tubes with PTA and PAA adapters below. Special low-voltage short-check circuit guards against damage to tubes under test. Stainless steel pin straighteners for 7 and 9-pin tubes. 5-window geared roll chart.  $20 \times 15 \times 7$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 26 lbs.  
87 FU 030. \$5.00 Down. NET..... 191.10



PICTURE TUBE ADAPTERS. For checking TV picture tubes with Precision tube testers. Type PTA is for all except 110" tubes; PAA for 110" tubes only. Shpg. wt., 1 lb.  
84 F 492. Type PTA. NET..... 7.59  
87 F 031. Type PAA. NET..... 4.90

# Precision, Seco, B & W Test Equipment

## PRECISION TEST EQUIPMENT



98-MCP

### MODEL 98-MCP DELUXE VTVM

Deluxe, wide-range, laboratory-type VTVM with specially designed P-P circuit. Has easy-to-read 7" meter with 200  $\mu$ a sensitivity; accuracy  $\pm 2\%$ . Ranges: Zero-center DC, AC rms and DC volts, 0-1.2-6-12-60-300-1200. P-P AC volts, 0-3.2-16-32-160-800-3200. Zero-center DC input resistance, 26.6 megohms. Resistance, 0-1000-100,000 ohms; 0-1-10-100-1000 megohms. DC current, 0-300 microamperes; 0-1.2-6-30-120-600 ma; 0-1.2-12 amps. 6 db ranges, -20 to +63 db. Metal cabinet,  $1\frac{1}{2} \times 13 \times 6\frac{3}{8}$ ". With 3-way probe. For 110-120 volts, 60 cycle AC. Shpg. wt., 18 lbs.

87 FZ 014. \$5.00 Down. NET. .... 117.11

**MODEL TV-8 SUPER-HIGH VOLTAGE PROBE.** For Model 88 or 98-MCP VTVM. Extends DC range to 60,000 v. 2 lbs.

84 F 681. NET. .... 14.45

**MODEL RF-10A HIGH-FREQUENCY PROBE.** For 98-MCP listed above. Extends response to 300 mc. Shpg. wt., 2 lbs.

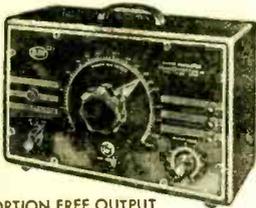
84 F 419. NET. .... 14.11

### MODEL 68 VTVM

Has 5 zero-center ranges;  $5\frac{1}{4}$ " 400  $\mu$ amp meter. Accuracy  $\pm 2\%$ . 13.3 megohm input resistance on DC ranges. AC and DC v.: 0-3-12-60-300-1200. Res.: 0-1000-100,000; 0-1-100-1000 megs. P-P v., 0-8-32-160-800-3200.  $5\frac{1}{2} \times 7\frac{3}{4} \times 3\frac{1}{2}$ ". With battery, 3-way probe. For 110-120 v., 60 cycle AC. 7 lbs.

87 F 018. \$5.00 Down. NET. .... 53.41

## BARKER AND WILLIAMSON AUDIO OSCILLATOR



### DISTORTION FREE OUTPUT

**MODEL 200.** Highly stable, accurately calibrated audio oscillator designed for use in the shop or laboratory. An excellent instrument for making distortion or frequency measurements—or for use wherever a stable, accurately calibrated source of frequencies between 30 and 30,000 cps is needed.

Ranges: 30-300, 300-3000, 3000-30,000 cps. Output: 10 volts into a 500 ohm load. Frequency response is better than  $\pm 1$  db from 30 to 15,000 cps. RMS harmonics at 3 volts into a 500 ohm load less than 1% on all frequencies between 50 and 15,000 cps. Calibration accuracy is within  $\pm 3\%$  of scale reading. Stability better than 1%. Careful design eliminates the need for zero reset and line-voltage calibration.

Housed in an attractive black crackle finished steel cabinet with carrying handle and rubber feet. Panel is of reverse etched aluminum. Size,  $13\frac{3}{4} \times 7\frac{1}{2} \times 9\frac{1}{2}$ ". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 17 lbs.

84 FU 482. \$5.00 Down. NET. .... 138.00



110

### MODEL 110 MULTIMETER

Pocket-size VOM with full-range performance. Ranges: DC volts, 0-1.5-6-30-150-600-3000 (20,000 ohms per volt); AC volts, 0-1.5-6-30-150-600-3000 (5000 ohms per volt); DC current, 0-60-600 microamps and 0-6-60-600 ma; resistance, 0-2000-200,000 ohms and 0-20 megohms; db, from -20 to +70.  $3\frac{3}{8}$ " meter. Sensitivity 50 microamps. Full scale accuracy  $\pm 2\%$ . With vinyl-plastic cover; heavy-duty, banana-plug test leads; and batteries. Size (HWD),  $5\frac{3}{8} \times 3\frac{1}{2} \times 1\frac{1}{8}$ ". Shpg. wt., 3 lbs.

87 F 023. \$2.00 Down. NET. .... 33.81

### MODEL 88 VTVM

Highly sensitive—ideal for lab or shop use. Has full bridge VTVM circuit with 1% multipliers and shunts, 200  $\mu$ amp,  $5\frac{1}{4}$ " meter. Includes: both RMS and P-P AC volts from 3.2-3200, in 6 ranges; resistances up to 1000 megohms in 5 ranges; 6 zero-center DC ranges from 1.2-1200 v.; neg. and pos. DCV, from 1.2-1200 in 6 ranges, with 13.3 meg input resistance.  $5\frac{1}{2} \times 7 \times 3\frac{1}{8}$ ". With battery and probe. For 110-120 v., 50-60 cycle AC. Shpg. wt., 8 lbs.

84 F 680. \$5.00 Down. NET. .... 73.01

### FILAMENT & CONTINUITY TESTER

**MODEL SS-10.** Tests tube filaments, fuses, and pilot lamps. Also checks continuity of transformer windings, appliances, etc. Has sockets for octal, octal, and miniature 7 and 9 pin tubes. Built-in tube pin straighteners. With batteries.  $5\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{8}$ ". 1 lb.

87 F 026. NET. .... 6.37



120

### MODEL 120 MULTI-RANGE TESTER

- Extra-Large  $5\frac{1}{4}$ " Meter
- Mirrored Scale
- 20,000 Ohms/Volt DC Sensitivity
- High-Frequency AC/DB Ranges

Highly sensitive VOM. Has more ranges than most meters of its type and size, 1% multipliers and shunts;  $\pm 2\%$  accuracy at full scale; mirrored scale and polarity reversing switch. Ranges: AC, +DC, -DC, and output v., 0-1.2-3-12-60-300-600-1200-6000 with 5000 ohms per volt on AC and 20,000 ohms per volt on DC; DC current, 0-60-300  $\mu$ a, 0-1.2-12-120-600 ma, 0-12 amps; resistance, 0-200-2000-200,000 ohms, 0-2-20 megs; 8 db ranges, -20 to +77.  $5\frac{1}{4}$ " meter. Has rugged, molded phenolic case and panel. Supplied complete with batteries and test leads.  $5\frac{3}{8} \times 7 \times 3\frac{1}{8}$ ". Shpg. wt., 5 lbs.

84 F 490. \$2.00 Down. NET. .... 44.05

**MODEL 120M.** Same as above, but employs  $\frac{1}{2}$ " multipliers and 1% meter. Shpg. wt., 5 lbs.

87 F 080. \$5.19 Down. NET. .... 51.89

**MODEL LC-3 CASE.** Custom ever-ready type. Shpg. wt., 3 lbs.

84 F 496. NET. .... 9.31

**MODEL TV-28 HV PROBE.** Extends DC range to 30,000 v. Wt., 2 lbs.

84 F 495. NET. .... 14.45

**MODEL ST-1 RETRACTABLE STAND.** Designed for use with Models 88 and 120. Shpg. wt., 1 lb.

87 F 020. NET. .... 98c

## SECO TEST EQUIPMENT



### PS-2 TRANSISTOR RADIO BATTERY ELIMINATOR

For servicing transistor radios, amplifiers, etc. Supplies continuously variable, filtered DC, 0-15 v. Maximum output, 100 ma. Cannot be damaged by short circuit. No motor-boating—less than 2 ohms internal impedance. Line by-pass eliminates hum modulation. Output is isolated from power line by transformer. Has plug-in jacks for external voltmeter. With 40' leads. Size,  $1\frac{1}{2} \times 4\frac{1}{2} \times 5\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 11  $\frac{1}{2}$  lbs.

87 F 244. NET. .... 13.67



### HC-6 CURRENT CHECKER

Low-cost cathode current checker for on-the-spot check of TV horizontal output circuits. Permits in-circuit checking—without removing chassis. Instantly indicates if cathode current is within proper limits. Helps prevent premature failure of tubes, flyback, etc., due to improper drive, linearity or screen voltage adjustment. Built-in 0-300 ma current meter. Also useful for balancing audio output tubes. 2-socket adapters with 24" leads handle all popular output tubes.  $5\frac{1}{2} \times 5 \times 2\frac{1}{2}$ ". For 110-120 v., 60 cycle AC. Wt., 1 lb.

87 F 247. NET. .... 12.69

Weights  
1  $\frac{1}{2}$  lbs.



HC-6

107

### MODEL 107 ULTRA-COMPACT PORTABLE TUBE TESTER

Remarkably compact, precision tube tester. Provides all essential tests for wide range of tube types, including sub-miniature and foreign types. "Good-? Bad" meter shows results of dynamic mutual conductance test and cathode emission test; electron-eye indicates "control-grid-emission" test. Also checks for filament continuity, element leakage, open elements, and gas.  $6 \times 9 \times 13\frac{1}{2}$ ". For 110-120 volts, 60 cycle AC. Shpg. wt., 14  $\frac{1}{2}$  lbs.

87 F 295. \$5.00 Down. NET. .... 136.71

### MODEL GCT-8 GRID CIRCUIT TESTER

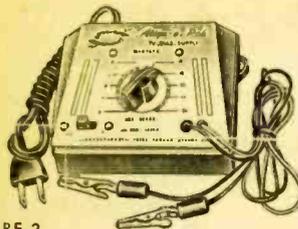
Perfect for use with any tube tester. Checks most popular 2-12 v. tubes—including many industrial types. Tests control grid emission, filament continuity, gas, and for shorts. 10 sockets plus 1 spare.  $6\frac{1}{2} \times 2\frac{1}{2} \times 6\frac{1}{2}$ ". For 105-115 v., 60 cycle AC. 4 lbs.

87 F 242. \$2.00 Down. NET. .... 29.35



# Sencore and C-D Test Equipment

## SENCORE "TIME-SAVER" TEST EQUIPMENT



BE-3

### BE-3 TV BIAS SUPPLY

- Fully Isolated DC Supply For TV Alignment, AGC Trouble-Shooting
- Simply Dial The Bias Voltage Needed

Compact, easy-to-operate TV bias supply. An invaluable aid in servicing TV sets of all types. Ideal for use on the shop bench or on outside service calls. Provides all bias voltages for making RF or IF alignments, locating AGC troubles, servicing gated sync circuits, etc. Eliminates the need for battery bias packs. Calibrated dial permits selection of any voltage between 0 and 18 volts DC, either positive or negative. Output voltage has less than 0.1% ripple. Power transformer provides isolation from line. Black, hammertone case with aluminum panel. 2 1/2 x 4 x 4". With leads. For 110-120 v., 50-60 cycle AC. Shpg. wt., 2 lbs. **84 F 696. NET. 7.69**

### TRANSISTOR RADIO POWER SUPPLY



Model PS-103. New power supply for transistorized radios. Provides variable DC voltage from 0 to 24 volts with 1.5 volt variable tap (a "must" for servicing Philco and Sylvania radios). Provides metered current output up to 100 ma (200 ma on peaks). No hum or feedback.

employs two 200-mfd capacitors for adequate filtering and low output impedance. Size, 5 1/4 x 4 1/2 x 2 1/4". With leads. For 110-120 v., 60 cycle AC. Shpg. wt., 4 lbs. **83 F 985. NET. 17.59**



H-36

### H-36 SUBSTITUTION UNIT

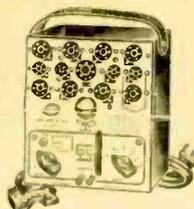
Handy for shop or outside servicing. 3-pole, 12-position switch selects any one of 36 components. Has 12—1-watt, 10K to 5K ohms; 12—1/2-watt, 10K to 5.6 megs; 10—600 v. capacitors. 100 mfd to .5 mfd; and 1 each, 10 and 40 mfd 450 v. electrolytics. Simply insert R or C value into circuit with test leads. If a part is already in the circuit, disconnect one end. With leads and case. Size: 2 1/2 x 4 1/4 x 3 1/4". Shpg. wt., 2 lbs. **87 F 269. NET. 12.49**

### FC-4 TUBE FILAMENT CHECKER

For quickly locating bad tubes in series-string TV receivers, such as G.E., Admiral, etc. Test is extremely simple. Power cord is disconnected from television set and plugged into checker. The tube in question is inserted into one of 4 sockets—if neon lamp goes out, filament is good. Also checks voltages (100-600 v.) and tests for continuity. 3 1/4 x 4 1/4". Supplied complete with leads. For operation from 110-120 v., AC or DC. Shpg. wt., 1 lb. **84 F 697. NET. 2.89**

### LC-3 TUBE-CAPACITOR CHECKER

Versatile checker for detecting leakage in capacitor or between tube elements. Tests 156 tube types; checks CRT's without removal from cabinet or chassis. Features handy roll chart with tube listings. Indicates grid-to-cathode leakage in tubes up to 100 megohms; heater-to-cathode leakage up to 50,000 ohms. Tests capacitors by applying 50 volts. Indicates leakage up to 50,000 ohms in electrolytics; up to 100 megohms in paper types. 7 x 6 x 3 1/4". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 3 1/2 lbs. **83 F 981. \$2.00 Down. NET. 28.37**



LC-3

### TRC-4 TRANSISTOR & DIODE CHECKER

Battery-operated transistor, crystal diode, and selenium rectifier checker. Tests transistors for opens, shorts, leakage and current gain; includes gain test for power types. Checks all crystal diodes for forward to reverse current ratio; checks selenium rectifiers for forward and reverse currents. Controls are accurately set for each transistor by referring to set-up chart on rear of unit. Cannot become obsolete. Supplied with leads and battery. Size, 4 1/2 x 5 x 2 1/4". Shpg. wt., 2 lbs. **87 F 287. NET. 17.59**

### ES-102 CAPACITOR CHECKER

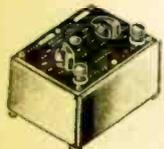
Not illustrated—similar to Model H-36. New and fast substitution tester—checks electrolytic capacitors in seconds. Offers instantaneous switching between capacitors of 4, 10, 20, 40, 60, 80, 100, 150, 225 and 350 mfd. Special design permits substitution in any electrolytic circuit from 2 to 450 WVDC. Surge protector circuit causes capacitors to discharge immediately without arcing or sparking; prevents accidental heating of capacitor being checked. Size, 4 1/4 x 4 1/4 x 2 1/4". With test leads. Shpg. wt., 2 1/4 lbs. **83 F 984. NET. 15.63**



### VB-2 "VIBRA-DAPTOR"

Permits any tube tester to check vibrators. Plug VB-2 into tube tester, and set for 6AX4 for 6-volt vibrators or 12AX4 for 12-volt vibrators. Has sockets for 3- or 4-prong vibrators. Two lampson the adaptor indicate condition of the vibrator. Uses 2 #51 lamps. Steel case with instructions on front. Size, 3 1/4 x 1 1/4 x 1 1/4". Shpg. wt., 5 oz. **87 F 278. NET. 2.69**

## CORNELL-DUBILIER TEST EQUIPMENT



CDA



CDE



BF-90



BF-60



BF-80



BF-70

### CAPACITOR DECADES

Provide accurate standards over a wide range of capacity. Rated at 600 volts DC and 220 volts AC. May be used singly or in groups of two or more decades. With calibration chart. CDA-5, CDB-5, and CDC-5, = 5%; CDB-3 and CDC-3, = 3% tolerance. CDA-5 has mica capacitors; others have oil-impregnated paper capacitors. 3 1/4 x 5 x 3 1/2". Wt., 4 lbs.

Stock No.	Mfr's Type	Range Mfd	Mfd/Step	NET EACH
84 F 452	CDA-5	.0001-.011	.0001	12.25
84 F 453	CDB-5	.01-1.1	.01	12.25
84 F 455	CDB-3	.01-1.1	.01	14.55
84 F 454	CDC-5	1.0-10	1.0	21.51
84 F 456	CDC-3	1.0-10	1.0	23.71

### RESISTANCE DECADES

Not illustrated. Dependable source of resistance for substitution use. Each decade permits selection of 110 resistance values. Series connected, they cover a range from 1 ohm to 1,111,110 ohms in 1-ohm steps. Have 2 rotary switches with 11 positions for quick change in resistance values. Less leads. Size, 3 1/4 x 5 x 3". Shpg. wt., 1 1/4 lbs.

Stock No.	Mfr's Type	Range Ohms	Ohms/Step	NET EACH
84 F 615	RDA	1-110	1	13.08
84 F 616	RDB	100-11,000	100	13.47
84 F 617	RDC	10,000-1,100,000	10,000	13.47

### CDE CAPACITOR SUBSTITUTION BOX

New, reliable capacitor substitution box. Selects 15 combinations of capacitances, ranging from 10 mfd to 150 mfd, in 10-mfd steps. Voltage range: to 450 volts DC, maximum. Size, 3 1/4 x 5 x 3". Shpg. wt., 1 1/4 lbs. **87 F 034 NET. 12.25**

### BF-90 CAPACITOR CHECKER

Checks capacitors without removing them from circuit. "Magic-Eye" indicator. Checks capacitors from 30 mmfd to 2000 mfd for open, short or intermittent even when connected across resistances as low as 10 ohms. Resistance ranges from 1 mfd to 2000 mfd for short circuit even when connected in parallel with 1-ohm resistor. Size: 7 x 10 x 5 1/4". For 110-125 volts, 60 cycle AC. Shpg. wt., 8 lbs. **84 FX 619. \$2.00 Down. NET. 37.95**

### BF-60 CAPACITOR-RESISTOR BRIDGE

Precision instrument; checks for opens, shorts, intermittents, capacity and power factor of electrolytics as well as insulation resistance of papers, micas and ceramics. Measures capacity between wires and shielding, transformer windings, etc. Range in 10 mfd-.005 mfd. .001-5 mfd, 1-50 mfd, 20-1000 mfd. Resistance ranges: 100-50,000 ohms and 10,000 ohms to 5 megohms. Size: 5 1/4 x 7 x 10". For 110-125 volts, 50-60 cycle AC. Shpg. wt., 10 lbs. **84 FU 457. \$2.00 Down. NET. 47.15**

### BF-80 FLYBACK-YOKE CHECKER

For rapidly locating defects in flyback transformers and yokes. Employs an oscillator circuit incorporating a 6V6 tube. Extremely sensitive—detects short circuited vacuum tube elements and windings. Will detect a single shorted turn. Also indicates open circuits in transformers, yokes, coils and switches. 4 1/2" microammeter; 50 microamp full-scale sensitivity. Meter scale indicates "GOOD" and "REPLACE"; scale is also numbered for quantitative readings. Sturdy metal case, 5 1/2 x 7 x 10". With test leads. For 110-125 v., 60 cycles AC. Shpg. wt., 9 1/2 lbs. **84 FU 618. \$5.00 Down. NET. 51.10**

### BF-70 CAPACITANCE-RESISTANCE ANALYZER

Accurately checks capacitors and resistors. Wien bridge circuit assures permanent accuracy; readings not affected by line voltage variations. Measures capacity from .00001 to 2000 mfd in 4 ranges. Checks power factor of electrolytics from 0 to 50%. Indicates insulation resistance of paper, mica, and ceramic capacitors. Built-in VOM for leakage measurement. VOM ranges: DC volts, 0-15-150-750; DC ma, 0-1-5-15-75; DC resistance, 2.5-2500 ohms, 250-250,000 ohms, 250,000 ohms to 25 mega, 1x10x5x5". For 110-125 v., 50-60 cycle AC. Shpg. wt., 11 lbs. **84 FU 613. \$5.00 Down. NET. 78.65**

# Eico Test Equipment—Kits or Wired



324-K



360-K



320-K



315-K

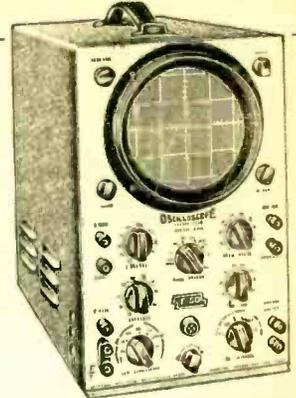


425-K



470-K

Cathode Follower Input Push-Pull Amplifiers



MODEL 460-K 5" OSCILLOSCOPE KIT

- For Black and White and Color TV
- 4-Step Attenuator in DC and AC
- Vertical Sensitivity: 25 mv/inch
- Built-in Voltage Calibrator

Wide-band scope for lab and color TV use. Response flat from DC to 4.5 mc—usable to 10 mc. Accurately reproduces 3.58-mc color TV sync burst. 4-step attenuator in both DC and AC position. High vertical sensitivity—25 mv/inch. Built-in voltage calibrator injects accurately adjusted reference voltage into vertical amplifier to permit direct peak-to-peak voltage measurement. Full-screen DC vertical positioning and 2X full-screen horizontal positioning. Automatic sync limiter and amplifier eliminates sync voltage adjustment. Sweep: 10 cps to 100 kc, plus low frequency sweep with external capacitor. Graph screen has variable illumination. Push-pull vertical amplifier, voltage regulated. Cathode follower inputs. With all tubes, CRT, all parts, instructions. 13x8 1/2 x 16". Less solder. For 105-125 v., 50-60 cycle AC. Shpg. wt., 26 lbs.

83 FU 193. NET ..... 79.95  
MODEL 450. As above, but wired.  
84 FU 668. NET ..... 129.50

## 324-K RF SIGNAL GENERATOR KIT

- Continuous Output from 150 kc to 435 mc
- Cathode Follower Modulated Oscillator

Provides modulated or unmodulated RF signal. Has expanded frequency range of 6 fundamental bands: 150-400 kc, 400-1200 kc, 1.2-3.5 mc, 3.5-11 mc, 11-37 mc and 37-145 mc. One harmonic band covers 111-435 mc. Calibration accuracy is  $\pm 1.5\%$ . Output impedance, 50 ohms. Internal modulation of 400 cps variable from 0 to 50%; can be used for audio testing. Input has gain control for use with external modulator. Colpitts RF oscillator is directly modulated by cathode follower. Fine and coarse RF attenuators. With tubes and all parts. Less solder. 8x10x4 1/4". For 105-125 v., 50-60 cycle AC. Shpg. wt., 10 lbs.

83 F 192. NET ..... 26.95  
MODEL 324. As above, but factory-wired.  
84 F 666. NET ..... 39.95

## MODEL 360-K SWEEP GENERATOR KIT

Every advanced feature needed for quick, accurate alignment of TV or FM receivers. For video IF alignment and response curve adjustment, sound IF and sound detector adjustment. Covers 500 kc to 228 mc. Variable sweep, 0-30 mc. Crystal marker oscillator with variable amplitude. Provision for injection of external marker. Phase control. 8 1/2" vernier tuning dial. Center of each TV channel is marked on front panel. With tubes, parts, instructions. Less 5-mc crystal and solder. 10x8x6 1/4". For 105-125 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

83 F 159. NET ..... 34.95  
MODEL 360. As above, but factory-wired.  
84 F 342. NET ..... 49.95

## 320-K RF SIGNAL GENERATOR KIT

Well-designed circuit uses a stable Hartley oscillator. Covers 150 kc to 34 mc on fundamentals—to 102 mc on harmonics. 400-cps modulation. Has 9" dial calibrated in 7 bands. Complete with tubes, portable case, parts, shielded cable, instructions, etc. Less solder. 10x8x4 1/4". For 105-125 v., 50-60 cycle AC. Shpg. wt., 10 lbs.

83 F 154. NET ..... 19.95  
MODEL 320. As above, but factory-wired.  
84 F 394. NET ..... 29.95

## MODEL 315-K DELUXE RF SIGNAL GENERATOR KIT

For AM, FM, TV servicing. 1% accuracy from 75 kc to 150 mc. 9" illuminated dial. Vernier tuning. Provision for external modulation. Internal 400-cps sine wave generator with attenuator for RF modulation and external audio testing. Uses: 7F7, 6C4, VR150, and 6X5. 12x13x7". Less solder. For 105-125 v., 50-60 cycle AC. 20 lbs.

83 F 162. NET ..... 39.95  
MODEL 315. As above, but factory-wired.  
84 FU 395. NET ..... 59.95

## MODEL 425-K 5" OSCILLOSCOPE KIT

- Wide Bandwidth and High Sensitivity
- Push-Pull Horizontal and Vertical Outputs

Popular, performance-proven cathode-ray oscilloscope. Ideal for AM, FM and TV servicing. Push-pull outputs in horizontal and vertical amplifiers provide balanced vertical and horizontal deflection. Wide bandwidth and high sensitivity. Sensitivity, .05 to 0.1 rms volt/inch. Range, 5 cps to 500 kc. Input imp., 1 meg. Multi-vibrator sweep circuit with frequency range of 15-75,000 cps. Provision for external sync., Z-modulation and direct input to CR tube plates. Intensity (z-axis) modulation input permits sweep blanking or insertion of timing markers on the trace. Has calibrating terminal on panel. Has graph screen. With tubes and parts. Less solder. 8 1/2 x 17 x 13". For 105-125 v., 50-60 cycle AC. 30 lbs.

83 FU 155. NET ..... 44.95  
MODEL 425. As above, but factory-wired.  
84 FU 392. NET ..... 79.95

## MODEL 470-K 7" OSCILLOSCOPE KIT

Push-pull amplifiers and cathode follower inputs to both vertical and horizontal sections. Wide-range sweep frequency generator (15 cps to 100 kc). Intensity modulation, external sync inputs, saw-tooth and line frequency outputs—all on front panel. Internal voltage calibrator. Frequency response: vertical amplifier, flat within  $\pm 2$  db from 10 cps to 1 mc with sensitivity of .01 volt rms/inch; horizontal amplifier,  $\pm 2$  db from 10 cps to 500 kc with sensitivity of .3 volt rms/inch. Input impedance: vertical, 3 megs and 35 mmf; horizontal, 1 meg and 40 mmf. Graph screen, 15x15x10". With all tubes and parts. Less solder. For 105-125 v., 50-60 cycle AC. Shpg. wt., 35 lbs.

83 FU 174. NET ..... 79.95  
MODEL 470. As above, but factory-wired.  
84 FU 343. NET ..... 129.50

## MODEL 488-K ELECTRONIC SWITCH KIT

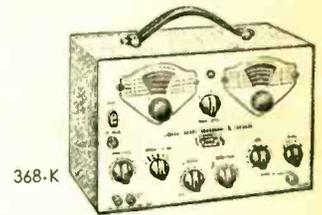
Not illus. Permits viewing 2 patterns on a scope. Switching rates: 10-2000 cps, variable. Freq. resp. 0-30,000 cps ( $\pm 2$  db). 6x8x6". Less solder and leads. For 105-125 v., 50-60 cycle AC. Shpg. wt., 7 lbs.

83 F 185. \$2.00 Down. .... 23.95  
MODEL 488. As above, but factory-wired.  
84 F 658. \$2.00 Down. .... 39.95

## OSCILLOSCOPE TV PROBES

For signal and waveform tracing, etc. Fully shielded. Av. shpg. wt., 5 oz.

Stock No.	Type	Description	NET
83 F 180	PSD-K	Demodulator Probe Kit.	3.75
84 F 653	PSD	As above, but wired.	5.75
83 F 181	PD-K	Direct Probe Kit.	2.75
84 F 654	PD	As above, but wired.	3.95
83 F 182	PLC-K	Low-Capacity Probe Kit.	3.75
84 F 655	PLC	As above, but wired.	5.75



368-K

## MODEL 368-K SWEEP & MARKER GENERATOR KIT

Sweep generator and marker for highly accurate alignment of FM, color and black-and-white TV. Covers 3 to 216 mc in 5 ranges. Variable frequency marker provides output from 2 to 75 mc on fundamentals; to 225 mc on harmonics. Sweep width is variable from 0-30 mc. Supplied with built-in 4.5-mc crystal marker for RF oscillator. Provides dual markers for RF or IF alignment. Provision for adding external marker. Continuously variable sweep and marker attenuators. Has retract sweep and marker attenuators. Output impedance, 50 ohms. Edge-lit hairlines for high tuning accuracy. Tubes used: 12AT7, 12AV7, 12AX7, 6AU6, 12B4, 6X4, rectifier, selenium bias rectifier. 8 1/2 x 13 1/2 x 7 1/4". Supplied complete with tubes, parts and instructions. Less solder. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 16 lbs.

83 FU 950. NET ..... 69.95  
MODEL 368. As above, but factory-wired.  
87 FU 225. NET ..... 119.95

# Eico Test Equipment—Kits and Assembled

## 666-K TUBE & TRANSISTOR TESTER KIT



Five Ranges of Meter Sensitivity

- Speedy and Simple to Use
- Indicates Mutual Conductance, Plate Conductance & Emission

Versatile, simple-to-operate tester indicates mutual conductance, plate conductance and peak emission of tubes under close simulation of actual operating conditions. Also measures transistor collector current and shows current amplification factor. 200  $\mu$ a meter provides direct leakage readings up to 20 megohms.

Tests all receiving tubes, n-p-n and p-n-p transistors, and many small transmitting and special-purpose tubes. Both color and black-and-white TV picture tubes can be tested with Model CRA Picture Tube Adapter, below. Gear-driven rollchart mechanism provides smooth, trouble-free operation. Snap-in windows permit settings for new tubes to be entered on rollchart without disassembling unit.

Rugged gray wrinkle steel carrying case with steel cover and carrying handle. 12x15x4 1/2". Less solder. For 105-130 v., 50-60 cycle AC. Wt., 18 lbs.

83 FX 198. \$5.00 Down. NET 69.95

MODEL 666. As above, but factory-wired. 87 FX 226. \$5.00 Down. NET 109.95

**MODEL CRA PICTURE TUBE ADAPTER**  
(Not illus.) Adapts 625 and 666 tube testers for quick, easy checking TV picture tubes. Measures cathode emission. Tests for filament continuity, shorts between elements. With standard 12-pin socket, octal connector and 4-ft. cable. Wt., 2 lbs.

84 F 348. NET..... 4.50

MODEL CRA-110. Same as above but with "Fighter" 8-contact socket for checking 110 deg. deflection tubes. Shpg. wt., 1 lb.

83 F 879. NET..... 3.95



## MODEL 565-K MULTIMETER KIT

- Sensitivity, 20,000 Ohms/Volt
- 31 Ranges
- Bakelite Case

Performance-proven, wide-range multimeter for radio-TV servicing, etc. Features easy-to-read, 4 1/2" meter—50 microamp meter movement. High-impact bakelite case with carrying handle; dust-free seal for meter. Has 31 ranges: DC, AC and output volts, 0.25-10-50-250-1000-5000 (DC at 20,000 ohms per volt, AC at 1000 ohms per volt); DC current, 0-100 microamps, 0-10-100-500 ma and 0-10 amps; resistance, 0-2000-200,000 ohms and 0-20 megohms. Five db ranges, -12 to +55. Size, 6 1/2 x 5 1/4 x 3". With case, batteries, all parts, wire, instructions. Less leads and solder. Wt., 4 lbs.

83 F 172. \$2.00 Down. NET..... 24.95

MODEL 565. As above, but factory-wired.

84 F 346. \$2.00 Down. NET..... 29.95

MODEL 555-K KIT. Same as 565-K above, but with 1% resistors. Wt., 4 lbs.

83 F 167. \$2.00 Down. NET..... 29.95

MODEL 555. As above, but factory-wired.

84 F 391. \$2.00 Down. NET..... 34.95



## 536-K

- Features 31 Ranges
- Zero to One Volt Range
- Rugged, High Impact Case



## 232-K

### 536-K STANDARD MULTIMETER KIT

Has 3" meter. 31 ranges: AC and DC volts; 0-1-5-10-50-100-500-5000 at 1000 ohms/volt; resistance, 0-500, 0-100,000 ohms, 0-1 meg; AC and DC current, 0-1-10 ma and 0-0.1-1 amps; 6 decibel ranges, -20 to +69 db. With bakelite case, wire, battery and instructions. Less leads and solder. Size: 6 1/2 x 3 1/4 x 2". Shpg. wt., 3 lbs.

83 F 171. NET..... 12.90

MODEL 536. As above, but factory-wired.

84 F 345. NET..... 14.90

MODEL 526-K KIT. As above, but with 1% resistors. Shpg. wt., 3 lbs.

83 F 166. NET..... 13.90

MODEL 526. As above, but factory-wired.

84 F 390. NET..... 16.90

### MODEL 556-K STANDARD MULTIMETER KIT—WITH 4 1/2" METER

Has 400-microamp movement. 38 full-scale ranges: DC, AC and output volts, 0-1-5-10-50-100-500-5000 (at 1000 ohms per volt); AC and DC current, 0-1-10 ma and 0-0.1-1 amp; resistance, 0-500-100,000 ohms and 0-1 megohm. Six db ranges, -20 to +69. 1% resistors. Accuracy: DC,  $\pm 3\%$ ; AC,  $\pm 5\%$ . With case, wire, battery. Less leads and solder. 6 1/2 x 5 1/4 x 3". Wt., 4 lbs.

83 F 173. NET..... 16.90

MODEL 556. As above, but factory-wired.

84 F 347. \$2.00 Down. NET..... 23.50

### MODEL 625-K TUBE TESTER KIT

Short and open test for each element. Full-vision, 4 1/2" meter with Replace-Weak-Good scale. An overload bulb indicates transformer overload and also serves as fuse. Rugged steel case. Illuminated, "speed-roll" chart. Lever-action switches for individual testing of every tube element. Knock-out for new tube socket. Less solder. For operation from 105-125 v., 60 cycle. AC. 12 1/2 x 9 1/4 x 4 1/4". Shpg. wt., 12 lbs.

83 FX 161. \$2.00 Down. NET..... 34.95

MODEL 625. As above, but factory-wired.

84 FX 397. \$2.00 Down. NET..... 49.95

MODEL L-1. Lid (cover) for 625-K or 625.

83 F 880. NET..... 3.98

### VTVM PROBES

Accessory probes for use with All Eico VTVM models. Av. shpg. wt., 1 lb.

Stock No.	Type	Description	NET
83 F 188	PTP-25-K	P-to-P probe kit for 221, 214.	4.95
84 F 661	PTP-25	As above, but factory wired.	6.95
83 F 189	PRF-25-K	RF probe kit for 221 or 214.	3.75
84 F 662	PRF-25	As above, but factory wired.	4.95
83 F 196	PRF-11-K	RF probe kit for 232 or 249.	3.75
83 F 197	PRF-11	As above, but factory wired.	4.95

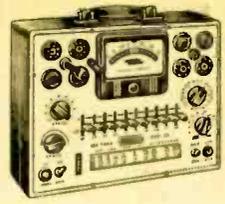
MODEL HVP-2 HIGH VOLTAGE PROBE. Adapts VTVM units to read up to 30,000 volts. Factory wired and fully tested.

84 F 663. For Models 214, 221. NET

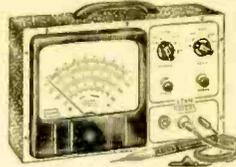
84 F 669. For Models 232, 249. EA. 4.95



## 556-K



## 625-K



## 249-K



## 214-K

### MODEL 232-K VTVM KIT

A high-quality, moderately-priced service instrument. Balanced-bridge circuit provides accuracy and stability. Meter movement protected against burn-out. Easy-to-read 4 1/2" scale. 1% multiplier resistors. Easily calibrated without removal from case. "Uni-Probe" provides convenient high impedance input. Half turn of probe tip selects DC or AC/ohms. Measures peak-to-peak or rms values of AC waves. Ranges: p-p volts, 0.4-14-42-140-420-1400-5000 volts; DC/rms volts, 0-1.5-5-15-50-150-500-1500 volts; resistance 0 to 1000 megohms in 7 ranges. Has zero-center scale for TV and FM discriminator alignment. Tubes: 12AU7, 6AL5, selenium rectifier. Size: 7x4x5". Less solder. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 7 lbs.

83 F 186. \$2.00 Down. NET..... 29.95

MODEL 232. As above, but factory-wired.

84 F 659. \$2.00 Down. NET..... 49.95

### MODEL 249-K DELUXE VTVM KIT

As above, but with 7 1/2" meter. 8 1/2 x 13 x 5". Less solder. Wt., 9 lbs.

83 F 187. \$2.00 Down. NET..... 39.95

MODEL 249. As above, but factory-wired.

84 F 660. \$5.00 Down. NET..... 59.95

### MODEL 221-K VTVM KIT

An easy-to-build, sensitive VTVM for making measurements in high-resistance circuits. 20 ranges, with DC input resistance of 25 megohms. 4 1/2" meter is protected against burnout. Includes zero center for alignment of FM and TV discriminators. Dual-triode balanced bridge, 1% multiplier resistors. Ranges: AC-DC volts, 0.5-10-100-500-1000; extends to 30,000 volts and 200 mc with HVP-2 and PRF-25 probes; resistance, 0-10-100-1000 megohms; db -20 to +55. Tubes used: 6H6, 6SN7; and 6X5 rectifier. With leads, less solder, 6x9 1/4 x 5". For 105-125 v., 50-60 cycle AC. Wt., 10 lbs.

83 F 152. \$2.00 Down. NET..... 25.95

MODEL 221. As above, but factory-wired.

84 FX 389. \$2.00 Down. NET..... 39.95

MODEL 214-K DELUXE VTVM KIT

Deluxe model VTVM. Has all the versatility and performance-proven features of Model 221, plus the extra convenience and legibility of a big 7 1/2" meter. 13 1/4 x 9 x 6". Shpg. wt., 11 lbs.

83 FX 170. \$2.00 Down. NET..... 34.95

MODEL 214. Same as above, but factory-wired and tested.

84 FX 344. \$5.00 Down. NET..... 54.95

# Eico Test Equipment—Kits and Assembled



540-K



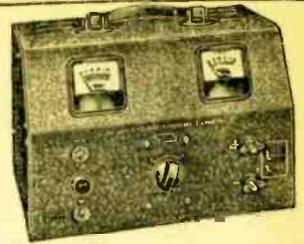
944-K



630-K



584-K



**MODEL 1060-K DELUXE BATTERY ELIMINATOR KIT**

- Battery Charger or Eliminator
- For All 6 & 12-Volt Auto Radios

A powerful unit for operating any auto radio, including transistor models. Includes effective smoothing filter to aid servicing of transistor sets. Can be used as a battery charger or eliminator. Features: 2 DC ranges with extra filtering and continuous adjustment by a variac; separate voltmeter and dual range ammeter; heavy duty selenium rectifiers; fused primary; automatic reset overload relay in secondary.

Specifications: low range, 0-8 v., 10 amps continuous, 20 amps intermittent, 0.3% ripple at 2 amps, 1.5% at 10 amps; high range, 0-16 v., 6 amps continuous, 12 amps intermittent, 1.5% ripple at 2 amps, 2% at 6 amps; voltmeter range, 0-20 v.; ammeter, 0-10, 0-20 amps. With steel case, parts, and instructions. Less solder. Size, 8 $\frac{3}{4}$ "x10 $\frac{1}{2}$ "x7 $\frac{3}{4}$ ". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 19 lbs.

83 FX 875, \$2.00 Down, NET..... 38.95

MODEL 1060, As above, but factory-wired, 83 FU 876, \$2.00 Down, NET..... 47.95

**MODEL 1050-K 6-12 VOLT BATTERY ELIMINATOR KIT**

Power supply for 6 or 12 volt auto radios. Same battery eliminator and charger as Model 1060-K above, but less smoothing filter. Shpg. wt., 15 lbs.

83 FX 175, \$2.00 Down, NET..... 29.95

MODEL 1050, As above, but factory-wired, 84 FU 341, \$2.00 Down, NET..... 38.95



**MODEL 147-K DELUXE SIGNAL TRACER KIT**

- For Visual or Aural Monitoring
- Has "Magic Eye" and 5" Speaker

Versatile transformer-operated instrument. High and low-gain RF channels with internal wide-frequency range demodulator permits direct observation of signal. Has output for VTVM or oscilloscope. May be connected as substitute speaker, output transformer, or amplifier. Heavy filtering and hum-balance control. Both visual and aural monitoring of all RF and AF channels—magic eye and 5" PM speaker. Calibrated wattmeter circuit indicates wattage consumption in unit under test. Has noise localizer circuit. Aluminum panel, gray wrinkled steel case. Size, 9x10x5 $\frac{1}{2}$ ". With probes. Less solder. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 10 lbs.

83 F 190, \$2.00 Down, NET..... 24.95

MODEL 147, As above, but factory-wired, 84 F 664, \$2.00 Down, NET..... 39.95



612-K



1020-K



145A-K



352-K



710-K

**MODEL 540-K "REDI-TESTER" KIT**

Combination AC/DC voltmeter, ammeter, ohmmeter, wattmeter, and leakage tester. Ranges: AC-DC volts, 0-7.5, 15, 150, 300. Current (AC or DC), 0-15 amps. Resistance, 0-1000 ohms. Neon lamp continuity—AC leakage tester, 3 $\frac{1}{2}$ " meter. Panel outlet for current metering. Etched aluminum panel, black bakelite case. With batteries, leads, less solder. 6 $\frac{1}{2}$ "x3 $\frac{3}{4}$ "x3 lbs.

83 F 199, NET..... 12.95

MODEL 540, As above, but factory-wired, 84 F 667, NET..... 15.95

**MODEL 944-K FLYBACK TESTER KIT**

Quickly and easily spots defective flyback transformers and yokes in black and white and color TV sets. Also checks continuity of yokes, speakers, etc. Features grid-dip principle and separate calibration for air and iron-core flybacks. 4 $\frac{1}{2}$ " meter with 3 separate colored scales. Satin finish aluminum panel. Housed in sturdy gray wrinkle steel case. Size, 8 $\frac{3}{4}$ "x5 $\frac{1}{2}$ ". Less solder. 105-125 v., 50-60 cycle AC. Shpg. wt., 3 lbs.

83 F 184, \$2.00 Down, NET..... 23.95

MODEL 944, As above, but factory-wired, 84 F 657, \$2.00 Down, NET..... 34.95

**MODEL 630-K CATHODE RAY TUBE CHECKER KIT**

Tests all CRT's—has bridge for measurement of peak beam current (which is proportional to screen brightness). Neon lamp acts as a sensitive bridge balance indicator. Two test sockets, each with 2 $\frac{1}{2}$  ft. of cable for duo-decal (12-pin) and diheptal (14-pin) tubes. Less solder. 6 $\frac{1}{2}$ "x9 $\frac{1}{2}$ "x3". For 105-125 v., 50-60 cycle AC. Shpg. wt., 6 lbs.

83 F 177, NET..... 13.95

MODEL 630, As above, but factory-wired, 84 F 650, NET..... 18.95

**MODEL 584-K BATTERY TESTER KIT**

Quickly tests all portable radio "A" and "B" batteries in or out of the receiver. Test switch positions (volts): 1.5, 4.5, 6.0, 7.5, 9.0, 22.5, 45, 67.5, 75, 90, plus a spare position. Employs a 3 $\frac{1}{2}$ " meter. Black bakelite case, aluminum panel. 6 $\frac{1}{2}$ "x3 $\frac{3}{4}$ "x2". Less solder. With leads. Shpg. wt., 2 lbs.

83 F 195, NET..... 9.95

MODEL 584, As above, but factory-wired, 84 F 671, NET..... 12.95

**NEW 612-K CONTINUITY TESTER KIT**

Battery operated tube filament continuity tester. Permits filament checking of tubes in an inoperative series string in rapid succession. Neon lamp indicator. CRT adapter plug. Sockets for 9-pin, octal, loctal and 7-pin tubes. Brushed aluminum panel, molded bakelite case. With batteries. 6 $\frac{1}{2}$ "x3 $\frac{3}{4}$ "x2". Shpg. wt., 1 $\frac{1}{2}$  lbs.

83 F 966, NET..... 3.95

MODEL 612, As above, but factory-wired, 83 F 967, NET..... 5.95

**NEW 1020-K POWER SUPPLY KIT**

Transistorized, low ripple, DC power and bias supply. Continuously variable output voltage. Dual range voltmeter (0-6, 0-30 VDC). 300 ma maximum. 5x4x5 $\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. 4 $\frac{1}{2}$  lbs.

83 F 968, \$2.00 Down, NET..... 19.95

MODEL 1020, As above, but factory-wired, 83 F 969, \$2.00 Down, NET..... 27.95

**MODEL 145A-K SIGNAL TRACER KIT**

For trouble-shooting any radio or TV set. Quickly checks IF, RF, video and audio circuits. Features: built-in speaker, audio amplifier with volume control; noise locator circuit. May be used with scope or VTVM for visual tracing. With probes. Less solder. 7 $\frac{1}{16}$ "x5 $\frac{3}{16}$ "x5 $\frac{3}{16}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 7 lbs.

83 F 158, \$2.00 Down, NET..... 19.95

MODEL 145A, As above, but factory-wired, 84 F 385, \$2.00 Down, NET..... 28.95

**MODEL 352-K BAR GENERATOR KIT**

For adjusting vertical and horizontal linearity. Produces 16 vertical and 12 horizontal bars (number of bars is adjustable). Video carrier oscillator is tunable over channels 2-6. 3-way antenna clip. Less solder. 7 $\frac{1}{2}$ "x5x4 $\frac{1}{2}$ ". For 105-125 v., 50-60 cycle AC. Shpg. wt., 4 lbs.

83 F 178, NET..... 14.95

MODEL 352, As above, but factory-wired, 84 F 651, \$2.00 Down, NET..... 19.95

**710-K GRID-DIP METER KIT**

Operates as oscillating detector or wavemeter. 400 kc to 250 mc in 8 overlapping ranges; precision 500 microamp meter; 1:7 planetary drive. Less solder. 110-120 v., 50-60 cycle AC. 2 $\frac{1}{2}$ "x2 $\frac{1}{2}$ "x6 $\frac{1}{4}$ ". 3 lbs.

87 F 352, \$2.00 Down, NET..... 29.95

MODEL 710, As above, but factory-wired, 87 F 353, \$2.00 Down, NET..... 49.95

**MODEL 377-K AUDIO GENERATOR KIT**

Provides sine and square waves. 1% resistors in Wien bridge-type oscillator circuit. Sine wave: 20-200,000 cps in 4 bands,  $\pm$ 1.5 db. from 60-150,000 cps, less than 1% distortion. Square wave: 60-50,000 cps in 4 bands, 5% tilt at 60 cps. 5% rounding at 30,000 cps. Output: 10 volts across rated load of 1000 ohms. 6 $\frac{1}{2}$ " dial has 0-100 reference scale. 7 $\frac{3}{8}$ "x1 $\frac{1}{16}$ "x7 $\frac{3}{8}$ ". Less solder and leads. For 105-125 v., 50-60 cycle AC. 14 lbs.

83 FX 169, \$2.00 Down, NET..... 31.95

MODEL 377, As above, but factory-wired, 84 FU 349, \$2.00 Down, NET..... 49.95





# Precise Test Equipment—Kits or Wired



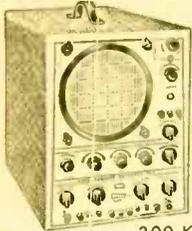
713-K



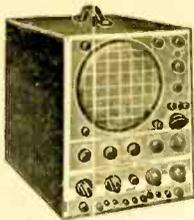
630-KA



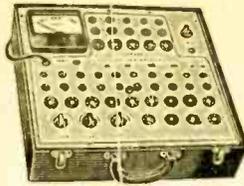
9071-K



300-K



308-K



116-K



## 111 TUBE TESTER—KIT OR WIRED

- Both Emission and Gm Testing
- For Receiving and CR Tubes

MODEL 111-K. Advanced design tube tester kit. Checks both emission and mutual conductance separately—roll chart indicates the most important single test for normal applications. Tests all receiving tubes; also tests CRT's with PTA-K adapter.

Features rotary type switches; gas check; single-switch short check; latest type anti-backlash roll chart. Tests each tube element for shorts against other elements. Allows filament current and tube bias to be measured directly on the meter. Sweeps from zero voltage through normal testing range when making measurements. Has spare switch to accommodate future tube types.

Rugged, handsome, moleskin-covered wooden carrying case and cover houses entire unit. Panel is deeply etched aluminum. Easy-to-follow step-by-step instruction manual. Size: 14x16x6". 110-120 volts, 60 cycle AC. 25 lbs.

83 FU 133. \$5.00 Down. NET 79.95

MODEL 111W. As above, factory-wired.

84 FU 692. \$5.00 Down. NET. 139.95

MODEL PTA-K. CRT adapter kit for above.

For testing picture tubes. 1 1/2 lbs.

84 F 693. NET. 2.95

MODEL PTA-W. As above, factory-wired.

84 F 694. NET. 4.25

## 713 POWER LAB—KIT OR WIRED

MODEL 713-K. Extremely versatile bench-top power supply kit—ideal for service shops and labs. Combines variable low and high-voltage AC and DC supplies, a wattmeter, voltmeter, AC and DC ammeter, and an isolation transformer in one compact unit. Performs function of 11 different pieces of equipment. DC power available is 0-30 v. at 10 amps and 110-180 v. at 75 amps. (1 amp intermittent). AC power available is 0-24 v. at 20 amps; 90-140 v. at 10 amps (1000 watts continuous) and 20 amps (2000 watts intermittent) (no isolation) and 90-140 v. at 3 amps, 300 watts (with isolation). Meter reads AC and DC current to 20 amps, AC and DC voltage to 180 v. and power to 2000 watts. 12x8 1/2 x 5 1/4". For 110-120 v., 60 cycle AC. Wt., 22 lbs.

83 FU 904. \$5.00 Down. NET. 62.95

MODEL 713-W. As above, but factory-wired.

87 FU 266. \$5.00 Down. NET. 79.95

MODEL 711-K KIT. Similar to 713-K, but isolation to 100 watts. Shpg. wt., 15 lbs.

83 FU 903. \$2.00 Down. NET. 49.95

MODEL 711-W. As above, factory-wired.

87 FU 265. \$5.00 Down. NET. 64.95

## 630 SIGNAL GENERATOR—KIT OR WIRED

MODEL 630-KA. RF-AF-TV signal generator and marker kit. Reaches 110 mc on fundamentals; 330 mc on harmonics. Pre-assembled calibrated RF heads; audio, 20-20,000 cps; cathode follower output; variable percent modulation; external modulation; speech amp; crystal marker; bar generator; RF and AF stand-by; Wien bridge AF oscillator; Colpitts RF oscillator; coaxial fittings. Also has constant output impedance; Vernier tuning on RF and AF; separate RF section; individually tuned coils; filtered line; complete shielding. Coaxial-type connectors. Steel cabinet, 8x11x5". Aluminum panel; drum dials; leather handle. For 110-120 v., 60 cycle AC. 11 lbs.

83 FU 130. \$2.00 Down. NET. 38.95

MODEL 630-W. As above, but factory-wired.

84 FU 497. \$5.00 Down. NET. 53.95

## MODEL 9071-K VTVM KIT

Deluxe professional VTVM kit. Features extra large 7 1/2" meter for better visibility and greater accuracy. Has voltage regulation, 1% ceramic precision resistors, zero-center. Ranges: DC/AC volts, 0.5-250-500-1000; ohms, 0-1K-10K; megs., 0-1-10-1000; db., -20 to +55. Amphenol-type DC connector. In steel cabinet, 12x8 1/2 x 5". With test leads and instructions. For 110-120 v., 60 cycle AC. Wt., 11 lbs.

83 F 902. \$2.00 Down. NET. 35.95

MODEL 912A RF PROBE. For above. Extends RF range to 250 mc. With shielded cable and connector. Shpg. wt., 1/2 lb.

87 F 260. NET. 4.25

## MODEL 300-K 7" SCOPE KIT

Vertical response, ±3 db up to 5 megacycles with sensitivity of 10 millivolts. Frequency-compensated vertical and horizontal stepping attenuators. Push-pull DC amplifiers; push-pull horizontal. Astigmatic focus control. Linear sweep from 1 cycle to 80 kc. Internal square wave calibrator with pot. Electronic magnifier circuit allows any portion of signal to be magnified up to 10 times. With edge lighted screen, 5-way binding posts, plug gate and sawtooth outputs on front panel. Bridge-type positioning does not vary tube characteristics. Steel cabinet, 11x14x17". With all parts less solder. For 110-120 v., 60 cycle AC. 35 lbs.

83 FU 131. \$5.00 Down. NET. 99.95

MODEL 960 CAPACITOR ATTENUATOR PROBE.

Use with Models 300 and 308 oscilloscopes.

Range, through 100 mc. Input capacity, 7 mmf. Shpg. wt., 1 1/2 lbs.

84 F 691. NET. 5.95

## 308-K 8 1/2" SCOPE—KIT OR WIRED

Deluxe 8 1/2" scope kit for any radio-TV servicing or laboratory application. Edge-illuminated 8 1/2" screen and magnifier positioner for accurate waveform analysis. Bridge type horizontal and vertical positioning does not vary tube characteristics. A third anode intensifier ring, as well as a separate high voltage supply provides increased picture sharpness and tracing speed. Has push-pull inputs for internally mixing 2 signals or observing push-pull waveforms. Vertical response: ±1.5 db to 5 mc. Sensitivity, 10 mv/inch. Return trace eliminator. Linear sweep, 1 cycle to 80 kc. Square-wave calibrator with potentiometer. 11x14x19". With all parts, wire, tubes; less solder. 110-120 v., 60 cycle AC. 36 lbs.

83 FU 132. \$5.00 Down. NET. 129.50

MODEL 308-W. As above, but factory-wired.

84 FX 690. \$10.00 Down. NET. 229.50

## CHICAGO INDUSTRIAL TEST METERS

### MODEL 431-AN VOM

Has 860 µa meter movement  
Ranges: AC-DC volts, 0-15-30-150-300-1500-3000 (at 1000 ohms per volt); DC current, 0-1.5-150 ma and 0-7.5 amps; resistance, 0-10,000-100,000 ohms; 0-1 meg. Military-type aluminum case with hinged, removable cover—6 1/8 x 3 1/4 x 5 3/4". Anodized aluminum panel. With penlight cells, strap, leads. 3 3/4 lbs.



87 F 310. \$2.00 Down. NET. 21.07

MODEL 431-A—LESS COVER. Wt., 3 1/2 lbs.

84 F 309. NET. 19.11

### MODEL 312 VOM

Pocket-size, 6-function VOM with 2" meter. Reads: DC volts, 0-25-50-125-250, AC volts, 0-25-50-125-250, DC ma, 0-50, AC ma, 0-50, Resistance, 100,000 ohms full scale, with 2400 ohms half-scale reading. Capacitance, .05-15 mfd (chart furnished). Resistance ranges operate from AC power—no batteries required. 2" flush mounted meter in bakelite panel; housed in ultra-compact 3 1/8 x 2 1/4 x 1 1/2" sturdy bakelite case. With power cord; less test leads. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 1 1/4 lbs.



84 F 306. NET. 8.82

# Simpson Panel Meters

## RECTANGULAR PANEL METERS



3 1/2" Rectangular Meter



4 1/2" Rectangular Meter

An excellent selection of superior-quality panel meters. Ideal for use in transmitters, communications equipment, test equipment, Ham gear, etc. Models 27, 29, 37, 39, 47 and 142 have D'Arsonval moving coil movements. Models 57 and 59 have iron-vane movements. Housed in rugged, black molded bakelite cases. All meters listed below have recessed zero adjustments.

DC MILLIAMMETERS			
Model 27		Model 29	
Stock No.	NET EA.	Range	Stock No.
67 F 520	10.44	0-1	67 F 420
67 F 800		0-3	67 F 801
67 F 521		0-5	67 F 421
67 F 522		0-10	67 F 422
67 F 530		0-15	67 F 430
67 F 523	10.73	0-25	67 F 423
67 F 524		0-50	67 F 424
67 F 531		0-75	67 F 431
67 F 525		0-100	67 F 425
67 F 532		0-150	67 F 432
67 F 526	10.73	0-200	67 F 426
67 F 533		0-250	67 F 433
67 F 527		0-300	67 F 427
67 F 528		0-500	67 F 428
67 F 529		0-1000	67 F 429

DC VOLTMETERS			
Model 27		Model 29	
Stock No.	NET EA.	Range	Stock No.
67 F 515	11.17	0-3	67 F 415
67 F 516		0-5	67 F 416
67 F 506		0-8	67 F 401
67 F 501		0-10	67 F 402
67 F 502	11.17	0-15	67 F 403
67 F 507		0-25	67 F 417
67 F 518		0-50	67 F 418
67 F 507		0-100	67 F 405
67 F 504	11.17	0-150	67 F 406
67 F 519		0-200	67 F 419
67 F 505		0-250	67 F 407
67 F 508		0-300	67 F 408
67 F 509	11.76	0-500	67 F 409
67 F 510	13.96	*0-1000	67 F 410
67 F 514		*0-1500	67 F 411
67 F 511		*0-2000	67 F 412
67 F 512		*0-3000	67 F 413
67 F 513		*0-5000	67 F 414

DC AMMETERS			
Model 27		Model 29	
Stock No.	NET EA.	Range	Stock No.
67 F 535	10.58	0-1	67 F 435
67 F 536		0-3	67 F 436
67 F 537		0-5	67 F 437
67 F 538		0-10	67 F 438
67 F 539		0-15	67 F 439
67 F 540	10.58	0-25	67 F 440
67 F 542		0-50	67 F 442
68 F 802		0-75	68 F 805
68 F 803		0-100	68 F 806
68 F 804		0-150	68 F 807

DC MICROAMMETERS				
Model 27		Model 29		
Stock No.	NET EA.	Range	Stock No.	
68 F 808	20.58	0-15	68 F 809	
67 F 543		0-25	67 F 443	
67 F 545		0-50	67 F 445	
67 F 546		0-100	67 F 446	
67 F 547		0-150	67 F 447	
67 F 548	11.02	0-200	67 F 448	
67 F 684		15.58	25-0-25	67 F 691
67 F 685		13.67	50-0-50	67 F 692
67 F 686		11.76	100-0-100	67 F 693
67 F 687		10.58	500-0-500	67 F 694

MODEL 79 WATTMETERS					
Stock No.	Range Watts	Max. Amps	Max. Volts	NET EACH	
68 F 812	0-75	1.0	150	30.72	
68 F 813	0-300	4.0	150	30.72	
68 F 814	0-1500	10.0	300	33.07	
68 F 815	0-3000	20.0	300	33.07	

METER DIMENSIONS				
Model	Flange	Body Dia.	Body Depth	Scale
27	3.12x3.00"	2.75"	1.36"	2.56"
29	4.20x4.66"	2.75"	1.00"	3.91"
37	3.12x3.00"	2.75"	1.36"	2.56"
39	4.20x4.66"	2.75"	1.00"	3.91"
47	3.12x3.00"	2.75"	1.36"	2.56"
49	4.20x4.66"	2.75"	1.00"	3.91"
57	3.12x3.00"	2.75"	1.45"	2.56"
59	4.20x4.66"	2.75"	1.09"	3.91"
79	4.20x4.66"	2.00"	1.68"	3.50"
142	3.94x4.25"	3.25"	1.00"	3.50"

Spade type pointers move through a wide scale arc of 100°. All types have ±2% accuracy, except rectifier-type ±5%. Models 27, 37 and 57 are 3 1/2" meters; 29, 39 and 59 are 4 1/2" meters and shock-mounted jewels. Supplied with mounting hardware and template for accurately determining the proper cut-out. Shpg. wt., 1 lb. Include Range and Model No. on all orders.

AC MILLIAMMETERS			
Model 57		Model 59	
Stock No.	NET EA.	Range	Stock No.
67 F 565	10.14	0-50	67 F 465
67 F 566		0-100	67 F 466
67 F 567		0-250	67 F 467
67 F 568		0-500	67 F 468

AC VOLTMETERS				
Model 57		Model 59		
Stock No.	NET EA.	Range	Stock No.	
67 F 558	10.14	0-1.5	67 F 458	
67 F 550		0-3	67 F 450	
67 F 559		0-5	67 F 459	
67 F 551		0-10	67 F 451	
67 F 552	10.14	0-15	67 F 452	
67 F 560		0-25	67 F 460	
67 F 553		0-44	67 F 453	
67 F 555		11.32	0-150	67 F 455
67 F 561	11.32	0-250	67 F 461	
67 F 566		0-300	67 F 456	
67 F 557		16.02	0-500	67 F 457
67 F 575		10.00	0-1	67 F 475
67 F 577	0-3		67 F 477	
67 F 578	0-5		67 F 478	
67 F 579	0-10		67 F 479	
67 F 582	10.00	0-15	67 F 482	
67 F 580		10.29	0-25	67 F 480
67 F 581		11.17	0-50	67 F 481
68 F 810		10.00	0-75	68 F 811

RF AMMETERS (INTERNAL THERMOCOUPLE TYPE)			
Model 37		Model 39	
Stock No.	NET EA.	Range	Stock No.
67 F 585	12.49	0-1	67 F 485
67 F 586		0-1.5	67 F 486
67 F 587		0-2	67 F 487
67 F 588		0-3	67 F 488
67 F 589		0-5	67 F 489

RECTIFIER-TYPE AC VOLTMETERS 1000 OHMS PER VOLT			
Model 47		Model 49	
Stock No.	NET EA.	Range	Stock No.
67 F 569	15.29	0-1	67 F 490
67 F 570		0-5	67 F 491
67 F 571		0-10	67 F 492
67 F 572		0-15	67 F 493
67 F 573		15.29	0-50
67 F 574	0-150		67 F 496
67 F 584	0-300		67 F 497

VU METERS		
Stock No.	Model	EACH
67 F 597	47	18.82
67 F 598	142	20.00
67 F 599	142*	22.93

MODEL 27 DC GALVANOMETERS		
Stock No.	Model	EACH
67 F 591	NET EACH	10.58
75-0-75	Microamp.	As above, except 75-0-75 microamp range, 2000-ohm internal resistance. Shpg. wt., 1 lb.
67 F 592, 1-9	NET EACH	12.49

## "WIDE-VUE" PANEL METERS



- Modern Styling
- Easy-to-Read
- Longer Scales

Precision built "Wide-Vue" panel meters. Have durable, open-faced plastic cover for wide-angle readability and maximum protection to the meter face. Feature longer scales than conventional-type meters—3 1/4" "Wide-Vue" meter scale is over 1/2" longer than standard 3 1/2" meter scale. All DC meters except 0-25, 0-50 DC microammeters have "self-shielded" core magnet meter movement. This movement is not affected by steel panels or proximity to magnetic fields. 0-25, 0-50 DC microammeters have external magnet type movement; AC meters have moving-vane type movement. Both types are calibrated for non-magnetic panels. 3 1/2" meters have 3 1/4" scale; 4 1/2" meters have 3 1/2" scale. Feature polished and shock-mounted jewels. Size of 3 1/2" meters: 3 1/4" square flange; body diameter, 2 1/4"; body depth, 1 1/4". Size of 4 1/2" meters: flange, 4" high, 4 1/4" wide; body diameter, 2 3/4"; body depth, 1 1/4". Accuracy ±2%. Supplied complete with mounting hardware and template. Av. shpg. wt., 1 lb.

DC VOLTMETERS			
Model 1327-3 1/2"		Model 1329-4 1/2"	
Stock No.	NET EA.	Range	Stock No.
68 F 149	11.76	0-10	68 F 157
68 F 150		0-15	68 F 158
68 F 151		0-50	68 F 159
68 F 152	11.76	0-100	68 F 160
68 F 153		0-150	68 F 161
67 F 660		0-250	67 F 661
68 F 155		0-300	68 F 163

DC MILLIAMMETERS			
Model 1327-3 1/2"		Model 1329-4 1/2"	
Stock No.	NET EA.	Range	Stock No.
68 F 161	11.02	0-1	68 F 166
67 F 662		0-3	67 F 663
68 F 162		0-10	68 F 167
68 F 163	11.32	0-50	68 F 168
68 F 164		0-100	68 F 169
68 F 165		0-150	68 F 170
67 F 668	11.32	0-1000	67 F 669
67 F 668		0-1000	67 F 669

DC AMMETERS			
Model 1327-3 1/2"		Model 1329-4 1/2"	
Stock No.	NET EA.	Range	Stock No.
68 F 165	11.17	0-1	68 F 173
68 F 166		0-5	68 F 174
68 F 168		0-10	68 F 176
68 F 170		0-15	68 F 178
68 F 171		0-25	68 F 179

DC MICROAMMETERS				
Model 1327-3 1/2"		Model 1329-4 1/2"		
Stock No.	NET EA.	Range	Stock No.	
68 F 191	18.23	0-25	68 F 195	
68 F 192		15.43	0-50	68 F 196
68 F 193		14.11	0-100	68 F 197
67 F 673		5.58	25-0-25	67 F 674
68 F 194		14.26	50-0-50	68 F 198

AC VOLTMETERS			
Model 1357-3 1/2"		Model 1359-4 1/2"	
Stock No.	NET EA.	Range	Stock No.
68 F 154	11.91	0-150	68 F 162
68 F 156		0-300	68 F 164

AC AMMETERS				
Model 1357-3 1/2"		Model 1359-4 1/2"		
Stock No.	NET EA.	Range	Stock No.	
68 F 167	10.58	0-5	68 F 175	
68 F 169		10.58	0-10	68 F 177
68 F 172		11.76	0-50	68 F 180

57ET ELAPSED TIME METER		
Stock No.	Model	EACH
67 F 597	47	18.82
67 F 598	142	20.00
67 F 599	142*	22.93

Designed for panel mounting. Has self-starting synchronous clock motor. Counter indicates up to 9999.9 hours, then automatically recycles back to 0. Matches Simpson standard 3 1/2" meters exactly in panel appearance. Flange size, 3 3/4"x3"; body diameter, 2 1/4"; body depth, 2 1/4". For operation from 120 volts, 60 cycle AC. Shpg. wt., 2 lbs.

# Selected Panel Meters - Accessories

## EMICO PANEL METERS



NF-2C



RF-2C

DC meters have Hi-Tork magnetic movements; AC are moving iron type. Black enamel steel cases. Have screw terminal binding posts and lugs for soldered connections. Model NF-2C (round); flange, 2 1/4"; overall depth, 1 1/2". Model RF-2C (square); flange, 2 1/4"; overall depth, 1 3/8". With mtg. bracket. Both mount in 2 3/8" hole. 5% accurate. Av. shpg. wt., 9 oz.

### DC MILLIAMMETERS

Model NF-2C			Model RF-2C		
Ma	Stock No.	EACH	Stock No.	EACH	
0-1	67 F 609	3.53	67 F 614	3.58	
0-10	67 F 600	2.06	67 F 615	2.11	
0-20	67 F 601		67 F 616		
0-30	67 F 602		67 F 617		1.81
0-50	67 F 603	1.71	67 F 618		
0-100	67 F 604		67 F 619		
0-150	67 F 605		67 F 620		
0-200	67 F 606	1.71	67 F 621	1.81	
0-300	67 F 607		67 F 622		
0-500	67 F 608		67 F 623		

### DC AMMETERS

Amps.	Stock No.	EACH	Stock No.	EACH
0-10	67 F 650		67 F 656	
3-0-3	67 F 651	1.71	67 F 657	1.81
20-0-20	67 F 652		67 F 658	
30-0-30	67 F 653		67 F 659	

### AC VOLTMETERS

Volts	Stock No.	EACH	Stock No.	EACH
0-15	67 F 665	2.84	67 F 670	2.94
0-150	67 F 666	3.43	67 F 671	3.53
0-300	67 F 667	4.02	67 F 672	4.07

### DC VOLTMETERS

Volts	Stock No.	EACH	Stock No.	EACH
0-3	67 F 630		67 F 635	
3-0-3	67 F 631	1.71	67 F 636	1.81
0-10	67 F 632		67 F 637	

### AC AMMETERS

Amps.	Stock No.	EACH	Stock No.	EACH
0-5	67 F 646	2.84	67 F 648	2.94
0-10	67 F 647		67 F 649	

### AC MILLIAMMETERS

Ma	Stock No.	EACH	Stock No.	EACH
0-500	67 F 640	2.84	67 F 643	2.94

## JBT QUALITY METERS

### MODEL 31-EX ELAPSED TIME METER

In 1 hour steps to 9999.9 hours, then resets. Flange, 3 1/2"; mounts in 2 1/4" hole; depth 3 1/4". For 100-120 v., 60 cycle AC. 1 1/4 lbs. **66 F 689. NET 15.63**



### AC FREQUENCY METERS

= 0.3% at 77° F. Flange, 3 1/2"; body, 2 1/8"; depth, 3 3/4". For 100-130 v.  
**Model 34-FX.** 56-64 cycles. Freq. in 1-cycle steps. 12 oz. **66 F 685. NET 26.70**  
**Model 33-FX.** 380-420 cycles. Freq. in 5-cycle steps. 12 oz. **66 F 694. NET 33.42**



### MODEL 23-JP-1 TEMPERATURE METER

Tests oven thermostats in appliances. Permits accurate adjustments by showing oven temperatures as they change. 2 1/2" scale reads from 0-650° F. in 10° divisions. On black metal panel. With 5 1/2-ft. calibrated thermocouple, clip, convection shield, leather case. 4 1/2 x 2 1/4 x 1 1/4". 2 1/4 lbs. **66 F 688. NET 25.48**



### BENCH-TYPE METER CASE

Excellent for housing auxiliary test and measurement meters. Top binding posts. Black wrinkle finish. Size, 3 1/4 x 4". 2 1/4" dia. hole. Less meter. Shpg. wt. 1 lb. **66 F 506. NET 1.29**



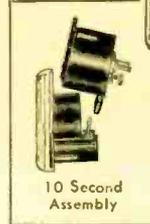
## TRIPLETT UNIMETERS

Precision meters for demonstration and easy visibility. Especially valuable for research laboratories, high schools and colleges, industrial stockrooms, experimenter's workshops, electrical hobbyists, electricians. Only one meter movement plus choice of interchangeable face plates covers a wide variety of meter ranges. Big meter selection at low cost—two basic movements for all ranges. Have a complete line of DC voltmeters, multivoltmeters, microammeters, milliammeters, ammeters, rectifier types for AC volts. Accuracy within 2% full scale. Basic movement and dial component sections are individually calibrated to 1%. Av. shpg. wt., 1 1/2 lbs.

Dial Component Sections Combine with Basic Movements



Dial Components Slide Into Place For Meter Selection



10 Second Assembly

### MODEL 327-U BASIC MOVEMENTS

0-1 DC MA BASIC MOVEMENT. Top-quality, D'Arsonval movement, self-shielded and dustproof. Can be used without special calibration on either magnetic or non-magnetic panels.

0-50 DC mA BASIC MOVEMENT. Extremely sensitive movement. Similar to above but designed for use with micro-range Dial Components below. No openings of dustproof movement—no soldering or wiring required.

Stock No.	Size	Movement	NET
87 F 336	3"	0-1 DC ma	10.78
87 F 436	4"	0-1 DC ma	7.6
87 F 341	3"	0-50 DC ma	15.58
87 F 441	4"	0-50 DC ma	16.66

### DIAL COMPONENT UNITS

Expertly-designed voltmeter and ammeter ranges. Slide easily into basic movements above; a quick turn of the self-contained locking screw assembles meter—in 10 seconds. In-

stant conversion to exact range wanted. For use with 0-1 DC ma Basic Movement except \*for 0-50 DC ma movement. Shpg. wt., 2 oz. Specify meter range and size.

Range	3 1/2" Stock No.	4 1/2" Stock No.	Range	3 1/2" Stock No.	4 1/2" Stock No.
0-1 DC MA	87 FF 337	87 FF 437	0-500 DC MA	87 FF 337	87 FF 437
0-5 DC MA	87 FF 337	87 FF 437	0-10 DC Volts	87 FF 338	87 FF 438
0-10 DC MA	87 FF 337	87 FF 437	0-25 DC Volts	87 FF 338	87 FF 438
0-15 DC MA	87 FF 337	87 FF 437	0-50 DC Volts	87 FF 338	87 FF 438
0-25 DC MA	87 FF 337	87 FF 437	0-150 DC Volts	87 FF 338	87 FF 438
0-50 DC MA	87 FF 337	87 FF 437	0-300 DC Volts	87 FF 338	87 FF 438
0-100 DC MA	87 FF 337	87 FF 437	0-500 DC Volts	87 FF 338	87 FF 438
0-150 DC MA	87 FF 337	87 FF 437	0-1 DC Ammeter	87 FF 339	87 FF 439
0-200 DC MA	87 FF 337	87 FF 437	0-5 DC Ammeter	87 FF 339	87 FF 439
0-250 DC MA	87 FF 337	87 FF 437	0-10 DC Ammeter	87 FF 339	87 FF 439
0-300 DC MA	87 FF 337	87 FF 437	0-15 DC Ammeter	87 FF 339	87 FF 439

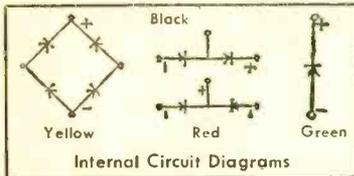
NET EACH

### NEW METER STAND

For laboratories or test bench. Holds panel and unimeters at correct reading angle. Size:

1 1/2 x 6" base. Shpg. wt., 1 1/2 lbs. **87 F 443. NET 2.94**

### CONANT INSTRUMENT RECTIFIERS



Maximum AC input, all units, 5 volts. Series 500: For up to 160 ma max. Reverse voltage: 2.25 DC. Frequency response: 0-1 mc. Diameter .500" with .166" center hole. 0.038" thick. Copper oxide with 24K gold contacts. 3" lead wires. Phillips head 6-32 mounting stud. Series 160: For up to 10 ma max. Reverse voltage: 2.25 DC. Frequency response: 0.75 mc. Diameter .500" with .166" center hole. 0.038" thick. Copper oxide with 24K gold contacts. Have 3" lead wires. Two holes for No. 2 mounting screw. Sealed in housing with polystyrene base. Series 160-C: Same as Series 160 except stack is housed in welded brass case. Yellow with 4 terminals, 1 circuit; black, 3 terminals, 2 circuits; red, 3 terminals, 3 circuits; green, 2 terminals, 4 circuits. Forward DC ma of 10 except \*60. Av. shpg. wt., 5 oz.

Stock No.	Type	Series	Body Color	Av. Output DC MA	NET EACH
68 F 041	M*	500	Yellow	100	2.06
68 F 043	HS*	500	Black	50	1.50
68 F 047	T*	500	Red	50	1.50
68 F 042	H*	500	Green	50	1.18
68 F 040	B	160	Yellow	10	2.06
68 F 044	BHS	160	Black	5	1.50
68 F 046	BT	160	Red	5	1.50
68 F 037	BH	160	Green	5	1.18
68 F 038	B-C	160-C	Yellow	10	2.06
68 F 045	BHS-C	160-C	Black	5	1.50
68 F 048	BH-C	160-C	Red	5	1.50
68 F 049	BT-C	160-C	Green	5	1.18

INSTRUMENT RECTIFIERS. By H. B. Conant. Includes graphs, curves, plus other helpful data. **37 K 170. Postpaid in U.S.A. 15c**

### EMICO AC VOLTAGE TESTER

Handy, low-cost, AC line-voltage tester. Gives accurate, instantaneous check at receptacle. Has 2-prong male plug to fit conventional outlets—no test leads are required. Features 90° swivel head for easier reading at angle. Range: 0-150 volts. Scale has 5-volt graduations between 50 and 150 volts. Meter size: 2". Damped movement. Overall accuracy: 5% of full scale. Black metal case. Shpg. wt., 8 oz. **67 F 626. NET 2.94**



### STERLING BATTERY TESTERS

Pocket-size battery testers in sturdy, watch-type nickel-finished cases. For checking hearing aid batteries, "B" batteries, dry cells, etc. Durable and accurate—an extremely practical unit for all service shops. White dial face with black, easy-to-read markings. Will not drain batteries. Supplied complete with test leads. Case size: 2 1/4" dia., 3/4" thick. Av. shpg. wt., 6 oz.



**Type 31A Hearing and Battery Tester.** Tests 22 1/2, 30 or 45-v. "B" and 1 1/4-v. "A" batteries. Scales: 0-50v., 0-2v. With plug and leads. **78 F 031. NET 2.50**

### FOR PORTABLE RADIO BATTERIES

Stock No.	Type	For Volts	NET
78 F 024	37A	0-2-50	2.20
78 F 025	38A	0-2-100	2.35
78 F 026	39A	0-2-150	2.35
78 F 027	40A	0-10-150	2.50

### FOR DRY CELL BATTERIES

Stock No.	Type	Scale	NET
78 F 028	24	0-35 amps	1.79
78 F 029	34C	0-50 volts	2.09
78 F 030	45	0-35 amps, 0-50 volts	2.50

# Triplett Glass-Front Panel Meters



2 1/2", 3"



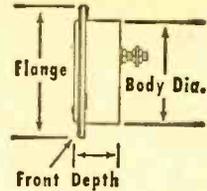
2 1/2", 3 1/2"



Selection of DC  
D'Arsonval  
Type and AC  
Iron Vane Type  
Quality Meters

4 1/2"

Accuracy within 2% of full scale. DC meters have D'Arsonval moving coil movements. Jeweled bearings and hardened alloy steel pivots assure highly dependable service. Metal dial faces, finished in white enamel. Have molded zero-adjusters and cushioned ceramic pointer stops. Steel parts are rustproofed. Black bakelite cases. Av. shpg. wt., 1 1/2 lbs. When ordering, include Range and Model Number of meter. \*In size table indicates depth of meter but does not include terminals.



## METER DIMENSIONS ROUND FLUSH MOUNTING

Model No.	Flange	Body Dia.	Depth	Scale Length
221T	2 1/2"	2 1/4"	1 5/8"	1.76"
231S	2 1/2"	2 1/4"	1 3/4"	1.58"
321T	3 1/2"	2 3/4"	1 3/4"	2.49"
331S	3 1/2"	2 3/4"	1 3/4"	2.22"
361	3 1/2"	2 3/4"	2"	2.22"

## RECTANGULAR FLUSH MOUNTING

Model No.	Flange	Body Dia.	Depth	Scale Length
227T	2 1/2 x 2 3/4"	2 1/4"	1"	1.76"
237S	2 1/2 x 2 3/4"	2 1/4"	1 1/4"	1.58"
327T	3 1/2 x 3 3/4"	2 3/4"	1 1/4"	2.49"
337S	3 1/2 x 3 3/4"	2 3/4"	1 1/4"	2.22"
420	4 1/2 x 4 3/4"	2 3/4"	1 1/4"	4.04"
430	4 1/2 x 4 3/4"	2 3/4"	1 1/4"	3.6"

## AC VOLTMETERS

Use on frequencies from 25 to 133 cycles. †With external wire-wound series resistors.

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH
0-3	66 F 259	66 F 279	9.70
0-5	66 F 250	66 F 270	
0-10	66 F 251	66 F 271	
0-15	66 F 252	66 F 272	
0-25	66 F 253	66 F 273	
0-50	66 F 254	66 F 274	10.68
0-100	66 F 255	66 F 275	
0-150	66 F 256	66 F 276	11.17
0-250	66 F 257	66 F 277	
0-500†	66 F 258	66 F 278	15.39

Range	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH
0-3	66 F 983	66 F 984	9.70
0-5	66 F 983	66 F 984	
0-10	66 F 983	66 F 984	
0-15	66 F 983	66 F 984	
0-25	66 F 983	66 F 984	
0-50	66 F 983	66 F 984	10.68
0-100	66 F 983	66 F 984	
0-150	66 F 983	66 F 984	11.17
0-250	66 F 983	66 F 984	
0-500†	66 F 983	66 F 984	15.39

Range	420 4 1/2" Rect.	NET EACH
0-3	66 F 983	9.70
0-5	66 F 983	
0-10	66 F 983	
0-15	66 F 983	
0-25	66 F 983	
0-50	66 F 983	10.68
0-100	66 F 983	
0-150	66 F 983	11.17
0-250	66 F 983	
0-500†	66 F 983	15.39

## DC MICROAMMETERS

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH
0-20	66 F 054	66 F 015	17.25
0-50	66 F 055	66 F 016	14.60
0-100	66 F 056	66 F 017	12.74
0-200	66 F 057	66 F 018	10.88
0-500	66 F 058	66 F 019	10.39

Range	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH
0-20	66 F 059	66 F 049	17.84
0-50	66 F 060	66 F 050	15.09
0-100	66 F 061	66 F 051	13.23
0-200	66 F 062	66 F 052	11.47
0-500	66 F 063	66 F 053	10.88

## DC MILLIAMMETERS

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH	420 4 1/2" Rect.	NET EACH
0-1	66 F 150	66 F 170	9.70	66 F 120	66 F 100	10.29	66 F 136	11.37
0-1.5	66 F 151	66 F 171		66 F 121	66 F 101		66 F 136	
0-3	66 F 152	66 F 172		66 F 122	66 F 102		66 F 137	
0-5	66 F 153	66 F 173	10.09	66 F 123	66 F 103	10.68	66 F 138	11.76
0-10	66 F 154	66 F 174		66 F 124	66 F 104		66 F 139	
0-15	66 F 155	66 F 175		66 F 125	66 F 105		66 F 140	
0-25	66 F 156	66 F 176	10.49	66 F 126	66 F 106	10.98	66 F 141	12.05
0-50	66 F 157	66 F 177		66 F 127	66 F 107		66 F 142	
0-75	66 F 158	66 F 178		66 F 128	66 F 108		66 F 143	
0-100	66 F 159	66 F 179	10.88	66 F 129	66 F 109	11.56	66 F 144	12.64
0-150	66 F 158	66 F 178		66 F 130	66 F 110		66 F 145	
0-200	66 F 159	66 F 179		66 F 131	66 F 111		66 F 146	
0-250	66 F 160	66 F 180	11.33	66 F 132	66 F 112	11.92	66 F 147	12.94
0-300	66 F 161	66 F 181		66 F 133	66 F 113		66 F 148	
0-400	66 F 162	66 F 182		66 F 134	66 F 114		66 F 149	
0-500	66 F 163	66 F 183	12.84	66 F 132	66 F 112	13.33	66 F 147	14.41
0-750	66 F 163	66 F 183		66 F 133	66 F 113		66 F 148	
0-1000	66 F 164	66 F 184	66 F 134	66 F 114	66 F 149			

## DC VOLTMETERS

1000 OHMS PER VOLT—WITH CARBON, FILM-TYPE RESISTORS

Economical units. For use where high humidity is not encountered. †Have external resistors. Specify Range and Type No. when ordering.

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH	420 4 1/2" Rect.	NET EACH
0-10	66 F 903	66 F 923	10.49	66 F 943	66 F 963	10.98	66 F 983	12.05
0-15	66 F 904	66 F 924		66 F 944	66 F 964		66 F 984	
0-25	66 F 905	66 F 925		66 F 945	66 F 965		66 F 985	
0-50	66 F 906	66 F 926		66 F 946	66 F 966		66 F 986	
0-100	66 F 907	66 F 927		66 F 947	66 F 967		66 F 987	
0-150	66 F 908	66 F 928	10.98	66 F 948	66 F 968	11.56	66 F 988	12.64
0-200	66 F 909	66 F 929		66 F 949	66 F 969		66 F 989	
0-250	66 F 910	66 F 930		66 F 950	66 F 970		66 F 990	
0-500	66 F 911	66 F 931		66 F 951	66 F 971		66 F 991	
0-500	66 F 912†	66 F 932†		66 F 952	66 F 972		66 F 992	
0-750	66 F 913†	66 F 933†	66 F 953	66 F 973	66 F 993			
0-1000	66 F 914†	66 F 934†	13.03	66 F 954†	66 F 974†	13.62	66 F 994†	14.70
0-2000	66 F 915†	66 F 935†		66 F 955†	66 F 975†		66 F 995†	
0-3000	66 F 916†	66 F 936†		66 F 956†	66 F 976†		66 F 996†	
0-4000	66 F 917†	66 F 937†		66 F 957†	66 F 977†		66 F 997†	
0-5000	66 F 918†	66 F 938†		66 F 958†	66 F 978†		66 F 998†	

1000 OHMS PER VOLT—WITH WIRE-WOUND MULTIPLIER RESISTORS

Have moisture-resistant, vacuum-sealed, wire-wound resistors. Specify Range and Type No. when ordering.

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH	420 4 1/2" Rect.	NET EACH
0-1	66 F 700	66 F 720	10.49	66 F 740	66 F 760	10.98	66 F 780	12.05
0-3	66 F 739	66 F 759		66 F 762	66 F 782		66 F 802	
0-5	66 F 740	66 F 760		66 F 763	66 F 783		66 F 803	
0-10	66 F 741	66 F 761		66 F 764	66 F 784		66 F 804	
0-25	66 F 742	66 F 762		66 F 765	66 F 785		66 F 805	
0-50	66 F 743	66 F 763	12.84	66 F 766	66 F 786	13.33	66 F 773	14.41
0-100	66 F 744	66 F 764		66 F 767	66 F 787		66 F 806	
0-150	66 F 745	66 F 765		66 F 768	66 F 788		66 F 807	
0-200	66 F 746	66 F 766		66 F 769	66 F 789		66 F 808	
0-300	66 F 747	66 F 767		66 F 770	66 F 790		66 F 809	
0-500	66 F 748	66 F 768	13.33	66 F 771	66 F 791	13.92	66 F 774	14.99
0-100	66 F 749	66 F 769		66 F 772	66 F 792		66 F 810	
0-150	66 F 750	66 F 770		66 F 773	66 F 793		66 F 811	
0-200	66 F 751	66 F 771		66 F 774	66 F 794		66 F 812	
0-300	66 F 752	66 F 772		66 F 775	66 F 795		66 F 813	
0-500	66 F 753	66 F 773	66 F 776	66 F 796	66 F 814			
0-1000	66 F 754	66 F 774	66 F 777	66 F 797	66 F 815			
0-1500	66 F 755	66 F 775	66 F 778	66 F 798	66 F 816			
0-2000	66 F 756	66 F 776	66 F 779	66 F 799	66 F 817			
0-3000	66 F 757	66 F 777	66 F 780	66 F 800	66 F 818			
0-5000	66 F 758	66 F 778	66 F 781	66 F 801	66 F 819			

## DC AMMETERS

Ammeters are self-contained up to and including 50 amperes. Meters for 100 amperes (50 millivolts) and higher have switchboard type shunts with 5-ft. leads.

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH	420 4 1/2" Rect.	NET EACH
0-1	66 F 510	66 F 525	9.70	66 F 450	66 F 440	10.29	66 F 460	11.37
0-5	66 F 511	66 F 526	10.49	66 F 451	66 F 441	10.98	66 F 461	12.05
0-10	66 F 512	66 F 527	10.49	66 F 452	66 F 442	10.98	66 F 462	12.05
0-15	66 F 513	66 F 528	10.49	66 F 453	66 F 443	10.98	66 F 463	12.05
0-25	66 F 514	66 F 529	10.49	66 F 454	66 F 444	10.98	66 F 464	12.05
0-30	66 F 515	66 F 530	10.49	66 F 455	66 F 445	10.98	66 F 465	12.05
0-50	66 F 516	66 F 531	10.49	66 F 456	66 F 446	10.98	66 F 466	12.05
0-100	66 F 517	66 F 532	10.49	66 F 457	66 F 447	10.98	66 F 467	12.05
0-200	66 F 518	66 F 533	17.25	66 F 458	66 F 448	17.84	66 F 468	18.91
0-300	66 F 519	66 F 534	17.25	66 F 459	66 F 449	17.84	66 F 469	18.91
0-500	66 F 520	66 F 535	18.72	66 F 460	66 F 450	19.31	66 F 470	20.38
0-750	66 F 521	66 F 536	23.52	66 F 461	66 F 451	24.11	66 F 471	25.19

## AC AMMETERS

Range	221T 2 1/2" Rnd.	227T 2 1/2" Rect.	NET EACH	327T 3" Rect.	321T 3 1/2" Rnd.	NET EACH	420 4 1/2" Rect.	NET EACH
0-1	66 F 340	66 F 350	9.70	66 F 320	66 F 300	10.29	66 F 330	11.37
0-2	66 F 341	66 F 351		66 F 321	66 F 301		66 F 331	
0-3	66 F 342	66 F 352		66 F 322	66 F 302		66 F 332	
0-5	66 F 343							

# Triplett Panel Meters

## GLASS-FRONT PANEL METERS

(Continued)

### AC MILLIAMMETERS

2 1/2", 3", 3 1/2" and 4 1/2" meters. Include range and model number in order.

Range	231S		NET EACH
	2 1/2" Rnd.	2 3/4" Rect.	
0-10	66 F 570	66 F 580	9.70
0-15	66 F 571	66 F 581	
0-25	66 F 572	66 F 582	
0-50	66 F 573	66 F 583	
0-100	66 F 574	66 F 584	
0-200	66 F 575	66 F 585	9.70
0-250	66 F 576	66 F 586	
0-500	66 F 577	66 F 587	

Range	337S		NET EACH
	3" Rect.	3 1/2" Rnd.	
0-10	66 F 490	66 F 470	10.29
0-15	66 F 491	66 F 471	
0-25	66 F 488	66 F 476	
0-50	66 F 492	66 F 472	
0-100	66 F 493	66 F 473	
0-200	66 F 489	66 F 477	10.29
0-250	66 F 494	66 F 474	
0-500	66 F 495	66 F 475	

Range	430		NET EACH
	4 1/2" Rect.		
0-10	66 F 496		11.37
0-15	66 F 446		
0-25	66 F 447		
0-50	66 F 448		
0-100	66 F 497		
0-200	66 F 445		11.37
0-250	66 F 498		
0-500	66 F 499		

### DC MILLIVOLTMETERS

3", 3 1/2" and 4 1/2" meters. Excellent for use in test equipment.

Range	327T		NET EACH
	3" Rect.	3 1/2" Rnd.	
0-50	66 F 078	66 F 088	10.29
0-100	66 F 079	66 F 089	

Range	420		NET EACH
	4 1/2" Rect.		
0-50	66 F 098		11.37
0-100	66 F 099		

### VOLUME UNIT METERS

Highly damped meters. "A" scale; -20 to +3 vol. units. 0-100% scale for 600-ohm lines. Steady state ref., 1 mw. Zero adjustment. Internal impedance, 3900 ohms. In rugged black cases of molded bakelite. \*Illuminated. †Portable. 3x3 1/2" bakelite case, 18" cord, phone plug and jack.

Range	327T		420	
	3" Rect.	NET EACH	4 1/2" Rect.	NET EACH
66 F 075	18.72	66 F 071	23.52	
66 F 076*	20.48	66 F 072*	26.75	
66 F 077†	22.54			

### DECIBEL METERS (+6 to -10 db)

Power level indicators. For measuring sound or noise level. Read up 6 and down 10 db. Zero db is 1.73 volts. Reference level is 6 milliwatts. Calibrated for 500-ohm line. Internal resistance 5000 ohms. \*Illuminated.

Range	327T		420	
	3" Rect.	NET EACH	4 1/2" Rect.	NET EACH
66 F 263	14.99	66 F 265	16.76	
66 F 264*	16.95	66 F 266*	18.03	

### TYPE 361 WATTMETERS

Electrodynamometer-type instrument. Useful as appliance tester, wattmeter, voltmeter or ammeter. 2% accuracy for either DC or single-phase AC to 133 cps. 3 1/2" dia. flange. Barrel dia., 2 3/4"; depth, 1 1/4".

Stock No.	Watts	Volts	Amps	NET EACH
66 F 285	0-300	150	2	
66 F 287	0-750	150	5	

### ZERO CENTER DC MICROAMMETERS

Range	327T		321T		NET EACH
	3" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	
50-0-50	66 F 086		66 F 084		13.23
100-0-100	66 F 087		66 F 085		11.47

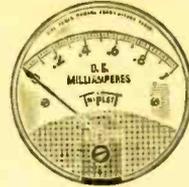
Range	420		NET EACH
	4 1/2" Rect.		
50-0-50	66 F 094		14.31
100-0-100	66 F 095		12.54

## TYPE PL PLASTIC-FRONT PANEL METERS

### METER DIMENSIONS

\*Round †Rectangular

Mfr's Type	Flange	Body Dia.	Depth	Scale Length
221-PL*	2 1/4"	2 1/4"	1"	2.197"
227-PL†	2 1/4"x2 3/8"	2 3/8"	1 1/2"	2.197"
231-PL*	2 1/4"	2 1/4"	1"	1.92"
321-PL*	3 1/2"	2 1/4"	1"	3.11"
327-PL†	3 3/4"x3 1/4"	2 1/4"	1 1/2"	3.11"
337-PL*	3 1/2"	2 1/4"	1"	2.65"
337-PL†	3 1/4"x3 1/4"	2 1/4"	1 1/2"	2.65"
341-PL*	3 1/2"	2 1/4"	1"	3.11"
347-PL†	3 3/4"x3 1/4"	2 1/4"	1 1/2"	3.11"
420-PL†	4 1/4"x4 1/4"	2 1/4"	1 1/4"	4.14"
430-PL†	4 1/4"x4 1/4"	2 1/4"	1 1/4"	3.6"
440-PL†	4 1/4"x4 1/4"	2 1/4"	1 1/4"	4.14"



2 1/2" and 3 1/2" Round



2 1/2", 3 1/2", 4 1/2" Rectangular

An excellent selection of advanced-design panel meters with wrap-around fronts of clear, unbreakable plastic. Have many advantages over conventional style panel meters. Full open dial provides a much longer, more readable scale in same size case. Attractive design enhances appearance of test instruments and panels. All have stud mountings. Raised plastic "coverglass" allows full lighting from an extremely wide angle. Easy-to-read, white enamel finish metal faces with black scales and characters. Accuracy within ±2% on full scale.

DC types have D'Arsonval movements with extra-light moving coil. AC types have air-damped, iron-vane movements. All types have precision jewel bearings and highly polished pivots. Template is provided with each meter for accurate cut-out. Spade-type pointers; molded zero adjusters; and ceramic stops. Av. shpg. wt., 1 1/2 lbs. Please be sure to include the Range and the Model Number on all meter orders. Write for prices or information on Triplett meters that are not listed in the tables below, or for price quotations on meters in quantity lots.

### AC MILLIAMMETERS

Range	331-PL		337-PL		430-PL	
	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-100	66 F 863	10.78	66 F 864	10.78	66 F 854	11.37

### AC VOLTMETERS

Range	231-PL		237-PL		331-PL		337-PL		430-PL	
	2 1/2" Rnd.	NET EACH	2 3/4" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-50	87 F 444	10.19	87 F 445	10.19	66 F 859	10.78	66 F 780	10.78	66 F 799	11.37
0-150	66 F 825	11.17	66 F 826	11.17	66 F 860	11.66	66 F 781	11.66	66 F 888	12.25
0-300	87 F 446	12.25	87 F 447	12.25	66 F 861	12.74	66 F 782	12.74	66 F 889	13.33

### AC AMMETERS

Range	231-PL		237-PL		331-PL		337-PL		430-PL	
	2 1/2" Rnd.	NET EACH	2 3/4" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-5	66 F 828	10.19	66 F 784	10.19	66 F 865	10.78	66 F 787	10.78	66 F 892	11.37
0-10	66 F 829		66 F 783		66 F 866		66 F 788			
0-25	66 F 833		66 F 786		66 F 867		66 F 789			
0-50	66 F 835		66 F 792		66 F 868		66 F 790			
0-50	66 F 832		66 F 785		66 F 869		66 F 791			

### DC MILLIAMMETERS

Range	221-PL		227-PL		321-PL		327-PL		420-PL	
	2 1/2" Rnd.	NET EACH	2 3/4" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-1	66 F 812	10.19	66 F 814	10.19	66 F 843	10.78	66 F 793	10.78	66 F 878	11.37
0-50	66 F 813	10.58	66 F 815	10.58	66 F 844	11.17	66 F 794	11.17	66 F 879	11.76
0-100	66 F 824	10.58	66 F 811	10.58	66 F 845	11.17	66 F 795	11.17	66 F 778	11.76
0-200	66 F 827	10.58	66 F 822	10.58	66 F 846	11.17	66 F 796	11.17	66 F 779	11.76
0-500	66 F 849		66 F 854		66 F 848		66 F 798		66 F 883	

### DC VOLTMETERS

#### 1000 OHMS PER VOLT—FILM-TYPE MULTIPLIER RESISTORS

Range	221-PL		227-PL		321-PL		327-PL		420-PL	
	2 1/2" Rnd.	NET EACH	2 3/4" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-50	66 F 804	10.98	66 F 805	10.98	66 F 834	11.47	66 F 806	11.47	66 F 872	12.05

### DC AMMETERS

Range	221-PL		227-PL		321-PL		327-PL		420-PL	
	2 1/2" Rnd.	NET EACH	2 3/4" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-5	87 F 448	10.98	87 F 449	10.98	66 F 855	11.47	66 F 880	11.47	66 F 885	12.05
0-10	66 F 822		66 F 830		66 F 856		66 F 881		66 F 886	

### DC MICROAMMETERS

Range	221-PL		227-PL		321-PL		327-PL		420-PL	
	2 1/2" Rnd.	NET EACH	2 3/4" Rect.	NET EACH	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-50	66 F 807	15.09	66 F 809	15.09	66 F 836	15.58	66 F 873	15.58	66 F 874	16.17
0-100	66 F 808	13.23	66 F 810	13.23	66 F 837	13.72	66 F 876	13.72	66 F 875	14.31
0-200	66 F 737	11.37	66 F 738	11.37	66 F 838	11.96	66 F 877	11.96	66 F 871	12.54

### THERMO AMMETERS (RF)

Range	341-PL		347-PL		440-PL	
	3 1/2" Rnd.	NET EACH	3 3/4" Rect.	NET EACH	4 1/2" Rect.	NET EACH
0-5	66 F 818	11.86	66 F 817	11.86	66 F 819	12.45

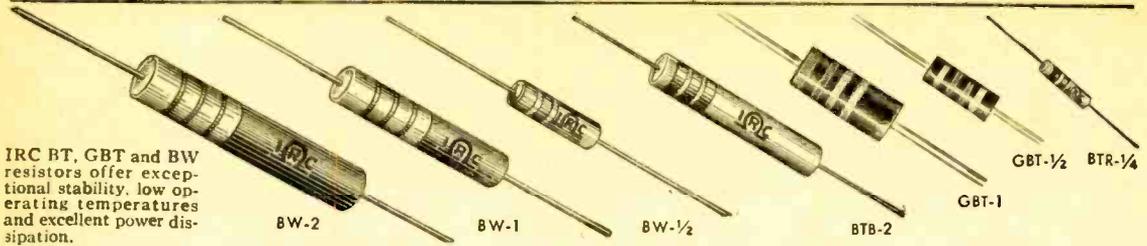
### DB METER

MODEL 321-PL. High-quality decibel meter. Ideal for use in shop, lab, etc. Accurate within 5%. Rated at 6 milliwatts. Has standard decibel meter internal resistance of 5000 ohms. Zero db equals 1.73 volts. Range, +6 to -10 db. Meter scale calibrated for standard 500 ohm line. 3 1/2" round. Shpg. wt., 1 1/2 lbs. 66 F 811. NET.....15.68

### VOLUME UNIT METER ("A" SCALE)

MODEL 321-PL. Highly accurate volume unit meter. Excellent for use in radio and TV broadcasting stations. 3900 ohms internal impedance. Steady state reference, 1 milliwatt. Designed for use with all 600-ohm audio lines. Also includes a 0-100% scale. Range, -20 db to +3 db. Meter scale is 3 1/2" round. Shpg. wt., 1 1/2 lbs. 66 F 897. NET.....19.31

# IRC Resistors



IRC BT, GBT and BW resistors offer exceptional stability, low operating temperatures and excellent power dissipation.

## BT, GBT AND BW 10% INSULATED TYPES

Type BT and GBT Fixed Composition. Exceed MIL-R-11 specifications. Withstand 50-100% overloads for short periods. EIA (RETMA) coded. Sizes: BTR,  $\frac{23}{32} \times \frac{3}{32}$ "; GBT- $\frac{1}{2}$ ,  $\frac{25}{64} \times \frac{9}{64}$ "; GBT-1,  $\frac{1}{16} \times \frac{1}{32}$ "; BTB,  $\frac{1}{4} \times \frac{1}{4}$ ". Figure in Type No. indicates wattage rating.

Type BW Fixed Wire-Wound (Low Power). Withstand 50% to 100% overloads with little or no resistance change. Have standard EIA (RETMA) color coding. Sizes: BW- $\frac{1}{2}$ ,  $\frac{5}{8} \times \frac{3}{16}$ "; BW-1,  $\frac{1}{4} \times \frac{1}{4}$ "; BW-2,  $\frac{1}{3} \times \frac{1}{4}$ ". Figure in Type No. indicates wattage rating.

### 10% EIA (RETMA) VALUES—SPECIFY RESISTANCE WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0.27	1.2	5.6	27	120	560	2700	12,000	56,000	0.27 meg	1.2 meg	5.6 meg	
0.33	1.5	6.8	33	150	680	3300	15,000	68,000	0.33 meg	1.5 meg	6.8 meg	
0.39	1.8	8.2	39	180	820	3900	18,000	82,000	0.39 meg	1.8 meg	8.2 meg	
0.47	2.2	10	47	220	1000	4700	22,000	0.47 meg	2.2 meg	10 meg		
0.56	2.7	12	56	270	1200	5600	27,000	0.12 meg	0.56 meg	2.7 meg	12 meg	
0.68	3.3	15	68	330	1500	6800	33,000	0.15 meg	0.68 meg	3.3 meg	15 meg	
0.82	3.9	18	82	390	1800	8200	39,000	0.18 meg	0.82 meg	3.9 meg	18 meg	
1.0	4.7	22	100	470	2200	10,000	47,000	0.22 meg	1.0 meg	4.7 meg	22 meg	

### TYPE BT, GBT 10% FIXED COMPOSITION

Stock No.	Mfr's Type	MIL Equiv.	Values	NET EACH	
				1-9	10-99
1 MM 010	BTR- $\frac{1}{4}$	RC09	10 $\Omega$ to 22 megs	12c	9c
1 MM 000	GBT- $\frac{1}{2}$	RC20	10 $\Omega$ to 22 megs	12c	9c
1 MM 020	GBT-1	RC32	10 $\Omega$ to 22 megs	18c	11c
1 MM 050	BTB-2	RC41	100 $\Omega$ to 22 megs	24c	19c

### TYPE BW 10% FIXED WIRE-WOUND (Low Power)

Stock No.	Mfr's Type	MIL Equiv.	Values (See Chart Above)	NET EACH	
				1-9	10-99
1 MM 061	BW- $\frac{1}{2}$	RU-3	0.27 to 8.2 $\Omega$	24c	19c
1 MM 060	BW- $\frac{1}{2}$	RU-3	10 to 820 $\Omega$	20c	16c
1 MM 080	BW-1	RU-4	0.47 to 4700 $\Omega$	30c	24c
1 MM 100	BW-2	RU-6	1 to 8200 $\Omega$	40c	31c

## BT, GBT AND BW 5% INSULATED TYPES

Type BT, GBT Fixed Composition. Filament carbon 5% resistors. For use in close tolerance circuits. EIA (RETMA) color coding. Completely insulated.

Type BW Fixed Wire-Wound (Low Power). Similar in appearance to carbon resistors, but have double-width first color band. Completely insulated.

### 5% EIA (RETMA) VALUES—SPECIFY RESISTANCE WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0.24	1.1	5.1	24	110	510	2400	11,000	51,000	0.24 meg	1.1 meg	5.1 meg	
0.27	1.2	5.6	27	120	560	2700	12,000	56,000	0.27 meg	1.2 meg	5.6 meg	
0.30	1.3	6.2	30	130	620	3000	13,000	62,000	0.30 meg	1.3 meg	6.2 meg	
0.33	1.5	6.8	33	150	680	3300	15,000	68,000	0.33 meg	1.5 meg	6.8 meg	
0.36	1.6	7.5	36	160	750	3600	16,000	75,000	0.36 meg	1.6 meg	7.5 meg	
0.39	1.8	8.2	39	180	820	3900	18,000	82,000	0.39 meg	1.8 meg	8.2 meg	
0.43	2.0	9.1	43	200	910	4300	20,000	91,000	0.43 meg	2.0 meg	9.1 meg	
0.47	2.2	10	47	220	1000	4700	22,000	0.1 meg	0.47 meg	2.2 meg	10 meg	
0.51	2.4	11	51	240	1100	5100	24,000	0.11 meg	0.51 meg	2.4 meg	11 meg	
0.56	2.7	12	56	270	1200	5600	27,000	0.12 meg	0.56 meg	2.7 meg	12 meg	
0.62	3.0	13	62	300	1300	6200	30,000	0.13 meg	0.62 meg	3.0 meg	13 meg	
0.68	3.3	15	68	330	1500	6800	33,000	0.15 meg	0.68 meg	3.3 meg	15 meg	
0.75	3.6	16	75	360	1600	7500	36,000	0.16 meg	0.75 meg	3.6 meg	16 meg	
0.82	3.9	18	82	390	1800	8200	39,000	0.18 meg	0.82 meg	3.9 meg	18 meg	
0.91	4.3	20	91	430	2000	9100	43,000	0.20 meg	0.91 meg	4.3 meg	20 meg	
1.0	4.7	22	100	470	2200	10,000	47,000	0.22 meg	1.0 meg	4.7 meg	22 meg	

### TYPE BT, GBT 5% FIXED COMPOSITION

Stock No.	Mfr's Type	MIL Equiv.	Values	NET EACH	
				1-9	10-99
1 MM 015	BTR- $\frac{1}{4}$	RC09	10 $\Omega$ to 22 megs	24c	19c
1 MM 005	GBT- $\frac{1}{2}$	RC20	10 $\Omega$ to 22 megs	24c	19c
1 MM 025	GBT-1	RC32	10 $\Omega$ to 22 megs	36c	28c
1 MM 035	BTB-2	RC41	100 $\Omega$ to 22 megs	48c	37c

### TYPE BW 5% FIXED WIRE-WOUND (Low Power)

Stock No.	Mfr's Type	MIL Equiv.	Values	NET EACH	
				1-9	10-99
1 MM 066	BW- $\frac{1}{2}$	RU-3	0.24 $\Omega$ to 9.1 $\Omega$	48c	38c
1 MM 065	BW- $\frac{1}{2}$	RU-3	10 $\Omega$ to 820 $\Omega$	30c	24c
1 MM 085	BW-1	RU-4	0.47 $\Omega$ to 5100 $\Omega$	45c	35c
1 MM 105	BW-2	RU-6	1.0 $\Omega$ to 8200 $\Omega$	60c	47c

## MULTI-RANGE 10-WATT WIRE-WOUND RESISTORS



Type MR. Unique, new resistors combining 4 separate 10-watt elements in a single, compact unit. With instructions for connecting element leads to provide up to 47 different resistance values within the ranges listed below. Shpg. wt., 3 oz. 2 per pkg.

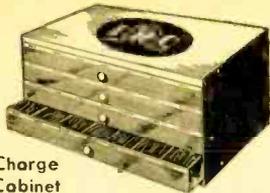


Type 55 Power Resistor Assortment. A complete power resistor kit consisting of 10 Type MR multi-range resistors. Kit includes 2 of each Type MR resistor listed in the table at left. Ideal for radio-TV servicemen, experimenters, Amateurs, etc. 200 different resistance values can be obtained from these 10 multi-range units. Provides complete 10-watt coverage right at your fingertips—resistance values range all the way from 0.5 ohms to 50,000 ohms. Steatite housings provide excellent insulation. Supplied in convenient plastic box. Size,  $\frac{1}{4} \times \frac{5}{8} \times \frac{3}{4}$ ". Shpg. wt., 1 lb.

Stock No.	Type	Resistance Range	NET PER PKG.
31 M 580	MR1	47 values from 0.5 through 15 ohms	1.18
31 M 581	MR2	47 values from 5.0 through 150 ohms	1.18
31 M 582	MR3	47 values from 50 through 1500 ohms	1.18
31 M 583	MR4	47 values from 500 through 15,000 ohms	1.18
31 M 584	MR5	12 values from 3000 through 50,000 ohms	1.76

31 M 585. NET. 6.47

# IRC Resistors



No Charge  
for Cabinet

## RESISTOR ASSORTMENTS

Keep your resistor stocks complete, orderly and accessible with IRC metal Resist-O-Cabinets. These space saving cabinets have 4 drawers and 28 compartments and are available with a choice of 4 resistor assortments ( $\pm 10\%$ ). Each resistance value is in a separate compartment. Prices are for resistors only—no charge for cabinets.  $5\frac{3}{4} \times 5\frac{1}{2} \times 10\frac{1}{2}$ ".

### METAL RESIST-O-CABINETS

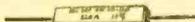
**Assortment No. 3A.** 120 2-watt resistors as follows: 7 each: 8200, 10K, 22K, 47K; 5 each: 1K, 6800, 15K, 0.1 meg; 4 each: 100, 330, 470, 1500, 2200, 3300, 4700, 27K, 1.0 meg; 3 each: 47, 82, 150, 220, 270, 3900, 0.22 meg; 0.47 meg; 2 each: 4.7, 10, 22, 68; 1 each: 157, 27, 33, 39. With Resist-O-Cabinet. 4 $\frac{1}{2}$  lbs. **28.22**

**Assortment No. 4A.** 150 IRC  $\frac{1}{2}$ -watt resistors: 8 each: 1K, 47K, 0.1 meg, 0.27 meg, 470K, 1.0 meg; 7 each: 4700, 10K, 0.22 meg, 2.2 meg; 5 each: 33K, 22K, 27K, 33K, 0.33 meg, 4.7 meg; 4 each: 100, 470, 1500, 2200, 2700, 50K, 68K, 3.3 meg; 3 each: 47, 220, 270, 10. With Resist-O-Cabinet. Shpg. wt., 4 $\frac{1}{2}$  lbs. **17.64**

**Assortment No. 5A.** 125 IRC 1-watt resistors: 7 each: 1K, 10K, 27K, 47K, 0.1 meg, 0.27 meg, 0.47 meg, 1.0 meg; 5 each: 2200, 4700, 22K; 4 each: 33K, 39K, 68K; 3 each: 47, 100, 150, 220, 270, 470, 1500, 2700, 3300, 15K, 0.15 meg, 0.22 meg, 2.2 meg, 4.7 meg. With metal Resist-O-Cabinet. Shpg. wt., 4 $\frac{3}{4}$  lbs. **22.05**

**Combination Assortment No. 6A.** Complete resistor stock for AM, FM and TV in one handy cabinet. 139 IRC insulated and Type DCF resistors.  $\frac{1}{2}$ -Watt: 4 each: 1000, 47K, 100K, 270K, 470K, 1.0 meg; 3 each: 4700, 10K, 220K, 2.2 meg; 2 each: 47, 100, 150, 220, 270, 470, 1500, 2200, 2700, 3300, 15K, 22K, 27K, 33K, 39K, 68K, 150K, 4.7 meg, 1 Watt: 4 each: 1000, 10K, 27K, 100K, 1.0 meg; 3 each: 47K, 470K, 2.2 meg; 2 each: 3300, 15K, 22K, 68K, 150K, 270K; 1 each: 47, 100, 150, 220, 270, 470, 1500, 2200, 2700, 4700, 33K, 39K, 220K, 4.7 meg, 2 Watt: 1 each: 47, 100, 470, 4700, 10K, 22K, 47K, Type DCF: 1 each: 1000, 10K, 100K, 1.0 meg, 5.0 meg. With metal Resist-O-Cabinet. Wt., 5 lbs. **22.76**

### AXIAL-LEAD POWER RESISTORS



**Type PW-10.** IRC 10-watt wire-wound resistor with glass fiber core. Element-lead assembly is fully sealed and insulated in rectangular ceramic case. Particularly recommended for circuits where a stable resistor is required with an actual wattage dissipation of 10 watts or less. Has axial leads  $1\frac{1}{2}$ " long. Tolerance  $\pm 10\%$ . Size less leads,  $1\frac{1}{2} \times \frac{3}{8} \times \frac{3}{8}$ ". Shpg. wt., 2 oz. Specify values when ordering—see listing below.

#### VALUES AVAILABLE (OHMS)

1	10	75	300	1500	5000	20,000
2	15	100	500	2000	7500	25,000
3	20	150	750	2500	8200	
4	25	200	1000	3000	10,000	
5	50	250	1250	4000	15,000	

1 M M 190, NET EACH ..... 35¢

### FUSE-RESISTORS

**Type FR 7.5.** A highly reliable plug-in type resistor with characteristics of a slow-blow fuse. For series-string filament circuits in television sets and other equipment. Prevents severe tube losses—opens filament circuits if current is excessive. May be used to replace similar units in Raytheon, RCA, Motorola, Sylvania, Zenith, etc. Has fully insulated ceramic body. Resistance, 7.5 ohms. Shpg. wt., 3 oz. **2 M 771, NET EACH ..... 44¢**

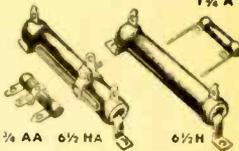


**Type FR 5.** Same as above, but 5 ohms. Shpg. wt., 3 oz. **2 M 773, NET EACH ..... 44¢**

**Type FR 5.6.** Same as above, but 5.6-ohm. Shpg. wt., 3 oz. **2 M 772, NET EACH ..... 44¢**

## WIRE-WOUND POWER RESISTORS

Large, non-porous ceramic cores, and thick cement coatings. All have lugs; Types 1 $\frac{1}{4}$  A and 2, also have 1 $\frac{1}{4}$ " leads. Units of 25 watts and higher have mounting brackets. All  $\pm 10\%$  tolerance except fixed types of 50 ohms and up, which are  $\pm 5\%$ . **NOTES ON ADJUSTABLE TYPES:** Units of 25 watts and higher have silver contacts. Where range of values is given in individual listings, consult table for specific values available; e.g., 1 to 1000 means all values listed in table between and including 1 and 1000. Specify resistance value when ordering. Av. 1 $\frac{1}{4}$  AA 6 $\frac{1}{2}$ " HA 6 $\frac{1}{2}$ " H. Shpg. wt., 10-50 watts, 4 oz.; 100-200 watts, 1 lb.



### STOCK RANGES—SPECIFY RESISTANCE VALUE

VALUES AVAILABLE IN OHMS						
1†	25†	350*‡	1250*	3500*	8500*‡	30,000*‡
2†	50†	400	4000†	4000†	9000†	40,000*‡
3†	75†	500†	1500†	4500*‡	10,000†	50,000*‡
5†	100†	600*‡	1750*‡	5000†	12,000*‡	100,000*‡
7.5*‡	150†	750†	2000†	6000*	12,500*‡	
10†	200†	800*	2250*‡	7000*	15,000	
15†	250†	1000†	2500†	7500*‡	20,000	
20*‡	300†	1200*	3000†	8000*	25,000	

### FIXED POWER RESISTORS

1 $\frac{1}{4}$ A (AB)—10 WATT			4 $\frac{1}{2}$ E (EP)—50 WATT		
To 25,000 ohms, except 2 and 3 ohms. 1 $\frac{1}{2}$ " x $\frac{1}{2}$ ".			In values indicated below only. 4 $\frac{1}{2}$ " x $\frac{1}{2}$ ".		
Stock No.	Ohms	EACH	Stock No.	Ohms	EACH
1 M M 20	1 to 1000	.47	1 M M 160	1 and 2	1.47
1 M M 21	1200 to 5000	.53	1 M M 161	5, 10, 25, 50, 75, 100, 250, 500, 1000	1.06
1 M M 22	6,000 to 10,000	.59	1 M M 162	1500, 2000, 2500, 3000, 4000, 5000	1.12
1 M M 23	12,000 to 20,000	.65	1 M M 163	6000 and 10,000	1.23
1 M M 24	25,000	.71	1 M M 168	100,000	2.06

2 D (DG)—20 WATT			6 $\frac{1}{2}$ H (HA)—100 WATT		
All values to 50,000 ohms, except 2 x $\frac{1}{2}$ ".			In values indicated below only. 6 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ ".		
1 M M	Ohms	EACH	1 M M	Ohms	EACH
1 M M 140	1 to 1000	.62	1 M M 300	5, 10, 25, 50, 75, 100, 150, 250, 500, 750, 1000	1.56
1 M M 141	1200 to 5000	.65	1 M M 301	1250, 1500, 2000, 2500, 3000, 5000	1.65
1 M M 142	6000 to 10,000	.71	1 M M 302	7500	1.76
1 M M 143	15,000 and 20,000	.76			
1 M M 144	25,000 to 40,000	.88			
1 M M 145	50,000	1.03			

### ADJUSTABLE POWER RESISTORS

1 $\frac{1}{4}$ AA (ABA)—10 WATT			6 $\frac{1}{2}$ HA (HAA)—100 WATT		
Available in values to 10,000 marked † in above table. Size, 1 $\frac{1}{2}$ " x $\frac{1}{2}$ ".			Available only in values indicated below. Size, 6 $\frac{1}{2}$ " x $\frac{1}{2}$ ".		
1 M M	Ohms	EACH	1 M M	Ohms	EACH
1 M M 200	1 to 1000	.94	1 M M 260	100, 200, 400, 500, 750, 1000	2.32
1 M M 201	1500 to 5000	1.00	1 M M 261	1500, 3000, 5000	2.38
1 M M 202	7500 and 10,000	1.06	1 M M 262	10,000	2.50
			1 M M 263	15,000 and 20,000	2.65
			1 M M 264	25,000	2.82
			1 M M 265	50,000	2.94
			1 M M 267	100,000	3.20

2 $\frac{1}{2}$ DA (DHA)—25 WATT			10 $\frac{1}{2}$ HA (HOA)—200 WATT		
In all values above, except*. Size, 2 $\frac{1}{2}$ " x $\frac{1}{2}$ ".			Available only in resistances indicated below. Size, 10 $\frac{1}{2}$ " x $\frac{1}{2}$ ".		
1 M M	Ohms	EACH	1 M M	Ohms	EACH
1 M M 220	1 to 1000	1.21	1 M M 340	10, 25, 50, 100, 250, 500, 1000	2.82
1 M M 221	1500 to 5000	1.23	1 M M 341	1500, 2000, 2500, 5000	2.88
1 M M 222	7500 and 10,000	1.29	1 M M 342	10,000	3.06
1 M M 223	15,000 and 20,000	1.35	1 M M 345	50,000	3.35
1 M M 224	25,000	1.47	1 M M 347	100,000	3.67

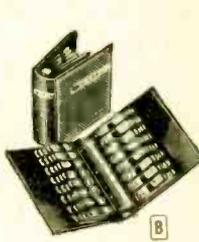
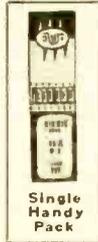
4 $\frac{1}{2}$ EA (EPA)—50 WATT		
In values indicated below only. 4 $\frac{1}{2}$ " x $\frac{1}{2}$ ".		
1 M M	Ohms	EACH
1 M M 240	10, 25, 50, 75, 100, 150, 200, 250, 500, 750, 1000	1.53
1 M M 241	1500, 2000, 2500, 3000, 4000, 5000	1.59
1 M M 242	10,000	1.71
1 M M 243	15,000 and 20,000	1.82
1 M M 244	25,000, 30,000, 40,000	2.00
1 M M 245	50,000	2.12
1 M M 247	100,000	2.53

**Extra Silders.** For adjustable resistors. 3 oz. 2 M 604, For 2 $\frac{1}{2}$  DA, } NET ..... 18¢  
 2 M 605, For 4 $\frac{1}{2}$  EA, } EACH ..... 18¢  
 2 M 606, For 1 $\frac{1}{4}$  A, } NET ..... 26¢  
 2 M 603, 6 $\frac{1}{2}$  HA 10 $\frac{1}{2}$  HA EA, } EACH ..... 26¢

## NEW HANDY-PAK RESISTOR ASSORTMENTS

A choice of 3 different Handy-Pak resistor kits. Designed to keep stocks within quick, easy reach—end clear box configuration. Handy-Paks are uniform size for  $\frac{1}{2}$ ", 1 and 2 watts—one pack for each resistor value. Complete stocks are always visible. All prices shown are for resistors only—no extra charge for pouch, binder or cabinet.



**A Resistor-Caddy.** Resistor companion to the tube caddy. Plastic pouch containing Handy-Paks folds to 6 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ ". Individual pockets keep packets orderly—inventory always visible. Type 41 contains 120, half-watt resistors in 20 popular values from 47 ohms to 10 meg. Type 45 similar but has 80, 1-watt resistors. Shpg. wt., 8 oz. **2 M 782, Type 41, NET ..... 14.11**  
**2 M 783, Type 45, NET ..... 14.11**

**B Resistor-O-Pedia.** Resistor stocks in handy book form. Hardback binder has 3-ring "fingered" inserts for resistors. Complete stock is always visible. \*Indicates total no. of resistors. 9x8 $\frac{1}{4}$ "x2 $\frac{1}{4}$ ". Av. wt., 3 $\frac{1}{2}$ " lbs.

Stock No.	Type	Watts	Values	* No.	NET
2 M 784	44	$\frac{1}{2}$	77	462	54.33
2 M 785	48	1	77	308	55.33
2 M 786	51	2	65	195	45.86

**C Resistor-O-Chest.** An all-metal resistor filing cabinet. Designed to accommodate a complete Handy-Pak assortment. Ideal for the service shop. Provides a safe, convenient storage place. Has hinged lid and metal separators to keep Handy-Paks in order. Case is an attractive blue and yellow. Size, 6 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ ". Type 42 contains 6 resistors of each value, 47 ohms to 10 meg. Type 43 and 47 have 6 of each value, 10 ohms to 22 meg. Type 49 has 3 of each value, 100 ohms through 10 meg. Type 50 has 3 values of each from 100 to 15 meg. Av. shpg. wts.: 42 and 43, 2 $\frac{1}{2}$  lbs.; 46 and 47, 2 $\frac{1}{2}$  lbs.; 49 and 50, 3 lbs. \*Indicates total no. of resistors in assortment.

Stock No.	Type	Watts	Values	* No.	NET
2 M 787	42	$\frac{1}{2}$	34	204	23.99
2 M 788	43	$\frac{1}{2}$	77	462	54.33
2 M 789	46	1	34	136	23.99
2 M 790	47	1	77	308	54.33
2 M 791	49	2	34	102	23.99
2 M 792	50	2	65	195	45.86

# Ohmite Resistors

## "LITTLE DEVIL" RESISTORS



Molded, insulated composition resistors. Meet MIL-R-11B specifications, including salt water immersion and high humidity tests. Dissipate heat rapidly and can be used at their full wattage ratings at 158° F. Tinned copper leads. Breakdown ratings: 1/10 W., 150 v.; 1/2 W., 350 v.; 1 W., 500 v.; 2 W., 750 v. Shpg. wt., 2 oz.

### SPECIFY VALUES DESIRED 10% TOLERANCE RESISTORS

Ohms	Ohms	Ohms	Mega	Mega
10	220	4700	0.1	2.2
12	270	5600	0.12	2.7
15	330	6800	0.15	3.3
18	390	8200	0.18	3.9
22	470	10,000	0.22	4.7
27	560	12,000	0.27	5.6
33	680	15,000	0.33	6.8
39	820	18,000	0.39	8.2
47	1000	22,000	0.47	10.0
56	1200	27,000	0.56	12.0
68	1500	33,000	0.68	15.0
82	1800	39,000	0.82	18.0
100	2200	47,000	1.0	22.0
120	2700	56,000	1.2	27.0
150	3300	68,000	1.5	33.0
180	3900	82,000	1.8	39.0

Stock No.	Watts	NET EACH	
		1-99	100-249†
2 MM 050	1/10"	24c	1.44
2 MM 040	1/8"	12c	.07
2 MM 060	1/4"	18c	1.08
2 MM 080	1/2"	24c	1.44

†Applies to resistors of one value only.  
\*Available only in values from 10 ohms to 1.0 megohm.

### 5% TOLERANCE RESISTORS

Ohms	Ohms	Ohms	Mega	Mega
10	220	4700	0.1	2.2
11	240	5100	0.11	2.4
12	270	5600	0.12	2.7
13	300	6200	0.13	3.0
15	330	6800	0.15	3.3
16	360	7500	0.16	3.6
18	390	8200	0.18	3.9
20	430	9100	0.20	4.3
22	470	10,000	0.22	4.7
24	510	11,000	0.24	5.1
27	560	12,000	0.27	5.6
30	620	13,000	0.30	6.2
33	680	15,000	0.33	6.8
36	750	16,000	0.36	7.5
39	820	18,000	0.39	8.2
43	910	20,000	0.43	9.1
47	1000	22,000	0.47	10.0
51	1100	24,000	0.51	11.0
56	1200	27,000	0.56	12.0
62	1300	30,000	0.62	13.0
68	1500	33,000	0.68	15.0
75	1600	36,000	0.75	16.0
82	1800	39,000	0.82	18.0
91	2000	43,000	0.91	20.0
100	2200	47,000	1.0	22.0
110	2400	51,000	1.1	24.0
120	2700	56,000	1.2	27.0
130	3000	62,000	1.3	30.0
150	3300	68,000	1.5	33.0
160	3600	75,000	1.6	36.0
180	3900	82,000	1.8	39.0
200	4300	91,000	2.0	43.0

Stock No.	Watts	NET EACH	
		1-99	100-249†
2 MM 045	1/2"	24c	1.44
2 MM 065	1"	35c	2.16
2 MM 085	2"	47c	2.88

†Applies to resistors of one value only.

## "LITTLE DEVIL" ASSORTMENTS



NO CHARGE for Plastic Cabinet

Selected supply of 150 1/2-watt or 125 1- or 2-watt resistors in most-often-needed values. Complete with handsome plastic cabinet, 4 3/4 x 9 5/8" at no extra charge. Cabinet has 5 drawers and 40 compartments. Has dovetail top and bottom. Shpg. wt., 7 lbs.

No.	Type	Description	EACH
2 M 761	CAB-10	150 1/2-watt resistors	17.64
2 M 754	CAB-2	125 1-watt resistors	22.05
2 M 762	CAB-3	125 2-watt resistors	29.40

## FAMOUS "BROWN DEVIL" WIRE-WOUND RESISTORS



For voltage dropping, bias units, bleeders, etc. Thick vitreous enamel coating—for excellent heat conduction and insulation; also protects against effects of humidity. Welded high-strength alloy terminals. Accuracy, ± 5%. Size: 5-watt units, 1 1/2"; 10-watt units, 1 3/4"; 20-watt units, 2 1/4". 1 1/2" tinned leads. Av. shpg. wt., 3 oz.

### SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms	Ohms
1	100	1000	7500	35,000
1.5*	125*	1100*	8000	40,000
2	150*	1200	8500†	45,000
3*	200	1250	9000	50,000
4*	225*	1500	10,000	55,000
5	250	1750	11,000*	60,000
7.5*	300	2000	12,000*	65,000
10	350	2250	12,500	70,000
12*	400	2500	13,500*	75,000
15*	450*	2750†	15,000	80,000
20*	500	3000	16,000*	85,000
25	600*	3500	17,500*	90,000
30*	650†	4000	18,000*	95,000
35*	700	4500	20,000	100,000
40*	750	5000	22,500*	
50	800	6000	25,000*	
75	900*	7000	30,000	

## "DIVIDOHM" WIRE-WOUND ADJUSTABLE RESISTORS



Used for voltage-dividing networks in power supplies, adjustable dropping resistors, etc. Wire-wound on ceramic core with vitreous enameled coat. Accuracy = 10%. With slider and mounting brackets. Av. shpg. wt., 1/2 lb.

### 10 WATTS—1 1/4 x 3/4"

No.	Type	Ohms	Ma.	EACH
74 M 950	1001	1	3160	.94
74 M 951	1002	2	2240	
74 M 952	1003	3	1830	
74 M 953	1004	5	1410	
74 M 954	1005	10	1000	
75 M 861	1006	10	1000	.94
75 M 862	1009	25	630	
75 M 863	1010	50	450	
75 M 864	1011	75	370	
75 M 865	1012	100	320	
75 M 866	1013	150	260	1.00
75 M 867	1015	250	200	
75 M 868	1019	500	140	
75 M 869	1021	750	120	
75 M 870	1023	1000	100	
75 M 871	1025	1500	81	1.06
75 M 872	1028	2500	63	
75 M 873	1033	5000	45	
75 M 874	1036	7500	36	1.06
75 M 875	1040	10,000	32	
75 M 883	EXTRA SLIDER			1.1c

### 25 WATTS—2 x 3/4"

No.	Type	Ohms	Ma.	EACH
74 M 954	0360	1	5000	1.21
74 M 955	0361	3	2880	
74 M 956	0362	5	2240	
74 M 957	0363	10	1580	
74 M 958	0364	15	1290	1.21
74 M 959	0365	25	1000	
74 M 960	0366	50	710	
74 M 961	0367	75	580	
75 M 780	0368	100	500	1.21
75 M 781	0371	250	320	
75 M 782	0372	500	220	
75 M 783	0373	750	180	
75 M 784	0375	1000	160	1.24
75 M 785	0376	1500	130	
75 M 786	0377	2000	120	
75 M 787	0378	2500	100	
75 M 788	0379	3000	91	1.29
75 M 789	0382	5000	70	
75 M 790	0384	7500	57	
75 M 791	0385	10,000	50	
75 M 792	0386	12,000	42	1.35
75 M 793	0387	15,000	36	
75 M 794	0388	20,000	31	
75 M 795	0389	25,000	28	
75 M 880	EXTRA SLIDER			1.1c

### 50 WATTS—4 x 3/4"

No.	Type	Ohms	Ma.	EACH
74 M 962	0560A	1	7070	1.94
74 M 963	0560B	2	5000	1.53
74 M 964	0560C	3	4070	1.53
74 M 965	0560D	4	3530	1.53

### 5-WATT SIZE

Available in all values to 10,000 except those marked † in table at left.

No.	Ohms	EACH
1 MM 730	1 to 1000	.44
1 MM 731	1100 to 5000	.57
1 MM 732	6000 to 10,000	.50

### 10-WATT SIZE

Available in all values to 50,000 except those marked † in table at left.

No.	Ohms	EACH
1 MM 700	1 to 1000	.47
1 MM 701	1100 to 5000	.53
1 MM 702	6000 to 10,000	.59
1 MM 703	11,000 to 20,000	.65
1 MM 704	22,500 to 25,000	.71
1 MM 705	30,000 to 50,000	.79

### 20-WATT SIZE

Available in all values except those marked \* in table at left.

No.	Ohms	EACH
1 MM 720	5 to 1000	.62
1 MM 721	1200 to 5000	.65
1 MM 722	6000 to 10,000	.71
1 MM 723	12,500 to 20,000	.76
1 MM 724	25,000 to 40,000	.88
1 MM 725	45,000 to 60,000	1.03
1 MM 726	65,000 to 80,000	1.18
1 MM 727	85,000 to 100,000	1.35

### 50 WATTS—4 x 3/4" (Cont.)

No.	Type	Ohms	Ma.	EACH
74 M 966	0561	10	2230	1.53
74 M 967	0562	25	1410	
74 M 968	0563	50	1000	
74 M 969	0564	75	820	1.53
74 M 970	0565	100	710	
74 M 971	0566	150	580	
74 M 972	0567	200	500	1.59
75 M 800	0568	250	450	
75 M 801	0569	500	320	
75 M 802	0570	750	260	1.53
75 M 803	0572	1000	220	
75 M 804	0573	1500	180	
75 M 805	0574	2000	160	1.59
75 M 806	0575	2500	140	
75 M 807	0578	5000	100	
75 M 808	0581	10,000	71	1.71
75 M 809	0583	15,000	57	
75 M 810	0584	20,000	50	
75 M 811	0585	25,000	45	2.00
75 M 812	0586	30,000	36	
75 M 813	0587	40,000	29	
75 M 814	0588	50,000	26	2.12
75 M 815	0591	100,000	18	
75 M 880	EXTRA SLIDER			1.1c

### 100 WATTS—6 1/2 x 3/4"

No.	Type	Ohms	Ma.	EACH
74 M 973	0956A	1	10000	2.94
74 M 974	0956B	2	7070	
74 M 975	0956C	3	5770	
74 M 976	0956D	4	5000	2.32
74 M 977	0956	5	4470	
74 M 978	0957	10	3160	
74 M 979	0958	25	2000	
74 M 980	0959	50	1410	2.32
74 M 981	0960	100	1000	
74 M 982	0960B	250	630	
74 M 983	0961	500	450	
75 M 830	0962	1000	320	2.38
75 M 831	0964	5000	140	
75 M 832	0965	10,000	100	
75 M 833	0966	15,000	81	
75 M 834	0967	20,000	71	2.65
75 M 835	0968	25,000	63	
75 M 837	0970	40,000	50	
75 M 838	0971	50,000	45	
75 M 840	0973	100,000	28	3.20
75 M 881	EXTRA SLIDER				1.1c

### 200 WATTS—10 1/2 x 1 1/4"

No.	Type	Ohms	Ma.	EACH
74 M 984	1356A	1	14100	3.67
74 M 985	1356B	2	10000	
74 M 986	1356C	3	8160	
74 M 987	1356D	4	7070	
74 M 988	1356	5	6320	2.82
74 M 989	1357	10	4470	
74 M 990	1358	25	2830	
74 M 991	1359	50	2000	
74 M 992	1			

# Special-Purpose Resistors, Controls

## OHMITE AXIAL-LEAD WIRE-WOUND RESISTORS

Axial-lead, ceramic-core resistors. Covered with vitreous enamel to withstand high temperature. Resistance wire and terminals welded to end caps to assure excellent stability and minimum noise. Tolerance:  $\pm 5\%$ . Wattage based on temperature rise to 300°C.  $1\frac{1}{2}$ " leads. Av. shpg. wt., 4 oz.



### SPECIFY RESISTANCE WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1.0	12	75	350	900	2250	7000	18,000
1.5	15	100	400	1000	2500	7500	20,000
2.0	20	125	450	1100	3000	8000	22,500
3.0	25	150	500	1200	3500	9000	25,000
4.0	30	200	600	1250	4000	10,000	
5.0	35	225	700	1500	4500	12,500	
7.5	40	250	750	1750	5000	15,000	
10.0	50	300	800	2000	6000	17,500	

### 3 WATTS— $\frac{1}{2}$ "x $\frac{1}{4}$ "

No.	Ohms	EACH	No.	Ohms	EACH
2 MM 090	1-1000	50c	2 MM 110	6000-10,000	56c
2 MM 095	1100-5000	53c			

### 5 WATTS— $1\frac{1}{2}$ "x $\frac{1}{2}$ "

No.	Ohms	EACH	No.	Ohms	EACH
2 MM 115	1-1000	53c	2 MM 145	12,500-20,000	71c
2 MM 130	1100-5000	56c	2 MM 146	22,500-25,000	73c
2 MM 135	6000-10,000	59c			

## OHMITE TYPE FR FUSE RESISTOR

A highly dependable  $\frac{1}{2}$ -ohm fuse resistor. May be used to replace many fuse resistors used in television circuits.  $\frac{1}{2}$ " tinned wire leads make replacement application easy and quick. Supplied with convenient, plug-in bakelite mounting strip—or can be wired directly into circuit of TV set. Very commonly used in series-string filament circuits. Length,  $1\frac{1}{2}$ ". Shpg. wt., 3 oz. **NET** **38c**



## SPRAGUE "KOOLOHM" WIRE-WOUND RESISTORS

Feature high-voltage insulated resistance wire windings; will withstand 10,000 volts from surface of jacket to resistance element. KT types are inductively wound; NIT types have non-inductive winding. Ceramic jackets and special end-seals provide complete protection against high humidity and heat—ceramic coating insulation withstands temperatures to 1000°C. Accuracy within 5%. Av. shpg. wt., 2 oz.



### SPECIFY RESISTANCE WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
5	50	400	1250	5000	12,000	30,000
10	75	500	1500	6000	14,000	35,000
15	100	600	1750	7500	15,000	40,000
20	150	700	2000	8000	17,500	50,000
25	200	800	2500	9000	20,000	60,000
30	250	900	3000	10,000	25,000	70,000
40	300	1000	4000			

### TYPE SKT—5 WATT— $1\frac{1}{2}$ "x $\frac{1}{2}$ "

No.	Ohms	EACH	No.	Ohms	EACH
1 M M 640	5 to 1000	38c	1 M 645	20,000	56c
1 M M 641	1250 to 5000	41c	1 M 646	25,000	65c
1 M M 642	6000 to 10,000	47c	1 M 647	30,000	71c
1 M 643	14,000	53c	1 M 649	35,000	82c
1 M 644	15,000	56c	1 M 648	40,000	88c

### TYPE 10KT—10 WATT— $1\frac{1}{2}$ "x $\frac{1}{2}$ "

No.	Ohms	EACH	No.	Ohms	EACH
1 M M 660	5 to 1000	44c	1 M 666	30,000	.76
1 M M 661	1250 to 5000	47c	1 M 668	35,000	.88
1 M M 662	6000 to 10,000	53c	1 M 667	40,000	.97
1 M M 663	12,000 to 17,500	59c	1 M 668	50,000	1.06
1 M 664	20,000	65c	1 M 669	60,000	1.18
1 M 665	25,000	71c	1 M 659	70,000	1.29

### TYPE 5NIT—5 WATT NON-INDUCTIVE— $1\frac{1}{2}$ "x $\frac{1}{2}$ "

No.	Ohms	EACH	No.	Ohms	EACH
1 M M 670	5 to 1000	59c	1 M M 672	2500 to 4000	73c
1 M M 671	1250 to 2000	68c	1 M 673	5000	76c

### TYPE 10NIT—10 WATT NON-INDUCTIVE— $1\frac{1}{2}$ "x $\frac{1}{2}$ "

No.	Ohms	EACH	No.	Ohms	EACH
1 M M 680	5 to 1000	59c	1 M M 683	5000 to 6000	.76
1 M M 681	1250 to 2000	68c	1 M 684	7500 to 9000	.85
1 M M 682	2500 to 4000	73c	1 M 685	10,000	1.12

## HANDY OHM'S LAW CALCULATOR

Easy-to-use calculator. Solves problems in Ohm's Law and DC power. Shows power, voltage and current when resistance is known. By setting to two known values resistance can be determined. Also has parallel resistance calculator. Size, 9x3". Shpg. wt., 3 oz. **NET** **25c**



2 M 780. NET **25c**  
2 M 781. Deluxe Plastic Model. NET **1.50**

## ALLIED'S COLOR-CODE GUIDE

An "instant-reference" color-code guide for resistors. Code colors may be set to show corresponding resistance values, or resistance values set to show corresponding code colors. Size,  $2\frac{1}{4}$ "x $3\frac{3}{4}$ ". Includes tolerance code and EIA-JAN  $\pm 10\%$  standard stock values. (Free with order for 20 or more resistors.) **NET** **25c**



## OHMITE HS MINIATURE POTENTIOMETERS

- Made to Rigid Specifications
- No Rivets or Soldered Parts
- Synthetic Resin Sealed
- Screwdriver Slotted



Linear-taper, miniature potentiometers combining exceptional reliability and extremely small size. Maximum continuous power rating is 0.5 watt. Only  $\frac{1}{8}$ " in diameter. Molded composition resistance and collector tracks (bridged by a molded composition brush) assure long life. Greater cross-section of resistor track lowers current density—gives excellent performance in excess of 50,000 operation cycles. Terminals are molded directly into control elements for trouble-free connections. Enclosures are sealed to keep out dust, moisture and fungus. Terminals are gold-plated for easy soldering. Screwdriver-slotted, locking-type shafts. Rated at 350 V.,  $\frac{1}{8}$ " dia.;  $\frac{1}{4}$ " long. Shaft,  $\frac{1}{8}$ " long. Meet QQ-M-151, MIL-R-94A and EIA specs. Types 3613, 3614 and 3615 have  $\pm 20\%$  tolerance; others are  $\pm 10\%$ . Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Ohms	Stock No.	Mfr's Type	Ohms
28 M 580	3601	100	28 M 588	3609	50K
28 M 581	3602	250	28 M 589	3610	1 meg
28 M 582	3603	500	28 M 590	3611	.25 meg
28 M 583	3604	1K	28 M 591	3612	.50 meg
28 M 584	3605	2.5K			
28 M 585	3606	5K	28 M 592	3613	1.0 meg
28 M 586	3607	10K	28 M 593	3614	2.5 meg
28 M 587	3608	25K	28 M 594	3615	5.0 meg

**NET EACH** **5.00**

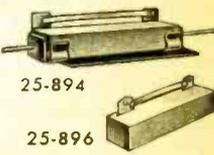
## JENSEN SPEAKER VOLUME CONTROLS

Not Illustrated. 1-pads designed for volume control at individual speakers. Provide a constant load impedance at all volume levels. Have positively no effect on volume of other speakers in system. Smooth, gradual control. Excellent for use in PA, intercom, background music and home music systems. Supplied complete with knob and attractive dial plate. Av. shpg. wt., 5 oz.

Stock No.	Type	Ohms	Watts	NET EACH
33 M 942	ST-760	3-4	5	1.97
33 M 940	ST-276	6-8	5	1.76
33 M 941	ST-411	15	5	2.76
33 M 938	ST-837	15-16	15	2.76
33 M 939	ST-761	500-600	15	3.65

## G-C SURGISTORS

Surge resistors for increased receiving tube life. CR tube and component life. Combine the functions of a resistor and a relay. Limit harmful initial voltage surge to 25% of normal, yet allow full voltage after warm-up. Connect directly into the power line. For use with 110-120 v., AC-DC. Av. shpg. wt., 7 oz.



Stock No.	Type	Watts	NET
80 G 144	25-894	100-275	1.09
81 G 036	25-896	250-400	1.26

## G-C GLO-BAR THERMISTORS

Popular thermistors used in series-string filament circuits of RCA, Crosley, Philco, and other TV sets. A necessary service replacement item. "Matched pair" replaces filament resistors of G.E., Motorola, Sears, etc. Av. wt., 1 oz.



Stock No.	Type	Ohms		Replaces	NET EACH	
		Hot	Cold		1-9	10-49
2 M 066	25-912	20	250	GE RRV051	.88	.81
2 M 067	25-914	75	950	GE RRV051	.94	.86
2 M 068	25-916	31	260	GE RRV097	.94	.86
2 M 069	25-918	35	460	GE RRV054	.94	.86
2 M 053	25-920	11	250	M'rola 6A735941	.88	.81
2 M 054	25-922	50	1050	Philco 33-1343-3	.71	.65
2 M 055	25-924	10500	at 125V	G.E. RRV052	1.09	1.00
2 M 070	25-926	43	125	Crosley	1.18	1.08
2 M 071	25-928	9	200	RCA 100118	.97	.89
2 M 072	25-910	40	375	*(see above)	1.65	1.51

## G-C TV FUSE-SISTORS

Reliable, low-cost replacement units for series-string TV tube circuits. Replace similar units in Raytheon, RCA, Motorola, Sylvania, Zenith and other TV receivers. All units are less than an inch in length; tinned leads for quick and easy installation. Av. shpg. wt., 1 oz.



Stock No.	Type	Ohms	List	1-9, EACH	10-49, EACH
2 M 073	25-964	5.6	.65	38c	35c
2 M 074	25-960	7.5	.65	38c	35c
2 M 075	25-966	9.0	.65	38c	35c
2 M 076	25-968	22.0	.65	38c	35c

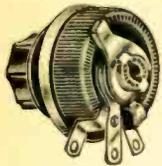
Type 25-998 Fuse-Sistor Kit. Contains one each of above. **NET** **98c**

## ALLIED BARGAIN RESISTOR ASSORTMENT

Service men, Hams, experimenters—here's a useful assortment of 100 high quality carbon resistors at a money-saving low price! An excellent selection of most often-used values. All resistors are brand new and have tinned copper leads. Non-insulated types only. Shpg. wt., 12 oz. **NET** **95c**



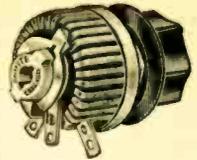
# Ohmite Controls



## WIREWOUND RHEOSTATS

Quality vitreous-enamelled wirewound rheostats. Provide extremely smooth, highly dependable control of industrial and other electronic devices. Resistance wire is wound on a solid ceramic core and each turn is permanently bonded in place by vitreous enamel. The core and base are also bonded by vitreous enamel. A pivoted universal-action-mounted contact brush rides over a smooth, flat surface to assure perfect contact at all settings. Copper-graphite contact brush, except \*silver-

graphite contact brush. Ratings indicated are at full setting. U.L. Approved. Types H, J, K and L mount on panels up to 1/4" thick; Type N on panels up to 1/4" thick. Specifications: Type H, dia. 1 1/2", depth behind panel 1 1/2"; Type J, dia. 2 1/4", depth behind panel 1 1/2"; Type K, dia. 3 1/4", depth behind panel 1 1/2"; Type L, dia. 4", depth behind panel 2"; Type N, dia. 6", depth behind panel 2 1/4". Complete with fluted, plastic knob. Av. shpg. wt., 10 oz.



### 25 WATT—TYPE H

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74 M 320	0140*	1	4.53	74 M 341	0152	125	
74 M 321	0141	2		74 M 328	0153	175	
74 M 322	0142	3		74 M 329	0154	250	
74 M 323	0143	6		74 M 342	0155	350	4.03
74 M 338	0144	8		74 M 330	0156	500	
				74 M 331	0157	750	
74 M 323	0145	10	4.03	74 M 332	0158	1000	
74 M 324	0146	15		74 M 333	0159	1500	4.53
74 M 325	0147	25		74 M 334	0160	2500	
74 M 339	0148	35					
74 M 326	0149	50		74 M 335	0161	3500	4.76
74 M 340	0150	75		74 M 336	0162	5000	
74 M 327	0151	100					

### 50 WATT—TYPE J

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74 M 350	0308*	0.5	5.06	74 M 359	0321	125	
74 M 351	0309*	1		74 M 360	0322	250	4.53
74 M 352	0310*	2		74 M 361	0323	300	
				74 M 362	0324	500	
74 M 353	0311	4		74 M 371	0325	800	
74 M 367	0312	6		74 M 372	0326	1000	4.76
74 M 364	0313	8		74 M 373	0327	1600	
74 M 355	0314	12		74 M 364	0328	2500	
74 M 368	0315	16	4.53				
74 M 356	0316	22		74 M 373	0329	3500	
74 M 369	0317	35		74 M 365	0330	5000	5.06
74 M 357	0318	50		74 M 374	0331	8000	
74 M 358	0319	80		74 M 366	0332	10,000	
74 M 370	0320	125					

### 100 WATT—TYPE K

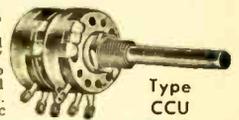
No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74 M 380	0440*	0.5	7.59	74 M 399	0452	200	
74 M 393	0441*	1		74 M 400	0453	300	7.09
74 M 381	0442*	2		74 M 401	0454	400	
74 M 382	0443*	3		74 M 387	0455	500	
74 M 394	0444*	5		74 M 402	0456	750	
74 M 395	0445	7.5		74 M 388	0457	1000	
74 M 383	0446	10		74 M 403	0458	1500	7.59
74 M 397	0447	16		74 M 404	0459	2000	
74 M 384	0448	25		74 M 389	0460	2500	
74 M 385	0449	50	7.09	74 M 390	0461	5000	8.06
74 M 398	0450	75		74 M 391	0462	7500	8.58
74 M 386	0451	100		74 M 392	0463	10,000	9.06

### 150 WATT—TYPE L

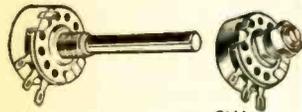
No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74 M 450	0524*	0.5	9.58	74 M 463	0537	150	
74 M 451	0525*	1		74 M 464	0538	200	
74 M 452	0526*	2		74 M 465	0539	350	9.06
74 M 453	0527*	3		74 M 466	0540	500	
74 M 454	0528*	5		74 M 467	0541	750	
74 M 455	0529*	7.5		74 M 468	0542	1000	9.58
74 M 456	0530	10		74 M 469	0543	1250	9.58
74 M 457	0531	15		74 M 470	0544	1800	10.11
74 M 458	0532	25		74 M 471	0545	2250	10.11
74 M 459	0533	35	9.06	74 M 472	0546	3000	10.11
74 M 460	0534	50		74 M 473	0547	4500	10.58
74 M 461	0535	75		74 M 474	0548	7500	11.11
74 M 462	0536	100		74 M 475	0549	10,000	12.11

## OHMITE "AB" TWO-WATT POTENTIOMETERS

Resistor element is sealed in a metal enclosure. Carbon sliding contact and terminals assure smooth, noise-free operation. Size of single units, 1 1/2" dia. x 3/4"; double units, 1 1/2" dia. x 1 1/4". Mount in 3/8" hole on panels up to 1/4" thick. Types CU, CCU, CA and CB have 2" standard 1/4" round shafts; CLU has locking nut and slotted shaft for screwdriver adjustment. CU, CCU and CLU types have linear taper; CA types, clockwise logarithmic taper; CB types, counterclockwise logarithmic taper. All ± 10% tolerance, except \* = 20%. Av. wt., 5 oz.



Type CU  
Duals



CA, CB, CU

CLU

### TYPES CA, CB, CU

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
28 M 500	CU5001	50		28 M 511	CU5031	50,000	1.91
28 M 501	CU1011	100	1.91	28 M 512	CB5031	50,000	2.20
28 M 596	CU1511	150		28 M 604	CU7531	75,000	1.91
28 M 502	CU2511	250		28 M 513	CU1011	100,000	1.91
28 M 597	CU3511	350		28 M 514	CA1011	100,000	2.20
28 M 503	CU5011	500		28 M 605	CU1541	150,000	1.91
28 M 598	CU7511	750		28 M 515	CU2541	250,000	1.91
28 M 504	CU1021	1000	1.91	28 M 516	CA2541	250,000	2.20
28 M 599	CU1521	1500		28 M 606	CU3541	350,000	1.91
28 M 505	CU2521	2500		28 M 517	CU5041	500,000	1.91
28 M 600	CU3521	3500	1.91	28 M 518	CA5041	500,000	2.20
28 M 506	CU5021	5000	1.91	28 M 607	CU7542	750,000	1.91
28 M 601	CU7521	7500		28 M 519	CU1052	1 Meg*	1.91
28 M 507	CU1031	10,000	1.91	28 M 520	CA1052	1 Meg*	2.20
28 M 508	CB1031	10,000	2.20	28 M 608	CU1552	1.5 Meg*	1.91
28 M 602	CU2531	15,000	1.91	28 M 521	CU2552	2.5 Meg*	1.91
28 M 509	CU3531	25,000	1.91	28 M 522	CA2552	2.5 Meg*	2.20
28 M 510	CB2531	25,000	2.20	28 M 609	CU3552	3.5 Meg*	1.91
28 M 603	CU3531	35,000	1.91	28 M 523	CU5052	5 Meg*	1.91

### 300 WATT—TYPE N

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74 M 476	0650*	1		74 M 487	0661	100	
74 M 477	0651*	2		74 M 488	0662	150	
74 M 478	0652*	3		74 M 489	0663	200	
74 M 479	0653*	4		74 M 490	0664	300	
74 M 480	0654*	5		74 M 491	0665	400	13.64
74 M 481	0655*	7.5	13.64	74 M 492	0666	700	
74 M 482	0656*	10		74 M 493	0667	900	
74 M 483	0657*	15		74 M 494	0668	1200	
74 M 484	0658	25		74 M 495	0669	1500	
74 M 485	0659	50		74 M 496	0670	1750	
74 M 486	0660	75		74 M 497	0671	2500	

Type 5000 Dial Plate. For Type H, J, K and L. 2 1/4" diameter. Hand-somely finished with bright figures and lines on etched black background. 0-100 scale. Shpg. wt., 2 oz.

74 M 405. NET. 18c

Type 5001 Dial Plate. For Type N. 5 1/2" dia. 0-100. 3 oz. 74 M 407. NET. 76c

### TYPE E 12 1/2-WATT MINIATURE RHEOSTATS

Extremely compact, 12 1/2-watt power rheostats for limited space applications. Rugged, all ceramic and metal construction. Built to operate at maximum hot spot temperature of 340°C. Ideally suited for military and industrial applications at high ambient temperatures. Resistance tolerance is ± 10%. Only 3/8" in diameter. Require 1/4" behind panel. Have 3/4" by 3/2" threaded bushing 1/4" long. 1/4" diameter shaft is 3/8" long. With knob. Av. shpg. wt., 2 oz.



No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74 M 920	0101	1	4.53	74 M 932	0013	125	4.03
74 M 921	0102	2	4.03	74 M 933	0114	175	4.03
74 M 922	0103	3	4.03	74 M 934	0115	250	4.03
74 M 923	0104	6	4.03	74 M 935	0116	350	4.03
74 M 924	0105	10	4.03	74 M 936	0117	500	4.03
74 M 925	0106	10	4.03	74 M 937	0118	750	4.03
74 M 926	0107	15	4.03	74 M 938	0119	1000	4.53
74 M 927	0108	25	4.03	74 M 939	0120	1500	4.53
74 M 928	0109	35	4.03	74 M 940	0121	2500	4.53
74 M 929	0110	50	4.03	74 M 941	0122	3500	4.76
74 M 930	0111	75	4.03	74 M 942	0123	5000	4.76
74 M 931	0112	100	4.03				

### TANDEM COUPLING KITS

Kits for assembling Ohmite rheostats in tandem. Each kit consists of a steel "U" frame, mica washer, coupling, Allen wrench and complete instructions.

Type 6533 Tandem Coupling Kit. Large frame designed for Type K or L rheostats. Will accommodate Model H or J in rear position. Maximum panel thickness 1/4". Frame is 2 1/4" long, 1 1/4" wide. Wt., 4 oz. 74 M 409. NET. 2.23

Type 6532 Tandem Coupling Kit. Small frame designed for Type H or J, and will accommodate Type K or L in the rear position. Maximum panel thickness 1/4". Frame is 2 1/4" long and 1 1/4" wide. 5 oz. 74 M 408. NET. 1.79

Type 6591 Tandem Coupling Kit. Couples two Type E rheostats. Max. panel thickness 1/4". Frame 1 3/8" long and 1 1/4" wide. 5 oz. 28 M 595. NET. 1.79

### TYPE CLU—WITH LOCKING SHAFT

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
28 M 525	CLU5001	50		28 M 533	CLU2531	25,000	
28 M 526	CLU1011	100		28 M 534	CLU5031	50,000	
28 M 527	CLU2511	250		28 M 535	CLU1041	1 Meg	
28 M 528	CLU5011	500		28 M 536	CLU2541	25 Meg	2.50
28 M 529	CLU1021	1000		28 M 537	CLU541	5 Meg	
28 M 530	CLU2521	2500		28 M 538	CLU1052	1.0 Meg*	
28 M 531	CLU5021	5000		28 M 539	CLU2552	2.5 Meg*	
28 M 532	CLU1031	10,000		28 M 540	CLU5052	5.0 Meg*	

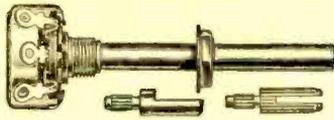
### TYPE CCU DUALS

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
28 M 541	CCU1031	10,000		28 M 545	CCU2541	250,000	
28 M 542	CCU2531	25,000	5.73	28 M 546	CCU5041	500,000	5.73
28 M 543	CCU5031	50,000					

# Mallory Controls

## SERIES U MIDGETROL CONTROLS

For audio, tone and similar control circuits in home receivers, audio amplifiers, portables, TV sets, and industrial electronic equipment. Available in a full line of resistances, tapers, and taps. Round, hollow shaft—easily cut to desired length. Two spline-shank knob adapters furnished with each Midgetrol—see illustration above. With nut and lock washer, 1 1/2" dia. brass shaft, 2 1/4" long, 1/4" dia. Less switch (see below). Shpg. wt., 3 oz.



No.	Type	Ohms	Taper*	No.	Type	Ohms	Taper*
29 M 714	U-1	100	4	29 M 764	U-36	75K	1
29 M 715	U-52R	500	2	29 M 765	U-39	100K	1
29 M 709	U-2	500	4	29 M 766	U-40	100K	2
29 M 638	U-751R	750	2	29 M 767	U-41	100K	4
29 M 796	U-3	1K	4	29 M 795	U-415	125K	4
29 M 785	U-4	1K	4	29 M 768	U-42	150K	1
29 M 797	U-5	1500	2	29 M 769	U-43	200K	4
29 M 786	U-6	2K	4	29 M 770	U-44	250K	1
29 M 798	U-7	2500	2	29 M 771	U-45	250K	2
29 M 787	U-8	3K	4	29 M 772	U-46	250K	4
29 M 717	U-9	3K	2	29 M 773	U-48	500K	1
29 M 751	U-12	5K	1	29 M 774	U-50	500K	4
29 M 752	U-14	5K	4	29 M 775	U-51	750K	1
29 M 753	U-18	10K	1	29 M 7713	U-52	1 Meg	2
29 M 754	U-19	10K	2	29 M 776	U-53	1 Meg	1
29 M 755	U-20	10K	4	29 M 777	U-54	1 Meg	4
29 M 759	U-21	15K	1	29 M 790	U-55	1.5 Meg	4
29 M 757	U-22	15K	4	29 M 778	U-55	2 Meg	4
29 M 758	U-24	20K	1	29 M 781	U-56	2 Meg	4
29 M 783	U-26	20K	4	29 M 784	U-56.5	2.5 Meg	4
29 M 759	U-28	25K	2	29 M 779	U-57	3 Meg	1
29 M 712	U-28A	25K	1	29 M 782	U-59	3 Meg	4
29 M 760	U-29	25K	4	29 M 780	U-65	5 Meg	4
29 M 761	U-33	50K	1	29 M 788	U-67	5 Meg	4
29 M 762	U-34	50K	4	29 M 789	U-82	10 Meg	4
29 M 763	U-35	50K	2				

NET EACH..... 9lc

### EXPLANATION OF TAPERS\*

Taper No. 1: For use in audio or antenna shunt circuits.  
Taper No. 2: For series circuits or cathode voltage controls.  
Taper No. 4: Linear. For voltage control.

## TYPE UT SINGLE-TAPPED MIDGETROLS

Same as U-types above, but tapped for tone compensation.

No.	Type	Ohms	Tap	No.	Type	Ohms	Tap
29 M 718	UT-153	15K	10K	29 M 862	UT-438	1 Meg	300K
29 M 802	UT-420	250K	50K	29 M 806	UT-443	1 Meg	450K
29 M 803	UT-425	350K	70K	29 M 807	UT-450	2 Meg	125K
29 M 816	UT-429	500K	50K	29 M 808	UT-448	2 Meg	250K
29 M 804	UT-427	500K	100K	29 M 809	UT-454	2 Meg	400K
29 M 860	UT-430	500K	150K	29 M 863	UT-449	2 Meg	600K
29 M 805	UT-431	500K	225K	29 M 810	UT-451	2 Meg	900K
29 M 861	UT-440	1 Meg	200K	29 M 817	UT-457	3 Meg	900K

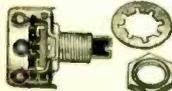
NET EACH..... 1.32

## TYPE UDT DOUBLE-TAPPED MIDGETROLS

No.	Mfr's Type	Ohms	Taps	EACH
29 M 988	UDT-283	500K	100K/200K	1.32
29 M 939	UDT-289	1 Meg	250K/500K	
29 M 990	UDT-291	1.5 Meg	225K/500K	
29 M 991	UDT-295	2.25 Meg	250K/500K	
29 M 992	UDT-296	2.25 Meg	500K/1 Meg	
29 M 719	UDT-303	3.3 Meg	300K/1.5 Meg	

## TYPE SU INSULATED-SHAFT MIDGETROLS FOR TV

Size and basic construction are the same as Midgetrols listed above, except the SU type control has a 1/4" dia. fixed knurled and slotted phenolic shaft protruding 1/4" beyond bushing. Meet exact physical and electrical requirements for special applications. Linear taper. With hex nut. Shpg. wt., 3 oz.



No.	Mfr's Type	Ohms	No.	Mfr's Type	Ohms
29 M 646	SU-6	1.5K	29 M 828	SU-46	250K
29 M 647	SU-8	3K	29 M 814	SU-50	500K
29 M 832	SU-4	5K	29 M 829	SU-54	1 Meg
29 M 826	SU-20	10K	29 M 830	SU-56	2 Meg
29 M 812	SU-29	25K	29 M 833	SU-56.5	2.5 Meg
29 M 827	SU-35	50K	29 M 831	SU-59	3 Meg
29 M 813	SU-41	100K	29 M 815	SU-67	5 Meg

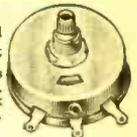
NET EACH..... 9lc

## SWITCHES AND ACCESSORIES FOR MIDGETROLS

"Push-on, stay-on" switches for Midgetrols. Shpg. wt., 2 oz.  
29 M 620. US-28 SPST Switch. NET..... 41c  
29 M 621. US-26T SPST Switch. With dummy terminal. NET..... 53c  
29 M 622. US-27 DPST Switch. NET..... 41c  
29 M 623. US-28 SPDT Switch. NET..... 53c  
29 M 985. DS-36 Special 3" Extension Shaft. For tubular shaft Midgetrols, TV and Industrial 2-watt controls, and Type "M" pots. Also couples front and rear sections together. Shpg. wt., 2 oz. NET..... 32c  
29 M 882. DS-37 3/4" Diameter Shaft. For use with round-shaft Midgetrols to accommodate knobs requiring 3/4" shaft. Wt., 2 oz. NET..... 32c  
29 M 987. EB-214 Special Bushing. Dimensions: 1/2" x 28 thread, 2 1/4" long with .403" milled flat. Shpg. wt., 2 oz. NET..... 53c

## "M" AND "MT" WIRE WOUND CONTROLS

For industrial and laboratory use as bias controls and voltage dividers. Also for TV replacement. 4 watts. Arm insulated from shaft. 294° rotation. Knurled 1/4" shaft is 3/4" long; has screwdriver slot. "M" shaft is hollow to accept DS-36 and DS-37 shafts (see below, right). MT types center-tapped TV units. 1 1/2" dia. x 3/4". Mount in 3/4" hole. Linear taper. Shpg. wt., 4 oz.



### POTENTIOMETERS

No.	Type	Ohms	EA.	No.	Type	Ohms	EA.
29 M 424	M1PK	1	1.32	29 M 411	M500PK	500	1.32
29 M 425	M3PK	3		29 M 412	M600PK	600	
29 M 426	M6PK	6		29 M 413	M1MPK	1000	
29 M 427	M10PK	10		29 M 431	M1.5MPK	1500	
29 M 428	MT10PK	10	1.29	29 M 414	M2MPK	2000	1.32
29 M 400	M15PK	15	1.32	29 M 415	M2.5MPK	2500	
29 M 401	M20PK	20	1.32	29 M 416	M3MPK	3000	
29 M 429	MT20PK	20	1.29	29 M 417	M4MPK	4000	
29 M 402	M25PK	25	1.32	29 M 418	M5MPK	5000	1.44
29 M 403	M30PK	30		29 M 419	M15MPK	15000	
29 M 430	MT30PK	30		29 M 420	M20MPK	20000	
29 M 404	M40PK	40		29 M 421	M25MPK	25000	
29 M 405	M50PK	50	1.32	29 M 422	M50MPK	50000	1.71
29 M 406	M60PK	60		29 M 423	M70MPK	70000	
29 M 407	M75PK	75		29 M 433	M75MPK	75000	
29 M 408	M100PK	100		29 M 434	M100MPK	100000	
29 M 409	M200PK	200					
29 M 410	M400PK	400					

### RHEOSTATS

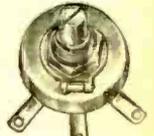
Have open or "off" position counter-clockwise.

No.	Type	Ohms	Amps	No.	Type	Ohms	Amps
29 M 451	M05RK	1/2	2.80	29 M 459	M20RK	20	.45
29 M 452	M1RK	1	2.00	29 M 460	M25RK	25	.40
29 M 453	M2RK	2	1.40	29 M 461	M30RK	30	.37
29 M 454	M3RK	3	1.15	29 M 462	M40RK	40	.32
29 M 455	M4RK	4	1.00	29 M 463	M50RK	50	.28
29 M 456	M6RK	6	.82	29 M 464	M60RK	60	.26
29 M 457	M10RK	10	.63	29 M 465	M75RK	75	.23
29 M 458	M15RK	15	.52	29 M 466	M100RK	100	.20

NET EACH..... 9lc  
29 M 651. Type 395 Dial Plate. For "M" Controls. 2 oz. NET..... 15c

## "C" WIREWOUND CONTROLS

Ideal for limited-space applications. Conservatively rated to dissipate 2 watts. Contact arm grounded to shaft. 266° effective electrical rotation. 1 1/4" dia. x 3/4" deep. 1/4" shaft, slotted 3/4" x 1/4" deep, extends 1/4" from bushing. Hexagon nut furnished. Use dial plate 34 B 622, listed below. Linear taper. Av. shpg. wt., 4 oz.



### POTENTIOMETERS

No.	Type	Ohms	Amps	No.	Type	Ohms	Amps
29 M 720	C6P	6	.58	29 M 725	C40P	40	.22
29 M 721	C10P	10	.45	29 M 726	C50P	50	.22
29 M 722	C15P	15	.37	29 M 727	C100P	100	.14
29 M 723	C20P	20	.32	29 M 728	C200P	200	.1
29 M 724	C30P	30	.26	29 M 729	C400P	400	.07

NET EACH..... 1.06

29 M 730. C1MP | 1000 | .045 | 29 M 731. C3MP | 3000 | .025

NET EACH..... 1.18

29 M 732. C5MP | 5000 | .018 | 29 M 734. C10MP | 10000 | .014

29 M 733. C6MP | 6000 | .018 | 29 M 735. C15MP | 15000 | .011

NET EACH..... 1.44

### RHEOSTATS

No.	Type	Ohms	Amps	No.	Type	Ohms	Amps
29 M 700	C6R	6	.58	29 M 704	C30R	30	.26
29 M 701	C10R	10	.45	29 M 705	C40R	40	.22
29 M 702	C15R	15	.37	29 M 706	C50R	50	.22
29 M 703	C20R	20	.32	29 M 707	C100R	100	.14

NET EACH..... 9lc

34 B 622. Type 393 Dial Plate. For "C" controls. 2 oz. NET..... 15c

## 2-WATT TV AND INDUSTRIAL CONTROLS

Two-watt wirewound potentiometers designed especially for replacement of television controls. Also excellent for use as voltage dividers and bias controls. Insulated contact arm type, linear taper. Special dual contactor mechanism. 900 volts AC insulation between resistance element and chassis. 297° rotation. Taper 4. 1 1/4" in diameter. Knurled stub shaft has screwdriver slot. \*Center-tapped. 1/4" bushing. Shpg. wt., 4 oz.

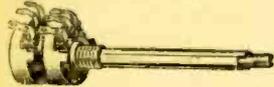


No.	Type	Ohms	NET	No.	Type	Ohms	NET
29 M 835	R20L	20	.91	29 M 842	R1000L	1000	.91
29 M 836	R20LT*	20	1.29	29 M 843	R1500L	1500	.91
29 M 837	R25L	25	.91	29 M 844	R2500L	2500	.91
29 M 838	R30L	30	.91	29 M 846	R3000L	3000	.91
29 M 839	R30CT*	30	1.29	29 M 845	R5000L	5000	.91
29 M 840	R50L	50	.91	29 M 692	R7500L	7500	1.06
29 M 864	R100L	100	.91	29 M 693	R10ML	10,000	1.06
29 M 841	R250L	250	.91	29 M 694	R15ML	15,000	1.06
29 M 834	R500L	500	.91	29 M 695	R20ML	20,000	1.06

# CTS-IRC, Mallory, Centralab Controls

## CTS-IRC EXACT-DUPLICATE TV CONTROLS

### TYPE QJ



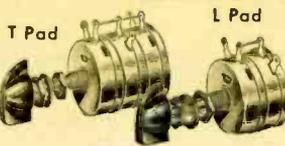
A wide selection of exact-duplicate controls for TV receivers. All duplicate the originals in every detail—there's never any installation problem when you use these carefully engineered replacement units. No time is wasted in cutting down shafts or enlarging mounting holes and no modifications in wiring are required.

In cases where the original has a switch, the CTS-IRC exact-duplicate control is equipped with an identical switch—no additional parts are ever required. All controls are made of finest materials and constructed to highest standards to assure smooth, highly dependable operation—quality is always equal or superior to the originals.

Simply locate the name of the manufacturer and the part number of the original control in the table—you'll see the exact-duplicate CTS-IRC replacement in the adjoining column. Av. shgp. wt., 3 oz.

Stock No.	Type No.	TV Mfr and Mfr's Part No.	NET	Stock No.	Type No.	TV Mfr and Mfr's Part No.	NET
30 M 922	QJ-106	ADMIRAL: 75B11-10	2.20	30 M 916	QJ-49	PATHE: A24109	2.62
30 M 901	QJ-12	75B11-13, -15	2.62	30 M 940	QJ-231	A24124	2.62
30 M 902	QJ-13	75B11-16, -18	2.62	30 M 907	QJ-21	TVC 528-D	2.62
30 M 972	QJ-397	75B11-21	2.62	30 M 947	QJ-277	PHILCO: 33-5563-22	2.41
30 M 978	QJ-425	75B17-1	2.41	30 M 919	QJ-82	33-5563-22	2.20
30 M 917	QJ-51	75B11-14	2.62	30 M 948	QJ-279	33-5563-39	2.41
30 M 977	QJ-418	AIRLINE: 78X12, -B	3.03	30 M 954	QJ-309	33-5563-36	2.41
30 M 929	QJ-162	C-8-217-3	2.20	30 M 971	QJ-391	33-5563-42	2.62
30 M 913	QJ-40	ARVIN: 22464-1	3.03	30 M 960	QJ-340	33-5563-44	3.03
30 M 913	QJ-40	BELL: 970111-7	3.03	30 M 965	QJ-357	33-5563-51	2.41
30 M 928	QJ-161	970111-8	2.20	30 M 974	QJ-402	33-5563-53	2.41
30 M 903	QJ-15	BENDIX: 262036-1	2.20	30 M 985	QJ-501	33-5563-63	2.20
30 M 915	QJ-48	BRUNSWICK: 390034	2.62	30 M 913	QJ-40	RCA: 970111-7	3.03
30 M 929	QJ-162	390033	2.20	30 M 928	QJ-161	970111-8	2.20
30 M 928	QJ-161	970111-8	2.20	30 M 925	QJ-131	970111-18	2.20
30 M 979	QJ-446	CAPEHART: 45337A-1	2.62	30 M 914	QJ-41	970111-30	3.03
30 M 913	QJ-40	CBS (AIR KING): 970111-7	3.03	30 M 930	QJ-168	970913-9	2.20
30 M 977	QJ-418	CORONADO: 78X12	3.03	30 M 918	QJ-81	970913-27	2.20
30 M 959	QJ-332	PD-10-A	3.03	30 M 938	QJ-222	970913-30	3.03
30 M 907	QJ-21	TVC 528-D	2.62	30 M 980	QJ-447	971666-6	3.03
30 M 913	QJ-40	CROSLLEY: 139170	3.03	30 M 984	QJ-496	971666-9	3.03
30 M 928	QJ-161	139173	2.20	30 M 986	QJ-504	971666-13	3.03
30 M 931	QJ-176	146856	2.62	30 M 928	QJ-161	REGAL: 20 2A, 30M119, CMA994, T-20-2	2.20
30 M 932	QJ-181	148098, -A	2.62	30 M 913	QJ-40	970111-7	3.03
30 M 933	QJ-183	149220	3.03	30 M 950	QJ-292	T-20-9	3.56
30 M 967	QJ-370	154085, -C, -F	2.62	30 M 944	QJ-261	SCOTT: 18A791705	3.03
30 M 924	QJ-119	DUMONT: 01027020	2.20	30 M 942	QJ-246	70W5027, VC12127, -B, VCA12127D	3.03
30 M 920	QJ-84	01028210	3.03	30 M 916	QJ-49	SILVERTONE: 424109, A24124, A24142	2.62
30 M 915	QJ-48	EMERSON: 390034	2.62	30 M 940	QJ-231	A24124	2.62
30 M 929	QJ-162	390036	2.20	30 M 966	QJ-363	A24142	2.62
30 M 910	QJ-30	390074-6	2.62	30 M 908	QJ-22	M25B888	2.62
30 M 911	QJ-32	390144	2.62	30 M 952	QJ-305	M25B889	2.41
30 M 904	QJ-17	390167	2.62	30 M 940	QJ-231	PB24124A	2.62
30 M 956	QJ-313	390184, 390201	2.62	30 M 907	QJ-21	TVC 528-D	2.62
30 M 941	QJ-237	390187	3.03	30 M 942	QJ-246	VCA12127B, -C	3.03
30 M 975	QJ-410	390207	2.62	30 M 906	QJ-20	STRONBERG-CARLSON: 145164	2.62
30 M 913	QJ-40	FADA: 52.22	3.03	30 M 937	QJ-205	SYLVANIA: V-9235-2, V-9235-1, -2	3.03
30 M 946	QJ-270	52.64	3.19	30 M 976	QJ-417	37-37876-3	2.62
30 M 977	QJ-418	FIRESTONE: 78X12, -B	3.03	30 M 993	QJ-472	37-77377-1	2.82
30 M 940	QJ-231	A24124, PA24124	2.62	30 M 988	QJ-513	37-79047-1	2.62
30 M 940	QJ-231	FREED: A24124	2.62	30 M 937	QJ-205	873153	3.03
30 M 926	QJ-142	G.E.: K68J86-1	2.20	30 M 913	QJ-40	TECHMASTER: 11-7	3.03
30 M 923	QJ-110	K68J881-2	2.62	30 M 928	QJ-161	11-8	2.20
30 M 934	QJ-200	K71J70-1	3.03	30 M 959	QJ-332	TELE-KING: PD-10-A	3.03
30 M 935	QJ-201	K71J70-2	3.03	30 M 907	QJ-21	TELE-TONE: TVC 528-D	2.62
30 M 952	QJ-350	K71J71-1	3.03	30 M 905	QJ-19	TELE-VOGUE: VC 0033, -C	2.62
30 M 936	QJ-203	K71J71-2	2.62	30 M 906	QJ-20	VC-0040	2.62
30 M 964	QJ-354	K71J71-3	2.62	30 M 981	QJ-454	VC-0040-A	2.62
30 M 951	QJ-301	K82J163-1	3.03	30 M 914	QJ-40	VC-0040-1	2.62
30 M 958	QJ-328	K83J475-1	2.62	30 M 913	QJ-40	TRIAD: 970111-7	3.03
30 M 973	QJ-398	K83J870-2	2.82	30 M 928	QJ-161	970111-8	2.20
30 M 990	QJ-547	K83J931-1	3.23	30 M 949	QJ-291	TRAVLER: TV-VC-36	2.82
30 M 987	QJ-506	K119166-1	2.82	30 M 977	QJ-418	TRUETONE: 78X12, -A, -B	3.03
30 M 963	QJ-352	M77J466-1	3.23	30 M 929	QJ-162	C-8-217-3	2.20
30 M 908	QJ-22	HALLICRAFTERS: 25B888	2.62	30 M 928	QJ-161	VIDEO CORP: 970111-8	2.20
30 M 952	QJ-305	25B889	2.41	30 M 928	QJ-161	VIDEO PROD: EP-105	2.20
30 M 953	QJ-306	25B895	2.41	30 M 913	QJ-40	EP-107, -A	3.03
30 M 909	QJ-34	25B898	2.62	30 M 942	QJ-246	VISION MASTER: VC12127B	3.03
30 M 961	QJ-245	25B997	2.62	30 M 921	QJ-91	WESTINGHOUSE: V-9235-2	2.20
30 M 968	QJ-371	HOFFMAN: 4833, -2	2.62	30 M 927	QJ-149	V-9235-1	3.03
30 M 913	QJ-40	4863	2.62	30 M 970	QJ-382	V-9877-4, -5, -6	3.03
30 M 928	QJ-161	74801	3.03	30 M 989	QJ-519	V-9877-7, -8	3.03
30 M 929	QJ-162	MAJESTIC: C-8-217-3	2.20	30 M 955	QJ-310	V-10854-1	3.03
30 M 900	QJ-9	C-8-230-1	2.62	30 M 982	QJ-464	V-11695-1	3.44
30 M 900	QJ-9	METEOR: C-8-230-1	2.62	30 M 939	QJ-229	ZENITH: 63-1667	2.62
30 M 942	QJ-246	MIRROTRONE: VC12127, B, D	3.03				
30 M 957	QJ-322	MOTOROLA: 18K702864	3.50				
30 M 969	QJ-380	18K702865	3.03				
30 M 943	QJ-260	18K722190	3.50				
30 M 944	QJ-261	18A790166	3.44				
30 M 945	QJ-262	18A791705	3.03				
30 M 900	QJ-9	MUNTZ: C-8-230-1	2.62				
30 M 905	QJ-19	VC-0033, -B, -C, -D	2.62				
30 M 906	QJ-20	VC-0040, -A, -B	2.62				
30 M 981	QJ-454	VC-0040-1	2.62				
30 M 925	QJ-131	OLYMPIC: PT-1478	2.20				
30 M 928	QJ-161	PT-1479	2.20				
30 M 912	QJ-34	PT-2267	2.62				

## MALLORY CONTROLS



### SPEAKER CONTROLS

Constant-load attenuator pads. Widely used to control the level of low-impedance audio circuits in sound systems. Rated at 4 watts, continuous DC; 15 w. peak audio. Have 2 shafts. Bushing size: 3/4x3/4" diameter. Supplied with bar knob, 0-10 dial plate and wiring instructions. Av. shgp. wt., 7 oz.

**T Pad Attenuators.** Present constant source impedance as well as constant load at all control settings. Size: 1 1/2" dia., 1 1/8" deep.

**L Pad Attenuators.** Present a constant load impedance at all control settings. Size: 1 1/2" dia., 1 1/8" deep.

Ohms	Stock No.	Type	Stock No.	Type
2	29 M 868	T2	29 M 883	L2
4	29 M 869	T4	29 M 884	L4
6	29 M 870	T6	29 M 885	L6
8	29 M 871	T8	29 M 882	L8
15	29 M 872	T15	29 M 886	L15
50	29 M 873	T50	29 M 887	L50
100	29 M 865	T100	29 M 920	L100
200	29 M 874	T200	29 M 888	L200
250	29 M 875	T250	29 M 889	L250
500	29 M 876	T500	29 M 890	L500
600	29 M 866	T600	29 M 921	L600
1000	29 M 867	T1000	29 M 922	L1000
2000	29 M 877	T2000	29 M 891	L2000
3000	29 M 878	T3000	29 M 923	L3000
4000	29 M 878	T3000	29 M 708	L4000

"T" Pads. NET EACH .303 "L" Pads. NET EACH .268

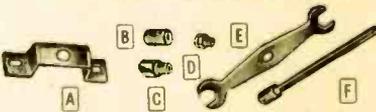
## THEATER SPEAKER CONTROLS



Precision units developed especially as controls in drive-in theater speaker installations. Withstand extremes of temperature and humidity. TSA-10 is an L-pad with 10-ohm input and 4-ohm output. TSA-35 is a 35-ohm series-type potentiometer. TSA-6 is a 6-ohm shunt-type attenuator. 1 1/2" dia. cases. Shafts are 1/2" long; steel knurled. Brass. Shgp. wt., 4 oz.

No.	Mfr's Type	Description	EACH
29 M 847	*TSA-10	L-pad Potentiometer	1.44
29 M 848	*TSA-35	Potentiometer	1.06
29 M 849	†TSA-6	Shunt-type Attenuator	1.06

## VOLUME CONTROL ACCESSORIES



from mounting surface. Av. shgp. wts.: Brackets, 3 oz.; shafts, couplers and bushings, 1 1/4 oz.

No.	Type	Fig.	Description	EACH
29 M 676	RB240	A	Mtg. bracket. Mtg. Ctrs. 2 1/2"	24c
29 M 675	RB248	A	Mtg. bracket. Mtg. Ctrs. 1 3/4"	21c
29 M 661	EB247	C	Extender	41c
29 M 665	178	E	Wrench for 1/2"-3/8" v.c. hex nuts	50c
29 M 655	RS242	F	Ext. shaft. 4x1/2x1/2" flat	56c
29 M 656	RS243	F	Ext. shaft. 4x3/4x3/4" flat	56c
29 M 657	RS244	F	Ext. shaft. 4x5/8x5/8" flat	56c
29 M 658	WB245	F	Ext. shaft. 2x1/2" with 3/8" slot	79c
60 H 390	EC240*	B	Coupling	59c
	UB241†	D	Bushing	9c

## CENTRALAB COMPENTROL CONTROLS

### TYPE C-1 COMPENTROLS



A combination volume control and tone compensator. The skilfully designed electronic circuit network substantially improves the apparent bass and treble response of amplifiers, radio and television receivers, hi-fi equipment, phonographs, etc., when volume control is set at a low level. Improves sound quality at negligible expense. Quickly and easily installed in place of existing volume control. Switch is SPST. Shaft length, 3". Body diameter, 1 1/8". Shgp. wt., 5 oz.

Stock No.	Mfr's Type	Description	1 to 4, EACH	5 to 49, EACH
30 M 421	C1-60	1/2 meg, plain	2.69	2.03
30 M 422	C1-60-S	1/2 meg, with switch	3.23	2.43
30 M 423	C1-70	1 meg, plain	2.69	2.03
30 M 424	C1-70-S	1 meg, with switch	3.23	2.43

### TYPE C2-100 COMPENTROL "SENIOR"

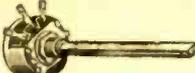


Combination volume control and tone compensator. Automatically compensates for reduced frequency response of the human ear at low volume levels. Adjusted for exact amount of compensation desired. A worthwhile addition to hi-fi equipment, radios, television, etc. Simply mount in space occupied by regular volume control. With two brown plastic knobs; instructions. Shaft length, 3/4". Shgp. wt., 6 oz.

Stock No.	Mfr's Type	Description	1 to 4, EACH	5 to 49, EACH
30 M				

## UNIVERSAL WIRE-WOUND CONTROLS

Rugged 4-watt controls. Replace Types W, WK, 4WK and 4WS. Have linear taper, except \*left-hand logarithmic taper for TV focus and right-hand logarithmic taper for picture contrast. Rotation, 300°. Size: 1 1/4" dia., 2 3/4" deep; threaded bushing is 3/8" dia. and 3/4" long. Nickel-plated brass shafts, 1/4" dia. Type WP has round shaft, 3" long. Type WPK has 3" long "Knob Master" shaft—fits a wide variety of knobs. Type WPS has 3/4" long shaft, knurled at end and slotted. Type WM multisections can be attached to all controls. Shpg. wt., 4 oz.



### WPK CONTROLS

Type	Ohms	Type	Ohms
WPK-10	10	WPK-1350R	1350†
WPK-20	20	WPK-1500	1500
WPK-30	30	WPK-1500L	1500*
WPK-50	50	WPK-2000	2000
WPK-100	100	WPK-2000L	2000*
WPK-200	200	WPK-2250L	2250*
WPK-250	250	WPK-2500	2500
WPK-300	300	WPK-2500R	2500†
WPK-400	400	WPK-3000	3000
WPK-500	500	WPK-4000L	4000*
WPK-600	600	WPK-5000	5000
WPK-650	650	WPK-5000L	5000*
WPK-750	750	WPK-6000	6000
WPK-750L	750*	WPK-6000L	6000*
WPK-750R	750†	WPK-7500	7500
WPK-1000	1000	WPK-7500L	7500*
WPK-1350	1350	WPK-10000	10,000

Specify Type No. and Ohms.  
30 MM 216. NET EACH.....1.12

Type	Ohms	Type	Ohms
WPK-12500	12,500	WPK-20000	20,000
WPK-15000	15,000	WPK-25000	25,000

Specify Type No. and Ohms.  
30 MM 199. NET EACH.....1.35

### WPS CONTROLS

Type	Ohms	Type	Ohms
WPS-25	25	WPS-2000	2000
WPS-40	40	WPS-2250	2250
WPS-60	60	WPS-2250L	2250*
WPS-250	250	WPS-2500	2500
WPS-500	500	WPS-3000	3000
WPS-500L	500*	WPS-4000	4000*
WPS-1000	1000	WPS-4000L	4000*
WPS-1500	1500	WPS-5000	5000

Specify Type No. and Ohms.  
30 MM 217. NET EACH.....1.12

### WP CONTROLS

Type	Ohms	Type	Ohms
WP-2	2	WP-200	200
WP-3	3	WP-250	250
WP-5	5	WP-300	300
WP-6	6	WP-400	400
WP-8	8	WP-500	500
WP-10	10	WP-750	750
WP-15	15	WP-1000	1000
WP-20	20	WP-1500	1500
WP-25	25	WP-2000	2000
WP-30	30	WP-2500	2500
WP-40	40	WP-3000	3000
WP-50	50	WP-4000	4000
WP-60	60	WP-5000	5000
WP-75	75	WP-7500	7500
WP-100	100	WP-10000	10,000

Specify Type No. and Ohms.  
30 MM 215. NET EACH.....1.12

### WM MULTISECTION CONTROLS

Ruggedly constructed 4-watt "add-on" control sections. Can be attached to the WPK, WPS or WP controls, listed above, to form dual control units. All have linear taper, except \*Type WM-7500L which has left-hand logarithmic taper for TV focus, Rotation, 300°. Multisection adds 3/4" to depth. Shpg. wt., 2 oz.

Type	Ohms	Type	Ohms
WM-50	50	WM-2000	2000
WM-100	100	WM-2500	2500
WM-200	200	WM-3000	3000
WM-250	250	WM-5000	5000
WM-500	500	WM-7500L	7500*
WM-1000	1000	WM-10000	10,000
WM-1500	1500		

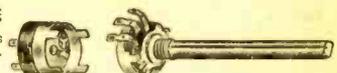
Specify Type No. and Ohms.  
30 MM 860. NET EACH.....1.12

### SWITCHES FOR ABOVE CONTROLS

Easily attached switches for all of above controls. Shpg. wt., 2 oz.  
30 M 218. Type 76-11. SPST. NET  
30 M 219. Type 76-12. DPST. EACH.....41c

## Q CONTROLS WITH UNIVERSAL SHAFTS

Knurled, flatted and slotted. 3" universal shaft can be cut to desired length. 1/4" body dia. Bushing is 3/4" long. Smooth, extremely quiet operation. \*Includes 270-ohm, 1/2-watt bias resistor. Less switches (below). See taper explanations below. Av. shpg. wt., 4 oz.



No.	Type	Ohms	Taper	No.	Type	Ohms	Taper
30 M 395	Q11-201	250	A	30 M 318	Q13-128	100K	C
30 M 300	Q11-103	500	A	30 M 388	Q11-228	125K	A
30 M 377	Q11-105	750	A	30 M 875	Q11-328	150K	A
30 M 441	Q17-105	750	P	30 M 444	Q13-328	150K	A
30 M 301	Q11-108	1000	A	30 M 374	Q11-129	200K	A
30 M 379	Q17-108	1000	P	30 M 319	Q11-130	250K	A
30 M 874	Q17-110	2000	A	30 M 320	Q13-130	250K	A
30 M 442	Q11-109	1500	A	30 M 445	Q11-131	300K	A
30 M 380	Q17-119	1500	Q	30 M 876	Q11-132	350K	A
30 M 302	Q11-110	2000	A	30 M 321	Q13-132	350K	C
30 M 373	Q13-111	2500	C	30 M 322	Q11-133	500K	A
30 M 381	Q17-111	2500	Q	30 M 323	Q13-133	500K	C
30 M 303	Q11-112	3000	A	30 M 324	Q14-133	500K	D
30 M 382	Q17-112	3000	Q	30 M 397	Q17-133	500K	Q
30 M 304	Q11-114	5000	A	30 M 398	Q11-134	600K	A
30 M 383	Q13-114	5000	C	30 M 390	Q11-136	750K	A
30 M 384	Q17-114	5000	Q	30 M 325	Q11-137	1 meg	A
30 M 305	Q11-115	7500	A	30 M 326	Q13-137	1 meg	D
30 M 306	Q11-116	10K	A	30 M 327	Q14-137	1 meg	D
30 M 307	Q13-116	10K	C	30 M 877	Q17-137	1 meg	Q
30 M 308	Q14-116*	10K	D	30 M 328	Q11-138	1.5 meg	A
30 M 385	Q17-116	10K	Q	30 M 329	Q11-139	2 meg	A
30 M 309	Q11-119	20K	A	30 M 399	Q17-139	2 meg	Q
30 M 310	Q16-119	20K	Spec.	30 M 331	Q11-239	2.5 meg	A
30 M 311	Q11-120	25K	A	30 M 332	Q11-140	3 meg	A
30 M 443	Q13-120	25K	C	30 M 333	Q13-140	3 meg	Q
30 M 312	Q14-120*	25K	D	30 M 446	Q17-140	3 meg	Q
30 M 313	Q11-121	30K	A	30 M 334	Q11-141	5 meg	A
30 M 396	Q11-122	35K	A	30 M 287	Q12-141	5 meg	Spec.
30 M 314	Q11-123	50K	A	30 M 392	Q13-141	5 meg	Q
30 M 315	Q13-123	50K	C	30 M 393	Q17-141	5 meg	Q
30 M 316	Q14-123*	50K	D	30 M 394	Q11-142	7.5 meg	A
30 M 387	Q11-125	75K	A	30 M 395	Q11-143	10 meg	A
30 M 317	Q11-128	100K	A				

NET EACH.....91c

## TAPPED Q CONTROLS WITH UNIVERSAL SHAFTS

No.	Type	Megs	Taps, Ohms	Taper	No.	Type	Megs	Taps, Ohms	Taper
30 M 879	Q13-118X	15K†	10K	Spec.	30 M 349	Q18-137X	1.0	100K	Spec.
30 M 386	Q13-118XX	15K†	5K/10K	Spec.	30 M 350	Q18-137XX	1.0	250K/.5 Meg.	Spec.
30 M 337	Q18-130X	.25	60K	H	30 M 351	Q19-137X	1.0	.5 Meg.	Spec.
30 M 336	Q13-130X	.25	125K	Spec.	30 M 352	Q18-539X	1.0	5 meg	Spec.
30 M 340	Q18-132X	.35	75K	Spec.	30 M 391	Q13-138X	1.5	25 meg	Spec.
30 M 342	Q17-133X	.5	25K	Spec.	30 M 355	Q17-139X	2.0	150K	Spec.
30 M 343	Q18-133X	.5	50K	Spec.	30 M 357	Q18-139XX	2.0	250K/.5 Meg	Spec.
30 M 341	Q13-133X	.5	125K	H	30 M 354	Q13-139XX	2.0	.5Meg/1Meg	Spec.
30 M 344	Q19-133X	.5	250K	Spec.	30 M 353	Q13-139X	2.0	.5 Meg	H
30 M 345	Q18-133X	.5	100K/200K	Spec.	30 M 356	Q18-139X	2.0	1 Meg	Spec.
30 M 346	Q13-137X	1.0	250K	H	30 M 449	Q18-140X	3.0	1.5 Meg	Spec.

NET EACH.....1.32

## TYPE 76 ATTACHABLE SWITCHES FOR Q CONTROLS

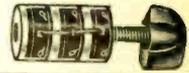
Blue bakelite enclosure. Easily attached. Type 30 M 359. Type 76-1. SPST. NET  
76-4 in make-one, break-one for TV spot killing. 30 M 591. Type 76-2. DPST. NET  
U.L. Approved. Shpg. wt., 2 oz. 30 M 888. Type 76-4. SP'DT. EACH.....41c

## EXPLANATION OF TAPERS

- Taper A.** Linear.
- Taper C.** Logarithmic curve for audio circuit control or antenna shunt control.
- Taper D.** Tapered at both ends to provide control of grid bias and antenna circuit. Used where control of grid bias is of prime importance in controlling gain.
- Taper H.** Tapped logarithmic curve. Audio level control for bass compensation.
- Taper P.** Semi-logarithmic curve with reverse taper. For use in contrast and picture control circuits in television.
- Taper Q.** Same applications as Taper P above, but has slightly steeper curve.

## L AND T PAD SPEAKER CONTROLS

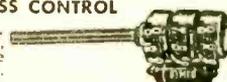
Handle 10 watts of audio (3 watts DC). L pad attenuators provide constant input impedance. T pad attenuators provide both constant input and output imped. Dia. 1 1/4" depth behind panel, 1 1/2" (L Pad) and 1 1/4" (T Pad). 3/8" bushing for mtg. on panels up to 3/4" thick. With knob. 6 oz.



No.	Type	Pad	Ohms	EACH	No.	Type	Pad	Ohms	EACH
30 M 880	LP4	L	4	2.73	30 M 884	TP4	T	4	3.09
30 M 881	LP8	L	8		30 M 885	TP8	T	8	
30 M 882	LP15	L	15		30 M 886	TP15	T	15	
30 M 883	LP500	L	500		30 M 887	TP500	T	500	

## LOUDNESS CONTROL

**Type LC-1.** Easily installed. loudness-type volume control. Provides complete listening pleasure when amplifier volume must be kept low. Replaces conventional volume control. Automatically compensates for reduced response of the ear to bass and treble at low volume. Audio output can be reduced to nearly whisper level and retain almost perfect tonal balance. Has input resistance of 5 meg-ohms. Insertion loss only 6 db. Space required behind panel: With switch 2 1/2", without switch, 1 3/4". With instructions, less AC switch (may be used with Type 76-1 or Type 76-2 switch above). Shpg. wt., 4 oz.  
30 M 595. List, \$12.00. NET.....7.06



## TV SIGNAL ATTENUATOR

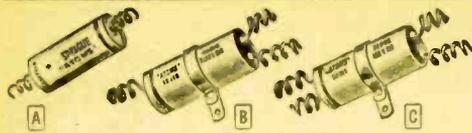
**Type QJ-3.** Economically priced L-pad television signal attenuator. For use with sets having 300-ohm twin line antenna input. Minimizes interstation interference, definition loss and sound bars caused by excessive signal strength. Diminishes buzz or hum due to high signal level in intercarrier systems. Reduces overloading effects in strong signal area. In many cases, corrects or reduces horizontal or vertical jitter, also picture and sound "break-over". Very useful device to simulate fringe-area signals. A nearly constant 300-ohm load is maintained on antenna lead-in. With mtg. bracket and instructions. 3/8" diameter, 1" deep. Shaft: 3/8" diameter, 3/4" long. Wt., 3 oz.  
29 M 915. List, \$4.00. NET.....2.35



# Sprague Capacitors

## TVA AND TU ATOMS—MIDGET ELECTROLYTICS

Very compact, metal-cased dry electrolytics. Engineered especially for replacements in tough TV applications—such as power supplies, decoupling circuits, cathode bypass circuits, etc. Will withstand the high surge voltages and high ripple currents commonly found in television circuits. Very low leakage. Operate efficiently at temperatures as high as 85°C. \*Separate negative lead. Av. shpg. wt., 6 oz.



**A SINGLE SECTION**

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
16 L 249	TVA-1962	8	600	1 1/2 x 1 1/2	1.23
16 L 256	TVA-1963	10	600	1 1/2 x 1 1/2	1.29
16 L 257	TVA-1965	16	600	1 1/2 x 1 1/2	1.50
16 L 258	TVA-1966	20	600	1 1/2 x 1 1/2	1.59
15 L 175	TVA-1902	8	500	1 1/2 x 1 1/2	.76
15 L 176	TVA-1905	16	500	1 1/2 x 2 1/2	.88
15 L 177	TVA-1906	20	500	1 1/2 x 2 1/2	.94
16 L 613	TVA-1802	10	475	3/4 x 1 1/2	.79
16 L 614	TVA-1804	20	475	3/4 x 1 1/2	.84
16 L 615	TVA-1701	2	450	3/4 x 2 1/2	.65
15 L 170	TVA-1702	4	450	3/4 x 1 1/2	.68
15 L 171	TVA-1704	8	450	3/4 x 1 1/2	.73
15 L 225	TVA-1705	10	450	3/4 x 1 1/2	.76
15 L 172	TVA-1706	12	450	3/4 x 1 1/2	.79
15 L 173	TVA-1708	16	450	3/4 x 2 1/2	.82
15 L 174	TVA-1709	20	450	3/4 x 2 1/2	.91
15 L 169	TVA-1711	30	450	3/4 x 2 1/2	1.00
15 L 178	TVA-1712	40	450	3/4 x 2 1/2	1.06
15 L 991	TVA-1713	50	450	3/4 x 3 1/2	1.23
16 L 248	TVA-1714	60	450	1 1/8 x 3 1/2	1.38
15 L 985	TVA-1716	80	450	1 1/8 x 3 1/2	1.65
16 L 616	TVA-1601	4	350	3/4 x 1 1/2	.71
15 L 181	TVA-1603	8	350	3/4 x 1 1/2	.74
15 L 184	TVA-1608	20	350	3/4 x 1 1/2	.85
15 L 983	TVA-1611	40	350	3/4 x 2 1/2	1.03
15 L 984	TVA-1613	60	350	1 1/2 x 2 1/2	1.15
16 L 247	TVA-1575	140	300	1 1/2 x 3 3/4	1.85
15 L 185	TVA-1501	4	250	3/4 x 1 1/2	.59
15 L 186	TVA-1503	8	250	3/4 x 1 1/2	.68
16 L 617	TVA-1504	10	250	3/4 x 1 1/2	.71
15 L 187	TVA-1505	12	250	3/4 x 1 1/2	.73
15 L 188	TVA-1507	16	250	3/4 x 1 1/2	.76
15 L 189	TVA-1508	20	250	3/4 x 1 1/2	.79
16 L 618	TVA-1510	30	250	3/4 x 2 1/2	.85
15 L 190	TVA-1511	40	250	3/4 x 2 1/2	.91
16 L 246	TVA-1480	200	200	1 1/2 x 3 3/4	1.71
15 L 192	TVA-1402	4	150	3/4 x 1 1/2	.52
15 L 193	TVA-1405	8	150	3/4 x 1 1/2	.69
15 L 226	TVA-1406	10	150	3/4 x 1 1/2	.62
15 L 194	TVA-1407	12	150	3/4 x 1 1/2	.65
15 L 195	TVA-1409	16	150	3/4 x 1 1/2	.68
16 L 241	TVA-1403	5	150	3/4 x 1 1/2	.59
15 L 196	TVA-1410	20	150	3/4 x 1 1/2	.61
16 L 242	TVA-1411	25	150	3/4 x 1 1/2	.73
15 L 197	TVA-1412	30	150	3/4 x 1 1/2	.76
15 L 198	TVA-1413	40	150	3/4 x 1 1/2	.79
15 L 199	TVA-1414	50	150	3/4 x 1 1/2	.82
16 L 243	TVA-1415	60	150	3/4 x 1 1/2	.88
15 L 878	TVA-1418	80	150	3/4 x 1 1/2	.94
16 L 619	TVA-1420	100	150	3/4 x 2 1/2	1.03
16 L 240	TVA-1422	150	150	1 1/2 x 2 1/2	1.12
16 L 244	TVA-1423	200	150	1 1/2 x 2 1/2	1.29
16 L 245	TVA-1425	300	150	1 1/2 x 3 1/2	1.50
15 L 198	TVA-1370	1	50	3/4 x 1 1/2	.39
15 L 877	TVA-1301	1	50	3/4 x 1 1/2	.53
15 L 200	TVA-1303	2	50	3/4 x 1 1/2	.59
15 L 201	TVA-1304	10	50	3/4 x 1 1/2	.65
15 L 202	TVA-1306	25	50	3/4 x 1 1/2	.62
15 L 203	TVA-1308	50	50	3/4 x 1 1/2	.71
15 L 876	TVA-1310	100	50	3/4 x 1 1/2	.82
15 L 858	TVA-1311	150	50	3/4 x 1 1/2	.91
15 L 859	TVA-1312	250	50	3/4 x 1 1/2	1.03
16 L 620	TVA-1201	2	25	3/4 x 1 1/2	.53
15 L 207	TVA-1203	5	25	3/4 x 1 1/2	.59
15 L 205	TVA-1204	10	25	3/4 x 1 1/2	.59
15 L 206	TVA-1205	25	25	3/4 x 1 1/2	.59
15 L 208	TVA-1206	50	25	3/4 x 1 1/2	.65
15 L 867	TVA-1207	100	25	3/4 x 1 1/2	.79
15 L 868	TVA-1208	250	25	3/4 x 1 1/2	1.00
15 L 869	TVA-1209	500	25	3/4 x 2 1/2	1.35
16 L 236	TVA-1160	100	15	3/4 x 1 1/2	.73
16 L 237	TVA-1161	250	15	3/4 x 1 1/2	.91

### ATOM CAPACITOR KITS



SK-106. A kit of Atom electrolytic capacitors. Contains one each of the following TVA types of capacitors (listed above): #1205, 1207, 1303, 1304, 1306, 1308, 1310, 1310, 1422, 1704, 1705, 1708, 1709, 1711, 1712, 1713, 1716, 2428, 2450, 2453. Supplied in sturdy, compartmented welded metal inventory cabinet. Cabinet is open in front to allow easy access to units. Cabinet size (HWD), 9 1/2 x 10 1/2 x 5 1/2. Shpg. wt., 5 lbs.

SK-106

EK-1

EK-1. A kit of Atom electrolytic capacitors consisting of the following TVA types of capacitors (listed above): #1205, 1303, 1304, 1410, 1704, 1711, 1716, 2450, 2453, 2 ea.—1705, 1709, 1712. Capacitors are small in size; rated 80°C or 185°F. Supplied in crystal-clear compartmented plastic case. Each capacitor immediately accessible. Case size, 7 x 1 1/2 x 1 1/2. Shpg. wt., 2 lbs.

152 Specify Manufacturer's Type No. and Capacitance on Capacitor Orders

**A SINGLE SECTION (cont'd)**

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
16 L 238	TVA-1162	500	15	1 1/2 x 2 1/2	1.03
16 L 239	TVA-1163	1000	15	1 1/2 x 2 1/2	1.35
16 L 234	TVA-1130	100	12	1 1/2 x 1 1/2	.71
15 L 862	TVA-1131	250	12	1 1/2 x 1 1/2	.85
15 L 863	TVA-1132	500	12	1 1/2 x 1 1/2	1.00
16 L 235	TVA-1133	1000	12	1 1/2 x 2 1/2	1.32
15 L 981	TVA-1100	50	6	3/4 x 1 1/2	.56
16 L 230	TVA-1101	100	6	3/4 x 1 1/2	.71
16 L 231	TVA-1102	250	6	3/4 x 1 1/2	.79
16 L 232	TVA-1103	500	6	3/4 x 2 1/2	.91
15 L 860	TVA-1104	1000	6	1 1/2 x 2 1/2	1.12
16 L 233	TVA-1105	1500	6	1 1/2 x 2 1/2	1.23
15 L 861	TVA-1106	2000	6	1 1/2 x 2 1/2	1.35

**B DUAL SECTION**

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
15 L 220	TVA-2720	8-8	450	3/4 x 1 1/2	1.00
15 L 221	TU-88	*8-8	450	1 1/2 x 3 3/4	1.26
15 L 222	TVA-2725	16-8	450	3/4 x 2 1/2	1.18
15 L 227	TVA-2722	10-10	450	3/4 x 1 1/2	1.09
15 L 215	TU-1616	*16-16	450	1 1/2 x 3 1/2	1.65
15 L 986	TVA-2735	20-20	450	1 1/2 x 3 1/2	1.77
15 L 987	TVA-2740	30-30	450	1 1/2 x 3 1/2	1.76
15 L 987	TVA-2740	40-40	450	1 1/2 x 3 1/2	2.00
16 L 266	TVA-2711	450-50	450-50	1 1/2 x 4 3/4	2.18
16 L 264	TVA-2535	120-80	250	1 1/2 x 3 3/4	2.35
15 L 245	TVA-2415	8-8	150	3/4 x 1 1/2	.88
15 L 254	TVA-2420	16-16	150	3/4 x 1 1/2	1.06
15 L 247	TVA-2428	20-20	150	3/4 x 1 1/2	.97
15 L 248	TU-220	*20-20	150	1 1/2 x 2 1/2	1.21
15 L 253	TVA-2421	30-20	150	3/4 x 1 1/2	1.00
15 L 252	TVA-2438	40-20	150	3/4 x 1 1/2	1.03
15 L 251	TVA-2434	30-30	150	3/4 x 1 1/2	1.29
15 L 249	TU-420	*40-20	150	1 1/2 x 2 1/2	1.03
15 L 250	TVA-2442	40-30	150	3/4 x 1 1/2	1.06
15 L 243	TVA-2445	40-40	150	3/4 x 1 1/2	1.09
15 L 244	TVA-2450	50-30	150	3/4 x 1 1/2	1.15
15 L 305	TVA-2453	50-50	150	3/4 x 2 1/2	1.23
15 L 306	TVA-2460	80-30	150	3/4 x 2 1/2	1.29
16 L 259	TVA-2162	80-50	150	1 1/2 x 3 1/2	1.38
16 L 262	TVA-2464	100-100	150	1 1/2 x 3 1/2	1.88
16 L 263	TVA-2467	200-5	150	1 1/2 x 3 1/2	1.56
15 L 255	TVA-2315	10-10	50	3/4 x 1 1/2	.82

**C TRIPLE SECTION**

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
15 L 307	TVA-3440	20-20-20	150	3/4 x 1 1/2	1.29
15 L 311	TVA-3444	30-30-30	150	3/4 x 2 1/2	1.38
15 L 308	TVA-3448	40-30-20	150	3/4 x 2 1/2	1.38
15 L 309	TVA-3451	40-40-40	150	1 1/2 x 2 1/2	1.44
15 L 327	TVA-3455	80-40-20	150	1 1/2 x 2 1/2	1.62
15 L 989	TVA-3419	30-30-100	150-12	3/4 x 1 1/2	1.35
15 L 988	TVA-3415	20-20-20	150-150-25	3/4 x 1 1/2	1.21
15 L 312	TVA-3423	40-30-20	150-150-25	3/4 x 1 1/2	1.29
15 L 328	TVA-3427	40-40-100	150-150-25	3/4 x 2 1/2	1.44
15 L 313	TVA-3430	50-30-20	150-150-25	3/4 x 2 1/2	1.38
15 L 329	TVA-3433	50-30-200	150-150-25	1 1/2 x 2 1/2	1.62
16 L 314	TVA-3436	50-30-20	150-150-25	1 1/2 x 2 1/2	1.40
16 L 288	TVA-3712	5-4-40	400-400-400	1 1/2 x 4 3/4	2.68
15 L 990	TVA-3716	12-12-20	450-450-25	3/4 x 1 1/2	1.35

### QUADRUPLE SECTION

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
16 L 284	TVA-4576	140-5-200-30	300-300-150-150	1 1/2 x 4 3/4	3.56
16 L 285	TVA-4584	120-40-40-10	300-300-300-250	1 1/2 x 4 3/4	3.65
16 L 286	TVA-4607	140-200-30	350-300-200	1 1/2 x 5 1/2	4.50
16 L 287	TVA-4618	80-60-40-20	350-350-300-150	1 1/2 x 4 3/4	3.47
16 L 288	TVA-4659	80-10-40-100	400-300-300-50	1 1/2 x 4 3/4	3.20
16 L 289	TVA-4705	10-80-40-100	450-300-250-50	1 1/2 x 4 3/4	2.82
15 L 854	TVA-4742	20-20-20-10	450	1 1/2 x 3 3/4	2.50
15 L 855	TVA-4748	40-20-20-10	450	1 1/2 x 4 3/4	2.76
15 L 856	TVA-4750	40-40-20-20	450	1 1/2 x 4 3/4	3.20

### TYPE AM MOTOR STARTING CAPACITORS



An electrolytic capacitor designed especially for 110 volt capacitor-start AC motors. Carefully engineered to pass the correct amount of current for the maximum possible starting torque. In tightly sealed aluminum cans with insulating outer cardboard tubes for high efficiency and dependability. Provided with lug terminals for quick, easy installation. Screws are removable for solder connections if desired. When in question as to proper size, it is always safer to choose the next larger value of capacitance. \*Indicates minimum-maximum capacitance values replaceable with these units. Av. shpg. wt., 10 oz.

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH				
15 L 579	1106	47-56	1x2 1/2	1.23	1.5 L 570	1128	189-227	1 1/2 x 2 1/2	2.20
15 L 580	1107	53-64	1x2 1/2	1.26	15 L 571	1130	200-240	1 1/2 x 3 1/2	2.29
15 L 581	1108	64-77	1x2 1/2	1.32	15 L 572	1131	216-259	1 1/2 x 3 1/2	2.38
15 L 582	1109	72-88	1x2 1/2	1.35	15 L 573	1134	233-280	1 1/2 x 3 1/2	2.65
15 L 583	1110	88-108	1x2 1/2	1.53	15 L 574	1137	243-291	1 1/2 x 4 1/2	2.76
15 L 584	1113	108-130	1 1/2 x 2 1/2	1.69	15 L 575	1140	270-328	1 1/2 x 4 1/2	2.79
15 L 585	1116	124-149	1 1/2 x 2 1/2	1.73	15 L 576	1142	324-388	1 1/2 x 4 1/2	3.18
15 L 586	1119	130-156	1 1/2 x 2 1/2	1.7					

# Sprague Capacitors

## TYPE EP PAPER MIDGETS

Midget-size tubulars. Fit tight spots in pocket and auto radios and other electronic assemblies requiring high temperature performance with minimum size. For 105°C operation with no voltage derating. Av. shpg. wt., 2 oz.



No.	Type	Mfd	W.V.	Size	EA.
15 L 820	6EP-D10	.001	600	1/4 x 1 1/2"	21c
15 L 821	6EP-D20	.002	600	1/4 x 1 1/2"	21c
15 L 822	6EP-D30	.003	600	1/4 x 1 1/2"	21c
15 L 823	6EP-D40	.004	600	1/4 x 1 1/2"	21c
15 L 824	6EP-D50	.005	600	1/4 x 1 1/2"	24c
15 L 825	6EP-D60	.006	600	1/4 x 1 1/2"	24c
15 L 826	6EP-D80	.008	600	1/4 x 1 1/2"	24c
15 L 827	6EP-S10	.01	600	1/4 x 1 1/2"	26c
15 L 828	6EP-S20	.02	600	1/4 x 1 1/2"	29c
15 L 829	6EP-S50	.05	600	1/4 x 1 1/2"	32c
15 L 830	6EP-P10	.1	600	1/4 x 1 1/2"	41c
15 L 832	6EP-P20	.2	600	1/4 x 1 1/2"	47c
15 L 831	6EP-P25	.25	600	1/4 x 1 1/2"	47c
15 L 800	4EP-D10	.001	400	1/4 x 1 1/2"	21c
15 L 802	4EP-D30	.003	400	1/4 x 1 1/2"	21c
15 L 803	4EP-D40	.004	400	1/4 x 1 1/2"	21c
15 L 804	4EP-D50	.005	400	1/4 x 1 1/2"	21c
15 L 805	4EP-D60	.006	400	1/4 x 1 1/2"	21c
15 L 806	4EP-S10	.01	400	1/4 x 1 1/2"	24c
15 L 807	4EP-S20	.02	400	1/4 x 1 1/2"	26c
15 L 808	4EP-S50	.05	400	1/4 x 1 1/2"	29c
15 L 843	4EP-P10	.1	400	1/4 x 1 1/2"	41c
15 L 844	4EP-P20	.2	400	1/4 x 1 1/2"	41c
15 L 845	4EP-P25	.25	400	1/4 x 1 1/2"	44c
15 L 846	4EP-P50	.5	400	1/4 x 1 1/2"	50c
15 L 809	2EP-D50	.005	200	1/4 x 1 1/2"	21c
15 L 811	2EP-S10	.01	200	1/4 x 1 1/2"	24c
15 L 812	2EP-S20	.02	200	1/4 x 1 1/2"	26c
15 L 813	2EP-S50	.05	200	1/4 x 1 1/2"	29c
15 L 814	2EP-P10	.1	200	1/4 x 1 1/2"	35c
15 L 836	2EP-P20	.2	200	1/4 x 1 1/2"	38c
15 L 837	2EP-P25	.25	200	1/4 x 1 1/2"	41c
15 L 838	2EP-P50	.5	200	1/4 x 1 1/2"	47c
15 L 815	1EP-P25	.25	100	1/4 x 1 1/2"	41c
15 L 816	1EP-P50	.5	100	1/4 x 1 1/2"	47c

## HYPASS NETWORK CAPACITOR

Feed-through VHF bypass capacitors. Efficient up to 150 mc. Reduce vibrator hash and harmonic radiation. 48P18 reduces voltage regulator noise in mobile applications; leads at 40 amps. 80P13 leads are rated 20 amps; for bulkhead mounting. \*Screw terminals. 2 oz.



No.	Type	Mfd	WVDC	Size	NET
15 L 688	48P18*	.5	500	1x1 1/2"	2.23
15 L 683	46P12	.002	600	1/4 x 1 1/2"	1.26
15 L 685	48P8*	.1	600	1/4 x 1 1/2"	1.53
15 L 689	80P3*	.1	600	1/4 x 1 1/2"	1.73
15 L 697	47P16	.002	3000	1x1 1/2"	1.88

## CAN-TYPE DRY ELECTROLYTICS

Can-type electrolytic capacitors for replacement and original equipment use. Inverted screw-can mounting. Will replace old-style or standard-size units. With mtg. hardware.



### PLS "TINY MIKE"

525 Volts Surge—450 Volts Wkg.

An assortment of electrolytic capacitors with sections having separate positive leads and common negative leads. Feature etched-foil construction. Av. shpg. wt., 6 oz.

No.	Type	Mfd	Size	NET
15 L 700	PLS-4	4	1 1/2 x 2 1/2"	1.18
15 L 701	PLS-8	8	1 1/2 x 2 1/2"	1.29
15 L 702	PLS-12	12	1 1/2 x 2 1/2"	1.41
15 L 703	PLS-16	16	1 1/2 x 2 1/2"	1.44
15 L 709	PLS-20	20	1 1/2 x 2 1/2"	1.59
15 L 710	PLS-25	25	1 1/2 x 3 1/2"	1.71
15 L 711	PLS-30	30	1 1/2 x 3 1/2"	1.76
15 L 712	PLS-40	40	1 1/2 x 3 1/2"	1.85
15 L 704	PLS-48	4-8	1 1/2 x 3 1/2"	1.73
15 L 705	PLS-88	8-8	1 1/2 x 3 1/2"	1.76
15 L 706	PLS-88	8-8	1 1/2 x 3 1/2"	2.94
15 L 707	PLS-816	8-16	1 1/2 x 3 1/2"	1.94
15 L 708	PLS-216	16-16	1 1/2 x 3 1/2"	2.09

### LS INVERTED SCREW CAN

525 Volts Surge—450 Volts Wkg.

Negative can. Av. shpg. wt., 6 oz.

No.	Type	Mfd	Size	NET
15 L 020	LS-8	8	1 1/2 x 2 1/2"	1.29
15 L 021	LS-12	12	1 1/2 x 2 1/2"	1.41
15 L 022	LS-16	16	1 1/2 x 2 1/2"	1.44
15 L 025	LS-20	20	1 1/2 x 2 1/2"	1.59
15 L 026	LS-25	25	1 1/2 x 3 1/2"	1.71
15 L 027	LS-30	30	1 1/2 x 3 1/2"	1.76
15 L 028	LS-40	40	1 1/2 x 3 1/2"	1.85
15 L 023	LS-88	8-8	1 1/2 x 3 1/2"	1.76

## "BLACK BEAUTY" TELECAPS

Hi-temp molded plastic tubulars. Highly resistant to heat and moisture; ruggedly built; completely insulated. Features special "DIFILM" (Mylar paper) molded construction. 200 to 1000 v. types operate to 105°C; 1600 v. and up types, operate to 85°C. 600-6000 v. types are oil impregnated. All are ±10% tolerance. Av. shpg. wt., 3 oz.



### 200 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
15 L 120	2TM-S2	.02	3/4 x 1 1/2"	15c
15 L 149	2TM-S47	.047	3/4 x 1 1/2"	15c
15 L 121	2TM-S5	.05	3/4 x 1 1/2"	15c
15 L 122	2TM-P15	.15	3/4 x 1 1/2"	21c
15 L 145	2TM-P15	.15	3/4 x 1 1/2"	21c
15 L 146	2TM-P22	.22	3/4 x 1 1/2"	24c
15 L 147	2TM-P25	.25	3/4 x 1 1/2"	24c
15 L 148	2TM-P47	.47	3/4 x 1 1/2"	35c
15 L 123	2TM-P5	.5	3/4 x 1 1/2"	35c
15 L 124	2TM-M1	1.0	3/4 x 1 1/2"	53c

### 400 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
15 L 125	4TM-S1	.01	3/4 x 1 1/2"	15c
15 L 126	4TM-S2	.02	3/4 x 1 1/2"	15c
15 L 013	4TM-S22	.022	3/4 x 1 1/2"	18c
15 L 014	4TM-S47	.047	3/4 x 1 1/2"	18c
15 L 127	4TM-S5	.05	3/4 x 1 1/2"	18c
15 L 015	4TM-S68	.068	3/4 x 1 1/2"	21c
15 L 128	4TM-P1	.1	3/4 x 1 1/2"	21c
15 L 011	4TM-P15	.15	3/4 x 1 1/2"	24c
15 L 521	4TM-P2	.2	3/4 x 1 1/2"	24c
15 L 012	4TM-P22	.22	3/4 x 1 1/2"	24c
15 L 129	4TM-P25	.25	3/4 x 1 1/2"	24c
15 L 010	4TM-P5	.5	3/4 x 1 1/2"	35c

### 600 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
16 L 250	6TM-T1	.0001	3/4 x 1 1/2"	15c
16 L 251	6TM-T25	.00025	3/4 x 1 1/2"	15c
16 L 252	6TM-T4	.0004	3/4 x 1 1/2"	15c
16 L 253	6TM-T5	.0005	3/4 x 1 1/2"	15c
15 L 070	6TM-D1	.001	3/4 x 1 1/2"	15c

No.	Type	Mfd	Size	EA.
15 L 084	6TM-D15	.0015	3/4 x 1 1/2"	15c
15 L 071	6TM-D2	.002	3/4 x 1 1/2"	15c
15 L 092	6TM-D22	.0022	3/4 x 1 1/2"	15c
15 L 072	6TM-D3	.003	3/4 x 1 1/2"	15c
15 L 522	6TM-D33	.0033	3/4 x 1 1/2"	15c

No.	Type	Mfd	Size	EA.
15 L 073	6TM-D4	.004	3/4 x 1 1/2"	15c
15 L 093	6TM-D47	.0047	3/4 x 1 1/2"	15c
15 L 074	6TM-D5	.005	3/4 x 1 1/2"	15c
15 L 075	6TM-D6	.006	3/4 x 1 1/2"	15c

No.	Type	Mfd	Size	EA.
16 L 254	6TM-D68	.0068	3/4 x 1 1/2"	18c
15 L 523	6TM-D8	.008	3/4 x 1 1/2"	18c
15 L 076	6TM-S1	.01	3/4 x 1 1/2"	18c
15 L 094	6TM-S15	.015	3/4 x 1 1/2"	18c
15 L 077	6TM-S22	.022	3/4 x 1 1/2"	18c
16 L 255	6TM-S22	.022	3/4 x 1 1/2"	18c

No.	Type	Mfd	Size	EA.
15 L 078	6TM-S3	.03	3/4 x 1 1/2"	21c
15 L 526	6TM-S33	.033	3/4 x 1 1/2"	21c
15 L 079	6TM-S4	.04	3/4 x 1 1/2"	21c
15 L 098	6TM-S47	.047	3/4 x 1 1/2"	24c
15 L 080	6TM-S5	.05	3/4 x 1 1/2"	24c
15 L 081	6TM-S6	.06	3/4 x 1 1/2"	24c

No.	Type	Mfd	Size	EA.
15 L 082	6TM-P1	.1	3/4 x 1 1/2"	29c
15 L 524	6TM-P15	.15	3/4 x 1 1/2"	26c
15 L 525	6TM-P2	.2	3/4 x 1 1/2"	32c

### SC INVERTED SCREW CAN

600 Volts Surge—475 Volts Wkg.

Threaded bushing mount. Negative can. Insulating washer. Av. shpg. wt., 6 oz.

No.	Type	Mfd	Size	NET
15 L 320	SC-4	4	1 x 3 1/2"	1.50
15 L 321	SC-8	8	1 1/2 x 4 1/2"	1.62
15 L 323	SC-12	12	1 1/2 x 4 1/2"	1.73
15 L 324	SC-16	16	1 1/2 x 4 1/2"	1.85
15 L 325	SC-88	8-8	1 1/2 x 4 1/2"	2.41

### CL INVERTED SCREW CAN

600 Volts Surge—475 Volts Wkg.

Like "SC" but can insulated from filter section. Pos. and neg. leads. Wt., 8 oz.

No.	Type	Mfd	Size	NET
15 L 720	CL-8	8	1 1/2 x 4 1/2"	1.62
15 L 721	CL-16	16	1 1/2 x 4 1/2"	1.85
15 L 722	CL-88	8-8	1 1/2 x 4 1/2"	2.41

### WR REPLACEMENTS FOR WET ELECTROLYTICS

600 Volts Surge—500 Volts Wkg.

High-voltage dry electrolytics. Designed to replace wet types. Will withstand high peak voltages. Lug terminals; can is negative. With insulating washers, inverted screw can mountings. Av. shpg. wt., 8 oz.

No.	Type	Mfd	Size	NET
15 L 040	WR-8	8	1 1/2 x 2 1/2"	1.68
15 L 041	WR-16	16	1 1/2 x 2 1/2"	1.94
15 L 042	WR-25	25	1 1/2 x 2 1/2"	2.20

### 600 VOLTS DC WORKING (CONT'D)

No.	Type	Mfd	Size	EA.
15 L 083	6TM-P25	.25	3/4 x 2 1/2"	32c
16 L 260	6TM-P5	5.0	1 1/2 x 2 1/2"	47c
16 L 261	TC-10	1.0	1 1/2 x 2 1/2"	73c

### 1000 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
15 L 928	10TM-T5	.0005	3/4 x 1 1/2"	29c
15 L 929	10TM-D1	.001	3/4 x 1 1/2"	29c
15 L 930	10TM-D15	.0015	3/4 x 1 1/2"	29c
15 L 931	10TM-D2	.002	3/4 x 1 1/2"	29c
15 L 932	10TM-D22	.0022	3/4 x 1 1/2"	29c

No.	Type	Mfd	Size	EA.
15 L 933	10TM-D3	.003	3/4 x 1 1/2"	29c
15 L 936	10TM-D5	.005	3/4 x 1 1/2"	29c
15 L 937	10TM-D68	.0068	3/4 x 1 1/2"	29c
15 L 938	10TM-S1	.01	3/4 x 1 1/2"	29c

No.	Type	Mfd	Size	EA.
15 L 939	10TM-S15	.015	3/4 x 1 1/2"	29c
15 L 940	10TM-S2	.02	3/4 x 1 1/2"	29c
15 L 941	10TM-S22	.022	3/4 x 1 1/2"	29c
15 L 942	10TM-S3	.03	3/4 x 1 1/2"	29c
15 L 943	10TM-S35	.035	3/4 x 1 1/2"	29c

No.	Type	Mfd	Size	EA.
15 L 944	10TM-S47	.047	3/4 x 1 1/2"	35c
15 L 945	10TM-S5	.05	3/4 x 1 1/2"	35c
15 L 946	10TM-S68			

# Sprague Capacitors



## "CERA-MITE" DISC CERAMIC CAPACITORS

Ultra-compact ceramic disc capacitors. In EIA (RETMA) and other popular values. High by-pass efficiency in critical circuits. Moisture-proof coating. Tolerances: 1000 WVDC types = ±20%, 3000 WVDC types 1.5 mmf. ±.25 mmf.; 4.7 mmf. ±.5 mmf.; thru 68 mmf. ±10%; thru 500 mmf. ±20%. All capacitors are "tagged" for easy identification. Sizes range from ¼" to ¾". Shpg. wt., 2 oz.

### SERIES 5GA 1000 WVDC

\*Designates Mfd.

No.	Type	Mmf	No.	Type	Mmf
16 L 300	V5	5	16 L 330	T25	250
16 L 301	V6	6	16 L 331	T27	270
16 L 302	V75	7.5	16 L 332	T3	300
16 L 303	V8	8	16 L 333	T33	330
16 L 304	Q1	10	16 L 334	T35	350
16 L 305	Q12	12	16 L 335	T36	360
16 L 306	Q15	15	16 L 336	T39	390
16 L 307	Q18	18	16 L 337	T4	400
16 L 308	Q2	20	16 L 338	T47	470
16 L 309	Q22	22	16 L 339	T5	500
16 L 310	Q25	25	16 L 340	T56	560
16 L 312	Q3	30	16 L 341	T6	600
16 L 313	Q33	33	16 L 342	T68	680
16 L 314	Q39	39	16 L 343	T75	750
16 L 315	Q47	47	16 L 344	T8	800
16 L 316	Q5	50	16 L 345	T82	820
16 L 317	Q56	56	16 L 670	D1	001*
16 L 318	Q68	68	16 L 347	D12	0012*
16 L 319	Q75	75	16 L 348	D13	0013*
			16 L 671	D15	0015*
16 L 320	Q82	82	16 L 350	D16	0016*
16 L 321	Q91	91	16 L 351	D18	0018*
16 L 322	T1	100	16 L 352	D2	0020
16 L 323	T12	120	16 L 353	D22	0022*
16 L 324	T13	130	16 L 354	D25	0025*
16 L 325	T15	150	16 L 355	D27	0027*
16 L 326	T18	180	16 L 356	D3	0030*
16 L 327	T2	200	16 L 357	D33	0033*
16 L 328	T22	220	16 L 358	D39	0039*
16 L 329	T24	240	16 L 359	D4	0040*

NET EACH ..... 15c

No.	Type	Mfd	EACH
16 L 360	D43	.0043	18c
16 L 361	D47	.0047	
16 L 362	D5	.005	
16 L 363	S1	.01	
16 L 364	S2	.02	

### SERIES 30GA 3000 WVDC

No.	Type	Mmf	EACH
16 L 387	V15	1.5	24c
16 L 370	V47	4.7	
16 L 371	T1	10	
16 L 372	Q15	15	
16 L 373	Q25	25	24c
16 L 374	Q3	30	
16 L 389	Q39	39	
16 L 375	Q5	50	
16 L 390	Q6	60	24c
16 L 376	Q68	68	
16 L 377	T1	100	
16 L 378	T12	120	
16 L 379	T15	150	24c
16 L 380	T18	180	
16 L 381	T2	200	
16 L 382	T22	220	
16 L 383	T25	250	24c
16 L 384	T27	270	
16 L 385	T3	300	
16 L 386	T5	500	

### SINGLE AND DUAL HIGH-K TYPES

#### SERIES 5HK 1000 WVDC

No.	Type	Mfd.	NET
15 L 672	D2	.002	15c
15 L 673	D5	.005	15c
15 L 674	S1	.010	18c
15 L 675	2D1	2x.001	24c
15 L 676	2D15	2x.0015	24c
15 L 677	2D2	2x.002	24c
15 L 678	2D4	2x.004	26c

### MINIATURIZED DISC CERAMICS

Excellent for Transistorized Circuits



Type TG. Designed for circuits requiring extremely small components. Ideal for printed circuits, transistor-type radios, etc. Provides very dependable service in bypass and coupling applications. Capacitors are covered with an exceptionally tough, protective coating that assures top performance despite conditions of heavy humidity. All rated at 50 working volts, DC. Tolerance of +80% to -20% except \* +80% to -30%.

No.	Type	Mfd	Dia.	Wt.	NET
15 L 995	D50	.005	¼"	2oz.	26c
15 L 996	S10	.01	¼"	3oz.	38c
15 L 997	S25	.025	½"	3oz.	38c
15 L 998	S50	.05	¾"	3oz.	41c
15 L 999	P10	.1	1"	4oz.	53c

### TYPE NPO CERAMICS

Zero temperature-coefficient capacitors. 500 WVDC. Discs, except \*rectangular. Wt., 2 oz.

No.	Type	Mmf	EACH
16 L 450	5TCCB-V1*	1.0	29c
16 L 451	5TCCB-V15*	1.5	
16 L 452	5TCCB-V22*	2.2	
16 L 453	5TCCB-V33*	3.3	
16 L 454	5TCCB-V47*	4.7	
16 L 455	5TCCB-V68*	6.8	29c
16 L 456	5TCC-Q1	10.0	
16 L 457	5TCC-Q15	15.0	
16 L 458	5TCC-Q2	20.0	
16 L 459	5TCC-Q22	22.0	
16 L 460	5TCC-Q33	25.0	32c
16 L 461	5TCC-Q35	33.0	
16 L 462	5TCC-Q39	39.0	
16 L 463	5TCC-Q47	47.0	
16 L 464	5TCC-Q5	50.0	
16 L 465	5TCC-Q68	68.0	35c
16 L 466	5TCC-Q75	75.0	
16 L 467	5TCC-T1	100.0	
16 L 468	5TCC-T12	120.0	
16 L 469	5TCC-T15	150.0	
16 L 470	5TCC-T175	175.0	41c
16 L 471	5TCC-T22	220.0	
16 L 472	5TCC-T27	270.0	

### TYPE N750 CERAMICS

A negative temperature coefficient capacitor with a negative change of 750 parts per million per degree Centigrade. 500 WVDC. Discs, except \*rectangular. Shpg. wt., 2 oz.

No.	Type	Mmf	EACH
16 L 480	5TUCBV-5*	5	29c
16 L 481	5TUC-Q1	10	
16 L 482	5TUC-Q15	15	
16 L 483	5TUC-Q2	20	
16 L 484	5TUC-Q22	22	29c
16 L 485	5TUC-Q25	25	
16 L 486	5TUC-Q33	33	
16 L 487	5TUC-Q47	47	
16 L 488	5TUC-Q68	68	29c
16 L 489	5TUC-Q75	75	
16 L 490	5TUC-T1	100	
16 L 491	5TUC-T15	150	
16 L 492	5TUC-T2	200	29c
16 L 493	5TUC-T22	220	
16 L 494	5TUC-T33	330	

### TYPE BL DISC CERAMICS

2000 WVDC disc ceramic type capacitors for buffer applications. Tiny, rugged construction. Moisture-proof coating assures high dependability. Fit into tight spaces. Tol., ±20%. Av. shpg. wt., 2 oz.

No.	Type	Mfd	EACH
16 L 290	BL-D10	.001	21c
16 L 291	BL-D20	.002	
16 L 292	BL-D30	.003	
16 L 293	BL-D40	.004	
16 L 294	BL-D50	.005	21c
16 L 295	BL-D60	.006	
16 L 296	BL-D70	.007	
16 L 297	BL-D75	.0075	
16 L 298	BL-D80	.008	21c
16 L 299	BL-S10	.01	

### UNIVERSAL CERAMIC CAPACITORS



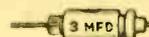
Highly versatile, 4-lead ceramic type capacitors. Provide maximum coverage with minimum stock. Ideal for use by servicemen, experimenters, etc. Offer a large variety of odd and popular ratings—simply wire leads in various combinations. With complete instructions on how to select the desired capacitance. \*Guaranteed minimum value; UGA-1 and UGA-2 have tolerance of ±20%. Rated at 500 WVDC. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Capacity Range, Mfd	Size	NET EACH
15 L 216	*UHK-1	001-.004	1 1/2 x 3/8 x 1/8"	29c
15 L 217	*UHK-2	0025-.015	1 1/2 x 3/8 x 1/8"	35c
15 L 218	UGA-1	0004-.0013	1 1/2 x 3/8 x 1/8"	29c
15 L 219	UGA-2	.0006-.0027	1 1/2 x 3/8 x 1/8"	35c

### UNIVERSAL CERAMIC CAPACITOR KIT

Type CK-4 Kit. Universal multi-purpose capacitor kit. Handles 90% of all common ceramic, molded tubular, and mica replacements in bypass and coupling circuits. Includes 3 each: UHK-1, UHK-2, UGA-1 and UGA-2. Supplied with detailed instructions. 3 1/2 x 8 1/2". Shpg. wt., 3 oz. 18 L 712. NET EACH ..... 3.88

### TE "LITTL-LYTIC" SUBMINIATURE CAPACITORS



An extensive selection of ultra-small 30D series electrolytic. Excellent for use in transistorized radios, transistor circuits in hearing aids, pocket wire recorders, wireless microphones, and other miniature electronic equipment. Hermetically sealed, metal enclosed. Withstand temperatures to 85°C. Low leakage current; long shelf life. Size is diameter x length. Av. shpg. wt., 1 oz.

No.	Type	Mfd	WVDC	Size	EA.
16 L 027	1010	5	1	3/8 x 1 1/2"	.73
16 L 028	1055	25	3	3/8 x 1 1/2"	.73
16 L 029	1060	110	3	3/8 x 1 1/2"	.82
16 L 030	1061	150	3	3/8 x 1 1/2"	.85
16 L 031	1064	200	3	3/8 x 1 1/2"	.88
16 L 032	1065	250	3	3/8 x 1 1/2"	.94
16 L 033	1066	300	3	3/8 x 1 1/2"	.97
16 L 034	1067	400	3	3/8 x 1 1/2"	1.00
16 L 035	1068	500	3	3/8 x 1 1/2"	1.03
16 L 036	1080	1	6	3/8 x 1 1/2"	.73
16 L 031	1081	2	6	3/8 x 1 1/2"	.73
16 L 032	1082	3	6	3/8 x 1 1/2"	.73
16 L 033	1083	4	6	3/8 x 1 1/2"	.73
16 L 034	1084	5	6	3/8 x 1 1/2"	.73
16 L 035	1086	8	6	3/8 x 1 1/2"	.79
16 L 036	1087	10	6	3/8 x 1 1/2"	.79
16 L 037	1089	15	6	3/8 x 1 1/2"	.79
16 L 038	1091	25	6	3/8 x 1 1/2"	.79
16 L 039	1092	30	6	3/8 x 1 1/2"	.82
16 L 040	1095	40	6	3/8 x 1 1/2"	.82
16 L 041	1100	50	6	3/8 x 1 1/2"	.82
16 L 042	1101	60	6	3/8 x 1 1/2"	.82
16 L 043	1101.5	75	6	3/8 x 1 1/2"	.85
16 L 044	1105	250	6	3/8 x 1 1/2"	1.06
16 L 045	1106	300	6	3/8 x 1 1/2"	1.06
16 L 042	1116	15	10	3/8 x 1 1/2"	.79
16 L 043	1118	25	10	3/8 x 1 1/2"	.79
16 L 041	1119	50	10	3/8 x 1 1/2"	.88
16 L 042	1119.3	100	10	3/8 x 1 1/2"	1.00
16 L 043	1119.6	200	10	3/8 x 1 1/2"	1.18
16 L 044	1127	5	12	3/8 x 1 1/2"	.79
16 L 045	1128	10	12	3/8 x 1 1/2"	.79
16 L 046	1152	5	15	3/8 x 1 1/2"	.82
16 L 047	1155	10	15	3/8 x 1 1/2"	.82
16 L 048	1156	15	15	3/8 x 1 1/2"	.85
16 L 047	1157	20	15	3/8 x 1 1/2"	.85
16 L 048	1157.1	25	15	3/8 x 1 1/2"	.85
16 L 049	1158	30	15	3/8 x 1 1/2"	.88
16 L 049	1159	35	15	3/8 x 1 1/2"	.91
16 L 050	1160	50	15	3/8 x 1 1/2"	.94
16 L 051	1161	75	15	3/8 x 1 1/2"	1.00
16 L 052	1162	100	15	3/8 x 1 1/2"	1.06
16 L 053	1163	150	15	3/8 x 1 1/2"	.15
16 L 054	1164	200	15	3/8 x 1 1/2"	1.23
16 L 055	1202	5	25	3/8 x 1 1/2"	.82
16 L 047	1203	6	25	3/8 x 1 1/2"	.82
16 L 048	1204	10	25	3/8 x 1 1/2"	.85
16 L 049	1205	15	25	3/8 x 1 1/2"	.85
16 L 050	1206	20	25	3/8 x 1 1/2"	.88
16 L 051	1207	25	25	3/8 x 1 1/2"	.91
16 L 052	1208	35	25	3/8 x 1 1/2"	.97
16 L 053	1209	50	25	3/8 x 1 1/2"	1.06
16 L 054	1210	75	25	3/8 x 1 1/2"	.15
16 L 055	1211	100	25	3/8 x 1 1/2"	1.23
16 L 056	1301	2	50	3/8 x 1 1/2"	.79
16 L 057	1302.1	4	50	3/8 x 1 1/2"	.79
16 L 058	1305	20	50	3/8 x 1 1/2"	.88
16 L 059	1306	35	50	3/8 x 1 1/2"	1.00
16 L 060	1307	50	50	3/8 x 1 1/2"	1.09
16 L 061	1404	5	100	3/8 x 1 1/2"	.88
16 L 062	1407	10	100	3/8 x 1 1/2"	.91
16 L 063	1408	15	100	3/8 x 1 1/2"	.94
16 L 064	1409	20	100	3/8 x 1 1/2"	.94
16 L 065	1502	3	150	3/8 x 1 1/2"	.85
16 L 066	1504	5	150	3/8 x 1 1/2"	.91
16 L 067	1507	10	150	3/8 x 1 1/2"	.94
16 L 068	1508	12	150	3/8 x 1 1/2"	.94

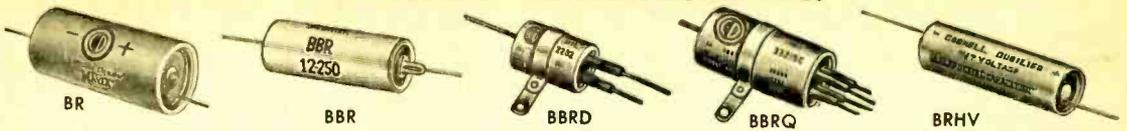
### BULPLATE MULTIPLE CERAMIC CAPACITORS



Compact, self-contained assemblies containing all the

# Cornell-Dubilier Capacitors

## "BLUE BEAVER" TUBULAR ELECTROLYTICS



"Blue Beaver" tubular electrolytic capacitors are specifically designed for service replacement applications. All are sealed in aluminum cans for protection against heat, humidity. Type BR has solid, tinned-copper leads with negative terminal grounded to can. Type BBR is a miniature version of Type BR, for limited-space applications. Type BRHV is similar to Type BR, but is designed

for filter applications in higher-voltage power supplies. Surge voltage of Type BRHV is 150 volts above working voltage. Types BBRD, BBRQ, and BBRQ have 7" flexible vinyl covered leads with color coded positive and common negative. All "Blue Beavers" are rated for operation up to 85°C, except 500-volt types, which are for up to 65°C. Av. shpg. wt., 4 oz.

### TYPE BR SINGLE SECTION

Stock No.	Type	Mfd	W.V.	Size	NET
19 L 285	500-6	500	6	1 1/2 x 1 3/4	.91
19 L 286	1000-6	1000	6	1 1/2 x 2 1/4	1.12
19 L 287	2000-6	2000	6	1 1/2 x 3 1/4	1.35
19 L 272	2501	250	15	1 1/2 x 1 3/4	.91
19 L 273	5001	500	15	1 1/2 x 2 1/4	1.03
19 L 274	10001	1000	15	1 1/2 x 3 1/4	1.35
19 L 284	20001	2000	15	1 1/2 x 4 1/4	1.88
19 L 270	2502	250	25	1 1/2 x 1 3/4	.91
19 L 271	5002	500	25	1 1/2 x 2 1/4	1.35
19 L 147	1005	100	50	1 1/2 x 2 1/4	.82
19 L 148	1505	150	50	1 1/2 x 3 1/4	.91
19 L 149	2505	250	50	1 1/2 x 4 1/4	1.03
19 L 269	5005	500	50	1 1/2 x 5 1/4	1.41
19 L 145	2515	25	150	1 1/2 x 1 3/4	.73
19 L 145	3015	30	150	1 1/2 x 1 3/4	.76
14 L 046	4015	40	150	1 1/2 x 1 3/4	.79
14 L 047	5015	50	150	1 1/2 x 1 3/4	.82
14 L 046	6015	60	150	1 1/2 x 1 3/4	.86
14 L 039	8015	80	150	1 1/2 x 1 3/4	.94
14 L 056	10015	100	150	1 1/2 x 2 1/4	1.03
14 L 057	15015	150	150	1 1/2 x 3 1/4	1.12
14 L 542	20015	200	150	1 x 3	1.29
14 L 543	30015	300	150	1 x 4	1.50
14 L 033	1625	16	250	1 1/2 x 1 3/4	.73
14 L 034	2025	20	250	1 1/2 x 1 3/4	.75
19 L 142	3025	30	250	1 1/2 x 1 3/4	.85
19 L 035	4025	40	250	1 1/2 x 1 3/4	.91
19 L 143	5025	50	250	1 1/2 x 1 3/4	1.00
19 L 144	6025	60	250	1 1/2 x 1 3/4	1.06
14 L 020	435	4	350	1 1/2 x 1 3/4	.62
14 L 021	835	8	350	1 1/2 x 1 3/4	.71
14 L 022	1235	12	350	1 1/2 x 1 3/4	.76
14 L 023	1635	16	350	1 1/2 x 1 3/4	.82
14 L 018	2035	20	350	1 1/2 x 1 3/4	.85
14 L 019	3035	30	350	1 1/2 x 2 1/4	.97
14 L 026	4035	40	350	1 1/2 x 2 1/4	1.03
19 L 141	5035	50	350	1 1/2 x 2 1/4	1.09
14 L 544	6035	60	350	1 x 3 1/4	1.15
14 L 545	8035	80	350	1 x 3 1/4	1.23
14 L 546	10035	100	350	1 x 4	1.35
14 L 008	145	1	450	1 1/2 x 1 3/4	.65
14 L 009	245	2	450	1 1/2 x 1 3/4	.67
14 L 010	445	4	450	1 1/2 x 1 3/4	.68
14 L 011	845	8	450	1 1/2 x 1 3/4	.73
14 L 012	1045	10	450	1 1/2 x 1 3/4	.76
14 L 013	1245	12	450	1 1/2 x 1 3/4	.79
14 L 014	1645	16	450	1 1/2 x 2 1/4	.82
14 L 015	2045	20	450	1 1/2 x 2 1/4	.91
14 L 016	3045	30	450	1 1/2 x 2 1/4	1.00
14 L 017	4045	40	450	1 1/2 x 2 1/4	1.06
14 L 004	6045	60	450	1 1/2 x 2 1/4	1.38
14 L 004	8045	80	450	1 1/2 x 2 1/4	1.66
14 L 547	10045	100	450	1 x 4	1.88
19 L 215	450	4	500	1 1/2 x 1 3/4	.71
14 L 000	850	8	500	1 1/2 x 1 3/4	.76
14 L 001	1650	16	500	1 1/2 x 2 1/4	.88
14 L 002	2050	20	500	1 1/2 x 2 1/4	.94
14 L 003	3050	30	500	1 1/2 x 2 1/4	1.03

### TYPE BBR SINGLE SECTION

Stock No.	Type	Mfd	W.V.	Size	NET
19 L 200	25-3	25	3	1/2 x 1 1/4	.50
19 L 201	50-3	50	3	1/2 x 1 1/4	.56
19 L 202	5-6	5	6	1/2 x 1 1/4	.47
19 L 203	25-6	25	6	1/2 x 1 1/4	.50
19 L 204	50-6	50	6	1/2 x 1 1/4	.56
19 L 205	100-6	100	6	1/2 x 1 1/4	.71
19 L 206	250-6	250	6	1/2 x 1 1/4	.79
19 L 207	100-15	100	15	1/2 x 1 1/4	.73
19 L 216	10-25	10	25	1/2 x 1 1/4	.59
19 L 217	20-25	20	25	1/2 x 1 1/4	.59
19 L 218	25-25	25	25	1/2 x 1 1/4	.59
19 L 219	50-25	50	25	1/2 x 1 1/4	.65
19 L 208	100-25	100	25	1/2 x 1 1/4	.79
19 L 209	1-50	1	50	1/2 x 1 1/4	.53
19 L 210	2-50	2	50	1/2 x 1 1/4	.53
19 L 211	4-50	4	50	1/2 x 1 1/4	.59
19 L 222	5-50	5	50	1/2 x 1 1/4	.59
19 L 223	10-50	10	50	1/2 x 1 1/4	.59
19 L 224	25-50	25	50	1/2 x 1 1/4	.59
19 L 212	10-90	10	90	1/2 x 1 1/4	.65
19 L 213	16-90	16	90	1/2 x 1 1/4	.65
19 L 214	4-150	4	150	1/2 x 1 1/4	.59
19 L 249	8-150	8	150	1/2 x 1 1/4	.62
19 L 226	10-150	10	150	1/2 x 1 1/4	.62
19 L 247	12-150	12	150	1/2 x 1 1/4	.65
19 L 248	16-150	16	150	1/2 x 1 1/4	.68
19 L 225	20-150	20	150	1/2 x 1 1/4	.71
19 L 227	4-250	4	250	1/2 x 1 1/4	.59
19 L 228	8-250	8	250	1/2 x 1 1/4	.68
19 L 229	12-250	12	250	1/2 x 1 1/4	.73

### TYPE BBRD DUAL SECTION (CONT'D)

Stock No.	Type	Mfd	W.V.	Size	NET
19 L 267	16D45	16-16	450	1 1/2 x 2 1/4	1.32
19 L 268	22D45	20-20	450	1 1/2 x 3 1/4	1.17
19 L 297	33D45	30-30	450	1 1/2 x 3 1/4	1.76
19 L 221	44D45	40-40	450	1 1/2 x 4 1/4	2.00
18 L 617	0652	40 50	450 50	1 x 3 1/4	1.76
18 L 619	0707	30 50	450 200	1 x 2 1/4	1.68

### TYPE BBRQ TRIPLE SECTION

Stock No.	Type	Mfd	W.V.	Size	NET
19 L 230	22215	20-20	150	1 1/2 x 1 1/4	1.79
19 L 231	32V215	30-25	150	1 1/2 x 1 1/4	1.32
19 L 232	33315	30-30	150	1 1/2 x 2 1/4	1.38
19 L 233	42215	40-20	150	1 1/2 x 1 1/4	1.32
19 L 234	43215	40-20	150	1 1/2 x 2 1/4	1.38
19 L 235	44215	40-40	150	1 1/2 x 2 1/4	1.38
19 L 236	44415	40-40	150	1 1/2 x 3 1/4	1.44
19 L 298	84215	80-40	150	1 1/2 x 3 1/4	1.62
18 L 620	01265	150-150-150	150	1 1/2 x 4 1/4	2.79
19 L 237	2215C	20-20	150, 25	1 1/2 x 1 1/4	1.21
19 L 238	3315C	30-30	150, 25	1 1/2 x 2 1/4	1.29
19 L 239	4215C	40-20	150, 25	1 1/2 x 1 1/4	1.26
19 L 240	4315C	40-30	150, 25	1 1/2 x 1 1/4	1.29
19 L 241	4415C	40-40	150, 25	1 1/2 x 1 1/4	1.32
19 L 242	4415X25	40-40, 250	150, 10	1 1/2 x 2 1/4	1.53
19 L 243	5315C	50-30	150, 25	1 1/2 x 1 1/4	1.38
19 L 244	5515C	50-50	150, 25	1 1/2 x 2 1/4	1.47
19 L 299	5315C25	50-30, 250	150, 25	1 1/2 x 3 1/4	1.82
19 L 245	8415C	80-40	150, 25	1 1/2 x 2 1/4	1.56
19 L 246	3215C10	30-20	100, 150, 25	1 1/2 x 1 1/4	1.38
19 L 275	5315C20	50-30	200, 150, 10	1 1/2 x 2 1/4	1.50
19 L 276	5315C10	50-30	100, 150, 25	1 1/2 x 2 1/4	1.44
19 L 277	8215C10	80-20	100, 150, 25	1 1/2 x 2 1/4	1.62
19 L 278	2225C	20-20	250, 25	1 1/2 x 1 1/4	1.32
19 L 279	4225C	40-20	250, 25	1 1/2 x 2 1/4	1.50
19 L 280	4425C	40-40	250, 25	1 1/2 x 2 1/4	1.71
19 L 281	7V4125	75-40	10, 250	1 1/2 x 3 1/4	2.03
19 L 282	0185	40-40	300	1 1/2 x 3 1/4	2.70
19 L 621	16745	16-16	450	1 1/2 x 3 1/4	1.82
19 L 283	2245C	20-20	450, 25	1 1/2 x 3 1/4	1.71
19 L 626	1411	30, 50, 100	450, 150, 25	1 1/2 x 3 1/4	2.18

### TYPE BBRQ QUADRUPE SECTION

Stock No.	Type	Mfd	W.V.	Size	NET	
19 L 290	33215C	30-30	20, 20	150, 25	1 1/2 x 2 1/4	1.71
19 L 293	44315C	40-40	20, 20	150, 25	1 1/2 x 3 1/4	1.76
19 L 294	55515C	50-50	20, 20	150, 25	1 1/2 x 3 1/4	2.03
18 L 628	0789A	140-5, 200-30, 300-150	150, 25, 25	1 1/2 x 3 1/4	3.03	
18 L 630	0789B	80-60, 40, 20	350, 300, 150	1 1/2 x 3 1/4	3.47	
18 L 631	0925	140.5, 200-30, 350, 300, 200	150, 25, 25, 25	1 1/2 x 3 1/4	4.50	
18 L 633	0125	50-20	10, 450	1 1/2 x 3 1/4	2.50	
18 L 634	0170A	40-20	10, 450	1 1/2 x 3 1/4	2.76	
18 L 635	0174	40-40	20, 450	1 1/2 x 3 1/4	3.20	
19 L 295	22245C	20-20	20, 450, 25	1 1/2 x 3 1/4	2.91	
18 L 636	0926.5	10, 80-40	450, 300, 250	1 1/2 x 3 1/4	2.38	
18 L 637	0954	10, 80, 40, 100	450, 300, 150	1 1/2 x 3 1/4	2.82	

### TYPE BRHV HIGH-VOLTAGE

Stock No.	Type	Mfd	W.V.	Size	NET
14 L 538	708	8	700	1 1/2 x 3 1/4	1.20
14 L 539	710	10	700	1 1/2 x 3 1/4	1.38
14 L 540	712	12	700	1 1/2 x 3 1/4	1.44
14 L 541	716	16	700	1 1/2 x 4 1/4	1.56
14 L 534	608	8	600	1 1/2 x 3 1/4	1.23
14 L 535	610	10	600	1 1/2 x 3 1/4	1.29
14 L 537	616	16	600	1 1/2 x 3 1/4	1.50

### FB HIGH-CAPACITY LOW-VOLTAGE TYPES

Hermetically sealed capacitors in aluminum cans with wax-impregnated insulating sleeves. Temperature range up to 85 degrees C. Tinned solder lugs. Wt., 6 oz.

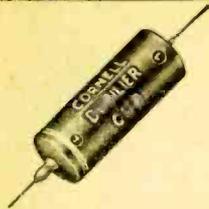


Stock No.	Mfr's Type	Mfd	Volts DC	Size	NET EACH
19 L 320	FB 5005	500	50	1 1/2 x 3 1/4	2.29
19 L 321	FB 5010	1000	50	1 1/2 x 4 1/4	4.12
19 L 322	FB 5020	2000	50	1 1/2 x 4 1/4	5.35
19 L 323	FB 5040	4000	50	2 1/2 x 4 1/4	7.35
19 L 355	FB 2510	1000	25	1 1/2 x 3 1/4	2.82
19 L 356	FB 2520	2000	25	1 1/2 x 4 1/4	3.38
19 L 318	FB 2540	4000	25	2 x 4 1/4	5.59
19 L 319	FB 2550	5000	25	2 1/2 x 4 1/4	6.47
19 L 353	FB 1520	2000	15	1 1/2 x 3 1/4	2.76
19 L 354	FB 1500	6000	15	2 x 4 1/4	5.88

### GENERAL-PURPOSE DISC CERAMIC CAPACITORS

Exceptionally small, lightweight, disc-type ceramic capacitors. An excellent choice for a wide variety of equipment and particularly suited for limited-space applications. Type H, low-voltage, miniature type for transistor circuitry, low capacitance. Constructed to rigid standards to assure low inductance, minimized eddy current losses,

# Cornell-Dubilier Capacitors



## "CUB" PLASTIC TUBULAR CAPACITORS

For general replacement service; extremely durable and very compact. Have high insulation resistance, low power factor and exceptional capacitance stability. Molded in extra hard, non-inflammable bakelite; resistant to moisture, high temperature and shock. Excellent dielectric strength. Dry assembled and sealed after impregnation to insure long life. Extra strong copper-weld leads eliminate breakage during installation. Leads are solder sealed securely to the capacitor. 200 and 400-volt units are impregnated with special HT compound; 600-volt units and higher are oil impregnated. Temperature range: 200 and 400-volt units, -40 to +90° C.; 600 volt units and up, -55 to +100° C. \*ST types in ceramic case. Av. shpg. wt., 4 oz.

### 200 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	NET
19 L 000	2S2	.02	3/8x1"	15c
19 L 001	2S47	.047	3/8x1 1/4"	15c
19 L 002	2S5	.05	3/8x1 1/4"	15c
19 L 003	2P1	.10	3/8x1 1/4"	21c
19 L 004	2P15	.15	3/8x1 1/4"	21c
19 L 005	2P22	.22	1 1/8x1 1/4"	24c
19 L 006	2P25	.25	1 1/8x1 1/4"	24c
19 L 007	2P47	.47	1 1/8x1 1/4"	35c
19 L 008	2P5	.50	1 1/8x1 1/4"	35c
19 L 009	2W1	1.0	3/4x2 1/4"	53c

### 400 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	NET
19 L 010	4S1	.01	3/8x1"	15c
19 L 011	4S2	.02	3/8x1"	15c
19 L 012	4S22	.022	3/8x1 1/4"	15c
19 L 013	4S47	.047	3/8x1 1/4"	18c
19 L 014	4S5	.05	3/8x1 1/4"	18c
19 L 015	4S68	.068	3/8x1 1/4"	21c
19 L 016	4P1	.10	3/8x1 1/4"	21c
19 L 017	4P15	.15	3/8x1 1/4"	21c
19 L 018	4P22	.22	1 1/8x1 1/4"	24c
19 L 019	4P25	.25	1 1/8x1 1/4"	24c
19 L 020	4P47	.47	1 1/8x1 1/4"	35c
19 L 049	4P47	.47	3/4x2 1/4"	35c
19 L 021	4W1*	1.0	1 1/2x2 1/4"	53c

### 600 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	EACH
19 L 022	6T1	.0001	3/8x1"	
19 L 023	6T25	.00025	3/8x1"	
19 L 024	6T4	.0004	3/8x1"	
19 L 025	6T5	.0005	3/8x1"	
19 L 026	6D1	.001	3/8x1"	
19 L 027	6D15	.0015	3/8x1"	15c
19 L 028	6D2	.002	3/8x1"	
19 L 029	6D22	.0022	3/8x1"	
19 L 030	6D3	.003	3/8x1"	
19 L 031	6D33	.0033	3/8x1"	
19 L 032	6D4	.004	3/8x1"	
19 L 033	6D47	.0047	3/8x1"	
19 L 034	6D6	.006	3/8x1 1/4"	
19 L 035	6D68	.0068	3/8x1 1/4"	
19 L 036	6S1	.01	3/8x1 1/4"	18c
19 L 037	6S15	.015	3/8x1 1/4"	
19 L 038	6S2	.02	3/8x1 1/4"	
19 L 039	6S22	.022	3/8x1 1/4"	
19 L 040	6S3	.03	3/8x1 1/4"	21c
19 L 041	6S33	.033	3/8x1 1/4"	
19 L 042	6S4	.04	3/8x1 1/4"	
19 L 043	6S47	.047	3/8x1 1/4"	24c
19 L 044	6S5	.05	3/8x1 1/4"	
19 L 045	6S6	.06	3/8x1 1/4"	
19 L 046	6S68	.068	3/8x1 1/4"	
19 L 045	6P1	.10	1 1/8x1 1/4"	26c
19 L 046	6P22	.22	1 1/8x1 1/4"	32c
19 L 047	6P25	.25	1 1/8x1 1/4"	32c
19 L 047	6P5*	.50	1 1/2x2 1/4"	47c

## TYPE NLW "ELECTOMITE" SUBMINIATURE ELECTROLYTICS



"Electomites" are aluminum foil capacitors, hermetically sealed into an ultra-small tubular aluminum can which is tightly fitted with

an outer transparent plastic sleeve. Terminal connections are securely welded. Despite their extremely small size, these units exhibit excellent electrical characteristics. Surge voltages are 20% higher than working voltage. Tolerance, -10% to +150%. Leakage, 0.1 µa/mfd/yr or less. Type 22 AWG has tinned copper wire leads. Operating temp., -20°C to +85°C. Av. shpg. wt., 2 oz.

Stock No.	Type	Mfd	WVDC	Size	NET
19 L 600	5-150	5	150	3/8x1 1/4"	91c
19 L 601	8-150	8	150	3/8x1 1/4"	94c
19 L 602	10-150	10	150	3/8x1 1/4"	94c
19 L 603	12-150	12	150	3/8x1 1/4"	94c
19 L 604	5-100	5	100	3/8x1 1/4"	88c
19 L 605	10-100	10	100	3/8x1 1/4"	91c
19 L 606	15-100	15	100	3/8x1 1/4"	91c
19 L 607	20-100	20	100	3/8x1 1/4"	94c
19 L 662	5-50	5	50	3/8x1 1/4"	85c
19 L 663	10-50	10	50	3/8x1 1/4"	88c
19 L 664	20-50	20	50	3/8x1 1/4"	88c
19 L 608	10-25	10	25	3/8x1 1/4"	85c
19 L 660	15-25	15	25	3/8x1 1/4"	85c
19 L 661	20-25	20	25	3/8x1 1/4"	88c
19 L 655	5-15	5	15	3/8x1 1/4"	82c
19 L 656	10-15	10	15	3/8x1 1/4"	82c
19 L 657	20-15	20	15	3/8x1 1/4"	85c
19 L 658	30-15	30	15	3/8x1 1/4"	85c
19 L 651	10-10	10	10	3/8x1 1/4"	79c

Stock No.	Type	Mfd	WVDC	Size	NET
19 L 652	25-10	25	10	3/8x1 1/4"	79c
19 L 653	50-10	50	10	3/8x1 1/4"	88c
19 L 654	100-10	100	10	3/8x1 1/4"	1.00
19 L 915	3-6	3	6	3/8x1 1/4"	73c
19 L 643	2-6	2	6	3/8x1 1/4"	73c
19 L 644	5-6	5	6	3/8x1 1/4"	73c
19 L 645	10-6	10	6	3/8x1 1/4"	79c
19 L 646	20-6	20	6	3/8x1 1/4"	79c
19 L 647	25-6	25	6	3/8x1 1/4"	79c
19 L 609	40-6	40	6	3/8x1 1/4"	82c
19 L 648	50-6	50	6	3/8x1 1/4"	82c
19 L 649	60-6	60	6	3/8x1 1/4"	82c
19 L 650	100-6	100	6	3/8x1 1/4"	88c
19 L 610	2-3	3	3	3/8x1 1/4"	73c
19 L 611	10-3	10	3	3/8x1 1/4"	73c
19 L 640	25-3	25	3	3/8x1 1/4"	73c
19 L 612	50-3	50	3	3/8x1 1/4"	73c
19 L 613	110-3	110	3	3/8x1 1/4"	82c
19 L 641	200-3	200	3	3/8x1 1/4"	88c

## PM MOLDED MYLAR TUBULARS



Molded tubular capacitors for severe operating conditions and high temperature applications. Feature mylar polyester film dielectric. Capacity tolerance is ±10%. Temperature range is -55°C to +85°C—derate 90% of rated voltage at 100°C and derate 50% at 130°C. Non-inductive construction insures low resistance connections and low Rf impedance. Rugged thermoset assembly firmly secures leads to withstand extremes of handling, shock, vibration and soldering temperatures. Moisture resistance exceeds JAN-91 or MIL-C-25A requirements. Av. shpg. wt., 3 oz.

### 200 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	NET
14 L 273	PM2S2	.02	3/8x1 1/4"	15c
14 L 274	PM2S5	.05	3/8x1 1/4"	15c
14 L 275	PM2P1	.10	3/8x1 1/4"	21c
14 L 276	PM2P22	.22	1 1/8x1 1/4"	24c
14 L 277	PM2P25	.25	1 1/8x1 1/4"	26c
14 L 278	PM2P47	.47	1 1/8x1 1/4"	35c
14 L 279	PM2P5	.50	1 1/8x1 1/4"	35c
14 L 286	PM2W1	1.00	3/4x2 1/4"	56c

### 400 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	NET
14 L 293	PM4S1	.01	3/8x1"	15c
14 L 294	PM4S2	.02	3/8x1"	15c
14 L 614	PM4S22	.022	3/8x1 1/4"	18c
14 L 615	PM4S33	.033	3/8x1 1/4"	18c
14 L 616	PM4S47	.047	3/8x1 1/4"	18c
14 L 295	PM4S5	.05	3/8x1 1/4"	18c
14 L 617	PM4S68	.068	3/8x1 1/4"	21c
14 L 296	PM4P1	.10	3/8x1 1/4"	21c
14 L 297	PM4P22	.22	1 1/8x1 1/4"	29c
14 L 298	PM4P25	.25	1 1/8x1 1/4"	32c
14 L 618	PM4P33	.33	1 1/8x1 1/4"	38c
14 L 299	PM4P47	.47	1 1/8x1 1/4"	47c
14 L 243	PM4P5	.50	1 1/8x1 1/4"	50c
14 L 619	PM4P68	.68	1 1/8x1 1/4"	60c
14 L 244	PM4W1	1.00	1 1/2x2 1/4"	85c

### 600 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	NET
14 L 158	PM6T5	.0005	3/8x1"	15c
14 L 159	PM6D1	.0010	3/8x1"	15c
14 L 167	PM6D22	.0022	3/8x1 1/4"	15c
14 L 620	PM6D33	.0033	3/8x1 1/4"	15c
14 L 169	PM6D47	.0047	3/8x1 1/4"	15c
19 L 621	PM6D68	.0068	3/8x1 1/4"	18c
14 L 178	PM6S1	.010	3/8x1 1/4"	18c
14 L 179	PM6S15	.015	3/8x1 1/4"	18c
14 L 180	PM6S22	.022	3/8x1 1/4"	18c
19 L 622	PM6S33	.033	3/8x1 1/4"	21c
14 L 182	PM6S47	.047	3/8x1 1/4"	24c
19 L 623	PM6S5	.05	3/8x1 1/4"	24c
14 L 183	PM6S68	.068	3/8x1 1/4"	24c
14 L 184	PM6P1	.10	3/8x1 1/4"	26c
14 L 197	PM6P22	.22	1 1/8x1 1/4"	38c
14 L 198	PM6P33	.33	1 1/8x1 1/4"	53c
14 L 199	PM6P47	.47	1 1/2x2 1/4"	68c

## PM CAPACITOR KIT

Plastic case containing an assortment of PM mylar tubulars in the most popular values. Includes: 10 each .01, .05, .02, .05, .10, .12, .22, .47, .05 and .002. All are rated at 600 WVDC. Wt., 3 lbs. 15.52

## "PUP" METAL END-CAP TUBULARS



Self-healing, metallized cardboard tubulars. Lightweight, compact, and made to last. Wax-impregnated and dip-sealed against humidity. Temperature range: -40° to +60° C. Non-inductively wound. High insulation resistance, low power factor and low capacity change. Tolerance, ±20%. Av. shpg. wt., 2 oz.

### 200 VOLTS DC WORKING

Stock No.	Mfr's Type	Mfd	Size	1-24, EACH
14 L 928	MP2S5	.05	3/8x1 1/4"	.45
14 L 929	MP2P1	.10	3/8x1 1/4"	.47
14 L 930	MP2P25	.25	1 1/8x1 1/4"	.68
14 L 931	MP2P5	.5	1 1/8x1 1/4"	.80
14 L 932	MP2W1	1.0	3/4x2 1/4"	1.07
14 L 924	MP2W2	2.0	1 1/2x2 1/4"	1.46

### 600 VOLTS DC WORKING

Stock No.	Mfr's Type	Mfd	Size	1-24, EACH
14 L 942	MP6S1	.01	3/8x1"	.45
14 L 943	MP6P1	.10	3/8x1 1/4"	.59
14 L 947	MP6P25	.25	1 1/8x1 1/4"	.92
14 L 948	MP6P5	.5	1 1/8x1 1/4"	1.15
14 L 949	MP6W1	1.0	3/4x2 1/4"	1.43

# Cornell-Dubilier Capacitors

## TRANSMITTING CAPACITORS TYPES TJU-TJL HERMETICALLY SEALED

Paper-oil dykanol in hermetically sealed steel containers. \*Type TJL, others Type TJU. Type TJU has universal mounting strap; TJL has foot brackets. Av. wt., 3 lbs.



### 600 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	EA.
73 L 600	6010	1	2 1/2 x 1 1/2 x 1 1/2	2.68
73 L 601	6020	2	2 1/2 x 1 1/2 x 1 1/2	3.20
73 L 602	6040	4	3 3/4 x 2 1/2 x 1 1/2	4.32
73 L 603	6080	8	3 3/4 x 3 3/4 x 1 1/2	6.18
73 L 650	6100	10	4 3/4 x 3 3/4 x 1 1/2	6.64

### 1000 VOLTS DC WORKING

73 L 614	10005	.5	2 1/2 x 1 1/2 x 1 1/2	2.67
73 L 605	10010	1	2 1/2 x 1 1/2 x 1 1/2	2.88
73 L 606	10020	2	4 x 1 1/2 x 1 1/2	3.61
73 L 607	10040	4	4 3/4 x 2 1/2 x 1 1/2	4.84
73 L 608	10080	8	3 3/4 x 3 3/4 x 1 1/2	6.92
73 L 651	10100	10	4 3/4 x 3 3/4 x 1 1/2	7.93
73 L 665	10150	15	4 3/4 x 3 3/4 x 2 3/8	10.82

### 1500 DC VOLTS WORKING

73 L 610	15010	1	4 x 1 1/2 x 1 1/2	3.43
73 L 611	15020	2	4 3/4 x 2 1/2 x 1 1/2	4.68
73 L 612	15040	4	4 3/4 x 3 3/4 x 1 1/2	6.34
73 L 652	15100*	10	4 3/4 x 3 3/4 x 3 3/8	11.47

### 2000 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	EA.
73 L 618	20001	.1	2 1/2 x 1 1/2 x 1 1/2	3.71
73 L 619	20005	.5	2 3/4 x 1 1/2 x 1 1/2	4.14
73 L 615	20010	1	3 3/4 x 2 1/2 x 1 1/2	4.64
73 L 616	20020	2	4 x 3 3/4 x 1 1/2	5.73
73 L 617	20040	4	3 1/2 x 3 3/4 x 2 1/2	8.00
73 L 690	20080*	8	4 3/4 x 3 3/4 x 3 3/8	12.09

### 2500 VOLTS DC WORKING

73 L 620	25010	1	3 1/2 x 3 3/4 x 1 1/2	6.59
73 L 654	25040*	4	4 x 3 3/4 x 3 3/8	13.03

### 3000 VOLTS DC WORKING

73 L 666	30001	1	2 x 2 x 1 1/2	6.96
73 L 667 <td>300025</td> <td>.25</td> <td>2 1/2 x 2 1/2 x 1 1/2</td> <td>7.40</td>	300025	.25	2 1/2 x 2 1/2 x 1 1/2	7.40
73 L 625 <td>30010</td> <td>1</td> <td>3 1/2 x 3 3/4 x 2 1/2</td> <td>9.62</td>	30010	1	3 1/2 x 3 3/4 x 2 1/2	9.62
73 L 626 <td>30020*</td> <td>2</td> <td>4 1/2 x 3 3/4 x 3 3/8</td> <td>12.75</td>	30020*	2	4 1/2 x 3 3/4 x 3 3/8	12.75
73 L 656 <td>30040*</td> <td>4</td> <td>4 3/4 x 3 3/4 x 4 3/8</td> <td>17.83</td>	30040*	4	4 3/4 x 3 3/4 x 4 3/8	17.83

### 4000 VOLTS DC WORKING

73 L 693	40005	.5	4 x 3 3/4 x 2 1/2	9.01
73 L 657	40010	1	5 x 3 3/4 x 2 1/2	11.37
73 L 659	40040A*	4	8 x 3 3/4 x 4 3/8	24.67

## TYPE DYR PAPER CAPACITORS

Non-inductively wound by-pass conductors. For RF and AF bypass, AF coupling and AC circuits. Meet "F" characteristics of JAN-C-5. Metal shell. Tol., ±10%. 600 WVDC, except \*1000 WVDC. Av. shpg. wt., 6 oz.



Stock No.	Type	Mfd	Size	EA.
14 L 620	6005	.05	1 1/2 x 1 x 3/4	1.69
14 L 621	6010	.1	1 1/2 x 1 x 3/4	1.73
14 L 622	6025	.25	1 1/2 x 1 x 3/4	1.81
14 L 623	6050	.5	1 1/2 x 1 x 3/4	1.93
14 L 624	6100	1.0	2 x 1 1/2 x 3/8	2.20
14 L 625	6200	2.0	2 x 2 x 1 1/2	2.94
14 L 627	6011	-1-1	1 1/2 x 1 x 3/4	2.19
14 L 628	6022X	-25-.25	1 1/2 x 1 x 3/4	2.20
14 L 629	6055	-5-.5	2 x 1 1/2 x 3/8	2.53
14 L 630	6110	1.0-1.0	2 x 2 x 1 1/2	3.12
14 L 631	6111	-1.-1-1	1 1/2 x 1 x 3/4	2.47
14 L 613	10005*	.05	1 1/2 x 1 x 3/4	1.75
14 L 614	10010*	.1	1 1/2 x 1 x 3/4	1.85
14 L 615	10025*	.25	1 1/2 x 1 x 3/4	1.89
14 L 616	10050*	.5	2 x 1 1/2 x 3/8	2.02
14 L 618	10011*	-1.-1	1 1/2 x 1 x 3/4	2.35
14 L 619	10022*	-25-.25	2 x 1 1/2 x 3/8	2.47

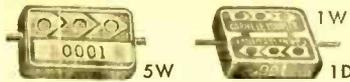
## TLA & TNAD TRANSMITTING CAPACITORS

Mount vertically in 3/8" hole. One screw terminal and one solder-type ground lug, except \*two screw and two solder terminals insulated from case. Size, 4 1/2 x 1 1/2" dia., except †2 1/2 x 1 1/2" dia. Av. wt., 2 lbs.



Stock No.	Type	Mfd	WVDC	EA.
73 L 630	TLA6020†	2	600	2.70
73 L 632	TLA6040	4	600	3.70
73 L 633	TNAD6040*	4	600	4.17

## MOLDED MICA CAPACITORS



Molded units with India ruby mica dielectric; special wax-treated stack, brown bakelite case. Designed for wide range of applications. Individually tested for accuracy. Tinned brass wire leads. Capacity tolerance on all types is ±20%. Rated at 500 WVDC, 1000 v. DC test. Average shpg. wt., 2 oz.

### TYPE 5W

Size, 5/8 x 1 1/2 x 3/4". With 1 1/4" tinned leads.

Stock No.	Type	Mfd	EA.
14 L 111	5W5V5	.00005	15c
14 L 112	5W5Q1	.0001	
14 L 113	5W5Q2	.0002	
14 L 100	5W5Q25	.00025	
14 L 101	5W5Q3	.0003	
14 L 102	5W5Q4	.0004	12c
14 L 103	5W5Q5	.0005	
14 L 114	5W5Q7	.0007	
14 L 104	5W5T1	.0001	
14 L 105	5W5T15	.0015	
14 L 106	5W5T2	.002	15c
14 L 107	5W5T25	.0025	
14 L 110	5W5T3	.003	
14 L 108	5W5T4	.004	
14 L 109	5W5T5	.005	
14 L 117	5W5T6	.006	15c
14 L 118	5W5T7	.007	
14 L 119	5W5T8	.008	
14 L 146	5W5T82	.0082	
14 L 147	5W5T9	.009	
14 L 148	5W5D1	.001	15c
14 L 115	5W5D15	.0015	18c
14 L 116	5W5D2	.002	24c

### TYPE 1W

Size, 1 1/2" square x 1/4". With 1 1/4" tinned leads.

Stock No.	Type	Mfd.	EA.
14 L 124	1W5D25	.0025	26c
14 L 125	1W5D3	.003	29c
14 L 126	1W5D4	.004	32c
14 L 127	1W5D5	.005	35c
14 L 128	1W5D6	.006	44c

### TYPE 1D

Size, 1 1/2" square x 3/8". With 1 1/4" tinned leads.

Stock No.	Type	Mfd.	EA.
14 L 129	1D5D8	.008	59c
14 L 139	1D5D82	.0082	59c
14 L 130	1D5S1	.01	71c

## BC "PLUG-IN" TUBULARS



High-quality, phenolic-cased paper "plug-in" capacitors. Leads plug directly into printed circuits for dip soldering. Perfect for production runs or general replacement use. Withstand high soldering temperatures. Tolerance: ±20 except \* ±10%. 400 v. DC. Operating temperature range: 200 and 400 WVDC units, -40° C to +90° C; 600 WVDC units, -55° C to +100° C. Av. shpg. wt., 4 oz.

### 200 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	EA.
19 L 126	BC2S1J	.01	3/4 x 1"	18c
19 L 107	BC2S47J	.047	3/4 x 1 1/2"	21c
19 L 108	BC2P1J	.10	3/4 x 1 1/2"	24c
19 L 138	BC2P22J	.22	3/4 x 1 1/2"	29c
19 L 139	BC2P33J	.33	3/4 x 1 1/2"	32c

### 600 VOLTS DC WORKING

Stock No.	Type	Mfd	Size	EA.
19 L 163	BC6D1J	.001	3/4 x 1"	18c
19 L 165	BC6D22J	.022	3/4 x 1"	18c
19 L 167	BC6D47J	.047	3/4 x 1"	18c
19 L 169	BC6S1J	.01	3/4 x 1 1/2"	21c
19 L 194	BC6S22J	.022	3/4 x 1 1/2"	24c
19 L 196	BC6S47J	.047	3/4 x 1 1/2"	26c
19 L 117	BC6P22J	.22	3/4 x 2 1/2"	38c
19 L 198	BC6S147J	.47	3/4 x 2 1/2"	41c

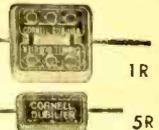
## TYPE KR 600-VOLT SCREW-NECK ELECTROLYTICS

Compact single-section electrolytic capacitors. Metal screw neck for simple one hole mounting. Etched foil plates. In round aluminum cans designed for inverted mounting. Color-coded leads. Av. shpg. wt., 6 oz.

Stock No.	Type	Mfd	WVDC	Size	EA.
14 L 161	608C	8	600	1 3/4 x 4 3/8	1.85
14 L 162	616C	16	600	1 3/4 x 4 3/8	2.20

## "SILVER MIKE" MICA CAPACITORS

Silvered mica midget capacitors. For circuits requiring frequency stability and high efficiency. Tolerance, ±5%. 500 volts DC working, 1000 volts DC test. Tinned leads. Av. wt., 2 oz.



### TYPES 1R AND 1DR

Size: Type 1R, 1 3/8" square x 1/4"; Type 1DR, 1 3/8" square x 3/8". 4300 volts DC working.

Stock No.	Type	Mfd	EACH
14 L 341	1RST75	.00075	.56
14 L 342	1RST82	.00082	.56
14 L 343	1RSD1	.001	.65
14 L 380	1RSD15	.0015	.79
14 L 381	1RSD2	.002	.79
14 L 382	1RSD25	.0025	1.06
14 L 383	1RSD3	.003	1.21
14 L 384	1RSD4	.004	1.26
14 L 385	1DR5D5	.005	1.32
14 L 344	1DR3D68*	.0068	1.47
14 L 345	1DR3D75*	.0075	1.47
14 L 346	1DR3D82*	.0082	1.47
14 L 347	1DR3S1*	.01	1.47

### TYPE 5R

Size, 5/8 x 1 1/2 x 3/8". With 1 1/4" tinned leads.

Stock No.	Type	Mfd	EACH
14 L 386	5RST33	.00033	.32
14 L 387	5RST39	.00039	.36
14 L 388	5RST47	.00047	.41
14 L 389	5RST51	.00051	.41
14 L 394	5RST3	.0003	.32
14 L 395	5RST4	.0004	.38
14 L 396	5RST5	.0005	.41

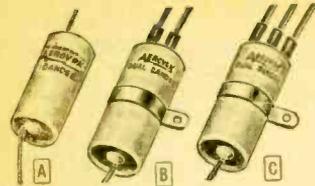
### TYPE 22R

Highly stable silvered mica. For use in circuits where accuracy and stability of capacity are of prime importance. Ideal for use in oscillators. VFO's, etc. Molded in low-loss red bakelite. Capacity tolerance, ±5%. All rated 500 WVDC, tested at 1000 VDC. Size: 1 1/2" x 1 1/2" x 3/8". 1 1/2" tinned leads. Av. shpg. wt., 2 oz.



Stock No.	Type	Mfd	EACH
14 L 850	22R5Q1	.00001	24c
14 L 851	22R5Q15	.000015	
14 L 852	22R5Q2	.00002	
14 L 853	22R5Q22	.000022	
14 L 854	22R5Q24	.000024	24c
14 L 855	22R5Q27	.000027	
14 L 856	22R5Q32	.000032	
14 L 857	22R5Q33	.000033	
14 L 859	22R5Q39	.000039	24c
14 L 861	22R5Q47	.000047	
14 L 862	22R5Q5	.00005	24c
14 L 863	22R5Q51	.000051	
14 L 864	22R5Q56	.000056	
14 L 865	22R5Q62	.000062	
14 L 866	22R5Q68	.000068	24c
14 L 867	22R5Q75	.000075	
14 L 868	22R5Q82	.000082	
14 L 870	22R5R1	.0001	
14 L 872	22R5T12	.00012	26c
14 L 873	22R5T13	.00013	
14 L 874	22R5T15	.00015	
14 L 889	22R5T16	.00016	
14 L 890	22R5T18	.00018	26c
14 L 875	22R5T2	.0002	
14 L 876	22R5T22	.	

# Aerovox Capacitors



## PRS MINIATURE ELECTROLYTICS

Extremely compact high-quality tubular electrolytics in metal cans with cardboard sleeves. Ideally suited to a wide variety of applications where space is at a premium, and dependable service is required. Negative leads are connected to aluminum cans. Dual and triple-section types have common negative leads. Single-section capacitors have bare tinned copper leads, 3" long. Dual and triple-section types have flexible stranded-copper leads, 5" long, with insulating sleeves. All are conservatively rated for temperatures to 85°C. Av. shpg. wt., 4 oz.

A—SINGLE SECTION

Stock No.	Mfd	Volts	Size	NET EACH
13 L 639	8	700	1 1/2 x 3 1/2"	1.29
13 L 640	10	700	1 1/2 x 3 1/2"	1.38
13 L 623	12	700	1 1/2 x 3 1/2"	1.44
13 L 642	16	700	1 1/2 x 3 1/2"	1.56
13 L 632	8	600	1 1/2 x 3 1/2"	1.23
13 L 633	10	600	1 1/2 x 3 1/2"	1.29
13 L 634	12	600	1 1/2 x 3 1/2"	1.41
13 L 635	16	600	1 1/2 x 3 1/2"	1.50
12 L 617	1	450	1 1/2 x 1 1/2"	.65
12 L 618	2	450	1 1/2 x 1 1/2"	.65
13 L 385	4	450	1 1/2 x 1 1/2"	.68
13 L 386	8	450	1 1/2 x 1 1/2"	.73
13 L 394	10	450	1 1/2 x 1 1/2"	.76
13 L 397	12	450	1 1/2 x 1 1/2"	.81
13 L 388	16	450	1 1/2 x 1 1/2"	.82
13 L 389	20	450	1 1/2 x 1 1/2"	.91
13 L 395	30	450	1 1/2 x 1 1/2"	1.00
13 L 396	40	450	1 1/2 x 1 1/2"	1.06
12 L 619	50	450	1 1/2 x 1 1/2"	1.23
12 L 620	60	450	1 1/2 x 1 1/2"	1.38
12 L 621	80	450	1 1/2 x 1 1/2"	1.65
12 L 622	100	450	1 1/2 x 1 1/2"	1.88
12 L 612	10	350	1 1/2 x 1 1/2"	.73
12 L 403	16	350	1 1/2 x 1 1/2"	.81
13 L 404	24	350	1 1/2 x 1 1/2"	.81
12 L 613	30	350	1 1/2 x 1 1/2"	.97
12 L 614	40	350	1 1/2 x 1 1/2"	1.03
12 L 615	50	350	1 1/2 x 1 1/2"	1.09
12 L 616	60	350	1 1/2 x 1 1/2"	1.15
13 L 410	4	250	1 1/2 x 1 1/2"	.59
13 L 411	8	250	1 1/2 x 1 1/2"	.68
13 L 412	12	250	1 1/2 x 1 1/2"	.73
13 L 413	16	250	1 1/2 x 1 1/2"	.76
12 L 414	20	250	1 1/2 x 1 1/2"	.81
12 L 608	30	250	1 1/2 x 1 1/2"	.85
12 L 609	40	250	1 1/2 x 1 1/2"	.91
12 L 610	50	250	1 1/2 x 1 1/2"	1.00
12 L 611	60	250	1 1/2 x 1 1/2"	1.06
13 L 430	4	150	1 1/2 x 1 1/2"	.59
13 L 431	8	150	1 1/2 x 1 1/2"	.62
13 L 425	10	150	1 1/2 x 1 1/2"	.62
13 L 432	12	150	1 1/2 x 1 1/2"	.65
13 L 433	16	150	1 1/2 x 1 1/2"	.68
13 L 434	20	150	1 1/2 x 1 1/2"	.73
13 L 435	24	150	1 1/2 x 1 1/2"	.73
13 L 436	30	150	1 1/2 x 1 1/2"	.76
13 L 437	40	150	1 1/2 x 1 1/2"	.82
13 L 441	50	150	1 1/2 x 1 1/2"	.88
13 L 407	60	150	1 1/2 x 1 1/2"	.88
13 L 426	80	150	1 1/2 x 1 1/2"	.94
13 L 427	100	150	1 1/2 x 1 1/2"	1.03
13 L 428	150	150	1 1/2 x 1 1/2"	1.12
13 L 450	10	50	1 1/2 x 1 1/2"	.59
13 L 451	25	50	1 1/2 x 1 1/2"	.59
13 L 452	50	50	1 1/2 x 1 1/2"	.71
13 L 453	100	50	1 1/2 x 1 1/2"	.91
12 L 605	150	50	1 1/2 x 1 1/2"	.91
12 L 606	250	50	1 1/2 x 1 1/2"	1.03
13 L 460	10	25	1 1/2 x 1 1/2"	.59
13 L 858	16	25	1 1/2 x 1 1/2"	.59
13 L 461	25	25	1 1/2 x 1 1/2"	.59
13 L 462	50	25	1 1/2 x 1 1/2"	.65
13 L 463	100	25	1 1/2 x 1 1/2"	.79
12 L 604	250	25	1 1/2 x 1 1/2"	1.00

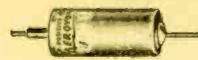
## XPP MINIATURIZED METAL-CASED ELECTROLYTICS

Miniature, hermetically sealed, metal-cased tubular aluminum electrolytic capacitors. Designed specifically for applications where weight and size are at a premium and must be kept at a minimum. Ideal for all transistorized assemblies such as portable radios, hearing aids, instruments, and other miniaturized electronic apparatus. Feature extended life, and provide for relatively high capacitance values at low voltage. Tolerance: -10%, +25%. Operating temperature range: -20°C to +65°C. Av. shpg. wt., 2 oz.



Stock No.	Mfd.	WVDC	Size	NET	Stock No.	Mfd.	WVDC	Size	NET
18 L 921	2	3	1/4 x 1/4"	73c	18 L 924	10	10	1/4 x 3/8"	79c
18 L 829	6	3	1/4 x 1/4"	73c	18 L 925	20	10	1/4 x 3/8"	79c
18 L 922	10	3	1/4 x 1/4"	73c	18 L 926	50	10	1/4 x 3/8"	88c
18 L 830	25	3	1/4 x 1/4"	73c	18 L 848	5	12	1/4 x 3/8"	79c
18 L 923	40	3	1/4 x 1/4"	73c	18 L 849	10	12	1/4 x 3/8"	79c
18 L 831	50	3	1/4 x 1/4"	73c	18 L 927	5	15	1/4 x 3/8"	82c
18 L 832	100	3	1/4 x 1/4"	82c	18 L 928	8	15	1/4 x 3/8"	82c
18 L 833	1	6	1/4 x 1/4"	73c	18 L 929	10	15	1/4 x 3/8"	82c
18 L 834	2	6	1/4 x 1/4"	73c	18 L 930	20	15	1/4 x 3/8"	85c
18 L 835	3	6	1/4 x 1/4"	73c	18 L 931	30	15	1/4 x 3/8"	88c
18 L 836	4	6	1/4 x 1/4"	73c	18 L 932	5	25	1/4 x 3/8"	82c
18 L 837	25	6	1/4 x 1/4"	73c	18 L 933	8	25	1/4 x 3/8"	85c
18 L 838	8	6	1/4 x 1/4"	79c	18 L 934	10	25	1/4 x 3/8"	85c
18 L 839	10	6	1/4 x 1/4"	79c	18 L 935	15	25	1/4 x 3/8"	85c
18 L 844	50	6	1/4 x 1/4"	82c	18 L 936	20	25	1/4 x 3/8"	88c
18 L 845	60	6	1/4 x 1/4"	82c					

## SRE BANTAM ELECTROLYTICS METAL-CASED TUBULARS



Extremely small dry electrolytic metal tubular capacitors that handle full-sized loads.

Ideal for limited space applications such as in hearing aids, personal portable radios, TV receivers and instruments. Especially useful in low-voltage miniaturized circuits. Hermetically sealed in aluminum cans and furnished with an external wax-coated insulating sleeve. Negative grounded to can. Available in a wide range of capacitances and DC working voltages. Shpg. wt., 2 oz.

Stock No.	Mfd	Volts	Size	NET
13 L 830	5	150	1/4 x 1 1/2"	.59
13 L 831	10	150	1/4 x 1 1/2"	.62
13 L 819	20	150	1/4 x 1 1/2"	.71
13 L 833	25	150	1/4 x 1 1/2"	.73
13 L 847	1	50	1/4 x 1 1/2"	.53
13 L 848	2	50	1/4 x 1 1/2"	.53
13 L 849	5	50	1/4 x 1 1/2"	.59
13 L 827	10	50	1/4 x 1 1/2"	.59
13 L 828	15	50	1/4 x 1 1/2"	.59
13 L 829	25	50	1/4 x 1 1/2"	.62
13 L 844	5	25	1/4 x 1 1/2"	.59
13 L 845	10	25	1/4 x 1 1/2"	.59
13 L 846	20	25	1/4 x 1 1/2"	.59
13 L 824	25	25	1/4 x 1 1/2"	.59
13 L 825	50	25	1/4 x 1 1/2"	.65
13 L 826	100	25	1/4 x 1 1/2"	.79
13 L 821	50	12	1/4 x 1 1/2"	.59
13 L 822	100	12	1/4 x 1 1/2"	.79
13 L 823	200	12	1/4 x 1 1/2"	.79
13 L 824	25	6	1/4 x 1 1/2"	.59
13 L 825	50	6	1/4 x 1 1/2"	.56
13 L 820	100	6	1/4 x 1 1/2"	.71
13 L 834	250	6	1/4 x 1 1/2"	.79
13 L 834	100	3	1/4 x 1 1/2"	.65
13 L 835	200	3	1/4 x 1 1/2"	.68
13 L 836	300	3	1/4 x 1 1/2"	.76
13 L 837	500	3	1/4 x 1 1/2"	.82

## TYPE AEP PLUG-IN ELECTROLYTIC CAPACITORS



Plug-in type 1, 2 and 3-section electrolytic capacitors. Designed for continuous service applications; quickly changed by simply plugging in a new unit. Insulated, tube-type bases fit all standard octal sockets. Kevel guide pins insure correct installation and polarity. Vented for safety; etched aluminum foil construction. Common neg. Operating temperature to +65°C. Av. wt., 5 oz.

### SINGLE SECTION

Stock No.	Type	Mfd.	W. V.	Size	NET
18 L 936	400P	2000	15	1 1/4 x 2 1/2"	3.35
13 L 035	2J	10	450	1 1/2 x 2 1/2"	2.25
13 L 037	4J	20	450	1 1/2 x 2 1/2"	2.38
13 L 039	8J	40	450	1 1/2 x 2 1/2"	2.70
13 L 040	16J	80	450	1 1/2 x 2 1/2"	2.78
13 L 041	2L	10	600	1 1/2 x 3 1/2"	2.78

### DUAL SECTION

13 L 044	22T	10-10	450	1 1/2 x 2 1/2"	2.52
13 L 045	44J	20-20	450	1 1/2 x 2 1/2"	2.84
13 L 046	88J	40-40	450	1 1/2 x 3"	3.23

### TRIPLE SECTION

13 L 047	22Z	10-10-10	450	1 1/2 x 2 1/2"	2.72
13 L 048	44Z	20-20-20	450	1 1/2 x 3"	3.23
18 L 935	82Z	40-10-10	450	1 1/2 x 3"	3.18

### QUADRUPE SECTION

18 L 934	G222Z	10-10-10-10	450	1 1/2 x 2 1/2"	3.05
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## TYPE P83Z MICROMINIATURE METALLIZED-PAPER TUBULARS



Ultra-small (resistor size); metallized dielectric. For replacement and original use as coupling and bypass capacitors in radio, TV and electronic equipment. Hyvol K impregnated, in moisture-resistant cases. Improved metallized foil serves as both dielectric and electrodes. Av. shpg. wt., 2 oz.

Stock No.	Mfd.	W. V.	Size	NET
13 L 885	.005	200	1/4 x 1/4"	.21
13 L 886	.01	200	1/4 x 1/4"	.21
13 L 887	.002	400	1/4 x 1/4"	.21
13 L 888	.003	400	1/4 x 1/4"	.26
13 L 889	.01	400	1/4 x 1/4"	.26
13 L 890	.0005	600	1/4 x 1/4"	.21
13 L 891	.001	600	1/4 x 1/4"	.21
13 L 892	.002	600	1/4 x 1/4"	.26
13 L 894	.0047	600	1/4 x 1/4"	.26
13 L 895	.005	600	1/4 x 1/4"	.26
13 L 896	.0068	600	1/4 x 1/4"	.26

# Aerovox Capacitors



## MICA CAPACITORS

Extremely stable capacitors. Types 1468L, S, 1467L, S, 1469, 1464; Made to MIL-C-5A specs; 1500 WVDC, except \*300 WVDC; have ±20% tolerance, except \*1464 and 1469 which are ±5%. Types 1650L, 1651L, 1652L, 1455, 1446 and 1447: ±10% tolerance. Types 1445, 1446 and 1447 are 1 1/2 x 1 1/2 x 1/2"; lug terminals and 1 3/8" centers; case styles are equivalent to CM45 and CM50 of MIL-C-5A. Types 1650L, 1651L and 1652L are 1 1/2 x 1 1/2 x 3/8"; have 6-32 screw terminals; 1 1/4" centers. Av. shpg. wt. 1.671L, S, 1468L, S, 1469 and 1464, 2oz.; others, 4 oz.

### A TYPE 1468LS

Stock No.	Mmf	MIL No.	Size	NET EACH
12 L 468	5	CM-208-050		
12 L 469	10	CM-208-100		
12 L 470	20	CM-208-200	3/8" x 1 1/2" x 3/8"	18c
12 L 471	24	CM-208-240		
12 L 472	30	CM-208-300		
12 L 473	50	CM-208-500	5/8" x 2 1/2" x 3/8"	18c
12 L 474	100	CM-208-820		12c
12 L 475	100	CM-208-101		12c
12 L 476	150	CM-208-151		
12 L 477	200	CM-208-201		15c
12 L 478	250	CM-208-251	3/8" x 2 1/2" x 3/8"	15c
12 L 479	270	CM-208-271		18c
12 L 480	300	CM-208-301		
12 L 481	350	CM-208-351	3/8" x 2 1/2" x 3/8"	18c
12 L 482	400	CM-208-431		
12 L 483	500	CM-208-561		

### B TYPE 1467LS

12 L 778	560	CM-308-561		18c
12 L 779	680	CM-308-681	3/8" x 2 1/2" x 3/8"	18c
12 L 780	910	CM-308-911		18c
12 L 781	1090	CM-308-102		21c
12 L 782	1500	CM-308-152		24c
12 L 783	2,200	CM-308-222		26c
12 L 784	2,200	CM-308-222		26c
12 L 785	2,500	CM-308-252	3/8" x 2 1/2" x 3/8"	29c
12 L 786	2,700	CM-308-272		29c
12 L 787	3,000	CM-308-302		35c
12 L 788	3,300	CM-308-332		35c
12 L 789	4,700	CM-308-472	3/8" x 2 1/2" x 3/8"	38c
12 L 790	5,000	CM-308-502		41c
12 L 791	5,600	CM-308-562		41c
12 L 792	6,200	CM-308-622		53c
12 L 793	7,500	CM-308-752	3/8" x 2 1/2" x 3/8"	59c
12 L 794	8,200	CM-308-822		59c
12 L 795	10,000	CM-308-103		71c

### A TYPE 1469—SILVERED MICA

Stock No.	Mmf	MIL No.	Size	NET EACH
12 L 300	5	CM-20C-050		
12 L 301	10	CM-20C-100		
12 L 302	15	CM-20C-150	3/8" x 2 1/2" x 3/8"	24c
12 L 303	15	CM-20C-150		
12 L 304	18	CM-20C-180		
12 L 305	20	CM-20C-200		
12 L 306	24	CM-20C-240	3/8" x 2 1/2" x 3/8"	24c
12 L 307	27	CM-20C-270		
12 L 308	30	CM-20C-300		
12 L 309	33	CM-20C-330		
12 L 310	36	CM-20C-360		
12 L 311	39	CM-20C-390	3/8" x 2 1/2" x 3/8"	24c
12 L 312	42	CM-20C-420		
12 L 313	47	CM-20C-470		
12 L 314	50	CM-20C-500		
12 L 315	51	CM-20C-510	3/8" x 2 1/2" x 3/8"	24c
12 L 316	56	CM-20C-560		
12 L 317	62	CM-20C-620		
12 L 318	68	CM-20C-680		
12 L 319	75	CM-20C-750	3/8" x 2 1/2" x 3/8"	24c
12 L 320	82	CM-20C-820		
12 L 321	91	CM-20C-910		
12 L 322	100	CM-20C-101		24c
12 L 323	150	CM-20C-151	3/8" x 2 1/2" x 3/8"	26c
12 L 324	180	CM-20C-181		26c
12 L 325	209	CM-20C-201		26c
12 L 326	220	CM-20C-221		26c
12 L 327	240	CM-20C-241		26c
12 L 328	270	CM-20C-271		32c
12 L 329	300	CM-20C-301	3/8" x 2 1/2" x 3/8"	32c
12 L 330	360	CM-20C-361		32c

### B TYPE 1464—SILVERED MICA

12 L 331	470	CM-30D-471		.41
12 L 332	510	CM-30D-511		.41
12 L 333	560	CM-30D-561	3/8" x 2 1/2" x 3/8"	.44
12 L 334	620	CM-30D-621		.44
12 L 335	680	CM-30D-681		.47
12 L 336	750	CM-30D-751		.47
12 L 337	820	CM-30D-821	3/8" x 2 1/2" x 3/8"	.50
12 L 338	910	CM-30D-911		.53
12 L 339	1090	CM-30D-102		.59
12 L 340	2000	CM-30D-202		.79
12 L 341	3000	CM-30D-302	3/8" x 2 1/2" x 3/8"	1.12
12 L 342	3900	CM-30D-392		1.18
12 L 343	5000	CM-30D-502	3/8" x 2 1/2" x 3/8"	1.26
12 L 344	6200	CM-30D-622	3/8" x 2 1/2" x 3/8"	1.41
12 L 345	7500	CM-30D-752	3/8" x 2 1/2" x 3/8"	1.47
12 L 346	10000*	CM-35D-103	3/8" x 2 1/2" x 3/8"	2.06

1446 and 1447 are 1 1/2 x 1 1/2 x 1/2"; lug terminals and 1 3/8" centers; case styles are equivalent to CM45 and CM50 of MIL-C-5A. Types 1650L, 1651L and 1652L are 1 1/2 x 1 1/2 x 3/8"; have 6-32 screw terminals; 1 1/4" centers. Av. shpg. wt. 1.671L, S, 1468L, S, 1469 and 1464, 2oz.; others, 4 oz.

### 600 WVDC

(C) TYPE 1650L		(D) TYPE 1445	
Mfd	Stock No. EACH	Stock No.	EACH
.00005	12 L 347	12 L 359	
.0001	12 L 348	12 L 360	
.00025	12 L 349	12 L 361	
.0005	12 L 350	12 L 362	
.001	12 L 351	12 L 363	.71
.002	12 L 352	12 L 364	.76
.003	12 L 353	12 L 365	.85
.005	12 L 354	12 L 366	.91
.01	12 L 355	12 L 367	1.26
.015	12 L 356	12 L 368	1.56
.02	12 L 357	12 L 369	1.79
.03	12 L 358	12 L 370	2.62

### 1200 WVDC

(C) TYPE 1651L		(D) TYPE 1446	
Mfd	Stock No. EACH	Stock No.	EACH
.00005	12 L 371	12 L 382	
.0001	12 L 372	12 L 383	
.00025	12 L 373	12 L 384	
.0005	12 L 374	12 L 385	
.001	12 L 375	12 L 386	1.06
.002	12 L 376	12 L 387	1.41
.003	12 L 377	12 L 388	1.79
.005	12 L 378	12 L 389	1.94
.01	12 L 379	12 L 390	3.00
.02	12 L 380		
.03	12 L 381		

### 2500 WVDC

(C) TYPE 1652L		(D) TYPE 1447	
Mfd	Stock No. EACH	Stock No.	EACH
.00005	12 L 484	12 L 967	1.12
.0001	12 L 485	12 L 968	1.12
.0002	12 L 486	12 L 969	1.12
.00025	12 L 487	12 L 970	1.29
.0003	12 L 488	12 L 971	1.32
.0004	12 L 489	12 L 972	1.35
.0005	12 L 490	12 L 973	1.41
.001	12 L 491	12 L 974	1.65
.0015	12 L 492	12 L 975	2.09
.002	12 L 493	12 L 976	2.44
.003	12 L 494	12 L 977	2.88
.004	12 L 495	12 L 978	3.32
.005	12 L 496	12 L 979	3.76
.01	12 L 497		
.015	12 L 498		
.02	12 L 499		

## PLASTIC-COATED, DIPPED-MICA CAPACITORS

Compact, plastic-coated, dipped-mica capacitors designed for long life and high stability over wide ranges of temperature and humidity. Employ radial-lead design—ideal for printed-circuit use and automatic insertion. Operate from -55° to +125°C. Tolerance is ±10%. Rated 500 DCWV, except \*300 DCWV. Max. size: ADM-15, 1/2" x 3/8" x 3/8"; ADM-19, 3/4" x 3/8" x 3/8". Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	Mmf	EACH
13 L 541	ADM-15-050	5	
13 L 542	ADM-15-100	10	
13 L 543	ADM-15-150	15	17c
13 L 544	ADM-15-200	20	
13 L 545	ADM-15-300	30	
13 L 546	ADM-15-360	36	
13 L 547	ADM-15-360	36	
13 L 548	ADM-15-390	39	17c
13 L 549	ADM-15-470	47	
13 L 572	ADM-15-500	50	
13 L 573	ADM-15-560	56	17c
13 L 574	ADM-15-680	68	
13 L 575	ADM-15-820	82	17c
13 L 576	ADM-15-101	100	17c
13 L 577	ADM-15-151	150	20c
13 L 578	ADM-15-181	180	23c
13 L 873	ADM-15-201	200	23c
13 L 874	ADM-15-221	220	25c
13 L 875	ADM-15-271	270	29c
13 L 876	ADM-15-301	300	29c
13 L 877	ADM-15-361	360	32c
13 L 878	*ADM-15-471	470	39c
13 L 879	*ADM-15-511	510	39c
13 L 880	ADM-19-681	680	39c
13 L 881	ADM-19-821	820	39c
13 L 882	ADM-19-102	1000	45c
13 L 883	ADM-19-202	2000	72c
13 L 884	*ADM-19-302	3000	97c



## P84CM DURAMIC

### CERAMIC CASED TUBULARS

Ceramic-cased paper tubular capacitors— for use in electronic equipment where outstanding performance and top dependability are required. Have high stability and dielectric strength. The moistening type end-lead provide exceptional humidity protection. Pigtail leads are firmly imbedded. Operating temperature range: -55°C to +85°C. ±20% tolerance, except \* ±10%. Av. shpg. wt., 4 oz.

Stock No.	Mfd	WVDC	Size	NET EACH
12 L 400	.01	200	3/8" x 1 1/2"	
12 L 401	.015	200	3/8" x 1 3/8"	15c
12 L 402	.02	200	3/8" x 1 3/8"	
12 L 403	.022	200	3/8" x 1 3/8"	
12 L 404	.03	200	3/8" x 1 3/8"	
12 L 405	.033	200	3/8" x 1 3/8"	15c
12 L 406	.047	200	3/8" x 1 3/8"	15c
12 L 407	.05	200	3/8" x 1 3/8"	15c
12 L 408	.068	200	3/8" x 1 3/8"	18c
12 L 409	.1	200	3/8" x 1 3/8"	21c
12 L 410	.15	200	3/8" x 1 3/8"	21c
12 L 411	.2	200	3/8" x 1 3/8"	21c
12 L 413	.25	200	3/8" x 1 3/8"	24c
12 L 414	.33	200	3/8" x 1 3/8"	29c
12 L 415	.47	200	3/8" x 1 3/8"	35c
12 L 416	.5	200	3/8" x 1 3/8"	35c
12 L 418	1.0	400	1 1/2" x 2 1/4"	53c
12 L 419	.0068	400	3/8" x 1 3/8"	15c
12 L 420	.01	400	3/8" x 1 3/8"	15c
12 L 421	.015	400	3/8" x 1 3/8"	15c
12 L 422	.02	400	3/8" x 1 3/8"	15c
12 L 423	.022	400	3/8" x 1 3/8"	15c
12 L 424	.03	400	3/8" x 1 3/8"	18c
12 L 426	.047	400	3/8" x 1 3/8"	18c
12 L 427	.05	400	3/8" x 1 3/8"	18c
12 L 429	.1	400	3/8" x 1 3/8"	21c
12 L 431	.2	400	3/8" x 1 3/8"	21c
12 L 433	.25	400	3/8" x 1 3/8"	29c
12 L 434	.33	400	3/8" x 1 3/8"	32c
12 L 436	.47	400	3/8" x 1 3/8"	32c
12 L 438	.5	400	3/8" x 1 3/8"	35c
12 L 439	1.0	400	1 1/2" x 2 1/4"	53c
12 L 439	.0005	600	3/8" x 1 3/8"	15c
12 L 440	.001	600	3/8" x 1 3/8"	15c
12 L 441	.0015	600	3/8" x 1 3/8"	15c
12 L 442	.002	600	3/8" x 1 3/8"	15c
12 L 443	.0022	600	3/8" x 1 3/8"	15c
12 L 444	.003	600	3/8" x 1 3/8"	15c
12 L 445	.0033	600	3/8" x 1 3/8"	15c
12 L 446	.004	600	3/8" x 1 3/8"	15c
12 L 447	.047	600	3/8" x 1 3/8"	15c
12 L 448	.05	600	3/8" x 1 3/8"	15c
12 L 449	.068	600	3/8" x 1 3/8"	15c
12 L 449	.068	600	3/8" x 1 3/8"	15c
12 L 450	.068	600	3/8" x 1 3/8"	18c
12 L 451</				

# Sprague, Cornell, & Mallory Capacitors

## NEW COMBINED LISTING OF TWIST PRONG ELECTROLYTICS

### SPRAGUE TVL MIDGET CAN CAPACITORS



"Twist-1-ok" hermetically sealed, aluminum can capacitors. Withstand extremely high temperatures, ripple currents, and surge voltages. Suitable for use in selenium rectifier circuits. Supplied with both bakelite and metal mounting washers. All types rated +85°C. Up to 150 WVDC, capacity tolerance is -10% to +100%; above 150 WVDC, tolerance is -10% to +50%. Can serves as common negative. Terminals are welded to capacitor cathodes and trimmed for easy soldering. Capacity and voltage are clearly marked to eliminate replacement error. Av. shpg. wt., 6 oz.

### CORNELL-DUBILIER UP AND UPE CAPACITORS



Efficient, electrolytic capacitors in hermetically sealed, seamless aluminum cans. Ideal for use in all types of original equipment as well as for exact replacement in radio, TV, audio, and other electronic equipment. Up to 50 WVDC, capacity tolerance is -10% to +250%; from 51 to 350 WVDC, tolerance is -10% to +100%; from 351 to 450 WVDC, tolerance is -10% to +50%. Up to 450 WVDC, temperature range to +85°C; 500 WVDC types, rated to +65°C. All are UP types except UPE types which are designed for selenium rectifier circuits. Av. shpg. wt., 5 oz.

### MALLORY FP, PFP, WP, AND PWP CAPACITORS



For filter, audio by-pass, and TV circuits. Suitable for use with selenium rectifiers. Stable under high ripple current, surge voltages, and temperatures. Rubber-sealed aluminum cans. FP types have exclusive Mallory Fabricated Plates—WP types have etched-plate anodes. PFP and PWP types are for printed circuits. Tolerances: 0-50 WVDC, -10% to +250%; 100-350 WVDC, -10% to +100%; over 350 WVDC, -10% to +50%. All types rated to +85°C. Insulating washer supplied. Can is common negative except for mounting hardware, see capacitor hardware section. Av. shpg. wt., 6 oz.

## Single Section Capacitor Size Chart

Code	Dia. x L	Code	Dia. x L	Code	Dia. x L	Code	Dia. x L	Code	Dia. x L	Code	Dia. x L	Code	Dia. x L
A	1 1/2 x 2"	C	1 x 2 1/2"	E	1 x 3 1/2"	G	1 x 4"	I	1 1/2 x 2 1/2"	M	1 1/2 x 3 1/2"	N	1 1/2 x 4 1/2"
B	1 x 2"	D	1 x 3"	F	1 x 3 3/4"	H	1 1/2 x 2"	J	1 1/2 x 3"	L	1 1/2 x 3 3/4"	P	1 1/2 x 4 1/2"

## SINGLE SECTION—Specify Stock No. & Mfr's Type No. When Ordering

Stock No.	Cap. Mfd.	DC WV	Sprague				C-D				Mallory				NET EACH		
			Type	Size	Type	Size	Type	Size	Type	Size	Type	Size					
70 LL 900	10	500	TVL-1940	B	A0520	B	FP171	B	.94	70 LL 927	40	250	TVL-1519	B	XA0291*	J	1.06
70 LL 901	20	500	TVL-1943	C	A0530	C	FP173	B	1.09	70 LL 928	100	250	TVL-1535	D	XA0312*	J	1.59
70 LL 902	30	500	TVL-1947	D	XA0541	D	FP175	C	1.18	70 LL 929	150	250	TVL-1540	J	XA0315*	D	1.82
70 LL 903	40	500	TVL-1950	E	A0550	F	FP177	D	1.47	70 LL 930	200	250	TVL-1547	L	XA0318*	K	2.15
70 LL 904	80	500	TVL-1958	K	A0560	M			1.88	70 LL 931	120	200	XA0265.3*	H	FP121	H	1.38
70 LL 905	90	500	TVL-1960	L	A0570	M	FP187	K	2.06	70 LL 932	160	200	TVL-1473	B	FP122	J	1.85
70 LL 906	40	475	TVL-1820	H	A0516	B			1.42	70 LL 933	50	150	TVL-1415	C	XA0200	B	1.97
70 LL 907	10	450	TVL-1705	B	A0430	FC142	A	.91	70 LL 934	80	150	TVL-1420	C	XA0231*	B	1.09	
70 LL 908	15	450	TVL-1709	B	A0450	FP143	B	1.00	70 LL 935	100	150	TVL-1423	C	XA0241*	C	1.18	
70 LL 909	20	450	TVL-1714	B	A0460	FP144	B	1.06	70 LL 936	120	150	TVL-1425	E	A0250	H	1.26	
70 LL 910	30	450	TVL-1720	C	A0470	FP145	C	1.06	70 LL 937	140	150	TVL-1428	D	XA0261*	D	1.26	
70 LL 911	40	450	TVL-1725	D	A0480	FP146	C	1.21	70 LL 938	150	150	TVL-1429	D	XA0261*	D	1.26	
70 LL 912	50	450	TVL-1728	D	A0490	F		1.38	70 LL 939	150	150	TVL-1430	K		J	1.26	
70 LL 913	80	450	TVL-1735	J	A0510	K	FP149	J	1.79	70 LL 940	200	150	TVL-1431	N	XA0262*	J	1.44
70 LL 914	100	450	TVL-1750	K	A0512	K	FP150	K	2.03	70 LL 941	300	150	TVL-1434	L	XA0263*	K	1.65
70 LL 915	125	450	TVL-1760	N	A0514	P		2.26	70 LL 942	100	50	TVL-1317	A	A0140	A	.97	
70 LL 916	40	350	TVL-1621	B	A0380	C		1.18	70 LL 943	50	50	TVL-1330	J	A0150	L	1.56	
70 LL 917	50	350	TVL-1622	D	A0390	J	FP137	C	1.23	70 LL 944	100	50	TVL-1338	M	WP065	H	2.20
70 LL 918	80	350	TVL-1630	K	XA0401*	C		1.38	70 LL 945	150	50	TVL-1341	N	A0174	P	2.26	
70 LL 919	125	350	TVL-1638	L	XA0411*	K	FP140	K	2.32	70 LL 946	40	25	TVL-1210	A	A0090	A	.79
70 LL 920	150	350	TVL-1642	N	XA0415*	M		2.32	70 LL 947	500	25	TVL-1220	B	A0120	B	1.50	
70 LL 921	80	300	TVL-1573	E	XA0331*	D	FP128	D	1.50	70 LL 948	1000	25	TVL-1230	H	A0130	H	2.09
70 LL 922	100	300	TVL-1578	G	XA0340	K	FP129.1	D	1.71	70 LL 949	1000	15	TVL-1165	C	A0060	C	1.50
70 LL 923	125	300	TVL-1580	L		K		2.06	70 LL 950	2000	15	TVL-1168	H	A0070	J	2.03	
70 LL 924	150	300	TVL-1584	L	XA0355*	K	FP131	K	2.06	70 LL 951	3000	15	TVL-1170	K	A0080	K	2.06
70 LL 925	250	300	TVL-1590	N		B		3.26	70 LL 952	2000	6	TVL-1115	H	A0040	H	1.50	
70 LL 926	20	250	TVL-1509	B	A0270	A		.94									

## DUAL SECTION—Specify Stock No. & Mfr's Type No. When Ordering

Stock No.	Cap. Mfd.	DC Wkg. Volts	Sprague				C-D				Mallory				NET EACH
			Type	Size	Type	Size	Type	Size	Type	Size	Type	Size			
70 LL 953	10-10	500	TVL-2933	1 x 2 1/2"	B0490	1 x 2 1/2"	FP284	1 1/2 x 2 1/2"	1.15						
70 LL 954	20-20	500	TVL-2935	1 1/2 x 2 1/2"	B0500	1 1/2 x 2 1/2"	FP288	1 1/2 x 3"	1.68						
70 LL 955	30-30	500	TVL-2937	1 3/4 x 3"	B0530	1 3/4 x 3"		1.91							
70 LL 956	40-40	500	TVL-2940	1 3/4 x 3 1/2"	B0540	1 3/4 x 3 1/2"		2.53							
70 LL 957	60-40	500	TVL-2944	1 3/4 x 3 1/2"				2.70							
70 LL 958	15-15	475	TVL-2820	1 x 2 1/2"	B0485	1 x 2 1/2"	FP258	1 x 2 1/2"	1.38						
70 LL 959	30-10	475	TVL-2824	1 x 3"	B0486	1 1/2 x 2"	FP259	1 x 3"	1.53						
70 LL 960	40-40	475	TVL-2830	1 1/2 x 3"			FP262	1 1/2 x 3"	3.18						
70 LL 961	80-40	475	TVL-2850	1 1/2 x 4"			FP264.5	1 1/2 x 4"	3.70						
70 LL 962	80-50	475	TVL-2855	1 1/2 x 4"	B0489	1 1/2 x 4 1/2"	FP266	1 1/2 x 4"	3.06						
70 LL 963	10-10	450	TVL-2750	1 x 2"	B0370	1 x 2"	FP231	1 x 2"	1.12						
70 LL 964	20-10	450	TVL-2754	1 x 2 1/2"	B0390	1 x 2 1/2"	FP231.3	1 x 2 1/2"	1.32						
70 LL 965	15-15	450	TVL-2753	1 x 2 1/2"	B0380	1 x 2 1/2"		1.32							
70 LL 966	20-20	450	TVL-2755	1 x 3"	B0400	1 x 3"	FP234	1 x 3"	1.50						
70 LL 967	30-10	450	TVL-2757	1 x 3"	B0410	1 x 3"		1.41							
70 LL 968	30-30	450	TVL-2759	1 1/2 x 2 1/2"	B0430	1 1/2 x 2 1/2"	FP237	1 1/2 x 2 1/2"	1.79						
70 LL 969	40-20	450	TVL-2762	1 1/2 x 2 1/2"	B0440	1 1/2 x 2 1/2"		1.91							
70 LL 970	40-40	450	TVL-2764	1 1/2 x 3"	B0450	1 1/2 x 3"	FP238	1 1/2 x 3"	2.03						
70 LL 971	50-40	450	TVL-2766	1 1/2 x 3"			FP239	1 1/2 x 3"	2.65						
70 LL 972	50-50	450	TVL-2767	1 1/2 x 3"	XB0455*	1 1/2 x 3"	FP240*	1 1/2 x 3"	2.26						
70 LL 973	60-40	450	TVL-2770	1 1/2 x 3 1/2"	B0462	1 1/2 x 3 1/2"		2.32							
70 LL 974	60-60	450	TVL-2772	1 1/2 x 3 1/2"			FP242.5	1 1/2 x 4"	2.26						
70 LL 975	80-10	450	TVL-2776	1 1/2 x 3 1/2"	B0170	1 1/2 x 3 1/2"		2.12							
70 LL 976	80-20	450	TVL-2776.5	1 1/2 x 3 1/2"	B0473	1 1/2 x 3 1/2"	FP245.2	1 1/2 x 3 1/2"	2.29						
70 LL 977	80-40	450	TVL-2778	1 1/2 x 3 1/2"	B0480	1 1/2 x 3 1/2"		2.97							
70 LL 978	100-40	450	TVL-2780	1 1/2 x 4"	B0481	1 1/2 x 4 1/2"		2.85							
70 LL 979	80-50	450-50	TVL-2710	1 1/2 x 3"	B0720	1 1/2 x 3"	FP244	1 1/2 x 3"	2.06						
70 LL 980	80-100	450-50	TVL-2711	1 1/2 x 3"	B0722	1 1/2 x 3 1/2"		2.20							
70 LL 981	10-20	450-25	TVL-2701	1 x 2"	B0630	1 x 2"		1.00							
70 LL 982	80-60	400	TVL-2677	1 1/2 x 4"	B0354	1 1/2 x 3 1/2"		2.76							
70 LL 983	80-80	400-200	TVL-2656	1 1/2 x 3 1/2"			FP225	1 x 2"	2.32						
70 LL 984	15-15	350	TVL-2625	1 x 2"	B0290	1 x 2"	FP227	1 x 2 1/2"	1.71						
70 LL 985	20-20	350	TVL-2626	1 x 3"	B0300	1 x 3"	FP227.3	1 x 3"	1.71						
70 LL 986	30-30	350	TVL-2628	1 x 3"	B0310	1 x 3"		2.82							
70 LL 987	100-60	350	TVL-2639	1 1/2 x 3 1/2"											
70 LL 988	100-100	350	TVL-2641	1 1/2 x 4"	B0332	1 1/2 x 4 1/2"	FP227.7	1 1/2 x 4"	3.62						
70 LL 989	10-10	300	TVL-2565	1 x 2"			FP217.86	1 1/2 x 2"	1.29						
70 LL 990	40-40	300	TVL-2575	1 1/2 x 2 1/2"	XB0254*	1 x 3"	FP217.87	1 1/2 x 2"	1.73						
70 LL 991	80-80	300	TVL-2585	1 1/2 x 3 1/2"	B0270	1 1/2 x 3"		2.38							
70 LL 992	20-20	250	TVL-2515	1 x 2"	B0210	1 x 2"	FP217	1 x 2"	1.12						
70 LL 993	40-40	250	TVL-2520	1 x 3 1/2"	XB0241*	1 x 3"	FP221	1 x 3"	1.47						
70 LL 994	150-150	250	TVL-2535	1 1/2 x 4 1/2"	B0250	1 1/2 x 4 1/2"	FP217.7	1 1/2 x 4"	3.03						
70 LL 995	200-5	200	TVL-2470	1 1/2 x 2"	XB0196*	1 1/2 x 2 1/2"		1.59							
70 LL 996	100-100	200	TVL-2464	1 1/2 x 3"	XB0194*	1 1/2 x 3"		2.06							
70 LL 997	20	150	TVL-2415	1 x 2"	XB0091*	1 x 2"	FP208	1 x 2"	1.00						
70 LL 998	30-30	150	TVL-2422	1 x 2"	B0110	1 x 2"	FP211	1 x 2"	1.09						
70 LL 999	40-20	150	TVL-2425	1 x 2"	B0120	1 x 2"	FP210	1 x 2"	1.09						

# Sprague, Cornell, & Mallory Capacitors

DUAL SECTION (CONT)—Specify Stock No. & Mfr's Type No. When Ordering

Stock No.	Cap. Mfd.	DC Wkg. Volts	Sprague		C-D		Mallory		NET EACH
			Type	Size	Type	Size	Type	Size	
70 LL 800	40-40	150	TVL-2428	1x2 1/2"	X B0111*	1x2"	FP212	1x3"	1.12
70 LL 801	50-30	150	TVL-2432	1x2 1/2"	B0150	1x2"	FP213	1x2"	1.18
70 LL 802	50-30	150					FP213.1	1x2"	1.18
70 LL 803	50-30	150	TVL-2435	1x2 1/2"	X B0161*	1x2 1/2"	FP214	1x2 1/2"	1.26
70 LL 804	70-30	150	TVL-2439	1x2 1/2"			FP214.3	1x2 1/2"	1.29
70 LL 805	80-40	150	TVL-2442	1 1/2x2 1/2"	X B0181*	1x2 1/2"	FP216	1x3"	1.35
70 LL 806	80-50	150	TVL-2442.1	1x2 1/2"					1.41
70 LL 807	200-5	150	TVL-2444	1 1/2x3"			FP216.1	1 1/2x2 1/2"	1.59
70 LL 808	200-200	150	TVL-2447	1 1/2x4"	X B0189*	1 1/2x3 3/4"	FP216.4	1 1/2x4"	2.35
70 LL 809	200-200	150					FP216.4	1 1/2x4"	2.35
70 LL 810	50-50	50	TVL-2320	1x2"	B0080	1x2"	WP202.1	1x2"	1.00
70 LL 811	100-100	50	TVL-2326	1x2"	B0085	1x2"	WP202.5	1x2"	1.23
70 LL 812	40-40	25	TVL-2210	1x2"	B0040	1x2"	WP201.1	1x2"	1.18
70 LL 813	1000-1000	15	TVL-2160	1x3 1/2"	B0040	1 1/2x2 1/2"	WP200	1 1/2x2 1/2"	2.59

TRIPLE SECTION—Specify Stock No. & Mfr's Type No. When Ordering

Stock No.	Cap. Mfd.	DC Wkg. Volts	Sprague		C-D		Mallory		NET EACH
			Type	Size	Type	Size	Type	Size	
70 LL 814	10-10-10	500	TVL-3952	1x3"	C0380	1x3"			1.59
70 LL 815	30-20-20	500	TVL-3956	1 1/2x3"	C0390	1 1/2x3"			2.47
70 LL 816	40-40-10	500	TVL-3965	1 1/2x3 3/4"	C0410	1 1/2x3 3/4"			2.97
70 LL 817	40-40-100	500-500-200	TVL-3935	1 1/2x4"	C1180	1 1/2x4 1/2"			3.41
70 LL 818	20-10-100	500-500-50	TVL-3928	1x4"	C1150	1x3 3/4"			1.94
70 LL 819	10-10-10	475	TVL-3835	1x3"			FP394	1x3"	2.38
70 LL 820	30-40-100	475	TVL-3840	1 1/2x3"	C0371	1 1/2x3"	FP396	1 1/2x3"	2.62
70 LL 821	40-10-10	475	TVL-3841	1 1/2x4"			FP396.2	1 1/2x2 1/2"	3.03
70 LL 822	40-30-30	475	TVL-3843	1 1/2x4"	C0374	1 1/2x3 3/4"			3.41
70 LL 823	10-10-10	450	TVL-3776	1x3"	C0240	1x2 1/2"	FP375.8	1x2 1/2"	1.53
70 LL 824	15-15-10	450	TVL-3778	1x3 1/2"	C0250	1x3"	FP376.1	1x3"	2.62
70 LL 825	20-10-10	450	TVL-3779	1x3"	C0260	1x3"	FP376.3	1x3"	1.71
70 LL 826	20-20-20	450	TVL-3780	1 1/2x2 1/2"	C0270	1 1/2x2 1/2"	FP376.5	1 1/2x2 1/2"	2.12
70 LL 827	30-20-20	450	TVL-3781	1 1/2x3"	C0280	1 1/2x3"			2.26
70 LL 828	30-30-30	450	TVL-3782	1 1/2x3 3/4"	C0300	1 1/2x3 3/4"			2.56
70 LL 829	40-30-20	450	TVL-3784	1 1/2x3"	C0330	1 1/2x3"			2.53
70 LL 830	40-40-10	450	TVL-3785	1 1/2x3 3/4"	C0340	1 1/2x3 3/4"	FP376.8	1 1/2x3"	2.44
70 LL 831	40-40-20	450	TVL-3786	1 1/2x3 3/4"	C0344	1 1/2x3 3/4"			2.62
70 LL 832	40-40-40	450	TVL-3787	1 1/2x3 3/4"	C0350	1 1/2x3 3/4"	FP377	1 1/2x4"	2.88
70 LL 833	60-20-20	450	TVL-3789	1 1/2x3 3/4"	C0360	1 1/2x3 3/4"			2.70
70 LL 834	60-30-10	450	TVL-3790	1 1/2x3"					2.65
70 LL 835	60-40-20	450	TVL-3791	1 1/2x3 1/2"	C0365	1 1/2x3 3/4"			2.94
70 LL 836	80-40-20	450	TVL-3793	1 1/2x4"	C0370	1 1/2x4 1/2"	FP378	1 1/2x4"	3.29
70 LL 837	40-10-80	450-450-200	TVL-3761	1 1/2x3"	C1050	1 1/2x3"			2.18
70 LL 838	40-40-100	450-450-200	TVL-3764	1 1/2x4"			FP375	1 1/2x4"	2.91
70 LL 839	40-40-40	450-450-150	TVL-3758	1 1/2x3 1/2"	C1100	1 1/2x3 3/4"			2.44
70 LL 840	20-10-50	450-450-50	TVL-3751	1x3"	C0970	1x3"	FP366	1x3"	1.68
70 LL 841	40-10-100	450-450-50	TVL-3754.2	1 1/2x3"	C1090	1 1/2x3 3/4"			2.53
70 LL 842	80-20-100	450-450-50	TVL-3757	1 1/2x4"	C1108	1 1/2x4 1/2"			2.82
70 LL 843	10-10-20	450-450-25	TVL-3731	1x2 1/2"	C0910	1x2"	FP345.2	1x2"	1.41
70 LL 844	20-10-20	450-450-25	TVL-3735	1x3"	C0960	1x2 1/2"			1.59
70 LL 845	20-20-20	450-450-25	TVL-3739	1x3"	C0990	1x3"	FP345.8	1x3"	1.79
70 LL 846	30-30-20	450-450-25	TVL-3741	1 1/2x2 1/2"	C1020	1 1/2x2 1/2"			2.29
70 LL 847	40-40-20	450-450-25	TVL-3744	1 1/2x3"	C1070	1 1/2x3"	FP346	1 1/2x3"	2.29
70 LL 848	40-90-50	450-150-150	TVL-3708	1 1/2x3"	C1260	1 1/2x3"	FP341	1 1/2x3 3/4"	2.35
70 LL 849	100-10-80	400-400-350	TVL-3689.3	1 1/2x4"	C0896	1 1/2x4 1/2"	FP333.85	1 1/2x4"	3.59
70 LL 850	20-20-20	400-400-25	TVL-3678	1x3"					1.68
70 LL 851	10-10-10	350		1x3"	C0210	1x2"	FP330.5	1x2"	1.41
70 LL 852	30-20-10	350	TVL-3639.8	1 1/2x4"	C0225	1x3"	FP330.7	1x3"	1.91
70 LL 853	60-40-20	350	TVL-3640	1 1/2x4"	C0230	1 1/2x3"			2.50
70 LL 854	100-100-10	350			C0238	1 1/2x4 1/2"	FP332.4	1 1/2x4"	4.00
70 LL 855	20-10-5	350-350-250	TVL-3639.4	1x2 1/2"	C0790	1x2"	FP330.3	1x2"	1.50
70 LL 856	100-60-20	350-350-200	TVL-3639.2	1 1/2x4"	C0875	1 1/2x3 1/2"			3.23
70 LL 857	15-10-20	350-350-25	TVL-3630	1x2 1/2"	C0770	1x2"	FP328	1x2"	1.47
70 LL 858	20-20-20	350-350-25	TVL-3635	1x2 1/2"	C0800	1x2 1/2"	FP329.5	1x2"	1.71
70 LL 859	20-10-20	350-350-25	TVL-3634	1x2 1/2"	C0780	1x2"			1.50
70 LL 860	30-30-20	350-350-25	TVL-3636.3	1 1/2x2 1/2"	C0840	1 1/2x2"			2.00
70 LL 861	30-30-20	350-300-25	TVL-3620	1x3"	C1310	1x3"	FP331	1x3"	1.85
70 LL 862	10-10-10	300	TVL-3580	1x2"	C0210	1x2"			1.41
70 LL 863	120-50-40	300	TVL-3585	1 1/2x4"	C0200	1 1/2x4 1/2"			3.44
70 LL 864	150-100-30	300					FP326.76	1 1/2x4"	3.00
70 LL 865	60-10-25	300-300-25					FP326.4	1 1/2x2"	2.20
70 LL 866	100-60-20	300-250-250	TVL-3562	1 1/2x4"	XC1209*	1 1/2x4 1/2"	FP335	1 1/2x3"	2.88
70 LL 867	200-60-20	300-250-250	TVL-3563	1 1/2x4"	XC1212*	1 1/2x5"			3.23
70 LL 868	10-10-20	300-150-150					FP326.15	1x2"	1.32
70 LL 869	100-200-60	300-150-150	TVL-3560.5	1 1/2x4"			FP326.3	1 1/2x4"	2.94
70 LL 870	40-20-20	250	TVL-3540	1x3 1/2"	C0160	1x3"	FP320	1 1/2x2"	1.71
70 LL 871	30-30-20	250-250-25	TVL-3513	1x3"	C0670	1x2 1/2"			1.65
70 LL 872	80-40-50	250-150-50	TVL-3506	1 1/2x2 1/2"	C1280	1 1/2x2 1/2"	FP319	1 1/2x2 1/2"	1.38
70 LL 873	80-10-20	200-200-50	TVL-3471	1x3"					1.65
70 LL 874	60-200-140	200-150-150	TVL-3461.4	1 1/2x4"	XC1202*	1 1/2x4 1/2"			2.82
70 LL 875	20-20-20	150	TVL-3433	1x2 1/2"	XC0041*	1x2"	FP311.2	1x2"	1.35
70 LL 876	40-20-20	150	TVL-3437	1x2 1/2"	XC0071*	1x2"	FP311.4	1x2 1/2"	1.41
70 LL 877	40-30-20	150	TVL-3438	1x2"	C0080	1x2 1/2"			1.47
70 LL 878	40-40-40	150	TVL-3440	1x3 1/2"	C0090	1x2 1/2"	FP311.5	1x3"	1.53
70 LL 879	50-40-30	150					FP311.63	1x2 1/2"	1.88
70 LL 880	50-50-50	150	TVL-3442	1x3"	XC0105*	1x3"			1.76
70 LL 881	60-40-20	150	TVL-3443	1x3"	C0110	1x2 1/2"			1.62
70 LL 882	80-40-20	150	TVL-3444	1x3"	C0120	1x3"	FP311.7	1 1/2x2"	1.71
70 LL 883	120-120-40	150	TVL-3448.2	1 1/2x3"	XC0126*	1 1/2x3"	FP311.9	1 1/2x3"	2.38
70 LL 884	250-200-10	150			XC0129*	1 1/2x4 1/2"			3.29
70 LL 885	200-100-60	150			XC0127*	1 1/2x3 3/4"			2.68
70 LL 886	40-20-100	150-150-25	TVL-3450	1 1/2x3 3/4"	C0490	1x2"	FP307	1x2 1/2"	2.20
70 LL 887	40-40-20	150-150-25	TVL-3426	1x2 1/2"	XC0551*	1x2"	FP310	1x2 1/2"	1.41
70 LL 888	40-40-200	150-150-25	TVL-3423.2	1x3"			FP314	1x3"	1.59
70 LL 889	50-30-100	150-150-25	TVL-3427	1x3"	C0570	1x2 1/2"	FP309	1x2 1/2"	1.59
70 LL 890	50-50-20	150-150-25	TVL-3430	1x3"	C0580	1x2 1/2"	FP311	1x3"	1.56
70 LL 891	70-30-20	150-150-25					FP311.12	1x2 1/2"	2.35
70 LL 892	70-30-100	150-150-10					FP302.38	1x2 1/2"	1.65
70 LL 893	80-60-250	150-150-10			XC0615*	1 1/2x2 1/2"	FP302.5	1x2 1/2"	2.00
70 LL 894	90-40 400	150-150-10	TVL-3414.5	1 1/2x2 1/2"			FP302.75	1x3"	3.09
70 LL 895	20-20-20	25	TVL-3210	1x2"	C0010	1x2"			1.15
70 LL 896	40-40-40	25	TVL-3230	1x2"			WP520	1x2"	1.88

See Additional Sprague, C-D, & Mallory Capacitor Listings on Next Page

# Sprague, Cornell, Mallory Capacitors

## TWIST PRONG ELECTROLYTICS (CON'T)

QUADRUPLE SECTION—Specify Stock No. & Mfr's Type No. When Ordering

Stock No.	Cap. Mfd.	DC Wkg. Volts	Sprague		C-D		Mallory		NET EACH
			Type	Size	Type	Size	Type	Size	
70 LL 700	10-10-10-10	500	TVL 4940	1 1/4 x 2"	D0180	1 1/4 x 2"			2.06
70 LL 701	40-40-8-8	500	TVL 4944	1 1/4 x 3 1/2"	D0185	1 1/4 x 3 1/2"	FP495	1 1/2 x 4"	3.35
70 LL 702	30-10-150-30	500-450-50-50	TVL 4917	1 1/4 x 2 1/2"	D0928	1 1/4 x 2 1/2"			2.47
70 LL 703	10-10-10-10	475	TVL 4830	1 1/4 x 2"			FP474	1 1/4 x 2 1/2"	3.09
70 LL 704	20-20-10-10	475	TVL 4832	1 1/4 x 2 1/2"	D0179.3	1 1/4 x 2 1/2"	FP474.5	1 1/4 x 2 1/2"	2.56
70 LL 705	20-20-20-20	475	TVL 4834	1 1/4 x 3"	D0179.5	1 1/4 x 3"	FP475	1 1/4 x 3"	3.00
70 LL 706	40-20-10-10	475	TVL 4840	1 1/4 x 3"	D0179.7	1 1/4 x 3"	FP476	1 1/4 x 3"	3.00
70 LL 707	50-30-10-30	475-475-475-300	TVL 4827	1 1/4 x 3 1/2"	D0692	1 1/4 x 3 1/2"			3.29
70 LL 708	15-15-80-40	475-475-300-50	TVL 4815	1 1/4 x 3"	D0840	1 1/4 x 3"			2.82
70 LL 709	10-4-140-100	475-300-300-50					FP451.3	1 1/2 x 4"	3.12
70 LL 710	20-40-100-80	475-300-50-25	TVL 4800	1 1/4 x 3"	D0990	1 1/4 x 3"			2.62
70 LL 711	5-5-5-5	450	TVL 4759.7	1 1/4 x 2"	D0080	1 1/4 x 2"	WP433.6	1 1/2 x 2"	1.76
70 LL 712	10-10-10-10	450	TVL 4760	1 1/4 x 2"	D0090	1 1/4 x 2"	FP434	1 1/2 x 2"	1.97
70 LL 713	20-10-10-10	450	TVL 4761	1 1/4 x 2 1/2"	D0120	1 1/4 x 2 1/2"	FP434.5	1 1/2 x 2"	2.18
70 LL 714	20-20-20-20	450	TVL 4763	1 1/4 x 3"	D0130	1 1/4 x 3"	FP444	1 1/2 x 3"	2.76
70 LL 715	30-30-20-20	450	TVL 4769.4	1 1/4 x 3"	D0144	1 1/4 x 3 1/2"	FP444.8	1 1/4 x 3"	3.06
70 LL 716	35-35-10-5	450	TVL 4771	1 1/4 x 3 1/2"	D0150	1 1/4 x 3 1/2"	FP445	1 1/4 x 3"	2.70
70 LL 717	40-20-10-10	450			D0170	1 1/4 x 3"			2.62
70 LL 718	40-40-20-20	450	TVL 4773	1 1/4 x 4"	D0174	1 1/4 x 4"	FP447	1 1/2 x 4"	2.26
70 LL 719	40-40-30-20	450	TVL 4774	1 1/4 x 4"	D0176	1 1/4 x 4"			3.56
70 LL 720	40-40-40-40	450	TVL 4775	1 1/4 x 4"	D0177	1 1/4 x 5"			3.79
70 LL 721	40-40-40-100	450-450-450-100	TVL 4747	1 1/4 x 3 1/2"	D0660	1 1/4 x 3 1/2"			3.26
70 LL 722	30-30-15-30	450-450-450-50	TVL 4742	1 1/4 x 3"	D0560	1 1/4 x 3"			2.68
70 LL 723	10-10-10-20	450-450-450-25	TVL 4723	1 1/4 x 2"	D0840	1 1/4 x 2"			1.85
70 LL 724	20-20-20-20	450-450-450-25	TVL 4724.2	1 1/4 x 2 1/2"	D0520	1 1/4 x 2 1/2"			2.44
70 LL 725	40-20-20-25	450-450-450-25					FP430.2	1 1/2 x 3"	2.70
70 LL 726	40-30-10-20	450-450-450-25	TVL 4734	1 1/4 x 3 1/2"	D0640	1 1/2 x 3"	FP429	1 1/2 x 3"	2.65
70 LL 727	40-20-20-40	450-450-450-25	TVL 4732	1 1/4 x 3"	D0630	1 1/2 x 3"	FP436	1 1/2 x 3"	2.72
70 LL 728	40-40-10-20	450-450-450-25	TVL 4736	1 1/4 x 3 1/2"			FP430.6	1 1/2 x 4"	3.23
70 LL 729	40-40-40-40	450-450-450-25	TVL 4739	1 1/4 x 4"	D0666.2	1 1/2 x 3 1/2"			3.00
70 LL 730	20-15-20-20	450-450-25-25	TVL 4712	1 1/4 x 2"			FP426	1 1/2 x 2"	2.03
70 LL 731	40-40-40-20	450-300-300-150	TVL 4703.7	1 1/4 x 3"			FP413X	1 1/2 x 3"	2.88
70 LL 732	80-40-10-20	400-400-400-25	TVL 4669	1 1/4 x 4"	D0477	1 1/4 x 3 1/2"			3.12
70 LL 733	80-40-30-40	400-400-400-25	TVL 4670	1 1/4 x 4"	D0478	1 1/4 x 3 1/2"			3.50
70 LL 734	100-10-30-20	400-400-50-50	TVL 4665.5	1 1/4 x 3 1/2"	D0875	1 1/4 x 3 1/2"	FP420.7	1 1/2 x 3"	3.00
70 LL 735	40-80-100-25	400-350-200-50	TVL 4654	1 1/4 x 3 1/2"			FP420.45	1 1/2 x 4"	3.50
70 LL 736	80-60-40-20	350	TVL 4635.7	1 1/4 x 4"					3.76
70 LL 737	20-10-5-10	350-350-350-25	TVL 4620	1 1/4 x 2"	D0410	1 1/4 x 2"			1.82
70 LL 738	40-40-20-20	350-350-350-25	TVL 4621.6	1 1/4 x 3"	D0430	1 1/4 x 3"	FP419.3	1 1/2 x 3"	2.73
70 LL 739	60-40-60-20	350-350-200-150	TVL 4609	1 1/4 x 3 1/2"					2.97
70 LL 740	60-100-60-40	350-350-200-75					FP419.67	1 1/2 x 4"	3.85
70 LL 741	40-40-20-10	300	TVL 4579	1 1/4 x 3 1/2"	D0020	1 1/4 x 2 1/2"			2.68
70 LL 742	40-40-40-20	300-300-300-150	TVL 4575	1 1/4 x 3"	D0370	1 1/4 x 3"			2.88
70 LL 743	100-10-200-30	300-300-150-25	TVL 4561	1 1/4 x 4"	D0866	1 1/4 x 5"			3.47
70 LL 744	200-20-100-20	300-250-50-150	TVL 4563	1 1/4 x 4"	D0940	1 1/4 x 5"	FP419	1 1/2 x 4"	3.41
70 LL 745	100-60-10-20	300-200-150-50	TVL 4559.5	1 1/4 x 3 1/2"					2.85
70 LL 746	100-40-10-100	250-250-250-50	TVL 4516	1 1/4 x 3 1/2"	D0360	1 1/2 x 3 1/2"			3.03
70 LL 747	100-80-60-40	150	TVL 4445	1 1/4 x 3"	D0014	1 1/4 x 3"	FP412	1 1/2 x 3"	2.73
70 LL 748	40-40-40-30	150	TVL 4441	1 1/4 x 2"	D0010	1 1/4 x 2"			1.94
70 LL 749	30-30-30-40	150-150-150-25	TVL 4415	1 1/4 x 2"	D0210	1 1/4 x 2"			1.82
70 LL 750	40-40-30-20	150-150-150-25	TVL 4420	1 1/4 x 2"	D0240	1 1/4 x 2"	FP409	1 1/2 x 2"	1.82
70 LL 751	50-50-50-20	150-150-150-25	TVL 4425	1 1/4 x 2"	D0290	1 1/4 x 2"	FP410	1 1/2 x 2 1/2"	2.09
70 LL 752	80-40-30-100	150-150-150-25	TVL 4430	1 1/4 x 2 1/2"			FP411	1 1/2 x 2 1/2"	3.26
70 LL 753	150-10-140-130-25	150-150-150-25	TVL 4431	1 1/4 x 2"	D0325	1 1/4 x 2 1/2"	FP411.3	1 1/2 x 2 1/2"	2.09
70 LL 754	80-40-40-100	150-150-150-25	TVL 4434	1 1/4 x 2 1/2"	D0330	1 1/4 x 2 1/2"			2.20
70 LL 755	60-40-20-200	150-150-150-10	TVL 4414	1 1/4 x 2"	D0300	1 1/4 x 2"	FP408	1 1/2 x 2"	2.03
70 LL 756	20-20-160-40	150-150-25-25	TVL 4409	1 1/4 x 2"	XD0844*	1 1/4 x 2"	FP405	1 1/2 x 2"	1.88
70 LL 757	50-40-160-40	150-150-25-25	TVL 4410.7	1 1/4 x 2"					2.09

## MALLORY GEM MOLDED TUBULAR PAPER CAPACITORS

600 VOLTS DC WORKING (CON'T.)

1600 VOLTS DC WORKING (CON'T.)



Molded tubular paper capacitors, manufactured to extremely high standards. Rugged, mineral-filled bakelite cases and resin sealings assure exceptionally dependable service, even under adverse operating conditions. Have high resistance to moisture and mechanical shock. Leads are double-tinned copperweld wire. Types up to 1/2" dia. have No. 20 leads; types over 1/2" dia. have heavy-duty No. 18 leads. All GEM capacitors are designed to operate efficiently at temperatures up to 85°C. Tolerance of 20%, except\* 10%. Av. wt., 5 oz.

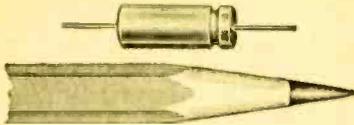
### 400 VOLTS DC WORKING

Stock No.	Type	Mfd	WVDC	Size	EACH
18L 586	421	.001	400	3/16x1"	15c
18L 587	425	.005	400	3/16x1"	
18L 588	411	.01	400	3/16x1"	
18L 589	4115	.015	400	3/16x1"	
18L 590	412	.02	400	3/16x1"	
18L 591	4122	.022	400	3/16x1"	
18L 592	4125	.025	400	3/16x1"	
18L 593	413	.03	400	3/16x1"	18c
18L 594	4133	.033	400	3/16x1"	
18L 595	414	.04	400	3/16x1"	
18L 596	4147	.047	400	3/16x1"	18c
18L 597	415	.05	400	3/16x1"	18c
18L 598	416	.06	400	3/16x1"	21c
18L 599	4168	.068	400	3/16x1"	21c
18L 600	401	.1	400	3/16x1"	21c
18L 601	4015*	.15	400	3/16x1"	24c
18L 602	402*	.2	400	3/16x1"	26c
18L 603	4022*	.22	400	3/16x1"	26c
18L 604	4025*	.25	400	3/16x1"	26c
18L 605	4033*	.33	400	3/16x1"	29c
18L 606	4047*	.47	400	1/2x3"	35c
18L 607	405*	.5	400	1/2x3"	35c
18L 608	41*	1.0	400	1/2x3"	73c
18L 546	621	.001	600	3/8x1"	15c

Stock No.	Type	Mfd	WVDC	Size	EACH
18L 547	6215	.015	600	3/8x1"	15c
18L 548	622	.02	600	3/8x1"	
18L 549	6222	.022	600	3/8x1"	
18L 550	6225	.025	600	3/8x1"	
18L 551	623	.03	600	3/8x1"	
18L 552	6233	.033	600	3/8x1"	
18L 553	624	.04	600	3/8x1"	
18L 554	6247	.047	600	3/8x1"	15c
18L 555	625	.05	600	3/8x1"	
18L 556	626	.06	600	3/8x1"	
18L 557	6268	.068	600	3/8x1"	
18L 558	627	.07	600	3/8x1"	
18L 559	628	.08	600	3/8x1"	18c
18L 560	6282	.082	600	3/8x1"	
18L 561	611	.01	600	3/8x1"	
18L 562	6112	.012	600	3/8x1"	18c
18L 563	6115	.015	600	3/8x1"	18c
18L 564	612	.02	600	3/8x1"	18c
18L 565	6122	.022	600	3/8x1"	18c
18L 566	6125	.025	600	3/8x1"	21c
18L 567	613	.03	600	3/8x1"	21c
18L 568	6133	.033	600	3/8x1"	21c
18L 569	614	.04	600	3/8x1"	21c
18L 570	6147	.047	600	3/8x1"	24c
18L 571	615	.05	600	3/8x1"	24c
18L 572	6156	.056	600	3/8x1"	24c
18L 573	616	.06	600	3/8x1"	24c
18L 574	6168	.068	600	3/8x1"	26c
18L 575	601	.1	600	3/8x1"	26c
18L 576	6015*	.15	600	3/8x1"	29c
18L 577	602*	.2	600	3/8x1"	41c
18L 578	6022*	.22	600	3/8x1"	41c
18L 579	6025*	.25	600	3/8x1"	32c
18L 580	6027*	.27	600	3/8x1"	41c
18L 581	6033				

# Mallory Capacitors

## "TT" MINIATURE ALUMINUM DRY ELECTROLYTICS



Extremely small, aluminum-case, dry electrolytic capacitors. Ultra-miniature size permits very compact construction of portable and mobile communications equipment, radios, hearing aids, etc. Ideal for transistorized circuits and other equipment requiring utmost economy of space. Incorporate etched-foil design and high-purity aluminum construction to assure optimum efficiency and stability. A special silicon rubber compound is used to seal the ends. Units have very low leakage current. All capacitors have an operating range of -20° C. to +65° C. Tolerance is -10% to +250%. Leads are 22 gauge, tinned copper wire. Av. shpg. wt., 2 oz.

Stock No.	Type	Mfd	WVDC	Size	NET
18 L 763	TT1X5	5	1	1/4x3/8	.79c
18 L 764	TT1X10	10	3	1/4x3/8	.79c
18 L 765	TT1X25	25	3	1/4x3/8	.79c
18 L 766	TT1X40	40	3	1/4x3/8	.79c
18 L 768	TT1X25	2	6	1/4x3/8	.79c
18 L 799	TT6X3	3	6	1/4x3/8	.79c
18 L 769	TT6X5	5	6	1/4x3/8	.79c
18 L 770	TT6X8	8	6	1/4x3/8	.82c
18 L 771	TT6X10	10	6	1/4x3/8	.82c
18 L 772	TT6X15	15	6	1/4x3/8	.82c
18 L 773	TT6X25	25	6	1/4x3/8	.82c
18 L 775	TT6X40	40	6	1/4x3/8	.88c
18 L 776	TT6X50	50	6	1/4x3/8	.88c
18 L 777	TT6X60	60	6	1/4x3/8	.88c
18 L 778	TT6X100	100	6	1/4x3/8	.91c
18 L 779	TT10X15	15	10	1/4x3/8	.94c
18 L 780	TT10X25	25	10	1/4x3/8	.82c
18 L 781	TT10X60	60	10	1/4x3/8	.88c
18 L 782	TT12X1	1	12	1/4x3/8	.82c
18 L 783	TT12X2	2	12	1/4x3/8	.82c
18 L 784	TT12X5	5	12	1/4x3/8	.82c
18 L 785	TT12X10	10	12	1/4x3/8	.82c
18 L 786	TT15X10	10	15	1/4x3/8	.88c
18 L 787	TT15X20	20	15	1/4x3/8	.88c
18 L 788	TT15X30	30	15	1/4x3/8	.88c
18 L 789	TT25X5	5	25	1/4x3/8	.88c
18 L 790	TT125X8	8	25	1/4x3/8	.88c
18 L 791	TT25X15	15	25	1/4x3/8	.91c
18 L 792	TT25X20	20	25	1/4x3/8	.94c
18 L 797	TT50X4	4	50	1/4x3/8	.91c
18 L 793	TT50X5	5	50	1/4x3/8	.91c
18 L 794	TT50X10	10	50	1/4x3/8	.94c
18 L 795	TT50X20	20	50	1/4x3/8	.94c
18 L 798	TT150X4	4	150	1/4x3/8	.94c

## AC MOTOR-STARTING CAPACITORS



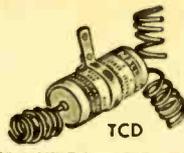
Type PSU and EPU. Non-polarized dry electrolytic, for intermittent duty in AC motor-starting circuits. All are Type PSU, with molded plastic containers except T-Type EPU, aluminum case with cardboard sleeve. Equipped with two screw-type terminals; two solder-lug terminals also supplied for optional use. Capacitors are rated at minimum capacity values, with a tolerance of +20%. All for 110-volt AC motors, except \* for 330 v. AC, for 220 v. AC. Suffix "R" designates resistor across terminals. Av. shpg. wt., 10 oz.

Stock No.	Type	Mfd	Size	NET
18 L 403	2730*	27	1 1/4x3 3/8	3.82
18 L 550	5310	53	1 1/4x3 3/8	1.26
18 L 553	7510	75	1 1/4x3 3/8	1.50
18 L 404	8130*	81	2 1/4x4 3/8	6.70
18 L 554	8610	86	1 1/4x3 3/8	1.56
18 L 555	9710	97	1 1/4x3 3/8	1.65
18 L 556	1081*	108	1 1/4x3 3/8	1.68
18 L 075	10830R*	108	2 1/4x4 3/8	8.20
18 L 577	12410	124	1 1/4x2 3/8	1.73
18 L 558	13010	130	1 1/4x2 3/8	1.73
18 L 077	13530R*	135	2 1/4x4 3/8	9.53
18 L 745	14120*	141	1 1/4x4 3/8	5.50
18 L 076	14120R*	141	2 1/4x4 3/8	5.64
18 L 559	14510	145	1 1/4x2 3/8	1.88
18 L 560	15810	158	1 1/4x2 3/8	1.91
18 L 561	16110	161	1 1/4x2 3/8	1.91
18 L 563	19410	194	1 1/4x3 3/8	2.29
18 L 565	21610	216	1 1/4x3 3/8	2.38
18 L 566	24310	243	1 1/4x3 3/8	2.76
18 L 567	27010	270	1 1/4x3 3/8	2.79
18 L 568	32410	324	1 1/4x3 3/8	3.18
18 L 569	34010	340	1 1/4x3 3/8	3.26
18 L 570	37810	378	1 1/4x3 3/8	3.53
18 L 571	40010	400	1 1/4x3 3/8	3.56

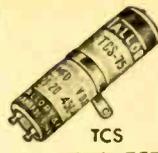
## METAL-CASED ELECTROLYTICS



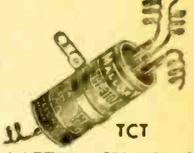
TC



TCD



TCS



TCT

Units rated up to 150 WVDC have tolerance of -10% +100%. Above 150 WVDC tolerance is -10% +50%. All units have external insulating sleeves. Type TC has 3" tinned

copper leads; TCD and TCT have 8" insulated wire leads. TCS, soldering lugs. \*Non-polarized types. All types except TC capacitors of less than 1/4" dia. with fixed mts. straps. 4 oz.

### TYPE TC SINGLE CAPACITORS

No.	Type	Mfd	WVDC	Size	EA.
17 L 450	92	10	600	1 1/2x2 1/4	1.73
17 L 245	81	10	500	1 1/2x2 1/4	.79
17 L 246	83	20	500	1 1/2x2 1/4	.94
17 L 247	84	30	500	1 1/2x2 1/4	1.03
17 L 452	70	5	450	1 1/2x2 1/4	.71
17 L 619	71	8	450	1 1/2x2 1/4	.73
17 L 620	72	10	450	1 1/2x2 1/4	.76
17 L 638	73	12	450	1 1/2x2 1/4	.79
17 L 622	74	16	450	1 1/2x2 1/4	.82
17 L 453	75	20	450	1 1/2x2 1/4	.91
17 L 454	77	30	450	1 1/2x2 1/4	1.00
17 L 527	78	40	450	1 1/2x2 1/4	1.06
18 L 800	79	60	450	1 1/2x2 1/4	1.35
17 L 204	80	80	450	1 1/2x2 1/4	1.65
17 L 634	60	5	350	1 1/4x1 3/8	.62
17 L 635	61	8	350	1 1/4x1 3/8	.71
17 L 455	62	10	350	1 1/4x1 3/8	.73
18 L 341	63	12	350	1 1/4x1 3/8	.76
17 L 456	65	20	350	1 1/4x1 3/8	.85
18 L 444	68	60	350	1 1/4x1 3/8	1.15
18 L 801	69	100	350	1 1/4x1 3/8	1.82
17 L 626	50X	5	250	1 1/4x1 3/8	.62
17 L 627	51	10	250	1 1/4x1 3/8	.68
17 L 457	52	10	250	1 1/4x1 3/8	.71
17 L 629	54	16	250	1 1/4x1 3/8	.76
17 L 505	55	20	250	1 1/4x1 3/8	.79
17 L 633	58	40	250	1 1/4x1 3/8	.91
17 L 243	59	50	250	1 1/4x1 3/8	1.00
17 L 249	1265	100	250	1x3"	1.44
17 L 458	40	5	150	1 1/4x1 1/8	.59
17 L 624	41	8	150	1 1/4x1 1/8	.62
17 L 459	43	10	150	1 1/4x1 1/8	.62
17 L 625	44	12	150	1 1/4x1 1/8	.65
17 L 08	44	16	150	1 1/4x1 1/8	.68
17 L 503	45	20	150	1 1/4x1 1/8	.71
17 L 610	47	30	150	1 1/4x1 1/8	.76
17 L 611	48	40	150	1 1/4x1 1/8	.79
17 L 504	49	50	150	1 1/4x1 1/8	.82
17 L 640	492	80	150	1 1/4x1 1/8	.94
18 L 802	493	100	150	1 1/4x1 1/8	1.03
17 L 242	495	150	150	1 1/4x1 1/8	1.12
17 L 639	302	2	50	1 1/4x1 1/8	.53
17 L 078	*504	4	50	1 1/4x1 1/8	.59
17 L 603	30	5	50	1 1/4x1 1/8	.59
17 L 604	32	25	50	1 1/4x1 1/8	.62
17 L 605	39	50	50	1 1/4x1 1/8	.62
17 L 641	3501	100	50	1 1/4x1 1/8	.82
18 L 342	50025	250	50	1 1/4x1 1/8	1.03
17 L 600	22	10	25	1 1/4x1 1/8	.59
17 L 601	26	25	25	1 1/4x1 1/8	.59
17 L 602	29	50	25	1 1/4x1 1/8	.65
17 L 500	2501	100	25	1 1/4x1 1/8	.79
17 L 207	*425	100	25	1x1 1/2"	.79

### "PET" ALUMINUM ELECTROLYTICS

For printed circuit or electronic applications where high quality and small size are important. Single ended design with high-purity foils to assure lower leakage current, lower power factor and impedance, and greater stability over a wide temperature range throughout capacitor life. Leads are securely welded to the capacitor tabs, emit from one end for printed circuit applications. Temperature range -30° to +85° C. Capacity tolerance at 25° C.: -10% +250%. Leads are bare tinned copper clad wire; case is black plastic. Av. shpg. wt., 3 oz.



No.	Type	Mfd	WVDC	Size	NET
18 L 082	118	8	3	3/4x3/8	.85
18 L 083	130	30	3	3/4x3/8	.85
18 L 084	140	40	3	3/4x3/8	.88
18 L 085	1260	60	6	1 1/4x2 3/8	.94
18 L 086	1340	10	10	1 1/4x2 3/8	.85
18 L 087	1400	100	10	1 1/4x2 3/8	1.06
18 L 088	1500	100	12	1 1/4x2 3/8	1.12
18 L 089	1535	6	15	1 1/4x2 3/8	.88
18 L 090	1575	50	15	1 1/4x2 3/8	.97
18 L 091	1930	2	50	1 1/4x2 3/8	.88
18 L 092	1935	4	50	1 1/4x2 3/8	.97
18 L 093	1960	25	50	1 1/4x2 3/8	.97
18 L 094	1980	50	50	1 1/4x2 3/8	1.09
18 L 095	2410	200-20	8.8	1 1/4x2 3/8	1.09
18 L 096	2370	50-50	10-10	1 1/4x2 3/8	1.26
18 L 097	3400	100-100	65	8-8 1/4	1.53

### TYPE TC SINGLE CAPACITORS (cont'd)

No.	Type	Mfd	WVDC	Size	EA.
18 L 804	304	2	3	1 1/4x2 1/4	.53
17 L 466	2505	500	25	1 1/4x2 1/4	1.35
17 L 462	1502	300	15	1 1/4x2 1/4	.82
17 L 460	1505	500	15	1 1/4x2 1/4	1.03
17 L 209	1501	1000	15	1 1/4x2 1/4	1.35
18 L 079	*105	5	10	1 1/4x1 3/8	1.18
18 L 080	*108	8	10	1 1/4x1 3/8	1.35
17 L 461	605	500	6	1 1/4x1 3/8	.91
17 L 462	610	1000	6	1 1/4x2 1/4	1.12
18 L 805	305	500	3	1 1/4x1 3/8	.82
17 L 463	310	1000	3	1 1/4x1 3/8	1.00

### TCD COMMON-NEGATIVE DUALS

No.	Type	Mfd	WVDC	Size	EA.
17 L 470	71	8-8	450	1 1/2x2 1/4	1.00
17 L 507	72	10-10	450	1 1/2x2 1/4	1.09
17 L 471	74	15-15	450	1 1/2x3 1/8	1.29
17 L 472	75	20-20	450	1 1/2x3 1/8	1.47
17 L 468	78	40-40	450	1 1/2x4 1/8	2.00
17 L 474	65	20-20	350	1 1/4x3 3/8	1.32
17 L 475	52	10-10	250	1 1/4x3 3/8	.97
17 L 476	55	20-20	250	1 1/4x3 3/8	1.09
17 L 503	45	20-20	150	1 1/4x1 3/8	.97
17 L 477	47	30-30	150	1 1/4x1 3/8	1.06
17 L 480	48	40-40	150	1 1/4x1 3/8	1.06
17 L 478	48	40-40	150	1 1/4x2 1/4	1.09
17 L 482	49	50-30	150	1 1/4x2 1/4	1.15
17 L 481	49	50-50	150	1 1/4x2 1/4	1.23
18 L 344	498	80-50	150	1 1/4x2 1/4	1.38
17 L 479	26	25-25	25	1 1/4x1 3/8	.82
18 L 081	*16	500-100	16	1 1/4x2 1/4	.76

### TCS SEPARATE-SECTION DUALS

No.	Type	Mfd	WVDC	Size	EA.
17 L 485	71	8-8	450	1 1/2x2 1/4	1.26
17 L 487	75	20-20	450	1 1/2x3 1/8	1.85
17 L 493	45	20-20	250	1 1/4x2 1/4	1.38
17 L 495	48	40-40	150	1 1/4x2 1/4	1.38

### TCT TRIPLE COMMON NEGATIVE

No.	Type	Mfd	W
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# Centralab Ceramic Capacitors

## SERIES DD DISC CERAMICS



Compact, rugged disc ceramic capacitors designed for bypass and coupling or filter applications. Sizes range from 1/4 to 1/2 dia. Tolerance  $\pm 20\%$  except  $\pm 0.5$  mmf. \*  $\pm 10\%$  guaranteed minimum value and  $\pm 20\%$  to  $\pm 80\%$ . Capacitors are especially made to withstand extreme temperature, humidity and vibration. Av. shpg. wt., 2 oz.

### DD 1000 VOLTS (except $\pm 600$ v.)

No.	Type	Mmf	No.	Type	Mmf
LL 406	3K31	3.3	LL 430	391*	390
LL 407	050**	5	LL 535	401*	400
LL 520	060**	6	LL 431	471*	470
LL 408	68**	6.8	LL 432	501*	500
LL 522	080**	8	LL 684	511*	510
LL 409	100*	10	LL 433	561*	560
LL 523	120*	12	LL 536	601*	600
LL 410	150*	15	LL 434	681*	680
LL 411	200*	20	LL 435	751*	750
LL 525	220*	22	LL 436	801*	800
LL 412	250*	25	LL 537	821*	820
LL 527	270*	27	LL 685	911*	910
LL 413	330*	33	LL 437	102*	100
LL 414	390*	39	LL 538	122*	1200
LL 415	470*	47	LL 539	132*	1300
LL 416	500*	50	LL 438	152*	1500
LL 417	560*	56	LL 540	162*	1600
LL 418	680*	68	LL 541	182*	1800
LL 419	750*	75	LL 439	202*	2000
LL 529	820*	82	LL 542	222*	2200
LL 420	101*	100	LL 543	252*	2500
LL 421	121*	120	LL 544	272*	2700
LL 531	131*	130	LL 440	302*	3000
LL 422	151*	150	LL 600	332*	3300
LL 423	181*	180	LL 601	392*	4000
LL 424	201*	200	LL 602	402*	4000
LL 425	221*	220	LL 603	432*	4300
LL 426	251*	250	LL 441	472*	4700
LL 427	271*	270	LL 037	502*	5000
LL 428	301*	300	LL 604	562*	5600
LL 429	331*	330	LL 605	682*	6800
LL 534	361*	360	LL 606	752*	7500

25-99, EA. . . . . 12c 1-24, EA. . . . . 15c

Stock No.	Type	Mmf	1-24, EA.	25-99, EA.
LL 106	1032	10,000	18c	14c
LL 686	1533**	15,000	18c	14c
LL 1042	2033**	20,000	18c	14c
LL 687	3033**	30,000	29c	24c
LL 688	4033**	40,000	29c	24c
LL 689	5033**	50,000	29c	24c

### TYPE D6 BC TUBULAR CERAMIC "HI-KAPS"



For bypass and coupling or filter applications. 600 WVDC.  $\pm 10\%$  tolerance, except  $\pm 20\%$ . \*GMV (guaranteed minimum value). Av. shpg. wt., 2 oz.

### D6 CAPACITOR SIZES

Cap. Mmf	Size	Cap. Mmf	Size
3 to 500	1/4 x 1/2	2000 to 4000	1/4 x 1 1/2
560 to 680	3/8 x 1 1/2	4700 to 5600	3/8 x 2 1/2
750 to 1800	1/2 x 1 1/2	6800 to 10,000	3/4 x 1 1/2

No.	Type	Mmf	No.	Type	Mmf
LL 545	030	3	LL 571	271	280
LL 546	050	5	LL 572	301	300
LL 547	100	10	LL 573	331	330
LL 548	120	12	LL 574	391	390
LL 549	150	15	LL 575	401	400
LL 550	180	18	LL 576	471	470
LL 551	200	20	LL 577	501	500
LL 552	220	22	LL 578	561	560
LL 553	250	25	LL 579	601	600
LL 554	270	27	LL 580	681	680
LL 555	330	33	LL 581	751	750
LL 556	390	39	LL 582	821	820
LL 557	470	47	LL 583	102*	1000
LL 558	500	50	LL 584	122*	1200
LL 559	560	56	LL 585	152*	1500
LL 560	680	68	LL 586	182*	1800
LL 561	750	75	LL 587	202*	2000
LL 562	820	82	LL 588	222*	2200
LL 563	910	91	LL 589	252*	2500
LL 564	101	100	LL 590	272*	2700
LL 565	121	120	LL 591	302*	3000
LL 566	151	150	LL 592	332*	3300
LL 567	181	180	LL 593	402*	4000
LL 568	201	200	LL 594	472*	4700
LL 569	221	220	LL 595	502*	5000
LL 570	251	250			

25-99, NET EACH. . 12c 1-24, EACH. . 15c

No.	Type	Mmf	No.	Type	Mmf
LL 596	562	5600*	LL 598	752	7500*
LL 597	682	6800*	LL 599	103	10,000*

25-99, NET EACH. . 25c 1-24, EACH. . 32c

### DD16 1600-VOLT BUFFER CAPACITORS

Stock No.	Mfr's Type	Mfd.	NET EACH	
			1-24	25-99
LL 456	302	.003		
LL 370	402	.004		
LL 371	502	.005		
LL 372	602	.006		
LL 457	702	.007	21c	17c
LL 373	752	.0075		
LL 374	802	.008		
LL 375	103	.01		
LL 376	153**	.015	35c	29c

### DD30 3000 VOLTS

Stock No.	Mfr's Type	Mmf	Stock No.	Mfr's Type	Mmf
LL 607	250	25	LL 617	221	220
LL 609	470	47	LL 618	251	250
LL 610	500	50	LL 619	271	270
LL 611	560	56	LL 620	471	470
LL 612	680	68	LL 621	501	500
LL 613	820	82	LL 622	102	1000
LL 614	101	100	LL 624	202	2000
LL 616	181	180	LL 626	502	5000

1-24, NET EACH. . . . . 24c  
25-99, EACH. . . . . 19c

### DD60 6000 VOLTS

Stock No.	Mfr's Type	Mmf	Stock No.	Mfr's Type	Mmf
LL 680	100	100	LL 475	151	150
LL 681	150	150	LL 476	181	180
LL 462	250	250	LL 478	221	220
LL 466	390	390	LL 479	251	250
LL 467	470	470	LL 480	271	270
LL 468	500	500	LL 682	391	390
LL 469	560	560	LL 485	471	470
LL 470	680	680	LL 486	501	500
LL 472	820	820	LL 683	751	750
LL 473	101	100			

1-24, NET EACH. . . . . 29c  
25-99, EACH. . . . . 24c

Stock No.	Mfr's Type	Mmf	Stock No.	Mfr's Type	Mmf
LL 445	102	1000	LL 448	202	2000
LL 447	152	1500			

1-24, NET EACH. . . . . 50c  
25-99, EACH. . . . . 40c

### CERAMIC CAPACITOR KITS



#### DDK-200

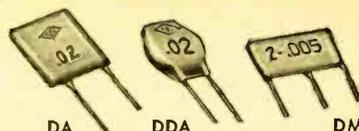
DDK-200 Ceramic Capacitor Kit. Ceramic disc capacitors are primarily intended for bypass and coupling or filter service where high capacity is necessary and controlled stability is secondary. 200 Type DD disc ceramics (above). All 1000 WVDC unless otherwise specified. 5 each—5, 10, 25, 33, 47, 50, 68, 120, 150, 180, 220, 250, 270, 300, 330, 390, 470, 500, 680, 1500, 3000, 4700, 10,000 (600 v.) mmf. 10 each—100, 200 mmf. 15 of each—1000, 5000, 20,000 (600 v.) mmf. 20 of each—10,000 mmf. With cabinet 4 1/2 x 6 1/2 x 11 1/2". Wt., 6 lbs. LL 912. NET. . . . . 29.99

HVK-150 Ceramic Capacitor Kit. Kit includes 150 disc ceramics of the DD series (described above) in a single-drawer steel cabinet. Types DD30 and DD60 are highly efficient for bypass and coupling in high frequency circuits. Type DD16 are compact, rugged buffers designed to withstand heat and vibration. Values: DD30 (5 of each)—47, 100, 470, 1000, 2000 mmf; DD60 (5 of each)—82, 1000, 500, 1000, 1500 mmf; DD16 (10 of each)—3000, 4000, 5000, 6000, 7000, 7500, 8000, 10,500 mmf; DD16 (20) 10,000 mmf. Size of cabinet, 4 1/2 x 6 1/2 x 11 1/2". 6 lbs. LL 913. NET. . . . . 37.34

D6K-200 Ceramic Capacitor Kit. Assorted sizes of easy-to-install capacitors which offer the double economy of efficient long life and low initial cost. All capacitors clearly marked with value, tolerance and part number. Includes 200 Type D6 BC tubular ceramic capacitors (described at left) in a 1-drawer steel cabinet—values from 5 to 10,000 mmf., 5 of each included, except 10 or 15 each of the most popular values. Cabinet size, 4 1/2 x 6 1/2 x 11 1/2". Shpg. wt. 6 lbs. LL 914. NET. . . . . 32.05

Bargain Disc Ceramic Capacitor Assortment. Consists of 20 Centralab Type MD disc ceramic "Hi-Kaps" in values ranging from 15 to 5000 mmf. in 600 and 1000 WVDC ratings. 1/2" dia. x 1/2". Shpg. wt., 1 lb. LL 448. ONLY. . . . . 1.29

## LOW-VOLTAGE CAPACITORS



Extremely compact, high-capacity, low-voltage ceramic capacitors. Have durable "Durez" resin insulation. Designed especially for transistor circuits and other subminiature applications. Ruggedly constructed to resist the effects of heat, moisture and vibration. All units have capacity clearly indicated.

Type DA: Plate design of high capacity, low mass weight, unusual thin styling plus inherent Centralab ceramic stability and permanence. Extremely popular both as bypass and filter capacitors. 1/2 x 1/2 x 1/8" thick; tolerance  $-20\%$  to  $+100\%$ . 30 WVDC.

Type DDA: Disc ceramic capacitors have higher dielectric constant, greater voltages, and higher capacities in less space than paper or mica types—the ideal replacement for old style mica and paper tubulars. 3/8" dia. x 1/8" thick; tolerance  $-30\%$  to  $+80\%$ . 75 WVDC.

Type DM: Miniature plate capacitors. 1 1/4 x 1/4 x 1/8" thick; tolerance  $\pm 20\%$  to  $+50\%$  and  $\pm 20\%$  to  $+80\%$ . 150 WVDC. Av. wt., 2 oz.

Stock No.	Mfr's Type	Mfd.	NET EACH	
			1-24	25-99
LL 627	203	.02	.24	.19
LL 628	503	.05	.38	.31
LL 629	104	.1	.56	.45

TYPE DDA				
Stock No.	Mfr's Type	Mfd.	1-24	25-99
LL 630	503	.05	.29	.24
LL 631	104	.1	.53	.43

TYPE DM				
Stock No.	Mfr's Type	Mfd.	1-24	25-99
LL 632	101*	.0001	.21	.17
LL 633	201*	.0002	.21	.17
LL 635	501*	.0005	.21	.17
LL 636	102*	.001	.26	.21
LL 637	202*	.002	.26	.21
LL 638	302*	.003	.26	.21
LL 639	502*	.005	.26	.21
LL 640	103*	.01	.39	.31
LL 641	2-502*	2x.005	.53	.43

### UK ULTRA-KAP MINIATURE DISC CAPACITORS



Disc ceramic capacitors designed to meet the small size and high capacitance requirements of high capacitor circuitry. Specifically engineered for low-voltage bypass and coupling applications. Present extremely low power factors. Available in popular capacitance values from 0.22 to 2.2 mfd. Insulated with double coating of "Durez" and impregnated with high-vacuum wax to withstand extreme temperatures, humidity and vibration. Extremely compact, only 3/8" thick with diameters from only 1/4 to 3/8". Rated 3 working volts DC. All units stamped with capacity and voltage ratings for easy identification. Tolerance: guaranteed minimum value. Securely anchored No. 22 tinned copper leads. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Mfd.	Dia.	NET EACH	
				1-24	25-99
LL 293	UK-224	.22	3/8"	.32	.26
LL 294	UK-474	.47	3/8"	.32	.26
LL 295	UK-105	1.0	3/8"	.44	.36
LL 296	UK-225	2.2	3/8"	.53	.43

### DF FLAT PLATE HI-KAPS



Unusually thin, compact ceramic capacitors in capacitance values up to 1 mfd. Excellent for use in bypass and filter applications. Offer exceptionally high stability. Rated at 600 working volts DC. Tolerance: all guaranteed minimum value, except \*  $\pm 80\%$  to  $-20\%$ . No. 20 tinned leads firmly anchored in capacitor body. Capacity and working voltage are stamped on all capacitors for quick, easy identification. Size of DF-104 and DF-753 is 1 1/2 x 1 1/2 x 1/8". Size of Type DF-503, Type D, 4 1/2 x 1 1/2 x 1/8". Av. shpg. wt., 3 oz.

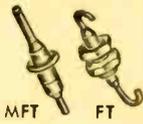
Stock No.	Mfr's Type	Mfd.	NET EACH	
			1-24	25-99
LL 245	DF-104*	.1	73c	59c
LL 246	DF-753	.075	73c	59c
LL 247	DF-503	.05	53c	43c
LL 248	DF-403	.04	53c	43c
LL 249	DF-303	.03	53c	43c

# Centralab Capacitors—Capacitor Hardware

## CENTRALAB HIGH-QUALITY CAPACITORS

### FEED-THRU HI-KAPS

Tiny ceramics for single-hole mounting. Specifically designed for and widely used in high frequency circuits. Ideal for transmitting equipment, receivers, VHF converters, etc. Permit convenient feeding of leads through chassis or shields and at the same time provide exceptionally effective RF by-passing. Special construction virtually eliminates lead inductance. Rated 500 WVDC.



Type FT has brass cadmium plated double flanged mounting bushing. 281° long for panels up to 3/4" thick. 12-28 thread bushing and mounting nut provide rigid installation. .050" diameter tinmed copper leads with hooked ends to facilitate soldering.

Type MFT Miniature Eyelet Feed-Thru are a condensed version of the FT series. Required in many applications where space is at a premium. Have 1/4" diameter flange, mounts in 1/4" diameter hole and is attached by soldering to chassis (has No. 16 leads). Tolerance: \* ± 20%; † -20 to +50%; ‡ ± 10%; § guaranteed minimum value. Av. shpg. wt., 2 oz.

### TYPE FT

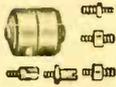
Stock No.	Mfr's Type	Mmf	NET EACH	
			1-24	25-99
11 L 390	FT-500	\$ 500	59c	48c
11 L 391	FT-1000	*1000		
11 L 392	FT-1500	*1500		
11 L 393	FT-1800	*1800		
11 L 394	FT-2300	*2300		

### TYPE MFT MINIATURES

Stock No.	Mfr's Type	Mmf	NET EACH	
			1-24	25-99
11 L 488	MFT-50	\$ 50	29c	24c
11 L 489	MFT-100	\$ 100		
11 L 490	MFT-500	\$ 500		
11 L 491	MFT-1000	*1000		

### HI-VO-KAP UNIVERSAL CAPACITORS

Type TV-207. High-voltage TV-202 ceramic capacitor with set of 7 attachable terminals. Ideal for service shops—provides maximum coverage with a minimum of inventory. Capacitance 500 mmf. Rated 20,000 working volts DC, 35,000 volts test. Molded plastic insulation, "High-K" ceramic insulation and rugged, threaded-hole terminal studs. Tolerance: -20% to +50%. Size, 1" dia. x 1 1/4". Shpg. wt., 5 oz.



11 L 016. NET ..... 1.32

TVK-5-50. Five of above capacitors in a convenient plastic case with 5 sets of 10 terminals. Shpg. wt., 1 lb.

11 L 017. NET ..... 6.61

## C-D AND MALLORY CAPACITOR MOUNTING HARDWARE

### CORNELL-DUBILIER HARDWARE

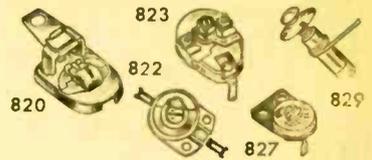


Widely used mounting hardware for all types of capacitors. Designed for a variety of installations, above or below chassis. Universal clip (Fig. E) adjusts to fit various sizes. Av. shpg. wt., 2 oz.

Stock No.	Fig.	Description	Pkg. of 2
19 L 478	A	Mtg. Ring; 1 1/4" dia. cans	.23
19 L 479	A	Mtg. Ring; 1 1/2" dia. cans	.23
19 L 480	A	Mtg. Ring; 1 3/4" dia. cans	.35
19 L 481	B	Mtg. Clip; 3/4" dia. cans	.35
19 L 482	B	Mtg. Clip; 1" dia. cans	.35
19 L 483	B	Mtg. Clip; 1 1/4" dia. cans	.35
19 L 484	C	"C" Clamp; 3/4" cans	.35
19 L 485	C	"C" Clamp; 1" cans	.35
19 L 489	D	Mtg. Strap; I.D. 3/4"	.17
19 L 491	D	Mtg. Strap; I.D. 1"	.17
19 L 492	D	Mtg. Strap; I.D. 1 1/4"	.17
19 L 493	E	For 3/4" dia. cans	.35
19 L 494	E	For 1" dia. cans	.35
19 L 495	E	For 1 1/4" dia. cans	.35
19 L 496	E	For 1 1/2" dia. cans	.35
19 L 497	E	For 1 3/4" dia. cans	.35
19 L 498	E	For 1 7/8" dia. cans	.35
19 L 499	E	For 2" dia. cans	.35

### CERAMIC-DIELECTRIC TRIMMERS

Compact, highly stable trimmer capacitors with ceramic dielectric. Lightweight, with convenient mounting facilities. Easily adjusted by means of a screwdriver. Simplicity of mechanical design makes these capacitors a dependable and economical approach to fine tuning. Specifically designed to compensate for variations in tube capacities. Provide a smooth, linear rate of capacity change. Ceramic tubular trimmers are excellent for use in critical precision tuning applications. Full capacity range with 180° rotation. Balanced rotor and heavy spring pressure for excellent mechanical stability, even under conditions of heavy vibration. Silver is fired to stator and rotor, which make contact on a flat optically ground surface to eliminate air space. All types listed are rated at 600 WVDC. Power factor: less than 0.2% at 1 mc. Types 820 have ceramic base, 822 and 823 steatite base, 827 phenolic base, 829 are tubular



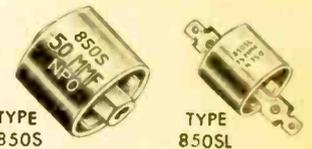
ceramic (equipped with mounting screw and locknut). 820 E, F, G, less bracket. Letter N in Type No. indicates negative temperature coefficient; letter Z in Type No. indicates zero temperature coefficient. \*body length. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Mmf	Base Size	NET EACH	
				1-24	25-99
11 L 381	820-D	1-3.5		.71	.57
11 L 382	820-A	2.5-6			
11 L 383	820-B	5-20			
11 L 384	820-C	7-35	3/4 x 3/16"		
11 L 690	820-E	35-55			
11 L 691	820-F	55-75			
11 L 692	820-G	70-90			
11 L 650	822-DN	2-6			
11 L 651	822-EN	4-30			
11 L 125	822-CN	4.5-25	1 1/2 x 1 1/4"			.88	.72
11 L 124	822-BN	7-45			
11 L 123	822-AN	8-50			
11 L 652	822-DZ	1.5-3			
11 L 653	822-EZ	1.5-7			
11 L 129	822-CZ	2-7.5			
11 L 128	822-BZ	2.5-13		.88	.72
11 L 654	822-FZ	3-12	1 1/2 x 1 1/4"		
11 L 127	822-AZ	4.5-25			

Stock No.	Mfr's Type	Mmf	Base Size	NET EACH	
				1-24	25-99
11 L 512	823-DN	8-50		2.06	1.65
11 L 511	823-BN	10-100			
11 L 510	823-AN	20-125			
11 L 515	823-DZ	6-25			
11 L 514	823-BZ	10-50	1 1/2 x 1 1/4"		
11 L 513	823-AZ	12-60			
11 L 693	823-FN	5-15			
11 L 694	823-EN	8-25			
11 L 695	823-EZ	5-12			
11 L 516	827-A	2.5-7				.73	.59
11 L 517	827-B	3.5-12			
11 L 518	827-C	6-30			
11 L 519	827-D	7-35	1 1/4 x 3/4"		
11 L 400	829-3	5-3	3/4"	.29	.24
11 L 401	829-4	1-4	1/4"	.29	.24
11 L 402	829-6	1-6	3/8"	.29	.24
11 L 403	829-7	1-7.5	1/2"	.35	.29
11 L 404	829-10	1.5-10	3/4"	.35	.29

### 850 SERIES TRANSMITTING CAPACITORS

High-quality ceramic capacitors for use in RF power circuits. Designed primarily for applications in transmitters, induction heaters, electronic welding equipment, x-ray, diathermy, and other high voltage, high frequency circuits. Small sizes also make them excellent for use in compact military and commercial electronic equipment. Have extremely low power factor and stable retrace characteristics. "Double Cup" construction provides high mechanical strength and long leakage paths. Silver electrodes fired to ceramic. Type 850S and 858S have 3/4" long hexagonal stud terminals with 6-32 tapped holes. SL series have 1/2" long terminals with 6-32 tapped hole plus solder lug; for screw-type or solder connections. †Negative temperature coefficient of 750 parts/



million/°C. \*Zero temperature coefficient. † ± 10% tolerance. Series 858S are same size and style as Series 850S. "Hi-K" dielectric; 3/4 x 3/4" diameter. ‡ 20% tolerance. § Based on 30° temperature rise. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Mmf	WVDC	SRF Load, 30 Mc	NET EACH	
					1-4	5-9-10-24
11 L 100	850S-25*	25	7500	7 amps	2.65	2.43 2.25
11 L 101	850S-50*	50	7500	10 amps		
11 L 102	850S-50M†	50	7500	8.8 amps		
11 L 103	850S-75M†	75	7500	10 amps	2.65	2.43 2.25
11 L 104	850S-100M†	100	5000	9.8 amps		
11 L 107	858S-500	500	5000			

Stock No.	Mfr's Type	Mmf	WVDC	SRF Load, 30 Mc	NET EACH	
					1-4	5-9-10-24
11 L 108	858S-1000	1000	5000		2.65	2.43 2.25
11 L 696	850SL-25*	25	7500	7 amps		
11 L 697	850SL-50*	50	7500	10 amps		
11 L 698	850SL-50M†	50	7500	8.8 amps		
11 L 699	850SL-75M†	75	7500	10 amps		
11 L 700	850SL-100M†	100	5000	9.8 amps		

## MALLORY MOUNTING HARDWARE

For mounting Mallory Type FP or WP capacitors, use MP, BP, PS and MV-100 units listed below. For Type TC, FP, WP and other tubular capacitors use VR brackets for vertical mounting, or TH spring clips where horizontal mounting is required. \*Metal. †Phenolic. Av. shpg. wt., 3 oz.



No.	Type	Fig.	Size	NET
17 L 531	PS-4	F	1"	.41
17 L 532	PS-6	F	1 1/2"	.53
17 L 402	VR-1	E	1 to 1 1/4"	.09
17 L 413	VR-3	G	1 3/4 to 1 1/2"	.09
17 L 414	VR-4	G	1 1/2 to 1 1/4"	.12
17 L 415	VR-6	G	1 1/2 to 1 1/4"	.15
17 L 416	VR-8	G	2 to 2 1/2"	.18
17 L 417	TH-25	J	1 3/8 to 1 1/2"	.06
17 L 417	MW-100	L	Mtg. Wrench	1.03

Stock No.	Mfr's Type	Fig.	Size	Per Pkg. of 3
18 L 414	MP-2	H*	1"	9c
18 L 415	MP-4	H*	1"	
18 L 416	MP-6	H*	1"	
18 L 417	BP-2	K†	1"	
18 L 418	BP-4	K†	1"	9c
18 L 419	BP-6	K†	1"	
18 L 420	TH-13	J	3/8 to 3/4"	
18 L 421	TH-15	J	3/8 to 3/4"	
18 L 422	TH-17	J	3/8 to 1 1/4"	9c
18 L 423	TH-19	J	3/8 to 1 1/4"	
18 L 424	TH-21	J	3/8 to 1 1/4"	

### INSULATING SLEEVES

Fiber sleeves for FP type capacitors. Wt., 2 oz.

No.	Type	Size	EACH	No.	Type	Size	EACH
17 L 510CE-1	1 1/2 x 2 1/2"	1 1/2 x 2 1/2"	6c	17 L 515CE-7	1 1/2 x 2 1/2"	6c	
17 L 511CE-3	1x2"	1x2"	6c	17 L 516CE-8	1x4"	6c	
17 L 512CE-4	1x3"	1x3"	6c	17 L 517CE-9	1 1/2 x 2 1/2"	6c	
17 L 513CE-5	1 1/2 x 2"	1 1/2 x 2"	6c	17 L 518CE-10	1 1/2 x 4"	9c	

### PL & HB MOUNTING HARDWARE

Plastic end caps and mounting brackets for plastic-cased, motor-starting capacitors. P.E.C. indicates plastic end cap. Av. wt., 3 oz.

No.	Type	Description	Size	NET
18 L 392	PL-8	P.E.C., on motor	2 1/4"	18c
18 L 393	PL-3A	P.E.C., off motor	1 1/2"	12c
18 L 396	HB-4	Horiz. bracket	3 1/2"	18c
18 L 397	HB-8	Horiz. bracket	4 3/4"	21c

# Packaged Circuits and Printed Circuit Kits

## QUALITY PRINTED CIRCUIT KITS



**A**



**B**



**C**



**D**



**E**



**F**

**A** G.C. Model 683. Save time and minimize replacement of printed circuit components with this handy repair kit. Permits quick repair jobs on resistors, capacitors, coils, wiring, sockets, lugs, copper foil, etc.—a valuable service aid. Kit includes: foil, solder washers; solder; "solder ease" tool for tightening contacts, etc.; fiberglass brush for removing excess solder; 6-oz. spray can of silicone resin lacquer; solvent for removing surplus solder; tweezers; practice wiring board; and an Ungar soldering iron with special tip, with instructions. 7x12 1/2 x 3/4. Shpg. wt., 1 lb. 46 N 465. List, \$13.95. NET.....**8.20**

**A** G.C. Type 682 Standard Kit. Complete printed circuit repair kit for quickly and easily making repair jobs on soldered components in printed circuits. Valuable service aid—replaces replacing of soldered components in printed circuits and permits repairing of sockets, lugs, copper foil, etc. Complete kit includes: silicone resin lacquer, solvent, solder washers, solder wire, handy solder probe tool with brush (for cleaning and tightening up contacts, etc.) and tweezers. Supplied complete with instructions and time-saving suggestions. Shpg. wt., 1 lb. 50 N 170. List, \$8.25. NET.....**4.85**

**B** Kepro Professional Kit. Etched circuit kit. A negative of the layout can be produced photographically, or manually with the negative materials supplied. A sensitized sheet of copper-clad XXP phenolic is exposed through the prepared negative, then developed and etched. Kit contains: 2 sheets of 1/8" copper-clad phenolic 6x3"; 2 pieces negative mask; 1 printing frame glass; 2 printing frame clamps; 1 bottle developer; 2 bottles etching solution; 1 aluminum developing tray; 1 polystyrene etching tray; 1 cleaning pad; and a set of complete instructions. Shpg. wt., 2 1/2 lbs. 43 N 068. NET.....**5.29**

**C** Kepro Standard Kit. This low-cost etching kit is supplied with all the materials needed for manually producing etched copper circuits. Kit contains: 2 sheets of 1/8" copper-clad phenolic 6x3"; 1 bottle etch-resistant solution; 1 etching tray; 1 bottle etching solution; 1 cleaning pad; 1 brush; and instructions. Plastic case. Shpg. wt., 1 1/2 lbs. 43 N 069. NET.....**3.38**

**AMPEX AUDIO AMPLIFIER**  
3 stage. Operates on 22 1/2 v. "B" battery and 1.5 v. AA battery. Response, 200-8000 cps. Gain of 4500 at 1 kc. PC-201 complete with tubes, one 6X4, one 6AR5, two 6X512-AX. Wt., 8 oz. PC-200 same but less tubes. Wt., 4 oz. B16-228 volume control and switch for use with either Amplex unit. 5/8" dia. 1/2" deep with knob. Instructions. Wt., 3 oz.  
11 L 160. Type PC-201. NET.....**4.70**  
11 L 159. Type PC-200. NET.....**8.82**  
30 M 419. Type B16-228. NET.....**2.35**

**AEROVOX RIGHT-ANGLE TUBE SOCKETS**  
Space-saving sockets permit horizontal placement of tubes. For use with printed circuits. Allow extremely compact chassis layout. Socket prongs insert easily into punched circuit board holes. Silver-plated contacts. Molded Alkoid 430 body. Meets MIL specs. 1 1/2 x 1 1/2 x 1/2. 6 oz.  
40 H 406. Type RA9A. 9-Pin. NET.....**97c**  
40 H 403. Type RA7A. 7-Pin. NET.....**81c**

**D** Micro-Circuits 531 Kit. Time-saving assortment of electrically conductive coatings and accessories for research and development programs. Kit includes following conducting paints: air-drying silver; flexible, air-drying silver; baking silver; firing silver; inorganic, water-base silver. Also includes: S31 resistor and conductor paint kit; silver shielding paint; 125-ohm-per-square resistance paint; carbon-conducting shielding paint; magnetic paint; fast and slow-drying solvents; plus informative manuals. Shpg. wt., 11 lbs. 43 N 098. NET.....**67.86**

**E** Micro-Circuits 521 Kit. This printed circuit kit lets you create all kinds of miniature-sized electronic equipment. Make resistors, capacitors, connecting wires and many other components. Kit also allows you to paint your own radio circuit and make rapid, easy repairs on existing printed circuits. Special materials supplied with kit include: brush; silver conducting paint; low, medium, high and very high resistance paints; insulating lacquer; solvent; brush cleaner; the manual, "Design and Repair of Printed Circuits," plus other informative literature. In cardboard box. Shpg. wt., 1 1/4 lbs. 43 N 070. NET.....**17.75**

**F** Techniques Kit. With this complete kit, it's a very simple matter to set up operating prototypes of many different kinds of printed circuits. Kit contains all materials required for producing etched circuits. It includes: 7 single-sided, copper-clad laminates; 5 double-sided, copper-clad laminates; 17 assorted tube sockets; roll of tape resist; 1 bottle of liquid resist; photographic resist; etchant; terminals; layout paper; sample of etched process, etc. In plastic box, 9 1/2 x 13 x 2". Shpg. wt., 9 1/2 lbs. 43 N 067. NET.....**27.00**

**KEPRO NAMEPLATE & PANEL KIT**  
Complete kit for making nameplates, dials, panel overlays, meter faces, etc. for short-run production and prototype use. Includes: 2-8x10" sheets of sensitized aluminum plates, three sizes letters and numerals, film, developer, printing glass, etc. Shpg. wt., 1 lb. 43 N 099. NET.....**6.81**

**CAPACITOR INDICATOR**  
**SPRAGUE**  
Type C-751. Reads color codes directly in capacitance, tolerance, and voltage. Wt., 2 oz. 37 K 076.....**18c**

**CENTRALAB PACKAGED ELECTRONIC CIRCUIT KIT**  
Type PK-40. 40 assorted packaged electronic circuit units in one-drawer steel Equipto cabinet. Contains packaged circuits most frequently used in popular electronic equipment. All units are individually packed in transparent plastic package with part numbers clearly shown for easy identification.  
Kit consists of: 2-PC-81 Triode Couplers; 2-PC-91 Pentode Couplers; 10-PC-100, 5-PC-101, 2-PC-104, 2-PC-105, 2-PC-106 Vertical Integrators; 5-PC-150, 2-PC-151, 2-PC-158, 2-PC-159 Audio Detector Couplers; 2-PC-160, 2-PC-165 Pentode-Detector Couplers.  
Sturdily constructed Equipto cabinet measures 11 1/2 x 9 1/2 x 4 1/4". Shpg. wt., 6 lbs. 11 L 379. NET.....**23.99**

## SPRAGUE BULPLATE PRINTED CIRCUITS

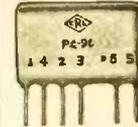


Each unit consists of a self-contained "package" of capacitors, resistors and, in certain units, inductance. There is no need to waste time on excessive wiring and unwiring operations—simply replace the entire circuit section. A moisture sealed shock-resistant ceramic base firmly holds printed circuit wiring and all components in place. Capacitors are rated at 500 v. DC, 1000 v. test, while the maximum voltage to be applied across the resistors is 250 v. DC; except D-1 where all elements are rated 100 v. DC. Av. shpg. wt., 2 oz.

**18 L 860. Free Printed Circuit Guide No. K-351.** An informative catalog listing complete information on Sprague's Bulplate printed circuits. Contains diagrams of all circuits listed below. Includes replacement information on sets produced by leading radio and television manufacturers. **NO CHARGE** when requested with your next order.

No.	Type	Description	NET
18 L 861	D-1	Diode Filter	.35
18 L 862	D-2	Diode Filter	.35
18 L 865	DT-1	Audio Output	.59
18 L 869	DT-5	Audio Output	.68
18 L 874		Vertical Coupling	.53
18 L 875	P-3	Pentode Coupling	.59
18 L 887	V1-V3	Vertical Integrator	.97
18 L 888	V-2	Vertical Integrator	.73
18 L 890	V-4	Vertical Integrator	.65
18 L 891	V-5	Vertical Integrator	.59
19 L 650	V-6	Vertical Integrator	.47
19 L 651	V-7	Vertical Integrator	.59
19 L 652	V-8	Vertical Integrator	.73
19 L 653	V-9	Vertical Integrator	.35
19 L 654	V-10	Vertical Integrator	.65
19 L 655	V-11	Vertical Integrator	.62
19 L 656	V-12	Vertical Integrator	1.18
19 L 657	V-13	Vertical Integrator	.47
19 L 658	V-14	Vertical Integrator	.21
19 L 659	V-15	Vertical Integrator	.21
19 L 660	V-16	Vertical Integrator	.44
19 L 661	V-17	Vertical Integrator	.44
19 L 662	V-18	Vertical Integrator	.59

## CENTRALAB PACKAGED ELECTRONIC CIRCUITS (PEC)



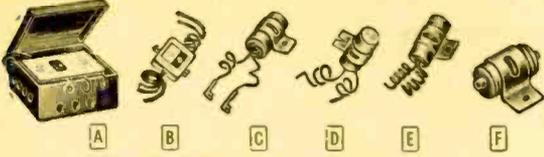
Complete, printed electronic circuits—with resistors, capacitors, and in some cases, inductance. Ideal for the replacement of entire circuit sections in radio and TV sets. The printed-circuit wiring and all components are bound to a ceramic base and sealed against moisture, temperature change and physical shock. These dependable sub-assemblies are widely used in original equipment applications—especially in TV chassis. Excellent for use by experimenters and those engaged in new design. Offer space-saving features of miniaturization as well as circuit stability at very low cost. All types listed are standard throughout the electronics industry, always stocked, easily replaceable. Designed for quick mounting. Only durable, quality components used. Av. shpg. wt., 2 oz.

**18 L 893. PC-5 Packaged Electronic Circuit Guide.** Contains complete data—**NO CHARGE** when requested with your next order.

No.	Type	Description	NET
11 L 147	PC-50	Diode Load Filter	35c
11 L 148	PC-51	Diode Load Filter	35c
11 L 150	PC-70	Triode Couplate	41c
11 L 151	PC-71	Triode Couplate	41c
11 L 152	PC-80	Triode Couplate	44c
11 L 153	PC-81	Triode Couplate	44c
11 L 165	PC-84	Triode Couplate	44c
11 L 154	PC-90	Pentode Couplate	53c
11 L 155	PC-91	Pentode Couplate	53c
11 L 166	PC-92	Pentode Couplate	54c
11 L 156	PC-100	Vertical Integrator	65c
11 L 157	PC-101	Vertical Integrator	65c
11 L 356	PC-104	Vertical Integrator	59c
11 L 357	PC-105	Vertical Integrator	59c
11 L 358	PC-106	Vertical Integrator	59c
11 L 158	PC-150	Audio/Det Couplate	59c
11 L 170	PC-151	Audio/Det Couplate	59c
11 L 359	PC-154	Audio/Det Couplate	59c
11 L 360	PC-157	Audio/Det Couplate	59c
11 L 361	PC-158	Audio/Det Couplate	59c
11 L 362	PC-159	Audio/Det Couplate	68c
11 L 171	PC-160	Audio/Det Couplate	59c
11 L 172	PC-165	Pentode-Det Couplate	59c
11 L 368	PC-260	Sync Takeoff Couplate	59c
11 L 369	PC-262	Sync Takeoff Couplate	59c
11 L 380	PC-263	Sync Takeoff Couplate	59c
18 L 901	PC-314	Retrace Suppression	59c
18 L 908	PC-327	Pentode/Det Couplate	73c

# Interference Filters — Auto Suppressors

## WIRED-IN TYPE FILTERS AND AUTO SUPPRESSORS



### CORNELL-DUBILIER "QUIETONE" FILTERS

**A** Type IF-7A. For installation at appliance. Capacitive-inductive type filter for suppression of severe interference. Attaches to all burners, electric motors in dishwashers, disposal units, washing machines, home workshop tools, etc. For single-phase 110-220 volt AC or DC. Rated 5 amps. Size, 6x6x4". Shpg. wt., 9 lbs. 70 B 124. List, \$13.75. NET **8.08**

**B** Type IF-54. General-purpose capacitive-inductive filter for use where moderate interference is present. For circuits drawing 2 amps or less from power line. Miniature size permits installation on almost any appliance or fluorescent fixture causing interference. Rated 110-220 volts. AC or DC. Shpg. wt., 8 oz. 70 B 114. List, \$2.50. NET **1.47**

### SPRAGUE INTERFERENCE FILTERS

Type IF. Compact multi-section interference filters for suppressing man-made radio and TV interference. Small and completely self-contained. For use on motors, thermostats, arcing devices, etc., up to 220 volts. AC or DC. Easily installed. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Fig.	Size	Sections	List	NET EACH
70 B 100	IF-15	C	1x2 3/4"	Triple	\$2.60	1.53
70 B 105	IF-21	E	1x2 3/4"	Dual	1.75	1.03
70 B 113	IF-51	D	1/2 x 2 1/4"	Single	1.15	.68
70 B 112	IF-37	E	1x2 3/4"	Triple	2.25	1.32

**Filter Types.** Connect in series with power supply lines of industrial devices. Encased three-terminal network of matched, specially designed chokes and coils acts as one of the terminals. Select filter with higher rating than the continuous current rating of the device with which it is to be used. Type 4 (Fig. F, above) provides strong attenuation above 5 mc. Single-hole mounting. Types 2 and 3 are drilled for mounting at either side. Av. shpg. wt., 1 lb.



Types 2, 3

Stock No.	Type	Amps	V. AC-DC	Size	List	NET
70 B 092	2	10	115	1 1/2 x 2 x 2"	\$14.80	8.70
70 B 093	3	35	115	1 1/2 x 2 1/4 x 3 1/2"	27.40	16.11
70 B 094	4	20	115	1" dia. x 1 1/2" long	3.05	1.79

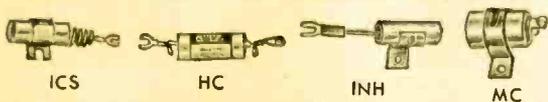
### FEDERAL ELECTRONICS TVI FILTER

Precision built, 3-pi., high-pass filter for use with any TV sets. Highly rated in nationally known product research magazine. Employs 8 capacitors and 6 coils in special-design printed circuit. Attenuation exceeds 46 db from 0-54 mc. Reduces interference caused by transmitters, neon signs, ignition systems, appliances, diathermy, X-ray equipment, heating systems, etc. Also aids in minimizing "snow" by suppressing interference in IF band. Exceptionally easy to install—simply attaches to antenna input terminals on TV Shpg. wt., 1/2 lb. 11 L 496. List, \$2.98. NET **1.75**



set. Plastic case, 2x3x1/2".

### CORNELL-DUBILIER NOISE SUPPRESSOR CAPACITORS

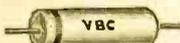


Noise-suppressing capacitors for mounting on generators, ammeters, voltage regulators, fuel pumps, etc. Withstand severe vibration, as well as extremes in temperature and humidity. An effective means of eliminating radio interference caused by ignition system. Shpg. wt., 4 oz.

Stock No.	Type	Mfd.	WVDC	Size	NET EA.
19 L 625	ICS2P1-3	.1	200	1 1/2 x 1/2 x 3 1/4"	1.44
19 L 626	MC8D98	1	100	1 1/2 x 1/2 x 3 1/4"	1.18
19 L 627	MC8D99	.25	100	1 1/2 x 1/2 x 3 1/4"	1.26
19 L 628	HC870E	.5	100	2 x 1/4 x 1 1/2"	.53
19 L 629	IC2P5C	.5	200	1 1/2 x 1/2 x 5 1/2"	.44
19 L 630	INH1P5-3	.5	100	1 1/4 x 1/4 x 2 3/4"	.53
19 L 631	INH2P5-7	.5	200	1 1/4 x 1/4 x 2 1/2"	.53
19 L 632	MC9D00	.5	100	1 1/4 x 1 1/4 x 3"	1.59
19 L 633	INS2W1-6	1.0	200	2 3/8 x 1/2 x 6"	1.03

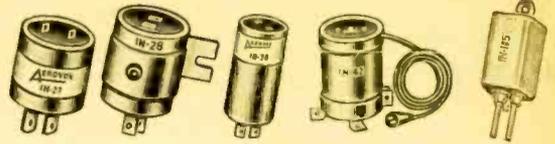
### AEROVOX VBC VIBRATOR BUFFER CAPACITORS

Heavy-duty buffer capacitors that effectively reduce vibrator hash and suppress interference. Units are paper in ceramic tubes. All 1600VV except \*3000 V. Resist shock, temperature, etc. Shpg. wt., 3 oz.



Stock No.	Mfr's Type	Mfd.	Size	NET EACH
18 L 918	VBC-2	.001	3/8 x 1 1/2"	29c
18 L 919	VBC-3	.002	3/8 x 1 1/2"	
18 L 920	VBC-4	.0022	3/8 x 1 1/2"	
18 L 937	VBC-6	.0033	2 1/4 x 1 1/2"	
18 L 938	VBC-8	.0047	2 1/4 x 1 1/2"	
18 L 939	VBC-23	.0068	1 7/8 x 1 1/2"	29c
18 L 940	VBC-25	.0075	1 7/8 x 1 1/2"	32c
18 L 941	VBC-27	.01	3/4 x 1 1/2"	32c
18 L 942	VBC-29	.02	1/2 x 2"	32c
18 L 943	VBC-45*	.007	1 1/4 x 2"	38c

## PLUG-IN AND WIRED-IN TYPE FILTERS FOR RADIO, TV AND APPLIANCES



### AEROVOX INTERFERENCE FILTERS

**G** Type IN-27. A simple and inexpensive plug-in unit for use where interference is slight; electric shavers, etc. Diameter, 1 1/4"; 1 1/2" long. Shpg. wt., 5 oz. 70 B 096. List, \$10.00. NET **88c**

**H** Type IN-28. For use where ground is at a considerable distance. Provides most efficient filtering action when mounted on appliance. Supplied with convenient mounting bracket. Diameter, 1 1/4"; 2" long. Shpg. wt., 8 oz. 70 B 097. List, \$2.00. NET **1.18**

**J** Type IN-30. Highly effective plug-in unit for local noise sources of variable character and severe intensity; auto call systems, barber chairs, cash registers, billing and calculating machines, food mixers, fruit juice extractors, dental machines, drink mixers, fans, hair dryers, etc. Diameter, 1 1/4"; 3" long. Shpg. wt., 7 oz. 70 B 098. List, \$2.50. NET **1.47**

**K** Type IN-42. Heavy-duty unit for serious interference from power transmission lines, vacuum cleaners, washing machines, refrigerators, dishwashers, electric typewriters, drills, etc. Filter is plugged into AC outlet—appliance or radio plugs into receptacle on filter. With mounting ring. Rated at 110-120 v. AC. 6 amps. Diameter, 2 1/2"; 3 3/4" long. Shpg. wt., 1 lb. 70 B 099. List, \$7.50. NET **4.41**

**L** Type 1N105. Rugged low-impedance delta-connected capacitor. Especially designed to eliminate interference caused by fluorescent light fixtures. Also effective in electric drills, fans, large motors, and oil burners. Compact bathtub case. Highly reliable, these filters are permanently installed in appliances produced by leading manufacturers. Best operation is secured when mounted as close to the interfering appliance as possible. Connects either across the line, or as a bypass from line to ground. Size, 1 1/4 x 1 1/2" high. Shpg. wt., 6 oz. 70 B 307. List, \$1.75. NET **1.03**

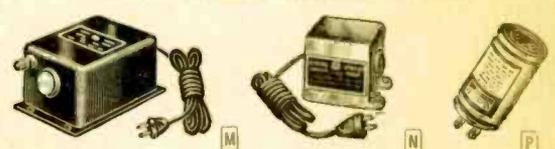
**L** Type 1N106. Excellent choice for stores and offices using large number of fluorescent fixtures. Perfect for radio and television salesrooms depending on utmost in lighting with least interference. Also recommended for adding machines, drink mixers, fans, humidifiers, small motors, radio receivers and sewing machines. Install inside equipment generating noise. One unit per fixture in series where power leads enter. Metal container with four stranded wire leads. 125 v. AC or DC; 2.6 amps. 1 1/4 x 3 1/4". Shpg. wt., 6 oz. 70 B 308. List, \$3.75. NET **2.23**

### SPRAGUE "FILTEROL" TYPE F-400

Effectively suppresses moderate interference by filtering power lines of receivers and appliances. Built-in screw for near installation on standard duplex wall outlet. Receiver or appliance plugs into outlet on face. Practically zero length of ground lead assures maximum noise eliminating efficiency. Rated 105-125 v., AC-DC. 5 amps. 4 1/2 x 2 1/2 x 2 1/2". Shpg. wt., 3 1/4 lbs. 70 B 095. NET **7.30**



### CORNELL-DUBILIER "QUIETONE" FILTERS



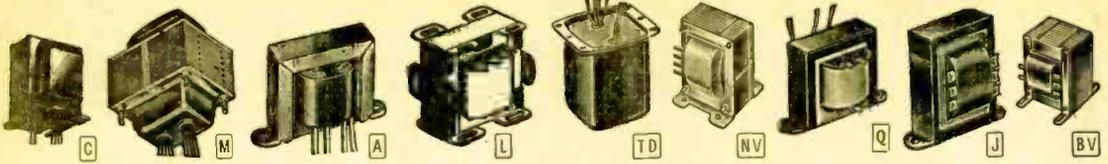
**M** Type IF-18. Highly effective all-wave capacitive-inductive type or filter for suppression of severe interference. Used where ventilating or air conditioning units, washing machines, or machine tools interfere with reception on radio or TV. Bakelite case, 6x3 1/4 x 2 1/2", with line cord and plug attached. Binding posts for attachment of ground wire, if used. Rated at 115 volts, AC-DC, 5 amps. Shpg. wt., 4 lbs. 70 B 120. List, \$9.20. NET **5.41**

**N** Type IF-19. Effective capacitive-inductive type filter for use where interference is severe. Used to eliminate interference from electric fans, diathermy machines, neon signs, etc. Mounting holes for permanent attachment to baseboard, back of receiver or any convenient location. Terminal for ground connection. Rated 115 volts AC-DC, 5 amps. Bakelite case, 4x2 1/4 x 2 1/4". Shpg. wt., 1 1/2 lbs. 70 B 121. List, \$7.70. NET **4.53**

**P** Type IF-4. Plug-in, cylindrical filter for suppression of medium-intensity interference produced by fluorescent lights, electric shavers and similar devices. Well-suited for use with small receivers such as AC-DC midjet sets, portable TV sets, etc. Filter plugs directly into wall; appliance or receiver plugs into filter. Rated 115 volts, AC-DC, 5 amps. 1 1/4" diameter and 2" long. Shpg. wt., 5 oz. 70 B 125. List \$1.25. NET **73c**

**P** Type IF-6. Convenient plug-in filter for elimination of moderate interference. Especially suitable for suppression of interference caused by fluorescent lights, electric shavers, and similar devices. Connects between power line and appliance, or between power line and receiver. Rated at 115 volts, AC-DC, 5 amps. Size, 1 1/4" diameter, 2" long. Shpg. wt., 6 oz. 70 B 126. List, \$1.95. NET **1.15**

# Stancor Transformers



## POWER TRANSFORMERS

8400 Series—For 6.3 Volt Tubes. All have center-tapped 6.3 volt winding except PS-8415, PS-8416, PC-8418, PC-8419, PC-8420, PM-8419, PM-8420 and PA-8421. \*For 6AX5, 6X4, 6X5 and similar 6.3 v. filament rectifiers, and for selenium rectifier. All are Figure M, except Type PC in Figure C and Type PS in Figure A. †PC-8414 has an extra 6.3 volt winding (not center tapped), rated at 3 amperes. All primary windings are for 117 volt, 60 cycle AC.

Stock No.	Mfr's Type	Plato		5V @	6.3V @	Size	Wt. Lbs.	NET EACH
		VCT	Ma					
64 G 162	PS-8415*	125	15	...	.6A	2 1/2 x 1 3/4 x 2 1/2	1 1/2	2.32
64 G 078	PM-8421*	125	50	...	2.0A	2 1/2 x 3 1/2 x 2 1/2	1 1/2	3.76
64 G 216	PS-8416*	250	25	...	1.0A	2 1/2 x 2 1/2 x 1 1/2	1	2.70
64 G 077	PC-8413	460	50	...	1.0A	2 1/2 x 2 1/2 x 2 1/2	2 1/2	4.70
64 G 154	PM-8401	470	40	2A	2.0A	2 1/2 x 3 1/2 x 2 1/2	2 1/2	5.65
64 G 176	PC-8401	470	40	2A	2.0A	3 1/2 x 2 1/2 x 2 1/2	2 1/2	5.42
64 G 170	PM-8402	480	55	2A	2.0A	2 1/2 x 2 1/2 x 2 1/2	2 1/2	5.53
64 G 177	PC-8402	480	55	2A	2.0A	3 1/2 x 2 1/2 x 2 1/2	2 1/2	5.38
64 G 175	PM-8419*	480	70	...	3.0A	2 1/2 x 2 1/2 x 3 1/2	2 1/2	5.41
64 G 215	PC-8419*	480	70	...	3.0A	3 1/2 x 2 1/2 x 2 1/2	2 1/2	5.41
64 G 167	PM-8420*	520	90	...	4.0A	3 1/2 x 3 1/2 x 3 1/2	3 1/2	6.56
64 G 168	PC-8420*	520	90	...	4.0A	3 1/2 x 2 1/2 x 3 1/2	3 1/2	6.29
64 G 171	PM-8403	500	70	2A	2.5A	3 1/2 x 3 1/2 x 3 1/2	3 1/2	6.23
64 G 178	PC-8403	500	70	2A	2.5A	3 1/2 x 3 1/2 x 3 1/2	3 1/2	6.23
64 G 179	PC-8404	520	90	2A	3.0A	3 1/2 x 3 1/2 x 3 1/2	4	6.91
64 G 160	PM-8404	520	90	2A	3.0A	2 1/2 x 3 1/2 x 3 1/2	4	6.91
64 G 172	PC-8405	540	120	3A	3.5A	3 1/2 x 3 1/2 x 3 1/2	4 1/2	9.01
64 G 183	PM-8405	540	120	3A	3.5A	4 1/2 x 3 1/2 x 3 1/2	4 1/2	9.01
64 G 155	PM-8407	650	55	2A	2.0A	2 1/2 x 3 1/2 x 2 1/2	3 1/2	5.88
64 G 157	PM-8406	650	40	2A	2.0A	2 1/2 x 3 1/2 x 2 1/2	2 1/2	5.64
64 G 214	PC-8406	650	40	2A	2.0A	3 1/2 x 2 1/2 x 2 1/2	2 1/2	5.64
64 G 187	PC-8407	650	55	2A	2.0A	3 1/2 x 2 1/2 x 3 1/2	3 1/2	5.88
64 G 184	PC-8408	680	70	2A	2.5A	3 1/2 x 3 1/2 x 3 1/2	4	7.35
64 G 156	PM-8409	680	70	2A	3.0A	2 1/2 x 3 1/2 x 3 1/2	4	7.76
64 G 158	PM-8409	700	90	2A	3.0A	3 1/2 x 3 1/2 x 3 1/2	4 1/2	7.76
64 G 185	PC-8410	720	120	3A	3.5A	3 1/2 x 3 1/2 x 3 1/2	5 1/2	9.17
64 G 186	PC-8410	720	120	3A	3.5A	4 1/2 x 3 1/2 x 3 1/2	5 1/2	8.81
64 G 173	PM-8411	750	150	3A	4.5A	3 1/2 x 3 1/2 x 4 1/2	6	12.30
64 G 187	PC-8411	750	150	3A	4.5A	4 1/2 x 3 1/2 x 4 1/2	6	11.79
64 G 161	PM-8412	800	200	3A	5.0A	3 1/2 x 4 1/2 x 3 1/2	8 1/2	12.31
64 G 163	PC-8412	800	200	3A	5.0A	4 1/2 x 4 1/2 x 4 1/2	8 1/2	12.30
64 G 169	PC-8414	1200	200	3A	3.0A	4 1/2 x 4 1/2 x 4 1/2	8 1/2	14.46

## FILTER CHOKES

All ratings are with maximum DC in windings. All are Fig. A mounting type, except \*Fig. L, †Fig. TD, ‡Fig. C, §Fig. NV. All are rated 1500 v. rms. except \*\*2000, ††3000.

Stock No.	Mfr's Type	Hys.	Ma.	Ohms	Size	Wt. Lbs.	NET EACH
64 G 057	C1001††	10.5	110	225	2 1/2 x 4 1/2 x 2 1/2	2 1/2	3.52
64 G 056	C1002	10	75	400	2 1/2 x 3 1/2 x 2 1/2	1 1/2	2.82
64 G 055	C1003	16.0	50	580	2 1/2 x 3 1/2 x 1 1/2	1 1/2	2.33
64 G 065	C1080	3.5	50	200	1 1/2 x 2 1/2 x 1 1/2	3/4	1.62
64 G 075	C1279	8.5	50	400	1 1/2 x 2 1/2 x 1 1/2	3/4	1.62
64 G 067	C1355*	8.0	75	290	2 1/2 x 2 1/2 x 1 1/2	1 1/2	2.60
64 G 063	C1410†††	4.0	175	100	3 1/2 x 3 1/2 x 2 1/2	2 1/2	4.45
64 G 466	C1411†††	4.5	200	80	3 1/2 x 3 1/2 x 1 1/2	3 1/2	5.56
64 G 455	C1412†††	4.0	250	60	3 1/2 x 3 1/2 x 3 1/2	4 1/2	6.82
64 G 468	C1420†	16.0	80	360	3 1/2 x 2 1/2 x 2 1/2	2 1/2	4.55
64 G 065	C1421†††	7.0	140	165	3 1/2 x 2 1/2 x 2 1/2	2 1/2	4.55
64 G 058	C1515	20.0	15	900	1 1/2 x 2 1/2 x 1 1/2	1	2.10
64 G 050	C1706	4.5	50	500	1 1/2 x 2 1/2 x 1 1/2	3/4	1.22
64 G 051	C1707	7.0	50	550	1 1/2 x 2 1/2 x 1 1/2	3/4	1.39
64 G 052	C1708	13.0	65	500	2 3/4 x 1 1/2 x 1 1/2	1	2.35
64 G 053	C1709	8.0	85	250	2 3/4 x 1 1/2 x 1 1/2	1 1/2	2.35
64 G 054	C1710	7.0	150	200	2 1/2 x 4 1/2 x 2 1/2	2 1/2	3.53
64 G 069	C1721†††	8.5	200	120	3 1/2 x 3 1/2 x 3 1/2	4 1/2	7.35
64 G 456	C1722†††	8.0	300	80	4 1/2 x 4 1/2 x 3 1/2	7 1/2	10.82
64 G 059	C2303**	2.5	130	100	2 3/4 x 1 1/2 x 1 1/2	1 1/2	2.20
64 G 060	C2304	2.3	150	60	2 3/4 x 1 1/2 x 1 1/2	1 1/2	2.20
64 G 061	C2305*	5.0	100	300	2 1/2 x 2 1/2 x 2 1/2	1 1/2	3.38
64 G 064	C2308†††	8.0	300	80	4 1/2 x 3 1/2 x 3 1/2	7 1/2	10.82
64 G 457	C2309**	3.0	150	90	2 1/2 x 3 1/2 x 2 1/2	1 1/2	2.52
64 G 055	C2325	2.0	200	60	3 1/2 x 2 1/2 x 2 1/2	2	2.79
64 G 050	C2326	1.0	300	43	3 1/2 x 2 1/2 x 2 1/2	1 1/2	2.84
64 G 073	C2327	1.5	200	85	1 1/2 x 2 1/2 x 1 1/2	3/4	1.76
64 G 458	C2328	8	375	25	2 1/2 x 3 1/2 x 2 1/2	1 1/2	3.53
64 G 459	C2334	2.8	300	60	2 1/2 x 2 1/2 x 4 1/2	2 1/2	3.46

## INTERCOM AND TRANSCEIVER TRANSFORMERS

Type A-4744 is similar to Fig. A mounting type but with side shelds. Types A-8090 and A-8091 are similar to Fig. A but with solder lug secondary connections. Type A-3833 is Fig. A type. Type A-4749 is Fig. TD. \*3 watts, †8 watts, ‡5 watts. Type A3833 is for microphone input or plate to grid. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Application	Ohm Imp.		Size HWD	NET EA.
			Prim.	Sec.		
64 G 030	A-4744	V.C. to grid	4	25K	1 1/2 x 2 1/2 x 1 1/2	1.98
64 G 489	A-8090	Line to V.C.	45	50	4-4-8	1.73
64 G 490	A-8091	Line to V.C.	45	50	3-4-8	1.37
64 G 031	A-3833	Transceiver	200 & 5K	60K	1 1/2 x 2 1/2 x 1 1/2	2.81
64 G 148	A-4749	Tele. Patch	10K	500	1 1/2 x 1 1/2 x 2 1/2	4.75

## UNIVERSAL OUTPUT TRANSFORMERS

For single or push-pull plates to voice coil. All are Fig. Q except \*Fig. J. Secondary: †500 ohms; ‡500, 333, 200, 125, 50 ohms. Wt., 1 1/2 lbs.

Stock No.	Mfr's Type	Primary	Watts	Size	NET EACH
64 G 294	A3250	5K; 10, 20K CT	(15 ma)	2x3 1/2 x 1 1/2	4.11
64 G 005	A3822	7-10K	4	1 1/2 x 2 1/2 x 1 1/2	1.91
64 G 026	A3823	4-14K CT	8	1 1/2 x 2 1/2 x 1 1/2	3.30
64 G 242	A3824	6-10K CT	8	2x3 1/2 x 2	3.23
64 G 002	A3825	1.5-4.5K	8	2x3 1/2 x 1 1/2	2.58
64 G 028	A3830*	3-10K CT	20	2 1/2 x 3 1/2 x 2 1/2	4.44
64 G 293	A3831†	2.5, 4, 5, 6, 7K	10	2 1/2 x 3 1/2 x 2 1/2	4.90
64 G 023	A3849	1.5-10K	10	1 1/2 x 2 1/2 x 1 1/2	3.30
64 G 024	A3850*	4-14K CT	8	2x2 1/2 x 1 1/2	3.25
64 G 027	A3852*	4-14K CT	18	2x3 1/2 x 2 1/2	3.99
64 G 025	A3856	4-14K CT	4	1 1/2 x 2 1/2 x 1 1/2	2.84
64 G 029	A3870	4-14K CT	18	2x3 1/2 x 2	4.07
64 G 292	A3880	4-14K CT	15	2 1/2 x 3 1/2 x 2 1/2	4.30

## FIXED-IMPEDANCE OUTPUT TRANSFORMERS

Transformers are Fig. A mounting type, except \*Fig. C. Type A3337 is similar to Fig. J, but has leads. Type A3330 has 4.5% primary tap.

Stock No.	Mfr's Type	Primary	Sec.	Watts	Mtg. Ctrs.	Wt. Lbs.	NET EACH
64 G 013	A2312	14,000 CT	4	10	2 1/2	1	2.79
64 G 245	A2313	7,000	8	10	1 1/2	1	2.50
64 G 023	A3304*	7, 10K CT	500/15/8/4	25	2x1 1/2	1	6.30
64 G 297	A3311*	10K CT	500/15/8/4	25	2 1/2 x 2	3 1/2	6.77
64 G 296	A3327	25K	4	5	2	1	1.80
64 G 244	A3328	4,000	3.5	3	1 1/2	1/2	1.34
64 G 246	A3329	8,000	3.5	3	1 1/2	1/2	1.34
64 G 299	A3330	2K	3.5	5	2	1	1.94
64 G 243	A3332	2,000	6-8	3	1 1/2	1/2	1.35
64 G 295	A3337	5K	4	10	2 1/2	1	2.28
64 G 020	A3800*	5,000 CT	500/250/15/8/4	30	2 1/2 x 2	4	6.73
64 G 021	A3801*	6,600 CT	500/250/15/8/4	35	2 1/2 x 2 1/2	4 1/2	8.58
64 G 298	A3831	10K CT	8/4/2	5	2 1/2	1	2.65
64 G 015	A3857	25K CT	4	5	2	1	2.35
64 G 001	A3876	2,000	4	5	2	1	1.45
64 G 004	A3877	5,000	4	5	2	1	1.45
64 G 006	A3878	7,000	4	5	2	1	1.49
64 G 010	A3879	10,000	4	5	2	1	1.45
64 G 138	A8094	4,000 CT	32/16/8	7 1/2	3 1/2	1 1/2	3.99
64 G 519	A8114	7,000	3.2	5	2 1/2	1	1.73

## FILAMENT TRANSFORMERS

Single-secondary transformers. Center-tapped except Type P6469 and Type P8190. Type P8191 has 6.3 v. primary, secondary for filament isolation. Others, 117 v., 60 cycle.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Insul.	Mtg. Ctrs.	Wt. Lbs.	NET EACH
64 G 141	P6133	A	2.5	5.0	7500	2 1/2 x 1 1/2	1 1/2	3.72
64 G 301	P3060	BV	2.5	10.0	10KV	2 1/2 x 1 1/2	2 1/2	6.59
64 G 262	P6467	A	5.0	3.0	2500	2 1/2 x 1 1/2	1 1/2	3.14
64 G 255	P3062	BV	5.0	6.0	2500	2 1/2 x 2	2 1/2	5.04
64 G 887	P0465	A	6.3	6.0	1500	2 1/2	1	1.94
64 G 888	P6492	C	5.0	30.0	2500	3x2 1/2	7 1/2	10.72
64 G 308	P6134	A	6.3	1.2	3000	2 1/2	1	2.70
64 G 588	P8190	A	6.3	1.2	5000	2 1/2	1	2.70
64 G 585	P8191	A	6.3	1.2	5000	2 1/2	1	2.91
64 G 263	P6466	A	6.3	3.0	2500	2 1/2	1 1/2	3.32
64 G 309	P5014	BV	6.3	3.0	2500	2x1 1/2	2	4.58
64 G 256	P4019	C	6.3	4.0	2500	2x1 1/2	2 1/2	4.94
64 G 264	P4089	C	6.3	6.0	2500	2 1/2 x 2	3 1/2	6.49
64 G 312	P3064	BV	6.3	6.0	2500	2 1/2 x 2	2 1/2	5.31
64 G 313	P6308	NV	6.3	10.0	2500	2 1/2 x 2 1/2	3 1/2	6.46
64 G 265	P6309	NV	6.3	20.0	2500	3x2 1/2	6 1/2	10.01
64 G 314	P5015	BV	7.5	4.0	2500	2 1/2 x		

# Stancor Transformers



## TRANSFORMER TRANSFORMERS

\*Maximum primary DC (for each half if primary has center tap). †TA-14 has two secondaries, 16 ohm series, 4 ohm parallel. ‡TP-1 for bridge rectifier power supplies; has 117 volt 60 cycle primary and 2 secondaries, each supplying 13 or 18 volts at 900 ma. Av. shpg. wt. 3 oz., except: TA-13, 1 1/4 lbs.; TA-14, 6 3/4 lbs.; TA-17, 3 lbs.; TP-1, 2 3/4 lbs.

### INPUT TRANSFORMERS

Stock No.	Mfr's Type	Pr. Imp.	Sec. Imp.	MA*	Watts	Size	Flg.	NET EACH
63 G 952	TA-1	600 CT	10	20	.05	1 1/2 x 2 1/2 x 1 1/2"	A	1.89
63 G 857	TA-15	50-100	10	50	5mw	1 1/2 x 1 1/2 x 1 1/2"	A	1.47
63 G 860	TA-18	30 CT	50K		.150	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 889	TA-47	1K CT	200K CT		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65

### OUTPUT TRANSFORMERS

Stock No.	Mfr's Type	Pr. Imp.	Sec. Imp.	MA*	Watts	Size	Flg.	NET EACH
63 G 959	TA-8	9800	15	2	.05	1 1/2 x 2 1/2 x 1 1/2"	A	4.24
63 G 960	TA-9	1000	4/8/16	10	.2	1 1/2 x 2 1/2 x 1 1/2"	A	4.86
63 G 961	TA-10	2K CT	4/8/16	10	.2	1 1/2 x 2 1/2 x 1 1/2"	A	4.86
63 G 962	TA-11	48 CT	8/16	275	5	2 3/8 x 1 1/2 x 1 1/2"	A	3.65
63 G 963	TA-12	20 CT	8	500	10	1 1/2 x 1 1/2 x 1 1/2"	A	1.89
63 G 965	TA-14	24 CT	16/4CT	200	10	4 1/2 x 4 1/2 x 3 1/2"	TD	10.06
63 G 862	TA-20	350 CT	4/12		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 863	TA-21	500 CT	4/8/16		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 865	TA-23	600 CT	4/8/16		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 867	TA-25	825 CT	4/8/16		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 868	TA-26	1250	4/12		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 871	TA-29	2500	4/16		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 875	TA-33	10K CT	4/8/16		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 879	TA-37	400 CT	11		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 881	TA-39	100 CT	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 882	TA-40	160	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 883	TA-41	400 CT	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 884	TA-42	500 CT	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 885	TA-43	700 CT	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 886	TA-44	2500	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 887	TA-45	3000	4/8/16		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65

### INTERSTAGE TRANSFORMERS

Stock No.	Mfr's Type	Pr. Imp.	Sec. Imp.	MA*	Watts	Size	Flg.	NET EACH
63 G 953	TA-2	100 CT	10 CT	100	.25	1 1/2 x 2 1/2 x 1 1/2"	A	1.89
63 G 954	TA-3	100	1K CT	100	.25	1 1/2 x 2 1/2 x 1 1/2"	A	1.89
63 G 955	TA-4	500 CT	5K CT	12	.03	1 1/2 x 2 1/2 x 1 1/2"	A	2.48
63 G 861	TA-19	100 CT	10 CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 864	TA-22	500 CT	50		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 866	TA-24	500 CT	50K		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 869	TA-27	1200	20K CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 870	TA-28	1500	500 CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 872	TA-30	5K CT	7500 CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 873	TA-31	5K CT	10K CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 874	TA-32	5K CT	80K CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 876	TA-34	10K	200 CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 877	TA-35	10K	2K CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 878	TA-36	10K	3K CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 880	TA-38	500 CT	150 CT		.150	2 1/2 x 1 1/2 x 1 1/2"	A	3.65
63 G 888	TA-46	100K	1500 CT		.300	1 1/2 x 1 1/2 x 1 1/2"	A	3.65

### DRIVER TRANSFORMERS

Stock No.	Mfr's Type	Pr. Imp.	Sec. Imp.	MA*	Watts	Size	Flg.	NET EACH
63 G 956	TA-5	1000	200 CT	10	.05	1 1/2 x 1 1/2 x 1 1/2"	A	4.70
63 G 957	TA-6	2000	200 CT	5	.05	1 1/2 x 1 1/2 x 1 1/2"	A	5.32
63 G 958	TA-7	100	100 CT	100	.5	1 1/2 x 1 1/2 x 1 1/2"	A	1.89
63 G 964	TA-13	200 CT	400 CT	10	.5	3 1/2 x 1 1/2 x 1 1/2"	TD	4.02
63 G 858	TA-16	20	36 CT	400	1	1 1/2 x 2 1/2 x 1 1/2"	A	1.70

### MODULATION TRANSFORMER

63 G 859	TA-17	8CT	17.5K/5K/120	35	1 3/4 x 3 1/2 x 1 1/2"	C	6.36
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### POWER TRANSFORMER

63 G 966	TP-1				1 3/4 x 2 1/2 x 1 1/2"	C	4.86
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### SELENIUM RECTIFIER TRANSFORMERS

For low voltage, high current applications. Use with CT, bridge rectifier circuit. For 117 v., 50-60 cycle AC. With wiring chart.

Stock No.	Mfr's Type	Range of AC Volts	Max. DC. Output Load		Size	Wt. Lbs.	NET EACH
			Resistive	Capacitive			
64 G 372	RT-201	11.7 to 29.4/11.2v @	2.0A	13.8v @ 2.0A	3 1/2 x 2 1/2 x 3 3/4"	2 1/2	4.97
64 G 373	RT-202	11.1 to 28.5/23.0v @	1.25A	30.0v @ 1.25A	3 1/2 x 2 1/2 x 3 3/4"	4	6.75
		12.0 to 29.8/11.1v @	4.0A	14.7v @ 4.0A			
64 G 374	RT-204	11.7 to 29.8/11.1v @	4.0A	14.7v @ 4.0A	4 1/2 x 3 1/2 x 4 1/2"	6 1/4	8.73
		12.0 to 29.8/23.0v @	2.0A	33.0v @ 2.0A			
64 G 375	RT-206	11.0 to 29.7/11.5v @	12.0A	14.4v @ 12.0A	4 1/2 x 3 1/2 x 5 1/2"	9 1/4	11.87
		12.0 to 29.7/24.0v @	6.0A	32.0v @ 6.0A			
64 G 376	RT-208	12.1 to 29.2/11.4v @	15.0A	14.8v @ 15.0A	4 1/2 x 3 1/2 x 5 1/2"	12 1/2	14.95
		12.1 to 29.2/23.7v @	8.0A	32.5v @ 8.0A			
64 GU 378	RT-2012	21.1 to 29.0/11.4v @	22.5A	14.3v @ 22.5A	5 1/2 x 4 1/2 x 6 1/2"	21	22.05
		12.0 to 29.0/23.5v @	12.0A	33.0v @ 12.0A			

### POLY-DECODE MODULATION TRANSFORMERS

Match Class "B" modulators to Class "C" load impedances in amateur and commercial transmitters. Multi-tapped primary and secondary windings match load impedances from 2000 to 20,000 ohms.

Stock No.	Mfr's Type	Max. DC Output Load		Watts	Size	Wt. Lbs.	NET EACH
		Primary	Secondary				
64 G 478	A-3893	180 ma.	180 ma.	60	4 3/4 x 4 3/4"	7	12.90
64 G 488	A-3894	225 ma.	225 ma.	125	4 1/4 x 4 3/4"	10	16.17

## LINE-TO-VOICE COIL TRANSFORMERS

Type A3837 is auto-transformer; operates one or more speakers in parallel. Type A8102, Type A8103 and Type A8105 are EIA 70.7 volt types. †Power steps in watts.

Stock No.	Mfr's Type	Primary Imp.	Secondary Imp.	Watts	Mtg. Ctrs.	Wt. Lbs.	Flg.	NET EACH
64 G 087	A3818	1500/1000/500	15/8/4	25	3 3/4"	2 1/2"	J	4.82
64 G 088	A3837	500/1000	.06 to 8, .12 to 16	15	2 3/4"	1 1/4"	J	3.93
		1500/2000	.18 to 24, .24 to 32					
		2500/3000	.30 to 40, .36 to 48	25	2 3/4"	1 1/4"	J	3.39
64 G 098	A3883	500	15/8/6/4	8	2 1/2"	1 1/2"	Q	2.87
64 G 085	A7947	2000/1500/1000/500	6-8/3/2	8	2 3/4"	1 1/4"	Q	2.87
64 G 086	A7949	2000/1500/1000/500	6-8/3/2	12	2 3/4"	1 1/4"	J	3.37
61 G 201	A8095	1000/500	5/2.5/1.25	5	2"	1 1/2"	Q	2.64
61 G 202	A8096	8/4/2/1/0.5†	4/8/16	18	2"	1 1/2"	J	3.53
61 G 203	A8097	16/8/4/2	4/8/16	16	2 1/2"	1 1/2"	J	4.23
		1/0.5†						
64 G 089	A8101	500	3/2/6-8	5	2"	1 1/2"	Q	1.73
64 G 091	A8102	8/4/2/1/1.5†	4/8/16	16	2"	1 1/2"	J	3.43
64 G 092	A8103	16/8/4/2/1	4/8/16	8	2 1/2"	1 1/4"	J	4.85
64 G 099	A8104	3000/2000/1500/1000/500	16/8/4/4	10	2 3/4"	1 1/2"	J	3.99
64 G 889	A8105	5/2.5/1.25/0.62/31†	4/8	5	2"	1 1/2"	Q	2.78
64 G 890	A8106	8/4/2/1†	4/8/16	16	2"	1 1/2"	J	2.94
64 G 891	A8107	16/8/4/2/1†	4/8/16	8	2 1/2"	1 1/4"	J	4.64
64 G 892	A8108	5/2.5/1.25/0.62†	4/8	5	2"	1 1/2"	Q	2.67

## MICROPHONE TRANSFORMERS

Type A4350 is for mike-to-line or line-to-line. Others for mike, pickup or line-to-grid. A4350 and A4352 are Fig. Q. A4705 is Fig. A. A4351 is Fig. TD. †Center-tapped. ‡Same as primary.

Stock No.	Mfr's Type	Pr. Ohms	Sec. Ohms	Mtg. Ctrs.	Wt. Lbs.	NET EACH	
64 G 094	A4350	500*	333/200*/125/50	†	2 1/3"	1	4.24
64 G 097	A4351	500*/333/200*/125/50	89,900	2 1/2 x 1 1/2"	1 1/2	4.54	
64 G 093	A4352	500*/333/200*/125/50	89,900	2 1/3"	1	4.70	
64 G 096	A4705		80,000	2"	1 1/2	2.91	

## ISOLATION TRANSFORMERS

Ideal for isolating transformerless (AC-DC type) radios and TV sets from AC power line. \*Primary is tapped for 105, 115 and 125 volts; 115-volt secondary with standard outlet. †Has 115-volt primary and tapped secondary with 3 standard outlets for 105, 115 and 125 volts; includes built-in electrostatic shield grounded to core. ‡115-volt primary and 115-volt secondary; standard outlet. All have line cord and plug.

Stock No.	Mfr's Type	Watts	Size	Flg.	Wt. Lbs.	NET EACH
64 G 449	P-64108	50	3 1/4 x 2 1/2 x 3 3/4"	KA	4	7.69
64 G 443	P-61160	100	4 1/4 x 3 1/2 x 3 3/4"	K	7	16.17
64 G 475	P-63718	175	5 1/4 x 4 1/2 x 3 3/4"	K	9	18.95
64 G 444	P-64115	350	5 3/4 x 4 1/2 x 3 3/4"	KC	17	23.05
64 GU 448	P-6298*	500	7 1/2 x 6 1/2 x 7 1/2"	KA	28	42.27

## AUDIO INPUT TRANSFORMERS

For matching 7000 to 15,000 ohm impedance single plate to push-pull grids; except\* for matching 7,000 to 20,000 ohm impedance single plate to single grid. Maximum primary DC, 10 ma.

Stock No.	Mfr's Type	Ratio	Size	Wt. Lbs.	NET EACH
64 G 079	A-52-C	1:2	1 1/2 x 2 1/2 x 1 1/2"	3/4	2.20
64 G 090	A53*	1:3	1 3/8 x 2 1/2 x 1 1/2"	3/4	1.98
64 G 081	A-53-C	1:3	1 3/8 x 2 1/2 x 1 1/2"		

# Stancor TV Transformers



## EXACT-REPLACEMENT TV HORIZONTAL OUTPUT TRANSFORMERS

A complete line of top-quality replacement flyback transformers for all standard television receivers. Every transformer faithfully duplicates all of the electrical and physical characteristics of the original manufacturer's unit. Manufacturer's own specifications are used.

No alterations are required in the existing circuit or chassis for installation of the Stancor transformers. High-quality construction. \*For 77J1 except where 6CD6 horizontal output tube is used. Write to Allied for quantity prices. Av. shpg. wt., 1 lb.



### ADMIRAL

No.	Type	Orig. Mfr's Part No.	NET
64 G 210	A-8128	79C-23-3, 79C28-1	6.88
64 G 211	A-8133	79C308-1, 7	9.89
64 G 551	A-8134	79C30-1, 79D38-1	8.96
64 G 213	A-8254	79C60-1	5.59
64 G 214	A-8265	79C60-2/-3	6.49
63 G 460	HO-255	79C70-1	5.83
64 G 572	A-8135	79D41-1/-2	7.64
64 G 212	A-8253	79D48-1	7.35
63 G 459	A-8292	79D65-1	7.06
61 G 204	HO-301	79D65-2/-4	7.17
61 G 205	HO-304	79D77-2	7.79

### CAPEHART

64 G 221	A-8131	750163A-1	5.87
63 G 461	A-8285	850285E-1	7.64

### CBS-COLUMBIA

64 G 331	A-8230	10104/07/08/10/35	7.35
64 G 332	A-8231	10136B/37/38/59	7.35
63 G 462	HO-258	12000751	7.02
63 G 463	A-8293	12000841/51	6.92
63 G 464	A-8284	12001051/91	6.53

### CROSLEY

64 G 222	A-8241	157820	6.36
64 G 223	A-8248	154069/-1, 154990/2/3	9.37
64 G 208	A-8263	158481-1/-2/-5	7.57

### EMERSON

64 G 221	A-8131	738047/48/53	5.87
64 G 268	A-8138	738079/84	6.53
64 G 333	A-8232	738067/68/69/73/74/75/82	7.35
64 G 369	A-8139	738096, 738100	6.53
61 G 206	HO-294	738103/109	6.53
61 G 207	HO-295	738106/107/111	7.32
61 G 208	HO-296	738119/122/128/129/140	7.50

### GENERAL ELECTRIC

64 G 546	A-8130*	77J1	7.17
64 G 276	A-8259	RTO-129/30	6.53
64 G 277	A-8262	RTO-131/141/-143/3	6.91
63 G 466	A-8288	RTO-149-1/1	6.17
63 G 467	A-8289	RTO-151-3/1	6.31
63 G 471	A-8290	RTO-166/5	6.05
63 G 468	HO-252	RTO-165	6.47
63 G 469	HO-253	RTO-175/87	6.47
63 G 470	HO-254	RTO-179/88	6.47

### GENERAL ELECTRIC (Cont'd)

No.	Type	Orig. Mfr's Part No.	NET
61 G 209	HO-298	RTO-207	6.69
61 G 210	HO-299	RTO-208	7.06

### HOFFMAN

61 G 211	A-8137	5035	7.00
61 G 212	HO-285	5158-A	5.64
63 G 975	HO-286	5165/68	9.26
63 G 976	HO-287	5144/45/46/48/49/55	7.18

### MAGNAVO

63 G 472	A-8293	360593-2, 360552-1/2/-2A, 360577/-1	7.60
63 G 473	A-8294	360606/-1	7.06
63 G 474	A-8295	360614-1, 360623/-1	7.06
63 G 435	HO-266	360659	6.53
63 G 970	HO-279	360632-1	6.53

### MOTOROLA

64 G 325	A-8224	24C711265/A, 24C721290	9.11
64 G 279	A-8239	24K792753, 24K701099	6.98
64 G 326	A-8225	24K712103	9.11
64 G 327	A-8226	24K713101/C, 24K7121517C	9.11
63 G 971	HO-280	24K739284	8.28
63 G 972	HO-281	24K730902/03/04	8.82
63 G 973	HO-282	24C736487	8.37
61 G 213	HO-293	24C736488	8.57

### MUNTZ

64 G 281	A-8129	TO-0024	7.17
64 G 559	A-8132	TO-0031	8.92
64 G 283	A-8240	TO-0036	7.06
63 G 436	A-8291	TO-0039	7.06
64 G 278	A-8261	9C253-1/-2/-E	6.63

### PHILCO

63 G 438	HO-277	32-8465-2, 32-8509/-2	9.41
64 G 323	A-8222	32-8533/34	7.42
64 G 322	A-8221	32-8555	7.47
64 G 21	A-8220	32-8565	8.22
64 G 324	A-8223	32-8572	6.92
63 G 437	HO-276	32-8624/-1	8.47
63 G 439	HO-278	32-8695-1	7.06
63 G 440	HO-264	32-8709-1	6.53

### PHILHARMONIC

64 G 573	A-8136	80-263/-265/-2	7.47
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### RCA

64 G 783	A-8119	211T1S	7.00
64 G 784	A-8127	211T1/T3	6.88

### RCA (Cont'd)

63 G 969	A-8252	225T1	6.53
63 G 441	HO-256	235T1	6.47
64 G 789	A-8235	75519, 75585, 76381	5.38
64 G 787	A-8233	76430, 76795	7.35
64 G 788	A-8234	76501	4.68
64 G 221	A-8131	74951	5.87
61 G 214	HO-289	104236, 972440-3	6.24
61 G 215	HO-290	104481, 973432-1	6.05
64 G 786	A-8244	78201, 78810	6.61
63 G 442	HO-272	972914-1, 103092	6.53

### SILVERTONE

64 G 331	A-8230	10104/07/08/10/35	7.35
64 G 332	A-8231	10136B/37/39	7.35
63 G 969	A-8252	N24989	6.53
61 G 216	HO-274	T80-326/336	6.76

### SPARTAN

63 G 974	HO-284	PC-700-10/6-12/F	7.06
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### SYLVANIA

64 G 328	A-8227	241-0003	5.53
64 G 329	A-8228	241-0005/-0006	5.53
64 G 330	A-8229	241-0007	5.29
63 G 443	HO-259	241-0011	6.47

### WESTINGHOUSE

64 G 285	A-8237	V9904-1/-2, V10213-1	6.76
64 G 286	A-8238	V-10214-1, V-9904-2, V-10215	6.66
64 G 284	A-8236	V-11548-1/-2/-3/-4	7.76

### ZENITH

64 G 287	A-8267	S-15911/12, 16566, S-17130, 40, 17233, S-17245/265/435, S-17646/767/811, S-17927, -20908	7.06
64 G 288	A-8268	S-15015/202/709, S-15710, -16006, S-16191/204, S-17244/699/X, S-20866	7.06
64 G 289	A-8269	S-18487/537/802	6.53
64 G 290	A-8270	S-18567/990, S-19278	6.53
64 G 291	A-8271	S-19032/71	6.53
64 G 368	A-8272	S-20998	6.53
63 G 444	HO-267	S-20099	7.19
63 G 445	HO-268	S-23049	6.08
63 G 446	HO-269	S-22720	6.24
63 G 447	HO-270	S-18125	5.88
63 G 448	HO-271	S-22451, S-23438	6.53
61 G 217	A-8276	S-22154	5.94

### TELEVISION POWER TRANSFORMERS

Power transformers for replacement use in standard television receivers. Carefully designed to assure dependable, efficient service. Plate windings are CT. \*With copper shorting band to reduce external magnetic field. †Pri. for 117/107 v. For 117 volts, 60 cycles.



Stock No.	Mfr's Type	Plate		Rect.		FIL.		Overall Size	Wt., Lbs.	NET EACH
		V	Ma	V	A	V	A			
63 G 429	P-5059P	675/200	5	3	6.3 CT	5		4 1/2 x 3 1/2 x 4 1/2	9 1/2	13.06
64 G 430	P-6315	740/275	5	3	6.3 CT	7.0		4 1/2 x 3 1/2 x 4 1/2	9 1/2	13.68
64 G 510	P-8154	750/205	5	3	6.3	2.5/6		4 1/2 x 4 1/2 x 4 1/2	9 1/2	14.70
64 G 576	P-8159*	720/290	5	3	6.3/6.3	2.8/6		5 1/2 x 3 1/2 x 4 1/2	10 1/2	17.29
64 G 577	P-8160*	716/185	5	3	6.45	1.2		4 1/2 x 3 1/2 x 4 1/2	10	16.23
64 G 578	P-8164*	600/225	5	3	6.3	2.5		4 1/2 x 3 1/2 x 4 1/2	7 1/2	15.88
64 G 580	P-8166*	680/330	5	3	6.3/6.3/6.3	9.0/5.0/5.0		6 x 3 1/2 x 4 1/2	13	19.30
63 G 458	P-8167*	650/400	5	3	6.3	4.8/6.5		6 x 3 1/2 x 4 1/2	13	19.73
64 G 583	P-8169*	760/220	5	3	6.3/6.3/6.3	1.2/5/7		4 1/2 x 3 1/2 x 4 1/2	10 1/2	16.77
63 G 431	P-8170*	760/220	5	3	6.3/6.3/6.3	1.2/5/7		4 1/2 x 3 1/2 x 4 1/2	10 1/2	16.31
64 G 599	P-8171*	750/225	5	3	6.3/6.3	2.0		5 x 3 1/2 x 4 1/2	10 1/2	17.64
63 G 449	P-8172	540/200	5	3	6.3	8.5		4 1/2 x 3 1/2 x 3 1/2	7	13.85
64 G 413	P-8331*	620/240	5	3	6.3/6.3	6.4/3		4 1/2 x 3 1/2 x 4 1/2	9	14.12
64 G 414	P-8333*	590/225	5	3	6.3/6.3	11.4/9		4 1/2 x 3 1/2 x 4 1/2	10	14.93
64 G 416	P-8334*	550/305	5	3	6.3/6.3	8.5/1.2		5 1/2 x 3 1/2 x 4 1/2	13	16.46
64 G 417	P-8335*	600/325	5	3	6.3/6.3	8.8/1.5		5 1/2 x 3 1/2 x 4 1/2	13	17.00
64 G 419	P-8337	630/225	5	3	6.3	8.25		4 1/2 x 3 1/2 x 4 1/2	8 1/2	14.09
64 G 421	P-8339	650/255	5	3	12.6 CT	5.25		4 1/2 x 3 1/2 x 5	8 1/2	13.93
64 G 422	P-8340*	710/270	5	3	6.3/6.3/6.3	9.5/1.65/2.4		5 1/2 x 3 1/2 x 4 1/2	12	18.40
64 G 424	P-8342*	730/260	5	3	6.3/6.3	8.85/1.2		5 1/2 x 3 1/2 x 4 1/2	13	17.57
63 G 428	P-8352*	580/240	5	3	12.6 CT	5.25		4 1/2 x 3 1/2 x 4 1/2	8 1/2	13.50

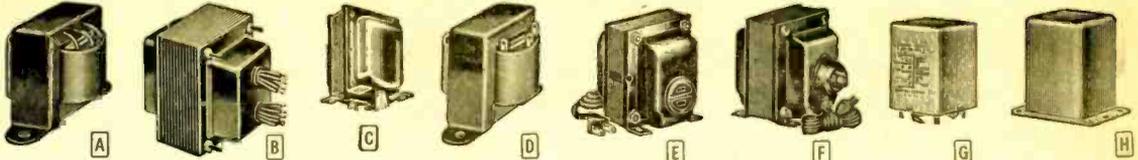
### VERTICAL BLOCKING OSCILLATOR TRANSFORMERS

Vertical blocking oscillator transformers for replacement use in standard television receivers. Designed to provide dependable, efficient service. \*Indicates copper shield band around coil and core.

No.	Type	Ratio (Pri. to Sec.)	Size	Lbs.	NET
64 G 501	A-8111	1:4.2	1 1/2 x 2 1/2 x 1 1/2	1/2	1.94
64 G 504	A-8121	1:4.2	1 1/2 x 2 1/2 x 1 1/2	3/4	2.59
64 G 543	A-8122	1:4.2	1 1/2 x 2 1/2 x 1 1/2	3/4	3.83
64 G 558	A-8125	1:4.2	2 1/2 x 1 1/2 x 1 1/2	3/4	1.89
64 G 471	A-8126	1:1.5	1 1/2 x 1 1/2 x 1 1/2	3/4	1.94
61 G 218	VBO-201*	1:3.33	1 1/2 x 2		

# Knight and Acme Transformers

## KNIGHT QUALITY TRANSFORMERS



An excellent selection of economy-priced, high-quality Knight transformers. Constructed of quality material to fully meet Allied's rigid standards for performance and dependability of operation.

### STANDARD OUTPUTS

A For coupling plate of output tube to the speaker voice coil. Designed for class A amplifiers. Secondary impedance, 3.2 ohms, except \*3.5 and †4 ohms. Shpg. wt., ½ lb.

Stock No.	Primary		Audio Watts	Size	NET EACH
	Imp.	Ma.			
62 G 064	5000	40	3	1 1/4 x 2 1/8 x 1 1/2	1.07
62 G 063	2500	50	3	1 1/4 x 2 1/8 x 1 1/2	1.07
62 G 093	8000	20	3	1 1/4 x 2 1/8 x 1 1/2	1.00
62 G 065	2000	50	5	1 1/2 x 2 3/8 x 1 1/2	1.07
61 G 400	4000*	10	3	1 3/8 x 2 1/4 x 1	1.00
61 G 401	2000	50	3	1 1/4 x 2 1/8 x 1 1/2	1.02
61 G 402	2000†	60	5	1 1/4 x 2 1/8 x 1 1/2	1.07
61 G 403	5000†	40	5	1 1/4 x 2 1/8 x 1 1/2	1.07

### AUDIO TRANSFORMERS

A Provide ratios of 1:3. Cores are 1/2 x 1/2". Maximum primary D.C. 10 ma. \*For 7000-15,000 ohm plate impedances; †7000-20,000. Wt., 1/2 lb.

Stock No.	Description	Mtg. Ctrs.	NET EACH
61 G 415	*Single plate to push-pull grid	2"	1.74
62 G 062	†Single plate to single grid	2"	1.47

### FILAMENT TRANSFORMERS

A For a wide variety of general applications. Primaries, 117 v., 50-60 cycle AC. †Center-tapped.

Stock No.	V	Amps	RMS V Insul	Size	Wt. Lbs.	NET EACH
62 G 028	5.0	6.0	2500	2 1/8 x 3 1/8 x 2 1/4	2 3/4	3.22
61 G 416	6.3	0.6	1500	1 1/4 x 2 3/8 x 1 1/2	3/4	1.43
62 G 031	6.3	3.0	2500	2 x 1 1/4 x 2 3/8	1 1/4	2.46
61 G 417	6.3	6.0	2500	3 x 2 1/4 x 2 1/4	2 3/4	3.92
61 G 418	6.3	10.0	2500	3 3/4 x 2 1/4 x 2 1/4	3 3/4	4.78
61 G 419	6.3	1.2	3000	1 1/2 x 2 1/8 x 1 1/2	1 1/4	1.51
62 G 030	6.3	1.0	1500	1 1/2 x 2 1/8 x 1 1/2	1 1/4	1.50
61 G 420	112.6	2.0	1500	2 x 3 1/4 x 2 1/4	1 1/4	2.49
61 G 421	25.2	1.0	1500	2 x 3 1/4 x 2 1/4	1 1/4	2.36

### FILTER CHOKES

A Excellent for receivers, low power transmitters, etc. 1500 v. RMS insulation, except \*3000 v.

Stock No.	Hys.	Ma.	Ohms	Mtg. Ctrs.	Wt. Lbs.	NET EACH
61 G 405	0.8	375	25	3 3/4"	1 1/2"	2.49
61 G 406	1.5	200	60	2 3/8"	1"	1.30
61 G 407	3.5	50	200	2 3/8"	3/4"	1.18
62 G 135	5.5	50	330	2"	3/4"	.93
61 G 408	7.0	50	550	2"	3/2"	1.03
61 G 409	8.5*	200	140	2 1/2 x 2 3/4"	4"	5.40
62 G 136	8.5	50	400	2 1/2"	1"	.98
62 G 137	16.0	50	550	2 1/2"	1 1/2"	1.57
62 G 138	15.0	75	400	3 3/4"	2"	2.09
62 G 139	10.5	110	220	3 3/4"	2 1/2"	2.49

### POWER TRANSFORMERS

Recommended for radio set replacement use, kit building, etc. Fully shielded; heavy-duty 5° flexible coded leads. All plate and 6.3 v. windings center-tapped, except \*half-wave type. All have 110-120 volt, 50-60 cycle primaries.

Stock No.	Flg.	Plate		6 V at	6.3 V at	Mtg. Centers	Wt. Lbs.	NET EACH
		VCT	Ma					
61 G 410	A	125*	15	----	0.6A	2"	1 1/2	1.72
61 G 411	A	125*	50	----	2.0A	3 1/4"	1 1/2	2.78
62 G 008	A	250	25	----	1.0A	2 3/4"	1	2.05
62 G 034	B	480	40	2A	2.0A	2x2 1/2"	3	4.00
61 G 412	C	520	90	2A	3.0A	2 1/4 x 2 1/4"	4	5.10
61 G 413	C	650	40	2A	2.0A	2x1 3/4"	2 1/2	4.16
62 G 041	B	650	40	2A	2.0A	2x2 1/2"	3	4.16
62 G 042	B	650	70	3A	3.5A	2x2 1/2"	5	4.34
62 G 043	B	700	90	3A	3.5A	2 1/4 x 2 3/8"	5 1/2	5.75
62 G 044	B	700	120	3A	4.7A	2 1/4 x 3 1/8"	7	6.76
62 G 045	B	750	150	3A	5.0A	2 1/2 x 3 3/8"	7 1/2	9.02
61 G 413	B	800	200	3A	5.0A	3x3 3/8"	8	9.06
61 G 414	C	800	200	3A	5.0A	3x2 1/2"	8	9.02

### UNIVERSAL OUTPUTS

D CT primary, except \*single-ended output. 6 taps on secondary. Match single or push-pull tubes to speaker voice coil.

Stock No.	Impedances	Watts	Mtg. Ctrs.	Wt. Lbs.	NET EACH
62 G 023	Pri., 4000-14,000 ohms. Sec., VC	4	2"	1	1.77
62 G 024	Pri., 4000-14,000 ohms. Sec., VC	8	2 3/8"	1	1.99
62 G 022	Pri., 4000-14,000 ohms. Sec., VC	18	2 3/8"	1 1/4	2.84
61 G 404	*Pri., 7000-10,000 ohms. Sec., VC	4	2"	1 1/2	1.37

Recommended for replacement applications and installation in new equipment. A fine low-cost line for use by radio-TV servicemen, Amateurs, experimenters, students and industrial users.

### 70.7 VOLT LINE-TO-VOICE COIL OUTPUTS

D Secondaries: 4, 8, 16 ohms, except \*3.2-4, 6-8.

Stock No.	Watt Taps	Watts	Mtg. Ctrs.	Wt. Lbs.	NET EACH
62 G 081	5, 2.5, 1.25, .62, .31	*5 Max. 2"	2"	3/4	1.92
61 G 422	8, 4, 2, 1, 0.5	8 Max. 2"	2"	3/4	2.54
62 G 077	10, 5, 2.5, 1.25, .62	10 Max. 2 3/8"	2 3/8"	1	2.41
62 G 078	18, 9, 4.5, 2.25, 1.12, .56	18 Max. 2 3/8"	2 3/8"	1 1/4	2.99
62 G 079	24, 12, 6, 3, 1.5, .75	24 Max. 3 3/8"	3 3/8"	1 1/4	3.54

### LINE TO VOICE COIL TRANSFORMERS

D 500-ohm primary except \*2000/1500/1000/500.

Stock No.	Sec. Imp., Ohms	Audio Watts	Mounting Centers	Wt. Lbs.	NET EACH
61 G 423	6-8/3.2	5	2"	1/4	1.29
61 G 424	15.8/6.4	25	2 3/8"	1	2.49
61 G 425	6-8/3.2	*8	2 3/8"	3/4	2.10

### 230-TO-115 VOLT AUTOTRANSFORMERS

E Well-built step-down transformers for reducing 220-250 volts, 50-60 cycles AC to 110-125 volts. For operating tape recorders, radios, amplifiers, household appliances, etc. Shielded construction. Smooth black enamel finish. With 8-ft. cord and plug. Female outlet on case.

Stock No.	Watts	Size	Wt. Lbs.	NET EACH
62 G 510	80	3 1/4 x 2 1/8 x 3"	6	5.70
62 G 511	150	3 3/8 x 3 1/8 x 3 3/8"	6	7.20
62 G 512	250	4 3/8 x 3 1/8 x 4"	9 1/4	9.45
62 G 513	500	4 3/8 x 3 1/8 x 4 3/8"	11	13.00

### VARIABLE VOLTAGE AND ISOLATION TRANSFORMERS

E Isolation Transformers. Reduce shock hazard by isolating test units, or equipment under test, from line. For 115 volts, 50-60 cycle AC. With 6-ft. cord, plug and output receptacle.

Stock No.	Watts	Size H.W.D.	Wt. Lbs.	NET EACH
61 G 426	50	3 3/4 x 2 1/8 x 3 1/4"	3 1/2	5.67
62 G 086	100	4 1/4 x 3 1/8 x 3 3/8"	7	10.00
62 G 087	250	4 3/8 x 3 1/8 x 4 1/2"	12 1/2	17.75

F Variable Voltage and Isolation Transformer. Rated 150 watts. Delivers 115 v. from 90-250 v., 50-60 cycle AC input. With 6-ft. cord and plug. Mtg. centers, 3x3 1/4". Shpg. wt., 9 lbs. 13.11

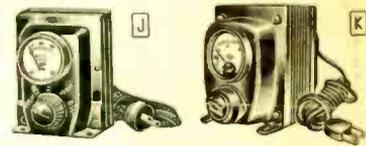
### HIGH-FIDELITY OUTPUT TRANSFORMERS

Designed for ultra-linear Williamson-type amplifiers. All flat from 60-90,000 cps \*except 10-100,000 cps. Rated watts from 20-30,000 cps. All have 4, 8 and 16 ohm outputs. †Max. allowable DC current in each half of primary. Precision-built to meet Allied's own high standards for audio equipment.

Stock No.	Flg.	Watts	P-P Imp.	†Ma.	Size	Wt. Lbs.	NET EACH
62 G 082	G	12	8000	60	3 3/4 x 3 x 3 1/4"	3 1/2	7.90
62 G 018	G	18	8000	65	3 3/8 x 3 x 3 1/4"	3 1/2	8.50
62 G 083	H	24	6600	75	4 1/4 x 3 3/8 x 4 1/2"	6 1/2	13.01
62 G 019	G	30*	6600	100	4 1/4 x 3 3/8 x 4 1/2"	7	14.01
62 G 024	C	12	8000	60	3 1/8 x 2 3/8 x 2 1/4"	3 3/8	6.76
62 G 058	A	18	8000	65	2 3/8 x 4 x 2 1/4"	2 1/2	5.35
62 G 054	C	24	6600	75	3 3/8 x 3 1/4 x 3 3/8"	6	11.35
62 G 059	C	30*	6600	100	3 7/8 x 3 1/4 x 4"	6	11.85

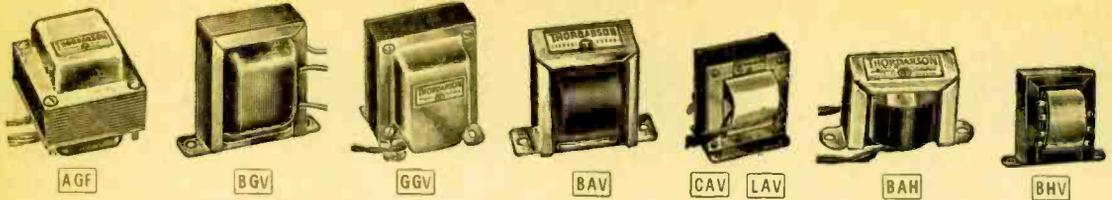
### ACME VARIABLE VOLTAGE TRANSFORMERS

Highly efficient, constant-duty voltage regulators. Used as step-up or step-down transformers to correct for either low or high line voltage. Easily adjusted by manually turning 7-position rotary switch until built-in voltmeter reads 115 volts output. Type T8394M has tap switch positions for 95, 100, 105, 110, 115, 120, 125 volts, at 50-60 cyc. Especially designed for use with television sets. Type T10306 is for 65, 75, 90, 100, 115, 130 and 145 volts. Features simple, "plug-in" installation (built-in AC receptacle and 8 ft. line cord). Ideal for localities with fluctuating voltage supplies, to assure correct performance of electrical appliances. Also for the radio serviceman for over-voltage testing—speeds location of intermittent troubles.



Stock No.	Type	Watts	Flg.	Size	Lbs.	NET EA.
62 G 514	T8394M	300	J	4 1/4 x 4 x 5"	9	11.55
62 G 501	T10306	150	K	4 3/8 x 3 3/8 x 5 1/2"	7	14.33

# Thordarson Transformers



## POWER TRANSFORMERS

A wide selection of high-quality power transformers for use in new equipment or for replacement use in radios, small transmitters, audio amplifiers, etc. Many are available in a choice of mounting style to meet specific needs. Types that have Fig. AGF construction are supplied with universal type mounting brackets which permit flush, vertical, or horizontal mounting. All transformers listed below have center-tapped 6.3 volt windings. 26R60 is for use in half-wave rectifier circuits using a selenium rectifier or 6-volt rectifier tube. \* Indicates an additional 3-ampere, 6.3-volt, center-tapped winding. All leads are stripped and tinned, and are color coded in accordance with EIA standards. All primaries are for 117 volt, 50-60 cycle AC.

Stock No.	Mfr's Type	Fig.	Plate		5 V at:	6.3 V at:	Mfg. Ctrs.	Wt. Lbs.	NET EACH
			VCT	Ma					
63 G 737	26R60	BGV	150	25	0.5A	2"	3/4	3.22	
63 G 719	24R00	AGF	480	40	2A	2.0A	2x2 1/2"	5.42	
63 G 320	24R00-U	GGV	180	40	2A	2.0A	2x2 1/2"	5.76	
63 G 700	22R00	AGF	500	40	2A	2.0A	2x2 1/2"	6.76	
63 G 701	22R01	AGF	550	50	2A	2.5A	2x2 1/2"	7.23	
63 G 711	22R30	GGV	550	50	2A	2.5A	2x2 1/2"	7.23	
63 G 702	22R02	AGF	600	70	2A	3.0A	2x2 1/2"	7.82	
63 G 703	22R04	AGF	600	90	2A	3.5A	2 1/2 x 3 1/2"	8.11	
63 G 704	22R05	AGF	600	120	3A	5.0A	2 1/2 x 3 1/2"	9.40	
63 G 321	24R01	AGF	650	40	2A	2.0A	2x2 1/2"	5.64	
63 G 322	24R01-U	GGV	650	40	2A	2.0A	2x1 1/2"	5.64	
63 G 705	22R06	AGF	650	150	3A	5.0A	2 1/2 x 3 1/2"	9.42	
63 G 323	24R02	AGF	700	70	2A	2.5A	2 1/2 x 3 1/2"	7.35	
63 G 324	24R04	AGF	700	90	3A	3.5A	2 1/2 x 3 1/2"	8.11	
63 G 325	24R04-U	GGV	700	90	3A	3.5A	2 1/2 x 3 1/2"	8.01	
63 G 713	22R32*	GGV	700	110	2A	3.0A	2 1/2 x 3 1/2"	11.52	
63 G 326	24R05	AGF	700	120	3A	4.7A	2 1/2 x 3 1/2"	8.65	
63 G 327	24R05-U	GGV	700	120	3A	4.7A	2 1/2 x 3 1/2"	8.65	
63 G 706	22R07	AGF	700	200	3A	6.0A	3x3 1/2"	12.94	
63 G 712	22R31	GGV	720	80	2A	2.5A	2x2 1/2"	9.70	
63 G 328	24R06	AGF	750	150	3A	4.7A	2 1/2 x 3 1/2"	12.30	
63 G 329	24R06-U	GGV	750	150	3A	4.7A	2 1/2 x 3 1/2"	11.79	
63 G 714	22R33	GGV	750	160	3A	5.0A	2 1/2 x 3 1/2"	13.47	
63 G 715	22R34	GGV	770	225	3A	5.0A	3x3 1/2"	15.05	
63 G 330	24R07	AGF	800	200	3A	5.0A	3x3 1/2"	12.33	
63 G 331	24R07-U	GGV	800	200	3A	5.0A	3x3 1/2"	12.30	
63 G 716	22R35	GGV	800	340	6A	7.0A	3x4"	18.23	
63 G 719	22R36	GGV	1200	200	3A	5.0A	3x3 1/2"	13.41	

## MODULATION TRANSFORMERS

Fixed primary impedance modulation transformers for low-power, amateur and other 2-way communications equipment use.

Stock No.	Mfr's Type	Fig.	Watts	Pri. CT	Secondary Ohms		Mfg. Ctrs.	Wt. Lbs.	NET EACH
					3K, 3.75K, 4.5K	5K, 5.75K, 6.5K			
63 G 801	21M52	FGV	10	10K	3K, 3.75K, 4.5K	2 1/2"	1 1/2	5.29	
63 G 615	21M53	BAH	10	10K	3K, 3.75K, 4.5K	2 1/2"	1 1/2	4.70	
63 G 613	21M68	BAV	10	10K	4K, 5K, 7.5K	2 1/2"	1 1/2	4.50	
63 G 612	21M67	GGV	25	10K	10K, 12K	2 1/2"	1 1/2	5.72	
63 G 802	21M54	GGV	25	6.6K	3K, 5K, 6.5K, 8K	2x2 1/2"	3 1/2	7.25	

## MULTI-MATCH TRANSFORMERS

Have taps to permit proper impedance match between modulator output tubes and RF amplifier load. Split secondary.

Stock No.	Mfr's Type	Watts	Prim. Ma		Sec. Par.		Mfg. Ctrs.	Wt. Lbs.	NET EACH
			Each	Side	Ma	Pa.			
63 G 812	21M61A	60	125	125	125	2 1/2 x 2 1/2"	6 1/2	12.89	
63 G 813	21M62A	125	210	160	320	3 1/2 x 3 1/2"	15	22.05	

## FILTERING AND COUPLING CHOKES

20C58 is speech-frequency tuned audio choke for impedance coupling. 20C59 is plate impedance coupling choke. Others for both input and smoothing use. \* Inductance at rated ma.

Stock No.	Mfr's Type	Fig.	*Mvts.	Rated Ma	Resis. Ohms	Test Volts	Mfg. Ctrs.	Wt. Lbs.	NET EACH
63 G 725	20C50	BAH	350	5	5500	2500	2 1/2"	1 1/2	3.88
63 G 726	20C51	BAH	35	15	1850	2500	2"	3/4	2.11
63 G 727	20C52	BAH	8	40	450	2500	2"	3/4	1.79
63 G 728	20C53	BAH	12	80	375	2500	2 1/2"	1 1/2	2.59
63 G 729	20C54	GGV	8	150	145	2700	1 1/2 x 2"	3	4.55
63 G 730	20C55	GGV	6	200	75	2700	2x2 1/2"	3 1/2	5.82
63 G 731	20C56	GGV	8	250	60	3500	3x2 1/2"	6 1/2	9.26
63 G 733	20C58	BAH	1/2	10	30	1100	2 1/2"	3 1/2	2.59
63 G 583	20C59	BAH	7	55	200	2500	2 1/2"	1 1/2	1.91
63 G 584	20C64	BAH	4	130	100	2500	3 1/2"	1 1/2	2.51
63 G 738	26C40	BAH	1.5	10	95	2500	1 1/2"	1 1/2	1.53

## CONTROL TRANSFORMERS

Fig. BHV. \*except not illustrated. 2-section secondary windings permit series or parallel operation. For 115 or 230 v., 50-60 cycle AC.

Stock No.	Mfr's Type	Secondary		Size	Mfg. Ctr.	Wt. Lbs.	NET EACH
		Parallel	Series				
63 G 179	23V50	6V @ 2A	12V @ 1A	2 1/2 x 2 1/2"	2 1/2"	3/4	4.59
63 G 180	23V51	6V @ 4A	24V @ 2A	3 1/2 x 3 1/2"	2 1/2"	1 1/2	6.23
63 G 181	23V52	12V @ 4A	24V @ 2A	3 1/2 x 3 1/2"	2 1/2"	1 1/2	7.88
63 G 182	23V53*	12V @ 8A	24V @ 4A	3 1/2 x 3 1/2"	2 1/2 x 2 1/2"	3 1/2	10.58
63 G 183	23V54*	12V @ 16A	24V @ 8A	4 1/2 x 3 1/2"	2 1/2 x 2 1/2"	4	14.70

## OUTPUT TRANSFORMERS

High-quality audio output transformers for replacement and new equipment uses. Listing includes types for single-ended outputs and for push-pull amplifiers. Av. shpg. wt., 2 1/2 lbs.

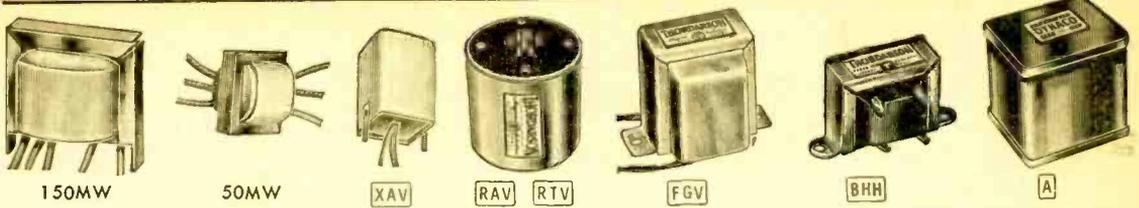
Stock No.	Type	Fig.	Pri. Sec.	Sec. Imp.	Watts	Ctrs.	EACH
63 G 742	24S48	BAH	4000/5000	3-2, 4-	5	1 1/2"	1.34
63 G 743	24S49	BAH	7000/8000	3-2, 4-	5	1 1/2"	1.34
63 G 768	24S50	BAH	2000	3-2, 4-	5	2"	1.45
63 G 769	24S51	BAH	5000	3-2, 4-	5	2"	1.45
63 G 770	24S52	BAH	7000/10,000	3-2, 4-	5	2"	1.49
63 G 771	24S54	BAH	15,000/25,000	3-2, 4-	5	2"	1.60
63 G 772	24S60	BAH	4000/7000/8000/10,000/14,000 CT	0.1-30	4	2"	2.65
63 G 773	24S61	BHH	4000/7000/8000/10,000/14,000 CT	0.1-30	8	2 1/2"	2.65
63 G 775	22S45	BAH	1500-3000	3-2, 4-	5	2"	2.94
63 G 776	22S46	BAH	2000-3000	3-2, 4-	5	2"	3.32
63 G 777	22S47	BAH	6000-7000 CT	3-2, 4-	5	2"	3.12
63 G 778	22S48	BAH	12,000-16,000 CT	3-2, 4-, 6-8	5	2"	2.65
63 G 779	22S56	BAH	8000/10,000 CT	3-2, 4-, 6-8	10	2 1/2"	3.22
63 G 780	22S58	BAH	5,000/7,000 CT	3-2, 4-, 6-8	8	2 1/2"	3.22
63 G 781	22S60	BAH	2500/4000 CT	0.1-30	8	2 1/2"	4.00
63 G 782	22S62	BHH	Univ. Plate 10,000 CT	3-2, 4-, 6-8	8	2 1/2"	4.06
63 G 783	22S64	GGV	15, 250, 500	3-2, 4-, 6-8	25	1 1/2 x 2"	6.40
63 G 784	22S66	GGV	8000 CT	15, 250, 500	25	1 1/2 x 2"	7.70
63 G 785	22S68	GGV	6500 CT	15, 250, 500	25	1 1/2 x 2"	7.76
63 G 786	22S70	GGV	5000 CT	15, 250, 500	25	1 1/2 x 2"	6.47
63 G 790	22S78	GGV	3300 CT	3-2, 4-, 6-8	60	2 1/2 x 2 1/2"	11.70
63 G 788	22S74	BHH	Universal CT	15, 250, 500	25	3 1/2"	6.53
63 G 796	22S86	BAH	Universal CT	3-2, 4-, 6-8	6	2 1/2"	4.12
63 G 797	22S87	BAH	Universal CT	3-2, 4-, 6-8	6	2 1/2"	4.12
63 G 798	22S88	BAH	Universal CT	3-2, 4-, 6-8	8	2 1/2"	4.12
63 G 799	22S93	GGV	9500 CT	3-2, 4-, 6-8	10	1 1/2 x 2"	8.52
63 G 774	22S95	GGV	5,000 CT 3,000 CT	15-16	15	1 1/2 x 2"	8.53
63 G 799	22S97	GGV	6,000 CT	3-2, 4-, 6-8	25	1 1/2 x 2"	7.76

## FILAMENT TRANSFORMERS

Primaries for 117 volt 50-60 cycle AC, except 26F65 and 26F67 6.3 volt, 21F26 115-230 volt. All have 2500 volt insulation, except 21F02 and 21F05 10,000 volt. 21F26 8500 volt, 21F27 3000 volt, 26F65 2000 volt. \*Single secondary with taps. †Tapped primary.

Stock No.	Type	Fig.	Volts	Amps	Ctrs.	Lbs.	EACH
63 G 665	21F00	BAV	2.5 CT	5	2 1/2"	1	2.94
63 G 666	21F01	BAV	2.5 CT	10	2 1/2"	1 1/2	4.65
63 G 667	21F02	CAV	2.5 CT	10	2 1/2 x 1/2"	2 1/2	6.47
63 G 668	21F03	BAH	5 CT	3	2 1/2"	1 1/2	4.16
63 G 669	21F04	CAV	5 CT	8	2 1/2 x 1/2"	3	5.68
63 G 681	21F05	CAV	5 CT	3	2 1/2 x 1/2"	2 1/2	6.47
63 G 670	21F06	CAV	5 CT	13	2x2"	3 1/2	8.03
63 G 671	21F07	CAV	5 CT	21	2 1/2 x 2 1/2"	5 1/2	10.47
63 G 672	21F08	BAH	6.3 CT	3	2 1/2"	1	2.06
63 G 604	21F09	BAH	6.3 CT	1.2	2 1/2"	1	2.06
63 G 673	21F10	BAH	6.3 CT	3	2 1/2"	1	3.32
63 G 674	21F11	CAV	6.3 CT	6	1 1/2 x 2"	2 1/2	4.85
63 G 675	21F12	CAV	6.3 CT	10	2x2"	3 1/2	6.17
63 G 676	21F14	BAH	*6.3, 5/2.5	2.5	2 1/2"	1 1/2	3.82
63 G 677	21F15	BAH	7.5 CT	4	2 1/2"	2	4.47
63 G 678	21F16	CAV	7.5 CT	8	2x2"	3 1/2	6.91
63 G 682	21F17	CAV	7.5 CT	12	2 1/2 x 2 1/2"	5	8.82
63 G 679	21F18	CAV	10 CT	5	1 1/2 x 2"	2 1/2	6.61
63 G 680	21F19	CAV	†10 or 11 CT	12 or 11	2 1/2 x 2 1/2"	6	10.58
63 G 605	21F26	BAH	7.5 CT	51	3 1/2 x 4 1/2"	15	29.40
63 G 606	21F27	BAH	26.5 CT	1.6	2 1/2"	1 1/2	3.82
63 G 746	26F60	BAH	6.3 CT	1.2	2 1/2"	1 1/2	2.70
63 G 607	26F65	BAH	6.3 CT	1.2	2 1/		

# Thordarson, Sola, Dynaco Transformers



## THORDARSON TRANSISTOR TRANSFORMERS

Designed for input, bridging, interstage, output and power output applications. These transformers need not necessarily be used at their stated impedance—they may be used efficiently at any practical impedance, provided that the ratio of the windings is maintained. Leads are EIA color-coded. Type BAH has 1 1/2" mounting centers; 150MW types have mounting tabs on 1/2" centerline. \*Miniature type, 1/2"x1/2"x1/2". 2x3 3/4"x4x mounting tabs on 1/2" centerline. †1 1/2"x2 1/2"x1/2". ‡For parallel 3.2 and 8 ohm voice coils. Applications: A—input; B—bridging; D—driver; IS—interstage; O—output; P—power output.

Stock No.	Mfr's Type	Fig.	Impedance		Power	Application	Wt. Oz.	NET EACH	
			WindinZ 1	WindinZ 2					
63 G 228	TR-1	BAH	1.00:1	500 CT	300 mw	B, D, IS	2	3.65	
63 G 229	TR-2	150MW	1.23:1	5000 CT	7500 CT	150 mw	B, D, IS	2	3.65
63 G 230	TR-3	150MW	1.41:1	5000 CT	10000 CT	150 mw	D, IS	2	3.65
63 G 232	TR-4	150MW	1.81:1	490 CT	150 CT	150 mw	D, O	2	3.65
63 G 234	TR-7	150MW	2.24:1	10000	2000 CT	150 mw	D, IS	2	3.65
63 G 235	TR-8	BAH	2.45:1	48 CT	8 or 4	300 mw	O	2	3.65
63 G 237	TR-10	150MW	3.00:1	5000 CT	45000	150 mw	A, IS	2	3.65
63 G 239	TR-12	150MW	3.16:1	100 CT	10 CT	150 mw	D, O	2	3.65
63 G 240	TR-13	150MW	4.00:1	5000 CT	80000	150 mw	A, IS	2	3.65
63 G 241	TR-14	150MW	4.08:1	2000	1200	150 mw	A, IS	2	3.65
63 G 244	TR-17	150MW	5.00:1	20000	800 CT	150 mw	A, D, IS	2	3.65
63 G 246	TR-19	150MW	6.04:1	400 CT	11	150 mw	O	2	3.65
63 G 248	TR-21	BAH	6.33:1	160 CT	8 or 4	300 mw	O	2	3.65
63 G 249	TR-22	BAH	7.07:1	400 CT	8 or 4	300 mw	O	2	3.65
63 G 257	TR-23	150MW	7.07:1	10000	200 CT	150 mw	D, O	2	3.65
63 G 258	TR-24	BAH	8.17:1	10000	1500 CT	300 mw	A, IS	2	3.65
63 G 259	TR-25	150MW	10.0:1	15000	200 CT	150 mw	IS, O	2	3.65
63 G 260	TR-26	150MW	10.0:1	50000	500 CT	150 mw	A, D, O	2	3.65
63 G 261	TR-27	150MW	12.5:1	500 CT	3.2	150 mw	O	2	3.65
63 G 262	TR-28	BAH	14.1:1	200000	1000	300 mw	A	2	3.65
63 G 271	TR-36	BAH	50.0:1	500000	200 CT	300 mw	A	2	3.88
63 G 350	TR-37*	50MW	1.1:	500 CT	50 mw	B, D, IS	2	4.56	
63 G 351	TR-39*	50MW	1.24:1	4000	2600 CT	50 mw	D, IS	2	4.12
63 G 352	TR-40*	50MW	2.23:1	10000	2000 CT	50 mw	D, IS	2	4.00
63 G 353	TR-41*	50MW	3.16:1	500	50	50 mw	D, O	2	4.00
63 G 354	TR-42*	50MW	3.16:1	20000	2000 CT	50 mw	A, IS	2	4.06
63 G 355	TR-43*	50MW	3.53:1	125 CT	10	50 mw	O	2	4.23
63 G 356	TR-44*	50MW	4.07:1	2000	1200	50 mw	D, O	2	4.56
63 G 357	TR-45*	50MW	4.46:1	1000	50	50 mw	D, O	2	4.56
63 G 358	TR-46*	50MW	4.47:1	200 CT	10	50 mw	O	2	4.56
63 G 359	TR-47*	50MW	5.46:1	300 CT	10	50 mw	O	2	4.56
63 G 360	TR-48*	50MW	5.75:1	20000	600	50 mw	A, IS	2	4.56
63 G 361	TR-49*	50MW	7.06:1	500 CT	10	50 mw	O	2	4.00
63 G 362	TR-50*	50MW	7.9:1	200 CT	3.2	50 mw	O	2	4.06
63 G 363	TR-51*	50MW	9.65:1	300 CT	3.2	50 mw	O	2	4.56
63 G 364	TR-52*	50MW	11.8:1	7000	50	50 mw	D, O	2	4.56
63 G 372	TR-53*	50MW	12.5:1	500 CT	3.2	50 mw	O	2	4.56
63 G 373	TR-57†	BAH	32 CT	1.6/4	10 W	P	16	4.56	
63 G 374	TR-58†	BAH	32 CT	3.2/8/16	10 W	P	16	4.56	
63 G 375	TR-60†	BAH	48 CT	3.2/8/16	10 W	P	16	4.56	
63 G 814	TR-61**	BAH	48 CT	3.2/8/16	5 W	P	8	2.26	
63 G 376	TR-63†	BAH	100	100 CT	1/2 W	D	8	4.12	
63 G 377	TR-64†	BAH	100	100 CT	1/2 W	D	8	2.26	
63 G 378	TR-65†	BAH	100	200 CT	1/2 W	D	8	2.26	
63 G 379	TR-66†	BAH	500 CT	200 CT	1/2 W	D	8	2.35	

## THORDARSON HI-FI TRANSISTOR TRANSFORMER

**XAV** Type TR-67. Wide-range output transformer. Response = 1/2 db 20-20,000 cps. Imp. (ohms): Pri., 125CT; Sec., 8. Pri. MADC 50. Power, 1-5 watts. Mtg. ctrs., 1 1/2". 1 1/2"x1 1/2"x1 1/2". Wt., 1 lb. **5.88**  
63 G 380. NET.

## THORDARSON AUDIO INPUT TRANSFORMERS

All are electrostatically shielded except 20A10, 20A01 and 20A04. Types 20A00 and 20A04 have response of 250-3500 cps; 20A01 has response of 60-7500 cps and effective hum-bucking construction. Av. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Turns Ratio	Application	Size (HWD)	NET EACH
63 G 760	20A00	BAH	1:10	Line or mic to srl. or PP grids.	1 1/2"x2 1/2"x1 1/4"	3.53
63 G 761	20A01	FGV	1:20	Line or mic to srl. grid.	2 1/2"x2 1/2"x1 1/4"	4.59
63 G 764	20A04	BAH	1:80	Voice coil or mic to line.	1 1/2"x2 1/2"x1 1/4"	1.98
63 G 616	20A10	BAH	1:20	Line or mic to srl. grid.	2x3 1/2"x1 1/2"	4.24
63 G 610	20A11	BAH	1:20	Line or mic to srl. or PP grids.	2x3 1/2"x1 1/2"	3.53

## THORDARSON UNIVERSAL TV POWER TRANSFORMER

**AGF** Type 26 R00. Replacement unit for power transformers in over 2000 popular television sets. Multi-tapped 295-ma secondary. Primary: 117 volts, 50-60 cy. Tapped secondary: 840 v. center-tapped, 720 v. center-tapped, 600 v. center-tapped. Filament windings: One 5 v. @ 3 amps, one 5 v. @ 6 amps, and four 6.3-volt @ 3 amps. Dual electrostatic shielding. 3 1/2"x4 1/2"x4 1/2". Wt., 11 lbs. **22.05**  
63 G 820. NET.

## THORDARSON DUAL TONE CONTROL COMPONENTS

Type 20C74. Reactor. For tone compensating systems to boost or attenuate bass or treble. Use with R1068X listed below. Hum-bucking. Ind., 22 hys. DC res., 220 ohms. 2x1 1/2" dia. Wt., 12 oz. **8.53**  
63 G 734. NET.

Type R1068X. Dual Control. Use with reactor above. 1 1/2" dia. x 1 1/2". Shaft, 3/8" long. With hardware and diagram. Two required for complete bass treble system. Wt., 8 oz. **5.88**  
63 G 165. NET.

## THORDARSON UNIVERSAL LINE-TO-VOICE COIL

**BHH** 24S21, 24S22 and 24S23 not illustrated; others BHH. Secondary taps marked with impedance values. \*Also marked for 70 v. operation. †For 25 v. operation. ‡Autofomer. †Also has 39 ohm pri. tap.

Stock No.	Mfr's Type	Pri. Imp.	Sec. Imp.	Watts	Size (HWD)	Wt., Lbs.	NET EACH
63 G 791	22S80	500, 600		8	2 1/2"x3 1/2"x2 1/4"	1 1/2	4.54
63 G 792	22S82			25	2 1/2"x4 1/2"x2 1/4"	2 1/2	5.29
63 G 793	22S83	2000/1500/2000/1500	3.2, 15	15	2 1/2"x3 1/2"x2 1/4"	2 1/2	4.41
63 G 794	22S84	1000/500	8, 16	5	2x3 1/2"x1 1/2"	1	4.12
63 G 795	22S85			3	1 1/2"x2 1/2"x1 1/2"	3/4	4.41
63 G 744	24S66	2000, 1500, 1000, 500	3.2, 8	10	2x2 1/2"x1 1/2"	1	2.94
63 G 745	24S62*	3000, 2500, 2000, 1500, 1000, 500	.06, 48	10	3x3 3/4"x2 1/4"	2 1/2	5.76
63 G 166	24S21†	78, 156	4, 8	8	2x2 3/4"x1 1/4"	3/4	3.53
63 G 167	24S21†	312, 625	16	16	3x3 3/4"x2 1/4"	1 1/4	4.23
63 G 168	24S23†	62, 125, 250, 500	4, 8, 10	10	2 3/4"x2 1/2"x1 3/4"	1	3.70
63 G 169	24S24†	500, 1000, 2000	4, 8	5	1 1/2"x2 1/2"x1 1/4"	1/2	2.64

## THORDARSON CLASS "B" AND "AB" DRIVERS

High quality driver transformers designed to provide sufficient primary inductance and proper turns ratio for the most rigid requirements. For use in modulators or high-powered audio amplifiers. \*Indicates single plate to PP grids. Others can be used as single or PP plates to PP grids.

Stock No.	Mfr's Type	Fig.	Max. Ma DC	Pri. to % Sec	Size (HWD)	Wt., Lbs.	NET EACH
63 G 690	20D75*	BAH	5	2.4:1	1 1/2"x2 1/2"x1 1/2"	1	3.18
63 G 691	20D76*	BAH	15	2.5:1	1 1/2"x2 1/2"x1 1/2"	1	3.18
63 G 692	20D77*	FGV	30	5.2:1	2 1/2"x2 1/2"x2 1/4"	1	4.70
63 G 693	20D78	GGV	40	4.0:1	3 1/2"x2 1/2"x2 1/4"	3	7.35
63 G 694	20D79	FGV	30	5.2:1	2 1/2"x2 1/2"x1 1/2"	2	7.35
63 G 609	20I87	BAH	30	5.2:1	2x3 1/2"x2"	1 1/4	4.70

## THORDARSON AUDIO INTERSTAGE TRANSFORMERS

Primary, 8 ma. 20A25 has hum-bucking construction. 20A24 and 20A25 have split sec. winding. 20A29 is also for high impedance output mixing and can be connected as a driver with 2:1 ratio. Wt., 1 1/4 lbs.

Stock No.	Mfr's Type	Fig.	Ratio	Application	Size (HWD)	NET EACH
63 G 750	20A16	BAH	1:2	Sgl. plate to srl. or PP grids.	1 1/2"x2 1/2"x1 1/4"	2.79
63 G 751	20A17	BAH	1:2	Srl. plate to srl. or PP grids.	2 1/2"x1 1/2" Dia.	5.55
63 G 752	20A19	BAH	1:3	Plates to grids, srl. or PP.	1 1/2"x2 1/2"x1 1/4"	2.47
63 G 753	20A22	BAH	1:3	Srl. plate to srl. or PP grids.	2x3 1/2"x2 1/4"	3.09
63 G 754	20A23	FGV	1:3	Sgl. plate to srl. or PP grids.	2 1/2"x2 1/2"x2 1/4"	5.59
63 G 755	20A24	FGV	1:3	Plates to grids, srl. or PP.	2 1/2"x2 1/2"x2 1/4"	5.10
63 G 756	20A25	RTV	1:1, 4:1	Plates to grids, srl. or PP.	2 1/2"x1 1/2" Dia.	10.29
63 G 748	20A29	BAH	1:1, 1:1	Univ. car radio interstage.	1 1/2"x2 1/2"x1 1/2"	3.09
63 G 749	20A30	BGV	1:137	S.B. mike or low imp. line to grid (High Gain).	1 1/2"x1 1/2"x1 1/4"	3.09

## THORDARSON OSCILLOSCOPE TRANSFORMER

Type 22 R40. For use in oscilloscopes. CRT applications and test equipment. Primary, 117 volts, 60 cycles. Plate, 1800 volts AC at 2 ma. Rectifier filament, 2.5 volts at 1.8 amp. Filament 1, 6.3 volts at 0.6 amps; tapped at 2.5 volts, 2.1 amps. Overall size: 3 1/2"x3 3/4"x1 1/2". 4-hole mounting; mtg. centers, 2 1/2"x2 1/2". Shpg. wt., 5 1/2 lbs. **14.35**  
63 G 717. NET.

## SOLA TV VOLTAGE REGULATORS

Type 72104. Minimizes poor TV reception due to line variations. For any TV set with power consumption between 165 and 285 watts. Delivers 8 1/2% stabilized voltage. No wiring necessary. Turns on and off with set. 3 1/2"x4 1/2"x1 1/2". For 95-130 v., 60 cycle AC. Shpg. wt., 27 lbs. **37.50**  
62 GU 667. NET.

Type 72103. For 110 to 175-watt sets. Shpg. wt., 19 lbs. **34.50**  
62 G 631. NET.

## DYNACO SUPER-FIDELITY OUTPUT TRANSFORMERS

**A** Provide outstanding audio reproduction even at high power levels. Feature exclusive "para-coupled" windings—a special design that provides highly accurate balancing of coils and tight coupling between sections. Reserve of power handling capacity is provided for undistorted output. Balancing of output tubes is virtually eliminated. Sealed in steel cans. Have 12" color coded leads. A-440 has taps for either screen or cathode circuits; all others have screen taps on primary. 8 and 16 ohm output except 4-4, 8, 16 ohm; 14, 8, 16 ohm and 70 v.

Stock No.	Mfr's Type	Pri. Ohms	Watts		Size (HWD)	Wt., Lbs.	NET
			30-15,000 cps	20-20,000 cps			
61 G 981	A-410	8000	30	15	3 1/4"x3 1/2"	5	14.65
61 G 982	A-420	6600	60	30	4 1/4"x3 1/2"x3 1/4"	7	19.55
61 G 983	A-430	4300	120	60	5 1/4"x4 1/4"	14	29.35
61 G 984	A-431*	4300	120	60	5 1/4"x4 1/4"	14	34.25
61 G 985	A-431-70†	4300	120	60	5 1/4"x4 1/4"	14	39.15
61 G 986	A-440	4300	240	120	6 1/4"x4 1/2"	24	39.15
61 G 987	A-450	2200	240	120	6 1/4"x4 1/2"	23	39.15

# UTC Transformers



G-2



G-3, G-4



G-5  
G-7  
G-8  
G-9  
G-10  
G-11  
G-12

## CASE DIMENSIONS

Case	Height	Width	Depth	Shpg. Wt.
G-2	2 1/2"	1 1/2"	1 1/2"	1 1/2 lbs.
G-3	2 1/2"	1 3/4"	2 1/2"	2 lbs.
G-4	2 1/2"	4 1/4"	2 1/2"	3 lbs.
G-5	3 1/2"	3 1/4"	4 1/4"	4 1/2 lbs.
G-7	4 1/2"	4 1/4"	5 1/4"	8 lbs.
G-8	4 1/2"	5 1/4"	5 1/4"	12 lbs.
G-9	5 1/2"	5 1/4"	6 1/4"	21 lbs.
G-10	5 1/2"	6 1/4"	6 1/4"	24 lbs.
G-11	5 1/2"	6 1/4"	7 1/4"	31 lbs.
G-12	10 1/2"	7 1/4"	9 1/4"	52 lbs.

## POWER TRANSFORMERS—115 V., 50-60 CYCLES

All Fil. 2 windings are center tapped.

Stock No.	Type	Sec. VCT	Rec. Fil.	Fil. 1	Fil. 2	Case	NET
62 G 739	S-39	980/800 @ 175 ma	5V, 3A	2.5 VCT, 6A	6.3V, 4A	G-7	16.17
62 G 740	S-40	1050/850 @ 250 ma	5V, 3A	6.3 VCT, 3A	6.3V, 3A	G-7	17.64
62 G 741	S-41	1200 @ 200 ma	5V, 3A	7.5V tapped	6.3V, 2A	G-7	17.64
62 G 742	S-42	1200/1050 @ 300 ma	5V, 6A	6.3V, 3A	6.3V, 3A	G-8	19.11

## LINE-TO-SPEAKER TRANSFORMERS

Stock No.	Type	Watts	Primary	Sec.	Case	NET
62 G 769	S-12	15	500, 2000	2, 4, 8, 15	G-2	5.29
62 G 770	S-13	30	1400	15	G-4	7.64

## OUNCER AUDIO UNITS

Weigh only 1 ounce—for all compact applications. Response characteristics are: 1 db 30-20,000 cps, except 0-14, 0-15, and units carrying DC, which are for voice from 150 to 4,000 cps. Maximum operating level, 0 db. Sealed in aluminum housings. 7/8" dia., 1 1/4" high. Mount by two 2-56 screws on 1/4" centers opposite terminals. Shpg. wt., 4 oz.

Stock No.	Type	Primary Impedance	Sec. Imp.	NET
62 G 780	0-1	50, 200-250, 500-600	50,000	7.64
62 G 781	0-2	50, 200-250, 500-600	50,000 CT	7.64
62 G 782	0-3	7.5-30	50,000	7.35
62 G 783	0-4	15,000	60,000	6.47
62 G 784	0-5	15,000 DC in Pri.	60,000	6.47
62 G 785	0-6	15,000	95,000 CT	7.35
62 G 786	0-7	15,000 DC in Pri.	95,000 CT	7.35
62 G 787	0-8	15,000	50	7.64
62 G 788	0-9	15,000 DC in Pri.	200-250	7.64
62 G 789	0-10	30,000 plate to plate	500-600	8.23
62 G 790	0-12	50, 200-250	50,000	7.64
62 G 793	0-13	Audio choke: 300 hys. at 0 DC; 50 hys. at 3 ma DC, 6000 ohms.		6.17
62 G 791	0-14	200	1/2 megohm	7.35
62 G 792	0-15	15,000	1 megohm	7.35
62 G 794	0-16	250 CT	50,000	10.00
62 G 493	0-18	10,000/2500	2000/500	8.23
62 G 494	0-19	10,000/2500	4000/1000	8.23
62 G 495	0-20	1500 CT	500/125	8.23
62 G 496	0-21	2000 CT; 4000 CT	8; 16	7.64
62 G 492	0-17	Mumetal Shield; fits any Ouncer unit		1.47

## SUB AND SUB-OUNCER TRANSFORMERS

For miniature equipment. Frequency response, +3 db 200-5000 cps. Sub-ouncer size, 3/8" x 3/8" x 1/2". Wt., 1/2 oz. Sub-sub-ouncer, 1/4" x 1/4" x 1/4". Wt., 1/4 oz. Fixed imp. ratio; 10:1, 120:1, 25:1, \*50:1, 11250:1. \*SO-5, 2675 ohms DC resistance; SSO-5, 4400 ohms. Shpg. wt., 2 oz.

## SUB-OUNCER TRANSFORMERS

Stock No.	Type	Use	Pri. Imp.	Pri. DC	Sec. Imp.	NET
62 G 210	†SO-1	Input	200, 50	0	250K, 62.5K	2.94
62 G 211	SO-2	Audio 1:3	10,000	0-2.5 ma	90K	2.94
62 G 238	*SO-3	Pl. to line	10K, 25K	3, 1.5 ma	200, 500	2.94
62 G 213	SO-4	Output	30,000	1 ma	50	2.94
62 G 214	SO-5	Reactor	50 hys @ 100,000	1 ma DC	60	2.94
62 G 215	SO-6	Output	100,000	5 ma	60	3.82
62 G 216	SO-7	Transistor Interstage	20K, 30K	5 ma	800, 1200	2.94
62 G 217	SO-8	Transistor to PP sec.	10K	1 ma	2000 CT	3.53
62 G 218	SO-9	PP Tran-	500 CT	0	3.2	3.53
62 G 497	SO-10	sistor to VC	2K CT	4	8	3.53
		Transistor to VC	4K CT	2	16	3.53

## SUB-SOUNCER TRANSFORMERS

Stock No.	Type	Use	Pri. Imp.	Pri. DC	Sec. Imp.	NET
62 G 236	†SSO-1	Input	200, 50	0	250K, 62.5K	4.41
62 G 237	SSO-2	Interstage 1:3	10,000	0-1.5 ma	90K	4.70
62 G 238	*SSO-3	Pl. to line	10K, 25K	3, 1.5 ma	200, 200	3.82
62 G 239	SSO-4	Output	30,000	1 ma	50	3.82
62 G 240	SSO-5	Reactor	50 hys @ 100,000	1 ma DC	60	3.82
62 G 241	SSO-6	Output	200K, 30K	5 ma	800, 1200	2.94
62 G 235	†SSO-7	Transistor	20K, 30K	5 ma	800, 1200	2.94
62 G 229	SSO-8	Transistor to PP sec.	10K	1	2000 CT	3.82
62 G 234	SSO-9	Transistor to VC	10K	2	16	2.94
62 G 246	SSO-10	to VC	10K	2	3.2	2.94
62 G 247	†SSO-11	Transistor Output	500	3.5	50	2.94
62 G 248	†SSO-12	Transistor Output	600	3.5	60	2.94
		Transistor Output	1000	3	50	2.94
		Output	1200	3	60	2.94
62 G 249	SSO-13	Crystal to Transistor	200K	0	1000	4.41
62 G 498	†SSO-14	Transistor Interstage	10K CT	2	200 CT	4.70
		Interstage	25K CT	1	500 CT	4.70
62 G 499	†SSO-15	Interstage	30K CT	1	800 CT	4.70
		Interstage	30K CT	1	1200 CT	4.70

## UNIVERSAL DRIVERS

Stock No.	Mfr's Type	Application	Case	NET EACH
62 G 761	S-8	Single driver plate to PP grids	G-3	6.47
62 G 762	S-9	PP pl. to grids of class B tubes	G-4	8.23
62 G 763	S-10	12AU7 or similar tubes to 5881 or 6L6's, self or fixed bias.	G-3	6.47

## UNIVERSAL OUTPUTS—TO LINE AND VOICE COIL

Secondary Impedances: 500, 15, 8, 2 ohms.

Stock No.	Mfr's Type	Primary Impedance	Watts	Case Type	NET EACH
62 G 764	S-14	2500, 4000, 7000, 10,000	10	G-2	6.47
62 G 765	S-15	PP tubes: 4000, 5000, 10,000	12	G-2	7.06
62 G 766	S-16	PP 3000, 6000, 9000-10,000	30	G-4	8.23

## FILTER, SWINGING AND AUDIO CHOKES

Stock No.	Mfr's Type	Swing	Ma	Ohms	Insul.	Case Type	NET EACH
62 G 776	S-23	300	5	5000	1500 V.	G-2	4.41
62 G 725	S-24	500 CT	3	6000	1500 V.	G-2	5.00
62 G 726	S-25	30	30	800	1500 V.	G-2	3.82
62 G 727	S-26	12	60	250	1500 V.	G-2	3.82
62 G 728	S-27	25	75	350	1500 V.	G-4	5.00
62 G 729	S-28	20	100	350	1500 V.	G-4	5.88
62 G 730	S-29	6	175	90	1500 V.	G-4	5.00
62 G 731	S-30	4/20	175	90	1500 V.	G-4	5.00
62 G 732	S-31	6	225	100	2700 V.	G-5	6.76
62 G 733	S-32	4/20	225	100	2700 V.	G-5	6.76
62 G 751	S-33	8	300	100	4000 V.	G-7	9.11
62 G 734	S-34	4/20	300	100	4000 V.	G-7	9.41
62 G 735	S-35	8	400	60	5000 V.	G-8	11.76
62 G 736	S-36	4/20	400	60	5000 V.	G-8	11.76
62 G 737	S-37	8	550	60	6000 V.	G-8	14.70
62 G 738	S-38	4/20	550	60	6000 V.	G-8	14.70

## PLATE TRANSFORMERS—115 V., 50-60 CYCLES

Stock No.	Type	Sec. VCT	DC Ma	Case	NET
62 GU 744	S-44	1150/1050	500	G-9	23.52
62 GU 745	S-45	1800/1500	200	G-8	20.58
62 GU 746	S-46	2000/1500	300	G-9	23.52
62 GU 748	S-47	3000/2500/2000	300	G-10	32.34
62 GU 749	S-48	3000/2500/2000	500	G-11	38.22
62 GU 750	S-49	4200/3600/3000	300	G-11	35.28
62 GU 700	S-50	6000/5000	500	G-12	58.80

## UNIVERSAL MODULATION TRANSFORMERS

Stock No.	Type	Audio Power	Case	NET
62 G 771	S-18	12 watts	G-3	7.06
62 G 772	S-19	30 watts	G-4	9.11
62 G 773	S-20	55 watts	G-5	14.70
62 G 775	S-22	250 watts	G-9	32.34

## SINGLE-SECONDARY FILAMENT TRANSFORMERS

All primaries tapped at 105, 115 volts, 50-60 cycles. \*Tapped sec.

Stock No.	Type	Secondary (CT)	Ins. V.	Case	NET
62 G 703	S-53	2.5V @ 10A	1500	G-3	5.88
62 G 704	S-54	5V @ 10A	2500	G-3	5.59
62 G 705	S-55	6.3V @ 3A	1500	G-3	5.29
62 G 707	S-57	2.5V @ 10A	10000	G-5	8.82
62 G 708	S-58	2.5V @ 20A	10000	G-5	9.41
62 G 709	S-59	5V @ 13A	5000	G-5	8.82
62 G 710	S-60	5V @ 22A	10000	G-7	12.94
62 G 711	S-61*	7.5, 6.3V @ 10A	3000	G-5	10.00
62 G 712	S-62	10V @ 10A	3000	G-5	9.11
62 G 713	S-63*	14, 12, 11V @ 10A	5000	G-7	12.94

## MULTIPLE-SECONDARY FILAMENT TRANSFORMERS

Primary tapped 105, 115 volts, 50-60 cycles. Insulation, 3000 v., except S-71, 10,000 v. and S-72, 5000 v. All in G-5 case except \*G-7 case.

Stock No.	Mfr's Type	Fil. 1 CT	Fil. 2 CT	Fil. 3 CT	NET EACH
62 G 717	S-67	5V @ 6A	6.3V @ 5A		9.70
62 G 720	SS-70	6.3V @ 5A	6.3V @ 5A		10.00
62 G 721	S-71*	2.5V @ 6A	2.5V @ 6A	2.5V @ 12A	14.70
62 G 722	S-72	5V @ 6A	5V @ 6A	5V @ 6A	10.59

## VARIMATCH MODULATION UNITS

Match any modulator tubes to any RF load. Designed to provide full undistorted output. Vacuum impregnated and sealed against moisture. Primary imp., from 500 to 20,000 ohms; secondary imp., from 30,000 to 300 ohms. Maximum audio ratings, CVM-0 12 w., CVM-1 30 w., CVM-2 60 w. \*Maximum watts. Shpg. wt.: CVM-0, 3 1/2 lbs.; CVM-1, 6 1/2 lbs.; CVM-2, 11 lbs.

Stock No.	Type	Class C Input*	Size	NET
63 G 069	CVM-0	25	3 x 3 1/2"	10.29
63 G 070	CVM-1	60	3 1/2 x 4 1/2"	13.52
63 G 071	CVM-2	125	4 1/2 x 5 1/2"	17.64

# UTC, Superior, Standard Transformers

## UTC TRANSFORMERS

### A ULTRA-COMPACT HIGH-FIDELITY AUDIOS

Max. level, +15 dbm, except +30. \*Multiple shield. Response, A-10, A-12, = 2 db, 20-20,000 cps; A-11, = 2 db, 50-20,000 cps; A-16, A-18, A-19, A-25 = 2 db, +0-20,000 cps; A-20, = 2 db, 10-50,000 cps; A-24, A-26, = 2 db, 20-40,000 cps; A-21, = 2 db, 30-30,000 cps; A-15, A-22, A-23, 2 db, 40-10,000 cps. 2x1 1/2 x 1 1/2" case. Av. wt., 1 1/2 lbs.

Stock No.	Mfr's Type	Pri. Imp., Ohms	Sec. Imp., Ohms	NET EACH
62 G 820	A-10	50, 125-150, 200-250, 333, 500-600	50K	12.94
62 G 821	A-11*	50, 200, 500	50K P.P.	11.76
62 G 822	A-12	Same as A-10	80K 2 sect.	11.76
62 G 864	A-15†	10K-2.5K	500-2K	9.70
62 G 824	A-16	15K	60K 2:1	9.70
62 G 825	A-18	15K (Split)	80K P.P. 2:3:1	11.76
62 G 826	A-19	15K—8 ma DC	80K P.P. 2:3:1	11.76
62 G 827	A-20	Same as A-10	Same as Pri.	14.11
62 G 828	A-21*	50, 200-250, 500-600	Same as Pri.	11.76
62 G 868	A-22†	500	125-500, split	9.70
62 G 873	A-23†	500	4-16, split	9.70
62 G 777	A-24	15K	As A-10 pri.	12.64
62 G 778	A-25	15K—8 ma DC	As A-10 pri.	11.76
62 G 779	A-26	30K P. to P.	As A-10 pri.	12.94
62 G 874	A-33	Mumetal shield; for any of above		2.65

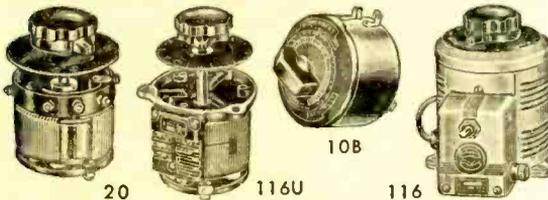
### "DO-TS" TRANSISTOR TRANSFORMERS

DeCl-Uencer miniature transistor transformers feature low distortion, excellent response. Moisture-proof case. Ideal for printed circuits. 1/2" x 1/2" long. Shpg. wt., 1 oz.



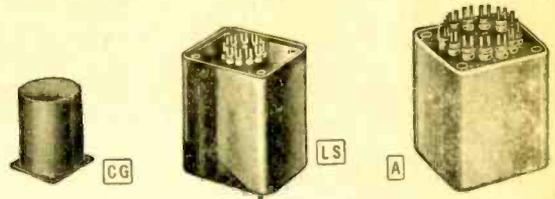
Stock No.	Mfr's Type	Application	Primary Ohms	Secondary Ohms	NET EACH
62 G 686	DO-T1	Interstage	20K-30K	800-1200	5.88
62 G 687	DO-T2	Output	500-600	50-60	5.29
62 G 688	DO-T3	Output	1K-1.2K	50-60	5.29
62 G 689	DO-T4	Output	600	3:2	5.29
62 G 690	DO-T5	Output	1.2K	3:2	5.29
62 G 691	DO-T6	Output	10K	3:2	5.88
62 G 692	DO-T7	Input	200K	1K	6.47
62 G 693	DO-T8	Reactor	3.5 hys. @ 2 ma DC		4.70
62 G 694	DO-T9	Out. Driv.	10K-12.5K	500-600	6.47
62 G 695	DO-T10	Driver	10K-12.5K	1.2K-1.5K	6.47
62 G 696	DO-T11	Driver	10K-12K	2K-2.5K	6.47
62 G 697	DO-T12	S/PP Output	150-200	12-16	6.59
62 G 698	S/PP Output	300-400	12-16	6.59	
62 G 699	DO-T13	S/PP Output	600-800	12-16	5.88
62 G 699	DO-T14	S/PP Output	800-1070	12-16	5.88
62 G 877	DO-T16	S/PP Output	1K-1.33K	12-16	5.88
62 G 878	DO-T17	S/PP Output	1.5K-2K	12-16	5.88
63 G 087	DO-T18	S/PP Output	7.5K-10K	12-16	6.17
63 G 088	DO-T19	Output	300	600	5.88
63 G 089	DO-T20	Output	500	600	5.88
63 G 090	DO-T21	Output	900	600	5.88
63 G 091	DO-T22	Output	1.5K	600	5.88
63 G 092	DO-T23	Interstage	20K-30K	800-1.2K	6.76
63 G 093	DO-T24	Input	200K	1K	7.35
63 G 094	DO-T25	Interstage	10K-12K	1.5K-1.8K	7.06
63 G 095	DO-T26	Reactor 6 hys @ 2 ma DC			5.59
63 G 096	DO-T27	Reactor 1.25 hys @ 2 ma DC			4.70
63 G 097	DO-T28	Shield, for any of above			5.88

### SUPERIOR VARIABLE VOLTAGE CONTROLS



Powerstat variable autotransformers of toroidal core design with a movable brush tap which rotates to deliver a continuously adjustable output voltage from AC power lines. Quality voltage controls that feature excellent regulation, high efficiency, conservative ratings, zero waveform distortion, rugged mechanical construction, smooth control, standard mountings. Deliver adjustable output voltage from AC line—output variable from zero to above input line voltage. Negligible voltage change from no load to full load. Maximum current ratings apply over full range of output voltage. Types 10B, 20, and 116U are supplied with an "L" terminal which allows connecting in the field to limit output voltage to applied voltage. Mountings: 10B, 20, 116U—panel; 116, 136—general utility. Rated for 50° C. temperature rise under full load. All for 110-120 v. AC inputs. Frequency range is 50-60 cycles, except 60 cycles only. Sizes shown on types 10B, 20, and 116U are distance back of panel and diameter; for types 116 and 136, sizes are overall height and diameter. Type 116 has on-off switch, line cord and plug, fuse and output receptacle. †Not illustrated; for bench or wall mounting, terminals for input and output.

Stock No.	Mfr's Type	OUTPUT			Size	Wt., Lbs.	NET EACH
		Volts	Amps	KVA			
62 G 536	10B‡	0-132	1.75	0.165	2 1/4" x 2 1/4"	2 1/4	8.50
62 G 531	20‡	0-140	3.0	0.42	3 1/4" x 3 1/4"	6	12.50
62 G 525	116	0-140	7.5	1.0	6 1/2" x 4 3/4"	12	24.00
62 G 524	116U	0-140	7.5	1.0	4 3/4" x 4 3/4"	11	18.00
62 GU 543	136†	0-140	20.0	2.8	6 1/2" x 7 3/4"	25	50.00



### LS LINEAR STANDARD OUTPUT TRANSFORMERS

Broadcast quality transformers with Hiperm-Alloy cores. Interleaved windings minimize leakage reactance and distributed capacity. High-conductivity shell and balanced windings assure minimum hum pick-up. Units housed in rugged die-cast cases of precise dimension with reversible mounting to permit above chassis or subchassis wiring. The solid termination posts on low absorption bakelite are arranged in a circular layout minimum posts on low absorption bakelite will clear all terminals. = 1 db, 7-50,000 cps. LS-35 and LS-65 are hi-fi types; LS-35; for class AB feedback; 43% screen tap; LS-65; for class AB' feedback; 40% screen tap. 4 1/2" x 3 1/2" x 4 1/2" case, 8 lbs.; except \*in 4 1/2" x 5 1/2" case, 15 lbs.

Stock No.	Mfr's Type	Pri. Imp., Ohms	Sec. Imp., Ohms	Watts	NET EACH
62 G 845	LS-52	8000	1.2, 2.5, 5	20	20.58
62 G 847	LS-55	5000, 3000	7.5, 10, 15	20	23.52
62 G 850	LS-61	10,000, 6000	120, 30, 50	20	23.52
62 G 851	LS-61.1	9000	125, 200	30	35.28
62 G 846	LS-54	8000	1.2, 2.5, 5	20	17.64
62 G 848	LS-57	5000, 3000	7.5, 10, 15	20	17.64
62 G 855	LS-63	10,000, 6000	20, 30	20	17.64
62 G 871	LS-35*	5000	4, 8, 16	35	23.52
62 G 872	LS-65*	3500	4, 8, 16	60	41.16

### CG SWINGING INPUT CHOKO

Type CG-105. Improves voltage regulation in DC power supplies. Inductance increases as load decreases—varies from 5 henrys at 350 ma DC maximum rating to 25 henrys at 35 ma. Has DC resistance of 90 ohms. 5000 v. test. Ratings are conservative for continuous duty. Height, 5 1/2". Cutout dia., 4". Shpg. wt., 15 1/2 lbs.

62 G 227. NET. 14.70

### DI-T TRANSFORMERS

Weight 0.05 oz.; 1/4" dia. by 1/2" long. Hermetically sealed; meet MIL-T-27A. For printed circuit—solder melting plastic covered leads. Leads withstand 101b. pull. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Application	Primary Ohms	Secondary Ohms	NET EACH
63 G 106	DI-T2	Output	500-600	50-60	5.29
63 G 107	DI-T3	Output	1K-1.2K	50-60	5.29
63 G 108	DI-T8	Reactor	2.5 hys. @ 2 ma DC		4.70
63 G 109	DI-T9	Out. Driv.	10K-12.5K	500-600	6.47
63 G 110	DI-T10	Driver	10K-12.5K	1.2K-1.5K	6.47
63 G 111	DI-T11	Driver	10K-12K	2K-2.5K	6.47
63 G 112	DI-T19	Output	300	600	5.88
63 G 113	DI-T20	Output	500	600	5.88
63 G 114	DI-T22	Output	1.5K	600	5.88
63 G 137	DI-T23	Interstage	20K-30K	800-1.2K	6.76

### STANDARD ADJUST-A-VOLT AUTOFORMERS

Type 100BU. Provides variable output voltage with high conversion efficiency. Single-layer winding on toroidal core. Output is variable from 0-132 volts. Mounts on panels up to 1/2" thick. Max. output current: 1.25 amps; max. load rating: 165 VA. 2 1/2" x 2 1/2" dia. For 120 v., 50-60 cycle AC. 2 lbs. 62 G 583. NET. 8.50



Type 300BU. Similar to above. Output variable from 0-135 volts. Mounts on panels up to 1/2" thick. Up to 3.0 amps. 400 VA. Size, 3 1/4" x 3 1/4" dia. For 115 v., 50-60 cycle AC. Shpg. wt., 6 lbs. 62 G 580. NET. 12.50

### ACROSOUND HI-FI OUTPUT TRANSFORMERS

High-fidelity output transformer for Ultra-Linear Acrosound and Williamson-type amplifier circuits. Frequency response = 1 db, 10-100,000 cps. Permissible feedback 30 db. 4-8-16 secondary impedance except \*also with 125 and 500 ohms. 10" color-coded leads brought out through case bottom. Seamless steel case in gray finish with base flange; 3/4" with four #8 mounting lugs; fence not illustrated.

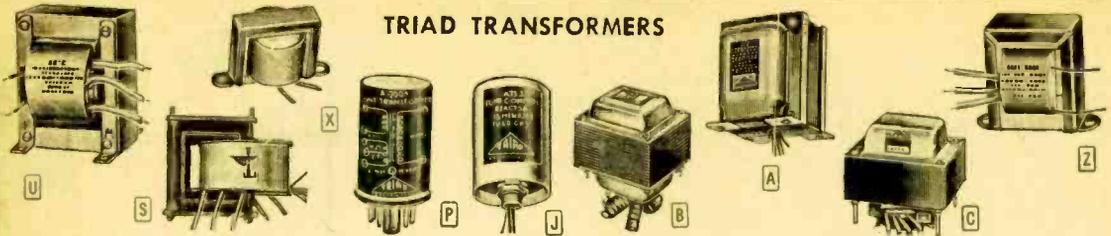
Stock No.	Mfr's Type	Pri. Ohms	Watts	Size	Lbs.	NET
63 G 993	TO-300	6600	40	4 1/4" x 3 3/4" x 3 3/4"	7	24.75
63 G 995	TO-305*	6600	40	4 1/4" x 3 3/4" x 3 3/4"	8	30.75
63 G 994	TO-310	8000	20	4 1/4" x 3 3/4" x 3 3/4"	6	18.75
63 G 996	TO-315*	8000	20	4 1/4" x 3 3/4" x 3 3/4"	7	24.75
63 G 990	TO-320	3500	20	4 1/4" x 3 3/4" x 3 3/4"	6	18.75
63 G 997	TO-320 1/2	3000	100	5 1/4" x 4 3/4" x 3 3/4"	14	39.75
63 G 991	TO-340 1/2	5000	100	4 1/4" x 5 3/4" x 3 3/4"	14	39.75

### TP-520 POWER TRANSFORMER

For high-fidelity amplifiers using 6Y6's, 6V6's, EL-84's. Delivers 285-0-285 v. at 175 ma., 5 v. at 2 amps, and 6.3 v. at 5 amps. Gray case, 4 x 3 1/4 x 3 1/4". 10" wire leads. For 110-120 v., 50-60 cycle AC. 6 lbs. 63 G 992. NET. 9.75

# Triad Transformers - CTC Coils

## TRIAD TRANSFORMERS



### FILAMENT TRANSFORMERS

For operation from 115 v., 60 cycle A.C.

Stock No.	Type	Fig.	Sec. V.	Sec. Amp.	Ins. V.	Size (HWD)	Lbs.	NET
61 G 931	F-1X	X	2.5CT	3	1500	1 1/8x2 1/8x1 1/8"	3/4	2.08
61 G 932	F-3X	X	2.5CT	10	3000	2 1/4x3 1/8x2 1/8"	1 1/4	3.17
61 G 933	F-5U	X	2.5CT	10	7500	3 1/2x2 1/8x2"	2	4.61
61 G 934	F-6X	X	2.5CT	6	2500	1 1/8x3/8x2"	2	1.94
61 G 935	F-7X	X	5CT	3	1500	1 1/8x3/8x2"	1 1/4	3.28
61 G 936	F-8X	X	5CT	6	1500	2 1/4x3 1/8x2 1/8"	1 1/4	3.81
64 G 953	F-13X	X	6.3	.6	1500	1 1/8x2 1/8x1 1/8"	1 1/4	1.95
64 G 954	F-14X	X	6.3CT	1.2	1500	1 1/8x2 1/8x1 1/8"	3/4	2.13
64 G 955	F-16X	X	6.3CT	3	1500	1 1/8x3/8x2"	1 1/4	3.06
64 G 956	F-18A	A	6.3CT	6	1500	3 1/8x2 1/8x2 1/8"	2 1/2	5.41
64 G 957	F-21A	A	6.3CT	10	1500	3 1/8x3/8x2"	3 1/2	6.69
64 G 958	F-22A	A	6.3CT	20	2000	4 3/8x2 1/8"	7	9.50
64 G 959	F-25X	X	12.6CT	1.5	1500	1 1/8x3/8x2"	1 1/4	3.38
61 G 937	F-26X	X	12.6CT	2.5	1500	2 1/8x3 1/8x2 1/8"	2 1/4	3.81
64 G 974	F-40X	X	24CT	1	1500	1 1/8x3/8x2"	1 1/4	3.26
61 G 938	F-41X	X	25.2CT	2.2	1500	2 1/8x4 1/8x2 1/8"	2 1/4	4.61
64 G 935	F-23U	U	10CT	7	1500	3 1/2x2 1/8x3 3/8"	4	6.59

### HIGH-LEVEL OUTPUT TRANSFORMERS

= 3 db, 20-20,000 cps. Secondaries 4, 8, 16 ohms \*except 8, 16, 32.

No.	Type	Fig.	Pri. Imp.	Watts	Size	Lbs.	NET
61 G 939	S-34X*	X	4000CT	7.5	2 1/2x3 1/8x2 1/8"	1 1/4	4.75
61 G 833	S-31A	A	8000CT	15	3 1/8x2 1/8x3 1/8"	3/4	8.24
61 G 940	S-142A	A	8000CT	15	3 1/8x2 1/8x3 1/8"	3/4	12.32
64 G 834	S-35A	A	8000CT	20	3 1/8x2 1/8x3 1/8"	4	8.93
61 G 941	S-38A	A	9000CT	25	3 1/8x3 1/8x4"	5 1/2	11.52
61 G 942	S-146A	A	6600CT	25	3 1/8x3 1/8x4"	5 1/2	17.30
61 G 943	S-152A	A	4000CT	65	4 1/8x3 1/8x4 1/8"	9	25.21

### TRANSISTOR POWER TRANSFORMERS

\*Rectifier output. Primaries for 12 v. DC systems. Av. shpg. wt., 8 oz.

Stock No.	Type	Fig.	*DCV	Ma.	Size	NET
61 G 944	TY-68S	S	250	65	1 1/2x1 1/2x1 1/2"	6.40
61 G 945	TY-69S	S	300	100	1 1/2x2x1 1/2"	8.40
61 G 946	TY-70S	S	325	150	2x2x2 1/2"	8.96
61 G 947	TY-71S	S	375	200	2x2x2 1/2"	10.40
61 G 948	TY-74S	S	600	200	2x4x3"	12.00

### MODULATION TRANSFORMERS

Stock No.	Type	Fir.	Primary	Secondary	Watts	Size	Lbs.	NET
61 G 949	TY-66A	A	6 CT (5A)	3K, 4K, 6K	40	3 1/8x3 1/8x3 1/8"	4 1/2	8.35
61 G 950	TY-67A	A	6 CT (5A)	16, 8, 4	4	3 1/8x3 1/8x3 1/8"	4 1/2	8.18
64 G 938	M-1X	X	10,000 CT	5K, 8K, 10K	50	1 1/2x2 1/8x1 1/8"	4	2.59
64 G 939	M-3X	X	10,000 CT	3K, 5K, 8K	20	2 1/8x2 1/8x2 1/8"	1 1/2	4.29
61 G 952	M-4Z	Z	5,000 (Autof'l)	6.75K, 4	10	1 1/8x2 1/8x1 1/8"	1 1/4	2.88
61 G 953	M-5Z	Z	5,000 (Autof'l)	6.75K, 4	20	2 1/8x2 1/8x2 1/8"	1 1/2	3.82

### PLUG-IN TRANSFORMERS

Stock No.	Type	Pri. Imp.	Sec. Imp.	Shldg.	Size	Lbs.	NET
61 G 954	A-20P	200/50 CT	36,000	70 db	2 1/8x1 1/2"	3/4	13.82
61 G 955	A-20P	200/50 CT	36,000	90 db	2 1/8x1 1/2"	3/4	17.91
61 G 956	HS-273P	200/50 CT	80,000	70 db	1 1/8x1 1/2"	1/2	15.83

### CTC COILS AND COIL FORMS

For broadband RF amplifiers, TV traps, HF circuits, etc. \*Bodies are HF paper base phenolic; †Ceramic body. 2770 and 2271 are horizontal mount, all others are vertical mount. Coils and forms are assembled, except †unassembled. All parts and hardware non-ferrous and electro-plated. Av. shpg. wt., 4 oz.

#### COILS

Stock No.	Type	Mc.	Lx Dia.	NET
72 H 283	LSM*	1	1 1/8x3/8"	1.02
72 H 419	LSM*	3	1 1/8x3/8"	.99
72 H 284	LSM*	5	1 1/8x3/8"	.96
72 H 293	LSM*	10	1 1/8x3/8"	.93
72 H 286	LSM*	30	1 1/8x3/8"	.85
72 H 287	LSM*	60	1 1/8x3/8"	.80
72 H 295	LS3*	1	1 1/8x3/8"	1.02
72 H 420	LS3*	3	1 1/8x3/8"	.99
72 H 296	LS3*	5	1 1/8x3/8"	.96
72 H 297	LS3*	10	1 1/8x3/8"	.93
72 H 298	LS3*	30	1 1/8x3/8"	.90
72 H 299	LS3*	60	1 1/8x3/8"	.85
72 H 421	2060-1†	20-50	1 1/8x3/8"	.93
72 H 422	2060-2†	20-50	1 1/8x3/8"	.93
72 H 423	2060-3†	1-20	1 1/8x3/8"	1.02
72 H 424	2060-4†	1-20	1 1/8x3/8"	1.02
72 H 438	2060-5†	0.7-1.5	1 1/8x3/8"	1.08
72 H 439	2060-6†	0.7-1.5	1 1/8x3/8"	1.24
72 H 440	2060-7†	0.2-1.5	1 1/8x3/8"	1.17
72 H 441	2060-8†	0.2-1.5	1 1/8x3/8"	1.33
72 H 442	2060-9†	0.2-1.5	1 1/8x3/8"	1.39
72 H 443	2060-10†	0.2-1.5	1 1/8x3/8"	1.44

#### COIL FORMS FOR 1-20 MC

Stock No.	Type	Lx Dia.	NET
72 H 446	PLS5-2C4L/B†	1 1/8x3/8"	.76
72 H 448	PLS6-2C4L/E†	2 1/8x3/8"	.71
72 H 457	PLS7-2C4L/H†	1 1/8x3/8"	.88
72 H 459	SPC-1A-4L*	1 1/8x3/8"	.21
72 H 460	SPC-2B-4L*	3/8x3/8"	.21
72 H 461	SPC-11A-4L†	3/8x3/8"	.26
72 H 462	SPC-12A-4L†	3/8x3/8"	.26
72 H 463	2270-2†	1 1/8x3/8"	.68
72 H 464	2271-2†	1 1/8x3/8"	.68
72 H 282	LSM/E*	2 1/8x3/8"	.52
72 H 294	LS3/B*	1 1/8x3/8"	.52
72 H 288	LS4/K*	2x1/2"	.65
72 H 289	PLS5/B†	1 1/8x3/8"	.61
72 H 292	PLS6/E†	2 1/8x3/8"	.56

#### COIL FORMS FOR 20-50 MC

Stock No.	Type	Lx Dia.	NET
72 H 444	PLST-2C4L/N†	1 1/8x3/8"	.63
72 H 445	PLST-2C4L/P†	1 1/8x3/8"	.63
72 H 447	PLS5-2C4L/N†	1 1/8x3/8"	.76
72 H 449	PLS6-2C4L/O†	2 1/8x3/8"	.71
72 H 458	PLS7-2C4L/Q†	1 1/8x3/8"	.88

### POWER TRANSFORMERS

Last letter in Type indicates case style. \*CT, For 115 v., 60 cycle A.C.

Stock No.	Mfr's Type	Plate		Filaments		Mkr. Ctrs.	Wt. Lbs.	NET EACH	
		Volts	Ma	Volts	Amps				
61 G 901	R-2C	135	15	6.3	.9	1 1/4"	1	3.68	
64 G 936	R-3A	500*	20	6.3*	2	1 1/4x1 1/4"	1 1/4	4.75	
64 G 976	R-4A	500*	40	6.3*	2	1 1/4x1 1/4"	1 1/4	4.75	
64 G 977	R-5A	600*	65	6.3*	2.7	2x1 1/4"	2 1/2	5.50	
61 G 900	R-6A	480*	50	5	2	2x1 1/4"	2 1/2	5.50	
64 G 978	R-7A	600*	50	5	2	2x1 1/4"	2 1/2	5.90	
61 G 902	R-8A	500*	75	5	2	2x1 1/4"	3	6.34	
64 G 979	R-9A	600*	75	5	2	2x1 1/4"	3 1/2	6.85	
61 G 903	R-10A	525*	90	5	2	2x1 1/4"	4 1/2	7.60	
64 G 986	R-11A	700*	90	5	2	2x1 1/4"	4 1/2	7.74	
61 G 904	R-12A	550*	110	5	2	2x1 1/4"	4 1/2	7.63	
64 G 987	R-14A	700*	125	5	2	2x1 1/4"	6	8.90	
61 G 905	R-16A	700*	160	5	3	2x1 1/4"	7 1/2	10.19	
61 G 906	R-18A	750*	175	5	3	2x1 1/4"	8 1/2	11.81	
61 G 907	R-20A	700*	200	5	3	2x1 1/4"	9 1/2	11.74	
61 G 908	R-21A	800*	200	5	3	2x1 1/4"	8 1/2	12.82	
61 G 909	R-29A	230*	40	6.3	1.5	1 1/4x1 1/4"	1 1/2	4.75	
61 G 910	R-30X	135	50	6.3	1.5	1 1/4x1 1/4"	1 1/2	3.86	
61 G 911	R-54X	15	15	6.3	2/4	3 1/4"	1	3.34	
61 G 912	R-71A	900*	250	5*	4	6.3*/6.3	2	15.54	
61 G 913	R-72A	800*	150	5	3	6.3	4	10.80	
61 G 914	R-73B	135	200	6.3	5.5	2 1/4x2 1/4"	5 1/2	7.20	
61 G 915	R-56A	130	20	0/15	5	22.5/30	6/6	5.82	
61 G 916	R-68A	800*	30	5	2	6.3/6.3	1.2/1.2	3.78	
61 G 917	R-41C	880*	125	5	3	6.3	.6	15.65	
61 G 918	R-43C	1250	5	2.5/2.5	1.75/1.75	6.3/6.3	1/3	2 1/2"	3 1/2
61 G 919	R-45C	800*	30	5/5	1/3	6.3/6.3	1/3	9.47	
		800*	5	5/5	2/2	6.3/6.3	1/6	12.45	

### DRIVER, INTERSTAGE, AND INPUT TRANSFORMERS

300-3000 cps except \*30-15,000; †70-7000; ‡50-10,000. †Spade-lug mtg. Last letter in Type is case. #Ohms, except as indicated.

Stock No.	Mfr's Type	Application	#Primary	Turns Ratio	Mtg. Ctrs.	Wt. Lbs.	NET EACH
64 G 989	A-1X	line/SB mike to grid	100	31:4:1	1 1/4"	1/4	1.90
61 G 925	A-3X	line/DB mike to grid	400 CT	15:8:1	1 1/4"	3/4	2.08
61 G 926	A-4X	line to grid	500/200/67.5 CT	12:1	1 1/4"	3/4	2.16
61 G 927	A-5X	SB mike-p.p. grids	100	84:1	2 1/4"	1/2	2.85
61 G 928	A-6X	speaker v.c. to grid	8/3.2	79:1	1 1/4"	1/4	2.08
61 G 929	A-7J†	speaker v.c. to grid	3.2	124:1	1 1/4"	1/4	4.82
61 G 930	A-9†	line/mike to grid	600/250/50	12:1	1 1/4"	1/2	2.30
64 G 934	A-21X	SB/mike/plate to grid	100 & 10,000	1:1	1 1/4"	3/4	8.93
64 G 991	A-31X	plate to s.p.p. grids	10,000	1:1	1 1/4"	3/4	2.08
61 G 920	A-33X†	plate to s.p.p. grids	10,000	1:3	2 1/4"	1	2.85
64 G 993	A-81X	driver (30, 10H)	15 ma. in Pri.	2.66:1, 1/2 sec.	1 1/4"	1/4	1.99
61 G 921	A-83X†	driver (6F6, 42, 45)	40 ma. in Pri.	1.33:1, 1/2 sec.	2 1/4"	1/2	2.48
61 G 922	A-85X†	driver (6F6, 42, 45)	40 ma. in Pri.	2.66:1, 1/2 sec.	2 1/4"	1	2.82
61 G 923	A-89A†	p.p. plates to grids	100 ma. each	3.1:1.8:1, 1/2 sec	2x1 1/4"	2 1/2	6.34
61 G 924	A-91A†	p.p. plates to grids	160 ma. each	3.1:1.88:1, 1/2 sec	2x2 1/4"	4	8.64

### X2060 COIL KIT

Handy container with 10 PLS6 coil forms wound in overlapping inductance ranges from 2 μh to 800 μh. Contains complete operating data of coils included. Frequency ranges from 0.2-50 mc. Units included are described in listing at left. Shpg. wt., 1/2 lb. 72 H 471. NET ..... 11.95

### X1897 COIL FORM KIT

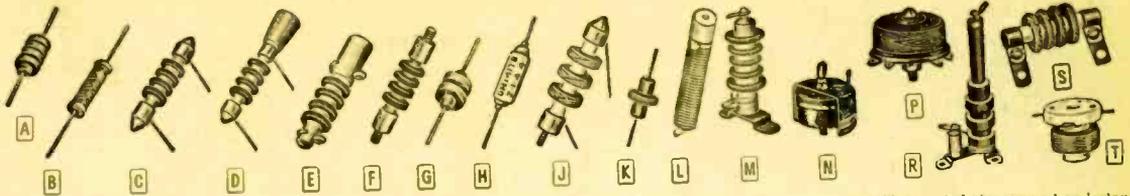
Includes 15 coil forms (3 each of 5 different types), 19 powdered iron slugs, 5 silver plated brass slugs, and complete set of mounting hardware. Coils covering 50 KC to 200 MC can be wound with the coil forms and slugs supplied. All are ceramic, with silicone Fiberglas collars. Coils remain in adjustment under extreme conditions of shock and vibration. Shpg. wt., 13 oz. 72 H 280. NET ..... 11.95

### X2082 RF CHOKE KIT

Contains 14 RF chokes on LPB-3 phenolic coil forms. Body size 1/2" diameter by 1/2" long. Axial pigtail leads. Fixed inductance from 6.8 μh to 1000 μh following preferred component values. DC resistance from 1.1 ohms to 2.6 ohms. Varnish impregnated for maximum resistance to moisture. Color-coded. 1/2 lb. 72 H 472. NET ..... 5.45

# RF and HF Chokes—Coil Forms—Coil Winder

## POPULAR RF CHOKES FOR EVERY PURPOSE



Chokes below may be used in transmitters, receivers, test equipment. etc. 71 H 160 is recommended for transmitters with plate supply of up to 3,000 volts modulated or 4,000 volts unmodulated. It may be used on all bands from 80 through 10 meters. R-33 series chokes are two-section; R-50 series chokes are 3 and 4-section. 71 H 149 choke is hermetically sealed in glass. National suffix "U" following type number indicates re-

movable standoff insulator at one end. National chokes wound on insulating forms; Meissner, on specially treated dowels, except \*iron-core type. †Shielded. The four highest frequency Ohmite chokes are wound on low power factor plastic cores; the other three units are wound on steatite tubes. ‡Mounted on standoff insulator for vertical mounting. †Millihenries. \*\*Microhenries. Av. shgp. wt., 2 oz.

Stock No.	Mfr.	Type	Fig.	±Mh	Ma	Ohms	NET
60 H 795	W. Miller	4532	J	2.5	200	21	.71
71 H 150	National	R-100	C	5	125	50	.40
71 H 189	National	R-100	C	10	75	50	.40
71 H 152	National	R-300	C	1	300	10	.44
71 H 151	National	R-100U†	D	2.5	125	50	.48
71 H 186	National	R-100U†	D	5	75	50	.48
71 H 187	National	R-100U†	D	10	75	50	.48
71 H 153	National	R-300U†	D	1	300	10	.48
71 H 161	National	R-100S‡	E	2.5	125	50	.48
71 H 178	National	R-100S‡	E	5	75	50	.48
71 H 179	National	R-100S‡	E	10	75	50	.48
71 H 162	National	R-300S‡	E	1	300	10	.48
71 H 164	National	R-300S‡	E	2.5	300	10	.46
71 H 159	National	R-33	F	10**	100	1.0	.40
71 H 158	National	R-33	G	50**	100	4.0	.40
71 H 163	National	R-33	G	100**	100	5.5	.40
71 H 148	National	R-33	G	1**	100	.06	.40
71 H 149	National	R-33	G	750**	100	17	.40
71 H 198	National	R-33	G	2.5	100	41.5	.40
71 H 250	National	R-50	A	.5	100	16.2	.40
71 H 251	National	R-50	A	1	100	22	.40
71 H 252	National	R-50-I	A	10	100	30	.61
71 H 253	National	R-60	B	2**	1700	6	1.61
71 H 156	National	R-154U	M	1	600	6	1.61
71 H 160	National	R-175A	R	225	800	6	3.56
60 H 027	Meissner	19-5588†	N	8.0	30	77	1.18
60 H 030	Meissner	19-5592†	N	30.0	20	165	1.18
60 H 031	Meissner	19-5594†	N	60.0	16	318	1.76
60 H 032	Meissner	19-5596†	N	80.0	16	342	1.76
60 H 010	Meissner	19-1994	P	2.5	20	40	.88
60 H 011	Meissner	19-1995	P	5.5	20	57.5	.88
60 H 014	Meissner	19-1995	P	16.0	20	108	.88
60 H 015	Meissner	19-2330	P	30.0	20	159	.88
60 H 016	Meissner	19-3247	P	60.0	20	258	1.18
60 H 017	Meissner	19-2709	P	80.0	16	372	1.18
60 H 040	Meissner	19-6834*	P	2.5	20	22.5	.88
60 H 042	Meissner	19-6842*	P	30.0	20	114	1.18
60 H 045	Meissner	19-6848*	P	125.0	75	330	1.91
72 H 040	Millen	34100	D	2.5	250	52.5	.42
72 H 073	Millen	34101	J	2.5	250	52.5	.42

Stock No.	Mfr.	Type	Fig.	±Mh	Ma	Ohms	NET
72 H 067	Millen	34103	J	2.5	250	52.5	.42
72 H 076	Millen	34106	J	2.5	300	13.5	.42
72 H 134	Millen	34300-100	K	100**	250	7.4	.42
72 H 135	Millen	34300-250	K	250**	250	11	.42
72 H 186	Millen	34300-25	K	25**	250	3.4	.42
72 H 187	Millen	34300-50	K	50**	250	5.2	.42
72 H 188	Millen	34300-300	K	300**	250	10.1	.42
72 H 189	Millen	34300-500	G	500**	250	20.8	.42
72 H 190	Millen	34300-1000	G	1000**	250	20.9	.42
72 H 192	Millen	34225		25	75	159	.84
72 H 193	Millen	34280		80	75	336	.96
72 H 194	Millen	1300-100	B	100**	50	4.0	.42
72 H 195	Millen	1300-250	B	250**	50	6.2	.42
72 H 196	Millen	1300-500	B	500**	50	12.8	.42
72 H 197	Millen	1300-1000	B	1000**	50	20.3	.42
72 H 198	Millen	J300-2500	B	2500**	50	37.2	.42
60 H 417	P & H	160-6	L	162**	2500		3.50
60 H 406	Bud	CH-926S	S	5.5	200	25	.60
60 H 407	Bud	CH-927S	S	5.5	200	32	.60
60 H 408	Bud	CH-928S	S	10	200	49	.60
60 H 409	Bud	CH-929S	S	2.5	400	11	.60
60 H 410	Bud	CH-1222	T	2.5	200	22	.60
60 H 411	Bud	CH-1224	T	5.5	200	33	.60
60 H 412	Bud	CH-1225	T	8	200	40	.60
60 H 413	Bud	CH-1227	T	16	200	59	.60
60 H 414	Bud	CH-1228	T	30	190	88	.68
60 H 415	Bud	CH-1229	T	60	180	130	.75
60 H 416	Bud	CH-1230	T	80	175	160	.83

Stock No.	Mfr.	Type	Fig.	**uh	Ma	Mc	NET
74 M 410	Ohmite	Z-460	H	0.2	1000	320-520	.29
74 M 411	Ohmite	Z-235	H	0.84	1000	160-350	.29
74 M 412	Ohmite	Z-44	H	1.8	1000	80-200	.29
74 M 413	Ohmite	Z-50	H	7.0	1000	35-110	.29
74 M 414	Ohmite	Z-28		21	600	20-60	.47
74 M 415	Ohmite	Z-14		44	600	7-35	.53
74 M 416	Ohmite	Z-7		84	1000	3-20	1.21
71 H 296	National	B20407-1		.1	2000	30	.30
71 H 297	National	B20407-2		.18	2000	30	.38
71 H 298	National	B20407-3		.27	2000	30	.48
71 H 299	National	B20407-4		.36	2000	30	.59

### MORRIS COIL WINDER

You'll be able to wind efficient, commercial-looking honeycomb, spiderweb and solenoid coils with this very versatile, but economical coil winder. It's a real time saver and gives your work a more professional appearance. Just set up the winder for the type of coil you need and turn the handle—dial indicator counts the turns for you. May be used for winding RF coils, oscillator coils, loop antennas, chokes, filter inductors, parasitic suppressors, TVI traps, etc. Handles up to No. 16 wire, making it suitable for almost all coil requirements in receivers, test equipment and small transmitters. Unit is supplied with wood spool for holding honeycomb and solenoid coils, plus cast per holders and four 6½" wooden pegs for spiderweb coils. Winder is mounted on cast-iron base with holes for bench mounting. With extension shaft for winding solenoid coils up to 3½" long. Less wire and forms. Base size, 4½x5". Shpg. wt., 3 lbs. 83 P 520. NET 4.95



### AMPHENOL COIL FORMS

A wide selection of top-quality, low-loss, polystyrene coil forms for winding RF coils of all types. Excellent for winding plug-in type regenerative receiver coils; plate, grid or tank coils in VFO's or low-power transmitters; grid-dip meter coils; and VHF equipment coils of all types. The 4, 5, and 6 prong standard forms fit standard tube sockets; the 5 and 6 prong miniature forms fit Amphentel Type 78-S5S and 78-S6S miniature sockets (see socket listings). Av. shgp. wt., 2 oz.



Stock No.	Mfr's Type	Description	Size	NET EACH
71 H 723	24-5H	5-Prong Min.	1½x1 ¾"	24c
71 H 711	24-6H	6-Prong Min.	1½x1 ¾"	
71 H 713	24-4P	4-Prong Std.	2½x1 ¾"	
71 H 714	24-5P	5-Prong Std.	2½x1 ¾"	
71 H 724	24-6P	6-Prong Std.	2½x1 ¾"	

Type No. 24 Coil Form. As above, less prongs. Has hole in center of base for screw mounting. 1½x1 ¾". Shpg. wt., 2 oz. 71 H 712. NET EACH 9c

### IRC INSULATED HF CHOKES

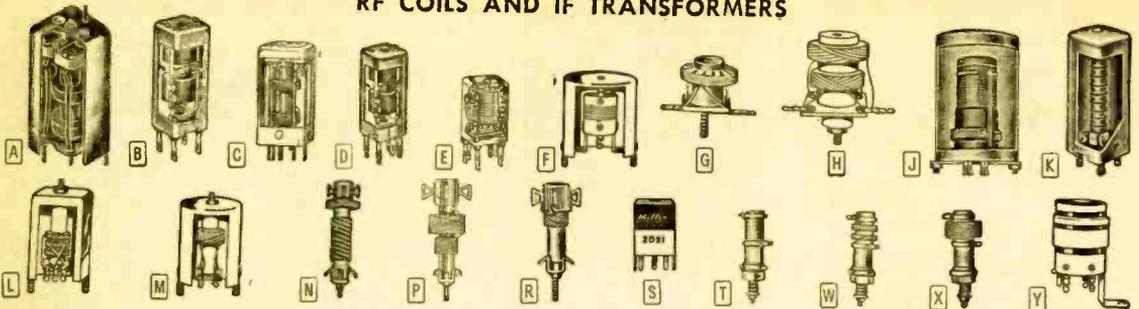
Insulated wire-wound chokes for use in receivers, transmitters and other high frequency circuitry. Compact size simplifies installation; wide choice of inductances. All are fully insulated in molded phenolic housings against high humidity; housings also provide high resistance to abrasion and other physical damage and prevents possible shorting to chassis. 1000 volts insulation breakdown to ground. Color coded for easy identification. All values are EIA preferred and have ± 10% tolerance. Type CLA units have resistance tolerance of ± 20%, except 0.47, 0.56, 0.68 and 1.0 microhenry units which are ± 30%. CL-1 units are ± 20%, except 0.47, 0.82 and 1.0 microhenry units which are ± 30%. "Q" rises with frequency. CLA units are ½" diameter; CL-1 units are 1¼" diameter. Av. shgp. wt., 2 oz.



Stock No.	Mfr's Type	Micro-henries	DC Ohms	Res. (Mc.) Freq.	NET EACH
74 M 420	CLA	0.47	0.22	305	21c
74 M 421	CLA	0.56	0.26	275	
74 M 422	CLA	0.68	0.37	250	
74 M 424	CLA	1.0	0.66	205	
74 M 425	CLA	1.2	0.68	190	21c
74 M 426	CLA	1.5	0.94	170	
74 M 427	CLA	1.8	1.3	155	
74 M 428	CLA	2.2	1.8	140	
74 M 429	CLA	2.7	2.0	125	21c
74 M 430	CLA	3.3	2.8	115	
74 M 431	CL-1	0.47	0.14	330	
74 M 434	CL-1	0.82	0.29	250	
74 M 435	CL-1	1.0	0.33	225	21c
74 M 437	CL-1	1.5	0.56	185	
74 M 438	CL-1	1.8	0.77	170	
74 M 439	CL-1	2.2	0.87	150	
74 M 440	CL-1	2.7	1.2	135	21c
74 M 441	CL-1	3.3	1.7	125	
74 M 442	CL-1	3.9	2.3	115	
74 M 443	CL-1	4.7	2.5	105	
74 M 444	CL-1	5.6	3.4	95	21c
74 M 445	CL-1	6.8	4.7	86	
74 M 446	CL-1	8.2	5.2	79	
74 M 447	CL-1	10.0	7.5	71	

# J. W. Miller Coils and IF Transformers

## RF COILS AND IF TRANSFORMERS



### 455-KC IF TRANSFORMERS

**A** Double-tuned air-core, universal input, interstage or output transformers. Excellent for replacement or experimental use. Universal wound primary and secondary tuned by mica insulated compression-type trimmers for minimum temperature-capacity drift. RETMA (EIA) leads. Size, 1 1/2 x 1 1/2 x 2 1/2". Wt., 4 oz.

Stock No.	Mfr's Type	Application	NET EA.
60 H 739	512-C1	Input IF	1.76
60 H 740	512-C2	Interstage IF	
60 H 741	512-C3	Full-wave output IF	
60 H 512	512-C4	Half-wave output IF	

### MINIATURE IF TRANSFORMERS

**B** Shell core, permeability tuned IF transformers. Designed for experimental use and for general replacement in "personal" radio receivers. Tunable powdered iron cores; tuning from top and bottom of shield. \*Built-in diode filter capacitors. Size: 3/4" sq. x 2". With mtg. hardware. Shpg. wt., 4 oz.

No.	Type	Freq.	Use	NET
60 H 727	12-C1	455 kc	IF Input	1.59
60 H 728	12-C2	455 kc	IF Output	1.59
60 H 729	12-C6	455 kc	IF Output*	1.68
60 H 716	12-C7	455 kc	Input (Batt.)	1.59
60 H 717	12-C8	455 kc	Output (Batt.)	1.59
60 H 718	12-C9	455 kc	Input (AC-DC)	1.59
60 H 719	12-C10	455 kc	Output (AC-DC)	1.59
60 H 729	12-H1	262 kc	IF Input	1.71
60 H 731	12-H2	262 kc	IF Output*	1.71
60 H 788	12-H6	262 kc	IF Output*	1.76
60 H 732	1463	10.7 mc	Input or Inter	1.91
60 H 733	1464	10.7 mc	Discriminator	2.21
60 H 734	1465	10.7 mc	Ratio Detect.	2.29
60 H 789	6203	4.5 mc	Input or Inter	1.94
60 H 790	6204	4.5 mc	Discriminator	2.21
60 H 791	6205	4.5 mc	Ratio Detect.	2.21

### MIDGET IF TRANSFORMERS

**C** Air-core mica trimmer tuned IF's. Excellent gain and selectivity. 6-32 spade-bolt mtg. 1 1/2 x 1 1/2 x 2". Shpg. wt., 4 oz.

No.	Type	Freq'cy	Use	EA.
60 H 735	112-C1	455 kc	Input	1.76
60 H 736	112-C2	455 kc	Interstage	
60 H 737	112-C3	455 kc	CT Output	
60 H 738	112-C4	455 kc	Output	

### SUBMINIATURE 455KC IF TRANSFORMERS

**D** Extremely small IF transformers with excellent gain and bandwidth characteristics. Ferrite-shell cores provide high efficiency. Primary and secondary tuned. Only 3/8" square by 1 1/2" high. Shpg. wt., 3 oz.

60 H 860. Type 10-C1. Input. NET  
60 H 861. Type 10-C2. Output. EA. 1.65

### TRANSISTOR IF TRANSFORMERS

**D** Subminiature. A tiny 455-kc IF transformer with cup-core construction for top performance. Only 3/8" square by 3/8" high. Primary impedance, 25,000 ohms; secondary impedance, \*600 ohms, \*1000 ohms. Will match CK760 and CK761 transistors. Primary is tuned and tapped. Shpg. wt., 3 oz.

60 H 802. Type 9-C1\*. Input. NET  
60 H 803. Type 9-C2\*. Output. EA. 2.35

**E** Miniature. High-quality 455-kc IF transformer for compact transistor receivers. Primary impedance, 25,000 ohms; secondary impedance, \*600 ohms, \*1000 ohms. Will match CK670 and CK671 transistors. Primary is tuned and tapped. Shpg. wt., 3 oz.

60 H 896. Type 2042\*. Input. NET  
60 H 973. Type 2042\*. Output. EA. 2.06

### BANDPASS COUPLING COIL

**F** Negative mutual coupling coil for hi-fi TRF receivers. 1 1/2 x 2". Shpg. wt., 4 oz.

60 H 761. Type EL-86. NET. 88c

### MIDGET OSCILLATOR COILS

**G** Cover 540-1600 with a 365 mmf capacitor. Series 5480 (Fig. H): single-section secondary with high-impedance primary; for use with pentagrid converters. Series 5481 (Fig. G): no primary, secondary tapped for cathode return; for use with 6BE6 and similar mixers, and with separate oscillator and mixer. Size, 1x1". Shpg. wt., 4 oz.

No.	Type	IF	Padder	EACH
60 H 742	5480-K	175 kc	.001 mfd	1.03
60 H 884	5480-H	262 kc	.0006 mfd	
60 H 743	5480-C	455 kc	.0004 mfd	
60 H 744	5481-C	455 kc	.0004 mfd	
60 H 885	5481-H	262 kc	.0006 mfd	
60 H 981	5481-K	175 kc	.001 mfd	

### DELUXE BANK-WOUND COILS

**J** Shielded antenna RF and bandpass coils. Cover 540-1740 kc with 365 mmf capacitor. Two-bank Litz secondaries. High impedance primaries. 1 1/2 x 3". Shpg. wt., 4 oz.

60 H 783. Type 242-A. Ant. NET  
60 H 784. Type 242-B. RF. EACH 1.32  
60 H 797. Type 242-BP. Bandpass. NET 1.18

### MINIATURE RF COILS

**K** Shielded iron-core coils for compact receivers. For 365 mmf tuning capacitors. Antenna and osc. coils have tapped sec. 3/4" sq. x 2". \*Requires series pad. Shpg. wt., 4 oz.

No.	Type	Use	KC Range	EACH
60 H 798	X-121-A	Antenna	140-425	1.47
60 H 795	X-121-RF	RF	140-425	
60 H 786	X-121-C	Osc.	*120 mmf	
60 H 706	A-121-A	Antenna	540-1700	1.32
60 H 707	A-121-RF	RF	540-1700	
60 H 708	A-121-C	Osc. 455 kc	*400 mmf	
60 H 709	A-121-H	Osc. 262 kc	*600 mmf	

### UNIVERSAL ADJUSTABLE BROADCAST BAND COILS

**L** Compact, variable-inductance iron-core coils for replacement use. Shielded type. Use with 250-150 mmf variable capacitors. Oscillator coils have tapped secondary. 1 1/2 x 1 3/4 x 2 1/2". \*IF frequency. Av. shpg. wt., 5 oz.

No.	Type	Use	KC Range	EACH
60 H 748	73-A	Antenna	500-1800	1.88
60 H 749	73-RF	RF	500-1800	
60 H 752	73-OSC	Oscillator	*100-550	

### ANTENNA AND RF COILS

**M** Untuned. Broadly self-resonant from 540 to 1700 kc. No tuning capacitor needed. Can. 2 1/2 x 1 1/2". Shpg. wt., 4 oz.

60 H 758. Type 472-UA. Ant. NET. 1.62  
60 H 759. Type 472-UT. RF. NET. 1.91

### HIGH "Q" BROADCAST RF COILS

**N** High-efficiency, unshielded, iron-core coils. For replacement purposes or for new receiver design. Adjustable core for tracking desired frequency range. Range indicated obtained using 365 mmf variable capacitor. Coils mount in 3/8" hole. \*Padder values shown are for 455 kc IF. Size: 3/8 x 2". Shpg. wt., 4 oz.

No.	Type	Use	KC Range	EACH
60 H 862	A-5495-A	Antenna	550-1700	1.47
60 H 863	A-5495-RF	RF	550-1700	
60 H 864	A-5495-C	Std. Osc.	*400 mmf	
60 H 865	A-5495-C	Tapped Osc.	*400 mmf	

### MINIATURE ADJUSTABLE RF COILS

**P** Variable-inductance RF coils. Use with tuning capacitors of 250 to 450 max. capacity. Type 70-OSC coil has tapped secondary. 70 series installed self-supported. 71-OSC has 2-tap primary. Both track 100 to 550 kc IF. Max. size: 3/8 x 1 1/2" high. Av. shpg. wt., 4 oz.

No.	Type	Use	KC Range	NET
60 H 866	70-A	Antenna	540-1600	1.03
60 H 867	70-RF	RF	540-1600	1.03
60 H 868	70-OSC	Osc.	500-1800	1.03
60 H 869	71-OSC	Osc.	500-1800	1.47

### TRANSISTOR OSCILLATOR COILS

**R** Type 2020. For use in a converter oscillator circuit using only one transistor. For 365 mmf tuning capacitor, 455 KC IF. 3/4 x 1 1/2". Shpg. wt., 3 oz.

60 H 895. NET. 1.47  
Type 2022. Similar to above, except for use with variable capacitor 78-100 mmf max.  
60 H 974. NET. 1.47

### SUBMINIATURE TRANSISTOR OSC. COIL

**S** Type 2021. Shielded. For use in converter circuits using one transistor for oscillator, mixer. Use with 100 mmf variable capacitor. Size, 3/8" high x 3/8" sq. Shpg. wt., 2 oz.

60 H 975. NET. 2.06

### ADJUSTABLE CERAMIC RF INDUCTORS

**T W X** Adjustable coils for the most exacting requirements. Wound on silicone-impregnated ceramic forms. Tuned by powdered iron core. Fig. T is single-layer wound, Fig. W is twin-pi wound, Fig. X is single-pi wound.

Standard. High "Q" units with a wide range of inductances. Require 1/4" mtg. hole. Form size: 3/8 x 1 1/2". Av. shpg. wt., 3 oz.

No.	Type	Fig.	Microhenries	NET
60 H 982	4400		Form only	1.06
60 H 983	4403	T	0.9-1.6	1.44
60 H 984	4104	T	1.5-3.2	1.47
60 H 985	4405	T	3.1-6.8	1.50
60 H 986	4406	T	6.7-15	1.56
60 H 987	4407	X	14.8-31	1.62
60 H 988	4408	X	30-69	1.65
60 H 989	4409	X	68-130	1.71
60 H 990	4410	X	126-250	1.73
60 H 991	4411	X	245-475	1.76
60 H 992	4412	X	450-800	1.79
60 H 993	4413	W	750-1400	1.82
60 H 994	4414	W	1300-2100	1.82

Miniature. For limited space. 3/8" mtg. hole. Form size: 4/8 x 3/4". Av. shpg. wt., 3 oz.

No.	Type	Fig.	Microhenries	NET
60 H 870	4500		Form only	.97
60 H 871	4502	T	1.0-1.6	1.32
60 H 872	4503	T	1.6-2.8	1.38
60 H 873	4504	T	2.8-5	1.41
60 H 874	4505	T	5-9	1.47
60 H 875	4506	T	9-16	1.53
60 H 876	4507	W	16-24	1.59
60 H 877	4508	W	24-35	1.62
60 H 878	4509	W	35-60	1.65
60 H 879	4511	X	60-120	1.68
60 H 880	4512	X	110-200	1.71
60 H 881	4513	X	190-330	1.73
60 H 882	4514	X	320-500	1.76

Subminiature. For ultra-compact equipment. 1/4" mtg. hole. Form: 3/8 x 3/4". Wt., 3 oz.

No.	Type	Fig.	Microhenries	NET
60 H 995	4300		Form only	.97
60 H 996	4301	T	0.17-0.27	1.32
60 H 997	4302	T	0.27-0.41	1.32
60 H 998	4303	T	0.40-0.65	1.38
60 H 999	4304	T	0.64-0.95	1.41
60 H 927	4305	T	0.94-1.55	1.47
60 H 928	4306	T	1.52-2.57	1.53
60 H 929	4307	T	2.5-4.40	1.59
60 H 930	4308	T	4.3-7.15	1.62
60 H 931	4309	X	7.1-12.5	1.62
60 H 932	4310	X	12.4-20.3	1.68
60 H 933	4311	X	20.1-32.8	1.71
60 H 934	4312	X	32.5-51.5	1.73
60 H 941	4313	X	51-102	1.76
60 H 942	4314	X	101-180	1.76
60 H 943	4315	X	178-300	1.76

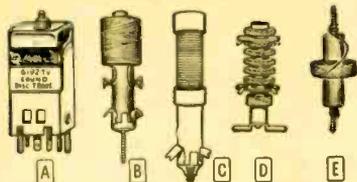
### TYPE 20 ECONOMY TRF COILS

**Y** Unshielded. TRF coils for 540 to 1750 kc. For use with 365 mmf variable capacitor. With L mtg. bracket. Low impedance primary on adjustable sleeve over secondary. 1 1/2 x 2" high. Shpg. wt., 3 oz.

60 H 753. 20-A. Antenna Coil. NET. 74c  
60 H 590. 20-RF. RF Coil. NET. 74c

# J. W. Miller Components

## TV COILS, INDUCTORS & TRANSFORMERS



### SOUND DETECTOR AND OSCILLATOR TRANSFORMERS

**A** Quality TV components. Type 6192 for TV receivers with separate 21.25 mc sound IF channel. Type 1468 are for 4.5 mc IF in sets using inter-carrier sound system; Type 6192 are the Foster-Seely type and are normally preceded by one or two limiter stages. Type 1468 are for use in ratio detector circuits. Type 6194 has tapped coil for horizontal oscillator Synchro-guide circuit. Type 6183 dual windings for Sync. Frequency and Phase circuit. Aluminum shields with 6-32 spade bolt mounting. Sizes: Type 6192, 1 1/4 x 1 1/2 x 2 1/2"; Type 1468, 1 1/4 x 1 1/2 x 2 1/2"; Type 6194 and Type 6183, 1 1/4 x 1 1/2 x 2 1/2". Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Description	NET EACH
60 H 765	6192	Discriminator	1.94
60 H 799	6183	Hor. Osc.	1.91
60 H 944	6194	Hor. Osc.	1.82
60 H 768	1468	Ratio detector	2.21

### SYNC STABILIZER (RINGING) COIL

**B** Type 6210. Has bakelite form with 3/8" mounting clip. 16-42 ma range. Size, 1/4 x 2 1/2". Shpg. wt., 2 oz. **1.47**

### HORIZONTAL LINEARITY AND WIDTH CONTROLS

**C** Iron-core variable inductance coils for horizontal sweep circuits. Have AGC winding. Mounting clip fits 3/8" hole. 6300 series are 1/2 x 2 1/2" long on phenolic forms. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Millichenries	NET EA.
60 H 826	6313	5 - 5	1.18
60 H 827	6314	2.0 - 18	1.12
60 H 828	6315	4.0 - 30	1.18
60 H 829	6316*	4.0 - 30	1.62
60 H 830	6317*	3.2 - 9	1.47
60 H 831	6318	2 - 3	1.00
60 H 832	6319	15.0 - 60	1.47
60 H 833	6320	2 - 3 tapped	1.03
60 H 834	6321	1.0 - 5 tapped	1.18
60 H 835	6322	1.5 - 10	1.12
60 H 898	6324	60 - 130 tapped	1.47

### HIGH VOLTAGE RF POWER SUPPLY TRANSFORMERS

**D** Type 4525. RF power supply transformer for TV receivers, scopes. Up to 5,000 v. DC. Size, 3 1/2 x 1 1/2". 4 oz. **5.44**

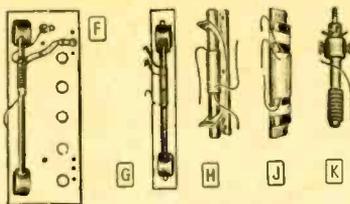
Type 4526. Up to 10,000 v. DC. (30,000 in rectifier-tripler circuit). Size, 6 x 2 1/4" diameter. Shpg. wt., 4 oz. **8.82**

### VIDEO PEAKING & FILAMENT CHOKE COILS

**E** Type 6175 is filament choke. Reduces stray coupling, feedback, etc. Others are video peaking coils for proper bandwidth and wave shape of video signals. Coils without shunt resistor wound on plastic forms; allunt types wound on resistor. Over-all size: Type 6175, 7/8 x 3/2" diameter; all other types, 3/4 x 3/8" diameter. Av. shpg. wt., 2 oz.

No.	Type	μhs.	Shunt	EACH
60 H 792	6172	73	None	50c
60 H 889	6175	120	None	
60 H 933	6173	250	22 K	
60 H 794	6174	500	None	50c
60 H 776	6175	0.8	None	
60 H 888	6152	20	None	
60 H 777	6176	36	None	50c
60 H 778	6177	93	None	
60 H 779	6178	120	22 K	
60 H 780	6179	180	39 K	50c
60 H 781	6180	180	None	
60 H 890	6154	200	None	
60 H 782	6181	250	None	50c
60 H 891	6155	300	None	

## LOOP ANTENNAS



**F** Type 705A. For universal replacement use. Uses a highly efficient design for outstanding performance. Improves reception of distant stations. Extremely easy to adjust. Simply slide the coil along the ferrite rod to peak the antenna. Non-directional. Replaces any loop antenna 3 1/4 x 9 1/2". Shpg. wt., 5 oz. **1.76**

**G** Type 2000. Has fixed inductance loop; picks up adequate signal to the first stage. Inductor is tapped to match the 600 ohm input impedance of the transistor. Frequency range is 540-1650 kc when used with a 365 mmf variable capacitor. 1 1/4 x 9 1/2". Shpg. wt., 3 oz. **1.76**

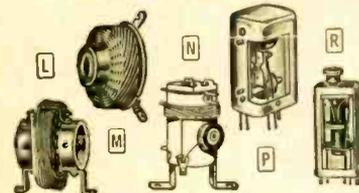
**H** Type 2001. Matches 600 ohm input impedance. Inductance, 240 μh. Tunes with 365 mmf. 3/4 x 3 1/4". Shpg. wt., 4 oz. **1.62**

**J** Type 2004. Matches 600 ohm input impedance. Inductance, 240 μh. Tunes with 365 mmf. 1/2 x 3 1/4". Shpg. wt., 4 oz. **1.62**

**K** Type 2006. As above, but 700 microhenries. Use with 125 mmf capacitor. **1.62**

**L** Type 2002. Adjustable from 35-300 μh. Hi-Q coil tunes with 500 mmf. Mounts in 3/8" hole, or bracket supplied. Matches 600 ohm input. Size, 1/2 x 2 1/2". Shpg. wt., 3 oz. **1.00**

### DUO-LATERAL FILTER CHOKES



**L** Effective line filters. Duo-lateral wound for low distributed capacity. Ideal for use in AC lines to filter RF or noise pulses from Amateur or commercial transmitters; from power supplies, sign flashers, diathermy equipment, and all intermittent switching systems. #825 is 1 1/2 x 1 1/2" wound on bakelite form. #827 is 2 1/2 x 2 1/2" wound on ceramic forms.

No.	Type	Amps	Ohms	Oz.	Mh	NET
70 H 185	7825	2	7	5	.600	1.44
60 H 887	7827	10	15	16	3.70	3.53

### CENTER TAPPED CHOKE

**M** Duo-lateral wound, single section RF chokes wound with silk-covered enamelled copper wire on impregnated ceramic dowels. 1 1/4 x 3/8" high. Shpg. wt., 4 oz.

Stock No.	Type	Mh	Ohms	Ma	NET
60 H 594	670-T	10	67	125	.79
60 H 588	691-T	20	100	125	.88
60 H 595	693-T	20	100	100	1.18

### CAPACITY-OPERATED RELAY COIL

**N** For alarm systems, window displays, etc. With diagram. 1/2 x 2 1/4" high. Wt., 4 oz. **60 H 589. Type 695. NET 2.06**

### BEAT FREQUENCY OSCILLATOR COIL

**P** Type 612-M6. Mica tuned air core. Frequency, 132, 127-137 KC range. Has knob for adjustment. 3 1/4 x 1 1/4 x 1 1/4". Wt., 4 oz. **60 H 821. NET 2.32**

### 100 KC HI-Q IF TRANSFORMER

**R** Type 1890-P1. For input or interstage. 3 1/4 x 1 1/4 x 1 1/4". Shpg. wt., 4 oz. **60 H 822. NET 5.59**

## MIDGET RF COILS

Type A-320-A. Permeability-tuned broadcast band coils enclosed in all-stage use. Adjustable iron core permits accurate alignment. Frequency range, 540-1700 kc. 1 1/4" sq. x 2 1/4" high. #6-32 spade bolt mounting. Shpg. wt., 4 oz. **1.47**

Type A-320-RF. Same as above except for R.F. stage use. Shpg. wt., 4 oz. **60 H 809. NET 1.47**

## PRINTED CIRCUIT RF CHOKES

High-quality, air-core RF chokes for use on printed circuit boards. Available in a wide range of inductances for transmitters, receivers, test equipment, etc. Printed-circuit type mounting lugs for quick, easy soldering into circuit. Coil forms are 1/4" long. Av. shpg. wt., 2 oz.

Stock No.	Type	Mh	Ohms	Ma	Dia.	EACH
60 H 610	970	1	17.2	125	1 1/4"	.50
60 H 611	971	1.2	19.8	125	2 1/2"	.50
60 H 612	972	1.5	21.8	125	3 1/4"	.50
60 H 613	973	1.8	24.7	125	4 1/4"	.53
60 H 614	974	2.2	27.4	125	2 1/2"	.53
60 H 615	975	2.7	31.2	125	1 1/4"	.53
60 H 616	976	3.3	34.8	125	1 1/2"	.56
60 H 617	977	3.9	38.9	125	2 1/8"	.56
60 H 618	978	4.7	43.2	125	3 1/8"	.56
60 H 619	979	5.6	48	125	2 1/2"	.56
60 H 628	980	6.8	53.6	125	1 3/4"	.59
60 H 629	981	8.2	60.8	100	2 1/2"	.59
60 H 630	982	10	77.8	100	3 1/4"	.65
60 H 631	983	12	77	100	2 1/4"	.68
60 H 632	984	15	87.7	100	1 3/4"	.71
60 H 633	985	18	97.9	100	1 1/2"	.74
60 H 634	986	22	108	75	3 1/2"	.82
60 H 635	987	27	121	75	1 1/4"	.85
60 H 636	988	33	209	75	1 1/2"	.91
60 H 637	989	39	231	75	1 1/4"	.94
60 H 638	990	47	263	50	2 3/4"	.97
60 H 639	991	56	292	50	1 3/4"	1.00
60 H 641	992	68	326	50	1 1/2"	1.06
60 H 642	993	82	368	50	1 1/2"	1.12
60 H 643	994	100	394	50	1 1/4"	1.18

## ADJUSTABLE RF COILS

Type 50A. Encapsulated coils of molded epoxy resin. Impervious to moisture, including immersion, and extremely shock and vibration resistant. Meet Mil-C-15305A Grade 1 Class B specs. Operating temp. -55° C to +125° C. Nominal inductance is 80 μh; tuning ratio 1.6:1 or greater with all ranges overlapping. Tension-type device permits rigid adjustment at any desired position. Unit is 1" long and 1/4" dia. except \* 3/4". Indicates millihenries. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	μh	Q	Freq.	NET
58 H 706	50A106EB1	1.0	110	25 Mc	3.20
58 H 707	50A156EB1	1.5	80	7.9 Mc	3.20
58 H 708	50A276EB1	2.2	80	7.9 Mc	3.20
58 H 709	50A336EB1	3.3	70	7.9 Mc	3.23
58 H 710	50A176EB1	4.7	70	7.9 Mc	3.23
58 H 711	50A686EB1	6.8	70	7.9 Mc	3.23
58 H 712	50A826EB1	8.2	77	7.9 Mc	3.23
58 H 713	50A105EB1	10.0	68	7.9 Mc	3.29
58 H 714	50A155EB1	15.0	70	2.5 Mc	3.29
58 H 715	50A225EB1	22.0	68	2.5 Mc	3.35
58 H 716	50A335EB1	33.0	67	2.5 Mc	3.35
58 H 717	50A475EB1	47.0	67	2.5 Mc	3.38
58 H 718	50A685EB1	68.0	70	2.5 Mc	3.38
58 H 719	50A825EB1	82.0	70	2.5 Mc	3.41
58 H 720	50A104EB1	100	60	790kc	3.76
58 H 721	50A154EB1	150	60	790kc	3.79
58 H 722	50A224EB1	220	68	790kc	3.79
58 H 723	50A334EB1	330	65	790kc	3.82
58 H 724	50A474EB1	470	65	790kc	3.82
58 H 725	50A684EB1	680	65	790kc	3.85
58 H 726	50A824EB1	820	60	790kc	3.85
58 H 727	50A103EB1*	1.0 mh	50	250kc	3.88
58 H 728	50A153EB1*	1.5 mh	55	250kc	3.88
58 H 729	50A223EB1*	2.2 mh	55	250kc	3.91
58 H 730	50A333EB1*	3.3 mh	60	250kc	3.91
58 H 731	50A473EB1*	4.7 mh	60	250kc	3.97
58 H 732	50A683EB1*	6.8 mh	64	250kc	3.97
58 H 733	50A823EB1*	8.2 mh	48	250kc	3.97

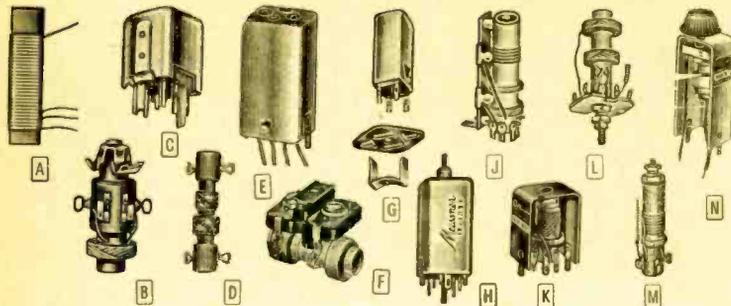
## MEDIUM POWER TRANSMITTER CHOKES

For use in Amateur and commercial equipment. Feature low distributed capacity and accurate inductance values. Multiple section, duo-lateral wound on ceramic forms. Rigid brass terminal clips. Snap-in mounting brackets. #6-32 tapped holes. 1/2" dia. x 2 1/2" long. Shpg. wt., 4 oz.

Stock No.	Type	mH	Ohms	Ma	NET
60 H 597	4550	2.0	6.5	400	1.62
60 H 598	4551	4.0	10.0	400	1.76

# Meissner IF's & Coils—Miller Coils

## MEISSNER IF'S AND COILS



### TRANSISTOR ANTENNA AND OSCILLATOR COILS

For broadcast frequencies with most transistors. High Q for maximum signal pick up.  $\frac{1}{2}$  wt., 3 oz.

Stock No.	Mfr's Type	Flg.	Use	Req. MMF	Size	NET EACH
60 H 951	14-9003	B	Ant.	365	$\frac{1}{2}$ x 7"	1.76
60 H 952	14-9004	B	Osc.	365	$1\frac{1}{2}$ x $8\frac{3}{4}$ "	1.62
60 H 953	14-9005	A	Ant.	123	$\frac{3}{32}$ x $1\frac{1}{2}$ x $3\frac{1}{4}$ "	1.76
60 H 958	14-9012	B	Osc.	98	$\frac{1}{2}$ x 7"	1.62
60 H 960	14-9014	B	Osc.	98	$1\frac{1}{2}$ x $8\frac{3}{4}$ "	1.47
60 H 961	14-9015	B	Ant.	100-365	$\frac{1}{2}$ x 2"	1.29

### TRANSISTOR IF'S

Quality units for input—A; interstage—IS; and output—O. Ideal for printed circuits. 455 KC except 16-9001 (262 KC).  $\frac{1}{2}$  wt., 3 oz.

Stock No.	Type	Pri. Imp.	Sec. Imp.	Use	NET
60 H 962	16-9001	20000	600	All	3.53
60 H 963	16-9002	25000	600	All	2.06
60 H 964	16-9003	10000	500	A, IS	3.23
60 H 971	16-9014	20000	1000	O	2.06

### ADJUSTABLE VIDEO PEAKING COILS

For exact adjustment of frequency response in video amplifiers. Slug-tuned. Wt., 4 oz.

No.	Type	Range	Size	EACH
60 H 034	19-1920	65-115 $\mu$ H		.88
60 H 035	19-1921	115-195 $\mu$ H		.88
60 H 036	19-1922	195-325 $\mu$ H	1 x $1\frac{1}{2}$ "	.88
60 H 037	19-1923	325-500 $\mu$ H		.88

### MIDGET-RECEIVER COILS

Permeability-tuned broadcast coils. For AC sets \*except battery. Shpg. wt., 3 oz.

No.	Type	Use	Size	EACH
60 H 167	14-1071	Ant.	$1\frac{1}{2}$ x $\frac{3}{8}$ "	1.18
60 H 169	14-1073	Osc.	1 x $\frac{3}{8}$ "	
60 H 183	14-1074*	Osc.	$1\frac{1}{2}$ x $\frac{3}{8}$ "	

### AIR-CORE "PLASTIC" IF'S

Low-cost IF's. Air core except, iron core.  $2\frac{1}{2}$  x  $1\frac{1}{2}$  x  $1\frac{1}{2}$ " or  $1\frac{1}{2}$  x  $1\frac{1}{2}$  x  $2\frac{1}{2}$ ". Wt., 6 oz.

Stock No.	Mfr's Type	Use	Freq. Kc	NET EACH
60 H 192	16-6649	Input	175	1.47
60 H 194	16-6652	Input	262	1.76
60 H 196	16-6658	Input	456	1.76
60 H 197	16-6659	Interstage	456	2.12
60 H 198	16-6660	Output	456	1.76
60 H 070	16-6666†	Input	456	1.91
60 H 139	16-6662†	Input	456	1.76

### GENERAL REPLACEMENT IF'S

Suitable for most receivers. Double-tuned, mica trimmers. Size,  $3\frac{1}{2}$  x  $1\frac{1}{2}$  x  $1\frac{1}{2}$ ". Av., 4 oz.

Stock No.	Mfr's Type	Use	Freq. Kc	NET EACH
60 H 077	16-5700	Input	175	1.91
60 H 080	16-5712	Input	456	1.62
60 H 082	16-5714	Output	456	1.62
60 H 079	16-3731	Output/CT	175	.82

### IRON-CORE IF'S

Same as above, but powdered iron cores. 15 Kc.  $1\frac{1}{2}$  x  $1\frac{1}{2}$  x  $1\frac{1}{2}$ ";  $\frac{3}{4}$  x  $3\frac{1}{2}$  x 2". Wt., 5 oz.

Stock No.	Mfr's Type	Use	NET EACH
60 H 181	16-5740†	Input	2.20
60 H 190	16-5742†	Output	2.06
60 H 104	16-6678‡	Input/Output	2.06

### "CARTWHEEL" IF'S

Type 16-6661. Input, interstage or output. Freq. range, 380-600 kc.  $1\frac{1}{2}$  x  $1\frac{1}{2}$  x  $1\frac{1}{2}$ ". Dual trimmers. Wt., 5 oz.

60 H 095, NET.	1.76
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### $\frac{3}{4}$ " PERMEABILITY TUNED IF'S

Tuned at top and bottom by variable iron cores. Silvered mica condensers. Size,  $2\frac{1}{2}$  x  $\frac{3}{4}$ " x  $\frac{3}{4}$ ". With mtg. plates.  $\frac{1}{2}$  with diode filters. 4 oz.

Stock No.	Mfr's Type	Use	Freq. Kc	NET EACH
60 H 152	16-6758	Input/Output	456	1.47
60 H 153	16-6770†	Output	456	1.53
60 H 157	16-6754†	Input	262	1.76
60 H 154	16-6752	Output	262	1.76

### 10.7 MC IF'S

High quality—permeability tuned. Input, interstage or output. Stable shunt capacitors. Excellent for replacement or as part of original equipment. Av. shpg. wt., 5 oz.

No.	Type	Flg.	Mounting	Size	EACH
60 H 097	16-6665	M	$1\frac{1}{2}$ "	$\frac{1}{2}$ x $1\frac{1}{2}$ x $1\frac{1}{2}$ "	1.91
60 H 158	16-3487	G	Var. $\frac{1}{2}$ x $1\frac{1}{2}$ "	$\frac{1}{2}$ x $1\frac{1}{2}$ x 2"	1.91

### GENERAL REPLACEMENT COILS

Wide selection of air-core types. High-impedance primary. Litz wire secondary. Tune 545-1620 kc, with  $\frac{365$  mmf tuning condenser. \*Shielded.  $\frac{1}{2}$  456 kc IF frequency; 350 mmf padder required. Shpg. wt., 5 oz.

No.	Type	Flg.	Use	Size	EACH
60 H 000	14-1010	J	Ant.	$1\frac{1}{2}$ x $2\frac{1}{2}$ "	1.29
60 H 001	14-1011	J	RF	$1\frac{1}{2}$ x $2\frac{1}{2}$ "	1.76
60 H 005	14-1004*	K	Ant.	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $2\frac{1}{2}$ "	1.26
60 H 006	14-1005*	K	RF	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $2\frac{1}{2}$ "	1.23
60 H 075	14-2136*	K	Ant.	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 2"	1.29
60 H 076	14-2437*	K	RF	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 2"	1.41
60 H 161	14-4034†	L	Osc.	1 x $1\frac{1}{2}$ "	1.38
60 H 166	14-4243††	J	Osc.	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $1\frac{1}{2}$ "	1.41
60 H 150	14-1022	K	Ant.	$\frac{1}{2}$ x $2\frac{1}{2}$ "	1.12

### "PENTAGON" OSCILLATOR COILS

Type 14-1033. Tapped type for 6SA7, 12SA7, etc. 456 kc. Single  $\frac{1}{4}$ " hole mtg.  $\frac{1}{2}$ " dia. 1" long. Use 420 mmf padder. 4 oz.

60 H 170, NET.	1.18
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Type 14-1053. (Not illustrate.) 456 kc. Same as above, but requires cut section padder, 162 mmf. Single  $\frac{1}{4}$ " hole mounting,  $\frac{3}{4}$ " diam. Shpg. wt., 4 oz.

60 H 118, NET.	1.18
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### ADJUSTABLE-INDUCTANCE COILS

For battery-operated sets. Osc. coils, 456 kc IF\* except may be used in cut-plate or padder circuits for IF frequencies between 175 and 520 kc. 14-1028 and 14-1056 are designed for replacement in practically any receiver. Single-hole mounting. Screwdriver adj. Broadcast band. Wt., 5 oz.

No.	Type	Flg.	Coil	Size	EACH
60 H 060	14-1040	M	Osc.	$\frac{3}{4}$ x $1\frac{1}{2}$ "	1.76
60 H 125	14-1060†	M	Osc.	$\frac{3}{4}$ x $1\frac{1}{2}$ "	
60 H 135	14-1026	L	Ant.	$1\frac{1}{2}$ sq. x $1\frac{1}{2}$ "	
60 H 137	14-1028*	L	Osc.	$\frac{3}{4}$ x $1\frac{1}{2}$ "	1.62
60 H 171	14-1056	M	Ant.	$\frac{3}{4}$ x $1\frac{1}{2}$ "	1.65

### BFO COIL

Type 17-6763. Beat frequency oscillator coil. For receivers having IF's between 290 and 650 kc. Supplies "beat" note necessary to receive CW.  $3\frac{1}{2}$  x  $1\frac{1}{2}$  x  $1\frac{1}{2}$ ". Wt., 6 oz.

60 H 230, NET.	3.23
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### PHONO-OSCILLATOR COIL

Type 17-9373. For use in building either wireless or direct connected phono-osc. units. Permits record reproduction through any radio receiver. Knob adjustment allows selection to obtain clear frequency. Size:  $3\frac{1}{2}$  x  $1\frac{1}{2}$  x  $1\frac{1}{2}$ ". Shpg. wt., 4 oz.

60 H 096, NET.	2.65
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## J. W. MILLER ADJUSTABLE

### RF COILS AND FORMS

Use where moisture resistant encapsulated units or mechanical properties of ceramics not required. Resin has mechanical and dielectric advantages of phenolics plus high dielectric strength. MIL-P-79B Type PBG. Inductance shown is 80% of maximum. Sizes: 20A,  $\frac{1}{2}$  x  $\frac{3}{4}$ "; 21A,  $\frac{3}{8}$  x  $\frac{1}{2}$ "; 22A,  $\frac{1}{4}$  x  $\frac{1}{2}$ ". Mtg. holes:  $\frac{1}{4}$ " for 20A;  $\frac{1}{8}$ " for 21A and 22A. \*Mh Indicates millihenries. Av. wt., 3 oz.

SERIES 20A				
Stock No.	Mfr's Type	Microhenries*	Coil form only	NET EA.
58 H 616	20A000RB1		.56	.76
58 H 617	20A107RB1	0.1	.76	.76
58 H 618	20A157RB1	0.15	.76	.76
58 H 619	20A227RB1	0.22	.76	.76
58 H 620	20A337RB1	0.33	.79	.79
58 H 621	20A477RB1		0.47	.79
58 H 622	20A687RB1	0.68	.79	.79
58 H 623	20A827RB1	0.82	.79	.79
58 H 624	20A106RB1	1.0	.79	.79
58 H 625	20A156RB1	1.5	.79	.79
58 H 626	20A226RB1	2.2	.79	.79
58 H 627	20A336RB1	3.3	.79	.79
58 H 628	20A476RB1	4.7	.82	.82
58 H 629	20A686RB1	6.8	.82	.82
58 H 630	20A826RB1	8.2	.82	.82
58 H 631	20A105RB1	10.0	.82	.82
58 H 632	20A155RB1	15.0	.82	.82
58 H 633	20A225RB1	22.0	.82	.82
58 H 634	20A335RB1	33.0	.82	.82
58 H 635	20A475RB1	47.0	.82	.82
58 H 636	20A685RB1	68.0	.82	.82
58 H 637	20A825RB1	82.0	.82	.82
58 H 638	20A104RB1	100	.82	.82
58 H 639	20A154RB1	150	.82	.82
58 H 640	20A224RB1	220	.85	.85
58 H 641	20A334RB1	330	.85	.85
58 H 642	20A474RB1	470	.85	.85
58 H 643	20A684RB1	680	.85	.85
58 H 644	20A824RB1	820	.85	.85
58 H 645	20A103RB1	1 mh.	.85	.85

### SERIES 21A

Stock No.	Mfr's Type	Microhenries*	Coil form only	NET EA.
58 H 646	21A000RB1		.59	.79
58 H 647	21A106RB1	1.0	.79	.79
58 H 648	21A156RB1	1.5	.79	.79
58 H 649	21A226RB1	2.2	.79	.79
58 H 650	21A336RB1	3.3	.79	.79
58 H 651	21A476RB1	4.7	.79	.79
58 H 652	21A686RB1	6.8	.82	.82
58 H 653	21A826RB1	8.2	.82	.82
58 H 654	21A105RB1	10.0	.82	.82
58 H 655	21A155RB1	15.0	.82	.82
58 H 656	21A225RB1	22.0	.82	.82
58 H 657	21A335RB1	33.0	.82	.82
58 H 658	21A475RB1	47.0	.85	.85
58 H 659	21A685RB1	68.0	.85	.85
58 H 660	21A825RB1	82.0	.85	.85
58 H 661	21A104RB1	100	.85	.85
58 H 662	21A154RB1	150	.88	.88
58 H 663	21A224RB1	220	.88	.88
58 H 664	21A334RB1	330	.91	.91
58 H 665	21A474RB1	470	.91	.91
58 H 666	21A684RB1	680	.94	.94
58 H 667	21A824RB1	820	.94	.94
58 H 668	21A103RB1	1 mh.	.97	.97
58 H 669	21A153RB1	1.5 mh.	.97	.97
58 H 670	21A223RB1	2.2 mh.	1.00	1.00
58 H 671	21A333RB1	3.3 mh.	1.00	1.00
58 H 672	21A473RB1	4.7 mh.	1.09	1.09
58 H 673	21A683RB1	6.8 mh.	1.18	1.18
58 H 674	21A823RB1	8.2 mh.	1.26	1.26
58 H 675	21A102RB1	10.0 mh.	1.32	1.32

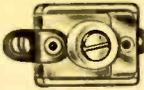
### SERIES 22A

Stock No.	Mfr's Type	Microhenries*	Coil form only	NET EA.
58 H 676	22A000RB1		.73	.93
58 H 677	22A105RB1	10.0	.93	.93
58 H				

# Capacitors & Accessories

## TRIMMERS AND PADDERS

Mica trimmer and padder capacitors. Treated to insure resistance to humidity and permanence of capacity settings. Low-loss ceramic base. Clear India mica. The adjusting plates have been rigidly constructed to permit bending soldering lugs without affecting capacity. Size:  $1\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{8}$  Mtg. ctrs.,  $\frac{1}{16}$ " Ranges indicated below are mmf. from 3 turns open trimmer to tight setting. Av. Shpg. wt., 2 oz.



Stock No.	Min. Mmf.	Max. Mmf.	NET EACH
60 H 347	1.5	15	12c
60 H 340	2.0	30	12c
60 H 341	4.0	80	12c
60 H 342	9.0	180	14c
60 H 343	25	280	15c
60 H 344	45	380	17c
60 H 345	70	480	19c
60 H 346	100	580	23c
60 H 348	140	680	24c
60 H 349	170	780	27c

## PANEL BEARING ASSEMBLY

For use with rigid or flexible couplings for mounting volume controls, etc., away from the panel. Bearing has short stub for knob; long shaft extending back for coupling. Made of brass. Take panels up to  $\frac{1}{2}$ " thick. For standard  $\frac{1}{8}$ " shafts. Supplied with 2 fiber insulating washers. Wt., 3 oz.



60 H 385	Overall length, 3"	NET	32c
60 H 386	Overall length, 6"	NET	38c
60 H 390	Bearing only.	NET	39c

## E. F. JOHNSON FLEXIBLE SHAFTS

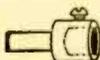
Non-rusting phosphor-bronze flexible shafts with  $\frac{1}{4}$ " hubs. Ideal for connecting out-of-line shafts together. Handy accessory for Amateurs, experimenters, labs, etc. Permit up to 90 degrees angular control. Shpg. wt., 2 oz.



73 H 290	115-253	Length, 3"	NET	50c
73 H 291	115-254	Length, 6"	NET	75c



SHAFT FITTINGS



Coupling

Extender

Couplings for extending shafts of volume controls, switches, condensers, etc., or for ganging single units, even when shafts are not of the same diameter. Available in insulated and non-insulated types. Insulated types are made of black phenolic. Extenders for decreasing or increasing shaft diameter and for extending shaft length. 60 H 366 has  $\frac{3}{8}$ " opening,  $\frac{1}{4}$ " shaft. Shaft length on all extenders,  $\frac{3}{4}$ "; overall length,  $1\frac{1}{2}$ ". Av. shpg. wt., 4 oz.

Brass	Insulated	Type	Size
60 H 360	60 H 350	Coupling	$\frac{1}{4}$ to $\frac{1}{2}$ "
60 H 361	60 H 351	Coupling	$\frac{3}{8}$ to $\frac{1}{2}$ "
60 H 362	60 H 352	Coupling	$\frac{1}{2}$ to $\frac{3}{4}$ "
60 H 365	60 H 355	Extender	$\frac{1}{4}$ to $\frac{1}{2}$ "
60 H 366		Extender	$\frac{1}{4}$ to $\frac{3}{4}$ "

NET EACH ..... 18c

## HAMMARLUND COUPLINGS

Type FC-46S. Sturdy, slip-proof insulated coupling. Excellent for providing flexible linkage between angularly misaligned shafts. Maximum torque is limited only by holding power of the 4 set screws (2 on each side). For use on all standard  $\frac{1}{4}$ "-diameter shafts. Shaft clearance,  $\frac{1}{16}$ ". Flash voltage, 6000 v. Size,  $1\frac{1}{2} \times 1\frac{1}{2}$ ". Shpg. wt., 3 oz.



Type FNC-46S. As above, but non-insulated type. Durable, heavy-duty construction. Maintains firm, slip-proof grip. Has flexible arms which compensate for shaft misalignment. Nickel-plated brass rim.  $1\frac{1}{4}$ " diameter x  $\frac{3}{16}$ ". Shpg. wt., 3 oz.

72 H 497. NET ..... 75c

## INSULATED COUPLING

For coupling drive shafts to capacitors, gang switches, controls and other components. Bakelite insulation. Hubs drilled to fit  $\frac{1}{8}$ " shafts; set-screws hold rigidly. Shpg. wt., 2 oz.



60 H 395. NET ..... 53c

## RECEIVER-TYPE VARIABLE CAPACITORS

### MIDGET SUPERHET AND TRF TYPES

Midget Superhet. Miniature size without sacrifice of performance makes these 2-gang variables perfect for portable and midget sets. Capacity: RF section, 14.5 to 368 mmf.; 27 plates, one section, 11.0 to 136.6 mmf., 15 plates. Capacity increases with counter-clockwise rotation. For use with 455 kc IF. With trimmers. Size,  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ".  $\frac{1}{8}$ " diameter shaft extends  $1\frac{1}{2}$ " beyond frame. Ball-bearing mounted shaft. Shpg. wt., 6 oz.



61 H 008. NET ..... 1.05

Miniature Superhet. RF section is 10.8 mmf to 232.4 mmf. Oscillator section is 8.5 mmf to 106.3 mmf.  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ". 5 oz.

61 H 011. NET ..... 95c

Midget T.R.F. Compact, 33-plate, single-gang capacitor. Variable from 15 to 409 mmf. Capacity increases clockwise. Size:  $1\frac{1}{2}$ " deep,  $1\frac{1}{2}$ " wide,  $1\frac{1}{2}$ " high.  $\frac{1}{4}$ " diameter shaft extends  $\frac{3}{4}$ " beyond capacitor frame. Shpg. wt., 5 oz.



61 H 009. NET ..... 76c

### TRANSISTOR VARIABLE CAPACITORS

TRISOR Superhet. Compact, variable, two-section capacitor designed for use with broadcast band transistor receivers. Ideal for small table models and portables. Counter-clockwise rotation for capacity increase. Each section includes a trimmer for precise adjustment. Oscillator section designed for 455-kc IF. Oscillator capacity: 7.2 to 66 mmf. Antenna section capacity: 7.5 to 81 mmf. Shaft diameter  $\frac{1}{8}$ ". Size:  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ". Wt., 4 oz.



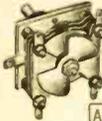
61 H 012. NET ..... 1.00

Miniature Superhet. Two section, variable capacitor designed particularly for the special needs of miniature transistor receivers. Although small in size, accuracy and precision are not sacrificed. Complete with trimmers.  $\frac{1}{8}$ " shaft has ball-bearing mount. Capacity ranges: Oscillator section, 6.1 to 73.4 mmf; RF section, 7.0 to 123.1 mmf. Size:  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ". Shpg. wt., 2 oz.



61 H 013. NET ..... 1.04

## CARDWELL CAPACITORS



### VHF BUTTERFLY CAPACITORS

A 90° capacitors with butterfly rotor plates. Electrical symmetry; low inductance; no moving contacts. Isolantite insulation. Removable plates. Air gap, .030". Shpg. wt., 10 oz.

Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	NET EACH
75 H 001	PL-6076	5	1.5	1.73
75 H 002	PL-6077	7	2.0	1.81
75 H 003	PL-6078	13	3.0	2.64
75 H 004	PL-6113	13	10.4	2.06

### "TRIM-AIR" MIDGETS

B Universal mounting. Isolantite insulation. Shaft has rear extension for ganging; except\*, † Air gap, .02"; others .03". Shpg. wt., 7 oz.

Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	NET EACH
75 H 010	PL-6000	10	1.2	1.20
75 H 011	PL-6001	15	1.5	1.58
75 H 012	PL-6002	25	2.0	1.80
75 H 013	PL-6003	35	2.5	2.03
75 H 014	PL-6004	50	2.8	2.18
75 H 015	PL-6016†	75	2.7	1.89
75 H 016	PL-6017†	100	3.0	2.48
75 H 017	PL-6018*	140	5.0	3.45

Type VHF-2S. Chassis-mounting dual split-stator capacitor. Shaft extension at rear, ball bearings front and back and brackets for mounting 2-7 pin min. sockets. Each split-stator section has a max. cap. of 22.5. min. of 3.0 mmf. Airgap: 0.016"; rated 3000 v. Wt., 2 lbs.

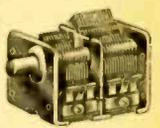
72 H 596. NET ..... 23.07

Type VHF-1S. One section of above—single split-stator. 1 lb.

72 H 597. NET ..... 13.08

## SUPERHET CAPACITOR AND MATCHING COILS

Two-Section Superhet Variable. 19-plate oscillator section with 172.6 max.—10.6 min. mmf; has one 2-17 mmf trimmer. 27-plate RF section with 434 max.—14.5 min. mmf; has one 2-1 mmf trimmer. Provides 455 kc frequency difference in combination with oscillator coil and loop antenna, below. Capacity increases in counter-clockwise direction.  $1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ ". Shaft,  $\frac{1}{8}$ " diameter.  $\frac{3}{4}$ " long. Shpg. wt., 10 oz.



61 H 065. NET ..... 1.06

Oscillator Coil for Above. Shpg. wt., 4 oz.

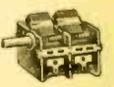
55 H 507. NET ..... 36c

Loop Antenna for Above. Shpg. wt., 8 oz.

51 C 040. NET ..... 53c

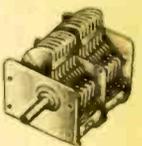
## TRF TYPE CAPACITORS

2-Gang. For use in superhets without RF stage or in 2-stage TRF receivers. Each section has 29 plates. Range of 15.5 to 467.8 mmf, each section. Counter-clockwise rotation increases capacity. With trimmers for each section. End plates slotted to permit easy tracking adjustments. Spring brass wipers. Requires series padder for oscillator use. Has  $\frac{3}{4}$ " diameter shaft. Use with shaft extender No. 60 H 366 (listed in the left-hand column) for conversion to  $\frac{1}{8}$ " shaft. See coil and 1 IF transformer section for coils. Size:  $1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ ". Shpg. wt., 10 oz.



61 H 059. NET ..... 1.11

2- and 3-Gang Capacitors. Compact RF variable capacitors. Have trimmers on side of frame. Outer rotor plates are slotted for tracking adjustment. Tapped holes in frame provide secure mounting. Range: 12 to 367 mmf. Shaft diameter,  $\frac{3}{8}$ ". Size of 2-gang:  $2\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ". Size of 3-gang:  $3\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ". Av. shpg. wt., 6 oz.



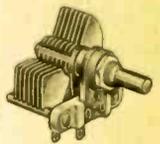
60 H 725. 2-gang. NET ..... 1.08

60 H 726. 3-gang. NET ..... 1.66

## BUD VARIABLE CAPACITORS

### "MC" MIDGETS

Sturdy, highly efficient midget variables. Single and double-bearing types; \*double. Fit  $\frac{3}{8}$ " dia. mounting hole. Cadmium-plated brass rotor and stator plates. Steatite insulation. .024" air-gap. Shpg. wt., 7 oz.



Stock No.	Mfr's Type	Max. Mmf.	Min. Mmf.	No. of Plates	NET EACH
61 H 142	1850*	15	3	3	1.78
61 H 143	1852*	33	4	5	1.84
61 H 144	1853*	50	5	7	2.43
61 H 145	1855*	100	7	14	2.65
61 H 146	1856*	140	7	19	2.72
61 H 147	1858*	190	9	27	2.94
61 H 148	1859*	235	10	33	3.38
61 H 149	1860*	300	12	43	3.67
61 H 150	1870	15	3	3	1.76
61 H 151	1872	33	4	5	1.84
61 H 152	1873	50	5	7	1.91
61 H 154	1875	100	7	14	2.06
61 H 155	1876	140	8	19	2.35

### MIDGET TRIMMERS

Type MT-833. For antenna coupling, interstage coupling and receiver tracking applications. Has screw adjustment for varying capacity. Maximum capacity, 36 mmf.; minimum capacity, 3 mmf. Has ceramic base. Shpg. wt., 4 oz.



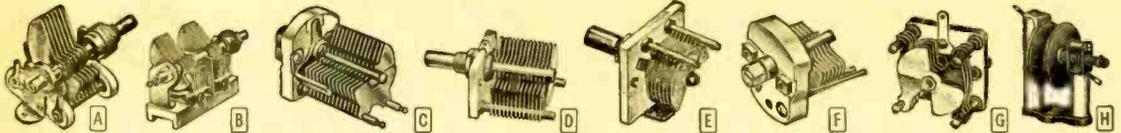
60 H 335. NET ..... 15c

## NATIONAL VARIABLE CAPACITORS



# Variable Capacitors

## HAMMARLUND CAPACITORS FOR AMATEUR, INDUSTRIAL AND MILITARY USE



**TYPE MC**

**A** Siliconized steatite base, nickel-plated brass plates. Panel or chassis mtg. \*Straight-line capacity characteristic; others have mid-line characteristic. Air gap: M and S types, .0245"; MX and SX types, .0715". Tested at 1000 v. and 1750 v. (60 cycle rms) respectively. Capacity increases with clockwise rotation. All have rotor stop. Size: S type,  $\frac{3}{4} \times 1\frac{1}{8}$ "; M type,  $2\frac{1}{2} \times 1\frac{1}{2}$ ". Wt. 10 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 425	*MC-20-S	20	5.5	1.78
72 H 426	*MC-35-S	35	6.0	1.84
72 H 427	*MC-50-S	50	6.5	2.43
72 H 428	MC-50-M	50	6.3	2.43
72 H 429	*MC-75-S	80	8.0	2.49
72 H 430	MC-75-M	80	7.3	2.49
72 H 431	*MC-100-S	100	8.3	2.65
72 H 432	MC-100-M	100	7.7	2.65
72 H 433	MC-140-M	140	9.0	2.72
72 H 434	*MC-140-S	140	10.0	2.72
72 H 435	MC-200-M	200	10.3	2.94
72 H 436	MC-250-M	250	12.0	3.38
72 H 437	MC-325-M	320	13.5	3.67

**DOUBLE-SPACED MC's**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 451	*MC-20-SX	20	0.8	2.43
72 H 452	*MC-35-SX	32	8.5	2.49
72 H 453	MC-35-MX	32	7.8	2.49
72 H 454	*MC-50-SX	53	11.5	2.65
72 H 455	MC-50-MX	53	10.5	2.65
72 H 456	*MC-100-SX	100	16.5	2.94

**TYPE MC2 DUALS**

**B** Panel-mount. Steatite base; nickel-plated brass plates. Tested at 1000 v. \*Straight-line capacity characteristic; others mid-line characteristic. Type M,  $1\frac{1}{2} \times 2\frac{1}{4}$ "; Type S,  $1\frac{1}{2} \times 2\frac{1}{4}$ ". Wt. 11 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 465	MCD-50-M	50	5.5	4.44
72 H 466	MCD-100-M	100	6.3	4.89
72 H 467	*MCD-100-S	100	7.0	4.89
72 H 468	MCD-140-M	140	7.8	5.28

**DOUBLE-SPACED DUALS**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 469	MCD-35-MX	31	6.0	4.62
72 H 470	*MCD-35-SX	31	6.0	4.62

**TYPE MAPC**

**C** Midget padding, trimming and general-purpose capacitors. Similar to APC, but smaller. Ideal for small space applications. Gap, .0135". Rotors and stators are nickel-plated brass. Nickel-plated beryllium copper wiper contact. Tapped (4-40 thread) brass studs in steatite base permit mounting without grounding rotor. Tested at 600 volts rms, 60 cps. Overall size:  $\frac{1}{2}$ " wide,  $\frac{1}{4}$ " high. All units listed below have slotted shafts for screwdriver or hex wrench. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 208	MAPC-15	15	2.3	1.10
72 H 209	MAPC-25	25	2.6	1.15
72 H 210	MAPC-35	35	2.9	1.20
72 H 211	MAPC-50	50	3.2	1.30
72 H 212	MAPC-75	75	3.9	1.45
72 H 213	MAPC-100	100	4.5	1.65

**TYPE HFA**

**D** Sturdy capacitors, similar to HF, but larger plates and wider air gaps. For general-purpose and transmitting applications. Single-hole panel mounting. Also bracket for base mounting. End letter A in type no. denotes .02" air gap, B—.03", E—.07", 800, 1200 and 1750 test volts respectively.  $1\frac{1}{2} \times 1\frac{1}{2}$ ". Wt. 1 lb.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 224	HFA-10B	9	2.3	2.10
72 H 225	HFA-15B	16	2.8	2.20
72 H 229	HFA-15E	16	4.0	2.50
72 H 226	HFA-25B	25	3.0	2.30
72 H 227	HFA-50B	50	4.3	2.50
72 H 228	HFA-100B	100	7.5	3.30
72 H 222	HFA-100A	102	4.5	2.60
72 H 223	HFA-140A	145	6.0	3.10

**TYPE MAC**

(Not illustrated.) Extremely small variable capacitors. Excellent for use as VHF trimmers. Steatite base; only  $\frac{1}{4} \times \frac{3}{4}$ ". Screwdriver adjustment. Have threaded sleeve for convenient panel mounting. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 255	MAC-5	5.0	1.4	1.00
72 H 256	MAC-10	8.7	1.7	1.05
72 H 257	MAC-15	14.2	2.2	1.20
72 H 258	MAC-20	19.6	2.7	1.35

**TYPE HF**

**E** Ideal for critical high-frequency circuits. Isolantite insulation. \*Double-spaced units. HF:  $1\frac{1}{2} \times 1\frac{1}{2}$ "; HFD:  $1\frac{1}{2} \times 1\frac{1}{2}$ ". 6 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 215	HF-15	17.5	2.8	1.50
72 H 216	HF-35	36	3.2	1.70
72 H 217	HF-50	52	3.7	1.80
72 H 218	HF-100	102	5.3	2.10
72 H 219	HF-140	142	6.3	2.50
72 H 220	*HF-15-X	15	3.6	1.80
72 H 221	*HF-30-X	30	5.2	1.90

**HFD SPLIT-STATOR**

1" wide by  $1\frac{1}{2}$ " high.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 230	HFD-50	52	3.6	4.15
72 H 231	HFD-100	102	5.0	4.75
72 H 232	HFD-140	142	6.0	5.55
72 H 233	HFD-15-X	16	3.8	4.75
72 H 234	*HFD-30-X	28.5	5.0	4.75

**TYPE APC**

**F** Isolantite base. Screwdriver or hex-wrench adjust.  $1\frac{1}{2} \times \frac{1}{2}$ ". Wt., 4 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 250	APC-25	25	3.0	1.35
72 H 251	APC-50	50	3.9	1.55
72 H 252	APC-75	75	4.6	1.70
72 H 253	APC-100	100	5.5	1.85
72 H 254	APC-140	140	6.7	2.15

**BFC BUTTERFLY TYPES**

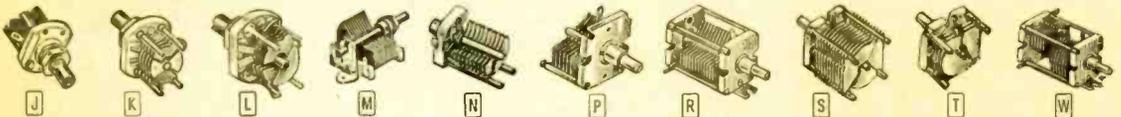
**G** Straight-line capacity type, 90° minimum to maximum. Spacing .03". Tested at 1200 v. rms, 60 cycles between rotor and each stator. Tapped (6-32 thread) studs in steatite base permit mounting capacitor without grounding the rotor. Silver contact.  $1\frac{1}{2} \times 1\frac{1}{2}$ ". Wt. 1 lb.

Stock No.	Type	Max.	Min.	NET
72 H 262	BFC-12	14.5	3.4	1.95
72 H 263	BFC-25	27.3	4.8	2.25
72 H 264	BFC-38	40.1	6.2	2.60

**NEUTRALIZING CAPACITOR**

**H** Type NZ-10. Rated, 3000 v. AC peak. Fine adjustment. Capacity, 2.3-10 mmf.  $2\frac{1}{4} \times 1\frac{1}{2} \times 2\frac{1}{4}$ ". Shpg. wt., 1 lb. 72 H 249. NET. **5.50**

## E. F. JOHNSON CAPACITORS



**TYPE "M" MINIATURE VARIABLES**

Excellent for design of compact VHF and UHF equipment. Bridge-type stator terminal provides low inductance; oversize bearing, heavily anchored stator supports insure rigidity.  $\frac{3}{4} \times \frac{3}{4}$ " panel mtg. cap,  $\frac{1}{4}$ " hole. Slotted shaft takes  $\frac{1}{8}$ " knob. 1250 volts approximate peak break-down. Low-loss steatite insulation. Nickel-plated. Av. shpg. wt., 2 oz.

**J SINGLE**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 175	5M11	5.0	1.5	5	1.00
75 H 176	9M11	8.7	1.8	9	1.05
75 H 177	15M11	14.2	2.3	15	1.20
75 H 178	20M11	19.6	2.7	21	1.35
75 H 900	30M8	32	3	28	1.40

**K BUTTERFLY**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 179	3MB11	3.1	1.5	5	1.40
75 H 180	5MB11	5.1	1.8	9	1.60
75 H 181	9MB11	8.0	2.2	16	1.80
75 H 182	11MB11	10.8	2.7	22	2.00

**L DIFFERENTIAL**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 901	6MA11	5.0	1.5	5	1.45
75 H 902	9MA11	8.7	1.8	9	1.65
75 H 903	15MA11	14.2	2.3	15	1.85
75 H 904	19MA11	19.6	2.7	21	2.10

**TYPE "R" VARIABLES**

**M** For transmitting and receiving. Feature extra heavy steatite stator support insulators. Corrosion resistant, nickel-plated parts. Double bearing construction. Plate spacing .024".  $1\frac{1}{2}$ " high and  $1\frac{1}{2}$ " wide. Bearing threaded  $\frac{1}{4}$ "-32 for panel mounting. Shaft diameter,  $\frac{3}{8}$ ". Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 053	20R12	20	5	3	2.25
75 H 054	35R12	35	6	5	2.35
75 H 055	50R12	50	6.5	7	2.45
75 H 056	75R12	80	8	11	2.60
75 H 057	100R12	102	8.5	14	2.75
75 H 058	140R12	140	13.5	19	2.95

**TYPE "S" VARIABLES**

**N** Ideal for use in VFO's, receivers, and transmitter tuning circuits. Steatite end frame, nickel-plated brass plates. Plate spacing, .013". 2-mtg. studs tapped 4-40 on  $\frac{1}{4}$ " centers.  $\frac{3}{4} \times \frac{1}{2}$ " panel space.  $\frac{1}{4}$ " hex shaft. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 905	15S8	15	2.3	6	1.10
75 H 906	25S8	25	2.6	10	1.15
75 H 907	35S8	35	2.9	14	1.20
75 H 908	50S8	50	3.2	19	1.30
75 H 909	75S8	75	3.9	29	1.45
75 H 910	100S8	100	4.5	38	1.65

**TYPE "L" VARIABLES**

Top-quality, general purpose capacitors. Steatite end frames. Plate spacing, .030". bearings threaded  $\frac{1}{4}$ "-32. Shaft diameters,  $\frac{1}{4}$ ".  $1\frac{1}{2} \times 1\frac{1}{2}$ " panel space. Av. shpg. wt., 1 lb.

**P SINGLE SECTION—ONE END PLATE**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 911	10L15	11	2.8	3	1.60
75 H 912	25L15	27	3.5	7	1.70
75 H 913	50L15	51	4.6	13	1.90
75 H 914	75L15	75	5.7	19	2.10

**R SINGLE SECTION—TWO END PLATE**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 918	100L15	90	6.8	25	3.30
75 H 919	200L15	202	11.6	51	4.20

**S BUTTERFLY**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 923	10LB15	10.5	2.8	5	1.95
75 H 927	25LB15	26	4.3	12	2.25
75 H 928	50LB15	51	6.8	23	2.75

**T DIFFERENTIAL**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 929	10LA15	11	2.8	3	2.00
75 H 930	25LA15	27	3.5	7	2.20
75 H 931	50LA15	51	4.6	13	2.50

**U DUAL SECTION**

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 932	25LD15	27	5.0	7	3.60
75 H 943	50LD15	51	6.5	13	4.05
75 H 944	100LD15	99	9.8	25	4.95

# Shields, Caps, Dials, Accessories

## CRONAME DIAL & SWITCH PLATES



A



B

### SQUARE DIAL PLATES

**A** Attractive anodized aluminum dial plates with black scales. Available in a large variety of designations. Excellent for installers, hobbyists and experimenters. Use with 1 1/4" bar knob. Provide the finishing touch that gives a custom-built look to H-F and P-A amplifiers, recorders, etc. Size, 2 1/4 x 2 1/2", with 1/2" center-hole. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	NET
55 H 160	448	Treble, 0-10	
55 H 161	447	Bass, 0-10	
55 H 137	429	Treble, 5-0-5	
55 H 136	428	Bass, 5-0-5	
55 H 164	416	Microphone, 1, 0-10	
55 H 165	417	Microphone, 2, 0-10	
55 H 126	415	Microphone, 0-10	
55 H 170	413	Master Gain, 0-10	
55 H 124	412	Gain, 0-10	
55 H 127	422	Gain, 5-0-5	
55 H 123	411	Tone, 0-10	
55 H 134	426	Volume, 0-10	
55 H 125	414	Record, 0-10	
55 H 135	427	Fader, 5-0-5	
55 H 138	430	Expansion, 0-10	
55 H 139	446	Phono, 0-10	
55 H 131	423	Increase, with arrow	
55 H 172	410	No title, 0-10	

NET EACH ..... 51c

### ROUND DIAL PLATES

**B** Easy-to-read etched aluminum scale with black background, 1 1/2" diameter. Type 25 has clockwise arrow labeled "Volume." Simple, one-hole mounting. Ideal for use on amplifiers, modulators, phonographs, transmitters, etc. Use with 1 1/4" bar knobs. 1 1/8" center-hole. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	NET
55 H 141	25	Volume	37c
55 H 140	569	0-100, 180°	37c
55 H 108	905	0-100, 270°	27c

### "OFF-ON" SWITCH PLATE

Economy-priced "Off-On" switch plate. Etched aluminum with black background. Has polished aluminum letters and border. Size, 1 1/4 x 1 1/4". Shpg. wt., 2 oz.



60 H 338, NET EACH ..... 17c

### AMPHENOL "TUNING-EYE" ASSEMBLIES

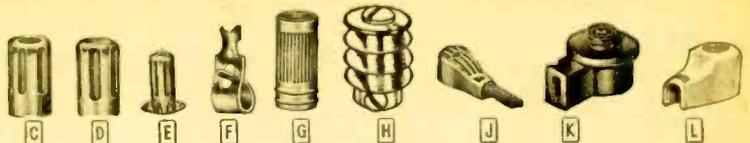
Complete mounting assemblies for installation of electron-ray tube "magic-eye" tuning indicators. Ideal for installation in FM or AM receivers (equipped with automatic volume control circuits) to provide an extremely accurate, visual tuning aid. Can also be used for modulation indicators in recorders; voltage indicators in test equipment; tuning indicators in transmitters. Mounting assemblies are supplied complete with color-coded wiring and a one-inch target plate resistor attached to tube socket. Adjustable mounting brackets accommodate a variety of tube types and permit installation on any panel. Hood escutcheon mounts on front of panel to provide a professional-looking installation. With hardware and instructions less tube.

Type 58-MEA-6. For 6-prong tubes such as 6E5 and 6A5. Shpg. wt., 6 oz. NET ..... 1.12

Type 58-MEA-8. For octal base tubes such as 6AD6G, 6AF6G and 6AL7GT. Shpg. wt., 6 oz. 45 H 856, NET ..... 1.53

### G-C AUTO RADIO SPEAKER CONTROLS

Type 8891 Speaker Selector. 3-position speaker selector switch for convenient control of front and rear-deck auto radio speakers. Permits operation of either speaker individually, or both at once. Attractive, etched aluminum dial plate mounts easily under dashboard. Supplied with switch, control knob, dial plate and wiring instructions. Less wire. Shpg. wt., 3 oz. 83 P 053, NET ..... 59c



### RECEIVING TUBE GRID CAPS AND SHIELDS

A complete selection of grid caps and shields for receiving-type tubes. Shields are used extensively with high-gain RF and audio amplifier tubes to minimize microphonics, and prevent oscillation, hum pickup, etc. Also used to shield oscillator and converter tubes to avoid radiation. Tube caps provide positive, dependable contact. Av. shpg. wt., per pkg., 3 oz.

vent oscillation, hum pickup, etc. Also used to shield oscillator and converter tubes to avoid radiation. Tube caps provide positive, dependable contact. Av. shpg. wt., per pkg., 3 oz.

Stock No.	Fig.	Description and Application	Quantity Per Pkg.	NET Per Pkg.
42H 510	C	Goat G1332-3 tube shield for GT tubes, 2 5/8" high, 7/8" hole.	4	25c
42H 511	D	Goat G1332-5A. Same as 42 H 510, but with closed top.	4	25c
42H 512	E	Goat G1700 tube shield for miniature T5 1/2 with G1710-B base. 865"x1 1/4".	3	14c
42H 514	F	National Type 24. For standard tubes, 3/4" dia. grid caps.	5	20c
42H 515	F	National Type 8. For octal tubes, 1/4" diameter grid caps.	5	20c
42H 507	G	Goat G1222K-5 tube shield for GT types. 1 1/4" dia., 2 3/4" high.	4	14c
42H 509	G	Goat G1222L-4 tube shield for loka! tube tubes. 1 1/2" dia., 2 3/4" high.	4	13c
42H 508		(Not illustrated). Goat G1004-2 ground clip for grounding shields on octal tubes.	10	11c
42H 506		(Not illustrated). Goat G1307-2 double clip for octal base tubes (fits on tube socket).	5	7c

### TRANSMITTING TUBE CAPS

An excellent selection of plate and grid caps for transmitting tubes. Listing includes heat-dissipating types; fine grained large metal surface area for rapid radiation of heat; have machine screw for secure connection. Millen

36011 cap is for mobile or industrial use where a tighter-than-normal grip is required; self-locking, with snap-button release. \*For use with wire leads. All others are cap type. Av. shpg. wt., 3 oz.

Stock No.	Fig.	Description and Application	Quantity Per Pkg.	NET Per Pkg.
42H 093	H*	Eimac HR-3 heat dissipating cap for 35T, 250TH, etc. .070" hole.	1	.60
42H 096	H	Eimac HR-6 heat dissipating cap for 4-250A, 304TH, etc. .35" hole.	1	.80
73H 007	H	Bud TC-487 heat dissipating cap for UH50, HK24, 304B, 829B, 832A, 834, .062" hole.	1	.67
73H 000	H*	Bud TC-488 heat dissipating cap for HK24, 3C24, 24G, 25T, etc. .052" hole.	1	.67
73H 001	H*	Bud TC-489 heat dissipating cap for 35T, HK54, etc. .072" hole.	1	.67
73H 002	H	Bud TC-1920 heat dissipating cap for 100T, 807, 4-125A, 2-150D, 250TH, 4-250A, 6146, 1625, 4D32, 807W, 1B3GT, etc. .375" hole.	1	.67
73H 003	H	Bud TC-1921 heat dissipating cap for 866, T125, HF100, 450TH, 750TH, 809, 811, 812, 813, 828, 866, etc. .570" hole.	1	.78
73H 004	H	Bud TC-1924 heat dissipating cap for HK57, 152TH, etc. .125" hole.	1	.71
73H 005	H	Bud TC-1925 heat dissipating cap for 304TH, 304TL, etc. .125" hole.	1	.73
73H 006	H	Bud TC-1926 heat dissipating cap for WL468, WL463, WL460, HF200, HF201, HF300, 810" hole.	1	1.03
72H 082	J	Millen 36011 industrial snap-action plate cap, plate cap, %".	1	.69
72H 083	K	National SPP-9 ceramic-insulated grid and plate cap, %".	3	.24
42H 518	F	National Type 12 grid and plate cap, %".	1	.21
72H 069	L	Millen Type 36002 stealite tube cap, %".	1	.24
72H 140	L	Millen Type 36004 stealite tube cap, %".	1	.24
72H 068	L	Millen 36001 stealite plate cap for 866, etc. %".	1	.24

### WALSCO DIAL CORD SPOOLS

An excellent selection of dial cord covering 80% of the replacement demand. All types have either a fiber-glass or a linen core. Pre-stretched; maintains proper tension. Nylon-braided sleeves. Av. shpg. wt., 4 oz.



No.	Type	Dia.	Strngth.	Lgth.	E.A.
60 N 490	652-Med.	.040"	35 lbs.	25 ft.	.88
60 N 491	656-Thin	.025"	15 lbs.	25 ft.	
60 N 492	654-Std.	.032"	20 lbs.	25 ft.	
43 N 197	652-Med.	.040"	35 lbs.	100 ft.	2.91
43 N 195	656-Thin	.025"	15 lbs.	100 ft.	
43 N 196	654-Std.	.032"	20 lbs.	100 ft.	

### G-C DIAL POINTERS

Will fit most radio sets. Can be cut shorter for small dials. Wt., 2 oz.

Type	Description	NET EACH
Type 6810	Kit of 10 pointers in plastic case. Shpg. wt., 4 oz.	
60 H 449	NET..... 1.91	
M	6802, 5" rotary for 1/4" shaft. Has gold and red finish.	24c
M	6446, NET EACH..... 24c	
N	6801, 3" rotary for 1/4" shaft. Gold.	24c
N	60 H 445, NET EACH..... 24c	
P	6804, 2" slide pointer. White enamel.	24c
P	60 H 448, NET EACH..... 24c	
R	6803, 2 1/2" slide pointer. Red translucent.	24c
R	60 H 447, NET EACH..... 24c	

### CRONAME "TAILORED" TUNING ASSEMBLIES



"Croflex" dials are "tailored" to fit any average chassis. They offer handsome, modern styling that will complement the finest of custom installations. The tuning knob can be located at either end of the dial or along its lower edge. To install, simply position dial assembly and mount on chassis, string dial cord and set pointer, and make shaft hole and dial cutout on panel. Capacitor pulley is furnished with each dial assembly—assemblies accommodate either clockwise or counter-clockwise capacitors with shafts up to 1/4" in diameter. Modern "3-dimension" edge-lighted glass scales are calibrated horizontally and are extremely easy to read. Supplied with gold-bronze finished aluminum escutcheon and two clip-on, miniature-base, screw-type pilot light sockets (less bulbs). AM calibration covers 550-1700 kc, FM covers 88-108 mc. shortwave covers 6-18 mc. Series CR-1: 9:1 tuning ratio, 3 3/4" pointer travel. Series CR-2: 17:1 tuning ratio, 6 3/4" pointer travel. Series CR-3: 18:1 tuning ratio, 7 1/2" pointer travel. \*Has 0-100 logging scale for shortwave applications. Shpg. wts.: Mfr's Type CR-1, 1 lb.; CR-2, 1 1/4 lb.; CR-3, 1 1/2 lb.

Stock No.	Mfr's Type	Appli-cation	Cutout	NET EACH
55 H 317	CR-1	*AM-SW		7.35
55 H 318	CR-1A	AM-FM	1 1/4 x 4 1/2"	7.35
55 H 319	CR-1B	AM-FM		7.35
55 H 356	CR-1C	FM		7.35
55 H 322	CR-2	*AM-SW		8.17
55 H 323	CR-2A	AM-FM		8.17
55 H 324	CR-2B	AM	1 1/4 x 7 1/2"	8.17
55 H 357	CR-2C	FM		8.17
55 H 325	CR-3	*AM-SW		10.58
55 H 326	CR-3A	AM-FM	2x8 1/2"	10.58
55 H 327	CR-3B	AM-FM		10.58

# National Components

## CALIBRATED AND UNCALIBRATED DIALS



ACN



ICN



MCN

### VERNIER DIALS FOR INDIVIDUAL CALIBRATION

Popular blank dials featuring famous "Velvet Vernier" with 5:1 drive ratio. Pointers have centered hairlines and pinholes for accurate calibration of each scale. Black-wrinkle finish; clear-view plastic windows. With extra scales, hardware, and hub for 1/4" shafts.

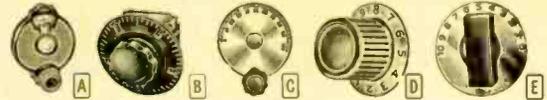
**Type ACN.** The famous original of this type with smart styling. Large-size vernier dial for easy direct calibration of 5 blank scales. Knob has bright chrome insert. 5" high, 7 3/4" wide. Shpg. wt., 1 1/4 lbs. 71 H 090. NET. **7.04**

**Type SCN.** Vernier dial same as above but intermediate in size. 4 1/4" high, 6 1/2" wide. Ideal for use where space is limited. Shpg. wt., 1 lb. 71 H 088. NET. **6.47**

**Type ICN.** Similar to above but has large, illuminated vernier dial, 5 3/4" high, 7 3/4" wide. Lights in upper corners. With standard bayonet sockets and mounting screws. Less lamps. Shpg. wt., 1 1/4 lbs. 71 H 087. NET. **6.90**

**Type MCN.** Small size vernier dial. Similar to above but not illuminated. 2 3/4" high, 3 3/4" wide. Perfect for mobile gear and other small units. 3 blank scales. Mechanism extends 1/4" below frame. 10 oz. 71 H 089. NET. **3.99**

**Type AN Vernier Dial Drive Mechanism.** (Not illus.) Smooth operating dial drive with 5 to 1 ratio. Same as used in above dial assemblies. Has 1/4" drive shaft and output hub for coupling to 1/4" shafts. 2 1/2" dia. diameter by 1 1/2" overall. Shpg. wt., 12 oz. 71 H 064. NET. **3.02**



### CALIBRATED DIALS

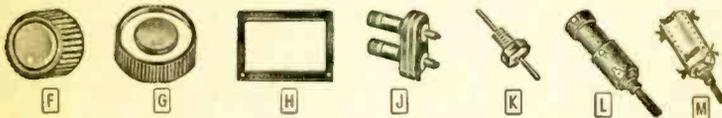
Famous National dials for smooth performance and dependability. Recommended for all types of equipment. We can supply any National dial promptly—specify type number for models not listed. †Gray, ‡Black.

Stock No.	Mfr's Type	Fig.	Ratio	Scale	Dia.	Wt., Oz.	NET EACH
71 H 072	AM-2	.....	5:1	0-100; 180°	3"	10	3.93
71 H 073	AM-3	.....	5:1	100-0; 180°	3"	10	3.93
71 H 076	AM-4	.....	5:1	150-0; 270°	3"	10	3.93
71 H 077	AM-5	.....	5:1	200-0; 360°	3"	10	3.93
71 H 078	AM-6	.....	5:1	0-150; 270°	3"	10	3.93
71 H 067	BM-1	A	Fixed	0-100-0; 180°	3"	10	4.88
71 H 068	BM-2	A	Fixed	0-100; 180°	3"	10	4.64
71 H 069	BM-5	A	Fixed	200-0; 360°	3"	10	4.64
71 H 063	N-5	.....	5:1	200-0; 360°	4"	12	7.50
71 H 091	K	C	Fixed	0-100; 180°	3 1/2"	12	1.73
71 H 058	HRS-3 1/2	D	Fixed	0-10; 300°	1 1/2"	2	.58
71 H 059	HRS-3†	D	Fixed	0-10; 300°	1 1/2"	2	.58
71 H 219	HRS-4†	D	Fixed	1-line; 300°	1 1/2"	2	.58
71 H 082	O	B	Fixed	0-100; 180°	3 1/2"	4	2.85
71 H 070	R	E	Fixed	0-10; 180°	1 1/2"	2	.69

**Type ODD Pinch Drive Mechanism.** For Type O dial above. Same as used on "K" dial (Fig. C). With knob. 1 1/2 x 3/4" dia. Shpg. wt., 2 oz. 71 H 085. NET. **48c**

**Type NPW-O Precision Gear Drive.** Ruggedly constructed, gear-driven, precision dial mechanism featuring accuracy to one part in 500. Offers smooth control and high reset accuracy. Dial finished in black with white numerals. Diameter, 4 1/2". Shpg. wt., 3 lbs. 71 H 083. NET. **20.45**

## EQUIPMENT DESIGN COMPONENTS



Stock No.	Mfr's Type	Fig.	Description	Shpg. Wt. Oz.	NET EACH
71 H 173	FWH	J	Terminal Jack Assembly—Binding Post.	4	1.10
71 H 176	FWJ	.....	Jack Assembly—As FWH, for jacks only.	4	.87
71 H 157	FWT	.....	Plug for FWH and FWJ terminal strips.	3	1.56
71 H 208	HRS	F	Knob, Black, HRS Type; white dot.	2	.35
71 H 209	HRS	F	Knob, Gray; same as above.	2	.35
71 H 071	HRT-P	.....	Bar knob with pointer. 1 1/4 x 1/2".	3	.29
71 H 056	HRT	G	Knob, Black, HRS Type; 2 1/4" dia.	3	.86
71 H 057	HRT	G	Knob, Gray; chrome insert. As above.	3	.86
71 H 242	CFA	H	Chart frame; 1/4" steel; 2 1/4 x 3 1/4".	6	.40
71 H 116	TPB	K	Threaded Polystyrene Bushing.	2	.07
71 H 228	XR-50	L	Coil Form, iron-slug tuned. Mica-bakelite.	2	1.04
71 H 229	XR-60	M	Coil Form, iron-slug tuned. Ceramic.	2	1.32
71 H 241	XR-62	M	Coil Form, iron-slug tuned. Ceramic.	2	1.32
71 H 239	XR-91	M	Coil Form, iron-slug tuned. Ceramic.	2	1.32
71 H 122	XS-6	.....	Seateite Bushing.	2	.14

## TRANSMITTING CAPACITORS



Compact, rigid construction. Steatite insulation. Provisions for panel, chassis or standoff insulator mounting. Air Gap and Peak Voltage: TMS types, .026", 1000 volts; TMC types, .077", 3000 volts; ST types, .026", 1000 volts (except .018", 600 volts). Lengths: \*3"; †3" to 6"; ‡4 1/2" to 9 1/4". 180° rotation. Wt., 1 lb.

### TYPE TMS—SINGLE STATOR\*

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 000	TMS-100	100	9.5	5.48
71 H 001	TMS-150	150	11	6.02
71 H 002	TMS-250	250	13.5	7.01
71 H 003	TMS-300	300	15	6.81

### TYPE TMS—DOUBLE STATOR\*

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 004	TMS-50D	50-50	6-6	6.09
71 H 005	TMS-100D	100-100	7-7	6.05
71 H 013	TMS-125D	125-125	8-8	7.50

### TYPE TMC—SINGLE STATOR†

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 015	TMC-50	50	10	7.17
71 H 016	TMC-100	100	13	8.61
71 H 017	TMC-150	150	17	9.23
71 H 018	TMC-250	250	23	13.11

### TYPE TMC—DOUBLE STATOR‡

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 020	TMC-50D	50-50	9-9	5.64
71 H 021	TMC-100D	100-100	11-11	11.61
71 H 022	TMC-200D	200-200	18.5-18.5	18.66

### TYPE ST—SINGLE BEARING\*

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 030	STHS-15 1/2	15	3	3.09
71 H 031	STHS-25 1/2	25	3.25	3.20
71 H 032	STHS-50 1/2	50	3.5	3.24

### TYPE ST—DOUBLE BEARING\*

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 033	ST-35	35	6	4.65
71 H 034	ST-50	50	7	4.83
71 H 035	ST-75	75	8	5.34
71 H 036	ST-100	100	9	4.88
71 H 037	ST-140	140	10	6.51
71 H 038	ST-150	150	10.5	7.28
71 H 039	STH-200	200	12	5.79
71 H 040	STH-250†	250	13.5	5.99
71 H 041	STH-300†	300	15	7.62
71 H 042	STH-35 1/2†	335	17	7.01

### ST—SPLIT STATOR DOUBLE BEARING\*

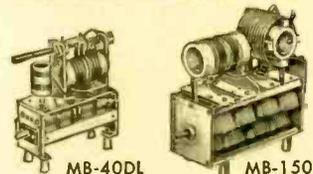
Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 043	STD-50	50-50	5-5	7.50
71 H 044	STHD-100†	100-100	5.5-5.5	6.21

## FRONT PANEL RIGHT-ANGLE DRIVE

**Type RAD.** Front panel control for variable capacitors, potentiometers, etc., at right angles to panel. Saves space by permitting greater freedom in parts layout. May be used to drive two units. Die-cast aluminum housing and gears. 2 1/2 x 1/4" shaft. 6 oz. 71 H 014. NET. **4.31**

**Type PRAD.** As above but deluxe precision model with brass gears. Backlash less than 1 1/2%. 1/4" shaft is 2 1/2" long. Wt., 3 oz. 71 H 247. NET. **11.31**

## MULTI-BAND TANK ASSEMBLIES



**Type MB-150.** Tunes all frequencies from 80 through 10 meters with no coil change. Constant L/C ratio maintained on all bands. Rated at 150 watts; handles 1500 v. peaks. Consists of 3 coils, 4-gang tank condenser, RF choke. For balanced or single-ended amplifiers. Size, 8 1/4 x 3 x 9". Shpg. wt., 4 lbs. 71 H 046. NET. **21.56**

**Type MB-40DL.** Low-power version of MB-150 tank above. Excellent for final tank in low-power transmitters or for grid circuit in transmitter using MB-150 in final. Has same frequency coverage. Shielded swinging link minimizes harmonics. Handles up to 40 watts with output link loaded; 20 watts no load. Size, 5 1/2 x 2 1/2 x 6 1/4". Shpg. wt., 1 1/4 lbs. 71 H 045. NET. **17.75**

## UM MINIATURE CAPACITORS

180° rotation. Straight-line-capacity plates. .017" air gap, 600 v. peak. 1/4" dia. shafts; protrude for ganging. Low minimum capacity. Ceramic base for 4-hole mounting or single 3/4" hole. 1x2 1/2 x 2 1/4". Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 275	UM-15	15	1.5	1.17
71 H 276	UM-35	35	2.5	1.32
71 H 277	UM-50	50	3	1.43
71 H 278	UM-75	75	3.5	1.67
71 H 279	UM-100	100	4 1/2	1.84

# Millen Components

## MINIATURIZED COUPLINGS

For limited space use. M003 is brass. M006 (illustrated) is universal joint style made of nickel-plated brass with steatite insulation and spring fingers. M008 is an insulated coupling with brass inserts. 39003 is solid brass for 1/4" shafts; all others are for 1/8" shafts. Av. shgp. wt., 2 oz.



Stock No.	Mfr's Type	Description	NET EACH
72 H 172	M003	Solid brass coupling	33c
72 H 170	M006	Univ. joint coupling	75c
72 H 171	M008	Insulated coupling	51c
72 H 090	39003	Solid brass coupling	24c

## FLEXIBLE COUPLINGS

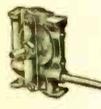
Popular 39000 series of flexible couplings. Designed to provide higher flexibility, no backlash, high break-down voltages, smaller diameter and accurate alignment. In addition to improved versions of conventional types, units include such exclusive original designs as 39001 with insulated universal joint and 39006 with "slide-action" coupling for out-of-line or eccentric shaft motion. Type 39005 (high torque) is similar to 39001 but is not insulated. Type 39016 is molded as single unit and features higher resistance to mechanical shock; has solid insulating barrier diaphragm. All are for 1/4" shafts except \* for 3/8" shaft. Av. shgp. wt., 2 oz.



Stock No.	Mfr's Type	Description	NET EA.
72 H 034	39001	Insulated universal joint	48c
72 H 176	39002	Insulated universal joint	
72 H 054	39005	Universal joint	
72 H 094	39006	Insulated slide action	
72 H 175	39016	Insulated barrier	
72 H 656	39017*	Miniature of 39016	

## DRIVE MECHANISM

Type 10000 Worm Drive. A ruggedly constructed drive mechanism offering a 16-to-1 step-down ratio. Cast-aluminum frame drilled for secure mounting on panel or chassis base. Spring-loaded split gears for smooth operation and minimum backlash. 1/4" left and right-hand shafts. Size, 3x2x2 3/8". Shgp. wt., 6 oz. NET 9.75



## MOLDED COIL FORMS

Type 45004. Molded-mica, phenolic base type coil forms. Four-prong type. For shortwave receivers and low-power transmitters. Size: 1" diameter; 1 1/4" winding length; 2 3/8" overall. Shgp. wt., 2 oz. NET 51c

Type 45005. Same as 45004, but has 5 prongs. Shgp. wt., 2 oz. NET 51c

Type 45000. As above, without prongs. Screw mount. Shgp. wt., 2 oz. NET 39c



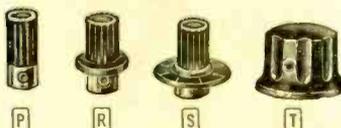
## INSTRUMENT DIAL

Type 10007. Handsome dial with accurate 0-10 clockwise scale spread over 180° for easy, direct calibration and high legibility. Lends professional appearance to test instruments, receivers, etc. Highly useful for engineers, Amateurs, experimenters, etc. Black etched numerals; black plastic knob. Dial dia., 1 1/2". Fits 1/4" shaft. Shgp. wt., 3 oz. NET 75c



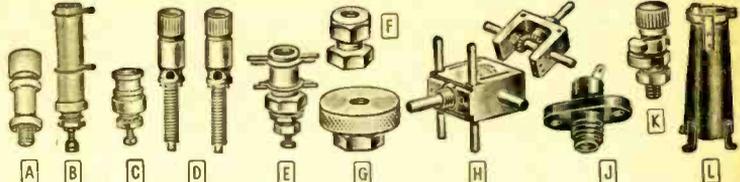
## MINIATURE KNOBS

Black plastic knobs with brass inserts for 1/4" diameter shafts. Type A018 has screwdriver slot in top. Overall height: A006, 1/2"; A007, A018 and A019, 3/4". Av. shgp. wt., 4 oz.



No.	Type	Fig.	Size	NET
72 H 274	A019	R	1/4" dial dia.	36c
72 H 273	A018	R	1/4" dial dia.	39c
72 H 272	A007	S	1/4" dial dia.	42c
72 H 271	A006	T	1/4" dial dia.	48c

## "DESIGNED FOR APPLICATION" COMPONENTS



## Precision Components for Finest Performance

Famous Millen components for use in original equipment and for replacement purposes in existing equipment. Made to exacting specifications to assure extremely dependable service in all industrial, Amateur and experimental applications. In all Series 69000 slug-tuned coil forms, copper slug decreases inductance as slug is turned into coil; iron slug increases inductance. Series 80000 CRT bezels have satin-black

finish, neoprene cushions and green Lucite filters. Series 37200 binding posts, plates and plugs provide a number of combinations to meet the most varied requirements. See Millen high-quality RF chokes, also listed in this Catalog. \*Items not illustrated. Coil dimensions are winding lengths. Refer to manufacturer's index for page numbers of the many other Millen precision products listed in this Catalog.

Stock No.	Mfr's Type	Fig.	Description	Wt., Oz.	NET EACH
72 H 085	10012	H	Right Angle Drive	5	5.00
72 H 087	10050	K	Dial Lock	4	.54
72 H 099	10061	F	Shaft Lock, for 3/8" Bushing; 1/4" shafts	4	.45
72 H 668	A061	F	Shaft Lock, for 1/2" Bushing; 1/2" shafts	4	.39
72 H 088	10062	G	Shaft Lock with Knurled Nut	4	.54
72 H 036	37001	J	High Voltage Terminal and Thru-Bushing, Black	3	.48
72 H 037	37001	J	High Voltage Terminal and Thru-Bushing, Red	3	.45
72 H 260	4005	*	5-Prong Steatite Coil Plug	3	.69
72 H 261	41305	*	5-Prong Steatite Jack Bar for above	3	.84
72 H 057	37202	*	Bakelite Plates (2) for 37222 below, Black	2	.36
72 H 059	37222	D	Binding Post	6	.30
72 H 166	37305	*	Steatite Terminal Strip, 5 Terminals	5	1.14
72 H 167	37306	*	Steatite Terminal Strip, 6 Terminals	5	1.23
72 H 130	69041	C	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Copper Slug	3	.96
72 H 131	69043	A	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Iron Slug	3	.84
72 H 084	69045	B	Ceramic Slug-tuned Coil Form, 1/4"x1 1/4", Copper Slug	3	1.05
72 H 132	69046	B	Ceramic Slug-tuned Coil Form, 1/4"x1 1/4", Iron Slug	3	1.05
72 H 133	69048	*	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Iron Slug	3	1.05
72 H 669	69051	E	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Copper Slug	3	.87
72 H 670	69052	E	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Iron Slug	3	.87
72 H 671	69055	E	Ceramic Slug-tuned Coil Form, 1/4"x1 1/4", Copper Slug	3	1.05
72 H 672	69056	E	Ceramic Slug-tuned Coil Form, 1/4"x1 1/4", Iron Slug	3	1.05
72 H 673	69057	E	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Copper Slug	3	.87
72 H 674	69058	E	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Iron Slug	3	.87
72 H 675	69061	E	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Copper Slug	3	.90
72 H 676	69062	E	Ceramic Slug-tuned Coil Form, 1/4"x3/4", Iron Slug	3	.90
72 H 150	80042	L	Nicoloi Shield for 2A1I and 2BP1 2" CR Tubes	10	6.90
72 H 151	80043	L	Nicoloi Shield for use with either 3API or 3BP1 3" CR Tubes	12	18.00
72 H 177	80055	*	Nicoloi Shield for 5CP1	4	1.80
72 H 153	80072	*	Bezel, Cushion and Filter for 2" CR Tube	5	4.35
72 H 154	80073	*	Bezel, Cushion and Filter for 3" CR Tube	7	8.40
72 H 155	80075	*	Bezel, Cushion and Filter for 5" CR Tube	7	8.40

## VARIABLE CAPACITORS

Series 20000 Ultra-Midgets. Top-quality, steatite-insulated variables. For use in applications requiring miniaturized components. All are single-bearing type with .015" air gap (rated 600 volts peak), except \*double-bearing type with .045" air gap (rated 1400 volts peak). All have 1/4" round shafts, 1" long, 3/32" thread mounting bushing. Av. shgp. wt., 5 oz.



Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	Overall Length	NET EACH
72 H 030	20015	20	2.8	1 1/2"	1.77
72 H 044	20025	28.5	3.0	2 1/8"	1.86
72 H 032	20050	56	3.5	2 1/2"	2.04
72 H 033	20100	111	5.2	2 3/4"	2.43
72 H 045	21935*	39.5	6.7	3 1/2"	4.08

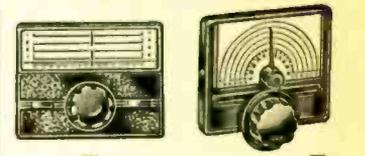
## 33087 TUBE BASE CLAMPS

Sturdily made, polished spring steel tube base clamps. Hold tubes in sockets and protect against damage from sudden jarring and shock. Excellent for use in mobile equipment and for reducing vibration of oscillator tubes. 2 oz.



Stock No.	Mfr's Type	Diameter	NET EACH
72 H 178	33087A	1.125"	36c
72 H 179	33087B	1.165"	
72 H 180	33087C	1.250"	
72 H 181	33087D	1.275"	
72 H 182	33087E	1.375"	

## MULTI-SCALE DIALS

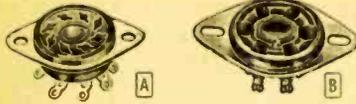


M Type 10035 Multi-Scale Dial. A deluxe-type illuminated slide-rule dial. Ideal for home-built amateur receivers, VFO's, etc. Two built-in pilot lights provide even illumination over dial. Unit is self-contained. Large finger-grip knob control. Has 12 to 1 drive ratio. Has 4 blank scales for calibration and one 0-1000 logging scale. Cardboard scale supplied can be used on both sides. Clear plastic dial window. Ample panel space provides room for 2 small controls. Size, 8 1/2"x6 1/2". Black finish. Shgp. wt., 2 1/2" lbs. NET 7.26

N Type 10039 Midget Panel Dial. Economy model. Excellent for small transmitters, receivers and measurement equipment. Drive ratio is 8 to 1. Totally self-contained mechanism eliminates back-of-panel interference; quick, easy installation. Compact design. Comfortable, finger-grip knob. Has 5 blank scales for calibration and one 0-1000 logging scale. Attractive black finish. Size, 4x3 1/2". Shgp. wt., 3 oz. NET 3.24

# Amphenol Sockets

## POPULAR STANDARD SOCKETS



**A** Type MIP. Bakelite body with molded-in steel plate. \*Requires 1 1/4" hole; mounting centers, 1 1/4". All others have 1 1/2" mounting centers. †Requires 1 1/2" hole; others 1 3/4" hole. ‡Mica-filled bakelite. Av. shgp. wt., 4 oz.

Stock No.	Type	Prongs	NET
40 H 024	77MIP4	4	9¢
40 H 025	77MIP5	5	10¢
40 H 026	77MIP6	6	11¢
40 H 027	77MIP7S	7 Small	12¢
40 H 029	77MIP7L†	7 Large	12¢
40 H 028	77MIP8	Octal	10¢
40 H 126	88-8*	Octal	11¢
40 H 030	88-8X*	Locetal	14¢
40 H 034	77MIP8†§	Octal	12¢
40 H 032	77MIP9	9	12¢
40 H 033	77MIP11	11	13¢
40 H 069	77MIP12	12	15¢
40 H 070	77MIP20	20	32¢

**B** Type RS. Has removable mounting plate. 40 H 009 mounts in 1 1/4" hole, others in 1 1/2" hole. Slotted mounting holes to fit centers from 1 1/2 to 1 3/4". Av. shgp. wt., 4 oz.

Stock No.	Mfr's Type	Prongs	NET
40 H 004	78RS4	4	11¢
40 H 005	78RS5	5	12¢
40 H 006	78RS6	6	13¢
40 H 007	78RS7S	7 Small	14¢
40 H 009	78RS7L	7 Large	18¢
40 H 008	78RS9	Octal	13¢
40 H 010	78RS8L	Locetal	17¢
40 H 012	78RS9	9	13¢
40 H 071	78RS11	11	16¢



**C** Type RSS. Ultra-low-loss steatite replacement sockets. Ruggedly constructed. Adaptable to a wide variety of uses. Excellent for use in high-frequency transmitting equipment, etc. All are universal type; have removable mounting plate with slotted holes 1 1/2 to 1 3/4". Mounting hole, 1 1/4" except 40 H 079, which requires 1 1/2". Av. shgp. wt., 5 oz.

Stock No.	Mfr's Type	Prongs	NET
40 H 074	49RSS4	4	28¢
40 H 075	49RSS5	5	29¢
40 H 076	49RSS6	6	31¢
40 H 077	49RSS7S	7 Small	35¢
40 H 079	49RSS7L	7 Large	34¢
40 H 078	49RSS8	Octal	29¢

**D** Type S. High-dielectric molded bakelite body. Units are the same as Type RS, but without mounting plate. Mount quickly and easily without screws or rivets on panel or chassis up to .050" thick with retainer ring supplied. Ruggedly built for trouble-free service. Socket may be positioned to line up contacts for convenient wiring. Sockets require 1 1/4" hole, except 40 H 059, which requires 1 1/2" hole. Av. shgp. wt., 4 oz.

Stock No.	Mfr's Type	Prongs	NET
40 H 054	78S4	4	8¢
40 H 055	78S5	5	9¢
40 H 056	78S6	6	10¢
40 H 057	78S7S	7 Small	10¢
40 H 059	78S7L	7 Large	14¢
40 H 058	78S8	Octal	10¢
40 H 062	78S9	9	11¢
40 H 060	78S8L	Locetal	14¢
40 H 072	78S11	11	13¢

## MINIATURE SOCKETS AND SHIELDS



### BAKELITE AND STEATITE SOCKETS

Miniature sockets and shields. 147 series mount in 3/8" hole; 7/8" mtg. ctrs., with 1/8" holes. 59 series mount in 3/8" hole and have 1 1/4" mtg. ctrs. with .095" holes (except 40 H 103, 125\*). \*Steatite. †Black bakelite. ‡Mica-filled. §Fig. F; rubber mounting. Av. wt., 5 oz.

Stock No.	Type	Prongs	NET
40 H 191	1147-500	7	15¢
40 H 192	1147-501	7	24¢
40 H 073	1147-502	7	24¢
40 H 193	1147-505	7	15¢
40 H 193	159-409	9	20¢
40 H 167	159-410	9	20¢

Stock No.	Mfr's Type	Prongs	NET
40 H 194	1147-005	7	21¢
40 H 195	1147-025	7	23¢
40 H 175	1147-913	7	22¢
40 H 103	59-403	9	29¢
40 H 176	59-407	9	27¢
40 H 196	59-406	9	24¢

### TUBE SHIELDS

#### For 7-Contact Sockets

Stock No.	Type	Height	NET
40 H 197	5-401	1 1/2"	8¢
40 H 198	5-402	1 1/2"	9¢

#### For 9-Contact Sockets

Stock No.	Type	Length	NET
40 H 188	5-405	1 1/2"	9¢
40 H 189	5-408	1 1/2"	10¢
40 H 190	5-409	2 3/4"	11¢

### BARRIER TYPE OCTAL SOCKETS



Maximum EIA working voltage, 2,000 DC. Bronze cloverleaf removable contacts. Rated 8 amps each contact. Inter-electrode capacitance, 2.6 mmf. Eight screw terminals. Insulating barriers. \*Includes 4 molded-in threaded inserts for use as tie points. Size: 4 1/4 x 1 1/2 x 2 3/4". Mounting centers, 1 1/4". Shgp. wt., 8 oz.

No.	Type	Mount	NET
40 H 180	146-103	Top	.96
40 H 181	146-104*	Top	1.25
40 H 080	146-203	Bottom	.98
40 H 087	146-204*	Bottom	1.25

### 7 AND 9-PIN SOCKETS

Manufactured from highest quality materials. Molded of low-loss "Ethylon-A". Insulating material with high "Q" factor. For use where temperature is below 125° F. 7 and 9-pin sockets without shield base are "Zip-In" type; require special keyed hole. 7-pin sockets with shield base require 7/8" holes; 9-pin, 1 1/4" holes. Mounting holes, 3/4" diameter on 1 1/4" centers. Av. shgp. wt., 5 oz.

Stock No.	Type	Pins	NET
40 H 184	59-357	7	15¢
40 H 185	59-359	9	20¢

Stock No.	Type	Pins	NET
40 H 186	59-367	7	21¢
40 H 187	59-369	9	36¢

### RETAINER RING SOCKETS

Mount in 3/8" round or "D" shaped hole with retainer ring provided. May be used with 91-MPM series plugs, listed elsewhere. 5 oz.

Stock No.	Mfr's Type	No. Prongs	NET EACH
40 H 131	78-S3S	3	7¢
40 H 115	78-S4S	4	7¢
40 H 122	78-S5S	5	10¢
40 H 130	78-S6S	6	11¢
40 H 120	78-7P	7	14¢

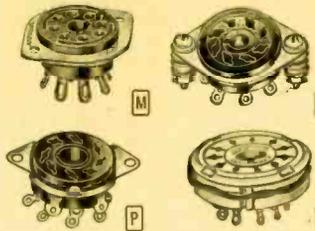
### MICA-FILLED HIGH VOLTAGE OCTAL SOCKET

Type 146-101. Rugged octal type tube sockets especially designed to provide maximum performance under extremely high voltage contact-to-chassis conditions. Top-quality materials—molded of durable arc resisting Melamine. Constructed to accommodate octal tubes of any size up to a diameter of 1 1/2" and a height of 1 1/2". Excellent for use with such tubes as 5Y4-G, 5U4-G, 6L6-G, etc. Two 3/4" mounting holes are located on 2 1/2" mounting centers. Require 1 1/4" diameter mounting hole. Shgp. wt., 4 oz.



Stock No.	Type	NET
40 H 088	78-7PT	54¢

## SPECIAL OCTAL AND MAGNAL SOCKETS



**M** Type 59-355 "Ethylon-A" Octal. Molded of low-loss "Ethylon-A" insulating material. High "Q" factor. For applications where temperature does not exceed 125° F. May be mounted above or below chassis. Requires 1 1/2" diameter hole; two 3/4" mounting holes on 1 1/4" centers. Shgp. wt., 5 oz.

**N** Type 77-MIP8FK Floating Octal. Live-rubber grommets in enlarged mounting holes of sturdy steel plate. Mounts in 1 1/2" hole with two 3/4" holes on 1 1/4" centers. Supplied with grommets, mtg. screws, nuts, washers. Shgp. wt., 5 oz.

**P** Type 168-016 Saddle Octal. Designed for below-chassis mounting. Sturdy steel plate is molded directly into bakelite body—cannot come loose or vibrate. For 1" hole; 1/2" mounting holes on 1 1/4" centers. Shgp. wt., 5 oz.

**R** Type 49-SS11L Magnal. Has 1 1/4" pin circle to accept 11-prong cathode-ray tubes. Constructed from low-loss steatite. Steel retaining ring for quick assembly. Requires 1 1/2" mounting hole. Shgp. wt., 7 oz.

### TELEVISION TUBE SOCKET



Type 59-402. Duodecal socket for cathode-ray tubes with 12 equally spaced pins on circle dia. of 1.063". Bakelite body and removable cap eliminate shock hazard. Shgp. wt., 5 oz.

### TYPE "S" MINIATURE SOCKETS



For modernizing any electronic equipment. Mount in standard 1 1/4" chassis holes by means of retainer ring. High-dielectric molded bakelite. With retainer ring, 5 oz.

40 H 113.	78-ATP.	7 Pin.	NET 22¢
40 H 114.	78-A9P.	9 Pin.	NET 26¢

### ACS SOCKET SHELLS



Type 23-15. Lightweight aluminum shell for Type "RSS", "RS" and "S" sockets at left (except Type S7L, RS7L, and RSS7L). Permits extending pins 1/8" above or below chassis surface. Size: 1 1/2" high x 1 1/4" body dia. Base dia., 2 1/4". 3 mtg. holes take screws up to 1/4" dia. Mts. in 1 1/4" hole. Less socket. Shgp. wt., 5 oz.

### HIGH-VOLTAGE 4-CONTACT SAFETY SOCKET



Type 77A-4T. For hi-voltage small-base TV rectifier tubes. Takes all 4-pin types with 1.156" base diameter such as 2X2A. Socket is set at bottom of deep molded bakelite shell. 1 1/2" dia. holes, 1 1/2" mtg. centers. Requires 1 1/2" dia. hole. Wt., 5 oz.

### HIGH VOLTAGE TYPE SOCKET



Type 146-812. Four-contact above chassis mounting plate type socket for high voltage applications. Quick heat dissipation is aided by steel cadmium plated mtg. plate. Two 3/4" mtg. holes on 2 1/2" mtg. ctrs. Requires 1 1/4" dia. mtg. hole. Shgp. wt., 4 oz.

40 H 089.	NET	1.86
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# All-Purpose Sockets

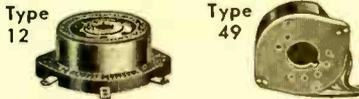
## WAFER-TYPE SOCKETS

Sturdily constructed, laminated-bakelite tube sockets. All have 1 1/2" mtg. centers except \* 1" centers and 1 1/8" Av. shpg. wt., 2 oz.



Stock No.	Prongs	NET EACH		
		1-9	10-49	50-99
40 H 224	4	7¢	6¢	5¢
40 H 225	5	8¢	7¢	6¢
40 H 226	6	9¢	8¢	7¢
40 H 227	7 (small)	10¢	8¢	7¢
40 H 228	*7 (min.)	6¢	5¢	4¢
40 H 228	*7 (min.)	7¢	6¢	5¢
40 H 279	†9 (min.)	7¢	6¢	5¢

## EBY SOCKETS



**Above-Chassis Type.** One-piece molded bakelite construction, for top-of-chassis or panel mounting. Contact designations molded in base. Mounting centers, 1 1/8". Shpg. wt., 2 oz.

No.	Type	Prongs	1-9, EA.	10-49, EA.
40 H 254	12-4	4	30¢	28¢
40 H 255	12-5	5	32¢	30¢
40 H 256	12-6	6	34¢	32¢
40 H 258	12-7-N-O-7L & 7S	3	35¢	32¢
40 H 261	12-8	8	39¢	36¢

**TV Tube Socket Type 49-13DD.** All-molded bakelite, dual-diode TV tube socket for magnetic or electrostatic focusing tubes. Complete with 18" leads. Shpg. wt., 4 oz.  
40 H 291, 10-49, EA. . . . 43¢ 1-9, EA. . . . 47¢

## CRT TEST SOCKET ADAPTER

TV picture tube socket adapter, easy to install or remove. External lugs permit checking all CRT pin voltages while set is in operation. No wiring or soldering required. Wt., 3 oz.  
40 H 273, 1-9, EACH. . . . 94¢  
10-49, EACH. . . . 84¢



## JAMES MILLEN TUBE SOCKETS

Recommended for UHF use. Higher steatite body gives longer leakage path between contacts. Mounting centers, 1 1/4". Shpg. wt., 4 oz.



Stock No.	Type	Prongs	EACH
72 H 060	33004	4	45¢
72 H 061	33005	5	
72 H 062	33006	6	
72 H 064	33008	8	

## RAY-PAR ANTI-CORONA SOCKETS

Octal socket for 1B3 high-voltage rectifier tube. Corona ring minimizes breakdown. Laminated bakelite. Mounts on insulator or high-voltage capacitor with screw type terminal. Shpg. wt., 3 oz.  
40 H 446, NET. . . . 44¢



## VECTOR SOCKETS PLUG-IN UNITS

Consist of standard tube socket, tubular terminal post, octal plug and shield can. Can sizes: B10M and B10N, 1.37" square, 2.5" long; C10M and C10N, 2" square, 2.5" long. Av. shpg. wt., 5 oz.



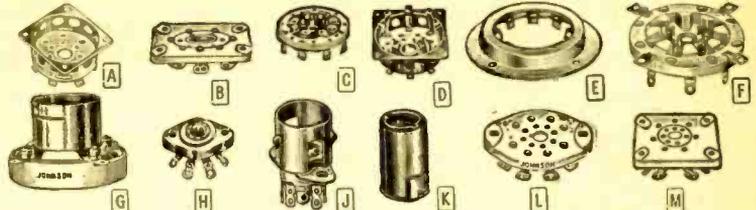
Stock No.	Type	Description	NET EA.
40 H 237	B10M	7-pin Miniature	1.87
40 H 238	B10N	9-pin Noval	1.91
40 H 241	C10M	7-pin Miniature	2.17
40 H 239	C10N	9-pin Noval	2.20

## TUBE ADAPTER TEST KIT

**Type T-789.** Ideal for making voltage, resistance and 7-pvdc form measurements from tube side of electronic equipment chassis without removing components or disassembling unit. A valuable aid for on-the-spot repair of any radio or TV equipment. Set contains 1—7-pin, 1—9-pin miniature, and 1 octal adapter in plastic carrying case. To use, adapters are simply inserted between tube and tube socket. 1/2" diam. holes in recessed tabs for test probe points. Adapters will fit into tube shield bases. Shpg. wt., 6 oz.  
40 H 210, NET. . . . 6.08



## E. F. JOHNSON TUBE SOCKETS



### SPECIAL SOCKET TYPES

**A** Type 122-105, 7-pin VHF steatite socket for 5894, 6524, 6252 tubes. Ventilated aluminum shell. Shpg. wt., 10 oz.  
73 H 996, NET. . . . 1.45

**B** Type 122-244, 4-pin steatite for "super jumbo" tubes. Takes 8008, BR6, SC22, 5C22, GL146, GL152, GL159, GL169, RO585, RH507, SR50, SR53, SK60, FG105. Wt., 1/2 lb.  
73 H 997, NET. . . . 1.60

**B** Type 122-275, Steatite socket for giant 5-pin base tubes. Takes 4-125A, 4-250A, RK28, RK48, 125M, 803. Shpg. wt., 10 oz.  
73 H 998, NET. . . . 1.90

**C** Type 124-109, 8-pin socket of Kel-F plastic for UHF high power tubes. 8—128" holes on 1 1/2" circle. Shpg. wt., 1/2 lb.  
40 H 299, NET. . . . 5.00

**D** Type 122-101, 7-pin steatite with base shield and retainer springs. For use with 4-65A, 826, 829, 832, etc. Shpg. wt., 1/2 lb.  
73 H 245, NET. . . . 2.35

**E** Type 124-113 Capacitor-Mount, 1450 mmfd mica screen by-pass. Tested 1000 v. DC. For 124-109 and 124-114 sockets. 6 oz.  
73 H 999, NET. . . . 5.00

**F** Type 124-114, Socket for 4X150A, 4X250B, 7034, 7035, etc. Shpg. wt., 1/2 lb.  
73 H 995, NET. . . . 5.65

### BAYONET SOCKETS

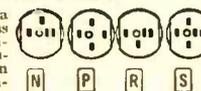
**G** Type 123-209, For tubes with 4 prong "UX" base; 852, 860, 866 tubes, etc. 4 mtg. holes, 2 1/2" centers. Shpg. wt., 10 oz.  
73 H 195, NET. . . . 1.50

**G** Type 123-211, Porcelain base socket for use with "jumbo"-type 4-pin tubes. Takes 211, 872 tubes, etc. Mounting centers are spaced 2 1/4". Shpg. wt., 1 lb.  
73 H 191, NET. . . . 1.95

## ELCO TRANSISTOR AND TUBE SOCKETS

### TRANSISTOR SOCKETS

Sub-miniature mica sockets eliminate loss and damage from direct soldering of transistor pins. For 3-pin transistors with in-line pins or 3 and 4-pin transistors with pins on 200" diam. circle of any configuration. Conform to MIL-P-14. \*Ring only for 3304, 3307, 3310, 3313. Av. shpg. wt., 2 oz.



### SADDLE MOUNT TYPE

Stock No.	Type	Fig.	EACH
41 H 092	3301	N	35¢
41 H 239	3306	P	35¢
41 H 245	3309	R	35¢
41 H 248	3312	S	38¢

### PRINTED CIRCUIT TYPE

41 H 238	3303	N	27¢
41 H 094	3305	N	30¢
41 H 244	3308	N	30¢
41 H 247	3311	R	30¢

### MOUNTING RING TYPE

41 H 093	3304	N	26¢
41 H 243	3307	P	26¢
41 H 246	3310	R	26¢
41 H 249	3313	S	29¢
41 H 095	757	*	3¢

### PRINTED CIRCUIT SOCKETS

Excellent selection of sub-miniature, mica filled phenolic sockets for use on printed circuit boards. For transistors and sub-miniature type tubes. All contacts gold flashed. Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	No. Prongs	NET EACH
41 H 062	786BC	4	15¢
41 H 066	805BC	5	16¢
41 H 064	788BC	6	17¢
41 H 072	815BC	6	19¢
41 H 073	792BC	7	20¢

### MINIATURE SERIES

**H** Type 120-267, 7-pin steatite socket with silver-plated contacts. For 9000 series and miniature tubes 1R5, 1S5, 6CB6, etc. 3/8" mtg. hole. Shpg. wt., 3 oz.  
40 H 290, NET. . . . 41¢

**J** Type 120-277, As above, but metal mtg. frame and shield base. Shpg. wt., 3 oz.  
73 H 186, NET. . . . 59¢

**K** Type 133-278-6 Shield. For use with Type 120-277 socket. Height 1 1/4". 3 oz.  
73 H 244, NET. . . . 15¢

**K** Type 133-278-8 Shield. As above but 2 1/4" high. Shpg. wt., 3 oz.  
73 H 187, NET. . . . 18¢

### STANDARD WAFERS

**L** Steatite wafer sockets for receiving and low-power transmitting tubes. Cadmium-plated contacts. Size, 2 1/2" x 1 1/2", 1 1/4" Mtg. centers. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Prongs	NET
73 H 238	122-224	4	69¢
73 H 239	122-225	5	76¢
73 H 240	122-226	6	94¢
73 H 241	122-227	7	90¢
73 H 243	122-228	Octal	97¢

### JUMBO WAFERS

**M** Type 122-237, Steatite wafer for 813, 8001, 3D22, 4E27, HK257 2 1/4" square. 4 mounting holes, 1 1/4" between centers. Ventilating hole in base 3/4" dia. provides tube seal cooling. Shpg. wt., 1/2 lb.  
73 H 188, NET. . . . 1.20

**yo** 12T-247, Same steatite "giant" 7-pin wafer socket as above, but with etched aluminum base shield. Contacts are designed with maximum surface area against tube prongs. For tubes 825, 826, etc. Shpg. wt., 1/2 lb.  
73 H 189, NET. . . . 1.45

## RETAINER MOUNT SOCKETS

In-line sockets of mica filled phenolic. For transistors and sub-miniature tubes. Contacts are gold flashed. Require retainers listed. Av. shpg. wt., 3 oz.



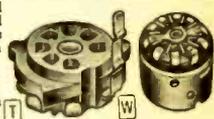
Stock No.	Type	Prongs	EACH
41 H 074	799BC	3	14¢
41 H 080	803BC	4	14¢
41 H 081	770BC	5	15¢
41 H 091	813BC	6	18¢
41 H 096	790BC	7	18¢

### RINGS

Stock No.	Type	For Type No.	EACH
41 H 097	777	799BC, 803BC, 770BC	3¢
41 H 098	834	813BC	2 1/2¢
41 H 099	768	790BC	2 1/2¢

## SOCKETS FOR PRINTED CIRCUITS

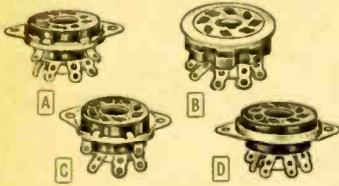
Dependable 7 and 9 miniature, and octal type sockets designed for use in printed circuits. Type 647 for general-purpose use; others have low-loss mica insulation. \*Bottom solder; †top solder; ‡shield base; §ground contact; ¶shield contact. All units have tin-leaded brass contacts except 623BC, tin-lead plated bronze; 623BC, silver-plated beryllium copper; 622-PHSP, silver-plated bronze Av. shpg. wt., 3 oz.



No.	Type	Fig.	Pins	EACH
41 H 550	645*	T	7	12¢
41 H 551	612P*	T	9	36¢
41 H 552	653P	T	9	13¢
42 H 410	646*†	T	7	13¢
42 H 411	647*†	T	7	13¢
42 H 412	648*†	T	7	14¢
42 H 414	658†‡	T	9	18¢
42 H 416	660*†	T	9	18¢
42 H 417	623BC	W	9	91¢
42 H 418	622-PHSP	W	7	78¢

# Sockets, Plugs, Connectors

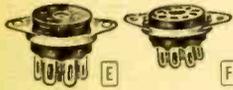
## SPECIAL-VALUE OCTAL SOCKETS



High-quality octal tube sockets for new equipment use as well as for replacement purposes in all types of electronic applications. All have phenolic insulated bases, except Fig. B, which has low-loss ceramic base. Figs. A, C, and D types have (rimmed steel saddles; A and C saddles are equipped with ground lugs. Fig. A is designed for below chassis mounting. Figs. C and D types are designed for top-of-chassis mounting. Fig. B types mount from top of chassis with retainer ring. All contacts are cadmium-plated brass. Av. shpg. wt., 4 oz. per pkg. 3 sockets per pkg.

Stock No.	Fig.	Mtg. Cntrs.	Mtg. Hole Req.	NET PER PKG.
41 H 524	A	1 1/4"	1 1/4"	23c
41 H 525	C	1 1/4"	1 1/4"	22c
41 H 526	B	1 1/4"	1 1/4"	62c
41 H 527	D	1 1/4"	1 1/4"	22c

## MINIATURE SOCKETS



phenolic insulated bases. Mica-filled types are ideal for low-loss RF use. All have cadmium-plated brass contacts and steel saddles.

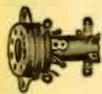
**Top Mounting Type.** Miniature type sockets designed for top-of-chassis mounting. 7-pin socket types require 1 1/4" mtg. hole; mtg. centers are 3/8" apart. 9-pin socket types require 1 1/4" mtg. hole; mtg. centers are 1 1/4" apart. Av. shpg. wt., 4 oz. per pkg. 3 per pkg.

Stock No.	Pins	Fig.	Base	NET PER PKG.
41 H 528	7	E	Phenolic	22c
41 H 529	7	E	Mica-Filled Phenolic	28c
41 H 530	9	F	Phenolic	29c
41 H 531	9	F	Mica-Filled Phenolic	34c

**Bottom Mounting Type.** Below-chassis mtg. 7-pin types require 3/4" hole; centers 3/8" apart. 9-pin types require 1 1/4" hole; centers 1 1/4" apart. Av. shpg. wt., 4 oz. per pkg. 3 per pkg.

Stock No.	Pins	Fig.	Base	NET PER PKG.
41 H 532	7	E	Phenolic	25c
41 H 533	7	E	Mica-Filled Phenolic	31c
41 H 534	9	F	Phenolic	29c
41 H 535	9	F	Mica-Filled Phenolic	34c

## VECTOR SOCKET-TURRETS



Terminal structures for use in single or multi-stage sub-assemblies—ideal for limited space applications. Simplifies construction of electronic equipment. Components mount on phenolic form. Turrets are 1/2" diam. Octal units mount in 1 1/2" hole; miniatures, 3/8" hole. Av. shpg. wt., 3 oz.

2 1/2" Turrets. Has 9 terminals in two rings, spaced 1 1/2" apart.

Stock No.	Type	Socket	NET
40 H 211	10-0-9T	Octal	62c

2" Turrets. 9 terminals in two rings, 1" apart.

40 H 212	8-0-9T	Octal	59c
40 H 217	8-M-9T	7-Pin Min.	68c
40 H 233	8-N-9T	9-Pin Noval	68c

1 1/2" Turrets. Have 6 terminals in one ring.

40 H 213	6-0-6T	Octal	53c
40 H 218	6-M-6T	7-Pin Min.	59c
40 H 234	6-N-6T	9-Pin Noval	62c

**Shield Bases.** For miniature sockets above. Fasten above chassis on socket mtg. centers. Use with standard bayonet type shield. 2 oz.

Stock No.	Type	Description	NET
40 H 235	S7	For 7-pin sockets	9c
40 H 236	S9	For 9-pin sockets	9c

## POMONA SOCKET SAVERS



Rigidly-mounting socket savers of durable phenolic material with long-life metal contacts. Protect your tube tester sockets from wear caused by repeated tube insertions. Does away with time consuming socket replacements. Prevents tube tester sockets from developing loose, worn contacts which cause inaccurate test readings. No wiring or soldering is necessary—the socket savers easily plug into original socket. Comes equipped with threaded bolt and nut to secure it rigidly in position. For 7 and 9-pin miniature sockets as well as standard octal. Av. shpg. wt., 3 oz.

No.	Type	Description	NET
40 H 668	SS-7	For 7-pin min.	1.91
40 H 669	SS-8	For 8-pin octal	1.91
40 H 678	SS-9	For 9-pin min.	1.91

## CINCH JONES RECEPTACLES TYPE 8PB 8-CONTACT PLUG



For making up to 8 connections between chassis. Molded black bakelite. Fits any octal socket. Use with 16F shield. (below). Wt., 2 oz. 40 H 847. NET 22c

**Type 11PB 11-Contact Plug.** Same as above, but with 11 contacts. Molded black bakelite construction. Fits 11-contact socket. Type 11RB listed below. Use with type 16F snap-on shield. Shpg. wt., 2 oz. 40 H 847. NET 24c

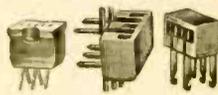
## TYPE 16F STEEL SNAP-ON SHIELD

Cadmium-plated, durable steel shield. Specifically designed to snap on 8PB and 11PB sockets, above. For use with extension cables. Rubber grommet with 3/4" hole protects cable. Shpg. wt., 2 oz. 40 H 848. NET 28c

## TYPE 11RB 11-CONTACT SOCKET

Precisely designed for use with 11PB 11-contact plug (above). Precision molded from high-dielectric, black bakelite. Hot solder-dipped tinning on brass contact terminals for quick, positive solder connections. Can be mounted on 1 1/2" thick chassis using retaining ring. Can also be used with 16F snap-on shield (described above) on extension cables. Shpg. wt., 2 oz. 40 H 849. NET 28c

## CINCH-JONES SUB-MINIATURE TUBE AND TRANSISTOR SOCKETS



Used extensively in hearing aids, miniature radios and transmitters, and other miniaturized electronic equipment employing sub-miniature tubes or transistors. Precision molded from mica-filled, low-loss bakelite. All have silver-plated beryllium-copper contacts to insure good electrical connection with tube or transistor elements and minimize losses. 4-prong miniature tubes and G.E. transistor types G11 and G11A fit 5-prong, 2H5 socket; other tube and transistor types fit other sockets listed below. Sockets shown below are all 3/8" deep. Av. shpg. wt., 2 oz.

Stock No.	Type	Contacts	NET
40 H 294	2H3	3	20c
40 H 245	2H5	5	27c
40 H 247	2H7	7	30c
40 H 242	8SM	8	52c

**Transistor Types.** 5-contact sockets designed for use with transistor circuit. Use type 5PC for printed circuits and 5WC for conventional wired circuits. Average shpg. wt., 2 oz.

Stock No.	Type	Size	NET EA.
40 H 249	5PC	3/8 x 1/2 x 1 1/4"	39c
40 H 252	5WC	1 5/8 x 1 1/2 x 1 1/4"	36c

## CINCH-JONES CHASSIS TYPE AC SOCKET



Type 2R2. Molded, black bakelite socket mounts in chassis, cabinets, etc., providing convenient pour outlet. Ideal for use where space is at a premium. Accepts any 2-prong standard plug. Rated: 15 amp, at 110 v.; 10 amp, at 250 v. Solder-lug terminals. Mounts in 3/4 x 3/4" hole. Has 1/4" dia. mtg. holes on 1 1/4" centers. Overall size, 1 1/2 x 3/4" shpg. wt., 2 oz. 40 H 830. NET 15c

## POMONA 110<sup>®</sup> CONVERSION ADAPTER



**Model 110-S. Sylvania Type.** Efficient conversion adapter socket for duo-decal test equipment. No rewiring necessary—plug in adapter to convert for 110<sup>®</sup> socket. pin circle dia. 7 pins, .093" dia. 40 H 683. NET 1.52

Has 0.820" Shpg. wt., 4 oz. 40 H 683. NET 1.52

**Model 110-R. RCA Type.** As above but has 0.600" pin circle dia. 8 pins, .040" dia. Wt., 5 oz. 40 H 684. NET 1.52

## AMPHENOL MULTIWIRE CONNECTORS



Matching male and female cable connectors. Take cables up to 1/4" O.D. High-dielectric, black bakelite. Slip-off metal covers; cable conductors solder to prongs and contacts. Male types can be plugged into chassis mounted, standard tube sockets or can be used with corresponding female types. Size, 1 1/2 x 1 1/2". Av. wt., 3 oz.

### FEMALE

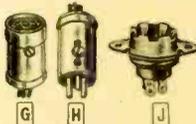
Stock No.	Mfr's Type	Contacts	NET EACH
40 H 524	78-PF4	4	17c
40 H 525	78-PF5	5	18c
40 H 526	78-PF6	6	19c
40 H 527	78-PF7S	7S	20c
40 H 528	78-PF8	8octal	19c
40 H 516	78-PF9	9	21c
40 H 517	78-PF11	11	22c

### MALE

Stock No.	Mfr's Type	Contacts	NET EACH
40 H 504	86-PM4	4	21c
40 H 505	86-PM5	5	21c
40 H 506	86-PM6	6	22c
40 H 507	86-PM7S	7S	23c
40 H 508	86-PM8	8	22c
40 H 512	86-PM9	9	22c
40 H 513	86-PM11	11	23c
40 H 688	86-PM12	12	25c
40 H 689	86-PM20	20	35c

**Amphenol Cable Clamp. Type 79-CG4.** For use with above connectors. Relieves strain on soldered connections. Shpg. wt., 5 oz. 40 H 670. NET 5c

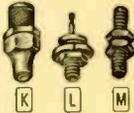
## AMPHENOL MINIATURE CABLE CONNECTORS



Last letter in Type No. indicates long (1 1/4"), or short (1 1/8") types. Last fig. in Type No. denotes contacts. PCG—chassis type. Figs. G and J are female types; Fig. H, male types. Av. shpg. wt., 2 oz.

No.	Type	Fig.	NET EACH
40 H 320	91-MPF3L	G	27c
40 H 321	91-MPF3S	G	27c
40 H 322	91-MPF4L	G	29c
40 H 323	91-MPF4S	G	27c
40 H 325	91-MPM3L	H	24c
40 H 326	91-MPM3S	H	23c
40 H 326	91-MPM4L	H	24c
40 H 327	91-MPM4S	H	23c
40 H 328	91-MPM5L	H	26c
40 H 329	91-MPM5S	H	27c
40 H 330	78-PCG3	J	16c
40 H 331	78-PCG4	J	16c
40 H 332	78-PCG5	J	19c
40 H 333	78-PCG6	J	19c

## H. H. SMITH TV COAXIAL CABLE CONNECTORS

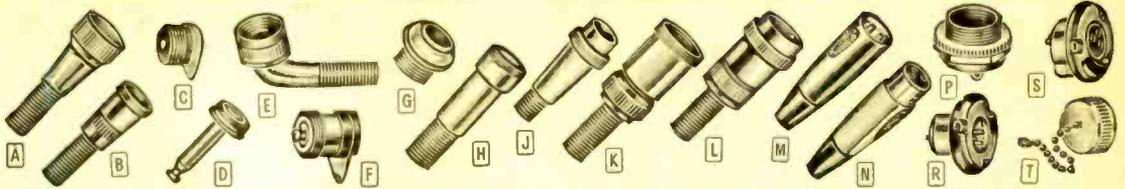


Low-cost solderless coaxial cable connectors for use with RG-59/U and other 1/4" diameter coaxial cable. Designed to use inner conductor of cable for male pin. Quick, easy assembly. Positive contact. Low loss insulation. Made of brass, silver-plated for high conductivity. Av. shpg. wt., 2 oz.

<b>K</b> Male Connector. For below. 40 H 300. NET 47c
<b>L</b> Female Receptacle. 3/8" threaded stem. Chassis type. 40 H 301. NET 47c
<b>M</b> Cable Junction. Feed-thru. Designed to fit 40 H 300. 40 H 302. NET 59c

# Amphenol Connectors, Sockets & Plugs

## MICROPHONE CONNECTORS



All microphones listed in this catalog are supplied less connector. Choose from this complete selection of Amphenol connectors—you'll find one to meet any application. Series 75 are chrome-plated, machined brass. Widely used on amplifiers, transmitters, phono-electric devices, home recorders, theft alarms, and coin operated devices. Series 91 quick-disconnect microphone connectors are easy-to-operate, efficient in use. Series 91 are corrosion-resistant satin nickel;

### SERIES 75 SINGLE CONTACT TYPES

Standard connectors 3/8", 27 threads; 3/16" mounting holes. †New miniature connectors are approximately half the size and weight of standard counterparts with same specifications. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	NET
41 H 958	75-MC1F	A	Combination cable plug & jack	31c
41 H 955	75-MC1M	B	Cable plug	21c
41 H 965	75-PC1M	C	Chassis receptacle, non-shorting	23c
41 H 962	75-MC1P	D	Phone plug adapter	30c
41 H 959	75-MC1A	E	90° angle cable jack	63c
41 H 967	75-CL-PC1M	F	Chassis receptacle, closed circuit	33c
42 H 658	75-1	A	Straight plug	37c
42 H 659	75-2	B	Cable jack	23c
42 H 660	75-3	F	Locknut receptacle	24c

### SERIES 80 SINGLE & DOUBLE CONTACT TYPES

For shielded cables, single and two conductor coaxial cables, etc. Center contacts are pin and socket type. \*Single-contact type. †Polarized, double-contact type. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	NET
42 H 084	*80-C	G	Female chassis receptacle	37c
42 H 661	*80-C1	G	Male chassis receptacle	38c
42 H 080	*80-F	H	Female cable jack	40c
42 H 662	*80-F1	J	Female cable plug	49c
42 H 081	*80-M	J	Male cable plug	47c
42 H 663	*80-M1	J	Male cable jack	49c
42 H 082	*80-MC2F	H	Female cable jack	43c
42 H 664	*80-MC2F1	J	Female cable plug	52c
42 H 083	*80-MC2M	J	Male cable plug	47c
42 H 665	*80-MC2M1	H	Male cable jack	38c
42 H 085	*80-PC2F	G	Female chassis receptacle	40c
42 H 666	*80-PC2M	G	Male chassis receptacle	39c

† Type 75-C001 Cap and Chain. Seals open chassis units against dirt and dust. Chain has eye for securing to panel. Used with both series 75 and 80 receptacles. Shpg. wt., 3 oz.  
40 H 381. NET 24c

bodies are made of a high grade zinc alloy. The high conductivity bronze contacts are gold-plated over silver; dielectric is Amphenol's famous "blue" diallyl phthalate. Series 80 precision construction assures positive connections free from noise, leaks or shorts. Note: Amphenol Type 75-MC1F (Fig. A) fits all Knight public address amplifiers. When splicing two cords, use two 75-MC1F connectors—they can be used as plugs or jacks.

### SERIES 91—3 AND 4-CONTACT TYPES

Microphone connectors for portable equipment. Polarized to prevent incorrect insertion. Clamps eliminate stress on soldered connections. \*3-contact type. †4-contact type. Shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	NET
41 H 970	*91-MC3F	K	Female cable jack	64c
42 H 667	*91-MC3F1	L	Female cable plug	71c
41 H 971	*91-MC3M	L	Male cable plug	64c
42 H 668	*91-MC3M1	K	Male cable jack	59c
41 H 972	*91-PC3F	P	Female chassis receptacle	51c
42 H 669	*91-PC3M	P	Male chassis receptacle	49c
41 H 977	*91-MC4F	K	Female cable jack	67c
42 H 670	*91-MC4F1	L	Female cable plug	72c
42 H 671	*91-MC4M	L	Male cable plug	66c
42 H 672	*91-MC4M1	K	Male cable jack	61c
41 H 978	*91-PC4F	P	Female chassis receptacle	52c
42 H 673	*91-PC4M	P	Male chassis receptacle	49c

### SERIES 91 "QUIK" 3 AND 4-CONTACT TYPES

Push together; released by slight pressure on lock button. Gold-plated (over silver) bronze contacts. Incorrect insertions are impossible because connectors are polarized. Satin-nickel plated, zinc-alloy shells. \*3-contact type. †4-contact type. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	NET
42 H 065	*91-853	M	Male cable plug	1.06
42 H 066	*91-854	N	Female cable plug	1.24
42 H 067	*91-855	R	Male chassis receptacle	1.67
42 H 068	*91-856	S	Female chassis receptacle	1.47
42 H 069	*91-857	M	Male cable plug	1.00
42 H 070	*91-858	N	Female cable plug	1.35
42 H 071	*91-859	R	Male chassis receptacle	1.72
42 H 072	*91-860	S	Female chassis receptacle	1.57

† Type 91-C003 Cap and Chain. Seals open chassis units against dirt and dust. Chain has eye for securing to panel. Used for series 91 microphone connectors. Shpg. wt., 3 oz.  
42 H 674. NET 27c

## SOCKETS AND PLUGS

Single-contact sockets and plugs. Molded bakelite bodies. Sockets mount in 3/8" hole. Supplied with Amphenol 2-11 retainer ring. Contacts recessed 1/4" to prevent shorts and possibility of shock from exposed metal. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Description	NET EACH
41 H 153	71-1L	Plug. Red. For 3/4" socket.	3c
41 H 154	71-1L	Plug. Black. Same as above.	3c
41 H 156	71-1M	Plug. Red. For 1/2" socket.	3c
41 H 157	71-1M	Plug. Black. Same as above.	3c
41 H 158	71-1S	Plug. Red. For 3/4" socket.	3c
41 H 159	71-1S	Plug. Black. Same as above.	3c
41 H 160	78-1L	Socket. Red. For 3/4" plug.	5c
41 H 161	78-1L	Socket. Black. Same as above.	5c
41 H 162	78-1M	Socket. Red. For 1/2" plug.	5c
41 H 163	78-1M	Socket. Black. Same as above.	5c
41 H 164	78-1P	Socket. Red. Std. 080" phone tip.	5c
41 H 165	78-1P	Socket. Black. Same as above.	5c
41 H 166	78-1S	Socket. Red. For 3/4" plug.	5c
41 H 167	78-1S	Socket. Black. Same as above.	5c

## TYPE 71 PLUGS

Compact, efficient, high-dielectric plugs. Ideal for all plug-in connections where space is limited. Excellent for transmitters, receivers, intercoms, speaker connections, etc. Body is made of high-quality bakelite. Molded ring allows firm, non-slip finger grip. Securely anchored, nickel-plated brass prongs, deeply recessed to prevent shorts caused by pulled back insulation. Easily soldered. Contacts are polarized to assure proper connection. For cables with up to six conductors. Fit Amphenol 78-S series miniature sockets listed on Amphenol socket page. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	NET EACH
40 H 177	71-3S	3	7c
40 H 169	71-4S	4	8c
41 H 149	71-5S	5	9c
40 H 179	71-6S	6	10c

## PRINTED CIRCUIT CONNECTORS

Series 143 connectors for printed circuit networks. Printed circuit board acts as male part of connector. Designed to resist set or over-stress—even after repeated insertions. Compact bodies molded of diallyl phthalate dielectric; gold-plated contacts. All units accept .061" to .07" printed circuit boards. \*Polarizing clips. Av. shpg. wt., 2 oz.

Stock No.	Type	Contacts	NET EACH
41 H 090	143-006-01	6	1.50
41 H 503	143-010-01	10	1.20
42 H 675	143-012-01	12	1.20
40 H 500	143-015-01	15	1.98
40 H 501	143-018-01	18	2.16
40 H 502	143-022-01	22	2.76
42 H 676	143-953	*	.02

## PRINTED CIRCUIT PLUGS

Series 133 plugs for standard 143 series printed circuit connectors above. Have molded diallyl phthalate body, molded nylon guide pins, brass cadmium-plated end caps and brass contacts with gold over albalzo plating. Average voltage rating 2300 v. rms at sea level; current rating meets or surpasses any printed circuit wiring board requirement. Polarized. Av. shpg. wt., 2 oz.

Stock No.	Type	Contacts	NET EACH
41 H 085	133-010-21	10	2.43
41 H 086	133-015-21	15	2.98
41 H 087	133-018-21	18	3.24
41 H 088	133-022-21	22	3.64

## TYPE CP PLUGS

Standard bakelite plugs ideal for use as chassis connectors with plug-in units. CP plugs quickly and easily installed without screws or rivets by means of retainer rings. Use adapter plate below for replacement mounting. With mounting ring for 1 1/8" holes except \*1 3/4" keyed hole. Have guide post and aligning key. Av. shpg. wt., 2 oz.

No.	Mfr's Type	Prongs	NET EACH
40 H 015	86-CP4	4	1c
40 H 016	86-CP5	5	1c
40 H 017	86-CP6	6	1c
40 H 018	86-CP7L*	7-Large	1c
40 H 019	86-CP7S	7-Small	4c
40 H 020	86-CP8	Octal	13c
40 H 021	86-CP9	9	13c
40 H 022	86-CP11†	11	14c
42 H 654	86-CP12†	12	17c

† Type 12-001-03 Adapter Plate. Nickel-plated steel. For use with all Type CP plugs above except 86-CP7L to 1 1/8" centers. 2 oz.  
40 H 023. NET 2c

## NEW MINIATURE CP PLUGS

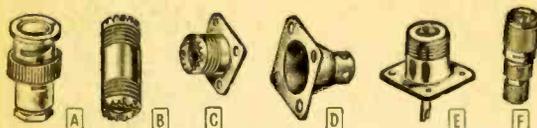
7 and 9 pin plugs designed for miniature tube sockets. Feature molded-in strain relief post. High-quality contacts are gold over silver-plate. Av. shpg. wt., 2 oz.

Stock No.	Type	Prongs	NET
42 H 650	86-893	9	1.15
42 H 653	86-894	7 w/side outlet cap	.78
42 H 651	86-895	7 with cap	.73
42 H 652	86-896	7	.66
42 H 652	86-897	9 with cap	1.22

Allied stocks a complete line of Amphenol connectors; many are not listed in this catalog. Write, wire, or phone for information and prices on the following connectors: Series 26, 165, 126, 27, 83, 82, 31, 67.

# Amphenol, Switchcraft, Cannon Connectors

## AMPHENOL RF CABLE CONNECTORS



### TYPES 31 AND 82 COAXIAL CONNECTORS

A wide selection of highly dependable, weatherproof coaxial connectors. Designed to meet government specifications.

**BNC Type Connectors.** Small lightweight, weatherproofed connectors. Low voltage, single contact types for use with 50-ohm RG-55/U and RG-58/U cables except \*for use with 70-ohm RG-59/U, RG-62/U and RG-71/U. Av. shpg. wt., 3 oz.

Stock No.	Military No.	Mir's Type	Fig.	Description	NET EACH	
					1-9	10-49
40 H 391	UG-80/U	31-002	A	Plug	1.09	.93
40 H 396	UG-260/U	31-012	A	Plug	1.16	.98
40 H 395	UG-262/U	31-011		Panel Jack	1.26	1.07
<b>Type N Connectors.</b> Low voltage. 50 ohms except *70 ohms. 3 oz.						
40 H 313	UG-21B/U	82-61		Plug for RG/U 8, 9, 10	1.87	1.59
40 H 520	UG-27A/U	82-64		Right-Angle Adapter	3.39	2.89
40 H 312	UG-58/U	82-24*	E	Receptacle	1.20	1.02
40 H 519	UG-107A/U	82-36		T Adapter	5.44	4.63

### TYPE B3 COAXIAL CONNECTORS

**UHFS** Small Single Contact. Popular connectors for any RF application.

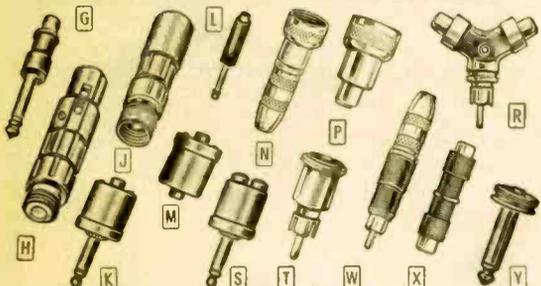
Stock No.	Military No.	Mir's Type	Fig.	Description	NET EACH	
					1-9	10-49
40 H 357	UG-106/U, M-360	83-1H	D	For RG/U 8, 9, 10, 11, 12, 13, 63	.26	.22
40 H 356	UG-363/U, PL-274	83-1F		Feed-Through Connector	1.94	1.65
40 H 354	M-358, 49199	83-1T		"T" Adapter	2.59	2.20
40 H 355	PL-258, 49191	83-1J	B	Straight Adapter	1.13	.96
40 H 350	PL-259, 49190	83-1SP		For RG/U 8, 9, 10, 11, 12, 13	.72	.61
40 H 352	SO-239, 49194	83-1R	C	Receptacle Chassis Type	.73	.63

**Solderless Type UHF Plug Connectors.**

Stock No.	Mir's Type	Fig.	Description	NET EACH	
				1-9	10-49
40 H 509	83-850	F	Plug for RG/U 11	1.35	1.15
40 H 510	83-851	F	Plug for RG/U 8, 9, 10, 11, 12, 13, 63, 65	1.18	1.00

Allied stocks a complete line of RF cable connectors; to order any type not listed, give Amphenol Type No. and description.

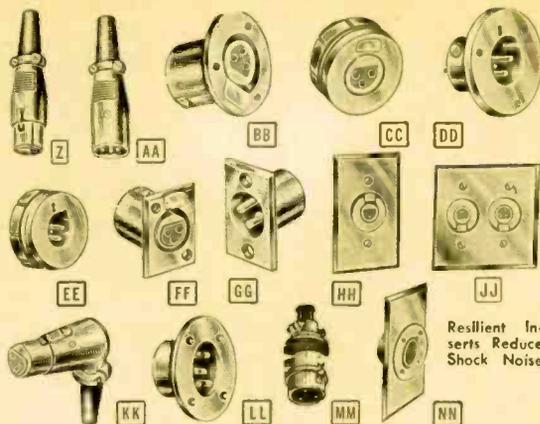
## SWITCHCRAFT ADAPTER-CONNECTORS



For quick adaptation of plug to fit other type of jack on recorders, amplifiers, tuners, etc. Designed to simplify the installations of hi-fi music systems by permitting quick and easy connections between equipment with different types of connectors. Av. shpg. wt., 6 oz.

Stock No.	Type	Fig.	Description	EACH
41 H 764	330F	R	2 phono jack connectors connected in parallel to standard phono plug.	1.03
41 H 768	332A	N	2-cond. phono jack input to female mike output; main body 1/2".	1.03
41 H 769	334A	P	Phono jack input to female microphone connector output; main body 1/2".	.73
41 H 712	335	H	2 cond. — input has conn. Switchcraft 2501 MP (Amphenol 75 PC1M) and output conn. Cannon XLR-3-11	1.73
41 H 772	336A	W	2-conductor phono jack input to phono plug output; main body 1/2".	.85
41 H 773	338A	T	Phono plug one end with male microphone connector other end; main body 1/2".	.58
41 H 713	339	J	As Type 335, but output conn. Switchcraft 2501F (Amphenol 75-MC1F) to input conn. Cannon XLR-3-12.	1.73
41 H 609	342	.....	Dual-purpose binding post/banana jack input to phone plug output.	1.53
41 H 460	343	L	Phono jack input; phone plug output. Built-in limiting resistor for cord.	1.15
41 H 645	344	K	Phono jack connector input to phone plug output.	.85
41 H 649	346	S	Tip jack input to phone plug output.	1.26
41 H 608	348	M	Phono jack input to phone jack output.	.82
40 H 382	345A	G	Phone plug output with phono jack input.	.73
41 H 774	349A	X	Phono plug coupler mates with phono plug at each end; gray plastic.	.58
41 H 657	44	Y	Adapts Amphenol Type 75-MC1F or 75-MC1F-A connectors for use with standard 1/4" 2-conductor phone jacks.	.29

## CANNON PLUGS AND RECEPTACLES



Resilient Inserts Reduce Shock Noise

### TYPE XLR CONNECTORS

Audio connectors with clamp and resilient socket insulator. Minimize mechanical interference and reduce noise. Feature satin nickel finish, integral cable clamp, neoprene cable relief and push-action latchlock. First number in type column indicates number of contacts. -2G in Type No. indicates 2 gang. Available with three 15-ampere contacts, or four 10-ampere contacts. \*Wall-type receptacles; †panel-type receptacles. ‡Indicates steel shell, others are die-cast zinc. Av. shpg. wt., 4 oz.

### STRAIGHT CORD PLUGS

Stock No.	Type	Fig.	Description	EACH
40 H 790	XLR-3-11C	Z	Female (socket insert)	1.02
41 H 212	XLR-4-11C	Z	Female (socket insert)	1.42
40 H 983	XLR-3-11SC†	Z	Female (socket insert)	2.24
40 H 984	XLR-4-11SC†	Z	Female (socket insert)	2.64
40 H 791	XLR-3-12C	AA	Male (pin insert)	.99
41 H 213	XLR-4-12C	AA	Male (pin insert)	1.32
40 H 985	XLR-3-12SC†	AA	Male (pin insert)	2.21
40 H 986	XLR-4-12SC†	AA	Male (pin insert)	2.54

### WALL AND PANELS RECEPTACLES

Stock No.	Type	Fig.	Description	EACH
41 H 214	XLR-3-13*	BB	Female (socket insert)	1.02
41 H 215	XLR-4-13*	BB	Female (socket insert)	1.42
41 H 216	XLR-3-13†	CC	Female (socket insert)	1.02
41 H 217	XLR-4-13†	CC	Female (socket insert)	1.42
41 H 218	XLR-3-14*	DD	Male (pin insert)	.79
41 H 219	XLR-4-14*	DD	Male (pin insert)	1.12
41 H 223	XLR-3-14†	EE	Male (pin insert)	.96
41 H 224	XLR-4-14†	EE	Male (pin insert)	1.29
40 H 792	XLR-3-31*	FF	Female (socket insert)	1.02
41 H 225	XLR-4-31*	FF	Female (socket insert)	1.42
40 H 793	XLR-3-32*	GG	Male (pin insert)	.79
41 H 226	XLR-4-32*	GG	Male (pin insert)	1.12
40 H 987	XLR-3-35-2G*	HH	Female (socket insert)	2.90
40 H 988	XLR-3-35-2G*	IJ	Female (socket insert)	6.17
40 H 989	XLR-4-35-2G*	JJ	Female (socket insert)	3.20
40 H 947	XLR-4-35-2G*	JJ	Female (socket insert)	6.96

### 90° PLUGS

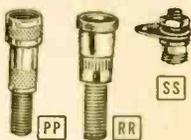
40 H 948	XLR-3-15	KK	90° plugs	2.64
40 H 949	XLR-4-15	KK	90° plugs	3.53

### TYPE P CONNECTORS

3-contact receptacles and cable connectors for audio circuits. For any size wires up to No. 10. 15 amp contact capacity. Black phenolic insulation. \*Zinc with satin-chrome finish. †Steel shells and zinc cable clamp. ‡P3-13 with satin-chrome brass plate.

40 H 707	P3-13*	.....	Panel mount, female (socket)	3.69
40 H 757	P3-14*	LL	Panel mount, male (pin)	2.19
40 H 724	P3-CG-11S†	MM	Cable plug, female (skt)	4.16
40 H 701	P3-CG-12S†	.....	Cable plug, male (pin)	3.40
40 H 709	P3-35‡	NN	Wall receptacle, female for 40 H 701	5.73

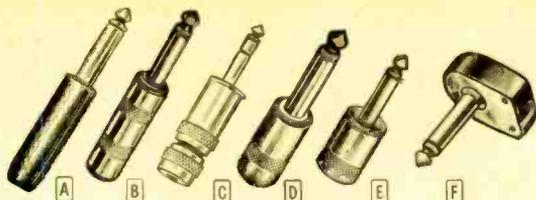
### SWITCHCRAFT MINIATURE MIKE CONNECTORS



"Mini-Con" connectors designed for use with single-conductor cable up to 3/16" in diameter (single-conductor and a shield). Ideal for lapel microphones, musical instruments, etc., whenever small cable is used. Half the size of standard mike connectors. Av. net wt., 1/4 oz. Rugged body and coupling ring accurately machined from bright nickel-plated brass. Connector 5501F has coupling ring that is removable resulting in quick change of female connector to male type. Braid of cable can be soldered to spring, the spring is clamped into by hollow point set screw. Panel receptacle 5501MP mounts in 3/16" dia. hole; for insulated mounting, use insulating washers and 1/4" dia. mounting hole. Av. shpg. wt., 2 oz.

PP	Type 5501F. Straight connector with single contact, female type coupling ring. Bright nickel-plated brass.	
41 H 947. NET	.....	35c
RR	Type 5501M. Straight connector, single contact, male type.	
41 H 948. NET	.....	26c
SS	Type 5501MP. Panel connector with male type single contact. Mounts by locknut on front of panel. Nickel-plated brass.	
41 H 949. NET	.....	21c

# Switchcraft Plugs and Jacks



## "LITTEL-PLUGS" PHONE PLUGS

Small-size phone plugs; fit standard  $\frac{3}{4}$ " phone jacks, except \*Type S-250, 206\* sleeve for S-11 "Litte-Jax" and †Type K280 which has short sleeve for Revere records. Plugs with solder terminals feature built-in cable clamp; others do not include cable clamp. Metal (shielded) handles are nickel-plated brass; plastic handles are durable "Ethocel." Handles are  $1\frac{1}{4}$ " long;  $\frac{1}{2}$ " dia. Av. shgp. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Cond.	Handle Color	Ter.	NET EACH
41 H 553	240	A	2	Black	Screw	44c
41 H 554	245	A	2	Red	Screw	44c
41 H 611	250	A	2	Black	Solder	41c
41 H 614	S250*	A	2	Black	Solder	44c
41 H 612	255	A	2	Red	Solder	41c
41 H 555	260	A	3	Black	Screw	71c
41 H 616	267	A	3	Black	Solder	62c
41 H 613	280	B	2	Black	Solder	59c
41 H 556	R280†	B	2	Metal	Solder	73c
41 H 617	297	B	3	Metal	Solder	76c

## STANDARD PHONE PLUGS

Standard-size  $\frac{3}{4}$ " phone plugs. Metal (shielded), red or black bakelite handles;  $2\frac{1}{2}$ " long,  $\frac{1}{2}$ " dia., except \*1" long. Type 170 is similar to 70, but has 2-piece handle with cable clamp for  $\frac{3}{4}$ " cable. No. 190A is similar to 90, but has same handle as 170. Av. shgp. wt., 5 oz.

Stock No.	Mfr's Type	Fig.	Cond.	Handle Color	Ter.	NET EACH
41 H 557	40	A	2	Black	Screw	.44
41 H 447	45	A	2	Red	Screw	.44
41 H 558	60	A	3	Black	Solder	.62
41 H 559	70	B	2	Black	Screw	.71
41 H 560	90*	E	3	Metal	Solder	.76
41 H 561	160*	C	2	Metal	Screw	.53
41 H 562	170	C	2	Metal	Screw	.97
41 H 563	190A	C	3	Metal	Solder	1.15

## "LUG-PLUG" PHONE PLUGS

Low-cost, two-conductor, phone plugs. All fit  $\frac{3}{4}$ " jacks except, \*fits S-11 Litte-Jax. Have solder terminals. Exterior parts bright nickel plated. Red or black handles are  $1\frac{1}{2}$ " long,  $\frac{1}{2}$ " diameter. Types 380 and 385 have shielded handles  $1\frac{1}{2}$ " long. Av. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Handle Color	NET EACH
41 H 564	350	A	Black	32c
41 H 565	355	A	Red	32c
41 H 566	380	D	Metal	41c
41 H 448	385*	D	Metal	59c

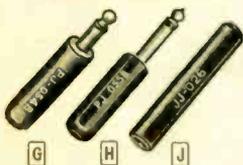
## FLAT PHONE PLUGS

$\frac{3}{4}$ " phone plugs featuring flat, space-saving handles. Ideal for applications where conventional plugs would protrude too far and interfere with operation of equipment, prevent installation in tight quarters, etc. Easily removable plastic handle. Screw terminals on Types 220 and 225 will accept standard phone tips. Terminals and body are mechanically interlocked. Shgp. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Cond.	Handle Color	Ter.	NET EACH
41 H 621	220	F	2	Black	Screw	53c
41 H 567	225	F	2	Red	Screw	53c
41 H 568	230	F	3	Black	Screw	76c
41 H 569	235	F	3	Red	Screw	76c

## MILITARY-TYPE "LITTEL-PLUGS" AND EXTENSION JACK

Meet exacting industrial and military requirements. Plugs are made in accordance with MIL-P-642A specs, except 475, made to MIL P-642(1). Type 820 extension jack is designed to meet MIL-1-641A specs. Firm internal interlock; parts will not shift in position. Black plastic handles; \*metal handles. Extension jack fits Type 430 "Litte-Plug." All have screw terminals. †Built-in cable clamp. Av. shgp. wt., 5 oz.



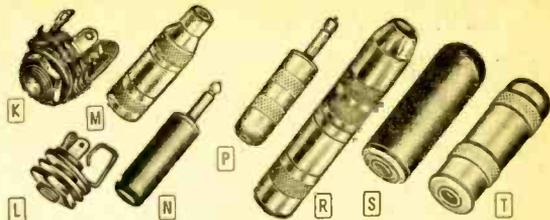
Stock No.	Mfr's Type	Fig.	Cond.	JAN Type	Old S.C. No.	NET EACH
41 H 570	430	G	2	PJ-054B	PL-54	.82
41 H 618	440	G	2	PJ-055B	PL-55	.82
41 H 449	470*	G	2	PJ-055M	PL-125	1.18
41 H 461	475*†	H	2	PJ-636		1.15
41 H 602	480	H	3	PJ-068	JK-68	2.12
41 H 619	820	J	2	PJ-026	JK-26	1.18

## SERIES 500 JACK COVERS

New, spring-loaded jack covers. Snap over jack openings when plug is removed; provide dust and moisture-proof seals. Use with conventional  $\frac{1}{2}$ "-32 threaded bushing-type jacks. Locknut seals into molded rubber washer when closed. 3 oz.



Stock No.	Type	Color	NET	Stock No.	Type	Color	NET
41 H 490	510	Olive Drab	.62	41 H 492	515	Black	.62
41 H 491	512	Bright Nickel	.62	41 H 493	520	Navy Gray	.62



## "LITTEL-JAX" PHONE JACKS

Take standard  $\frac{3}{4}$ " phone plugs, except \*S-11, which takes S-250 and 385 plugs, and C-12B which takes 480 Military-type "Litte-Plug"  $\frac{3}{4}$ " dia.,  $1\frac{1}{2}$ " overall, with a  $\frac{1}{4}$ " dia. threaded shank,  $\frac{1}{2}$ " long. L-11 and L-12A have bushing  $\frac{3}{4}$ " long. SCC indicates single closed circuit; OC indicates open circuit. Av. shgp. wt., 3 oz.

Stock No.	Mfr's Type	Diag.	Cond.	Circuit	JAN Type	NET EACH
41 H 622	11	I	2	OC		24c
41 H 623	C-11	I	2	OC	JJ-034	35c
41 H 479	C-11	I	2	OC		29c
41 H 607	S-11*	I	2	OC		26c
41 H 624	12A	II	2	SCC		26c
41 H 631	C-12A	II	2	SCC	JJ-089	44c
41 H 469	L-12A	II	2	SCC		32c
41 H 632	12B	III	3	OC		32c
41 H 633	C-12B	III	3	OC	IJ-033	41c
41 H 634	13B	IV	3	SCC		44c

## "TINI-JAX" SUB-MINIATURE PHONE JACKS

Extra-small 2-conductor jacks for "Tini-Plugs",  $\frac{1}{4}$ " long; fit  $\frac{3}{4}$ " hole. OC, open circuit; CC, closed circuit. Av. shgp. wt., 2 oz.

41 H 516	41	I	2	OC	24c
41 H 517	42A	II	2	CC	26c

New Type 125 "Tini-Extension Jax", Two-conductor; solder lug terminals. Mates with "Tini-Plugs", below. Wt., 2 oz.

41 H 472	NET				.73c
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## "TINI-PLUGS" SUB-MINIATURE PHONE PLUGS

For use with "Tini-Jax".  $1\frac{1}{2}$ " overall length. 2-conductor. Handles are "Ethocel" plastic or nickle-plated brass. Shgp. wt., 2 oz.

Stock No.	Type	Fig.	Ter.	Handle	NET
41 H 518	740	N	Screw	Black	44c
41 H 519	745	N	Screw	Red	44c
41 H 520	750	N	Solder	Black	41c
41 H 521	755	N	Solder	Red	41c
41 H 522	770	P	Screw	Shielded	62c
41 H 523	780	P	Solder	Shielded	59c

## "EXTENSION JAX" CABLE EXTENSION JACKS

Fit standard  $\frac{3}{4}$ " plugs.  $1\frac{1}{2}$ " O.D.;  $2\frac{1}{2}$ " long. 121 and 131  $\frac{1}{2}$ " O.D.;  $2\frac{1}{2}$ " long. Black handles are durable plastic "Ethocel"; shielded handles are nickle-plated brass. All are open circuit type. 3 oz.

Stock No.	Type	Fig.	Cond.	Ter.	Handle	NET
41 H 571	80	S	2	Screw	Black	.68
41 H 718	88	S	2	Solder	Black	.59
41 H 572	120	T	2	Screw	Shielded	.91
41 H 473	121	R	2	Solder	Shielded	.94
41 H 474	131	R	3	Solder	Shielded	1.18
41 H 717	1230	T	3	Screw	Shielded	1.15

## "MT-JAX" SWITCHBOARD-TYPE JACKS

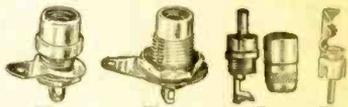
Meet Military specifications.  $\frac{1}{2}$ " wide,  $3\frac{1}{2}$ " long. Fit  $\frac{1}{2}$ " hole. CC, closed circuit; OC, open circuit. Shgp. wt., 3 oz.



Stock No.	Type	Diag.	Cond.	Circuit	JAN	NET
41 H 603	MT-331	I	2	OC	JJ-086	.88
41 H 604	MT-332A	II	2	CC	JJ-024	1.00
41 H 606	MT-332B	III	3	OC	JJ-022	1.00
41 H 477	MT-332C	VI	4	CC, OC	JJ-012	1.15
41 H 478	MT-334B	V	4	2-CC	JJ-042	1.18

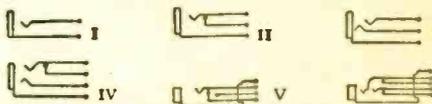
## MINIATURE PHONO JACKS AND PLUGS

New, easily-installed phono jacks and plugs. 3501FF for front panel mounting in  $\frac{1}{2}$ " hole—fits panel up to  $\frac{1}{2}$ " thick. 3501FR for rear panel mounting in  $\frac{3}{8}$ " hole—fits panel up to  $\frac{1}{2}$ " thick. 3502 has  $\frac{1}{2}$ " O.D. shielded handle that may be removed to expose terminals. 3501MC is unshielded, has  $\frac{3}{8}$ " O.D. shell with cable clamp. Av. shgp. wt., 3 oz.



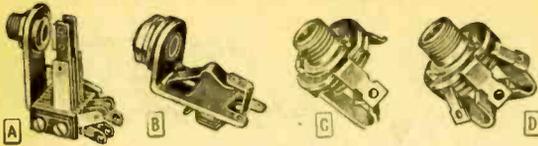
41 H 758	Type 3501FP Jack (Fig. W)	NET	21c
41 H 759	Type 3501FR Jack (Fig. X)	NET	24c
41 H 762	Type 3502 Plug (Fig. Y)	NET	29c
41 H 763	Type 3501MC Plug (Fig. Z)	NET	9c

## JACK SCHEMATIC DIAGRAMS



# Plugs and Jacks

## MALLORY STANDARD PHONE JACKS



### JUNIOR PHONE JACKS

**A** Compact "Junior" jacks for standard  $\frac{1}{4}$ " phone plugs. Require only  $\frac{1}{8}$ " behind panel. Cadmium-plated frames with nickel-plated brass shank, springs, and mounting hardware.  $\frac{3}{8}$ " diameter threaded shank for mounting in panels up to  $\frac{1}{4}$ " thick. Silver contacts. \*Column head "Cond." indicates number of conductors in mating plug. Av. shgp. wt., 3 oz.

Stock No.	Type	*Cond.	Circuit	Diagram	NET
41 H 054	701	2	Open	I	44c
41 H 058	702B	3	Open	III	56c
41 H 052	703	2	Open	V	59c
41 H 059	703B	3	Closed-Transfer 1	IV	59c
41 H 060	704B	3	Closed-Transfer 2	VI	68c

### MIDGET AND INFANT PHONE JACKS

**B** Extremely small "Midget" and "Infant" type jacks for limited-space applications. All take  $\frac{3}{8}$ " phone plugs. "Midget" type jacks require only  $\frac{1}{8}$ " mounting space behind panel; "Infant" type requires only  $\frac{1}{4}$ " behind panel. Cadmium-plated steel frames with nickel-plated brass shank, springs, and mounting hardware.  $\frac{3}{8}$ " threaded shank for mounting in panels up to  $\frac{1}{4}$ " thick. \*Column headed "Cond." indicates number of conductors in mating plug. All are "Midget" type except A-1 "Infant" type jack. (†Not illustrated). Av. shgp. wt., 2 oz.

Stock No.	Type	*Cond.	Circuit	Diagram	NET
41 H 050	†A-1	2	Open	I	38c
41 H 051	A-2	2	Shorting	VII	47c
41 H 053	A-2A	2	Closed	II	56c
41 H 056	A-3A	2	Closed-Transfer 1	VIII	65c

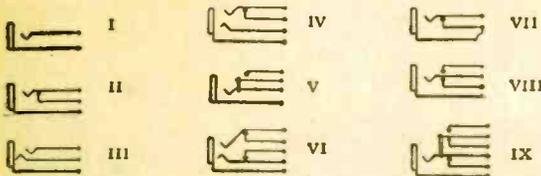
### MILITARY-TYPE SC JACKS

Type SC phone jacks are commercial equivalents of military types complying with JAN-J-641 specification. Both require  $\frac{3}{8}$ " mounting space behind panel. Type SC-1A has  $\frac{3}{8}$ " diameter threaded shank,  $\frac{3}{8}$ " long. Type SC-2B has  $\frac{1}{4}$ " diameter threaded shank,  $\frac{1}{2}$ " long. Av. shgp. wt., 2 oz.

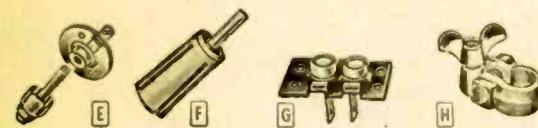
**C** Type SC-1A. Equivalent to military jack No. JJ-034. Open circuit, 2-conductor jack, see Diagram I. Takes all standard  $\frac{3}{8}$ " plugs including Mallory 75; Western Electric Nos. 47A and 47B; Nos. PL-47, PL-48, PL-55, PL-148, PL-155, PL-125, PJ-055, PJ-155, PJ-634, PJ-636, and PJ-047.  
41 H 642, NET..... 35c

**D** Type SC-2B. Equivalent to military jack No. JJ-033. Open circuit, 3-conductor jack, see Diagram III. Takes all 3-conductor plugs with 206" diameter sleeves, including Western Electric 109; Military Nos. PL-68, PL-168, PJ-068, PJ-168, and PJ-309.  
41 H 643, NET..... 41c

### JACK SCHEMATIC DIAGRAMS



### PHONO PIN PLUG & JACK—BINDING POST



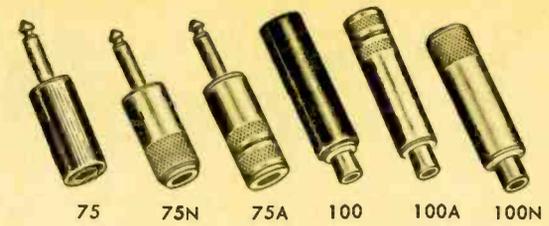
**E** Shielded Phono Pin-Plug and Jack. For auto radios, record players, etc. Pin plug fits standard phono jack on radio. Pin dia.,  $\frac{3}{32}$ " length,  $\frac{1}{8}$ ". Single prong jack on  $\frac{1}{4}$ " bakelite disc.  $\frac{1}{8}$ " mtg. centers. Av. wt., 1 oz., 3 per package.  
46 H 212, Pin Plug, 10 or More Pkgs., Per Pkg. 13c. Per Pkg. 14c  
46 H 213, Pin Jack, 10 or More Pkgs., Per Pkg. 18c. Per Pkg. 20c

**F** H. H. Smith No. 1200 Motorola Type Plug. Antenna lead pin plug designed for connecting coaxial lead in antenna wire to auto radio. Split brass shell has serrated edge to provide secure ground connection. Pin dia.,  $\frac{1}{8}$ ". Shgp. wt., 2 oz.  
41 H 152, 10 or More, EACH... 7c. 1 to 9, NET EACH..... 8c

**G** H. H. Smith No. 1214 Double Phono Jack Assembly. Two standard phono jacks on common base. Fit standard phono pin-plugs on record players, tuners, preamplifiers, etc. Insulated base drilled for mounting screws. Base size,  $1\frac{1}{2} \times 1\frac{1}{2}$ ". Shgp. wt., 2 oz.  
41 H 179, 10 or More, EACH... 7c. 1 to 9, NET EACH..... 8c

**H** Battery Binding Post. Heavy-duty, universal-type battery binding post for making solid connections to storage batteries. Easily adjustable to fit a variety of post diameters. Equipped with heavy nut and bolt to permit wrench tightening on battery post. Separate threaded terminal for connecting cables equipped with terminal lugs, quickly and easily. Large wing nut can be finger-tightened to hold terminal lugs securely. Shgp. wt., 3 oz.  
41 H 785, NET EACH..... 56c

## MALLORY PLUGS AND JACKS



### STANDARD PHONE PLUGS

Standard  $\frac{1}{4}$ ", 2 and 3-conductor, phone plug for use with headphones, handsets, microphones, and for numerous other audio applications. Fit standard  $\frac{1}{4}$ " phone jacks. 2-conductor plugs have built-in tie-cord anchor for terminal strain relief. Type 75A and 76A have a cable clamp built into the handle to provide terminal strain relief. Shielded handles are nickel-plated brass with knurling for sure grip; others are molded phenolic. Screw-type terminals accommodate either 41o jacks or with \*Type 76 and 76A (not illustrated) similar to 75 and 75A. Av. shgp. wt., 3 oz.

Stock No.	Mfr's Type	Cond.	Terminals	Handle		NET EACH
				Type	Length	
41 H 641	75	2	Screw	Phenolic	1 $\frac{1}{2}$ "	.44
41 H 640	75N	2	Screw	Shielded	1 $\frac{3}{8}$ "	.65
41 H 937	75A	2	Screw	Shielded	1 $\frac{3}{8}$ "	1.03
41 H 941	*76	3	Solder	Phenolic	1 $\frac{1}{2}$ "	.65
41 H 942	*76A	3	Solder	Shielded	1 $\frac{3}{8}$ "	1.15

### STANDARD EXTENSION JACKS

Type 100. 2-conductor, fiber handle extension jack for standard  $\frac{1}{4}$ " phone plugs. Length, 3 $\frac{1}{2}$ ". Screw terminals. Shgp. wt., 4 oz.  
41 H 938, NET..... 82c

Type 100N. 2-conductor extension jack with shielded, nickel-plated brass handle. For standard  $\frac{1}{4}$ " phone plugs. Screw terminals. Length, 3 $\frac{1}{2}$ ". Shgp. wt., 6 oz.  
41 H 939, NET..... 1.06

Type 100A. 2-conductor extension jack with shielded, nickel-plated brass handle and built-in cable clamp. Screw terminals. For standard  $\frac{1}{4}$ " phone plugs. Length, 3 $\frac{1}{2}$ ". Shgp. wt., 5 oz.  
41 H 940, NET..... 1.47



### LONG-FRAME STANDARD PHONE JACKS

Industrial-type, long-frame jacks offering a variety of switch combinations. All take standard  $\frac{3}{8}$ " phone plugs. Types Nos. 1, 2, 2A, and 5 (Fig. J) are  $3 \times 1 \frac{1}{2} \times 1 \frac{1}{2}$ " wide. Mount in panels up to  $\frac{1}{4}$ " thick by means of  $\frac{3}{8}$ " diameter threaded shank. XP types (Fig. K) are  $3 \times 2 \frac{1}{2} \times 1 \frac{1}{2}$ " wide. Have  $\frac{1}{8}$ " diameter smooth shank  $\frac{1}{4}$ " long and mount with screw and nut. \*Column headed "Cond." indicates number of conductors in mating plug. †Diagram indicates switching arrangement (shown in column at left). Av. shgp. wt., 4 oz.

Stock No.	Type	*Cond.	Circuit	†Diagram	NET
34 H 440	1	2	Open	I	44c
34 H 441	2	2	Shorting	VII	56c
34 H 442	2A	2	Closed	II	56c
41 H 055	5	2	Closed & Transfer	IX	88c
34 H 445	XP1	2	Open	I	62c
41 H 644	XP2B	2	Closed	II	73c
34 H 446	XP3B	2	Transfer	VIII	88c

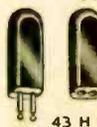
### H. H. SMITH PLUGS AND JACK



Standard  $\frac{1}{4}$ " 2-conductor phone plug and jack. Plugs have screw-type terminals and are available with either red or black bakelite handle; all metal parts, except screws, have nickel plating; overall length, 2 $\frac{1}{2}$ ". Open-circuit jack has  $\frac{3}{8}$ " dia. threaded shank  $\frac{3}{8}$ " long; requires 1" behind panel. Av. shgp. wt., 3 oz.

Stock No.	Type	Fig.	Description	NET
41 H 017	222B	M	Standard Phone Plug (black)	38c
41 H 018	222R	M	Standard Phone Plug (red)	38c
41 H 019	275	L	Standard Phone Jack	26c

### SWITCHCRAFT MINIATURE PLUG AND JACK



Top-quality, 2-conductor extension jack and mating plug. The plug is Military Type PJ-291; jack is Type JJ-048. Each is of two-piece, molded construction with EM-1 insulation per MIL-P-3412. Plug has solder-cup terminals; jack has solder lugs. After wiring, shells must be cemented and clamped till dry. Overall size (engaged), 2 $\frac{1}{2} \times 1 \frac{1}{2} \times \frac{1}{2}$ ". Shgp. wt., 3 oz. each.  
43 H 260, Type 410 Plug, NET..... 35c  
43 H 261, Type 810 Jack, NET..... 47c

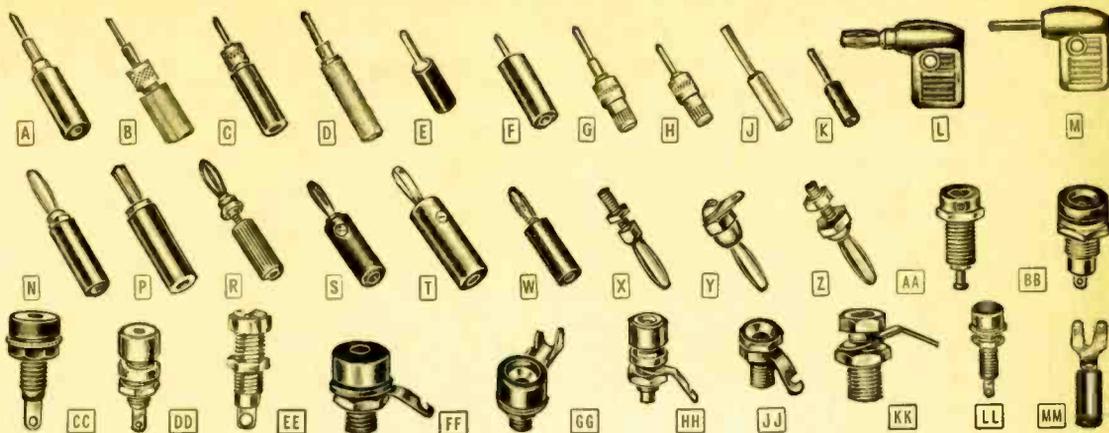
### GENERAL RADIO DOUBLE PLUG



Type 274-MB. Dual plug for standard banana jacks. Molded as a unit on  $\frac{3}{4}$ " centers. Recessed top forms double jack, allowing units to be used in tandem. Banana plug prongs. Holes in body accept phone tips or wires up to No. 12, terminal screws clamp conductors securely. 15 amp rating. 1 $\frac{1}{4}$ " W., 1 $\frac{1}{8}$ " L. Shgp. wt., 3 oz.  
41 H 242, NET..... 65c

# H. H. Smith Plugs and Jacks

## TIP PLUGS, BANANA PLUGS AND MATCHING JACKS



### INSULATED TIP PLUGS

**A** Type 229 Heavy Duty Phone Tip Plug. Molded bakelite handle. One-piece, nickel-plated brass construction for heavier-current use.  $2\frac{1}{2}$ " long. Shpg. wt., 3 oz. 41 H 536. Red 1-9  
41 H 537. Black NET EACH  
41 H 538. Yellow 15c  
41 H 539. Green  
41 H 540. Blue 13c  
10-49, EA.

**B** Type 200 "Senior" Solderless Phone Tip Plug. Knurled nut tightens against wire, making soldering unnecessary. Plug is made of nickel-plated brass; bakelite handle.  $2\frac{1}{2}$ " long. Shpg. wt., 3 oz. 41 H 250. Red 1-9  
41 H 255. Black NET EACH  
41 H 415. Yellow 15c  
41 H 416. Green  
41 H 417. Blue 13c  
10-49, EA.

**C** Type 201 "Junior" Solderless Phone Tip Plug. Has same tightening assembly in body of plug as Type 200, above. Bakelite handle; nickel-plated brass.  $2\frac{1}{2}$ " long. Shpg. wt., 3 oz. 41 H 542. Red 1-9  
41 H 543. Black NET EACH  
41 H 544. Yellow 15c  
41 H 545. Green  
41 H 546. Blue 13c  
10-49, EA.

**D** Type 270 Subminiature Phone Tip.  $\frac{1}{2}$ " O.D. bone fiber handle. Nickel-plated brass tip.  $1\frac{1}{2}$ " overall length. 2 oz. 41 H 547. Red 1-9  
41 H 548. Black NET EACH 18c  
10-49, EA.

**E** Type 237. For standard tip jacks.  $1\frac{1}{2}$ " long. 3 oz. 41 H 260. Red 1-9  
41 H 261. Black NET EACH 10c  
10-49, EA.

**F** Type 203 Short Phone Tip Plug. Shoulderless tip permits insertion all the way up to insulated handle. Handle is molded bakelite. Nickel-plated brass tip.  $1\frac{1}{2}$ " long. Shpg. wt., 3 oz. 41 H 575. Red 1-9  
41 H 576. Black NET EACH  
41 H 577. Yellow 12c  
41 H 578. Green  
41 H 579. Blue 11c  
10-49, EA.

### NON-INSULATED TIP PLUGS

**G** Type 105 "Senior" Solderless Phone Tip Plug. Has knurled nut for fastening wire.  $1\frac{1}{2}$ " long. Shpg. wt., 2 oz. 41 H 240. 1-9, NET EACH 10c  
10-49, EA.

**H** Type 106 "Junior" Solderless Phone Tip Plug. As above, but  $1\frac{1}{2}$ " long. 2 oz. 41 H 230. 1-9, NET EACH 10c  
10-49, EA.

**J** Type 123 Heavy-Duty Cord Tip. Fits standard phone tip jacks.  $1\frac{1}{2}$ " long. Shpg. wt., 2 oz. 41 H 125. 1-9, NET EACH 3c  
10-49, EA.

### NON-INSULATED TIP PLUG

**K** Type 108 Standard Cord Tip. For instruments, test panels, headphones, etc. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 200. 1-9, NET EACH.  $2\frac{1}{2}$ c  
10-49, EA.

### MOLDED METER PLUGS

**L** Type 255 Banana-Type Meter Plug. Four-leaved phosphor bronze spring; nickel-plated. Tip is  $\frac{1}{4}$ " long. Wt., 2 oz. 41 H 469. Red 1-9  
41 H 468. Black NET EACH 35c  
10-49, EA.

**M** Type 235 Meter Tip Plug. Molded in two halves for easy assembly with screw and nut. Nickel-plated tip is  $\frac{1}{4}$ " long. 2 oz. 41 H 204. Black NET EACH 26c  
10-49, EA.

### BANANA PLUGS

**N** Type 212 Insulated, Spring Tip. Molded Bakelite handle. Wire can be soldered to brass stud supplied, or directly into plug. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 593. Red 1-9  
41 H 594. Black NET EACH  
41 H 595. Yellow  
41 H 596. Green 21c  
41 H 597. Blue 19c  
10-49, EA.

**P** Type 253 Insulated, Split Tip. Nickel-plated, cross-slotted tip. Wire can be soldered to brass stud supplied or directly into plug.  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 428. Red 1-9  
41 H 427. Black NET EACH  
41 H 067. Yellow  
41 H 068. Green 18c  
41 H 069. Blue 16c  
10-49, EA.

**R** Type 236 Insulated, Spring Tip. Tenite handle. Silver-plated tip. Fits all standard banana jacks. Four leaved spring provides lasting contact. Has curved contact area to assure high current handling capacity. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 407. Red 1-9  
41 H 408. Black NET EACH 32c  
10-49, EA.

**S** Type 204 Insulated, Spring Tip. Solderless; has set screw in bakelite handle. Nickel-plated tip. Length,  $1\frac{1}{2}$ ". Wt., 2 oz. 41 H 405. Red 1-9  
41 H 410. Black NET EACH  
41 H 402. Yellow 18c  
41 H 403. Green  
41 H 404. Blue 16c  
10-49, EA.

**T** Type 213 Insulated, Split Tip. Solderless; set screw in handle.  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 425. Red 1-9  
41 H 430. Black NET EACH  
41 H 412. Yellow  
41 H 411. Green 18c  
41 H 414. Blue 16c  
10-49, EA.

### BANANA PLUGS

**W** Type 211 Insulated, Spring Tip. Nickel-plated brass tip. Wire can be soldered to brass stud supplied, or directly into plug. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 462. Red 1-9  
41 H 463. Black NET EACH  
41 H 464. Yellow 18c  
41 H 465. Green  
41 H 466. Blue 16c  
10-49, EA.

**X** Type 103 All-Metal, Spring Tip. Has solder lug. Four-leaved spring. Body and tip are nickel-plated.  $6-32 \times \frac{3}{8}$ " stud. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 400. 1-9, NET EACH 15c  
10-49, EA.

**Y** Type 100 All-Metal, Spring Tip. As above, but internal threads permit use on all size panels.  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 488. 1-9, NET EACH 15c  
10-49, EA.

**Z** Type 102 All-Metal, Spring Tip. Nickel plated, one-piece construction.  $6-32 \times \frac{3}{8}$ " stud. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 489. 1-9, NET EACH 15c  
10-49, EA.

### TIP JACKS

**AA** Type 1605 Miniature Nylon Tip Jacks. Silver-plated, beryllium copper contact. Fits  $\frac{1}{8}$ " hole; panel to  $\frac{1}{2}$ " thick. Overall size,  $1\frac{1}{2} \times \frac{3}{8} \times \frac{1}{2}$ " dia. Wt., 2 oz. 41 H 495. Red 1-9  
41 H 496. Black NET EACH  
41 H 497. Yellow 26c  
41 H 498. Green  
41 H 499. Blue 24c  
10-49, EA.

**BB** Type 240 Nylon Tip Jack. Completely insulated; phosphor bronze contact.  $1\frac{1}{2} \times \frac{3}{8}$ " dia. Shpg. wt., 2 oz. 41 H 012. Red 1-9  
41 H 013. Black NET EACH  
41 H 014. Yellow  
41 H 015. Green 18c  
41 H 016. Blue 16c  
10-49, EA.

**CC** Type 202 Insulated Tip Jack. Body is nickel-plated brass. Mounts in  $\frac{1}{2}$ " hole in panels up to  $\frac{3}{8}$ " thick. Size,  $1\frac{1}{2} \times \frac{3}{8}$ " O.D. Shpg. wt., 2 oz. 41 H 110. Red 1-9  
41 H 115. Black NET EACH  
41 H 432. Yellow  
41 H 433. Green 13c  
41 H 434. Blue 12c  
10-49, EA.

**DD** Type 241 Insulated Tip Jack. Molded nylon head and insulating washer. Nickel-plated brass body. Mounts in  $\frac{1}{2}$ " hole. Shpg. wt., 2 oz. 41 H 024. Red 1-9  
41 H 025. Black NET EACH  
41 H 026. Yellow  
41 H 027. Green 18c  
41 H 028. Blue 16c  
10-49, EA.

### TIP JACK

**EE** Type 107 Non-Insulated Tip Jack.  $\frac{1}{4}$ " mtg. hole;  $\frac{3}{8}$ " max. panel thickness. Has phosphor-bronze spring contact. Shpg. wt., 2 oz. 41 H 100. 1-9, NET EACH 10c  
10-49, EA.

### BANANA JACKS

**FF** Type 205 Insulated Banana Jack. With solder lug and removable insulated top. Requires  $\frac{1}{4}$ " hole; for panels to mtg. hole;  $\frac{3}{8}$ " long. Shpg. wt., 2 oz. 41 H 475. Red 1-9  
41 H 480. Black NET EACH  
41 H 422. Yellow 13c  
41 H 423. Green  
41 H 424. Blue 12c  
10-49, EA.

**GG** Type 219 Insulated Bat-Tip. Has molded plastic head. Recessed body assures snug contact. Fits  $\frac{1}{8}$ " mtg. hole;  $\frac{3}{8}$ " max. panel thickness. Shpg. wt., 2 oz. 41 H 033. Red 1-9  
41 H 035. Yellow NET EACH  
41 H 036. Green 15c  
41 H 037. Blue 13c  
10-49, EA.

**HH** Type 221 Insulated Banana Jack. Molded nylon head and insulating washer.  $\frac{1}{4}$ " hole;  $\frac{3}{8}$ " max. Wt., 2 oz. 41 H 042. Red 1-9  
41 H 043. Black NET EACH  
41 H 044. Yellow 18c  
41 H 045. Green  
41 H 046. Blue 16c  
10-49, EA.

**JJ** Type 101 Non-Insulated Banana Jack. Has brass tinned lug.  $\frac{1}{4}$ " mtg. hole;  $\frac{1}{2}$ " max. panel thickness. Shpg. wt., 2 oz. 41 H 047. 1-9, NET EACH 10c  
10-49, EA.

**KK** Type 109 Non-Insulated Banana Jack.  $\frac{1}{4}$ " mtg. hole;  $\frac{1}{2}$ " max. thickness. 2 oz. 41 H 470. 1-9, NET EACH 10c  
10-49, EA.

### COMBINATION JACK

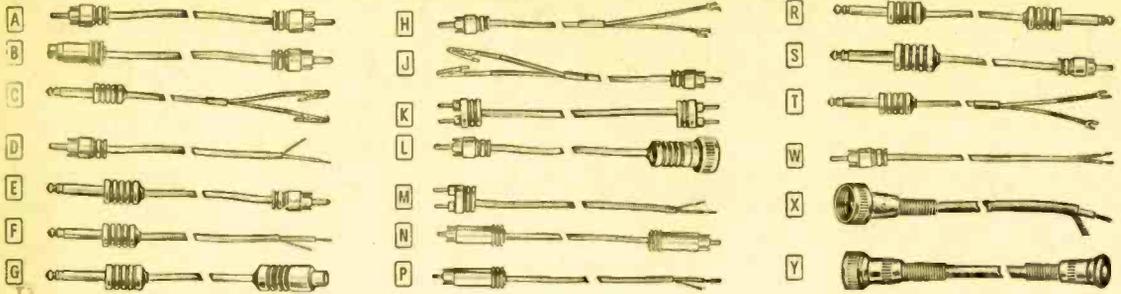
**LL** Type 206 Insulated Combination Jack. Will accommodate all standard phone tip or banana plugs. Nickel-plated brass body. Mounts in  $\frac{1}{2}$ " hole; panels up to  $\frac{3}{8}$ " thick. Length,  $1\frac{1}{2}$ ". Shpg. wt., 2 oz. 41 H 130. Red 1-9  
41 H 135. Black NET EACH  
41 H 137. Yellow 16c  
41 H 138. Green  
41 H 143. Blue 14c  
10-49, EA.

### INSULATED SPADE LUG

**MM** Type 218 Banana Plug To Spade Lug Adapter. Has jack in rear of handle to allow insertion of banana plug.  $\frac{1}{4}$ " wide steel hot-tinned lug.  $.030$ " thick for extra durability. Size:  $1\frac{1}{4} \times 1\frac{1}{2}$ " long.  $\frac{3}{8}$ " O.D. Shpg. wt., 2 oz. 41 H 048. Red 1-9  
41 H 049. Black NET. EA. 11c  
10-49, EA.

# Connector Cables, Connectors, Tie Points

## LAB-TRONICS HI-FI CONNECTOR CABLES



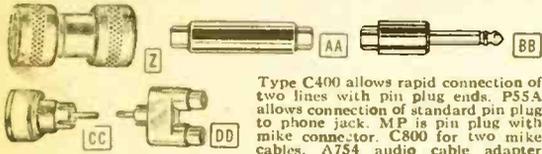
High-quality, low-capacitance connecting cable for every audio need. Invaluable accessories for trouble-free installation of hi-fi components. Cables are soldered prior to molding to assure noise-free con-

nections. Dual pin plugs on Figs. K and M are spaced  $\frac{1}{4}$ " (standard) for stereo use. Bare ends tinned. \*Indicates unshielded. Cable colored soft silver gray. Av. shpg. wt., 5 oz.

Stock No.	Type	Fig.	Description	NET EA.
99 H 855	C101	A	18"; pin plug on each end	.62
99 H 856	C102	A	36"; pin plug on each end	.71
99 H 857	C103	A	72"; pin plug on each end	.88
94 H 456	C202	B	36"; pin plug one end, jack other end	.79
94 H 457	C203	B	72"; pin plug one end, jack other end	.97
89 H 957	P7210*	C	10"; phone plug one end, clips other end	1.41
89 H 960	P7220*	C	20"; phone plug one end, clips other end	1.82
94 H 474	C106	D	36"; pin plug one end, bare other end	.56
94 H 467	C107	D	72"; pin plug one end, bare other end	.73
89 H 952	C4406	E	72"; pin plug one end, phone plug other end	1.18
89 H 965	C4410	E	10"; pin plug one end, phone plug other end	1.47
89 H 953	C4006	F	72"; phone plug one end, bare other end	1.33
89 H 966	C4010	F	10"; phone plug one end, bare other end	1.32
89 H 954	C4610	G	10"; phone plug one end, jack other end	2.00
89 H 956	P6110*	H	10"; pin plug one end, lugs other end	.88
89 H 967	P6120*	H	20"; pin plug one end, lugs other end	1.29
89 H 965	P6210*	J	10"; pin plug one end, clips other end	1.12
89 H 968	P6220*	J	20"; pin plug one end, clips other end	1.53
89 H 960	SP8403	K	36"; dual pin plug on each end	2.21
89 H 961	SP8410	K	72"; dual pin plug on each end	2.82
89 H 959	E803	L	36"; mike connector one end, pin plug other	1.03
89 H 959	E806	L	72"; mike connector one end, pin plug other	1.21

Stock No.	Type	Fig.	Description	NET EA.
89 H 962	SP8003	M	36"; dual pin plug one end, bare other end	1.71
89 H 963	SP8010	M	72"; dual pin plug one end, bare other end	2.32
89 H 969	S3410	N	10"; pin plug on each end	1.23
89 H 978	S3415	N	15"; pin plug on each end	1.53
89 H 979	S3010	P	10"; pin plug one end, bare other end	1.06
89 H 980	S3015	P	15"; pin plug one end, bare other end	1.35
89 H 981	P7310*	R	10"; phone plug on each end	1.62
89 H 982	P7320*	R	20"; phone plug on each end	2.03
89 H 983	P7410*	S	10"; phone plug one end, pin plug other end	1.32
89 H 984	P7420*	S	20"; phone plug one end, pin plug other end	1.72
89 H 985	P7106*	T	72"; phone plug one end, lugs other end	.88
89 H 986	P7110*	T	10"; phone plug one end, lugs other end	1.18
89 H 987	P7120*	T	20"; phone plug one end, lugs other end	1.59
89 H 988	P6010*	W	10"; pin plug one end, bare other end	.82
89 H 989	P6020*	W	20"; pin plug one end, bare other end	1.23
71 H 292	E1106	X	72"; mike connector one end, bare other end	1.03
71 H 293	E1110	X	10"; mike connector one end, bare other end	1.47
71 H 294	E906	Y	72"; male mike conn. one end, female other	1.32
71 H 295	E912	Y	12"; male mike conn. one end, female other	1.76
41 H 911	E925	Y	25"; male mike conn. one end, female other	2.79
89 H 990	P501*	...	10"; lugs on each end	.53
94 H 472	P502	...	20"; lugs on each end	.88

## LAB-TRONICS JACK ADAPTERS, CONNECTORS



Type C400 allows rapid connection of two lines with pin plug ends. P55A allows connection of standard pin plug to phone jack. MP is pin plug with mike connector. C800 for two mike cables. A754 audio cable adapter parallels two audio output cables of stereo-wired record changer for monophonic use. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	NET EACH
71 H 291	C800	Z	Microphone Cable Connector	.59
94 S 458	C400	AA	Double-ended Phono Pin Jack	.59
71 H 289	P55A	BB	Phono Pin Jack; Phono Plug	.73
71 H 290	MP	CC	Mic; Phono Pin Plug	.59
91 H 582	A754	DD	2 Phono Pin Jacks; Phono Pin Plug	1.18

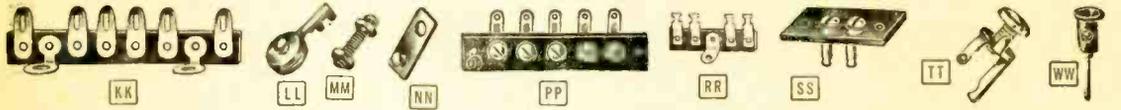
## FAHNESTOCK SPRING CONTACT CLIPS



Positive contact clips. \*Made of bronze. All others brass. Av. shpg. wt., per pkg., 3 oz. 10 clips per pkg.

Stock No.	Mfr's Type	Fig.	Length	Width	Max. Wire	Mtg. Hole	NET PER PKG.
41 H 700	2	EE	1"	$\frac{1}{8}$ "	#10	#8	.12 .11
41 H 702	3	EE	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#10	#8	.17 .15
41 H 705	10	EE	1"	$\frac{1}{8}$ "	#14	#6	.10 .09
41 H 703	5	FF	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#10	#8	.19 .17
41 H 707*	15	FF	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#16	#4	.10 .09
41 H 704	9	GG	2 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#10	#8	.51 .46
41 H 710	9C	GG	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#10	#8	1.50 1.35
41 H 715	18	GG	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#14	#6	.50 .45
41 H 708*	36	HH	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#10	lug	.55 .50
41 H 709	45	JJ	1 $\frac{1}{2}$ "	$\frac{1}{8}$ "	#12	lug	.17 .15

## TIE POINTS, TERMINAL STRIPS, NU-WAY SNAPS, STUDS, LUGS



### STANDARD BAKELITE TIE-POINTS

\*1 mtg. lug; others have two. Mtg. ctrs. 4-terminal,  $1\frac{1}{4}$ "; 6-terminal,  $1\frac{1}{2}$ ". Av. shpg. wt., per pkg.,  $\frac{1}{2}$  lb. 10 per pkg.

Stock No.	Terminals	PER PKG.
41 H 515	1*	12c
41 H 500	2*	15c
41 H 501	3*	17c
41 H 502	4	30c
41 H 503	5	26c
41 H 504	6	54c

### TERMINAL STRIPS

Excellent for cabled sub-assemblies, to simplify chassis removal. Have  $\frac{1}{16}$ "-thick bakelite strips. Cadmium-plated screw terminals and tinned solder lugs. Av. shpg. wt., per pkg.,  $\frac{1}{2}$  lb. 5 per pkg.

Stock No.	Terminals	PER PKG.
41 H 505	2	.42
41 H 506	3	.60
41 H 507	4	.77
41 H 508	5	.95
41 H 509	6	1.13

### HEAVY-DUTY STRIPS

Black  $\frac{1}{8}$ " bakelite. Cadmium-plated screw terminals. Tinned lugs. Ideal for antenna-ground connection on receivers; speaker connections, power supply terminals, and similar applications. Av. wt., 4 oz.

Stock No.	Terminals	1-9, EA.	10-49, EA.
41 H 875	2	14c	13c
41 H 880	3	17c	15c
41 H 885	4	21c	19c
41 H 890	5	24c	22c
41 H 895	6	27c	24c
41 H 897	7	31c	28c
41 H 898	8	34c	31c

### NU-WAY SNAPS, STUDS, AND LUGS

Make and break contacts for temporary or permanent connections. Size: Snap,  $\frac{1}{8}$ " dia. x  $\frac{1}{16}$ " L; Stud, 6-32x $\frac{1}{4}$ "; Lug  $\frac{1}{16}$ "x $\frac{1}{4}$ ". Nickel-plated brass. Snap has solder lug; Lug has hole for 6-32 screw. 12 oz. 100 per pkg.

Stock No.	Fig.	Description	PER PKG.
44 H 450	LL	Snaps for lugs and studs.	7.20
44 H 452	MM	Stud for panel or chassis mtg.	4.30
44 H 451	NN	Lug for flush mounting.	4.30

### MINIATURE TIE-POINTS

Tinned terminals on  $\frac{1}{16}$ " phenolic. With ground lug. Wt., per pkg., 8 oz. 10 per pkg.

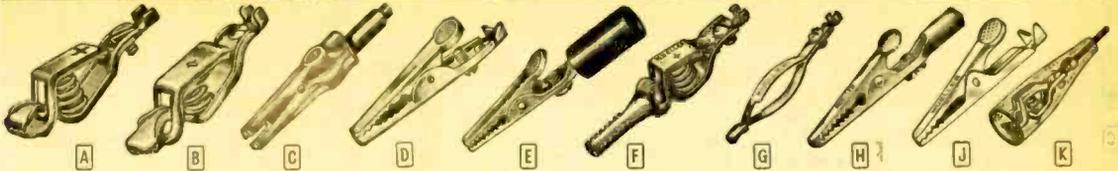
Stock No.	Terminals	PER PKG.
41 H 510	2	15c
41 H 511	3	21c
41 H 512	4	25c
41 H 513	5	31c
41 H 514	6	36c

### TERMINAL LUGS & PIN PLUGS

Av. shpg. wt., per pkg., 4 oz. 10 per pkg.

Stock No.	Fig.	Description	PER PKG.
41 H 767	TT	Terminal lugs.	53c
41 H 777	WW	Black, insulated pin-plug	86c

# Alligator Clips, Binding Posts, Jacks



## MUELLER UNIVERSAL CLIPS AND FLEXIBLE INSULATORS

A wide variety of clips for positive, dependable electrical contacts. For batteries, high-frequency equipment, experimental setups, transmitting apparatus, electroplating, and countless other applications.

Quality springs maintain firm grip. Lead-plated clips resist battery acid. Solid copper types have low resistance and are non-magnetic. Slip-on insulators (Fig. K) are listed for all types.

### MESH TEETH TEST CLIPS

A For general purpose use. \*Solid Copper. †Solid bronze. ‡Cadmium-plated steel. †Insulation-piercing needle. Av. wt., 3 oz.

Stock No.	Type	Amps	Size	NET
45 N 000	\$45	5	1 1/4"	7¢
45 N 005	*45C	10	1 1/2"	12¢
45 N 010	*48B	10	2"	10¢
45 N 078	*48C	10	2 1/2"	14¢
45 N 089	†50C	10	2 3/4"	25¢

### LEAD-PLATED BATTERY CLIPS

A For moderately heavy current work, including battery charging, electroplating, and light welding. Av. shpg. wt., 4 oz.

45 N 020	24A	25	2 1/4"	22¢
45 N 030	21A	50	4"	39¢
45 N 040	11A	100	6"	98¢

### SOLID COPPER CLIPS

A Heavy-duty, high-conductivity, solid copper clips. Shpg. wts.: 24C, 3 oz.; 21C, 5 oz.; 11C, 8 oz.; 33C, 1 lb.

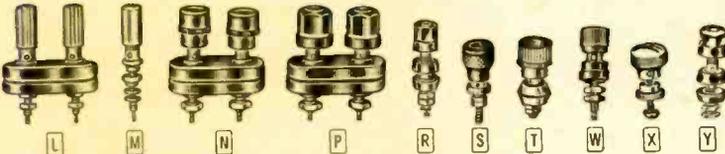
45 N 022	24C	50	2 3/4"	.33
45 N 035	21C	100	4 1/4"	.89
45 N 045	11C	200	6"	1.67
45 N 050	33C	300	7 3/4"	3.19

### 3-SIDED MESH TEETH CLIPS

B †Cadmium-plated steel; \*solid copper. Jaws open 3/8". Shpg. wt., 2 oz.

45 N 015	\$27	20	2 1/8"	13¢
45 N 097	*27C	40	2 1/8"	20¢

## H. H. SMITH BINDING POSTS



L Type 209. Dual binding post assembly with metal heads. Accommodates single or dual banana plugs, wire and phone tips (either forward or sideways). Mounts in two 1/2" holes on 3/4" mounting centers in panels from 1/8" up to 3/4" thick. Body: brass, nickel-plated. Head: captive-type, hex brass, nickel-plated. Washer: molded black styrene. With wrap-around solder studs. Has 3/4 x 1 1/2" rounded flat base. Supplied with 4 hex nuts and two flat washers. Shpg. wt., 4 oz.  
41 H 326, NET.....59¢

M Type 208. Five-way metal binding post. Can accept banana plug, phone tip, spade lug, alligator clip or wire strand. Mounts in .144" hole in panels from 1/8" to 3/4" thick. Body: brass, nickel plated. Head: captive, hex brass nickel plated. Has wrap-around solder stud. Supplied complete with 2 mounting nuts. Shpg. wt., 3 oz.  
41 H 327, NET.....22¢

N Type 224. Dual 5-way binding post assembly with black, insulated fluted heads. Accepts single or dual banana plugs. Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 3/4" thick. Has solder stud. 3/4 x 1 1/2" base. Body: brass, nickel plated. 4 mounting nuts. Shpg. wt., 4 oz.  
41 H 328, NET.....53¢

Y Five-way binding post offers complete insulation. Current capacity, 30 amperes; working voltage, 1000 volts. Take spade lugs, banana plugs (have jack in top), clip leads, and up to No. 12 wire. Insulated with nylon plastic; metal components are recessed. Mount in 3/4" holes in panels 1/8" to 3/4" thick. Metal parts gold-plated. Shpg. wt., 4 oz.

## SUPERIOR BINDING POSTS

Stock No.	Type	Color	NET EACH
41 H 172	DF30VC	Yellow	40¢
41 H 173	DF30VNC	Green	40¢
41 H 174	DF30VTC	White	40¢
41 H 175	DF30BC	Black	40¢
41 H 178	DF30RC	Red	40¢
41 H 198	DF30BLC	Blue	40¢

### INSULATED ALLIGATOR CLIPS

C †Cadmium-plated steel; \*solid copper. Vinyl plastic insulation. Shpg. wt., 3 oz.

Stock No.	Type	Amps	Size	NET
45 N 140	\$63	5	2 1/4"	24¢
45 N 141	*63C	10	2 3/4"	25¢

### 70 SERIES ALLIGATOR CLIPS

D \*Cadmium-plated steel; †solid copper; ‡solder connection; §screw connected. 3 oz.

45 N 170	70††	5	1 1/4"	7¢
45 N 171	70S‡	5	1 1/4"	8¢
45 N 172	70CS§	10	1 1/4"	11¢

### INSULATED BARREL ALLIGATOR CLIPS

E Made of cadmium-plated steel, except \*solid copper. Jaws open 1/4". Av. wt., 2 oz.

Stock No.	Type	Size	Description	NET
45 N 070	60HS	2 1/4"	Red handle	12¢
45 N 075	60HS	2 1/4"	Black handle	12¢
45 N 090	*60CHS	2 1/4"	Red handle	15¢
45 N 095	*60CHS	2 1/4"	Black handle	15¢

### CROCODILE CLIPS

F \*Solid copper; †cadmium-plated steel; ‡Phone tip on one jaw. Wt., 2 oz.

45 N 060	\$85	2 1/4"	Screw Connection	9¢
45 N 062	*85C	2 1/4"	Screw Connection	16¢
45 N 098	‡85	1 1/2"	Tip-Clip	21¢

### NON-FERROUS R.F. TEST CLIP

G Phosphor bronze clip with brass screw. Ideal for tapping small transmitter coils; also for work in crowded chassis. Shpg. wt., 2 oz.  
45 N 055 | 88 | 1 1/4" | Ideal for coils | 22¢

### ALLIGATOR CLIPS

H Steel, except \*Solid copper; †Solder type; ‡S—screw type. Slim jaws for close work. Jaws open 1/4". Shpg. wt., 2 oz.

Stock No.	Type	Size	Description	NET
45 N 200	†60	2"	Fit banana plugs	7¢
45 N 060	60S	2"	Fit banana plugs	8¢
45 N 085	*60CS	2"	Fit banana plugs	12¢

### "MINI-GATOR" CLIPS

J Miniaturized—3/4" jaw opening. 1 1/4" O.D. tip. †Cadmium-plated steel; \*solid copper. Shpg. wt., 2 oz.

Stock No.	Type	Amps	Size	NET
45 N 142	\$30	5	1 1/4"	7¢
45 N 143	*30C	10	1 1/4"	8¢

### SLIP-ON INSULATORS FOR CLIPS

K Tough, flexible plastic. High dielectric strength; resistant to oils and grease. Covers entire clip except for end of nose. Av. shpg. wt. per pkg., 5 oz. 2 insulators per pkg.; one red, one black.

Stock No.	Mfr's Type	For Use With	NET PER PKG.
45 N 167	13	Series 11	1.67
45 N 164	23	Series 21	.90
45 N 163	26	Series 24	.45
45 N 166	29	Series 27	.29
45 N 144	32	Series 30	.12
45 N 162	35	Series 33	5.74
45 N 160	47	Series 45	.12
45 N 161	49	Series 48, 50	.18
45 N 165	62	Series 50, 70	.12
45 N 168	87	Series 85	.24
45 N 169	93	Series 88	.24

## H. H. SMITH ALLIGATOR CLIPS

Clips for positive, dependable electrical contacts. Ideal for high-frequency equipment, experimental setups, transmitting apparatus, electroplating and other similar applications. Plastic insulated handles available in red or black. Type numbers 304 and 305 are Fig. Z; 336 and 337 are Fig. AA. Clips are steel cadmium plated. Quality springs maintain firm grip. Type 336 and 337 are all-insulated to insure against shock or grounding. All accept phone tip or banana plug except type 337 which has solder connection. Av. shpg. wt., 2 oz.

Stock No.	Type	Color	Description	EACH
41 H 300	304	Red	With tip jack adapter.	32¢
41 H 305	304	Black	With tip jack adapter.	32¢
41 H 168	305	Red	With comb. tip & banana jack.	38¢
41 H 169	305	Black	With comb. tip & banana jack.	38¢
41 H 373	336	Red	With tip jack adapter.	35¢
41 H 374	336	Black	With tip jack adapter.	35¢
41 H 362	337	Red	Solder type connection.	24¢
41 H 363	337	Black	Solder type connection.	24¢

## TELEX SUBMINIATURE JACKS AND PLUG

Miniature plug and jacks. Ideal for computing devices, dictating machines, transistor radios, tape recorders and similar applications.

Type PM-01 Plug. Extremely small phone-type plug for two-conductor cable up to .150" diameter. 1 1/8" by 3/8" diameter. Tip and sleeve brass, silver plated. Nylon insulator. Shpg. wt., 2 oz.  
59 J 243, NET.....36¢

Type JPM-01 Jack. Closed-circuit type for plug above. Mtg. bushing—brass, nickel plated. Mounts in 3/8" hole. Grade XXXP Phenolic insulators. Beryllium copper, silver plated contact springs. Shpg. wt., 2 oz.  
59 J 242, NET.....24¢

Type JPM-02 Jack. Same as above jack for Type PM-01 plug but is open-circuit type. Wt., 2 oz.  
59 J 254, NET.....24¢

# Cinch-Jones Strips, Terminals, Sockets

## FANNING STRIPS

For neat, highly dependable terminal wiring. Insure correct, positive firm connections. Ideal for cable or harness wiring. These units simplify assembly—connections can be made before putting strip into assembly. Facilitate disconnecting sub-assemblies for servicing. Last letter in Type No. indicates right or left mounting hole position. Laminated bakelite. Terminals made of .032" thick brass. Av. shpg. wt., 3 oz.

Series 160. Fit Series 140 barrier terminals below. Terminals are mounted on  $\frac{1}{8}$ " bakelite,  $\frac{1}{8}$ " wide and on  $\frac{1}{8}$ " centers.

Stock No.	Type	Term.	NET	Stock No.	Type	Term.	NET
41 H 808	2-160L	2	8c	40 H 956	2-160R	2	8c
41 H 809	3-160L	3	12c	40 H 957	3-160R	3	12c
41 H 812	4-160L	4	15c	40 H 958	4-160R	4	15c
41 H 813	5-160L	5	19c	40 H 959	5-160R	5	19c
41 H 814	6-160L	6	23c	40 H 960	6-160R	6	23c
41 H 817	8-160L	8	30c	40 H 961	8-160R	8	30c
41 H 818	10-160L	10	37c	40 H 962	10-160R	10	37c
41 H 819	12-160L	12	45c	40 H 963	12-160R	12	45c

Series 161. Fit Series 141 barrier terminals below. Terminals are mounted on  $\frac{1}{8}$ " bakelite,  $\frac{1}{8}$ " wide and on  $\frac{1}{8}$ " centers.

Stock No.	Type	Term.	NET	Stock No.	Type	Term.	NET
41 H 822	2-161L	2	8c	40 H 964	2-161R	2	8c
41 H 823	3-161L	3	13c	40 H 965	3-161R	3	13c
41 H 824	4-161L	4	16c	40 H 966	4-161R	4	16c
41 H 827	5-161L	5	20c	40 H 967	5-161R	5	20c
41 H 828	6-161L	6	24c	40 H 968	6-161R	6	24c
41 H 829	8-161L	8	30c	40 H 969	8-161R	8	30c
41 H 832	10-161L	10	38c	40 H 970	10-161R	10	38c
41 H 833	12-161L	12	45c	40 H 971	12-161R	12	45c

Series 162. Fit Series 142 barrier terminals below. Terminals are mounted on  $\frac{1}{8}$ " bakelite,  $\frac{1}{8}$ " wide and on  $\frac{1}{8}$ " centers.

Stock No.	Type	Term.	NET	Stock No.	Type	Term.	NET
41 H 834	2-162L	2	10c	40 H 972	2-162R	2	10c
41 H 843	3-162L	3	14c	40 H 973	3-162R	3	14c
41 H 844	4-162L	4	17c	40 H 974	4-162R	4	17c
41 H 845	5-162L	5	21c	40 H 975	5-162R	5	21c
41 H 846	6-162L	6	25c	40 H 976	6-162R	6	25c
41 H 847	8-162L	8	32c	40 H 977	8-162R	8	32c
41 H 848	10-162L	10	40c	40 H 978	10-162R	10	40c
41 H 849	12-162L	12	47c	40 H 979	12-162R	12	47c

## BARRIER TERMINALS

Barriers between each terminal provide increased insulation. Excellent for industrial and experimental applications. Barriers follow edge of strips and terminate at base. Make a long leakage path and prevent direct shorts caused by frayed wires at the terminals. Base is molded bakelite, with mounting holes at ends. Eyelets and binder screws of nickel-plated brass; terminals of hot tin-finish brass. Barrier-type terminals and fanning strips, when used together, insure positive contact and firm connections. No. 140 terminal strips have 5-40x $\frac{1}{8}$ " binder head screws,  $\frac{1}{8}$ " metal-to-metal spacing. No. 141 terminal strips have 6-32x $\frac{1}{8}$ " binder head screws,  $\frac{1}{8}$ " metal-to-metal spacing. No. 142 terminal strips have 8-32x $\frac{1}{8}$ " binder head screws,  $\frac{1}{8}$ " metal-to-metal spacing. Av. shpg. wt., 5 oz.

Series 140. Metal-to-metal spacing over bakelite  $\frac{1}{8}$ ". Base  $\frac{1}{8}$ " wide x  $\frac{1}{2}$ " high.  $\frac{1}{8}$ " centers. Use with Series 160 fanning strips.

Stock No.	Mfr's Type	Term.	NET EACH	Stock No.	Mfr's Type	Term.	NET EACH
41 H 580	1-140	1	.09	41 H 806	12-140	12	.66
41 H 800	2-140	2	.14	41 H 804	13-140	13	.72
41 H 801	3-140	3	.20	41 H 585	14-140	14	.77
41 H 803	4-140	4	.24	41 H 586	15-140	15	.82
41 H 807	5-140	5	.30	41 H 587	16-140	16	.87
41 H 802	6-140	6	.34	41 H 588	17-140	17	.92
41 H 581	7-140	7	.40	41 H 589	18-140	18	.98
41 H 804	8-140	8	.45	41 H 590	19-140	19	1.03
41 H 582	9-140	9	.51	41 H 591	20-140	20	1.08
41 H 805	10-140	10	.56	41 H 592	21-140	21	1.14
41 H 583	11-140	11	.61				

Series 141. Metal-to-metal spacing over bakelite  $\frac{1}{8}$ ". Base  $\frac{1}{8}$ " wide x  $\frac{1}{2}$ " high.  $\frac{1}{8}$ " centers. Use with Series 161 fanning strips.

Stock No.	Mfr's Type	Term.	NET	Stock No.	Mfr's Type	Term.	NET
41 H 835	2-141	2	.19	41 H 840	10-141	10	.72
41 H 836	3-141	3	.24	41 H 841	12-141	12	.84
41 H 837	4-141	4	.31	41 H 876	14-141	14	.98
41 H 842	5-141	5	.38	41 H 877	16-141	16	1.12
41 H 838	6-141	6	.44	41 H 878	18-141	18	1.24
41 H 839	8-141	8	.58	41 H 879	20-141	20	1.38

Series 142. Metal-to-metal spacing over bakelite  $\frac{1}{8}$ ". Base  $\frac{1}{8}$ " wide x  $\frac{1}{2}$ " high.  $\frac{1}{8}$ " centers. Use with Series 162 fanning strips.

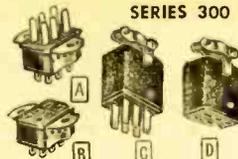
Stock No.	Mfr's Type	Term.	NET	Stock No.	Mfr's Type	Term.	NET
41 H 670	2-142	2	.22	41 H 680	12-142	12	1.04
41 H 671	3-142	3	.30	41 H 881	13-142	13	1.12
41 H 672	4-142	4	.38	41 H 882	14-142	14	1.20
41 H 673	5-142	5	.46	41 H 883	15-142	15	1.28
41 H 674	6-142	6	.53	41 H 884	16-142	16	1.36
41 H 676	8-142	8	.71	41 H 886	17-142	17	1.44
41 H 678	10-142	10	.87				

## ADAPTER SOLDER TERMINALS

Adapt barrier strips (listed above) to permit top-side or underside solder connections. Type  $\frac{3}{4}$ W permits top-side soldering to barrier terminals; Type Y is for underside solder connections. Made of brass; hot-tin finish. Assure positive solder connections. Fasten securely under binder head screws. Av. shpg. wt., 3 oz. Ton Per Pkg.

TYPE $\frac{3}{4}$ W				TYPE Y			
Stock No.	Mfr's Type	For Series	Per Pkg.	Stock No.	Mfr's Type	For Series	Per Pkg.
41 H 887	$\frac{3}{4}$ W-140	140	.25	41 H 891	Y-140	140	.25
41 H 888	$\frac{3}{4}$ W-141	141	.33	41 H 892	Y-141	141	.34
41 H 889	$\frac{3}{4}$ W-142	142	.42	41 H 893	Y-142	142	.42

## SERIES 300 PLUGS & SOCKETS



Compact units rated 730 volts rms at 10 amps. Metal caps; bakelite body. Phosphor-bronze socket contacts engage both sides of plug contacts. Units are polarized; plugs with 24 or more contacts have positioning pin. Plug contacts are  $\frac{1}{4}$ " wide by  $\frac{1}{8}$ " thick. \*Round shell; others rectangular. Av. shpg. wt., 3 oz.

### TYPE AB FOR CHASSIS MOUNTING

A PLUGS				B SOCKETS			
Contacts	Stock No.	Type	NET	Stock No.	Type	NET	
2	40 H 870*	P-302-AB	.19	40 H 880*	S-302-AB	.21	
3	40 H 871	P-303-AB	.24	40 H 881	S-303-AB	.24	
4	40 H 872	P-304-AB	.25	40 H 882	S-304-AB	.27	
6	40 H 873	P-306-AB	.31	40 H 883	S-306-AB	.34	
8	40 H 874	P-308-AB	.37	40 H 884	S-308-AB	.40	
10	40 H 875	P-310-AB	.42	40 H 885	S-310-AB	.51	
12	40 H 876	P-312-AB	.48	40 H 886	S-312-AB	.59	
15	40 H 877	P-315-AB	.63	40 H 887	S-315-AB	.72	
18	40 H 878	P-318-AB	.78	40 H 888	S-318-AB	.88	
21	40 H 879	P-321-AB	.98	40 H 889	S-321-AB	1.09	
24	40 H 819	P-324-AB	1.19	40 H 867	S-324-AB	1.29	
27	40 H 820	P-327-AB	1.40	40 H 868	S-327-AB	1.50	
30	40 H 821	P-330-AB	1.61	40 H 869	S-330-AB	1.71	
33	40 H 822	P-333-AB	1.80	40 H 877	S-333-AB	1.92	

### TYPE CCT WITH CABLE CLAMP

C PLUGS				D SOCKETS			
Contacts	Stock No.	Type	NET	Stock No.	Type	NET	
2	40 H 802*	P-302-CCT	.43	40 H 852*	S-302-CCT	.44	
3	40 H 803	P-303-CCT	.46	40 H 853	S-303-CCT	.48	
4	40 H 804	P-304-CCT	.51	40 H 854	S-304-CCT	.51	
6	40 H 806	P-306-CCT	.56	40 H 856	S-306-CCT	.59	
8	40 H 808	P-308-CCT	.62	40 H 858	S-308-CCT	.69	
10	40 H 810	P-310-CCT	.69	40 H 860	S-310-CCT	.76	
12	40 H 812	P-312-CCT	.75	40 H 862	S-312-CCT	.87	
15	40 H 805	P-315-CCT	.98	40 H 850	S-315-CCT	1.09	
18	40 H 807	P-318-CCT	1.19	40 H 851	S-318-CCT	1.29	
21	40 H 809	P-321-CCT	1.40	40 H 855	S-321-CCT	1.50	
24	40 H 811	P-324-CCT	1.66	40 H 857	S-324-CCT	1.77	
27	40 H 813	P-327-CCT	1.87	40 H 859	S-327-CCT	1.98	
30	40 H 814	P-330-CCT	2.18	40 H 861	S-330-CCT	2.28	
33	40 H 815	P-333-CCT	2.33	40 H 863	S-333-CCT	2.44	

## SERIES 170 TERMINAL STRIPS



Terminal strips with extra-heavy solder terminals. Ideal for industrial users, experimental labs, etc. Black molded bakelite insulation,  $\frac{1}{8}$ " wide,  $\frac{1}{8}$ " thick. Terminals are mounted on  $\frac{1}{8}$ " centers. Mounting holes are  $\frac{1}{8}$ " from center of end terminals.

Terminals are .032" brass, tin plated. Double-notched solder terminals for rapid soldering or wrap-around connections. Av. shpg. wt., 5 oz.

Stock No.	Type	Term.	NET	Stock No.	Type	Term.	NET
40 H 990	1-170	1	15c	40 H 995	6-170	6	33c
40 H 991	2-170	2	19c	40 H 996	7-170	7	36c
40 H 992	3-170	3	22c	40 H 997	8-170	8	39c
40 H 993	4-170	4	25c	40 H 998	9-170	9	43c
40 H 994	5-170	5	29c	40 H 999	10-170	10	46c

## SERIES 2000 TERMINAL STRIPS



Terminals are made of .019" brass, tin-plated and spaced on  $\frac{1}{8}$ " centers. Molded bakelite insulation. Mounting brackets are made of cadmium-plated steel. Mounting holes at each end of bracket. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Term.	Mtg. Ctrs.	NET	Stock No.	Mfr's Type	Term.	Mtg. Ctrs.	NET
41 H 687	2002	2	1"	6c	41 H 691	2006	6	2 $\frac{1}{2}$ "	10c
41 H 688	2003	3	1 $\frac{1}{8}$ "	7c	41 H 693	2008	8	2 $\frac{3}{4}$ "	11c
41 H 689	2004	4	1 $\frac{1}{2}$ "	8c	41 H 695	2010	10	3 $\frac{1}{2}$ "	13c
41 H 690	2005	5	1 $\frac{3}{4}$ "	9c	41 H 697	2012	12	4 $\frac{1}{2}$ "	15c

## CABLE CLAMPS



Cable clamps for fanning strips above. Made of nickel-plated brass, with 6-32 round head screws. Serve as strain relief and anchor cable securely. Sizes shown are I.D. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Size	NET	Stock No.	Mfr's Type	Size	NET
41 H 852	CC-161-4	$\frac{3}{8}$ "	8c	41 H 857	CC-161-10	$\frac{3}{8}$ "	8c
41 H 853	CC-161-6	$\frac{1}{2}$ "	8c	41 H 858	CC-161-12	$\frac{3}{8}$ "	8c
41 H 854	CC-161-8	$\frac{1}{2}$ "	8c	41 H 859	CC-161-14	$\frac{3}{8}$ "	8c

## SERIES 161 PLUG AND SOCKET

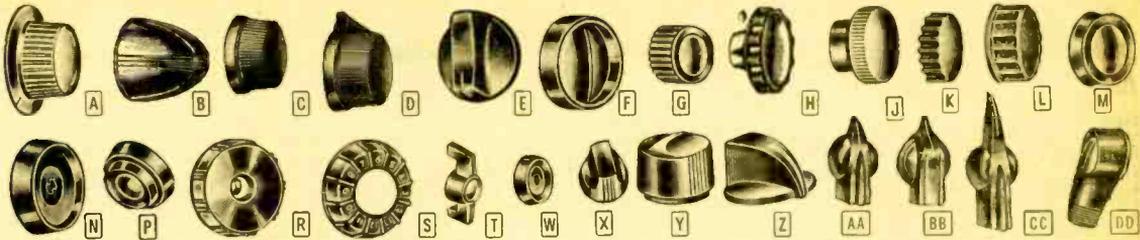


Low-loss plug and socket for high-frequency RF use. For coax or shielded 1-cord. Cadmium-plated brass; prong contacts, silver-plate I. Shpg. wt., 4 oz.

Stock No.	Type	Description	NET	Stock No.	Type	Description	NET
40 H 825	P-101	$\frac{1}{8}$ " Plug	63c	40 H 835	S-101	$\frac{1}{8}$ " Socket	41c

# Knobs, Insulators, Plugs, Jacks, Tape

## POPULAR MOLDED KNOBS FOR EVERY REQUIREMENT



A wide selection of handsomely styled plastic knobs. For replacement use on majority of radios and TV sets. Figs. B and C are excellent for small radios. \*For knurled shafts only; †screws on to 1/8" threaded

shaft; other types are equipped with setscrews to permit use with either round or flattened shafts. Figs. F, G and M have rich, contrasting gold-metal inlays. Knobs are for use with 1/4" shafts. Av. wt., 3 oz.

Stock No.	Fig.	Dia.	Color	1-9, EA.	10-49, EA.	Stock No.	Fig.	Dia.	Color	1-9, EA.	10-49, EA.	Stock No.	Fig.	Dia.	Color	1-9, EA.	10-49, EA.
55 H 031	A	1 1/4"	Black	.12	.108	55 H 081	D	1"	Black	.12	.108	54 H 962*	M	1 1/4"	Walnut	.22	.198
55 H 032	B	1 1/4"	Red	.12	.108	55 H 018	E	1 1/4"	Black	.10	.090	55 H 067	X	1 1/4"	Black	.35	.315
55 H 080	A	1 1/4"	Black	.08	.072	55 H 019	F	1 1/4"	Red	.10	.090	55 H 083	Y	1 1/4"	Black	.08	.072
55 H 022	B	1 1/4"	Black	.08	.072	54 H 960*	F	1 1/4"	Walnut	.24	.216	55 H 084	Z	1 1/4"	Black	.08	.072
55 H 025	B	1 1/4"	Black	.08	.072	54 H 964*	G	1 1/4"	Walnut	.16	.154	55 H 072	AA	1 1/4"	Black	.06	.054
55 H 027	B	3/4"	Walnut	.10	.090	54 H 965*	G	1 1/4"	Ivory	.16	.154	55 H 073	AA	1 1/4"	Red	.08	.072
55 H 028*	B	3/4"	Walnut	.04	.036	55 H 024	H	1 1/4"	Black	.10	.090	55 H 078	AA	1 1/4"	Black	.12	.108
55 H 029	B	3/4"	Ivory	.08	.072	55 H 050	H	1 1/4"	Black	.14	.126	55 H 074	BB	1 1/4"	Black	.08	.072
55 H 043*	C	1 1/4"	Black	.04	.036	55 H 082†	J	1 1/4"	Black	.04	.036	55 H 070	CC	2"	Black	.14	.126
55 H 035	C	1 1/4"	Black	.06	.054	54 H 982	K	1"	Walnut	.10	.090	55 H 071	CC	2"	Red	.16	.154
55 H 036	C	1 1/4"	Walnut	.06	.054	54 H 983*	K	1 1/4"	Ivory	.10	.090	55 H 079	CC	2"	Red	.16	.154
55 H 023	C	1 1/4"	Black	.10	.090	54 H 980	L	1 1/4"	Walnut	.10	.090	55 H 006	DD	1 1/4"	Black	.16	.154
55 H 040	D	1 1/4"	Black	.06	.054	54 H 981	L	1 1/4"	Ivory	.10	.090	55 H 089	DD	2 1/4"	Black	.16	.154
55 H 042*	D	1 1/4"	Black	.04	.036												

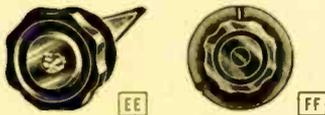
### TELEVISION REPLACEMENT KNOBS

For television receivers using dual-type controls manufactured by Standard Coil, Sarkes-Tarjian, etc. May be used on practically all popular TV sets, such as RCA, Bendix, Westinghouse, Admiral, etc.

Made of molded plastic; have walnut pattern with attractive gold-finish inlay on face. \*For 1/4" knurled shaft. †1/4" flattened shaft. ‡1/2" flattened shaft. §265\* keyway shaft. \*\*3/4" flattened shaft. Av. wt., 2 oz.

Stock No.	Fig.	Dia.	Use	NET EACH		Stock No.	Fig.	Dia.	Use	NET EACH	
				1-9	10-49					1-9	10-49
54 H 966*	M	1 1/4"	Front dual	.26	.234	54 H 974**	R	2 1/4"	Rear dual	.26	.234
54 H 967†	M	1 1/4"	Front dual	.29	.261	54 H 973†	S	2 1/4"	Front dual	.73	.657
54 H 968	M	1 1/4"	Front dual	.29	.261	54 H 972**	T	1 1/4"	Front dual	.53	.477
54 H 969‡	N	1 1/4"	Rear dual	.16	.154		W	1 1/4"	Rear dual	.16	.154
54 H 970†	P	1 1/4"	Comb. dual	.44	.40						

### FLUTED BAKELITE KNOBS



An excellent selection of high-quality fluted knobs. Made of durable high-gloss bakelite. All types have metal inserts for added strength. Provides set screw mounting for use on either 1/4" round or flattened shafts. \*Types with pointer. Av. shpg. wt., 4 oz.

Stock No.	Fig.	Dia.	1-9, EA.	10-49, EA.
55 H 085*	EE	1 1/4"	.32	.288
55 H 088*	EE	1 1/4"	.32	.288
55 H 086*	EE	1 1/4"	.32	.288
55 H 087*	EE	2 1/4"	.46	.414
55 H 095	EE	1 1/4"	.20	.180
55 H 094	EE	1 1/4"	.20	.180
55 H 096	EE	1 1/4"	.24	.216
55 H 097	EE	2 1/4"	.36	.324
55 H 092	FF	1 1/4"	.38	.342
55 H 090	FF	2 1/4"	.48	.432

### CHROME-PLATED BRASS KNOB

Replacement knobs for auto radios and amateur mobile equipment. Small diameter for close-spaced controls. 3/4" dia., 1 1/4" long. Fits 1/4" round or flattened shafts. Wt., 4 oz. 56 H 751. NET.....32c



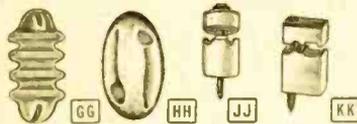
### SCOTCH PLASTIC-BACKED TAPE

No. 33. Strong, durable, plastic-backed electrical insulating tape. Has thickness of .007"; dielectric strength of 10,000 volts. Tape easily molds to irregular surfaces, making neat, compact wrappings over splices. Adhesive clings tightly—prevents unravelling of tape even after long periods of time. Highly resistant to chemicals, abrasion, oil, salt water and weather. Av. shpg. wt., per roll, 6 oz.



Stock No.	Size	NET PER ROLL	
		1-11	12-Up
52 N 613	3/4"x20'	.54	.50
52 N 616	3/4"x66'	1.47	1.35

### ANTENNA INSULATORS



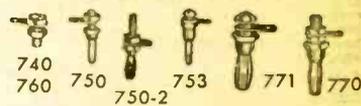
GG	51 C 223. Glazed porcelain insulator, 2 1/4" long. Shpg. wt., 2 oz. 4 per pkg. NET PER PKG.....21c
HH	51 C 224. White porcelain strain insulator, 1 1/4 x 1/2" dia. Wt., 2 oz. 4 per pkg. NET PER PKG.....29c
JJ	51 C 225. Standard mail knob, 1 1/4 x 1 1/4" dia. Shpg. wt., 4 oz. 4 per pkg. NET PER PKG.....19c
KK	51 C 226. Porcelain insulator for 300 ohm twin-lead. Shpg. wt., 5 oz. 4 per pkg. NET PER PKG.....27c

### JOHNSON ANTENNA INSULATORS

107 and 112 wet-process porcelain; 800 lbs. breaking strength. 104 dry-process porcelain; 400 lbs. breaking strength.

Stock No.	Type	Size	Wt.	NET
73 H 215	136-104	4"x3/8" sq.	4 oz.	.26
73 H 216	136-107	7"x1" dia.	10 oz.	1.18
73 H 217	136-112	12"x1 1/2" dia.	14 1/2 lb.	1.25

### E. F. JOHNSON NON-INSULATED PLUGS AND JACKS



Positive contact. Banana type plugs have nickel-silver springs; jacks are nickel-plated brass with phosphor bronze spring sleeves. Type 771 plugs have long screw for mounting on ceramic or steatite plug-in coil forms. Supplied with all hardware. Av. shpg. wt., 2 oz.

Stock No.	Type	Fits	Lgth.	NET
73 H 200	108-740	750, 750-2, 753	3/4"	12c
73 H 201	108-750	740	1 1/4"	13c
73 H 202	108-750-2	740	1 1/4"	14c
73 H 203	108-753	740	1 3/4"	14c
73 H 204	108-760	770, 771	1"	31c
73 H 205	108-770	760	1 1/2"	30c
73 H 206	108-771	760	1 1/4"	34c

### NATIONAL STAND-OFF INSULATORS

Steatite insulators for RF circuits. Glazed to prevent moisture absorption. Base and terminal assembly removable to form single-screw pillar mount. 3 oz.

No.	Type	Ht.	Dia.	NET
71 H 125	GS-1	1 1/4"	1 1/4"	27c
71 H 126	GS-2	2 1/4"	1 1/2"	35c
71 H 127	GS-3	2 1/4"	3/4"	69c

### DUTCH BRAND ELECTRICAL TAPE

Plastic Tape. Strong, black vinyl plastic electrical insulating tape. Stretches and conforms to irregular surfaces exceedingly well. Adhesive clings tightly— aids in making neat, compact wrappings and insulations which do not unravel even after long periods of time. High-dielectric strength and excellent adhesive qualities make this electrical tape a popular favorite with radio and television servicemen as well as electricians. 3/4" wide type is only .007" thick. Rated at 7,000 volts. 1/2" wide type is .010" thick. Rated at 10,000 volts. Av. shpg. wt., 6 oz.

Friction Tape. Very popular standard width tape. Tight-clinging adhesive on tough, strong fabric backing, makes long-lasting, high-dielectric wrappings for all requirements. For all radio, electrical, home and shop applications. Av. wt., 6oz.

Stock No.	Size	NET PER ROLL	
		1-29	30-99
52 N 610	3/4"x13'	14c	13c
52 N 611	3/4"x32'	22c	21c
52 N 612	3/4"x68'	42c	41c
52 N 620	3/4"x60'	21c	20c

# Connectors, Receptacles, Plugs, Insulators

## HARVEY HUBBELL "TWIST LOCK" CONNECTORS



A wide selection of heavy-duty electrical connectors for industrial as well as home use. Available in both midget and standard sizes. Feature "Twist Lock" design for safe, sure connections. Just plug connectors together and twist for a locked connection that cannot be accidentally pulled apart. Ideal for extension cables, portable electric tools, motors, and all types of electrical equipment subject to vibration. Conform to National Electrical Code Standard. Av. shpg. wt., 3 oz.

### MIDGET-SIZE CONNECTORS 2-WIRE NON-POLARIZED TYPES

Type 7428 male cap and Type 7427 female connector are of durable brown bakelite with metal cable clamps for  $\frac{1}{8}$  to  $\frac{1}{4}$ " O.D. cords. Type 7466 male base and Type 7468 female base are bakelite with metal housings. Rated 10 amps at 250 volts, or 15 amps at 125 volts.

Stock No.	Mfr's Type	Fig.	Description	NET EACH
41 H 282	7428	A	Male Cap	.42
41 H 283	7427	B	Female Conn.	.76
41 H 284	7466	C	Male Base	.90
41 H 287	7468	D	Female Base	1.09

### 3-WIRE POLARIZED TYPES

As above but for 3-conductor cables. Insulation is black bakelite. Clamps accept cords from .281 to .375" O.D. Polarization prevents wrong connection. Rated 10 amps at 250 v., or 15 amps at 115 v.

Stock No.	Mfr's Type	Fig.	Description	NET EACH
41 H 288	7485	A	Male Cap	.99
41 H 289	7484	B	Female Conn.	1.42
41 H 290	7486	C	Male Base	1.26
41 H 291	7487	D	Female Base	1.54

### STANDARD SIZE CONNECTORS 3-WIRE POLARIZED TYPES

Type 7572 male cap, Type 7556 male base and Type 7557 female base have rust-resistant metal housings. Type 7555 female connector is bakelite. Clamps take cords from .296 to .562 O.D. All are rated 10 amps at 250 volts, or 15 amps at 125 volts.

Stock No.	Mfr's Type	Fig.	Description	NET EACH
41 H 292	7572	E	Male Cap	1.17
41 H 293	7555	F	Female Conn.	1.85
41 H 294	7556	G	Male Base	1.54
41 H 295	7557	H	Female Base	1.71

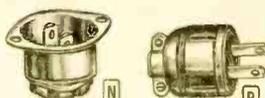
### HEAVY-DUTY 3-WIRE POLARIZED TYPES

Type 7311 cap, Type 7327 male base and Type 7328 female base have metal housings. Type 7313 connector is bakelite. Clamps take .437 to .750" O.D. cords. 20 amps at 250 v., 10 amps at 375 v. \*Armored.

Stock No.	Mfr's Type	Fig.	Description	NET EACH
41 H 296	7311	E	*Male Cap	1.68
41 H 297	7313	F	Female Conn.	2.59
41 H 298	7327	J	J Male Base	1.77
41 H 299	7328	K	Female Base	3.06



## AMPHENOL AC PLUGS AND RECEPTACLES



Compact, high dielectric black phenolic units designed to meet Underwriters Laboratories' approval. All plugs and receptacles are rated at 15 amps, 110 volts, or 10 amps at 250 volts. Fig. L mounts with retainer ring supplied. Requires  $1\frac{1}{8}$ " diameter mounting hole. Fig. M has mounting plate. Requires  $1\frac{1}{2}$ " diameter mtg. hole, mounting centers slotted  $1\frac{1}{2}$ " to  $1\frac{3}{4}$ ". Fig. N is recessed type; requires  $1\frac{1}{8}$ " hole, mounting centers  $1\frac{1}{4}$ ". Fig. P is shielded type with clamp. \*For standard or polarized plugs. All are 2 pole except 13 pole. Av. shpg. wt., 3 oz.

### L RETAINER RING TYPE

No.	Type	Description	NET
40 H 675	61-M	Male Standard	20c
40 H 676	61-MP	Male Polarized	20c
40 H 681	60-M	Male Polarized†	25c
40 H 677	61-F	Female Universal*	19c
40 H 682	60-F	Female Polarized†	22c

### M WITH SEPARATE MOUNTING PLATE

No.	Type	Description	NET
40 H 680	61-M1	Male Standard	23c
40 H 681	61-MP1	Male Polarized	23c
40 H 683	60-M1	Male Polarized†	27c
40 H 682	61-F1	Female Universal*	23c
40 H 684	60-F1	Female Polarized†	24c

### N WITH BELOW-SURFACE SHELL

No.	Type	Description	NET
40 H 685	61M10	Male Standard	29c
40 H 686	61MP10	Male Polarized	30c
40 H 687	61F10	Female Universal*	28c

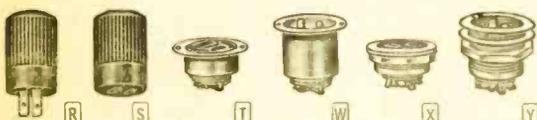
### P SHIELDED CABLE TYPE

No.	Type	Description	NET
40 H 690	61M11	Male Standard	33c
40 H 691	61MP11	Male Polarized	33c
40 H 692	61F11	Female Universal*	31c
40 H 693	60M11	Male Polarized†	36c

Type 61-MIP-61F. Female receptacle. Same as Fig. M except has molded-in plate. 2 mtg. holes on  $1\frac{1}{2}$ " ctrs. Takes standard or polarized 2-pole plugs. High-dielectric, black bakelite insulation. 3 oz.  
40 H 085. NET EACH.....19c

Type 61-61. Shell only. Converts Fig. L male plugs and female receptacles to Fig. N, for recessed mounting. Requires  $1\frac{1}{8}$ " diameter mounting hole in chassis or panel.  $1\frac{1}{4}$ " mounting centers. Shpg. wt., 2 oz.  
40 H 086. NET EACH.....8c

## HART & HEGEMAN MIDGET CONNECTORS

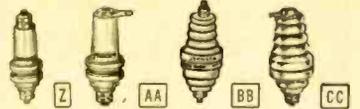


Midget 2-prong cord connectors and receptacles. Excellent for applications where space is at a premium. Figures R and S are constructed of durable bakelite. Others have rust-resistant metal housings and insulation required for all receptacles.

of bakelite. All are rated 10 amps at 250 volts. 1 inch diameter hole required for all receptacles.  $\frac{3}{8}$ " contact spacing. Terminals are exposed. All have threaded covers. Types 80326 and 80328 are furnished with plate for screws. Types 80327 and 80329 have plate and locking ring. Av. shpg. wt., 3 oz.

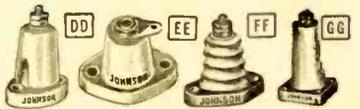
No.	Type	Fig.	Description	NET
52 N 721	80324	R	Female cable connector.	70c
52 N 722	80325	S	Male cable connector.	70c
52 N 725	80326	T	Female flush receptacle.	72c
52 N 726	80328	W	Male flush receptacle.	.84
52 N 727	80327	X	Female flush receptacle.	1.09
52 N 728	80329	Y	Male flush receptacle.	1.13

## E. F. JOHNSON INSULATORS



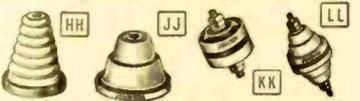
Thru-Panel Insulators. High mechanical strength; long leakage paths. White glazed porcelain, except Istateite. \*Have Type 108-740 jack, see jack listing. Shpg. wt., 12 oz.

Stock No.	Mfr's Type	Fig.	Top Ht.	Panel Hole	Hard-ware	NET EA.
73 H 225	135-40T	Z	$1\frac{1}{4}$ "	$\frac{1}{8}$ "	10-32	.35
73 H 226	135-40-2	AA	$1\frac{1}{4}$ "	$\frac{1}{8}$ "	"	.45
73 H 227	135-42T	Z	$\frac{3}{4}$ "	$\frac{1}{8}$ "	10-32	.35
73 H 228	135-42-2	AA	$\frac{3}{4}$ "	$\frac{1}{8}$ "	"	.45
73 H 229	135-44T	Z	$1\frac{1}{2}$ "	$\frac{1}{8}$ "	6-32	.27
73 H 230	135-45	BB	$1\frac{1}{2}$ "	$\frac{1}{8}$ "	10-32	.57
73 H 231	135-45-2	CC	$1\frac{1}{2}$ "	$\frac{1}{8}$ "	"	.47
73 H 233	135-46	Z	$2\frac{3}{4}$ "	$\frac{1}{8}$ "	$\frac{1}{2}$ -20	1.30
73 H 235	135-47	Z	$4\frac{1}{2}$ "	$\frac{1}{8}$ "	$\frac{1}{2}$ -20	1.85
73 H 235	135-48	BB	$4\frac{1}{2}$ "	$\frac{1}{8}$ "	10-32	.70
73 H 224	135-48-2	CC	$4\frac{1}{2}$ "	$\frac{1}{8}$ "	"	.83



Stand-Off Insulators. High-glass porcelain (except Istateite). Ideal for transmitter applications, etc. Feature long leakage path, low capacity and freedom from moisture absorption. Heavy breakage-resistant bases. Nickel-plated brass hardware. Types 65, 65-2, 68, 68-2 are ribbed; others have drawn bases. \*Have jacks as listed below. \*Like Fig. FF but square base. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Body Ht.	Hard-ware	NET
73 H 120	135-20B	DD	$1\frac{1}{2}$ "	10-32	25c
73 H 121	135-20-2	EE	$1\frac{1}{2}$ "	740†	30c
73 H 122	135-22B	DD	$1\frac{1}{2}$ "	8-32	19c
73 H 123	135-22-2	EE	$1\frac{1}{2}$ "	740†	23c
73 H 139	135-24B	DD	$\frac{3}{4}$ "	6-32	15c
73 H 125	135-60	*	$4\frac{1}{2}$ "	$\frac{1}{2}$ -20	98c
73 H 126	135-62	*	$2\frac{3}{4}$ "	$\frac{1}{2}$ -20	60c
73 H 127	135-65	FF	$1\frac{1}{2}$ "	10-32	30c
73 H 128	135-65-2	FF	$1\frac{1}{2}$ "	740†	39c
73 H 129	135-66	GG	$2\frac{3}{4}$ "	$\frac{1}{2}$ -20	87c
73 H 130	135-66-2	GG	$2\frac{3}{4}$ "	760†	98c
73 H 131	135-67	*	$4\frac{1}{2}$ "	$\frac{1}{2}$ -20	98c
73 H 136	135-68	*	$2\frac{3}{4}$ "	10-32	86c
73 H 137	135-68-2	*	$2\frac{3}{4}$ "	740†	54c



Load-In Bushings. Have many applications in transmitter and antenna installations. Ideal as power supply and high voltage terminals. 50, 51, 52, 55 are steatite, with nicked brass rod and nuts; 53 and 54 are porcelain, less hardware. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Fig.	Top Ht.	Max. Dia.	Panel Hole	NET EA.
73 H 160	135-50	LL	$1\frac{1}{2}$ "	$\frac{3}{8}$ "	$1\frac{1}{2}$ "	33c
73 H 161	135-51	LL	$1\frac{1}{2}$ "	$\frac{3}{8}$ "	$2\frac{1}{2}$ "	54c
73 H 162	135-52	LL	$1\frac{1}{2}$ "	$1\frac{1}{2}$ "	$1\frac{1}{2}$ "	28c
73 H 163	135-53	JJ	$1\frac{1}{2}$ "	$2\frac{1}{2}$ "	$1\frac{1}{2}$ "	79c
73 H 164	135-54	HH	$4\frac{1}{2}$ "	$3\frac{1}{2}$ "	$2\frac{1}{2}$ "	79c
73 H 165	135-55	KK	$4\frac{1}{2}$ "	$3\frac{1}{2}$ "	$1\frac{1}{2}$ "	31c

Ultra-Steatite Cone Insulators. Smooth, non-ribbed high grade steatite insulators. Ideal for mounting coils, capacitors, etc. Threads tapped directly into the steatite. Width shown is max. (base). With screws, washers. Wt., 5 oz.

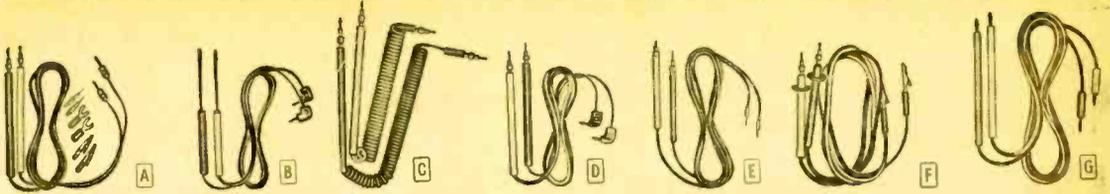
No.	Type	Height	Width	NET
73 H 150	135-500	$\frac{3}{8}$ "	$\frac{3}{8}$ "	.23
73 H 151	135-501	$1\frac{1}{2}$ "	$\frac{3}{8}$ "	.31
73 H 152	135-502	$1\frac{1}{2}$ "	$1\frac{1}{2}$ "	.51
73 H 153	135-503	$2\frac{1}{2}$ "	$1\frac{1}{2}$ "	.71
73 H 154	135-504	$3\frac{1}{2}$ "	$1\frac{1}{2}$ "	1.20

### FEEDER SPREADERS

General-purpose feeder spreaders for lowest leakage loss. For constructing open-wire feeders and transmission lines, with impedances of approximately 200 to 600 ohms. Unglazed porcelain bars,  $\frac{3}{4}$ " x  $\frac{1}{2}$ ". Impervious to moisture. Av. shpg. wt., 3 oz.

No.	Type	Length	NET
73 H 111	136-122	$2\frac{1}{2}$ "	17c
73 H 112	136-124	$4\frac{1}{2}$ "	24c
73 H 113	136-126	$6\frac{1}{2}$ "	32c

# Test Leads, Prods and Patch Cords



## H. H. SMITH TEST LEADS

**A** Type 610. **Test Lead Kit.** Contains one pair of test leads—One red, other black. One end is solderless phone tip test prod, other end has insulated banana plugs. Handles are molded tenite, 4" long, 3/8" outer diameter. Kit includes two each of the following fittings: Phone tips; alligator clips; and spade lugs. 50" kinkless wire. Shpg. wt., 4 oz. **42 N 261. NET.....1.76**

**A** Type 600. **Solderless Tip Test Leads.** Two molded tenite prods, each 4" long, with 3/8" outer diameter. Solderless pointed phone tips are nickel plated brass. One prod red, other black. Supplied with extra-flexible, rubber covered kinkless wire, 50" long, one red, one black. Identical to Type 610 kit above, less fittings. Shpg. wt., 4 oz. **42 N 262. NET PER PAIR.....85c**

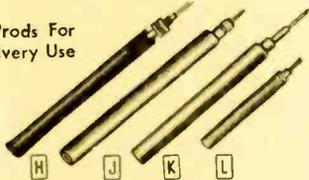
**A** Type 611. **Test Lead Kit.** Extremely versatile companion kit to Type 610 above. Has all the features, conveniences, and accessories of above unit, except test prods are phono needle tip type. Includes one pair of test leads, one red, one black. Standard fittings prepare you for virtually every servicing situation. Shpg. wt., 4 oz. **42 N 263. NET.....1.76**

**B** Type 698. **Slim Jim Test Leads.** Durable 4" molded tenite handle, 3/8" outer diameter. Extra-long 3/4" tip allows you to reach hard-to-get-at places. Tip insulated with vinyl spaghetti tubing. Angle phone tips on meter end are sturdy molded bakelite. Brass tips, nickel plated. Shpg. wt., 4 oz. **42 N 264. NET PER PAIR.....1.12**

**F** Type 622. **High Tension Test Leads.** One red, one black heavy-duty lead with fiber prod handle and plug. Handle is 5" long with 3/8" outer diameter. Plug is 1" long, 1/2" outer diameter. Insulated alligator clips on meter end. Finner guards on handles. Brass, nickel plated tip. Shpg. wt., 4 oz. **42 N 266. NET PER PAIR.....2.35**

## H. H. SMITH TEST PRODS

Prods For Every Use



**H** Type 302. **Solderless Test Prod.** Threaded prod with 4" long plastic handle, 3/8" outer diameter. Nickel plated phone tip. Wire fits through handle and body of plug, wraps around screw portion. Wire secured by knurled collar. Available in choice of two colors—red or black. Shpg. wt., 4 oz. **42 N 110. Red. NET.....29c**  
**42 N 111. Black. EACH.....29c**

**H** Type 323. **Solderless Fiber Test Prod.** Has 5 1/2" bone fiber handle with extra large 3/8" inside diameter for heavy duty wire. Body is nickel plated brass. Wire fits through handle and body of plug, then wraps around screw portion. Secured by knurled collar. Wt., 4 oz. **42 N 258. Red. NET.....29c**  
**42 N 259. Black. EACH.....29c**

**J** Type 318. **Phono Needle Test Prod.** Brass, nickel plated body with steel, nickel plated phono-type needle. With removable chuck for replacing broken needles. Needle pierces plating or corrosion to insure positive readings. Molded plastic handle, overall length 6 1/2" long, 3/8" outer diameter. Shpg. wt., 3 oz. **42 N 373. Red. NET.....32c**  
**42 N 374. Black. EACH.....32c**

**K** Type 329. **Heavy-Duty Test Prod.** Threaded tip with extra-sturdy brass, nickel plated tip. Molded plastic handle, overall length 6 1/2" long, 3/8" outer diameter. Fits standard phone tip jacks. Shpg. wt., 3 oz. **42 N 375. Red. NET.....32c**  
**42 N 376. Black. EACH.....32c**

**L** Type 322. **Sub-Minature Test Prod.** Bone fiber handle with brass, nickel plated tip. Tip only 3/8"—ideal for checking sub-miniature equipment. Shpg. wt., 3 oz. **42 N 256. Red. NET.....24c**  
**42 N 257. Black. EACH.....24c**

## GENERAL CEMENT TEST LEADS

**C** Type 9301. **Stretch Leads.** No-kink-no-tangle test leads. 9' coil extends to 6 feet. 6" Tenite prod handles. Pointed phone tips both ends. Shpg. wt., 4 oz. **42 N 355. NET PER PAIR.....2.91**

**D** Type 8459. **6000v. Insulation.** 6' durable Tenite prods with pointed phone tips. Angle phone tips on connector ends. 50' leads. Shpg. wt., 4 oz. **42 N 358. NET PER PAIR.....1.23**

Type 8461. **Needle-tipped, Insulation Piercing.** (Not illus.) Prods have needle type chuck and needle points for piercing insulation. All metal connector ends. Shpg. wt., 4 oz. **42 N 359. NET PER PAIR.....1.15**

Type 8462. (Not Illustrated). Same as Type 8459 above but equipped with angle phone tips on connector ends instead of the pointed phone tips. Shpg. wt., 4 oz. **42 N 360. NET PER PAIR.....1.32**

**E** Type 9190. **Slender Pencil.** 5" long test prods made of durable Tenite with 50" kinkless leads. Have pointed phone tips on prod end; heavy duty phone tips on connector end. Shpg. wt., 4 oz. **42 N 356. NET PER PAIR.....88c**

**F** Type 9102. **HV Test Leads.** 48" long, flexible, heavy-duty, rubber-covered leads. 1/4" thick. One red, one black. Pointed phone tip prods; alligator clip ends. Special finger-guard prod handles. 5' long, 22,000-volt breakdown at 60 cycles. Shpg. wt., 4 oz. **42 N 352. NET PER PAIR.....3.52**

## KLIPZON TEST PRODS AND LEADS

Prods equipped with clip-tip which holds on to wire, lug, etc.; leaving both hands free. 4" handles. 3' leads. Av. wt., 4 oz.

Stock No.	Type	Description	P.R.
42 N 362	5608	Klipzon tips both ends	2.06
42 N 363	5609	Klipzon tips and plain phone tip connectors	1.62
42 N 364	5610	Klipzon phone tip prods; banana plug connectors	2.06

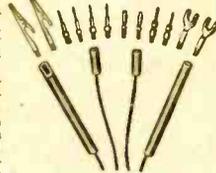
## KLIPZON JUMPER LEADS

(Not ill.) 2 wire leads with Klipzon phone-tip mini-prods at each end. Av. wt., 4 oz.

Stock No.	Type	Color	Length	PER PAIR
42 N 369	5634	Red	12"	.68
42 N 370	5635	Black	12"	.68
42 N 371	5636	Red	24"	1.15
42 N 372	5637	Black	24"	1.15

## H. H. SMITH TEST LEAD KIT

Type 699. Highly versatile universal test lead kit. Includes a pair of test leads and twelve interchangeable testing tips and connectors. Plastic handles at each end of test leads have threaded receptacles carefully cut to fit screw-in tips and connectors, assuring firm mechanical and electrical contact. Requires only a twist of the fingers to convert test leads to any two of 50 different types. Equips the test bench to meet almost any testing need.



All connectors and tips are quickly and easily interchangeable. fit prod handle or tip handle. Has four phone tips, two alligator clips, two needle tips, two banana plugs, and two spade lugs. An exceptionally useful kit for the radio and TV serviceman. Also very convenient for the radio amateur or experimenter who has a variety of test instruments with different types of input connectors. Comes attractively packaged in transparent plastic wallet-styled kit. Shpg. wt., 5 oz. **42 N 408. List \$4.00. NET.....2.35**

## HANDY GLOW TESTERS

**GENERAL CEMENT NEO-O-LITE**  
Extremely versatile neon glow type tester. Indicates voltages from 60 v. AC and 90 v. DC to 500 v. AC-DC. Excellent for finding "hot" AC leads, checking fuses and spark plugs, appliance repair, etc. Neon bulb is mounted in insulating holder. 5" insulated leads with phone tip ends. Ideal for home handymen, servicemen, experimenters, radio amateurs. Shpg. wt., 3 oz. **78 N 055. NET EACH.....44c**  
**10 or More, EACH.....39c**



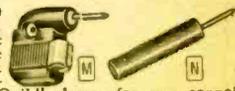
**SITTLER LOW VOLTAGE TESTER**  
Type T202. Extremely useful low voltage tester. Indicates voltages from 5 volts to 50 volts AC-DC. Perfect for testing low voltage circuits in automobiles, telephones, batteries, radio and TV filament circuits, etc. Uses incandescent lamp. Has red and yellow leads with alligator clips for easy identification and use. Applications everywhere. Shpg. wt., 3 oz. **42 N 406. NET EACH.....99c**



Type T203. Similar to above, but tests 2 1/2 to 24 v. AC-DC. **42 N 407. NET EACH.....99c**

## G-C TEST PRODS AND CONNECTOR

**M** Type 7830 **Connector.** Molded-plastic angle phone tips for test leads. Solder test "Trigger-Quit" clamps for sure connections. 1-red and 1-black. Shpg. wt., 2 oz. **42 N 405. NET PER PAIR.....70c**



**N** Type 5621. **Self-Gripping Tips.** Clip to any terminal, lug, etc. Needle points for piercing insulation. Solderless connection. Insulated 1/4" plastic handle. Shpg. wt., 2 oz. **42 N 271. Red. NET.....35c**  
**42 N 272. Black. EACH.....35c**

**N** Type 5623. **Mini-Prod Adapter Tips.** Fit over standard test points or phono needle types. Convert to self-gripping types with insert supplied. Shpg. wt., 2 oz. **50 N 159. Red. NET.....38c**  
**50 N 160. Black. EACH.....38c**

## PECO "STACK-UP" PATCH CORDS

For instrumentation patching. Have banana plugs with built-in jacks permitting right angle or lens-hyve stacking. Single plug types have single-conductor, polyvinyl-insulated cord. Double plugs with 3/8" spacing. Ground connection is clearly marked on one side. Solder bonding of each terminal assures noise-free connections. Withstand pull test exceeding 50 lbs. Contact resistance less than 0.001 ohm per plug in standard jack. Durable one-piece beryllium copper spring assures dependable contact and long trouble-free life. Shielded mike cable with single inner conductor polyethylene insulation, vinyl jacket, 118-gauge, vinyl insulated twisted pair. Av. shpg. wt., 5 oz.



### WITH DOUBLE PLUGS

Stock No.	Mfr's Type	Length	NET EACH
42 N 203	2BA-24t	24"	4.75
42 N 204	2BA-36t	36"	
42 N 205	2BB-36"	36"	

### WITH SINGLE PLUGS

Stock No.	Mfr's Type	Length	NET EACH
42 N 207	B-18	18"	1.47
42 N 208	B-24	24"	1.47
42 N 209	B-36	36"	1.47

### WITH DOUBLE PLUGS AND TWO ALLIGATOR CLIPS

Stock No.	Mfr's Type	Length	NET EACH
42 N 237	2BA-AL-36t	36"	5.73
42 N 239	2BB-AL-36"	36"	

# Belden Cable and Wire



## SHIELDED MICROPHONE CABLE SINGLE CONDUCTOR—FOR HIGH-IMPEDANCE MIKES

No. 25, tinned, stranded conductor; 3x33 copper and 4x33 copper-weld wire. Covered with cellulose acetate yarn braid, polyethylene insulation, tinned copper shield and chrome plastic jacket. \*Rubber insulation and black rubber jacket. Lengths under 100 ft. available only in pool sizes listed below.

Mfr's Type	15 ft. Spool		25 ft. Spool		50 ft. Spool		100 ft. Spool		Over 100 ft.	
	No.	NET	No.	NET	No.	NET	No.	NET	No.	Per 100'
8401	47 T 561	.85	47 T 562	1.18	47 T 563	2.30	47 T 560	4.21	47 W 564	4.21
8410*	47 T 447	1.32	47 T 448	2.06	47 T 449	3.82	47 T 446	7.20	47 W 444	7.20
8411	47 T 601	.70	47 T 602	.99	47 T 603	1.71	47 T 600	3.09	47 W 604	3.09

## TWO-CONDUCTOR—FOR LOW-IMPEDANCE MIKES

Shielded cable. 8422 is No. 22 stranded (16x34) tinned copper, polyethylene insulation, chrome plastic jacket. 8412 is No. 20 stranded (7x34) cotton wrap, rubber ins., black rubber jacket. 8428 is heavy-duty studio cable, No. 18 stranded (41x34), cotton wrap, black rubber jacket. Lengths under 100 ft. available only in pool sizes below.

Mfr's Type	15 ft. Spool		25 ft. Spool		50 ft. Spool		100 ft. Spool		Over 100 ft.	
	No.	NET	No.	NET	No.	NET	No.	NET	No.	Per 100'
8428	47 T 465	1.71	47 T 466	2.79	47 T 467	5.29	47 T 454	10.29	47 W 468	10.29
8412	47 T 457	1.50	47 T 458	2.30	47 T 459	4.21	47 T 453	8.08	47 W 464	8.08
8422	47 T 451	1.13	47 T 452	1.71	47 T 455	3.18	47 T 450	5.73	47 W 456	5.73

## MULTIPLE-CONDUCTOR MIKE AND POWER CABLE

For microphone and interconnecting power cable requirements. No. 20 stranded (26x34), tinned copper conductor, and color-coded conductors. Types 8423, 8424, 8425, 8426, 8427, and 8418 have cotton wrap, rubber insulation, rayon braid, tinned copper braid shield, and black rubber outer jacket. Types 8403, 8404, and 8405 have polyethylene insulation, rayon, tinned copper braid shield, and chrome vinyl plastic jacket. Types 8403, 8404, 8423, and 8424 for all low-impedance mikes; all others for general interconnecting power cable uses. Lengths under 100 ft. available only in pool sizes listed below.

Mfr's Type	Conductors	Mmf. per foot	15 ft. Spool		50 ft. Spool		100 ft. Spool		Over 100 ft.	
			No.	NET	No.	NET	No.	NET	No.	Per 100'
8423	3	85	47 T 461	1.76	47 T 462	4.70	47 T 460	9.11	47 W 463	9.11
8403	3	45	47 T 554	1.42	47 T 555	3.53	47 T 557	6.61	47 W 558	6.61
8404	4	45	47 T 559	1.47	47 T 565	3.97	47 T 566	7.50	47 W 567	7.50
8424	4	95	47 T 479	2.47	47 T 478	5.41	47 T 470	10.39	47 W 473	10.39
8425	5	80	47 T 481	2.20	47 T 482	6.57	47 T 480	12.94	47 W 483	12.94
8405	5	45	47 T 568	1.86	47 T 569	4.85	47 T 572	9.80	47 W 573	9.80
8426	6	78	47 T 491	2.65	47 T 492	8.04	47 T 490	15.43	47 W 493	15.43
8427	7	75	47 T 507	2.89	47 T 508	8.67	47 T 510	16.90	47 W 509	16.90
8418	8	75	48 T 834	2.89	48 T 835	8.82	48 T 836	17.05	48 W 837	17.05

## UNSHIELDED TWO-CONDUCTOR WEATHERPROOF CABLE

For intercom, speaker extensions, etc. 8205 is No. 20 stranded (10x30), vinyl plastic insulation, chrome vinyl jacket; 8204 is No. 18 (16x30), rubber insulation, white cotton braid.

Type	25 ft. Spool		100 ft. Spool		Over 100 ft.	
	Stock No.	NET	Stock No.	NET	Stock No.	PER 100'
8205	47 T 861	.81	47 T 860	2.45	47 W 862	2.45
8204	47 T 640	1.25	47 T 639	3.67	47 W 641	3.67

## 2-CONDUCTOR RUBBER SERVICE CORDS

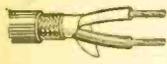
Two-conductor stranded bare copper wire with cotton fillers. Highly flexible. Rubber insulation  $\frac{1}{4}$ " on type SJ, and  $\frac{1}{8}$ " on SV. All are color coded for easy identification. 8452 and 8478 are No. 18 stranded (41x34). 8472, No. 16 stranded (65x34). \*Indicates type SV, †indicates SJ, U.L. Approved. Lengths under 100 feet available only in pool sizes listed below.

Mfr's Type	O.D.	25 ft. Spool		50 ft. Spool		100 ft. Spool		Over 100 ft.		Lbs., per 100 ft.
		No.	NET	No.	NET	No.	NET	No.	Per 100'	
8452*	.245"	47 T 411	1.47	47 T 412	2.45	47 T 410	4.41	47 W 413	4.41	4
8478†	.299"	47 T 401	1.62	47 T 402	2.85	47 T 403	5.29	47 W 404	5.29	5 1/2
8472†	.325"	47 T 406	1.86	47 T 407	3.67	47 T 403	7.01	47 W 408	7.01	6 1/2

## MULTIPLE-CONDUCTOR WIRE

Excellent for 3, 4, and 5-conductor wire extension speakers, public address systems, test equipment, remote control circuits, press-to-talk intercom circuits, etc. Uniform quality. Tinned-copper, flexible strands; cotton wrap; rubber insulation; color-coded conductors; black rubber jacket. Av. shgp. wt., per 100-ft. spool, 5 1/2 lbs. Lengths under 100 ft. available only in pool sizes listed below.

Mfr's Type	Cond.	Wire Size	15 ft. Spool		50 ft. Spool		100 ft. Spool		Over 100 ft.	
			No.	NET	No.	NET	No.	NET	No.	Per 100'
8453	3	18 (41x34)	47 T 421	1.18	47 T 422	3.09	47 T 420	5.54	47 W 423	5.54
8454	4	18 (41x34)	47 T 431	1.42	47 T 432	3.53	47 T 430	6.76	47 W 433	6.76
8455	5	3-20(26x34)	47 T 441	1.47	47 T 442	3.97	47 T 440	7.50	47 W 443	7.50

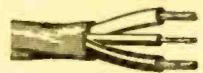


## SHIELDED PA AND SOUND SYSTEM CABLE

For long runs in speaker installations. 8208 and 8209 are 2-cond. 8206, 1-cond., 8735, 3-cond. All have No. 18 stranded copper conductor (except 8735), cotton or paper wrap, rubber insulation (except 8735), and copper braid shield. 8735 is No. 22 stranded (7x30) and has plastic insulation. 8209 in weatherproof cotton outer jacket; 8208, 8735 plastic; 8206 in copper braid. Lengths under 100 ft. available only in pool sizes below.

Mfr's Type	O.D.	15 ft. Spool		50 ft. Spool		100 ft. Spool		Over 100 ft.		Lbs., per 100 ft.
		No.	NET	No.	NET	No.	NET	No.	Per 100'	
8206	.156"	47 T 831	.73	47 T 832	1.99	47 T 830	3.53	47 W 833	3.53	2
8208	.270"	47 T 852	1.15	47 T 853	3.18	47 T 851	5.83	47 W 854	5.83	4
8209	.258"	47 T 847	1.15	47 T 848	3.18	47 T 850	5.83	47 W 849	5.83	4
8735	.199"	48 T 872	.85	48 T 873	2.25	48 T 876	4.21	48 W 874	4.21	3

## JUKE BOX CABLE



High-quality speaker and control cable for all juke box applications. All have vinyl-plastic inner insulation; chrome vinyl plastic outer jacket. For use as juke box control cable. 8783 is 3-cond. color-coded, 1—No. 20 (10x30), 2—No. 16 (26x30), Type 8785 oval is 5-cond. color-coded, No. 22 stranded (7x30) tinned copper with copper braid shield over 3 conductors, twisted pair unshielded, 8786 oval is 6-cond. color-coded, 2—No. 22 (7x30), 4—No. 24 (7x32) tinned copper braid shield over 4 conductors; twisted pair unshielded, 8787 is 10-cond. color coded, 2 pairs of 4—No. 24 (7x32) tinned copper braid shield over 4 conductors, 2—No. 22 (7x30) unshielded.

Stock No.	Mfr's Type	Wt., 100 ft.	NET Per foot	NET Per 100 ft.
8783	250*	2 1/2 lbs.	5c	4.41
8785	211*x.316"	4 lbs.	6c	5.14
8786	211*x.316"	4 lbs.	7c	5.63
8787	330*	1 3/4 lbs.	23c	18.82

## TYPE 8782 JUKE BOX SPEAKER CABLE

Has 2 parallel conductors of No. 24 stranded (7x32) copper wire, one bare, other tinned. Each conductor has vinyl plastic insulation; enclosed by outer jacket of chrome vinyl plastic. .058x.115" O.D. Shgp. wt., 100 ft., 10 oz.

48 T 848	25-ft. Spool	NET	.52
48 T 828	50-ft. Spool	NET	.76
48 T 829	100-ft. Spool	NET	1.21
48 W 869	Over 100', PER 100'	NET	1.21

## TYPE 8868 CATHODE-RAY TUBE CABLE

High voltage cable for CR tubes, power supplies and other applications. High dielectric strength, corona resistance and minimum surface leakage. No. 22 (7x30) tinned copper; polyethylene insulated with red vinyl jacket. .065" insulation; 20,000 v. working, 40,000 v. breakdown test. O.D. .150". Shgp. wt., 100 ft., 1 1/4 lbs. 47 T 897, 25-ft. Spool, NET, 73c. 47 T 896, 100-ft. Spool, NET, 1.86.

## DUPLEX LIGHTING CABLE

Weatherproof 2-conductor stranded copper wire. Outer jacket is chrome vinyl plastic. 1 brown and 1 red conductor parallel in vinyl oval sheathing. 8677 is No. 16 AWG (19x29); O.D., .164"x.276". 8675 is No. 14 AWG (19x27); O.D., .189"x.326". 8673 is No. 12 AWG (19x25); O.D., .214"x.384". Av. wt., 100 ft., 5 lbs.

Stock No.	Mfr's Type	NET Per ft.	NET Per 100 ft.
47 W 405	8677	7c	5.88
47 W 415	8675	9c	7.50
47 W 425	8673	13c	10.44

## TYPE 8885 SHIELDED GRID WIRE

No. 20 single stranded (10x30) tinned copper. .015" rubber insulation. Cellulose acetate yarn braid, fungus-resistant lacquer coating, tinned copper braid shield. Shields conductor from stray fields. Break-down voltage, 4000 volts. O.D., .117". Shgp. wt., 100 ft., 2 lbs. 47 T 791, 15-ft. Spool, NET, 68c. 47 T 792, 25-ft. Spool, NET, 1.00. 47 T 790, 100-ft. Spool, NET, 3.09. 47 W 793, Over 100 ft., PER 100 FT., 3.09

## PHONO PICKUP ARM CABLE

Type 8430. New, phono pickup arm cable of exceptional flexibility. Lightweight; has minimum effect on tracking pressure. No. 32 stranded (7x40) copper conductor with .009" vinyl plastic insulation. Red and black twisted pair; O.D., .055".

47 T 614	10-ft. Spool	Wt., 4 oz.	NET 43c
47 T 615	25-ft. Spool	Wt., 5 oz.	NET .64c
47 T 616	250-ft. Spool	Wt., 8oz.	NET 3.82

Type 8431. No. 24 stranded (16x36) tinned copper, rubber covered, tinned copper shield, brown cotton. Extremely limp and flexible. O.D. .095". Shgp. wt., 100 ft., 1 lb. 47 T 611, 10 ft. Spool, NET, 52c. 47 T 612, 25 ft. Spool, NET, 99c. 47 T 610, 100 ft. Spool, NET, 3.09. 47 W 613, Over 100 ft., PER 100 FT., 3.09

# Belden Wire and Cable

## 3 & 4-CONDUCTOR INTERCOM CABLE

Type 8734. No. 22 tinned, stranded copper (7x30) with plastic insulation. 3 cond.: 1 tinned copper shield, 2 unshielded. Chrome vinyl plastic jacket overall. 0.194" O.D. Shpg. wt., 100 ft., 2 1/4 lbs.



48 W 875. PER FOOT..... 4 1/2¢  
100 ft. or more, PER 100 FT..... 3.67

Type 8763. Same as Type 8734 except 2 conductor unshielded. Wt., 100 ft., 2 1/4 lbs.

49 W 840. PER FOOT..... 5¢  
100 ft. or more, PER 100 FT..... 4.36

Type 8732. No. 22 tinned, stranded copper (7x30) with polyethylene insulation. 4 conductors: 1 pair tinned copper braid shield, 1 pair unshielded. Chrome vinyl plastic jacket. Oval, 188x296 O.D. Wt., 100 ft., 3 lbs.

49 W 897. PER FOOT..... 5¢  
100 ft. or more, PER 100 FT..... 4.41

Mfr's Type	O.D.	Wt., 100 ft.
*8443	.150"	2 lbs.
*8444	.168"	2 1/4 lbs.
*8445	.180"	2 1/4 lbs.
*8446	.222"	4 lbs.
*8447	.246"	4 1/2 lbs.
*8448	.251"	4 1/2 lbs.
*8449	.261"	5 lbs.

## VINYL-COVERED PLASTIC-INSULATED CABLE

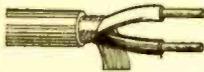
For permanent installation of speakers, control and intercom circuits, and other applications requiring highly durable, lightweight cable. Conductors are tinned copper, flexible, stranded wire, with color-coded, plastic insulation; chrome vinyl plastic jacket overall. \*All conductors are No. 22 stranded (7x30); †Have two conductors of No. 18 stranded (16x30); the others are No. 22 stranded. Cables are waterproof, oil-resistant, weather-resistant, tear-resistant, lightweight, and easily stripped. Lengths under 100 ft. available only in spool sizes listed below.



Mfr's Type	Cond.	15 ft. Spool		25 ft. Spool		100 ft. Spool		Over 100 ft.	
		Stock No.	NET EACH	Stock No.	NET EACH	Stock No.	NET EACH	Stock No.	NET PER 100'
*8443	3			47 T 361	.81	47 T 360	2.43	47 W 362	2.43
*8444	4			47 T 371	.96	47 T 370	2.94	47 W 372	2.94
*8445	5			47 T 381	1.14	47 T 380	3.63	47 W 382	3.63
*8446	6	47 T 311	1.03			47 T 310	5.29	47 W 312	5.29
*8447	7	47 T 321	1.13			47 T 320	6.03	47 W 322	6.03
*8448	8	47 T 331	1.18			47 T 330	6.27	47 W 332	6.27
*8449	9	47 T 341	1.27			47 T 340	7.01	47 W 342	7.01

## SHIELDED P.A. AND SOUND SYSTEM CABLE

In a variety of gauges, insulations, shields and jackets for public address and intercom use. 8790 recommended for stationary low impedance microphone lines. Rubber cables recommended for greater abrasion and impact resistance, extra limpness. All have inner insulation of vinyl plastic except 8432 and 8433 (rubber) and 8799 (cotton braid). Outer jackets of chrome vinyl plastic, except \*copper braid shield, 8432 and 8433 are No. 20 stranded (10x30); 8789, 8790 and 8791 are No. 18 stranded (7x26); 8799 is No. 18 solid (for PA and broadcast use); 8779 and 8780 are No. 16 stranded (19x29).



Stock No.	Mfr's Ty.	Cond.	O.D.	Lbs., 100 ft.	PER FOOT	100 Ft. For
48 W 884	8432*	2	.225"	3 1/2	7 1/2	6.27
48 W 866	8433*	3	.230"	5 1/2	9 1/2	7.64
48 W 811	8779*	2	.225"	5 1/2	6	5.14
48 W 815	8780	2	.266"	5	7c	5.59
48 W 865	8789*	2	.205"	3	5c	4.21
48 W 803	8790	2	.231"	4	5c	4.36
48 W 804	8791	3	.236"	4 1/4	6c	5.29
48 W 885	8799*	2	.165"	3	5c	4.41

## UNSHIELDED P.A. AND SOUND SYSTEM CABLE

For PA, intercom, speaker extension, alarm systems, etc. High insulation resistance and precision cabling assure low-noise circuits free from crosstalk. All have vinyl insulation except 8762 which has polyethylene. All have outer jackets of chrome vinyl plastic except 8482, 8483, 8480 and 8470 which are twisted lead types. 8762 has aluminum foil shield over copper ground wire and twisted pair, stranded (7x28). \*Solid copper conductors. †Stranded (7x26), ‡stranded (19x29).

Stock No.	Mfr's Type	Cond.	Wire Size	O.D.	Lbs., 100 ft.	PER FOOT	100 Ft. For
48 W 878	8482*	2	19	.115"	1 1/2	2c	1.56
48 W 879	8483*	3	19	.132"	1 1/4	2 1/2c	1.91
48 W 805	8486*	2	19	.162"	2	2 1/2c	2.06
48 W 806	8487*	3	19	.180"	2 1/2	3c	2.60
48 W 809	8762	2	20	.184"	2	4c	3.38
48 W 816	8460†	2	18	.175"	1	3c	2.20
48 W 817	8461†	2	18	.195"	3	4c	3.09
48 W 818	8470	2	16	.195"	2 1/4	3 1/2c	2.79
48 W 819	8471‡	2	16	.246"	4	4 1/2c	3.92

## 2-CONDUCTOR BROADCAST AUDIO CABLE

Built to eliminate troublesome current loops. All have tinned, solid-copper conductors. 8436, 8437 and 8440 have No. 22 solid copper ground wire parallel to twisted pair under copper spiral-wrapped shield (8437, copper braid shield) 8441 same as 8437 except has 22 gauge (16x34) copper ground with copper braid shield. Outer jackets; 8436, 8437 and 8441, black vinyl plastic; 8440, chrome vinyl plastic. Type 8440 has waxed cotton braid over cotton wrap; 8436, cellulose-acetate yarn braid over matching wrap; 8437 and 8441, waxed cotton braid over cellulose-acetate yarn wrap.



Stock No.	Mfr's Type	Gauge	O.D.	Lbs., 100 ft.	PER FOOT	100 Ft. For
48 W 859	8436	22	.180"	2	5 1/2c	4.65
48 W 886	8437	22	.200"	3 1/4	4 1/2c	3.77
48 W 889	8440	22	.185"	3	5 1/2c	4.51
49 W 841	8441	22	.210"	3	5 1/2c	4.41

## COPPER BRAID SHIELDING AND BONDING CABLE

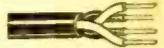
Flexible, braided and tinned copper for shielding conductors and cables. Useful for forming TVI-proof, metal-to-metal bonding. Braided in tubular form for easy slip-in installation over wiring. Av. shpg. wt., per 50 ft., 1 1/2 lbs. Lengths under 50 ft. available only in 10 ft. spools.



Mfr's Type	10 ft. Spool		50 ft. Spool		100 ft. or more	
	Stock No.	NET	Stock No.	NET	Stock No.	Per 100'
8660	49 T 351	.50	49 T 350	1.47	49 W 352	2.65
8668	49 T 356	.56	49 T 355	1.91	49 W 357	3.53
8661	49 T 361	.67	49 T 360	2.30	49 W 362	4.12
8669	49 T 366	1.18	49 T 365	5.39	49 W 367	9.76
8662	49 T 381	1.55	49 T 380	6.91	49 W 382	12.79
8663	49 T 842	.59	49 T 843	1.86	49 W 844	3.23

## PAIRED VINYL-COVERED CABLE

For intercom and telephone wiring. No. 22 solid tinned copper; color-coded vinyl plastic insulation. Conductors are cabled in twisted pairs; chrome vinyl plastic overall. Vinyl plastic insulation for high dielectric strength and the best physical properties such as free stripping, small diameter and tear resistance.



Stock No.	Mfr's Type	Conductors	O.D.	Lbs., 100 ft.	PER FOOT	100' or more, PER 100'
48 W 890	8740	2	.150"	1 1/4	2c	1.76
48 W 891	8741	4	.201"	2 1/4	5c	3.82
48 W 892	8742	6	.240"	3 1/4	7c	5.88
48 W 894	8744	12	.305"	6 1/2	9 1/2c	7.94
48 W 898	8753	22	.384"	8	13c	10.73
49 W 845	8754	26	.409"	11	15c	12.15
48 W 895	8745	30	.420"	10	16c	13.67
49 W 846	8755	38	.480"	15	24c	19.70
49 W 847	8756	46	.510"	17 1/2	28c	22.78
48 W 896	8746	54	.550"	17	30c	24.99

## 2-CONDUCTOR SHIELDED INTERCOM CABLE

All have vinyl plastic insulation, jackets; except 8738, 8758 have copper braid jackets. Tinned conductors. \*Tinned copper spiral-wrapped shield. Black/red coding. 8737 is No. 22 stranded (7x30); 8758, 8759 are No. 20 stranded (7x28); 8738, 8739 are No. 22 solid.



Stock No.	Mfr's Type	O.D.	Lbs., 100 ft.	PER FOOT	100' or more, PER 100'
48 W 877	8737*	.170"	2 1/4	4c	3.53
48 W 882	8738	.130"	2	3c	2.50
48 W 801	8758	.165"	2 1/4	3 1/2c	2.94
48 W 802	8759*	.195"	2 1/2	5c	3.82
48 W 893	8739*	.160"	2 1/4	3 1/2c	2.89

## TYPE 8434 STRAIN GAUGE CABLE

For microphones, hi-fi connector cords, shielded interconnecting and power supply cables, remote control circuits. Recommended where lower capacitance, lower loss, greater ozone and oil resistance needed. 25 gauge (7x33) with 4 conductors, O.D. of .169", aluminum-mylar shield, chrome vinyl jacket. Shpg. wt., 100 ft., 1 1/4 lbs.



49 W 890. NET PER FT... 5 1/2¢ 100' or More, PER 100'... 4.56

## 75-OHM VIDEO CABLE

Type 8281. Plastic coaxial video cable for black-and-white or color transmission. Single No. 20 solid copper conductor is polyethylene insulated. Has tinned copper, double braid shield and black polyethylene jacket. 31" O.D. Av. wt., 100 ft. coil, 8 lbs.



48 W 813. NET PER FT..... 19¢ 100' or More, PER 100'... 16.17

## RG HIGH-FREQUENCY CABLE

All cables have low-loss, flexible, polyethylene plastic inner jacket, covered with copper braid shield. All have black vinyl plastic outer jacket overall, except RG-9/U has gray plastic jacket and silver-coated copper shieldings. Impervious to acids, alkalis, oils and gasoline. RG-8/U copper shieldings. In medium-sized video and communications cable. RG-11/U is ideal for radio-frequency transmission, video applications, test equipment, etc. \*Solid copper; others stranded. See connector section for cable connector listings.



Stock No.	RG No.	Mfr's Type	Imp.	Mmf/ft	O.D.	Lbs., 100 ft.	PER FT.	100 Ft. For
49 W 891	5A/U	8264	50	28.5	.328"	9.2	30c	24.94
49 W 511	8/U	8237	52	29.5	.405"	12	15c	12.15
49 W 892	8A/U	8267	50	28.5	.405"	11 1/4	18c	14.55
49 W 512	9/U	8242	51	30.0	.420"	13 1/4	34c	28.32
49 W 513	11/U	8238	75	20.5	.405"	11	13c	10.98
49 W 893	11A/U	8261	75	20.5	.405"	10	15c	12.35
49 W 894	22A/U	8260	95	16.0	.420"	14	27c	22.05
49 W 516	58/U	8249	53.5	28.5	.195"	3 1/4	7c	4.85
49 W 895	58/U	8259	50	28.5	.195"	3 1/4	7c	4.95
49 W 895	58/U	8262	50	28.5	.195"	3	7c	5.59
49 W 552	59/U	8241*	73	21	.242"	4 1/4	8 1/2c	5.39
49 W 896	59B/U	8263	75	20.5	.242"	4	8c	6.61
49 W 518	62/U	8254*	93	13.5	.242"	4	7c	5.83

# Belden Cable and Wire

## TYPE MIL-W-76A SRIR THERMOPLASTIC HOOK-UP WIRE



A general-purpose, heavy-duty, thermoplastic-insulated hook-up wire for critical electronic applications. Insulation is rated at 1000 volts rms. Made to conform to stringent government specifications. Features extremely high dielectric strength, excellent stability at high temperatures and extremely low moisture absorption. Has high flame and fungi resistance. Vinyl thermoplastic insulation (.016" thick) is virtually impervious to damage from solvents. All are tinned copper conductors. Available in: black, brown, red, orange, yellow, green, blue, violet, gray and white. Specify choice, 5 1/2 lbs.

Av. shpg. wt. 25-ft. spool, 6 oz.; 100-ft. spool, 1 lb.; 1000-ft. spool, 5 1/2 lbs.

### 25-FOOT SPOOLS—SPECIFY COLOR

Stock No.	Mfr's Type	Size	Strands	O. D.	NET EACH
47 TT 214	8530	22	Solid	.059"	35c
47 TT 215	8524	22	7x30	.064"	38c
47 TT 216	8529	20	Solid	.066"	43c
47 TT 217	8523	20	10x30	.072"	47c

### 100 AND 1000-FOOT SPOOLS—SPECIFY COLOR

Mfr's Type	Size	Strands	O. D.	100' SPOOL		1000' SPOOL	
				No.	EACH	No.	EACH
8530	22	Solid	.059"	47 TT 218	.73	47 TT 222	4.51
8524	22	7x30	.064"	47 TT 219	.91	47 TT 223	5.73
8529	20	Solid	.066"	47 TT 220		47 TT 224	7.01
8523	20	10x30	.072"	47 TT 221	1.03	47 TT 225	7.01

### ASSORTED WIRE KITS

**Type 8822.** Contains ten 25-ft. spools of Type 8529 hook-up wire and a convenient dispenser rack. Colors: black, blue, green, red, white, yellow, orange, brown, gray, and violet. Shpg. wt., 2 1/2 lbs.  
47 T 226, NET 4.31

**Type 8824.** Contains eight 25-ft. spools of Type 8523 hook-up wire and a dispenser rack. Colors: black, blue, green, red, white, yellow, orange, brown. Shpg. wt., 2 1/2 lbs.  
47 T 227, NET 3.76

### POPULAR ANTENNA WIRE

High conductivity copper antenna wire. Ideal for all receiving and transmitting antenna requirements. Maximum tensile strength assures minimum stretch. \*Nylclad insulation protects wire from corrosion. Supplied only in coil lengths listed below. Av. shpg. wt., per 100-ft. coil, 1 lb.

### STRANDED BARE COPPER

Type 8000—7x22			Type 8002—7x24		
Stock No.	Spool	NET	Stock No.	Spool	NET
47 T 680	50 ft.	.88	47 T 654	50 ft.	.67
47 T 681	75 ft.	1.19	47 T 655	75 ft.	.81
47 T 682	100 ft.	1.55	47 T 656	100 ft.	1.03
47 T 683	1,000 ft.	14.36	47 T 657	1,000 ft.	9.55

### \*SOLID NYLCLAD COPPER

Type 8008 No. 12			Type 8009 No. 14		
47 T	Spool	NET	47 T	Spool	NET
47 T 670	100 ft.	2.50	47 T 740	100 ft.	1.70
47 T 735	200 ft.	4.56	47 T 742	200 ft.	3.23
47 T 736	500 ft.	10.68	47 T 741	500 ft.	7.20

### INDOOR AERIAL WIRE

**Type 8014.** Extra flexible. No. 25 stranded (13x36), tinned copper conductor, with chrome vinyl plastic insulation. O.D., .044". Shpg. wts.: 25-ft. spool, 2 oz.; 500-ft. spool, 2 lbs.

47 T 930, 25-ft. spool, NET 37c. 47 T 933, 500-ft. spool, NET 2.65

### NYLCLAD HEAVY MAGNET WIRE

**Type HNC.** This heavy-duty Nylclad copper magnet wire combines the most desirable features of Formvar wire with the toughness and solvent resistance of nylon enamel. Unexcelled for difficult and exacting windings of any type. Outstanding features: Withstands winding abuse and forming operations; resists solvent action of all types of thinners; resists softening and brittleness at extreme temperatures; infinite moisture resistance.

1/2 lb. Spool				1 lb. Spool			
Stock No.	Size	Feet	NET	Stock No.	Size	Feet	NET
48 T 036	14	40	.61	48 T 086	14	80	1.15
48 T 037	16	63	.61	48 T 087	16	126	1.15
48 T 038	18	100	.62	48 T 088	18	199	1.18
48 T 039	20	157	.65	48 T 089	20	315	1.22
48 T 040	22	250	.68	48 T 090	22	501	1.28
48 T 041	24	396	.71	48 T 091	24	793	1.35
48 T 042	26	630	.76	48 T 092	26	1260	1.49
48 T 043	28	995	.83	48 T 093	28	1990	1.62
48 T 044	30	1570	.93	48 T 094	30	3140	1.69
48 T 045	32	2440	.99	48 T 095	32	4880	1.91
48 T 046	34	3930	1.17	48 T 096	34	7860	2.20
48 T 047	36	6200	1.40	48 T 097	36	12400	2.76
48 T 048	38	9700	1.73	48 T 098	38	19400	3.50
48 T 049	40	16050	2.73	48 T 099	40	32100	5.50

### RUBBER-COVERED LEAD-IN

**Type 8200.** Flexible No. 18 tinned copper wire, stranded (7x27), with .040" live rubber insulation. Overall diameter, .126". Av. shpg. wt., 100-ft. spool, 1 1/2 lbs.  
47 T 745, 100-ft. Spool, NET 1.62. 47 T 746, 500-ft. Spool, NET 6.32

## HIGH-TEMPERATURE THERMOPLASTIC HOOK-UP WIRE



**Type B MIL-W-16878-C.** For general use in temperatures up to 212 degrees F. and with voltages up to 600 volts rms. Vinyl thermoplastic insulation (.010") resists damage from solvents. Conductors are stranded tinned copper. Supplied on durable spools for most convenient storage and use. A color designation such as "wh/black" indicates white body color and black striping. Available in 9 colors: wh/black, wh/brown, wh/red, wh/orange, wh/yellow, wh/green, wh/blue, wh/violet, wh/gray. Av. shpg. wt.: 100-ft. spool, 1/2 lb.; 1000-ft. spool, 4 1/2 lbs.

### 100 AND 1000-FOOT SPOOLS—SPECIFY COLOR

Mfr's Type	Size	Strands	O. D.	100' Spool		1000' Spool	
				No.	EACH	No.	EACH
8501	18	7x26	.068"	47 TT 260	1.47	47 TT 264	11.12
8502	20	7x28	.058"	47 TT 261	1.29	47 TT 265	9.51
8503	22	7x30	.050"	47 TT 262	1.25	47 TT 266	8.82
8504	24	7x32	.044"	47 TT 263	1.21	47 TT 267	7.94

### CELLULOSE ACETATE HOOK-UP WIRE



Single, tinned copper conductor, with heavy cellulose acetate yarn wrap and cellulose yarn braid. Ideal for RF circuits where low-loss properties are required. Has fungus and flame resistant lacquer coating. 1000 v. AC breakdown voltage. DC insulation resistance is 200 megohm-ft. Type 8943 is 10x30, type 8947 is 16x30, type 8942 is 26x30, type 8938 is 41x30. Type 8941 has .072" O.D., Type 8943 has .076" O.D., Type 8945 has .080" O.D., Type 8947 has .087" O.D., Type 8942 has .099" O.D., Type 8938 has .115" O.D. Av. shpg. wt. per 100 ft.: no. 20, 1/2 lb.; no. 18, 1/2 lb.; no. 16, 1 lb.; no. 14, 1 1/2 lb.

### TYPE 8941—20 SOLID

Spool	Red	Black	Blue	Green	Yellow	EACH
25 Ft.	48 T 331	48 T 330	48 T 332	48 T 333	48 T 334	.62
100 Ft.	47 T 207	47 T 211	47 T 222	47 T 223	47 T 224	1.59
1000 Ft.	48 T 351	48 T 350	48 T 352	48 T 353	48 T 354	11.76

### TYPE 8943—20 STRANDED

25 Ft.	48 T 361	48 T 360	48 T 362	48 T 363	48 T 364	.62
100 Ft.	47 T 940	47 T 941	47 T 942	47 T 943	47 T 944	1.62
1000 Ft.	48 T 381	48 T 380	48 T 382	48 T 383	48 T 384	12.49

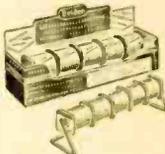
### TYPE 8945—18 SOLID

47 T 900, Red.	100-Ft. Spools NET EACH 1.70	47 T 910, Red.	100-Ft. Spools NET EACH 1.84
47 T 901, Black.		47 T 911, Black.	
47 T 902, Blue.		47 T 912, Blue.	
47 T 903, Green.		47 T 913, Green.	
47 T 904, Yellow.		47 T 914, Yellow.	

### TYPE 8942—16 STRANDED

47 T 916, Black.	100-Ft. Spools NET EACH 2.16	47 T 938—14 STRANDED
47 T 917, Red.		47 T 935, Red.
47 T 918, Green.		47 T 936, Black.

### ASSORTED WIRE KITS



**Type 8818.** A handy kit for the home workshop. Has selection of most commonly used colors in a popular wire size. Kit contains eight spools of Type 8941 cellulose acetate insulated, solid hook-up and lead wire described above. Also included is a convenient work-bench dispenser rack. Has 25-ft. each of the following colors: black, blue, green, red, white, yellow, orange, and brown. Shpg. wt., 2 lbs.  
47 T 228, NET 4.94

**Type 8820.** Contains eight spools of Type 8943 cellulose acetate insulated, stranded hook-up and lead wire described above. Kit also includes a convenient work-bench wire dispenser rack. Puts all wire spools within quick, easy reach for top efficiency—a worthwhile addition to any workshop. Colors: black, blue, green, red, white, yellow, orange, and brown. Shpg. wt., 2 lbs.  
47 T 229, NET 4.94

### TEST PROD WIRE



Rubber-covered lead designed for use with test equipment where a limp, flexible conductor is necessary. Made to withstand extremely high voltages. No. 18 conductor is 65x36 stranded tinned copper with cotton wrapping. Type 8898 has .230" O.D. and .088" rubber insulation. 10,000 v. working voltage, 29,000 v. puncture voltage. Type 8899 has .140" O.D. and .043" rubber insulation. 5000 v. working voltage, 20,000 v. puncture voltage. Shpg. wt. per 100 ft.: 8898, 4 lbs.; 8899, 2 lbs. Lengths under 100 ft. are available only in 10 and 25-ft. spools.

### TYPE 8898

TYPE 8898				TYPE 8899			
Stock No.	Color	Length	Ea.	Stock No.	Color	Length	Ea.
47 T 811	Red	10 ft. spool	.61	48 T 911	Red	10 ft. spool	.43
47 T 812	Black	10 ft. spool	.61	48 T 901	Black	10 ft. spool	.43
	Red	25 ft. spool	1.15	48 T 902	Red	25 ft. spool	.73
47 T 802	Black	25 ft. spool	1.15	48 T 902	Black	25 ft. spool	.73
47 T 810	Red	100 ft. spool	3.38	48 T 910	Red	100 ft. spool	2.16
47 T 800	Black	100 ft. spool	3.38	48 T 900	Black	100 ft. spool	2.16
47 W 813	Red	Over 100'	3.38	48 W 913	Red	Over 100'	2.16
47 W 803	Black	PER 100'	3.38	48 W 903	Black	PER 100'	2.16

### LITZ WIRE



**Type 8817.** 5x44 stranded copper Cello-enamel insulated with one nylon wrap. Specifically made for rewinding antenna primaries, hand-winding RF coils, IF coils, and similar radio frequency applications. Outside diameter: .008", 100-ft. spool. Shpg. wt., 2 oz.  
48 T 981, NET 29c

# Consolidated Wire

## POSJ AND POT TYPE LAMP CORD

No. 18 stranded copper wire. POSJ has coded cotton wrap, heavy rubber jacket. POT has vinyl insulation. Shpg. wt., 3 lbs. per 100 ft. Lengths under 100 feet are available only in 25-ft. coil.



Mfr's Type	Color	25 ft. Coil		100 ft. Coil		Over 100 ft.	
		Stk. No.	NET	Stk. No.	NET	Stk. No.	PER 100'
POSJ	Brown	48 T 761	73c	48 T 760	2.70	48 W 763	2.70
POSJ	Black	48 T 771	73c	48 T 770	2.70	48 W 773	2.70
POT	Brown	48 T 765	63c	48 T 764	2.33	48 W 766	2.33
POT	White	48 T 768	63c	48 T 769	2.33	48 W 767	2.33

## RUBBER SHEATHED SERVICE CORD

Very high-quality, rubber-sheathed service cord designed to provide dependable service. Excellent for a variety of applications: Power supply cords, remote control circuits, electrical tools, appliances, trouble lights, sound systems, garage lamps, etc.—wherever rough usage and power lines are required. Uniform quality, black rubber jacket resists abrasion. Types SV and SJ Nos. 18 and 16 are rated at 300 v.; all other types listed are rated at 600 v. U.L. Approved.



### SHPG. WTS., 100-FT. SPOOLS:

Type, Size	2 Cond.	3 Cond.	Type, Size	2 Cond.	3 Cond.
SV #18	4 lbs.		S #16	9 1/2 lbs.	11 1/2 lbs.
SJ #18	5 1/2 lbs.	6 1/2 lbs.	S #14	11 1/2 lbs.	19 lbs.
SJ #16	6 1/2 lbs.	8 lbs.	S #12	21 lbs.	23 lbs.
S #18	8 1/2 lbs.	8 1/2 lbs.	S #10	23 lbs.	29 lbs.

### 2-CONDUCTOR

Type, Size	25 ft. Coil		50 ft. Coil		100 ft. Spool		Over 100 ft.	
	Stock No.	NET	Stock No.	NET	Stock No.	NET	Stock No.	PER 100'
SV #18	48 T 480	1.20	48 T 488	2.25	48 T 496	4.47	48 W 439	4.47
SJ #18	48 T 481	1.50	48 T 489	2.55	48 T 497	4.90	48 W 451	4.90
SJ #16	48 T 482	1.80	48 T 490	3.30	48 T 498	6.30	48 W 452	6.30
S #18	48 T 483	2.48	48 T 491	4.43	48 T 499	8.37	48 W 453	8.37
S #16	48 T 484	3.00	48 T 492	5.40	48 T 435	10.31	48 W 454	10.31
S #14	48 T 485	3.90	48 T 493	7.43	48 T 436	13.95	48 W 465	13.95
S #12	48 T 486	6.23	48 T 494	12.25	48 T 437	23.04	48 W 466	23.04
S #10	48 T 487	7.50	48 T 495	14.05	48 T 438	27.27	48 W 467	27.27

### 3-CONDUCTOR

Type, Size	2 Cond.	3 Cond.	Type, Size	2 Cond.	3 Cond.	
SJ #18	48 T 468	2.18	48 T 416	3.98	48 T 428	7.73
SJ #16	48 T 469	2.70	48 T 417	5.03	48 T 429	9.68
S #18	48 T 405	3.23	48 T 418	6.00	48 T 503	11.52
S #16	48 T 406	3.98	48 T 419	7.50	48 T 504	14.04
S #14	48 T 407	5.85	48 T 425	11.33	48 T 505	21.64
S #12	48 T 408	7.50	48 T 426	14.25	48 T 506	27.23
S #10	48 T 415	9.38	48 T 427	17.63	48 T 507	32.57

## TELEPHONE WIRE

2-Conductor Interior. For interior use with telephones, intercoms, etc. No. 22 solid, tinned copper wire. Insulation and glazed cotton braid. Shpg. wt., 100 ft., 2 1/2 lbs.



48 W 810. PER FOOT .4c. 100 ft. or More, PER 100 FT. 3.73

2-Conductor Exterior. No. 22 solid tinned copper wire. Each conductor has rubber insulation; overall black weatherproof braid. Shpg. wt., 100 ft., 3 lbs.

48 W 826. PER FOOT .4c. 100 ft. or More, PER 100 FT. 3.38

3-Conductor Exterior. As above, but 3-cond. Wt., 100', 4 lbs. 48 W 825. PER FOOT 5 1/2c. 100 ft. or More, PER 100 FT. 5.08

## TWISTED-PAIR ANTENNA LEAD-IN

High-quality, twisted-pair antenna lead-in wire. Designed especially for use with noise-reducing, doublet-type receiving antennas. Close impedance match assures efficient signal transfer. Consists of two flexible No. 18, stranded-wire conductors with tough, long-life rubber insulation. The entire cable. Ideal for outside lighting and speaker systems. Excellent for electrical feeders and branch circuits from house to garage or barn as well as to post or yard lights. Eliminates overhead wiring. Capacity 15 amps. Rated at 600 volts. U.L. Approved. Size, .200x.350". Shpg. wt., 100 ft., 7 1/4 lbs.



48 W 850. PER FOOT .3c 100 ft. or More, PER 100 FT. 2.56

## NEW ROME FLEXALL CABLE

A non-metallic sheathed waterproof and rot resistant cable—designed specifically for burial in the earth. Has 2 No. 14 solid wire conductors insulated with Type TW thermoplastic. An all-glass yarn wrap covers both conductors and a synthetic plastic sheath covers the entire cable. Ideal for outside lighting and speaker systems. Excellent for electrical feeders and branch circuits from house to garage or barn as well as to post or yard lights. Eliminates overhead wiring. Capacity 15 amps. Rated at 600 volts. U.L. Approved. Size, .200x.350". Shpg. wt., 100 ft., 7 1/4 lbs.



47 W 594. PER FOOT .9c 100 ft. or More, PER 100 FT. 8.52

## ROME ROFLX CABLE

2 conductor cable for indoor or outdoor use. Ideally suited for long speaker lines as well as for electrical feeders or branch circuits in power wiring. Excellent for making temporary or permanent extension power line installations for motors, power tools, etc. Color-coded No. 14 solid wire conductors have durable, heat resistant, thermoplastic insulation with plastic sheath covering entire cable. Flexible and easy to use. Current capacity is 15 amp. Rated at 600 volts. U.L. Approved. Sizes, .230x.410". Shpg. wt., 100 ft., 7 lbs.



47 W 549. PER FOOT .7c 100 ft. or More, PER 100 FT. 6.23

## THERMOPLASTIC HOOK-UP WIRE

U.L. Approved. Voltage breakdown test, 10,000 volts. Oil and acid resistant. Withstands temperatures up to 80° C. Suitable for high-voltage circuits where low loss and proper insulation is essential. Shpg. wt., per 25 ft. spool, 4 oz.



20 SOLID		25 FOOT SPOOL		20 STRANDED		25 FOOT SPOOL	
48 T 455, Black.	} 29c EACH	48 T 460, Black.	} 34c EACH	48 T 461, Red.	} 34c EACH	48 T 462, Blue.	} 34c EACH
48 T 456, Red.		48 T 463, Green.		48 T 464, Yellow.			
48 T 457, Blue.							
48 T 458, Green.							
48 T 459, Yellow.							

## STRANDED HOOKUP WIRE

No. 18 tinned soft drawn copper wire. Cotton wrap and colored rubber insulation overall. Excellent for general wiring in radio-TV chassis, switchboards, etc. Shpg. wt., 25 ft., 5 oz.

Spool	Black	Red	Blue	Green	White	EACH
25 ft.	48 T 200	48 T 201	48 T 202	48 T 203	48 T 205	48c

## PUSH-BACK HOOK-UP WIRE

High quality tinned push-back hook-up wire. No. 20. Only evenly drawn pure copper wire is used. Insulation easily pushed back for convenient wiring. Available in both solid and stranded type. Unusually flexible and durable. Double-cotton covered with paraffin-treated damp-proof braid. 5 different colors. Shpg. wts.: 25 ft., 4 oz.; 100 ft., 1 lb.



### STRANDED TYPE, 10x30

Spool	Red	Black	Yellow	Blue	Green	EACH
25 ft.	48 T 442	48 T 440	48 T 444	48 T 441	48 T 443	.36
100 ft.	48 T 447	48 T 445	48 T 449	48 T 446	48 T 448	1.29

### SOLID TYPE

Spool	Red	Black	Yellow	Blue	Green	EACH
25 ft.	48 T 472	48 T 470	48 T 474	48 T 471	48 T 473	.34
100 ft.	48 T 477	48 T 475	48 T 479	48 T 476	48 T 478	1.26

## HIGH-GRADE MAGNET WIRE ON SPOOLS

Insulated, soft-drawn copper wire of highest quality. Specially manufactured for all types of coil winding applications—transformers, RF coils, chokes, etc. All sizes indicated below are standard B&S gauge. Shpg. wts.: 1/2-lb. spool, 14 oz.; 1-lb. spool, 1 1/2 lbs.



### PLAIN ENAMELED 1/2 LB. SPOOLS

Stock No.	Size	Feet	NET	Stock No.	Size	Feet	NET
48 T 100	14	38	.60	48 T 111	26	640	.71
48 T 102	16	63	.60	48 T 112	28	1013	.75
48 T 104	18	101	.62	48 T 113	30	1602	.83
48 T 106	20	159	.62	48 T 114	32	2543	.84
48 T 108	22	253	.65	48 T 115	34	4042	.92
48 T 109	24	402	.65	48 T 116	36	6410	.92

### SINGLE COTTON ENAMELED 1 LB. SPOOLS

48 T 020	14	78	1.44	48 T 028	22	490	1.91
48 T 022 <td>16</td> <td>124</td> <td>1.50</td> <td>48 T 029</td> <td>24</td> <td>772</td> <td>1.95</td>	16	124	1.50	48 T 029	24	772	1.95
48 T 023 <td>17</td> <td>156</td> <td>1.56</td> <td>48 T 030</td> <td>25</td> <td>936</td> <td>2.07</td>	17	156	1.56	48 T 030	25	936	2.07
48 T 024 <td>18</td> <td>198</td> <td>1.62</td> <td>48 T 031</td> <td>26</td> <td>1209</td> <td>2.19</td>	18	198	1.62	48 T 031	26	1209	2.19
48 T 025	19	248	1.70	48 T 032	28	1876	2.63
48 T 026	20	312	1.79	48 T 033	30	2780	3.08

## HEAVY FORMVAR MAGNET WIRE IN 1-POUND SPOOLS

Copper magnet wire covered with Formvar; tough, sturdy, abrasion-resisting film. Stable dielectric is maintained under the cumulative drying and aging effects of heat; does not fail after two hours at 105° C. Impervious to the deteriorating effects of petroleum solvents, resists acid and alkali. Takes up less winding space. Infinite resistance to moisture. Ideal for servicemen, experimenters, Amateurs, etc. Replaces enamel, paper, cotton, silk, and double cotton and double silk wire. Shpg. wt., per spool, 1 1/2 lbs.

Stock No.	Size	Feet	NET	Stock No.	Size	Feet	NET
48 T 180	14	78	1.13	48 T 187	28	1999	1.59
48 T 137	15	99	1.13	48 T 144	29	2780	1.77
48 T 181	16	124	1.13	48 T 188	30	3200	1.79
48 T 138	17	156	1.14	48 T 145	31	4410	2.03
48 T 182	18	198	1.14	48 T 189	32	4900	2.04
48 T 139	19	246	1.19	48 T 146	33	6441	2.16
48 T 183	20	313	1.20	48 T 190	34	7950	2.19
48 T 140	21	397	1.26	48 T 147	35	9002	2.51
48 T 184	22	501	1.26	48 T 191	36	12,800	2.54
48 T 141	23	628	1.4	48 T 148	37	15,998	3.45
48 T 185	24	798	1.34	48 T 192	38	20,000	3.51
48 T 142	25	941	1.43	48 T 149	39	25,188	5.37
48 T 186	26	1200	1.46	48 T 193	40	31,700	5.45
48 T 143	27	1583	1.56				

## TINNED SOLID COPPER WIRE

Fine quality, soft-drawn copper wire, tinned for easy soldering. Excellent for circuit wiring. Av. shpg. wt.: \*3 lbs., †5 lbs.

*100-FT. COILS					
Stock No.	Gauge	NET	Stock No.	Gauge	NET
47 T 523	16	1.05	47 T 530	12	1.98
47 T 520	14	1.43	47 T 540	10	4.28

†1000-FT. SPOOLS					
47 T 525	24	2.55	47 T 533	20	4.13
47 T 527	22	3.38	47 T 535	18	6.75

# Coaxial & Stereo Cable, Tubing

## AMPHENOL COAXIAL CABLE

### RG COAXIAL CABLE



Low-loss coaxial cable for RF applications. All meet rigid military and commercial specifications. All have

vinyl jacket and polyethylene dielectric except \*semi-solid polyethylene dielectric and teflon dielectric. Impervious to the effects of weather, acids, alkalis, oil and gasoline.

Stock No.	RG No.	Imp. Ohms	Mmf Per Ft.	O.D.	Lbs. 100'	1-99 Ft. PER FT.	100-499 Ft. PER FT.	500-999 Ft. PER FT.
49 W 631	6A/U	75	20	.332"	8	.209	.195	.176
49 W 632	5B/U	50	28.5	.328"	8 1/4	.301	.281	.253
49 W 460	8/U	52	29.5	.405"	12	1.132	1.23	1.23
49 W 315	8A/U	52	29.5	.405"	12	1.159	1.48	1.48
49 W 469	9/U	52	30	.420"	12 1/2	1.314	.292	.263
49 W 314	9A/U	51	30	.420"	12 1/2	.383	.358	.323
49 W 322	9B/U	51	30	.420"	12 1/2	.407	.380	.342
49 W 470	11/U	75	20.5	.405"	12	1.126	.118	.118
49 W 317	11A/U	75	20.5	.405"	12	1.144	.134	.134
49 W 633	14A/U	52	29.5	.445"	20 1/2	.330	.308	.278
49 W 306	17/U	52	29.5	.470"	47	.624	.583	.525
49 W 318	17A/U	52	29.5	.470"	47	.651	.608	.548
49 W 634	19A/U	52	29.5	1.120"	60	1.10	1.03	.923
49 W 465	22/U	95	16	.405"	12	1.107	.158	.143
49 W 637	55B/U	53.5	28.5	.206"	3 1/2	.107	.101	.091
49 W 485	58/U	53.5	28.5	.195"	3	.056	.052	.052
49 W 487	58A/U	50	28.5	.195"	3	.057	.053	.053
49 W 319	58C/U	50	28.5	.195"	3	.065	.060	.060
49 W 490	59/U	73	21	.242"	4 1/2	.060	.056	.056
49 W 638	59B/U	75	21	.242"	4	.071	.066	.066
49 W 488	62/U	93	13.5	.242"	4 1/2	.065	.061	.061
49 W 321	62A/U	93	13.5	.242"	4 1/2	.072	.067	.067
49 W 312	63/U	125	10	.405"	12	1.139	.130	.130
49 W 635	71A/U	93	14.5	.245"	4 1/2	.118	.110	.099
49 W 639	71B/U	93	13.5	.250"	4 1/2	.109	.101	.101
49 W 635	108A/U	78	29.5	.235"	2 1/2	.087	.082	.074
49 W 323	114/U	185	8.5	.405"	12	1.152	.141	.141
49 W 324	122/U	50	29.5	.160"	2 1/2	.062	.058	.052

Stock No.	RG No.	Imp. Ohms	Mmf Per Ft.	O.D.	Lbs. 100'	1-99 Ft. PER FT.	100-249 Ft. PER FT.	250-499 Ft. PER FT.
49 W 636	115A/U	50	29.5	.415"	18	2.62	2.40	2.13
49 W 640	178A/U	50	29	.075"	1	.242	.218	1.93
49 W 641	179A/U	75	19.5	.105"	1	.367	.338	.30
49 W 642	180/U	93	15.5	.141"	1 1/2	.50	.459	.408
49 W 643	210/U	93	13.5	.242"	4	1.27	1.17	1.04

### "SUB-MINAX" MINIATURIZED COAXIAL CABLE

Identical in construction features to full-size coaxial cable. Both types have polyethylene dielectric, vinyl jacket, braided copper shield, and stranded copperweld inner conductor. (21-598 has 7x .0063" and 21-597 has 7x.0056"). Shpg. wt., 100', 1 1/2 lbs.

Stock No.	Mfr's Type	Imp. Ohms	Mmf Per Ft.	O.D.	Lbs. 100'	1-99 Ft. PER FT.	100-999 Ft. PER FT.
49 W 473	21-598	75	30	.105"	.051	.051	.048
49 W 472	21-597	50	20	.150"	.057	.057	.053

### POLYFOAM MICROPHONE CABLE

Type 21-146 is microphone cable with polyethylene dielectric. Types 621-100, 621-111 and 621-715 are similar to RG11/U, RG8/U and RG59/U respectively, but have polyfoam dielectric.

Stock No.	Mfr's Type	Imp. Ohms	Mmf Per Ft.	O.D.	Lbs. 100'	1-99 Ft. PER FT.	100-999 Ft. PER FT.
49 W 313	21-146	45	35	.155"	2	.048	.045
49 W 337	621-100	75	16.5	.405"	8	1.141	1.132
49 W 339	621-715	73	17	.385"	2	.049	.045
49 W 644	621-111	50	26.5	.405"	10.4	1.53	1.43

### ALPHLEX PVC-10S PLASTIC TUBING—Specify Color

A wide selection of extruded plastic tubing for protection of wire and cable from effects of heat, oil, corrosion, fungi, etc. Resists temperatures from -30° C to 105° C. Conforms to military specifications MIL-631C, ASTM-D876, and ASTM-D922. Features high dielectric strength. Rated at 800 volts; resistance, over 1 million megohms. Tensile strength, 2500 PSI. \*Size indicates wire size accepted. Sizes 24 and 22, .012" wall thickness; all others, .016". Available in nine popular colors: clear, black, red, yellow, green, blue, brown, white and orange. Specify color. Av. shpg. wt., 100-ft., 5 oz.

*Size	Nom I.D.	Stock No.	NET	*Size	Nom I.D.	Stock No.	NET
24	.022"	71 TT 300	.51	16	.065"	71 TT 304	.57
22	.027"	71 TT 301	.51	14	.065"	71 TT 305	.59
20	.034"	71 TT 302	.53	12	.085"	71 TT 306	.63
18	.042"	71 TT 303	.54				

Tubing as above. Size 10, .016" wall thickness; all other sizes, .020". Available in choice of six popular colors: clear, black, red, yellow, green, and blue—specify color. Av. shpg. wt., 100-ft., 10 oz.

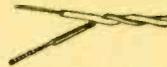
10	.106"	71 TT 314	.68	4	.208"	71 TT 317	1.08
8	.133"	71 TT 315	.83	2	.263"	71 TT 318	1.26
6	.166"	71 TT 316	.95				

Wall thicknesses, size 0, .020"; .025"; .030"; .035"; .040"; 1 1/2", .045". Choice of clear or black—specify. Av. wt., 100', 5 lbs.

0	.330"	71 TT 324	1.46	3/4"	.875"	71 TT 330	5.33
5/16"	.312"	71 TT 325	1.71	1 1/8"	1.000"	71 TT 331	6.15
3/8"	.375"	71 TT 326	2.07	1 1/4"	1.125"	71 TT 332	8.33
1/2"	.500"	71 TT 327	2.63	1 1/2"	1.375"	71 TT 333	8.85
5/8"	.625"	71 TT 328	3.60	1 3/4"	1.500"	71 TT 334	10.80
3/4"	.750"	71 TT 329	4.73				

## CONSOLIDATED CABLE

### STEREO PICKUP ARM CABLES



Phono pickup arm cables of exceptional flexibility. No. 32 stranded (7x40) copper conductor with .009" vinyl plastic insulation. O.D., .055". Extremely light in weight. cables have minimum effect on stylus tracking force and lateral arm movement. Types 1479, 1406, 1407, and 1410 have braided tinned copper shield for minimizing the possibility of hum pick up. Av. shpg. wt.: 10 ft., 4 oz.; 25 ft., 6 oz.; 250 ft., 1 lb.

### UNSHIELDED WIRE

Mfr's Type	Cond.	10-Ft. Coil Stock No.	NET	25-Ft. Coil Stock No.	NET	250-Ft. Coil Stock No.	NET
1478	2	48 T 523	.32	48 T 524	.44	48 T 525	3.00
1401	3	48 T 526	.38	48 T 527	.90	48 T 528	8.25
1402	4	48 T 529	.53	48 T 533	1.20	48 T 534	11.25

### SHIELDED WIRE

\*Individually shielded conductors.

1479	2	48 T 535	.45	48 T 536	.83	48 T 537	6.00
1406	3	48 T 538	.60	48 T 539	1.28	48 T 543	12.00
1407	4	48 T 544	.68	48 T 545	1.50	48 T 546	13.50
1410	2*	48 T 547	.60	48 T 548	1.35	48 T 549	12.75

### CONSOLIDATED SHIELDED CABLE FOR SOUND SYSTEMS

Type 14-2. Flexible, 2-conductor P.A. cable. No. 14 wire (stranded 41x30) with 1/2" plastic insulation, tinned-copper braided shield, and weatherproof cotton outer jacket. Shpg. wt., per 100 ft., 4 lbs.

49 W 614	1-99 Ft.	PER FOOT	13 1/2 c
100 Ft. or More	PER FOOT		12 c

### VARNISHED SPAGHETTI TUBING

#### ASSORTED 8" LENGTHS

Highly popular with experimenters and builders. 26 pieces of cambric spaghetti tubing in various colors and diameters. 3 oz.

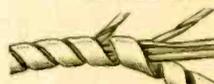
49 T 220	26-Piece Assortment	NET	25 c
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### SELECTION OF 36" LENGTHS

Used in industrial and electronic research laboratories, radio-TV shops, experimental laboratories, etc. Five lengths to a package. Standard grade varnished tubing, 4,000 volt av. dielectric strength. Meets V.T.S. and A.S.T.M. specifications. Shpg. wt., 2 oz.

Feet Wire Size	Stock No.				Per Pkg.	5 or More Pkgs., Per Pkg.
	Black	Yellow	Red	Green		
20	49 T 164	49 T 165	49 T 166	49 T 167	53c	48c
18	49 T 169	49 T 170	49 T 171	49 T 172	57c	52c
16	49 T 174	49 T 175	49 T 176	49 T 177	58c	53c
14	49 T 179	49 T 180	49 T 181	49 T 182	64c	58c
12	49 T 184	49 T 185	49 T 186	49 T 187	68c	62c
10	49 T 189	49 T 190	49 T 191	49 T 192	75c	68c

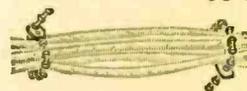
### HELI-TUBE SPIRAL-CUT PLASTIC WRAPPING



Flexible, highly durable polyethylene plastic wrapping. Provides neat appearance and protection for wire harnesses from 1/4" to 2" in diameter. Spiral-cut design permits instant location of individual wires. Easy to wind or unwind. Shpg. wt., 100 ft., 1 1/4 lbs.

71 W 543	1-99 Ft.	PER FOOT	8c
100 Ft. and Up	PER FOOT		7c

### GC CABLE TIES



Made of high dielectric polyethylene with 45 lb. breaking point. Will withstand 120° F. Each is 4 1/4" long. Will make harnesses as large as inch in diameter. Shpg. wt., 2 oz. 50 per pkg.

Stock No.	Type	Color	PER PKG.	Stock No.	Type	Color	PER PKG.
49 T 142	9362-1M	Red	.61	49 T 144	9362-6M	Yellow	.61
49 T 143	9362-4H	Blue	.61				

### WIRE MARKERS

Flat Stran Code adhesive markers provide efficient method of wire and cable identification. Consist of 33 numeral markers (3/16 x 1/2) per card in numerical sequence from 1 through 33. On vinyl impregnated cloth or .003" soft aluminum. Pressure sensitive adhesive. Heat resistant. Card size: cloth, 2x9"; aluminum, 1 1/2 x 3 1/4". Shpg. wt., 3 oz. Write for quantity prices on 50 or more cards.

49 T 898	Cloth	PER CARD	1-9	23c	10-49	Each	21c
49 T 899	Aluminum	PER CARD	1-9	21c	10-49	Each	19c



### CABLE LACING CORD

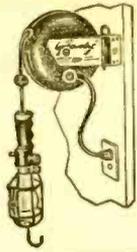
Top-quality genuine waxed linen twine designed for cable harness lacing. Hard-twist rayon 8-cord; 50-lb. test. For binding cables in switchboards, transmitters, etc. 1-lb. spool, approx. 450 yds.; 1/2-lb. spool, approx. 225 yds. Shpg. wt.: 1-lb. spool, 1 1/4 lbs.; 1/2-lb. spool, 3/4 lb.

49 T 245	1-Lb. Spool	NET	3.18
49 T 246	1/2-Lb. Spool	NET	1.68

# Electrical Accessories

## CORDOMATIC DROP-LIGHT REELS

Unique, self-winding drop light. Provides light where you want it. Cord is out of the way when light is no longer needed. All have No. 18, 2-conductor cord, covered with tough, neoprene insulation except \* rubber covered. Crack-proof hand with built-in outlet and toggle switch. Chrome reflector has swing-open bulb guard. Steel housing has universal mounting bracket. Less bulb. U.L. Approved.



Stock No.	Type	Ft.	Lbs.	EACH
50 NX 300	500*	20	4 3/4	8.77
46 NX 976	700	20	7	14.65
46 NX 977	800	30	8	18.57
46 NX 978	900	40	9	22.47

## ELECTRICORD "REDY-REEL"

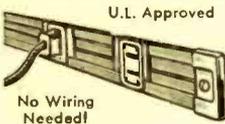
Model 5C2216-100 R. Handy power cord on self-winding reel assembly. Stops cord tangle, saves time and prolongs life of cord. Ideal for use with power tools, electric garden implements, lawn mowers and in garages. Contains 100 ft. of No. 16, 2-conductor cord, covered with tough red vinyl insulation. Has stand made of 3/4" steel rod, cadmium-plated for durability; reel is heavy steel. Shpg. wt., 1 1/2 lbs.



50 NX 301. NET..... 8.95

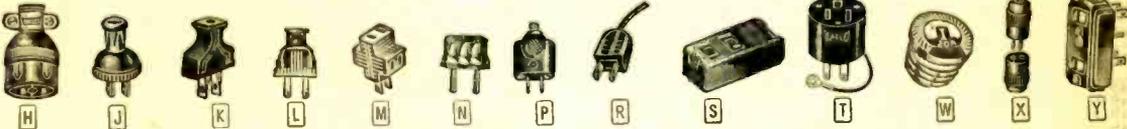
## ELECTROSTRIP FLEXIBLE OUTLET KIT

Unique 4-ft. electrical strip. U.L. Approved for easy installation on baseboard, wall, workbench, etc. Includes 3 outlets which may be moved to any point along strip. Has 12" cord with plug for feeding power from regular wall outlet to the strip. Rated 15 amps at 125 v. AC. Shpg. wt., 1 1/4 lbs.



52 NX 696. NET..... 2.29

Extra Outlets. For above. Shpg. wt., 3 oz. 52 N 697. NET EACH..... 35¢



## VALUES IN HANDY ELECTRICAL ACCESSORIES

**H** Line Cord Receptacle. Rubber pull-handle receptacle. Dia., 1 1/4". 15 amps at 125 v. Shpg. wt., 3 oz. 52 N 603. EACH..... 26c

**J** Rubber-Handle Plug. Unbreakable soft-rubber. Approved for power tools. Excellent for use with 52 N 603 above, for line cord extensions. U.L. Approved. Shpg. wt., 2 oz. 52 N 602. EACH..... 8c

**K** Bakelite Plug. With convenient finger-grip. Cap size, 1 1/4 x 1 1/4 x 1 1/4" deep. Brown finish. U.L. Approved. Shpg. wt., 2 oz. 52 N 600. EACH..... 8c

**L** Flat Rubber Plug. Has non-breakable molded rubber cap. Because of their narrow construction, these caps are ideal for use with multiple AC receptacles similar to Fig. 5 above. Easily disassembled. Screw terminal wiring. Rated 15 amps at 125 v.; 10 amps at 250 v. U.L. Approved. Shpg. wt., 3 oz. 52 N 641. EACH..... 10c

**M** Rubber Cube Tap. Spring-action, 3-way outlet of one-piece, soft rubber. U.L. Approved. Shpg. wt., 4 oz. 52 N 609. EACH..... 23c

**N** Continental Adapter. Male-female adapter. Permits using standard flat-prong American plugs in Continental Europe outlets designed for round prongs. Wt., 2 oz. 49 N 536. NET..... 29c

## BELDEN GRIP-PRONG REPLACEMENT CORDS

### A LIGHT-DUTY CORDS

Type 17126S. SP-1 6-Foot Replacement Cord. No. 18 wire. Brown, rubber-covered cord. Extra-flexible. Unbreakable, plastic plug on one end; other end stripped. Ideal cord for electric clocks, lamps, fans, radio sets and other small electrical appliances and implements. U.L. Approved. Shpg. wt., 6 oz. 49 T 211. NET..... 31c

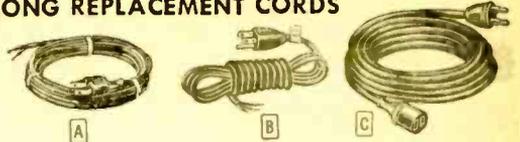
Type 17129S. SP-1. As above, but 9 feet. Shpg. wt., 8 oz. 49 T 236. NET..... 38c

Type 17330S. SJ 10-Foot Replacement Cord. No. 16 wire. For use on washing machines, workshop tools, etc. U.L. Approved. Shpg. wt., 3/4 lb. 49 T 213. NET..... 75c

Type 17308S. SJ 8-Foot Replacement Cord. No. 18 wire. Black rubber cord. U.L. Approved. Shpg. wt., 3/4 lb. 49 T 215. NET..... 56c

Type 17206S. SV 6-Ft. Replacement Cord. No. 18 wire. For use on small appliances. Gray rubber. Cord-holder plug. U.L. Approved. Wt. 3/4 lb. 49 T 212. NET..... 44c

**B** Type 17408S. SJ 8-Foot Appliance Grounding Cord. No. 18 wire. Used for electric power tools and appliances. 3 conductor cord with 3-prong plug. U.L. Approved. Shpg. wt., 3/4 lb. 49 T 219. NET..... 76c



### C HEAVY-DUTY CORDS

Type 17270S. SV 20-Foot Extension Cord. No. 18 gauge wire. Extra-flexible gray cord with plastic cord-holder plug and plastic connector. Specifically designed for use on vacuum cleaners and other small appliances and tools such as soldering irons, grinders, polishers, power saws, etc. In natural gray; will not mark or stain floors. Convenient, safe and dependable to use. Grip-type prongs insure long service life. Rubber covered. Underwriters' Laboratories Approved. Shpg. wt., 1 lb. 49 T 214. NET EACH..... 1.09

Type 17361S. SJ 10-Foot Extension Cord. No. 16 wire. For general-purpose use. Unbreakable plastic plug and connector. Underwriters' Laboratories Approved. Black rubber covered. Shpg. wt., 1 lb. 49 T 216. NET..... 85c

Type 17396S. SJT 60-Foot Extension Cord. No. 16 wire. Perfect for electric lawn mowers, yard extensions, etc. Rugged red plastic covering is easy to spot. U.L. Approved. Shpg. wt., 3 1/4 lbs. 49 T 217. NET..... 3.69

Type 17397S. SJT 100-Foot Extension Cord. No. 16 wire. Extra-flexible. Ideal for electric mowers, etc.—just as above—red plastic covering stands out. U.L. Approved. Shpg. wt., 6 lbs. 49 T 218. NET..... 7.40



**E** 6-Ft. Replacement Cord Set. Heavy, plastic insulated cord firmly secured in sturdy molded plug on one end; other end stripped. Brown. Shpg. wt., 5 oz. 49 T 230. 10 or More, EA. 19¢. EA..... 21c

**F** Cube Tap Extension. 3-way extension tap. Rated at 15 amps 125 volts; 10 amps 250 volts. With 6-foot cord and bakelite plug cap. Shpg. wt., 7 oz. 52 N 605. 10 or More, EA. 33¢. EA..... 37c

**G** Rubber Cube Tap Extension. An all-rubber, solderless, 3-way extension cord set. Consists of 9-ft. cord, unbreakable cube tap and plug. No. 18 wire. Spring-action contacts in cube receptacle provide positive connection with plugs. Shpg. wt., 8 oz. 52 N 608. EACH..... 59c

6-Ft. Extension. Same as above, but with 6-ft. cord. Shpg. wt., 6 oz. 52 N 621. EACH..... 50¢

## REPLACEMENT CORD VALUES



**X** Morse Midget Cord Connector. 2-conductor pull-apart type. For AC-DC cords, phone motors, pilot lights, etc. Consists of plug and receptacle. 1 1/2" long and 1/4" dia. Shpg. wt., 2 oz. 52 N 626. 10 or More, EA. 44¢. EA..... 49c

**Y** Eagle Type 880B Double Ground Tap. Converts any wall receptacle into a safe, grounded outlet. Inserts into socket and is grounded with attached screw. Brown plastic. U.L. Approved. Shpg. wt., 2 oz. 50 N 306. NET..... 67c

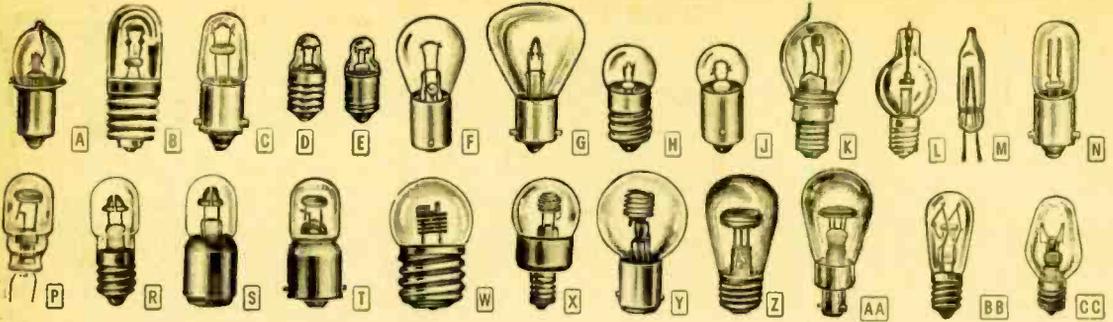
Type 880V Double Ground Tap. Same as above, but in ivory plastic. U.L. Approved. 50 N 307. NET..... 72c

## WIRE CONNECTORS

Solderless. Simply strip two wires end, push into connector and screw cap down. No tools needed. Wires cannot be pulled out. Finest grade phenolic. U.L. Approved. Av. wts.: Pkg. of 25, 5 oz.; Pks. of 100, 1 1/4 lbs.

Wire Size	Stock No.	Pkg. of 25	Stock No.	Pkg. of 100
10-18	52 N 874	.24	52 N 870	.73
14-18	52 N 875	.39	52 N 871	1.06
12-18	52 N 876	.46	52 N 872	1.28
10-18	52 N 877	.89	52 N 873	2.41

# General Electric Lamps - Sockets



## GENERAL-PURPOSE MINIATURE LAMPS

Precision-manufactured, top-quality lamps. All are miniature, except: \*Midget flanged type; †pre-focus candelabra. Under **Amps**, c.p. means candlepower. Abbreviations under **Base** mean: S. C., F.—single contact, flanged; S. C., Bay.—single contact, bayonet; D. C., Bay.—double contact, bayonet. Under **Bulb Style**: G—globe; T—tubular; B—lemon shape; TL—Lens end, tubular (pre-focus type); FE—flat end; RP—reflector, pear shape; S—as in Fig. 1, PAR—parabolic. Types 1847, 1891 are for Ford and Chev. cars. Ws.: 1 lamp, 2 oz.; box of 10, 4 oz.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Bulb Style	NET EA.	10 or More, Ea.	100 or More, Ea.
52 E 344	PR-2	A	2.4	0.50	S. C., F.	B-3½	.20	.14	.13
52 E 345	PR-3	A	3.6	0.50	S. C., F.	B-3½	.20	.14	.13
52 E 337	PR-4	A	2.3	0.27	S. C., F.	B-3½	.20	.14	.13
52 E 338	PR-9	A	2.7	0.15	S. C., F.	B-3½	.25	.18	.16
52 E 387	PR-12	A	5.95	0.50	S. C., F.	B-3½	.20	.14	.13
52 E 304	PR-13	A	4.75	0.50	S. C., F.	B-3½	.20	.14	.13
52 E 981	12	H	6.3	0.15	Min. 2-pin	G-3½	.15	.10	.09
52 E 300	13	H	3.7	0.30	Screw	G-3½	.17	.12	.11
52 E 301	14	H	4.5	0.30	Screw	G-3½	.17	.12	.11
52 E 303	27	H	2.9	0.30	Screw	G-4½	.17	.12	.11
52 E 302	31	H	6.2	0.30	Screw	G-4½	.20	.14	.13
52 E 305	45	B	2.8	0.15	Screw	T-3½	.15	.10	.09
52 E 306	41	B	2.5	0.50	Screw	T-3½	.15	.10	.09
52 E 307	42	B	3.2	0.35	Screw	T-3½	.20	.14	.13
52 E 308	43	C	2.5	0.50	Bayonet	T-3½	.15	.10	.09
52 E 309	44	C	6.8	0.25	Bayonet	T-3½	.15	.10	.09
52 E 310	45	C	3.2	0.35	Bayonet	T-3½	.15	.10	.09
52 E 311	46	B	6.8	0.25	Screw	T-3½	.15	.10	.09
52 E 312	47	C	6.8	0.15	Bayonet	T-3½	.15	.10	.09
52 E 313	48	B	2.0	0.06	Screw	T-3½	.15	.10	.09
52 E 314	49	C	2.0	0.06	Bayonet	T-3½	.15	.10	.09
52 E 315	50	H	6.8	1 c. p.	Screw	G-3½	.15	.10	.09
52 E 316	51	H	6.8	1 c. p.	Screw	G-3½	.15	.10	.09
52 E 369	53	J	14.4	0.12	Bayonet	G-4½	.15	.10	.09
52 E 320	55	J	6.8	2 c. d.	Bayonet	G-4½	.15	.10	.09
52 E 660	57	J	12-16	2 c. p.	Bayonet	G-4½	.15	.10	.09
52 E 322	63	J	6-8	3 c. p.	S. C. Bay.	G-6	.20	.14	.13
52 E 321	81	J	6-8	6 c. p.	S. C. Bay.	G-6	.20	.14	.13
52 E 317	82	J	6-8	6 c. p.	D. C. Bay.	G-6	.25	.18	.16
52 E 325	112	D	1.2	0.22	Screw	TL-3	.17	.12	.11
52 E 327	136	H	1.3	0.60	Screw	G-4½	.17	.12	.11
52 E 330	222	D	2.2	0.25	Screw	TL-3	.17	.12	.11
52 E 331	223	D	2.2	0.25	Screw	FE-3½	.17	.12	.11
52 E 332	224	E	2.15	0.22	Special Screw	TL-2½	.17	.12	.11
52 E 334	233	H	2.2	0.27	Screw	G-3½	.17	.12	.11
52 E 339	248	H	2.5	0.90	Screw	G-5½	.20	.14	.13
52 E 319	313	C	28	0.17	Bayonet	T-3½	.20	.14	.13
52 E 323	327	H	28	0.04	S. C. Mid.*	T-1½	.90	.66	.59
52 E 377	328	H	6	0.20	S. C. Mid.*	T-1½	.70	.51	.46
52 E 378	425	H	5	0.50	Screw	G-4½	.17	.12	.11
52 E 658	426	H	12.5	0.25	Screw	G-4½	.17	.12	.11
52 E 632	432	H	18.0	0.25	Screw	G-4½	.17	.12	.11
52 E 652	433	J	18	0.25	Bayonet	G-4½	.17	.12	.11
52 E 642	605	H	6.1	0.50	Screw	G-4½	.17	.12	.11
52 E 664	1129	F	6-8	21 c. p.	S. C. Bay.	S-8	.35	.26	.23
52 E 650	1133	G	6-8	32 c. p.	S. C. Bay	RP-11	.40	.29	.26
52 E 651	1188	G	6-8	50/32 c. p.	S. C. Bay	RP-11	1.00	.72	.65
52 E 379	1323	H	6.2	4.30	D. C. Bay. S. C. Pref.†	RP-11	1.00	.72	.65
52 E 659	1446	H	12	0.20	Screw	G-3½	.17	.12	.11
52 E 341	1447	H	18.0	0.15	Screw	G-3½	.20	.14	.13
52 E 661	1449	H	14	0.20	Screw	G-3½	.17	.12	.11
52 E 662	1458	J	20	0.25	Bayonet	G-5	.17	.12	.11
52 E 653	1477	B	24	0.17	Screw	T-3	.40	.27	.24
52 E 654	1487	B	12-16	0.20	Screw	T-3½	.20	.14	.13
52 E 655	1488	C	14	0.15	Bayonet	T-3½	.20	.14	.13
52 E 340	1490	C	3.2	0.16	Bayonet	T-3½	.15	.10	.09
52 E 656	1493	B	6.5	2.75	D. C. Bay.	S-8	1.00	.70	.63
52 E 657	1768	B	6	0.20	Midget Screw	T-1½	.75	.52	.47
52 E 657	1815	C	12.16	0.20	Bayonet	T-3½	.20	.14	.13
52 E 324	1820	C	28	0.10	Bayonet	T-3½	.40	.29	.26
52 E 343	1829	C	28	0.07	Bayonet	T-3½	.35	.25	.22
52 E 982	1847	C	6.3	0.15	Bayonet	T-3½	.20	.14	.13
52 E 983	1891	C	12.0	0.24	Min. Bay.	T-3½	.15	.10	.09

## TUNGAR BULBS

Tungar bulb rectifiers for replacement purposes. High-quality units. Used in battery-charging equipment. Gas-filled thermionic-emission types. \*Provides DC for movie projector arcs. Av. shpg. wt., 1¼ lbs.

No.	Type	Fig.	Amps	NET	No.	Type	Fig.	Amps	NET
9 E 900	12X825		2	4.41	9 E 904	189049		6	4.77
9 E 901	206501	K	2	4.41	9 E 905	*217283	L	15	9.19
9 E 906	20X672		5	5.2	9 E 907	16X897		2	12.13
9 E 903	189048	L	4	4.77	9 E 908	45X674		6	14.70

## NEON GLOW LAMPS

For 105-600 volt operation except types marked †; which are for 210-600 v. †Indicates DC only. S.C. stands for single contact; D.C., double contact; Sk., skirted. Screw types have series resistor in base—for 105-125 v. operation; others require external resistor. AC starting voltage shown. DC starting voltage is 40% higher. †High brightness types. Av. shpg. wt. 1 lamp, 3 oz.; box of 10, 5 oz.

Stock No.	Mfr's Type	Fig.	Watts	AC Volts	Bulb Style	Base	NET EACH	10-UP EACH
52 E 370	NE-2	M	1/25	65	T-2	Wire Term.	.10	.08
52 E 396	†NE-2H	M	¼		T-2	Wire Term.	.12	.10
52 E 374	NE-7	P	¼	55	T-4½	Wire Term.	.73	.56
52 E 826	†NE-16	S	¼	87	T-4½	D. C. Bay. Cand.	.63	.48
52 E 827	NE-17	S	¼	55	T-4½	D. C. Bay. Cand.	.90	.71
52 E 822	NE-21	T	¼	55	T-4½	S. C. Bay. Cand.	.95	.71
52 E 801	NE-30	W	1	60	G-10	Edison	1.20	.93
52 E 809	NE-31	X	1	60	G-10	Sk. Cand. Screw	2.28	2.62
52 E 814	NE-32	Y	1	60	G-10	D. C. Bay. Cand.	1.20	.93
52 E 803	NE-34	Z	2	60	S-14	Edison	1.85	1.43
52 E 815	NE-36	AA	2	60	S-14	Sk. D. C. Bay. Cand.	2.40	1.89
52 E 806	NE-40	Z	3	60	S-14	Edison	2.70	2.10
52 E 816	NE-42	AA	3	60	S-14	Sk. D. C. Bay. Cand.	2.65	2.04
52 E 807	NE-45	R	¼	65	T-4½	Cand. Screw	.85	.66
52 E 812	NE-48	S	¼	65	T-4½	D. C. Bay. Cand.	.70	.54
52 E 373	NE-51	N	1/25	65	T-3½	S. C. Bay. Min.	.21	.17
52 E 395	†NE-51H	N	¼	60	T-3½	S. C. Bay. Min.	1.23	.19
52 E 360	†NE-56	W	1	60	G-10	Edison	1.25	.98
52 E 361	NE-57	R	¼	55	T-4½	Cand. Screw	.95	.76
52 E 362	†NE-58	R	¼	65	T-4½	Cand. Screw	.95	.71
52 E 397	NE-77	M	¼	140	T-2	3-Wire Term.	.55	.43

## ARGON GLOW LAMPS

Pale blue-violet light—near-ultraviolet radiation. Clear glass. \*Av. life, 1000 hours; †av. life, 3000 hrs. Av. wt., 1 lamp, 3 oz.; box of 10, 5 oz.

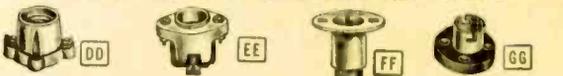
Stock No.	Mfr's Type	Fig.	Watts	AC Volts	Base	NET EACH	10-UP EACH	
52 E 811	*AR-3	R	¼	80	T-4½	Cand. Screw	.85	.68
52 E 810	†AR-1	Z	2	65	S-14	Edison	1.90	1.53

## AC-DC PILOT LAMPS

Rated at 1500 hours, average use. Have clear glass envelopes except † white glass. Ideal for use behind small panel openings, as indicator lamps, etc. †Candelabra screw base. †Double contact candelabra bayonet base. †Herzog tubular lamp—all others, G.E. Av. wt., 4 oz.

Stock No.	Type	Fig.	Volts	Watts	EACH	10-UP, EA.
52 E 349	*S6	BB	120	6	.22	.20
52 E 352	†6S6	BB	120	6	.30	.27
52 E 354	*3S6	BB	120	3	.35	.31
52 E 353	*10S6	BB	230	10	.52	.47
52 E 356	*C7	CC	115-125	7	.20	.18
52 E 355	*C7	CC	115-125	7	.20	.18
52 E 351	†C7	CC	115-125	10	.26	.23
52 E 350	*C7	CC	120	4	.39	.35

## SOCKETS FOR NEON, ARGON AND PILOT LAMPS



\*Hard rubber insert in metal shell. Av. shpg. wt., 3 oz.

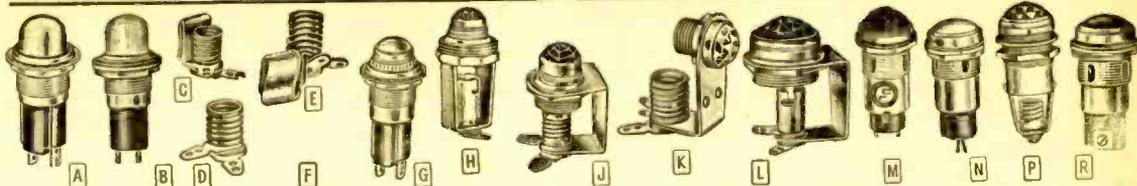
Stock No.	Fig.	Description	EACH	10-UP, EA.
52 E 850	DD	Edison	.13	.12
52 E 858	DD	Miniature screw	.14	.13
52 E 852	EE	Candelabra screw	.45	.41
52 E 855	DD	Candelabra screw	.14	.13
52 E 853*	FF	Double-contact, bay. candelabra	.29	.26
52 E 856	GG	Double-contact, bay. candelabra	.75	.67
52 E 857	GG	Single-contact, bay. candelabra	.59	.53

## LAMP SOCKET REDUCERS

Receptacle opening receives base of bulb; other end fits into socket desired. Enables user to convert to most commonly-used types of bulb bases. Positive contact. Av. shpg. wt., 2 oz.

Stock No.	Fig.	Description	NET
52 E 606	HH	Edison-to-Candelabra	16c
52 E 639	JJ	Candelabra-to-Miniature	14c
52 E 634	JJ	Intermediate-to-Candelabra	7c
52 E 638	KK	Edison-to-Intermediate	15c

# Dialco Indicator Lights



## NEON INDICATOR LIGHTS

**A** Series 95408X and Series 95408XH. Enclosed neon indicator lights. Series 95408X have built-in 56,000-ohm, 1/4 watt resistor for NE-51 neon lamps in 105-125 v. AC-DC circuits. Series 95408XH (\*) have built-in resistor of 18,000 ohms for use with NE-51H "high brightness" neon glow lamp on 105-125 v. AC, or DC circuits over 160 v. 2 1/2" long, 1 1/4" hole. Meet MIL-L-3661, CSA and U.L. requirements. Less lamp (see G. E. bulb listings). With mounting nut. Av. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Stock No.	Mfr's Type	Cap Color
52 E 504	931	53 E 142	931H*	Red
52 E 505	933	53 E 143	933H*	Amber
52 E 506	935	53 E 144	935H*	White
52 E 507	937	53 E 145	937H*	Clear

1-9, NET EACH ..... 1.19  
10 or More, EACH ..... 1.07

## NEON PANEL ASSEMBLIES

**B** Series 952208. Enclosed neon pilot light assemblies. Have built-in 56,000 ohm resistor for NE-51 in 105-125 v. AC-DC circuits; except \* with 18,000 ohm resistor for NE-51H "high brightness" lamp for use with 105-125 v. AC or 160 v. DC. 2 1/2" long, 1 1/4" mtg. hole. Less lamp (see G. E. bulb listings). With mounting nut. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Stock No.	Mfr's Type	Cap Color
52 E 581	931	53 E 146	931H*	Red
52 E 582	933	53 E 147	933H*	Amber
52 E 583	935	53 E 148	935H*	White
52 E 584	937	53 E 149	937H*	Clear

1-9, NET EACH ..... 68c  
10 or More, EACH ..... 61c

## REPLACEMENT PLASTIC CAPS FOR ABOVE

Stock No.	Mfr's Type	Color	1 to 9, EACH	10 or More, EACH
52 E 565	95-931	Red	15c	13c
52 E 566	95-933	Amber		
52 E 567	95-935	White		
52 E 568	95-937	Clear		

## PILOT LIGHT SOCKETS

Popular Dialco assemblies. Rust-resistant cadmium plating on all brackets. Have terminal lugs of tinned brass to facilitate rapid soldering. Coil spring construction on all bayonet type sockets. Supplied complete with high-grade insulating washers. See G. E. bulb listings for complete selection of miniature screw lamps (for Series 500), bayonet lamps (for Series 700), and candelabra lamps (for Series 600). Av. shpg. wt., per 5, 6 oz. 5 per pkg.

### MINIATURE SCREW

Stock No.	Mfr's Type	Fig.	Per Pkg.	5 Pkgs. or More, Per Pkg.
52 E 400	501	C	35c	31c
52 E 401	507	B	32c	29c
52 E 402	504	D	35c	31c
52 E 410	505	F	35c	31c

### CANDELABRA SCREW—115 VOLTS

Stock No.	Mfr's Type	Fig.	Per Pkg.	5 Pkgs. or More, Per Pkg.
52 E 407	601	C	45c	41c
52 E 408	604	E		
52 E 409	605	F		

### MINIATURE BAYONET (Not Illustrated)

Stock No.	Mfr's Type	Per Pkg.	5 Pkgs. or More, Per Pkg.
52 E 404	707	39c	35c
52 E 405	707	39c	28c
52 E 403	704	39c	35c
52 E 406	705	39c	35c

## PILOT LIGHT LENS CAPS

All-purpose 3/8", 1/2", and 3/4" diameter smooth jewels in polished nickel-plated brass holders for up to 3/4" panels. Require 1 1/2", 1/2" and 3/4" holes, respectively, for mounting. 2 oz.

Size	Stock No.	Stock No. Green	Stock No. Amber	NET EACH
3/8"	52 E 444	52 E 445	52 E 446	24c
1/2"	52 E 490	52 E 491	52 E 492	11c
3/4"	52 E 447	52 E 448	52 E 449	13c

## HALF INCH ENCLOSED TYPE

**G** Series 81410X. Rugged, aviation-type socket shell with smooth jewel in 3/4" brass holder. Take T-3 3/4 min. bayonet lamp. 2 1/4" long, 1 1/4" mtg. hole. Fits panels up to 3/4" thick. Less lamp. U.L. Approved. Wt., 3 oz.

Stock No.	Mfr's Type	Cap Color	NET 10 or More, EACH	1.07
52 E 530	111	Red	1.19	1.07
52 E 531	112	Green		
52 E 532	135	White		
52 E 533	113	Amber		

### Replacement Jewel Caps for Above

Stock No.	Mfr's Type	Jewel Color	NET 10 or More, EACH	14c
52 E 535	81-111	Red	16c	14c
52 E 536	81-112	Green		
52 E 537	81-135	White		
52 E 538	81-113	Amber		

## HALF-INCH OPEN TYPES

**H** Series 857B. Requires an 1 1/4" mtg. hole. 1 1/2" lens. 2 1/4" long. Tinned solder terminals. For panels up to 3/4" thick. With mounting washer. Less lamp. Uses type 44, 47 or 51. Wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET 10 or More, EACH	40c
52 E 545	431	Red	44c	40c
52 E 546	432	Green		
52 E 547	433	Amber		
52 E 548	434	Blue		

## MINIATURE TYPES

**J** Series 810. Screw and bayonet types. 3/4" jewel. Requires 1 1/4" mtg. hole. Use miniature bulbs. Series M takes T-3 3/4 bulb, screw base; \*Series B takes T-3 3/4 bulb, bayonet base. Less lamp; see G. E. bulb listings. Wt., 2 oz.

Stock No.	Mfr's Type	Jewel Color	NET 10 or More, EACH	29c
52 E 450	M-431	Red	32c	29c
52 E 451	M-432	Green		
52 E 452	M-433	Amber		
52 E 453	B-431*	Red		
52 E 454	B-432*	Green		
52 E 455	B-433*	Amber		

**K** Series 610, 610, and 710. Open-type visual indicators. Faceted jewels. Lug terminals. Take 1/2" mounting hole. Less lamp. \*510, 710 take T-3 3/4 bulb, 710 takes S6. 2 oz.

## MINIATURE AND CANDELABRA SCREW

Color	*Miniature Screw	†Candelabra Screw	NET EACH	10 or More EACH
Red	52 E 475	52 E 540	21c	19c
Green	52 E 476	52 E 541		
Amber	52 E 477	52 E 542		

## SERIES 710 MINIATURE BAYONET TYPE

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or More, EACH
52 E 480	431	Red	21c	19c
52 E 481	432	Green		
52 E 482	433	Amber		

## MINIATURE SOCKETS

**L** Series 910. Open type with chrome-plated brass jewel holders. 1 1/2" long. 1" mounting hole. Miniature types take T-3 3/4 bulb style; candelabra type takes S6 style. Less bulb. Shpg. wt., 3 oz.

## MINIATURE BAYONET TYPE

Stock No.	Color	NET EACH	10 or More, EACH
52 E 420	Red	61c	55c
52 E 421	Green		
52 E 422	Amber		

## MINIATURE AND CANDELABRA SCREW

Color	Miniature Screw	Candelabra Screw	NET EACH	10 or More, EACH
Red	52 E 430	52 E 440	58c	52c
Green	52 E 431	52 E 441		
Amber	52 E 432	52 E 442		

## PILOT BULB REMOVER

Designed to expedite installation or removal of miniature and candelabra lamps. High-grade rubber. Wt., 2 oz. 52 E 550. NET ..... 26c



## ONE-INCH ENCLOSED TYPE

**M** Series 313101. 115-volt, enclosed pilot lamp assembly. Black bakelite and brass. Has faceted jewel in chrome-plated holder. Candelabra screw socket. 1" mounting hole. \*Not recommended for neon; all others for neon or incandescent. For type S6 bulbs. U.L. Approved. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or More, EACH
52 E 460	431	Red	1.03	93c
52 E 461	432	Green*		
52 E 462	433	Amber		
52 E 510	437	Clear		
52 E 511	434	Blue*		
52 E 512	435	White		

## ASSEMBLIES WITH WIRE LEADS

**N** Series 312901. Enclosed assembly. With 6" wire leads. Solid brass. Has friction-fit, chrome-plated cap. 1" mtg. hole. U.L. Approved. Less S6 candelabra screw-base lamp (see G. E. bulb listings). Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or More, EACH
52 E 485	111	Red	1.13	1.02
52 E 486	112	Green		
52 E 487	113	Amber		
52 E 488	117	Clear		

## ONE-INCH OPEN TYPES

**P** Series 75. 115-volt open-type pilot lamp assembly with faceted jewel in chrome-plated brass holder. Candelabra screw socket. Solid brass construction. Friction-fit chrome-plated cap. 1" mounting hole. Less S6 lamp (see G. E. bulb listings). Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or More, EACH
52 E 500	C-431	Red	70c	63c
52 E 501	C-432	Green		
52 E 502	C-433	Amber		

## JEWEL CAP ASSEMBLIES

**R** Series 31914. For NE-45, NE-57, etc. Candelabra screw base neon lamps. 115 v., 2 1/2" long. 1" mtg. hole. Neon lamp removable from front. Less lamp (see G. E. bulb listings). U.L. Approved. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or More, EACH
52 E 559	111	Red	1.03	93c
52 E 560	113	Amber		
52 E 562	137	Clear		

## REPLACEMENT JEWEL CAPS

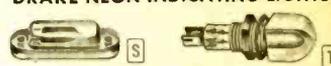
For Series 312901 and 31914

Stock No.	Mfr's Type	Cap Color	NET EACH	10 or More, EACH
52 E 575	31-111	Red	35c	31c
52 E 596	31-112	Green		
52 E 576	31-113	Amber		
52 E 578	31-117	Clear		

## FOR SERIES 75, 910, AND 313101

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or More, EACH
52 E 525	31-431	Red	35c	31c
52 E 526	31-432	Green		
52 E 527	31-433	Amber		
52 E 588	31-437	Clear		

## DRAKE NEON INDICATING LIGHTS



**S** Type 110 "Flushlite." Neon light in translucent plastic base. For 110-125 v. AC-DC. 1/2 x 1/4 x 1/4". 1 1/2" mounting centers. Shpg. wt., 2 oz.

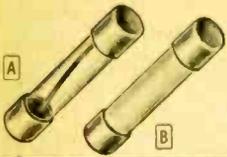
**T** Type 105 "Post-lite." Panel lights for 60-130 v. AC or 90-130 v. DC. 2 1/4" long. Require 1/2" mtg. hole. With mounting nut. Shpg. wt., 2 oz.

78 E 062. 10-Up, EA. 52c 1-9, EA. .... 58c  
Type R115 "Taperlite." Neon lamps with resistor for 110-125 v. AC-DC. 3/8" dia. mtg. hole. 1 oz. 53 E 192. NET ..... 87c



# Littelfuse Fuses and Mountings

## CARTRIDGE FUSES FOR RADIO, TV & INSTRUMENTS



### TYPE 3AG STANDARD FUSES

**A** Series 312000. Quick to medium acting fuses for short time-lag uses. High operating temperatures do not affect fuse characteristics.  $1\frac{1}{4} \times \frac{1}{2}$ ". Pkg. wt., 2 oz. 5 fuses per pkg.

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/16	250	52 B 242			3/4	250	52 B 233	39c	33c
1/8	250	52 B 230			1	250	52 B 234	24c	20c
15/100	250	52 B 671	59c	50c	1 1/2	250	52 B 235	24c	20c
.175	250	52 B 672			2	250	52 B 236	24c	20c
3/16	250	52 B 161			3	250	52 B 237	21c	18c
1/4	250	52 B 231			4	250	52 B 238	29c	25c
3/10	250	52 B 673	38c	33c	5	250	52 B 239	29c	25c
3/8	250	52 B 243			6	250	52 B 240	29c	25c
1/2	250	52 B 232			8	125	52 B 248	44c	38c

### TYPE 3AG SLO-BLO FUSES

**B** Series 313000. Slo-Blo fuses with high time-lag to stand heavy surges. Designed for circuits having high inductive or capacitive surges. Also for circuits having heavy starting currents, such as motors and lamps. Units through 5 amps are U.L. Approved. Size:  $1\frac{1}{4}$ " long and  $\frac{1}{2}$ " diameter. Shpg. wt., per pkg. 2 oz. 5 fuses per pkg.

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/100	125	52 B 185	1.06	90c	1 1/4	125	52 B 220	79c	68c
1/32	125	52 B 186	1.06	90c	1 1/2	125	52 B 253	73c	62c
1/16	125	52 B 187	79c	68c	1 3/4	125	52 B 198	73c	62c
1/10	125	52 B 252	79c	68c	1.6	125	52 B 254	73c	62c
1/8	125	52 B 188	79c	68c	2	125	52 B 179	73c	62c
15/100	125	52 B 189			2 1/2	125	52 B 257		
.175	125	52 B 675			3	125	52 B 181		
3/16	125	52 B 190	79c	68c	3.2	125	52 B 182	59c	50c
2/10	125	52 B 191			4	125	52 B 227		
1/4	125	52 B 921			5	125	52 B 223		
3/10	125	52 B 192			6 1/4	32	52 B 183		
3/8	125	52 B 193	79c	68c	8	32	52 B 184	59c	50c
1/2	125	52 B 923			10	32	52 B 226		
6/10	125	52 B 925			15	32	52 B 224		
3/4	125	52 B 196	79c	68c	20	32	52 B 225	59c	50c
8/10	125	52 B 197			30	32	52 B 677		

### TYPE 8AG FAST ACTION INSTRUMENT FUSES

**C** Series 361000. For protection of meter movements and delicate electronic equipment. All rated 250 max. volts, except \* which is 32. Size,  $1 \times \frac{1}{4}$ ". Shpg. wt., 2 oz. per pkg. 5 fuses per package.

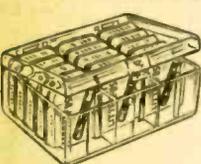
Amps	Blow Point, Ma	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Blow Point, Ma	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/500	3	52 B 199	3.53	3.00	1/2	520	52 B 208	.38	.33
1/200	8	52 B 200	1.47	1.24	3/4	800	52 B 209	.38	.33
1/100	16	52 B 201	1.33	1.13	1	1300	52 B 210	.29	.25
1/32	40	52 B 202	1.18	1.00	1 1/2	1950	52 B 212	.29	.25
1/16	85	52 B 203	.79	.68	2	2600	52 B 211	.29	.25
1/8	150	52 B 205	.59	.50	3	3600	52 B 213	.29	.25
1/4	275	52 B 206	.38	.33	5*	6000	52 B 214	.29	.25
3/8	380	52 B 207	.38	.33					

### TYPE 3AB FUSES

**D** Series 314000. Steatite enclosed, arc-quenching, powder-filled fuses. For use against quick shorts. Medium lag.  $1\frac{1}{4} \times \frac{1}{2}$ ". Types through 15 amps, U.L. Approved. Shpg. wt., per pkg. 2 oz. 5 fuses per pkg.

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1	250	52 B 678			10	250	52 B 244	50c	43c
2	250	52 B 679			12	250	52 B 245	50c	43c
3	250	52 B 680	50c	43c	15	250	52 B 246	50c	43c
5	250	52 B 681			20	250	52 B 247	50c	43c
8	250	52 B 241			30	125	52 B 682	59c	50c

### LITTELFUSE FUSE CADDIES



- Designed for Radio-TV Servicemen
- The Right Fuse When You Need It

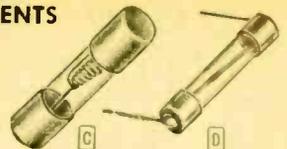
**Type 094041** Designed to fit in a tube caddy—puts the right fuse at your fingertips. Contains 15 different boxes (5 fuses per box) of Type C and N limited-current fuses marked by \* in table below. Rated 250 v., except 7 amp. 125 v. Clear plastic case has 3 spare compartments. Size,  $1\frac{1}{4} \times 3 \times 4\frac{1}{2}$ ". Shpg. wt., 2 lbs. 52 B 283. NET. 8.32

**Type 094037.** Fuse caddy as above but contains 14 boxes of fuses (types indicated by symbol). Also includes equipment kit with various radio fuses in popular values. Shpg. wt., 2 lbs. 52 B 272. NET. 6.21

Type	Amps	Type	Amps	Type	Amps
C (Regular)	.3*	N (Slo-Blo)	.6*	3AG	.2†
C (Regular)	.5*	N (Slo-Blo)	.7*	3AG	.3†
C (Regular)	.75*	N (Slo-Blo)	1†	3AG	.5†
C (Regular)	2*	N (Slo-Blo)	1.25†	3AG (Slo-Blo)	.25†
C (Regular)	2.5†	N (Slo-Blo)	1.6*	3AG (Slo-Blo)	.5†
C (Regular)	7*	N (Slo-Blo)	2*	8AG-U.L.	.25†
N (Slo-Blo)	.35†	3AG	.25†	8AG-U.L.	.5†
N (Slo-Blo)	.5*	3AG	.3†		
N (Slo-Blo)	.5*	3AG	1†		

### TYPE 4AG SLO-BLO FUSES

**C** Series 413000. Opens within 1 hour on 135% overload; within 60 seconds on 200%; immediately on short circuit.  $1\frac{1}{4} \times \frac{1}{2}$ ". Shpg. wt., 2 oz. 5 fuses per pkg.



Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
2/10	250	52 B 994			3	250	52 B 989		
1/4	250	52 B 985			3 1/2	250	52 B 947	79c	68c
1/10	250	52 B 995	1.03	88c	5	250	52 B 990		
1/2	250	52 B 986			6 1/2	32	52 B 948		
6/10	250	52 B 997			7	32	52 B 960		
3/4	250	52 B 987			8	32	52 B 991	79c	68c
1	250	52 B 988	1.03	88c	10	32	52 B 961		
1 1/2	250	52 B 999			20	32	52 B 962		
1-6/10	250	52 B 945	1.03	88c	25	32	52 B 963	79c	68c
2	250	52 B 988			30	32	52 B 964		

### TYPE 4AG AND 5AG STRAIGHT-ELEMENT FUSES

**Series 417000:**  $1\frac{1}{4} \times \frac{1}{2}$ ". \***Series 517000:**  $1\frac{1}{2} \times \frac{1}{2}$ ". Medium-lag, heavy-duty fuses. Shpg. wt., per pkg. 2 oz. 5 fuses per package.

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
2	250	52 B 113	38c	33c	* 2	250	52 B 137	47c	40c
3	250	52 B 114	38c	33c	* 3	250	52 B 138	47c	40c
5	32	52 B 115	32c	28c	* 4	32	52 B 139	47c	40c
10	32	52 B 134	32c	28c	* 5	32	52 B 140	44c	38c
15	32	52 B 135	32c	28c	* 10	32	52 B 141		
20	32	52 B 116	32c	28c	* 15	32	52 B 142		
30	32	52 B 119	32c	28c	* 20	32	52 B 143	44c	38c
40	32	52 B 132	38c	33c	* 30	32	52 B 145		

### LIMITED-CURRENT BAYONET FUSES

TV fuses for 346000 series bayonet-lock fuse holders only. Series 333000 are Slo-Blo; 332000 are regular. Shpg. wt., 2 oz. 5 fuses per pkg.

333000 Series (Slo-Blo N Type)					332000 Series (Regular C Type)				
Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
.25	125	52 B 167			.25	250	52 B 732		
.3	125	52 B 053	82c	70c	.3	250	52 B 168		
.4	125	52 B 730			.375	250	52 B 733	47c	40c
.5	125	52 B 162			.5	250	52 B 050		
.6	125	52 B 054			.75	250	52 B 169	47c	40c
.7	125	52 B 055			1.0	250	52 B 734	26c	22c
.75	125	52 B 731	82c	70c	1.0	250	52 B 735	26c	22c
1.0	125	52 B 164			2.0	250	52 B 051	26c	22c
1.25	125	52 B 166			2.5	250	52 B 163	26c	22c
1.6	125	52 B 056	76c	65c	7.0	125	52 B 052	35c	30c
2.0	125	52 B 057							

### TYPE SFE 32-VOLT AUTO FUSES

Series 307000. Medium-acting fuses. Made to sizes specified by S.A.E. U.L. Approved. Max. volts, 32.  $\frac{3}{16}$ " dia. 2 oz. per pkg. 6 fuses per pkg.

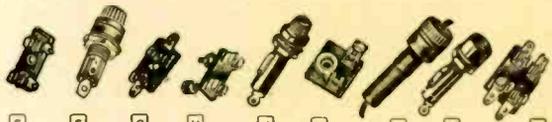
Amps	Stock No.	Length	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Length	Per Pkg.	20 Pkgs. or more, Per Pkg.
4	52 B 250	3/8"	17c	14c	14	52 B 265	1 1/4"	14c	11c
6	52 B 255	1/2"	17c	14c	20	52 B 270	1 1/4"	14c	11c
7 1/2	52 B 274	3/4"	17c	14c	30	52 B 275	1 1/2"	16c	15c
9	52 B 260	1/2"	16c	13c					

### TYPE 3AG PITGAL FUSES

**D** \*Series 315000. †Series 318000. Series 315000 are Slo-Blo; series 318000 are Fast.  $1\frac{1}{4} \times \frac{1}{2}$ ". Shpg. wt., per pkg. 2 oz. 5 fuses per pkg.

Amps	Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/4*	125	52 B 216	1.00	85c	1/4†	250	52 B 215	59c	50c
1/2*	125	52 B 282	1.00	85c	1/2†	250	52 B 279	59c	50c
3*	125	52 B 217	.94	80c	1†	250	52 B 928	44c	38c
4*	125	52 B 219	.79	68c					

### LITTELFUSE MOUNTINGS—EXTRACTOR TYPES



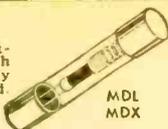
Fuse holders for every application. \*With fuse. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	For Fuses:	Description	EACH
41 B 720	341001	M	3AG, 3AB	Panel mount, screw slot	41c
41 B 721	371001	M	8AG	Panel mount, screw slot	41c
41 B 722	442001	J	3AG	Panel mount, thumb knob	82c
41 B 727	342001	J	3AG	Panel mount, thumb knob	41c
41 B 728	372001	J	3AG	Panel mount, thumb knob	41c
52 B 292	357001	G	3AG, 3AB	Single fuse, lug term.	12c
52 B 285	387001	G	8AG	Single fuse, lug term.	12c
52 B 294	356001	G			

# Buss Fuses and Accessories

## TYPE MDL FUSETRON FUSES

Long time-lag prevents needless blows from starting currents or surges. Operates instantly on high overloads or shorts. Thermal cutout operates slowly on low overloads. Size, 1 1/4 x 1/4". U.L. Approved. Shpg. wt., per pkg., 2 oz. 5 fuses per pkg.



MDL  
MDX

### 250 VOLTS MAX

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/100	53 B 441	1.06	.90	3/10	53 B 452		
1/32	53 B 442	.90	.80	4/10	53 B 453		
1/16	53 B 443	.78	.68	1/2	53 B 454		
1/10	53 B 444	.78	.68	6/10	53 B 455	78c	68c
15/100	53 B 450	.78	.68	8/10	53 B 456		
2/10	53 B 451	.78	.68	1	53 B 461		

### 125 VOLTS MAX

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1-1/4	53 B 462			2-1/2	53 B 465	59c	50c
1-6/10	53 B 463	73c	63c	2-8/10	53 B 466	59c	50c
2	53 B 464			1-1/2	53 B 465	73c	63c

### 32 VOLTS MAX

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
4	53 B 468			8	53 B 471		
5	53 B 469	59c	50c	10	53 B 472	59c	50c
6-1/4	53 B 470			15	53 B 473		

## TYPE MDX 125-VOLT FUSETRONS

Have same thermal delay action as Type MDL above, but open in approximately half the time. 1/2 second, 1 1/4 x 1/4". U.L. Approved. Shpg. wt. per pkg., 2 oz., per 100, 15 oz. 6 fuses per pkg.

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
4	53 B 503	69c	58c	6 1/2	53 B 505	69c	58c
5	53 B 504			7	53 B 506		

## FUSETRON TYPE T DUAL-ELEMENT FUSES

Dual-element plug-type fuses. Provide an additional measure of protection against "blowing" during motor starting cycle. 20, 25 and 30-ampere types are for use on appliance circuits or mains; 15-ampere fuse for smaller appliances. For up to 125 volts, AC or DC. U.L. Approved. Shpg. wt. per pkg., 5 oz. 4 fuses per pkg.



Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
15	53 B 521			25	53 B 523	30c	28c
20	53 B 522	30c	28c	30	53 B 524		

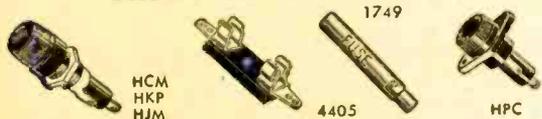
## TYPE W PLUG FUSES

Finest quality plug-type house fuses. Condition of fuse is visible at a glance—extremely large window area with white background behind fuse element shows when fuse is blown. Fine quality porcelain and first-cut mica used in construction. 125 volts max. Edison base. U.L. Approved. Shpg. wt., per pkg., 6 oz. 5 fuses per pkg.



Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
3	53 B 560			10	53 B 564		
5	53 B 561	30c	28c	15	53 B 565		
6	53 B 562			20	53 B 566	26c	24c
8	53 B 563			25	53 B 567		
				30	53 B 568		

## BUSS AND G.C. FUSE MOUNTINGS



HCM  
HKP  
HJM

1749

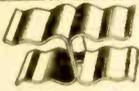
HPC

Provide a convenient way of mounting fuses on radio, TV, instrument, automobiles, etc. All are Buss, except "G-C" Fuse always easy to remove as it projects beyond holder body. †Screw terminals. Av. shpg. wt., 1 oz.

Stock No.	Type	For Fuses	NET	Stock No.	Type	For Fuses	NET
53 B 500	HPC	1 1/4 x 1/4"	.44	53 B 480	4405	1 1/4 x 1/4"	.12
53 B 477	HCM	1 1/4 x 1/4"	.41	53 B 481	4408	Double 4405	.24
53 B 475	HKP	1 1/4 x 1/4"	.29	41 B 735	1749†	2 1/2 x 1/4"	.14
53 B 478	HJM	1 1/4 x 1/4"	.29	41 B 737	4513†	1 1/4 x 1/4"	.33

## BUSS 4121 TWIN CLIPS FOR 1/4" FUSES

For replacement of pigtail TV fuses with standard snap-on type. No cutting or soldering. Less fuse. Shpg. wt. per box, 10 oz. 10 per pkg. 53 B 476. Per Pkg. 58c



## LITTELFUSE PHOSPHOR BRONZE FUSE CLIPS

Burnished nickel plate with fuse stop ears. 10 Clips Per Pkg. Wt., 5 oz.

Stock No.	For Fuse Types:	Per Pkg.	10 Pkgs., Per Pkg.
52 B 685	SFE, 3AG, 8AG, 3AB	.15	.10
52 B 686	4AG, 4AB	.29	.25
52 B 687	5AG High-voltage Midget	.35	.30
52 B 688	NEC-30 Fuses	.47	.40
52 B 689	Standard High-voltage	1.29	1.10

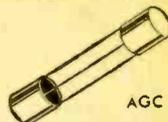
## LITTELFUSE 350130 SNAP-ON FUSE HOLDER

Double-ended fuse holder for fast replacement of "pig-tail" fuses. One side of holder clips onto blown fuse. New fuse fits into other side. Shpg. wt., 2 oz. 41 B 733, 10 or More, EACH 15c 1-9, NET EA. 18c



## AGC, MTH AND ABC FUSES

Low-resistance fuses providing high-speed action necessary to protect delicate instruments. Carry 110% of rated current; open in one hour at 135% of 250 volts max. U.L. Approved. 1 1/4 x 1/4". Wt., 100, 15 oz. 6 fuses per pkg.



AGC

### 250 VOLTS MAX

Amps	Mfr's Type	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Mfr's Type	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/4	AGC	53 B 420	59c	50c	1 1/2	AGC	53 B 427	24c	20c
1/2	AGC	53 B 421	59c	50c	2	AGC	53 B 428	24c	20c
3/4	AGC	53 B 422	39c	33c	3	AGC	53 B 429	21c	18c
1	AGC	53 B 423	39c	33c	4	MTH	53 B 430	29c	25c
1 1/2	AGC	53 B 424	39c	33c	5	MTH	53 B 431	29c	25c
2	AGC	53 B 425	39c	33c	6	MTH	53 B 432	29c	25c
3	AGC	53 B 426	24c	20c	8	ABC	53 B 433	49c	43c

### TYPE AGC 32-VOLT FUSES

For circuits operating at 32 volts or less. 1 1/4 x 1/4". U.L. Approved. Shpg. wt., 1 oz. per pkg. 6 fuses per pkg.

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
5	AGC 53 B 434	15c	13c	15	AGC 53 B 438	15c	13c
6	AGC 53 B 435	15c	13c	25	AGC 53 B 439	18c	15c
7 1/2	AGC 53 B 436	15c	13c	30	AGC 53 B 440	18c	15c
10	AGC 53 B 437	15c	13c				

## TYPE AGX FAST-ACTING FUSES

Capable of very high speed action for proper protection of valuable instruments. Specifications: will carry 100% load; open at 200% load within 5 seconds. U.L. Approved. \*Bridge construction of element. 1 1/4". Shpg. wt., per 5, 3 oz. 6 fuses per pkg.

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/4	250	53 B 513	.59	.50	1/200	250	53 B 508*	1.47	1.24
1/2	250	53 B 514	.39	.33	1	125	53 B 518*	.24	.20
3/4	250	53 B 515	.39	.33	2	125	53 B 520*	.24	.20
1	250	53 B 516	.39	.33	1/32	250	53 B 510*	1.18	1.00

## NEW TYPE S FUSTATS

Reliable time-delay plug fuses for circuits equipped with Fustat adapters. Physically designed to prevent overfusing; units cannot be replaced with fuses of higher value without changing adapter. Do not blow on motor starting. Allow circuit loading to capacity. Color-coded. Body is porcelain. 125 v. max. Wt. per pkg. 2 oz. 4 fuses per pkg.

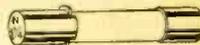


Amps	Stock No.	Body Color	Amps	Stock No.	Body Color
15	42 B 900	Blue	25	42 B 902	Green
20	42 B 901	Orange	30	42 B 903	Green

NET PER PKG. 43c  
20 or More Pkgs., PER PKG. 40c

## TYPE N TIME DELAY FUSES

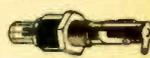
Slow-blowing glass tube fuses. Time-delay action; unaffected by harmless surges which might cause ordinary fuses to blow. 1/4 and 1/2 amp fuses. 1/4 x 1/4"; others, 1/4 x 1/2". 250 volts maximum. Av. shpg. wt. per pkg., 2 oz. 5 fuses per pkg.



Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/4	53 B 535	82c	70c	2	53 B 538	76c	65c
1/2	53 B 536	82c	70c	3-2/10	53 B 539	71c	60c
1-6/10	53 B 537	76c	65c	4	53 B 540	71c	60c

## TYPE HKL AND HKR INDICATOR FUSEHOLDERS

For 1 1/4 x 1/4" fuses. HKL has neon indicator which lights when fuse is blown. HKR for use in 100 to 250-volt circuits. HKR is for 32-volt circuits; has incandescent indicator. U.L. Approved. 1 oz. 53 B 501. Type HKL. NET. 1.26 53 B 502. Type HKR. NET. 2.06



## NEW GLD INDICATING FUSES

Fiber tube, silver-plated indicating pin extends from end of fuse when fuse is blown. Indicating pin actuates signal when used with HKA fuse holder listed below. 125 volts. 1 1/4 x 1/4". Wt. 2 oz. 5 fuses per pkg.

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/4	42 B 904	1.65	1.40	3	42 B 907	1.47	1.25
1/2	42 B 905	1.47	1.25	5	42 B 908	1.47	1.25
2	42 B 906	1.47	1.25				

Type HKA Lamp Indicating Fuse Holder. For above fuses. 2 oz. 42 B 909. NET EACH. 2.76

## FUSETRON TYPE FNM LONG TIME LAG FUSES

Avoid needless blows from starting currents or surges. Fuse link operates only on high overloads or short-circuits. Thermal cutout functions on low overloads. Thermal cutout cannot operate quickly on any load—provides long time lag. Dual-element type. Fiber tube. U.L. Approved. 1 1/2 x 1/2". 250 v. max. except 125 v. 5 oz. 10 fuses per pkg.



Amps	Stock No.	Per Pkg.	10 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	10 Pkgs. or more, Per Pkg.
1	53 B 485			4	53 B 491		
1 1/4	53 B 486			5	53 B 492		
1-6/10	53 B 487	2.32	1.94	6 1/2	53 B 493	2.32	1.94
2	53 B 488			10	53 B 494		
2 1/2	53 B 489			15	53 B 495		
3-2/10	53 B 490						

# Potter and Brumfield Relays

## PR HEAVY DUTY POWER RELAYS



AV types have contacts rated at 15 amps; D types rated at 15 amps except 3D types rated 20 amps. AC coils for 60 cycles. ST units normally open. \*Has extra SPDT contacts rated at 5 amps. Sizes: PR3, PR5: 2½x2½x2½; PR7: 2½x2½x2½; Av. shpg. wt., 12 oz.

No.	Type	Volts	Action	NET
75 P 846	PR3AV	6 AC	SPST	3.95
75 P 847	PR5AV	6 AC	SPDT	4.15
75 P 848	PR7AV	6 AC	DPST	4.65
75 P 849	PR11AV	6 AC	DPDT	5.15
76 P 750	PR5D	6 DC	SPDT	4.15
76 P 508	PR11D	6 DC	DPDT	6.15
76 P 751	PR3AV	12 AC	SPST	3.95
75 P 878	PR5AV	12 AC	SPDT	4.15
75 P 879	PR7AV	12 AC	DPST	4.65
76 P 752	PR11AV	12 AC	DPDT	6.15
76 P 509	PR3D	12 DC	SPST	3.95
76 P 510	PR5D	12 DC	SPDT	4.15
76 P 511	PR7D	12 DC	DPST	4.65
76 P 512	PR11D	12 DC	DPDT	6.15
75 P 961	PR3AV	24 AC	SPST	3.95
75 P 962	PR5AV	24 AC	SPDT	4.15
75 P 963	PR7AV	24 AC	DPST	4.65
75 P 964	PR11AV	24 AC	DPDT	6.15
76 P 753	PR11ALS	24 AC	DPDT	7.75
76 P 754	PR5D	24 DC	SPDT	4.15
76 P 513	PR7D	24 DC	DPST	4.65
76 P 514	PR11D	24 DC	DPDT	6.15
75 P 600	PR3AV	115 AC	SPST	3.95
75 P 602	PR5AV	115 AC	SPDT	4.15
75 P 603	PR7AV	115 AC	DPST	4.65
75 P 663	PR11AV	115 AC	DPDT	6.15
76 P 565	PR11ALS	115 AC	DPDT	7.75
75 P 968	PR3D	110 DC	SPST	3.95
75 P 969	PR5D	110 DC	SPDT	4.75
75 P 970	PR7D	110 DC	DPST	5.25
75 P 971	PR11D	110 DC	DPDT	6.75
75 P 652	PR3AV	230 AC	SPST	4.30
75 P 656	PR5AV	230 AC	SPDT	4.55
75 P 654	PR7AV	230 AC	DPST	5.05
75 P 655	PR11AV	230 AC	DPDT	6.55
76 P 756	PR11ALS	230 AC	DPDT	8.15

## MR MEDIUM-DUTY POWER RELAYS



For general applications. Silver contacts rated 8 amps except MR3 types rated 10 amps. AC coils for 60 cycles. ST actions normally open. Size: MR3 and MR5, 1½x1½x1½; MR11, 2x2½x1½; MR14, 1½x2½x1½; Av. wt., 4 oz.

No.	Type	Volts	Action	NET
75 P 975	MR3A	6 AC	SPST	3.65
75 P 976	MR5A	6 AC	SPDT	3.30
75 P 977	MR11A	6 AC	DPDT	4.60
75 P 978	MR3D	6 DC	SPST	3.65
75 P 979	MR5D	6 DC	SPDT	3.05
75 P 980	MR11D	6 DC	DPDT	4.40
75 P 981	MR14D	6 DC	3PDT	5.20
75 P 982	MR5A	12 AC	SPDT	3.30
76 P 758	MR11A	12 AC	DPDT	4.60
76 P 759	MR14A	12 AC	3PDT	5.55
75 P 187	MR3D	12 DC	SPST	3.35
75 P 188	MR5D	12 DC	SPDT	3.05
75 P 189	MR11D	12 DC	DPDT	4.40
75 P 191	MR14D	12 DC	3PDT	5.20
75 P 978	MR3A	24 AC	SPST	3.65
75 P 979	MR5A	24 AC	SPDT	3.30
75 P 981	MR11A	24 AC	DPDT	4.60
75 P 982	MR14A	24 AC	3PDT	5.55
75 P 988	MR3D	24 DC	SPST	3.35
75 P 989	MR5D	24 DC	SPDT	3.05
75 P 991	MR11D	24 DC	DPDT	4.40
75 P 992	MR14D	24 DC	3PDT	5.20
75 P 664	MR3A	115 AC	SPST	3.65
75 P 664	MR5A	115 AC	SPDT	3.30
75 P 616	MR11A	115 AC	DPDT	4.60
75 P 617	MR14A	115 AC	3PDT	5.55
76 P 760	MR5D	110 DC	SPDT	3.05
76 P 761	MR11D	110 DC	DPDT	4.90
76 P 762	MR14D	110 DC	3PDT	5.70
75 P 657	MR5A	230 AC	SPDT	3.70
75 P 659	MR11A	230 AC	DPDT	5.00
75 P 974	MR14A	230 AC	3PDT	5.95

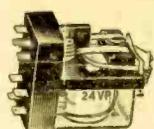
## MOTOR STARTING RELAYS



For starting capacitor-start, induction-run motors. Armature gap may be altered to change pull-in. All types are normally closed. MS2 types rated at ¾HP; MS4 types rated at 3HP. \*Have double-break contacts. Meet UL requirements. 2½x2½x2½. Av. wt., 5 oz.

No.	Type	Volts	Action	NET
76 P 763	MS2AV	115 AC	SPST	3.40
76 P 764	MS4AV	115 AC	SPST	3.95
76 P 765	MS2AV	230 AC	SPST	3.85
76 P 766	MS4AV	230 AC	SPST	4.35

## AB APPLIANCE RELAYS



Ideal for appliance applications requiring long-life and quiet operation. DPDT silver contacts rated at 10 amps. Size: 1½x1½x1½. Have 2—No. 8-32 tapped mounting holes on 1½" centers. \*UL approved. Av. wt., 8 oz.

No.	Type	Volts	NET
75 P 399	AB11AV*	6 AC	5.05
76 P 767	AB11D	12 DC	4.95
76 P 768	AB11D	12 DC	4.95
75 P 418	AB11AV*	24 AC	5.05
76 P 769	AB11D	24 DC	4.95
75 P 419	AB11AV*	115 AC	5.05
75 P 449	AB11D	110 DC	5.45
75 P 448	AB11AV*	230 AC	5.45

## ABC MEDIUM POWER RELAYS



For small motors, industrial controls, etc. Have DPDT silver contacts rated at 10 amps. Snap-on and screw terminals are supplied. Has dust cover. Size above chassis: 2½x3x1½. Single No. 8-32 mounting stud ¾" long and coating tab. \*UL Approved. Av. shpg. wt., 7 oz.

No.	Type	Volts	NET
75 P 431	ABC11AV*	6 AC	6.10
76 P 770	ABC11D	6 DC	6.00
76 P 771	ABC11D	12 DC	6.00
76 P 432	ABC11AV*	24 AC	6.10
76 P 772	ABC11D	24 DC	6.00
75 P 433	ABC11AV*	115 AC	6.10
75 P 465	ABC11D	110 DC	6.50
75 P 464	ABC11AV*	230 AC	6.50

## MB MINIATURE DC POWER RELAYS



Rugged telephone type relays. Designed for very high current applications. Contact arms are heavy brass with large silver contacts; solder terminals. Rated 60 amps SPST double break, normally open. Size: 1½x1½x1½. Mounting: ¼ No. 3-48 tapped holes on ¾x¾" centers. Av. shpg. wt., 5 oz.

No.	Type	Volts	NET
75 P 059	MB3D	6v. DC	5.15
75 P 065	MB3D	12v. DC	5.25
75 P 066	MB3D	24v. DC	5.25
75 P 067	MB3D	110v. DC	5.65

## MC SERIES RELAYS



Ideal for RF switching applications—have only 1.5 mmfd maximum capacitance between SPDT palladium contacts. Rated 2 amps. Withstand 100 vibration up to 300 cps; 25G shock. 1½x1½x1½. Av. wt., 2 oz.

No.	Type	Volts	NET
76 P 741	MC5A	6 AC	4.75
76 P 742	MC5D	6 DC	4.20
76 P 743	MC5D	12 DC	4.20
76 P 744	MC5D	24 DC	4.20
76 P 745	MC5A	115 AC	4.75

## LM PLATE CIRCUIT RELAYS



For photoelectric and similar circuits. Adjustable for voltages or currents. Silver contacts rated 5 amps. 115 v., 60 cycles, non-inductive load. 100 millivolt sensitivity for single-pole, 200mw for double-pole. \*SPDT; †DPDT. Size: LM5, 2½x1½x2½; LM11, 2½x2½x2½. Av. shpg. wt., 9 oz.

Stock No.	Type	Ohms	Ma.	NET
75 P 673	LM5*	2500	6.3	3.70
75 P 674	LM5*	5000	4.5	3.90
75 P 675	LM5*	10,000	3.2	4.20
75 P 682	LM11†	2500	9.0	5.30
75 P 683	LM11†	5000	6.3	5.50
75 P 684	LM11†	10,000	4.5	6.05

## RELAY CASES



For PR Relays. Steel base with aluminum cover. 4—knockouts for ½" conduit. Mtg. 3—No. 10 holes on 1½x1½" centers. 3½x5½x3½. Shpg. wt., 1 lb.

76 P 777. NET. 2.85  
For MR and MS Relays. Steel base with aluminum cover. 2—knockouts for ½" conduit. Mounts on pre-drilled holes. Wt., 1 lb.  
76 P 778. NET. 1.80

## AG SHOCKPROOF RELAYS



Shockproof relays in dust-proof covers. Screw terminals, phenolic bases. Silver DPDT contacts rated 5 amps. Size: 2½x3½x2½. 2—½" mounting holes on 2½x3½" diagonal centers. Wt., 9½ oz.

No.	Type	Volts	NET
76 P 773	AG11D	24 DC	8.65
76 P 774	AG11AV	115 AC	8.75

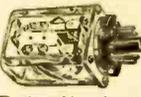
## KA GENERAL-PURPOSE RELAYS



Compact, general purpose relays for transmitters, power supply control, etc. Moisture resistant. Heavy-duty contacts rated at 5 amps. AC coils for 60 cycles. AC types UL approved. 6-32 mounting stud. 1½x1½x1½. Wt., 6 oz.

No.	Type	Volts	Action	NET
75 P 158	KASAV	6 AC	SPDT	3.05
75 P 159	KAI1AV	6 AC	DPDT	3.05
75 P 160	KAI4AV	6 AC	3PDT	4.05
75 P 167	KASD	6 DC	SPDT	2.90
75 P 168	KAI1D	6 DC	DPDT	3.25
75 P 169	KAI4D	6 DC	3PDT	3.65
76 P 780	KASAV	12 AC	SPDT	3.05
76 P 781	KAI1AV	12 AC	DPDT	3.65
76 P 779	KAI4AV	12 AC	3PDT	4.05
75 P 170	KASD	12 DC	SPDT	2.90
75 P 171	KAI1D	12 DC	DPDT	3.25
75 P 172	KAI4D	12 DC	3PDT	3.65
75 P 161	KASAV	24 AC	SPDT	3.05
75 P 162	KAI1AV	24 AC	DPDT	3.65
75 P 163	KAI4AV	24 AC	3PDT	4.05
75 P 173	KASD	24 DC	SPDT	2.90
75 P 174	KAI1D	24 DC	DPDT	3.25
75 P 185	KAI4D	24 DC	3PDT	3.65
75 P 164	KASAV	115 AC	SPDT	3.05
75 P 165	KAI1AV	115 AC	DPDT	3.65
75 P 166	KAI4AV	115 AC	3PDT	4.05
76 P 782	KASD	110 DC	SPDT	3.50
76 P 783	KAI1D	110 DC	DPDT	3.95
76 P 525	KAI4D	110 DC	3PDT	4.25
76 P 783	KAI1AV	230 AC	DPDT	4.05

## KRP ENCLOSED TYPE RELAYS



Completely enclosed mid-range relays in high-impact, transparent, polystyrene cases. Fully dust-proof and weather-proof for assurance of long life and dependable operation.

Designed to plug into standard octal or 11-pin sockets (see section of socket listings elsewhere in catalog for proper mounting accessories).

Heavy silver contacts rated at 5 amps non-inductive load except units with following type number which are rated at 10 amps. 1½x1½x2½. Av. shpg. wt., 5 oz.

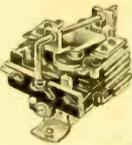
No.	Type	Volts	Action	NET
75 P 214	KRP5A	6 AC	SPDT	5.20
76 P 746	KRP5AG	6 AC	SPDT	5.30
75 P 920	KRP1A	6 AC	DPDT	5.75
76 P 747	KRP11AG	6 AC	DPDT	5.95
75 P 091	KRP1A	6 AC	3PDT	7.15
76 P 748	KRP14AG	6 AC	3PDT	7.45
76 P 217	KRP5D	6 DC	SPDT	5.15
76 P 749	KRP5DG	6 DC	SPDT	5.25
75 P 922	KRP11D	6 DC	DPDT	5.70
76 P 819	KRP11DG	6 DC	DPDT	5.90
75 P 094	KRP14D	6 DC	3PDT	7.10
76 P 981	KRP14DG	6 DC	3PDT	7.40
76 P 524	KRP11A	12 AC	DPDT	5.75
76 P 982	KRP11AG	12 AC	DPDT	5.95
76 P 525	KRP14A	12 AC	3PDT	7.15
76 P 983	KRP14AG	12 AC	3PDT	7.45
75 P 984	KRP5D	12 DC	SPDT	5.15
75 P 985	KRP5DG	12 DC	SPDT	5.20
75 P 246	KRP11D	12 DC	DPDT	5.70
76 P 985	KRP11DG	12 DC	DPDT	5.90
75 P 095	KRP14D	12 DC	3PDT	7.10
76 P 986	KRP14DG	12 DC	3PDT	7.40
75 P 215	KRP5A	24 AC	SPDT	5.20
76 P 987	KRP5AG	24 AC	SPDT	5.30
75 P 216	KRP11A	24 AC	DPDT	5.75
76 P 988	KRP11AG	24 AC	DPDT	5.95
75 P 092	KRP14A	24 AC	3PDT	7.15
76 P 989	KRP14AG	24 AC	3PDT	7.45
76 P 245	KRP5D	24 DC	SPDT	5.15
76 P 990	KRP5DG	24 DC	SPDT	5.25
75 P 247	KRP11D	24 DC	DPDT	5.70
76 P 991	KRP11DG	24 DC	DPDT	5.90
75 P 096	KRP14D	24 DC	3PDT	7.10
76 P 992	KRP14DG	24 DC	3PDT	7.40
75 P 213	KRP5A	115 AC	SPDT	5.20
76 P 993	KRP5AG	115 AC	SPDT	5.30
75 P 921	KRP11A	115 AC	DPDT	5.75
76 P 994	KRP11AG	115 AC	DPDT	5.95
76 P 095	KRP14A	115 AC	3PDT	7.15
76 P 995	KRP14AG	115 AC	3PDT	7.45
76 P 996	KRP5DG	110 DC	SPDT	5.85
76 P 352	KRP11D	110 DC	DPDT	6.30
76 P 997	KRP11DG	110 DC	DPDT	6.50
76 P 998	KRP14D	110 DC	3PDT	7.70
76 P 999	KRP14DG	110 DC	3PDT	8.00
76 P 597	KRP11A	230 AC	DPDT	6.15

# Potter and Brumfield, Advance Relays

## POTTER AND BRUMFIELD RELAYS

### TYPE PC IMPULSE RELAYS

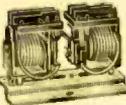
Compact, pulse operated relay. For on-off or reversing applications. Pulses may be as short as 30 milliseconds at 5 cps. Gold-plated silver contacts, rated 7.5 amperes at 115 volts AC, resistive load. Size: 1 3/4" x 2 1/2" x 2 3/4". AC is for 50-60 cycles. Shpg. wt., 10 oz.



No.	Type	Action	Volts	NET
76 P 504	PC11A	DPDT	6 AC	5.25
76 P 505	PC11A	4PDT	6 AC	7.25
76 P 726	PC11D	DPDT	6 DC	5.10
76 P 727	PC17D	4PDT	6 DC	7.10
76 P 728	PC11A	DPDT	12 AC	5.25
76 P 502	PC11A	DPDT	24 AC	5.25
76 P 503	PC11A	4PDT	24 AC	7.25
76 P 506	PC17D	DPDT	24 DC	5.10
76 P 507	PC17D	4PDT	24 DC	7.10
76 P 500	PC11A	DPDT	115 AC	5.25
76 P 501	PC17A	4PDT	115 AC	7.25
76 P 729	PC11D	DPDT	110 DC	5.60
76 P 730	PC17D	4PDT	110 DC	7.60

### TYPE KB LATCHING RELAYS

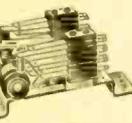
Ideal for memory work and overload applications. Operates on momentary impulse to either coil. Release and trip coils must be used with same voltage. Size: 2 1/4" x 1 1/2" x 2 1/2" high. Mounts with 4 DPDT holes on 1 1/2" centers. Contacts rated at 5 amperes, except \*10 amps. Indicates U.L. Approved. Shpg. wt., 10 oz.



Stock No.	Type	Action	Volts	NET
75 P 126	KB17A	4PDT†	6 AC	10.00
75 P 129	KB17A	4PDT†	6 DC	9.00
76 P 540	KB17A	4PDT†	12 AC	10.00
76 P 545	KB17D	4PDT†	12 DC	9.00
75 P 215	KB17A	4PDT†	24 AC	10.00
76 P 541	KB17AG	4PDT*	24 AC	10.10
76 P 542	KB23A	6PDT*	24 AC	12.00
75 P 128	KB17D	4PDT	24 DC	9.00
75 P 124	KB17A	4PDT†	115 AC	10.00
76 P 543	KB17AG	4PDT*	115 AC	10.10
76 P 544	KB23A	6PDT†	115 AC	12.00
75 P 127	KB17D	4PDT	110 DC	10.20
76 P 732	KB17A	4PDT†	230 AC	10.80
76 P 731	KB17AG	4PDT*	230 AC	10.90
76 P 733	KB23A	6PDT†	230 AC	12.80

### AP RATCHET IMPULSE RELAYS

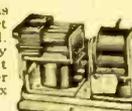
An extremely fast acting relay for applications requiring on-off or reversing action on alternate impulses. Operates on impulses as short as 20 microsecond intermittent duty. Contacts are 3/8" fine silver, rated 5 amps. Coils are wound on molded bobbins. Phenolic cams, hardened steel pawl and ratchet with pin hinged armature. Tinned solder terminals. Mounting: Three 3/8" diameter holes on 3/4" x 3/4" triangular centers. Size: 2 1/4" x 2 1/4" x 3 1/4". Weight, 7 oz. AC is for 50-60 cycles. Shpg. wt., 12 oz.



Stock No.	Type	Volts	Action	NET
75 P 997	AP11A	6 AC	DPDT	8.30
75 P 988	AP17A	6 AC	4PDT	10.00
76 P 585	AP11D	6 DC	DPDT	8.30
76 P 586	AP17D	6 DC	4PDT	10.00
76 P 581	AP11A	12 AC	DPDT	8.30
76 P 582	AP17A	12 AC	4PDT	10.00
76 P 587	AP11D	12 DC	DPDT	8.30
76 P 588	AP17D	12 DC	4PDT	10.00
75 P 995	AP11A	24 AC	DPDT	8.30
75 P 996	AP17A	24 AC	4PDT	10.00
75 P 997	AP11D	24 DC	DPDT	8.30
75 P 998	AP17D	24 DC	4PDT	10.00
75 P 993	AP11A	115 AC	DPDT	8.30
75 P 994	AP17A	115 AC	4PDT	10.00
76 P 589	AP11D	110 DC	DPDT	8.95
76 P 590	AP17D	110 DC	4PDT	10.65
76 P 583	AP11A	230 AC	DPDT	8.75
76 P 584	AP17A	230 AC	4PDT	10.45

### GC OVERLOAD RELAYS

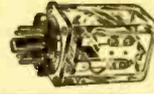
For overload protection. Has 6 or 115 volt 60 cycle AC reset coil and 50 ma DC trip coil. Rheostat (not included) may be used to set trip current from 100 to 1000 ma. Silver contacts rated at 5 amp. 2 1/4" x 1 1/2" x 8 oz.



Stock No.	Mfr's Type	Volts	Action	NET
76 P 787	GC11A	6 AC	DPDT	8.50
76 P 788	GC11A	115 AC	DPDT	8.50

### KCP ENCLOSED RELAYS

Plate circuit relays. In high-impact, weatherproof polystyrene cases. Fit standard octal or 11-pin socket (below). 2 amp resistive, silver contacts. 1 1/2" sq. by 2" 5 oz.



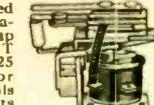
Stock No.	KCPs	Action	Ohms	Ma.	NET
75 P 287	KCP5	SPDT	2500	7.2	5.60
75 P 288	KCP5	SPDT	5000	5.0	5.70
75 P 289	KCP5	SPDT	10,000	3.6	6.10
75 P 290	KP11	DPDT	2500	10.0	6.00
75 P 291	KP11	DPDT	5000	7.2	6.10
75 P 292	KP11	DPDT	10,000	5.0	6.50
75 P 087	KCP4	3PDT	2500	12.3	7.40
75 P 098	KCP4	3PDT	5000	8.7	7.50
75 P 099	KCP4	3PDT	10,000	6.1	7.90

**Amphenol 146-103 Socket.** For KRP and KCP relays. For all relays except KRP14 and KCP14. Barrier type. U.L. approved. Mfg. centers, 1 1/2" x 5 oz. **96c**

**Type 77MIP11 Socket.** For KRP14 and KCP14 types. Molded bakelite. Mounts in 1/2" hole. With retainer ring. Wt., 2 oz. **13c**

### MP SNAP ACTION RELAYS

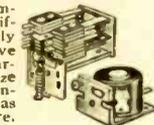
Snap action relays designed for starting split-phase capacitor-type motors of up to 1/2-hp capacity. SPDT silver contacts rated 25 amps—large enough for many applications. AC coils are for 60 cycles. Mounts with 4-6-32 screws, 3/4" x 3/8" ctrs. Size, 1 1/2" x 2 1/4" x 1/4". Av. shpg. wt., 4 oz.



Stock No.	Type	Volts	NET EACH
75 P 005	MP5A	6V AC	5.70
75 P 006	MP5A	24V AC	
75 P 007	MP5A	115V AC	
75 P 008	MP5A	230V AC	5.95
75 P 009	MP5D	110V DC	6.50

### GP "PIC & BUILD" SERIES

Units available can be combined to produce twenty different relays, each easily converted to an alternative sensitivity or switching arrangement in minutes. Size of assemblies relay and general specifications same as GA series listed elsewhere. Av. shpg. wt., 4 oz.



Stock No.	Mfr's Type	Item	NET
76 P 333	GPA	6 v. AC Coil	1.55
76 P 337	GPD	6 v. DC Coil	2.00
76 P 539	GPA	12 v. AC Coil	1.55
76 P 338	GPD	12 v. DC Coil	2.00
76 P 334	GPA	24 v. AC Coil	1.55
76 P 339	GPD	24 v. DC Coil	2.00
76 P 335	GPA	115 v. AC Coil	1.55
76 P 340	GPD	110 v. DC Coil	3.00
76 P 346	GPA	230 v. AC Coil	2.00
76 P 341	GPD	2500-ohm Coil	1.45
76 P 342	GPD	10,000-ohm Coil	2.00
76 P 343	GP11	DPDT Switch	1.60
76 P 344	GP17	4PDT Switch	2.80

### KT ANTENNA SWITCHING RELAYS

For both receivers and transmitters. Designed for RF applications; glass base insulation. Will switch 300-ohm line. All are DPDT. Mfg.: 6-32 stud. Fine silver, 5 amp contacts. 1 1/2" x 1 1/2" x 1 1/2". Shpg. wt., 2 oz.



Stock No.	Type	Volts	NET EACH
76 P 373	KT11A	6 AC	3.50
76 P 374	KT11A	115 AC	
76 P 375	KT11D	6 DC	
76 P 376	KT11D	12 DC	

### INT'L REC. CONTACT PROTECTORS

Fiber cartridge type. Reduce wear from inductive kick-back voltage in DC circuits. Av. wt., 3 oz.



Stock No.	Mfr's Type	DC Volts	Max. Current	Size	NET EACH
76 P 171	S1V1P	15	22	250 3/8 x 3/8"	.89
76 P 172	S2V1P	23	44	250 3/8 x 3/8"	.90
76 P 173	S3V2P	45	66	250 3/8 x 3/8"	1.07
76 P 174	S4V2P	67	88	250 3/8 x 3/8"	1.26
76 P 175	S5V2P	89	110	250 3/8 x 3/8"	1.24
76 P 176	S6V2P	111	132	250 3/8 x 1/2"	1.25
76 P 177	S7V2P	133	154	250 3/8 x 1/2"	1.26
76 P 178	S1V1P	15	22	600 3/8 x 3/8"	.94
76 P 179	S2V1P	23	44	600 3/8 x 3/8"	.94
76 P 180	S3V2P	45	66	600 3/8 x 3/8"	1.14
76 P 181	S4V2P	67	88	600 3/8 x 3/8"	1.14
76 P 182	S5V2P	89	110	600 3/8 x 3/8"	1.36
76 P 183	S6V2P	111	132	600 3/8 x 1/2"	1.37
76 P 184	S7V2P	133	154	600 3/8 x 1/2"	1.38

## ADVANCE RELAYS

### TYPE AM RELAYS

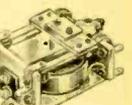
Compact "transmit-receive" antenna relays. For low-power RF use. DPDT silver contacts rated 2 amps at 115 VAC or 6.5 VDC resistive. Mounting stud. Size, 1 1/2" x 1 1/2" x 1 1/2". Shpg. wt., 6 oz.



Stock No.	Mfr's Type	Volts	NET
76 P 624	AM/2C/6VA	6 v. AC	4.70
76 P 625	AM/2C/115VA	6 v. DC	4.20
76 P 626	AM/2C/12VD	12 v. DC	4.20
75 P 644	AM/2C/115VA	115 v. AC	5.05

### TYPE AH RELAYS

Antenna changeover relay. Specifically designed for RF operation. Features low-loss dielectric insulation. Ideal for use in compact installations. Handles loads up to 500 watts. DPDT contacts. \*Indicates auxiliary SPDT contacts. positive action—will operate in any position. Has two tapped mounting holes; 6-32 NC-2; 2" centers. Overall size, 1 1/2" x 1 1/2" x 2 1/4". Wt., 6 oz.



Stock No.	Mfr's Type	Volts	NET
76 P 627	AH/2C/6VA	6 v. AC	13.00
76 P 628	AH/2C/115VA	6 v. DC	11.75
76 P 922	AH/2C/12VD	12 v. DC	11.75
76 P 628	AH/2C/115VA	115 v. AC	13.00
76 P 629	AH/2C/115VA	115 v. AC	14.25

### TYPE SO RELAYS

Extremely sensitive, adjustable, SPDT DC relays. Miniature size. SPDT use in extremely small spaces. Excellent for transistor applications. Feature sensitivity and versatility equal to relays costing three times as much. Standard adjustment is 10 mw, can be adjusted to as low as 2 mw. Maximum coil rating 3 watts. Contacts rated 1.5 amps, 28 v. DC, 115 v. AC resistive. Overall size, 1 1/2" x 1 1/2" x 1 1/4". Av. shpg. wt., 3 oz.



Stock No.	Mfr's Type	Ohms	Ma.	NET
76 P 890	SO/1C/1000D	1000	6.2	5.45
76 P 261	SO/2C/4000D	4000	3.2	5.75
76 P 632	SO/1C/6500D	6500	6.5	6.35
76 P 263	SO/1C/10,000D	10,000	2.0	6.70

### TYPE CB COAXIAL RELAYS

For 52-ohm RG cables at RF outputs of up to 800 watts on lines with low SWR. Maximum loss less than 1.08; loss at 150 mc. Extremely low loss at very high frequencies. Internal contacts are made of heavy quarter-inch fine silver. SPDT internal contacts directly connected to Amphenol 83-1B connector. Designed to operate equally well in all positions. \*SPDT with external DPDT contacts for auxiliary circuits. Two tapped mounting holes, 6-32 NC-2; 750° centers. 1 1/2" x 1 1/2" x 3 1/4". Shpg. wt., 11 oz.



Stock No.	Mfr's Type	Action	Volts	NET
76 P 645	CB/1C/115A	SPDT*	115 v. AC	12.5
75 P 628	CB/1C/2C/115A	SPDT*	115 v. AC	13.25
76 P 250	CB/1C/6VD	SPDT*	6 v. DC	12.00
76 P 252	CB/1C/2C/6VD	SPDT*	6 v. DC	13.00
76 P 917	CB/1C/12VD	SPDT*	12 v. DC	12.00
76 P 918	CB/1C/2C/12VD	SPDT*	12 v. DC	13.00
76 P 919	CB/1C/24VD	SPDT*	24 v. DC	12.00
76 P 920	CB/1C/2C/24VD	SPDT*	24 v. DC	13.00

### TYPE CE COAXIAL RELAYS

For coaxial line switching where space is limited. Designed for 52 ohm lines but may be used with other impedances. Ideal for aircraft, marine, experimental and fixed-station applications. Features extremely low standing wave ratio. Offer dependable continuous-duty operation in any position. Internal SPDT contacts rated at 2 amps. \*SPDT with external DPDT contacts for auxiliary circuits. 2 tapped mtg. holes, 6-32 NC-2; 750° centers. Overall size, 1 1/2" x 2 1/2" x 2 1/4". Shpg. wt., 6 oz.



Stock No.	Mfr's Type	Action	Volts	NET
76 P 925	CE/1C/115VA	SPDT	115 v. AC	13.20
76 P 926	CE/1C/2C/115VA	SPDT	115 v. AC	14.35
76 P 921	CE/1C/6VD	SPDT*	6 v. DC	2.90
76 P 922	CE/1C/2C/6VD	SPDT*	6 v. DC	3.75
76 P 923	CE/1C/12VD	SPDT*	12 v. DC	2.90
76 P 924	CE/1C/2C/12VD	SPDT*	12 v. DC	3.75

# Guardian, Dow-Key and Amperite Relays

## GUARDIAN RELAYS AND SOLENOIDS



### UNIVERSAL "200" SERIES

Universal interchangeable parts for assembling custom relays. Listings include AC, DC, and plate coils, and switch contact assemblies. Complete relay requires one coil and one contact assembly. For additional contacts use the contact switch parts kit. Contact ratings given are at 115 v. 60 cycle AC, non-inductive load. Use two 6-32 screws for mounting. Overall size: With standard contact assembly 2 1/4 x 1 1/4 x 1/4"; midjet contact assembly, 2 1/4 x 1 1/4 x 1/4". Av. shpg. wt., 4 oz.

AC Coils			DC Coils		
Stock No.	Volts	NET EACH	Stock No.	Volts	NET EACH
75 P 709	6	1.75	75 P 713	6	1.90
75 P 710	12	1.75	75 P 714	12	1.90
75 P 711	24	1.75	75 P 715	24	1.90
75 P 712	115	2.05	75 P 716	32	1.90
75 P 888	230	2.70	75 P 717	110	2.50

75 P 779, Type 200-5000 D, 5000-ohm plate coil. EACH ..... 2.20

### SERIES 200 SWITCH CONTACT ASSEMBLIES

Stock No.	Mfr's Type	Description	NET EACH
75 P 707	200-1	SPDT contact assembly, 8 amps.	1.50
75 P 708	200-2	DPDT contact assembly, 8 amps.	2.00
75 P 724	200-4	DPDT contact assembly, 12.5 amps.	2.25
75 P 889	200-5	4PDT contact assembly, 8 amps.	3.50
75 P 718	200-M1	SPDT midjet contact assembly, 8 amps.	1.40
75 P 719	200-M2	DPDT midjet contact assembly, 8 amps.	1.75
75 P 826	200-M5	4PDT midjet contact assembly, 8 amps.	2.85

Type 200-M3, Switch parts kit—adds up to 2 poles to 200-M1, 200-M2, 75 P 725, NET ..... 1.50

Type 200-3, Switch parts kit—adds up to 2 poles to 200-1, 200-2, 75 P 730, NET ..... 1.50

### RC-100 LOCKING RELAYS

Locking relays for break-in control; phone to CW switching etc. Momentary coil energization locks contacts. Each impulse reverses contacts. 1/2" silver contacts are rated 12.5 amps; handle 1500-watt non-inductive load at 60 cycle AC; 1000-watt inductive load at 60 cycle AC. Overall size, 2 1/4 x 2 1/4 x 3/4". Av. shpg. wt., 12 oz.

Stock No.	Type	Contacts	Volts	NET
75 P 727	RC-100-AR	4PST	115	6.00
75 P 827	RC-100-BR	SPDT & DPST	115	6.25
76 P 322	RC-100-CR	SPDT	115	5.75
75 P 887	RC-100-GR	DPDT	115	5.85

### X-300-ER OVERLOAD RELAY

Protects against surges or continuous overload. Has remote electrical reset and overload adjustment. Adjustable from 250-750 ma., DC 3000 volt insulation. Auxiliary contacts for pilot light indicates "overload" or "clear" position. Excellent for industrial panel installation for remote protection of machines and replacing fuses. Contacts rated 1500 w. non-inductive; 1 kw inductive, at 115 v. 60 cycles. 2000 volt insulation. 4 1/2 x 1 1/2 x 2 1/2". Shpg. wt., 1 1/4 lbs. 75 P 640, NET ..... 8.85

### DOW-KEY COAX ANTENNA RELAYS

Type DKC-G. Precision-built coaxial antenna relays. Re-designed magnet provides thrust pressure in excess of 200 grams—prevents intermittent failure in closing of receiver circuit. Shielded magnet, AC type completely free of hum or chatter. Contacts rated 1000 watts. Negligible change in SWR up to 300 mc. Built-in automatic receiver antenna shorting device. Grounds contact leading to receiver before tongue makes contact with transmitter—prevents RF from reaching receiver circuit. Breakdown voltage: over 1000 volts rms. Takes SPDT switch (included in illustration) listed below, for operating B+ of receiver. Connectors, relay tongues and brass parts are silver plated. Size: 4 1/2 x 2 1/2 x 1 1/4". Shpg. wt., 9 oz. 75 P 148, For 110 v. AC, NET ..... 12.45  
75 P 147, For 6 v. DC, NET ..... 12.05  
75 P 597, For 12 v. DC, NET ..... 12.05

1E SPDT Switch. Heavy-duty switch assembly for external mounting on DKC-G antenna relay above. Switch is actuated by built-in plunger which is part of relay. Shpg. wt., 2 oz. 75 P 799, NET ..... 1.15  
2E DPDT Switch. As above, but DPDT contacts. Shpg. wt., 2 oz. 75 P 884, NET ..... 2.30

Type DKF-2L Connector. Double male. For mounting relays directly to output of transmitter. Designed for UHF. Heavy silver plating. Recommended for indoor use. Locking type. Shpg. wt., 6 oz. 75 P 136, NET ..... 1.45

12V DC Coil. Model DKC-M. 12 volt relay coil for converting DKM 6 volt DC relay or DKC-G 6 and 110 volt AC relays for 12 volt DC use. Ideal for 12 v. automotive systems. Shpg. wt., 3 oz. 75 P 138, NET ..... 2.30

### 2200-U POWER RELAYS

DPDT power relay featuring interchangeable coils. Relay may be modified by inserting replacement coil of another voltage. For motor starting, heater loads and other heavy-duty uses. Contacts rated at 25 amps, continuous duty, 230 v. AC with 75% power factor load. Operating power requirement, 9.5 va; coil drain, approx. .080 amps at 115 v., 60 cycles. 3 1/2 x 2 1/2 x 2 1/4". Av. shpg. wt., relays, 12 oz.; coils, 6 oz.

Relays			Replacement Coils		
Volts AC	Stock No.	NET EACH	Volts AC	Stock No.	NET EACH
6	75 P 093	6.10	6	75 P 087	2.25
24	75 P 084	6.10	24	75 P 088	2.25
115	75 P 085	6.10	115	75 P 089	2.25
230	75 P 086	6.50	230	75 P 090	2.50

CS-2200, Switch Parts. Switch assemblies for above relays. "Left" or "right" means as viewed at armature end, contacts up. Wt., 4 oz. 75 P 563, Left Assembly, NET ..... 1.85

75 P 564, Right Assembly, NET ..... 1.85

### I-18 SERIES INDUSTRIAL SOLENOIDS

Intermittent and continuous-duty types. Intermittent-duty solenoids are for applications that do not require energization of coil for more than 5 consecutive minutes with sufficient time between cycles for cooling. Should not be permitted to rise more than 85°C above 24°C ambient without sufficient time to cool. Continuous duty types will not rise more than 85°C above the 24°C ambient temperature when operated at rated load. \*Intermittent Type. †Continuous Type.

Stock No.	Type	Volts	Stroke	Lift, Oz.	Size	Lbs.	NET
75 P 890	1A*	115AC	1/2-1/2"	8	1 1/4 x 1 1/4 x 1 1/4"	1/4	2.35
75 P 891	1A†	115AC	1/2-1/2"	3	1 1/4 x 1 1/4 x 1 1/4"	1/4	2.35
75 P 152	2*	115AC	3/8-3/8"	27	1 1/4 x 1 1/4 x 1 1/4"	3/4	3.20
75 P 153	2†	115AC	3/8-3/8"	10	1 1/4 x 1 1/4 x 1 1/4"	3/4	3.20
75 P 892	4*	115AC	3/8-1 1/8"	24	1 3/4 x 2 1/4 x 1 1/4"	1	3.20
75 P 893	4†	115AC	3/8-1 1/8"	6	1 3/4 x 2 1/4 x 1 1/4"	1	3.20
75 P 828	12*	115AC	3/4-1 1/2"	32	1 3/4 x 1 3/4 x 1 3/4"	1 1/4	4.15
75 P 829	12†	115AC	3/4-1 1/2"	11	1 3/4 x 1 3/4 x 1 3/4"	1 1/4	4.15
75 P 595	11*	6DC	1/2-1"	39	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	2.70
76 P 318	11†	6DC	1/2-1"	21	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	2.70
75 P 596	11*	24DC	3/8-1"	39	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	2.70
76 P 319	11†	24DC	3/8-1"	21	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	2.70
75 P 894	14*	115AC	3/8-1 1/2"	110	2 1/4 x 2 1/4 x 1 1/4"	1 1/2	5.50
75 P 895	14†	115AC	3/8-1 1/2"	65	2 1/4 x 2 1/4 x 1 1/4"	1 1/2	5.50
75 P 156	10*	115AC	3/8-3/8"	80	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	3.20
75 P 885	10†	115AC	3/8-3/8"	60	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	3.20
76 P 320	16†	230AC	3/4-1"	60	1 1/4 x 1 1/4 x 1 1/4"	1 1/4	3.40
75 P 157	18*	115AC	3/4-1"	183	2 1/4 x 2 1/4 x 1 1/4"	1 1/2	4.50
75 P 886	18†	115AC	3/4-1"	145	2 1/4 x 2 1/4 x 1 1/4"	1 1/2	4.50
76 P 321	18†	230AC	3/4-1"	145	2 1/4 x 2 1/4 x 1 1/4"	1 1/2	4.70

### MER-115 MIDJET STEPPING RELAY

Electrical-reset stepping relay with 21 active positions; resets from external control or own contacts. Contacts rated 1 amp at 115 v., 60 cycle, non-inductive. Stepping and reset coils 115 v., 60 cycle AC. Minimum set pulse, 50 ms; reset, 10 ms. Recommended for experimental purposes, original equipment, or replacement. 3 1/4 x 2 1/4 x 3 1/4". Wt., 13 oz. 75 P 282, NET EACH ..... 14.00

### AMPERITE DELAY RELAYS

Hermetically sealed in glass envelope with octal base. Heater draws 2 watts and may be operated continuously. Contacts: SPST, 3 amps at 115 v. AC, 1 amp at 220 v. AC. Voltage Breakdown: Contacts, 1000 v.; Heater-to-Contact, 1500 v., except† 250 v. and 500 v. for delays of 10 sec. or less. Ambient temperatures from -55° to +70° C. Size, Dia., 1 1/8"; Height less prongs, 2 3/8". Av. shpg. wt., 4 oz. Be sure to specify type number as well as stock number.

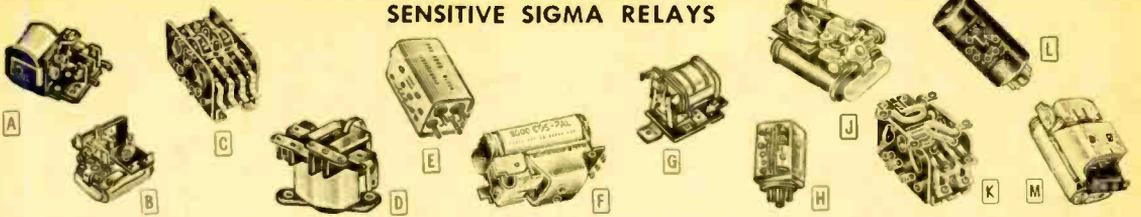
Delay Seconds	Type No. Normally Open		Type No. Normally Closed	
	6.3 v. AC-DC	115 v. AC-DC	6.3 v. AC-DC	115 v. AC-DC
2*	6N02	115N02	6C2	115C2
5*	6N05	115N05	6C5	115C5
10*	6N010	115N010	6C10	115C10
15*	6N015	115N015	6C15	115C15
20	6N020	115N020	6C20	115C20
30	6N030	115N030	6C30	115C30
45	6N045	115N045	6C45	115C45
60	6N060	115N060	6C60	115C60
75	6N075	115N075	6C75	115C75
90	6N090	115N090	6C90	115C90
120	6N0120	115N0120	6C120	115C120
150	6N0150	115N0150	6C150	115C150
180	6N0180	115N0180	6C180	115C180

75 PP 295, NET EACH ..... 2.35

Miniature Relays. All types above also available in miniature size except 115C150, 115C180, 115N0150, 115N0180. 9-pin. 3/4 x 2 1/4". Shpg. wt., 3 oz. Specify type no., adding letter "T" following type number. Example: 6N02T. 75 PP 296, NET EACH ..... 2.35

# Relays, Counters and Contact Protectors

## SENSITIVE SIGMA RELAYS



**A** Series 4F. Plate circuit relay for any 20 mv. sensitivity application. SPDT contacts rated 2 amps.  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. 3 oz.

Stock No.	Mfr's Type	Ohms	Ma. DC	NET
76 P 377	4F-1000-S/SIL	1000	4.5	6.05
76 P 378	4F-2500-S/SIL	2500	3.0	6.05
76 P 379	4F-5000-S/SIL	5000	2.0	6.35
76 P 285	4F-8000-S/SIL	8000	1.6	6.60

**B** Series 6F. Rugged SPDT DC relay withstands 100 G shock. 5 mv. sensitivity. Contacts rated 1 amp.  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. 5 oz.

76 P 380	5F-1000-S/SIL	1000	2.3	8.25
76 P 381	5F-2500-S/SIL	2500	1.4	8.25
76 P 382	5F-5000-S/SIL	5000	1.0	8.60
76 P 383	5F-10,000-S/SIL	10,000	0.7	9.85

**C** Series 6. 3-position, null center. 2 sets DPST 5 amp contacts. GD In Type No. indicates dual coil.  $1\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{2}$ " high. 10 oz.

No.	Type	Ohms	Ma. DC	NET
76 P 900	6F2A2A-5000G/SIL	5000	1.9	23.90
76 P 901	6F2A2A-10,000G/SIL	10,000	1.5	30.50
76 P 902	6F2A2A-25000G/SIL	25K/2.5K	4.2	30.75
76 P 903	6F2A2A-50000G/SIL	5K/5K	3.0	31.60

**D** Series 11F. Small, low-cost DC relay. 50 mv. sensitivity; SPDT contacts rated 1 amp.  $1 \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. Shpg. wt., 3 oz.

75 P 068	11F-1000-G/SIL	1000	7.0	1.75
75 P 069 <td>11F-2300-G/SIL</td> <td>2300</td> <td>4.6 <td>1.75</td> </td>	11F-2300-G/SIL	2300	4.6 <td>1.75</td>	1.75
75 P 074 <td>11F-6000-G/SIL</td> <td>6000</td> <td>2.9 <td>1.95</td> </td>	11F-6000-G/SIL	6000	2.9 <td>1.95</td>	1.95
75 P 075 <td>11F-9000-G/SIL</td> <td>9000</td> <td>2.4</td> <td>2.15</td>	11F-9000-G/SIL	9000	2.4	2.15

**D** Series 11FZ. Small, low cost AC relay for positive on/off operation. SPDT contacts rated 1 amp at 120 V. AC.  $1 \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. 3 oz.

No.	Mfr's Type	Ohms	V. AC	NET
76 P 547	11FZ-40-ACS/SIL	40	6	2.50
76 P 548	11FZ-150-ACS/SIL	150	12	2.50
76 P 548	11FZ-550-ACS/SIL	550	24	2.50
76 P 568	11FZ-9000-ACS/SIL	9000	120	2.95

**E** Series 22. Miniature hermetically-sealed relay. Silver contacts rated 2 amps for 28 V. DC or 115 V. AC resistive load. SPDT action at 20 mv sensitivity, except \*DPDT at 40 mv.  $1\frac{1}{2} \times 1 \times 1\frac{1}{2}$ " high. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Ohms	Ma. DC	NET
76 P 384	22RJC-1000-G/SIL	1000	4.5	13.00
76 P 385	22RJC-2500-G/SIL	2500	2.8	13.50
76 P 386	22RJC-5000-G/SIL	5000	2.0	14.00
76 P 387	22RJC-8000-G/SIL	8000	1.6	14.50
76 P 388	22RJC-1000-G/SIL*	1000	6.3	14.50
76 P 389	22RJC-2500-G/SIL*	2500	4.0	15.00
76 P 390	22RJC-5000-G/SIL*	5000	2.8	15.00
76 P 391	22RJC-8000-G/SIL*	8000	2.3	16.00

**F** Series 26. SPDT plate circuit relay. Type CDS extremely rugged; S, sensitive; G, stable. 4 mv. sensitivity. Contacts rated 0.5 amps.  $1 \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. Wt., 4 oz.

Stock No.	Mfr's Type	Ohms	Ma. DC	NET
76 P 904	26F-1000-S/SIL	1000	2.3	7.80
76 P 905	26F-8000-CDS/SIL	8000	0.7	9.55
76 P 906	26F-12000-G/SIL	12,000	0.9	10.80

**G** Series 41. Quiet, sensitive relay. SPDT contacts rated \*2, \*15 amps. Sensitivity, 40 mv. DC; 0.2 VA. AC.  $2\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. 3 oz.

Stock No.	Mfr's Type	Volts (AC) Ohms (DC)	Ma. (DC)	NET
75 P 076	41FZ-10-ACG/SIL	6 v. *	3.50	3.50
75 P 392	41FZ-35-ACS/SIL	6 v. *	4.00	4.00
75 P 077	41FZ-200-ACG/SIL	24 v. *	3.50	3.50
75 P 393	41FZ-500-ACS/SIL	24 v. *	4.00	4.00
75 P 078	41FZ-5000-ACG/SIL	115 v. *	3.65	3.65
75 P 394	41FZ-10000-ACS/SIL	115 v. *	4.45	4.45
75 P 079	41FZ-12000-ACG/SIL	230 v. *	4.15	4.15
76 P 395	41F-5-S/SIL	5 ohms	90	3.85
76 P 396	41F-50-S/SIL	50 ohms	30	3.85
76 P 397	41F-200-S/SIL	200 ohms	15	3.85
76 P 398	41F-1000-S/SIL	1k ohms	6.5	3.85
76 P 399	41F-5000-S/SIL	5k ohms	3.0	4.00
76 P 400	41F-10000-S/SIL	10k ohms	2.0	4.25

**H** Series 42. DPDT relay with octal plug-in base and dust cover. Operating power is under 0.25 watt on DC and under 0.5 volt-amp on AC. Silver contacts rated 5 amps at 28 V. DC or 115 V. AC for 100,000 operations. AC units are designed for 60 cycle operation. Z in Type No. Indicates for AC. Pin connections are on cover.  $2\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. Shpg. wt., 4 oz.

No.	Type	V/Ohms	Ma.	NET
76 P 401	42R0Z-8-ACG/SIL	6 VAC	6.20	6.20
76 P 914	42R0Z-25-ACS/SIL	6 VAC	7.15	6.20
76 P 403	42R0Z-200-ACG/SIL	24 VAC	7.15	6.20
76 P 404	42R0Z-4000-ACG/SIL	115 VAC	6.20	7.35
76 P 907	42R0Z-7000-ACG/SIL	90 VAC	6.20	6.20
76 P 406	42R0Z-5-G/SIL	5 ohms	200	6.20
76 P 407	42R0Z-50-G/SIL	50 ohms	65	6.20
76 P 408	42R0Z-200-G/SIL	200 ohms	32	6.20
76 P 409	42R0Z-1000-G/SIL	1k ohms	14	6.20
76 P 410	42R0Z-5000-G/SIL	5k ohms	6.5	6.40
76 P 411	42R0Z-10000-G/SIL	10k ohms	4.5	6.60

**J** 61FB-6000G/SIL. 5000 ohm, SPST normally closed, DC relay. 10 amp, double-break contacts. 4.5 ma. NET  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ " high. 4 oz.

**K** 76 P 909. NET EACH 10.20

**K** Series 61. Magnetic latching power relay. Switches by polarized signal. Has 2 sets 20 amp DPST contacts. 1 set normally open, other closed.  $3\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$ " high. 12 oz.

Stock No.	Mfr's Type	Trip	Coil	NET
76 P 910	61FZ2A2B-10000G/SC	48 VDC	Single	23.75
76 P 911	61FZ2A2B-10000G/SC	65 VDC	Dual	26.25

**L** Series 72. Magnetic latching relay. Will switch 500 loads per second. SPDT, 0.6 amp contacts. Require 50 VDC.  $1\frac{1}{2} \times 2\frac{1}{2} \times 5\frac{1}{2}$ " high. 5 oz.

Stock No.	Mfr's Type	Trip Ma.	NET
76 P 912	72A0Z-160TS/TP	1.4	33.00
76 P 913	72A0Z-160TG/TP	3.6	33.00

**M** 26F-8000-CDS/PAL Relay. Similar to 4F series relay but more efficient. SPDT, contacts rated 0.5 amp @ 28 v. DC or 115 v. AC. 8000 ohm coil. Operating current, 0.7 ma. 7 oz. 9.75

## FEDERAL CONTACT PROTECTORS

Effective protection for relay contacts controlling inductive circuits. Suppress arcing and RF transients. Consist of selenium rectifier cells back-to-back in small tubular units. For inductive loads being operated up to 40 times per sec. Pistal lead. Letter P in Type No. indicates paper, Letter H in Type No. indicates hermetically sealed. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Max. Volts	Max. Ma.	Min. Volts	Size	NET
76 P 323	8A2PS2	52 AC	200	27 AC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	1.08
76 P 324	15A2P	122 AC	400	27 AC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	1.14
76 P 326	15A5PS5	130 AC	200	105 AC	$1\frac{1}{2} \times 3\frac{1}{2}$ "	1.42
76 P 327	15A5PS5	130 AC	400	105 AC	$1\frac{1}{2} \times 3\frac{1}{2}$ "	1.58
76 P 328	8A2PS1	44 DC	200	23 DC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	.90
76 P 329	8A2HS1	44 DC	200	23 DC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	2.30
76 P 330	15A2PS1	44 DC	500	23 DC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	.94
76 P 331	15A2HS1	44 DC	500	23 DC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	2.34
76 P 332	8A3PS2	66 DC	250	45 DC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	1.08
76 P 325	15A3PS2	66 DC	500	45 DC	$2\frac{1}{2} \times 3\frac{1}{2}$ "	1.14

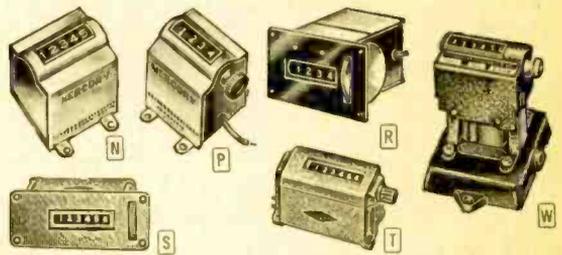
## HURST MOTORS

Extremely compact, heavy-duty synchronous motors for continuous timing applications. Wide choice of output speeds available. Ideal for use in alarm systems, extra-large clocks, animated displays, time switches, program instruments, railway signalling equipment, etc. Excellent shock and vibration resistance. Designed for continuous duty without overheating. SM series will not overheat even in a stalled position. Feature 40 inch-ounces of torque at 1 RPM. Clockwise rotation. Start instantly at full torque. RSM series is similar but instantly reversible and has 80 inch-ounces of torque. Complete timing accuracy is maintained in both clockwise and counter-clockwise directions. If other speeds than those listed are desired, write Allied for information. Size,  $2\frac{1}{2} \times 1\frac{1}{2}$ ". Shaft,  $\frac{1}{8}$ " dia. by  $1\frac{1}{2}$ " long. Power drain: 7 watts. For 110-115 v. 60 cycle AC. 1 lb.



Stock No.	Mfr's Type	Output Speed	NET EA.	Stock No.	Mfr's Type	Output Speed	NET EA.
76 P 571	SM-1	1 RPM	6.75	76 P 677	RSM-1	1 RPM	8.00
76 P 572	SM-4	4 RPM		76 P 678	RSM-4	4 RPM	
76 P 573	SM-6	6 RPM		76 P 679	RSM-6	6 RPM	
76 P 574	SM-10	10 RPM		76 P 680	RSM-10	10 RPM	
76 P 576	SM-30	30 RPM	6.81	76 P 681	RSM-30	30 RPM	6.82
76 P 577	SM-60	60 RPM		76 P 682	RSM-60	60 RPM	

## PRODUCTION INSTRUMENT COUNTERS



High-quality electric counters for commercial and industrial applications. For 60-cycle operation.

**Prefix "M".** Small counters for coin-operated equipment and light to moderate-duty industrial applications. Minimum make time 0.04 sec, break time 0.06 sec. Rated at 600 CPM. Enclosed in tamper-proof case. Reset units count to 4 digits, non-reset to 5. Shpg. wt., 1 lb.

**Prefix "6" and "P6".** Small counters for general industrial applications. Minimum make and break time of 0.030 sec. Enclosed in dust-resistant housing. Rated at 1000 CPM, 50-million count life. Continuous-duty coils. 6 digits. Shpg. wt., 1 lb.

**Prefix "CE".** Heavy-duty counter. For use on drill presses, punch presses, etc. Min. make and break duration, 0.03 sec, 1000 CPM. Tamper-proof aluminum case. 6 digits. Cont. duty coils. 5 lbs.

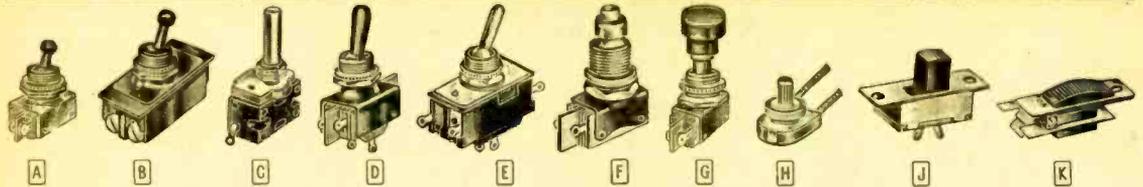
### RESET TYPES

77 P 099	Type	Fig.	V. AC	Size	Mount	Mts. Ctrs.	NET
77 P 049	MDB-S4-24A	R	24	$1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ "	Panel	$1\frac{1}{2} \times 2\frac{1}{2}$ "	14.75
77 P 043	MDA-S4-115A	P	115	$2\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$ "	Base	$1\frac{1}{2} \times 1\frac{1}{2}$ "	14.00
77 P 236	624A	Y	24	$2\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{2}$ "	Base	$3\frac{1}{2} \times 1\frac{1}{2}$ "	18.50
77 P 237	6115A	Y	115	$2\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{2}$ "	Base	$3\frac{1}{2} \times 1\frac{1}{2}$ "	18.50
77 P 238	PE14A	S	24	$2\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{2}$ "	Panel	$4\frac{1}{2} \times 1\frac{1}{2}$ "	19.50
77 P 239	PE15A	S	115	$2\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{2}$ "	Panel	$4\frac{1}{2} \times 1\frac{1}{2}$ "	19.50
77 P 298	CE800CS602	W	115	$4\frac{1}{2} \times 3\frac{1}{2} \times 5\frac{1}{2}$ "	Base	$5\frac{1}{2} \times 2\frac{1}{2}$ "	40.00

### NON-RESET TYPES

77 P 033	MEA-N5-115A	N	115	$2\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$ "	Base	$1\frac{1}{2} \times 1\frac{1}{2}$ "	4.40
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# Arrow-Hart and Hegeman Switches



## BALL HANDLE TOGGLE SWITCHES

**A** Provide long life and dependability in radio and fractional horsepower applications. All have bakelite insulation; with laminated phenolic sections and are nickel-finished. Solder lug terminals. Positive action type. With one hex nut and one knurled nut.  $1\frac{1}{2}$ " diameter shanks. U.L. Approved. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Action	Amps		Shank Length	1-9, EACH	10-99, EACH
			125V	250V			
34 B 100	20994-BF	SPST	3	3	$1\frac{1}{2}$ "	.52	.43
34 B 101	21518-B	SPST	3	3	$3\frac{1}{4}$ "	.64	.53
34 B 102	21615-BD	SPST	3	3	$1\frac{1}{2}$ "	.67	.55
34 B 110	21350-B	SPDT	3	1	$1\frac{1}{2}$ "	.67	.55
34 B 111	80023-B	SPDT	3	1	$3\frac{1}{4}$ "	.81	.67
34 B 120	20902-AM	DPST	3	1	$1\frac{1}{2}$ "	.96	.79
34 B 130	20905-Z	DPDT	3	1	$1\frac{1}{2}$ "	1.10	.91
34 B 131	20905-BT	DPDT	3	1	$1\frac{1}{2}$ "	1.21	1.00
34 B 132	20905-C	DPDT	3	1	$1\frac{1}{2}$ "	1.23	1.02
34 B 133	20902-N	DPST	3	1	$1\frac{1}{2}$ "	.95	.79
34 B 134	20905-BX	DPDT	3	1	$1\frac{1}{2}$ "	1.10	.91
34 B 138	20994-CB	SPST	3	3	$1\frac{1}{2}$ "	.52	.43
34 B 139	21350-BF	SPDT	3	1	$1\frac{1}{2}$ "	.67	.55

## POWER TYPE TOGGLE SWITCHES

**B** Compact, toggle-operated power switches for motors and appliances. 34 B 136 is rated 1 HP, 250 volts. U.L. Approved. Bakelite case. Screw terminals. Shank,  $1\frac{1}{2}$ " dia.  $1\frac{1}{4}$ " long. With mtg. nuts. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Action	Amps		1-9, EACH	10-99, EACH
			125V	250V		
34 B 135	80607	SPST	12	6		
34 B 136	80600	DPST	12	6	1.01	.83
34 B 137	80618	SPDT	12	6		

## ROTARY SWITCHES

**C** Positive contact. U.L. Approved. All 125/250 volts. Threaded shank,  $1\frac{1}{2}$ " dia.,  $3\frac{1}{4}$ " long. Shaft,  $3\frac{1}{4}$ " dia.,  $3\frac{1}{4}$ " long. Wt., 2 oz.

Stock No.	Type	Action	Amps	1-9, EACH	10-99, EACH
34 B 141	81715-G	SPST	6/3	1.27	1.06
34 B 142	81721-G	SPDT	6/1	1.43	1.18
34 B 144	81727-G	DPDT	6/3	1.86	1.54

## A-H&H GENERAL-PURPOSE SWITCHES

**H** Type 41047 Rotary Canopy Switch. SPST switch for small appliances. Rated 1 amp at 250 volts; 3 amps at 125 volts.  $1\frac{1}{2}$ " stem;  $3\frac{1}{2}$ " dia. With 6 inch leads attached. U.L. Approved. Wt.: each, 2 oz.; 20,  $1\frac{1}{4}$  lbs. 34 B 165, 1-9, NET EACH.....45c 10-99, EACH.....41c

**J** Type 81574 New Midget Slide Switch. SPST switch for use on small appliances. Requires minimum area for mounting—slot  $3\frac{1}{2}$ "x $1\frac{1}{2}$ ". Two  $3\frac{1}{4}$ " mounting holes,  $1\frac{1}{2}$ " centers. Mounting plate is nickel-finished,  $1\frac{1}{2}$ " long. Unit is rated 3 amperes at 125 volts AC. Has black phenolic sliding lever. U.L. Approved. Shpg. wt., 3 oz. 33 B 853, 1-9, NET EACH.....24c 10-99, EACH.....20c

**K** Type 81569 Slide Switch. SPST indicating switch designed for use in instrument, control panel, and appliance applications. Screw type terminals. Requires  $1\frac{1}{2}$ "x $3\frac{1}{4}$ " cutout for mounting. Ratings: 3 amps at 250 volts; 6 amps at 125 volts. Size,  $2\frac{1}{4}$ "x $3\frac{1}{4}$ ". Bakelite case. Underwriters' Laboratories Approved. Shpg. wt., 2 oz.; 20,  $1\frac{1}{4}$  lbs. 34 B 153, 1-9, NET EACH.....96c 10-99, EACH.....79c

## FEDERAL ANTI-CAPACITY SWITCHES

Quick make-and-break type, positive-action switches. Reduce capacity in various audio-switching applications. Widely used by broadcasters in studio control boards, consoles, and other equipment. All normally open. Lever action is cam-roller type, with graphite-impregnated bearing turning on tool-steel axles. Provides smooth, easy action under all atmospheric conditions. Round and flat master spring blades are silver-plated phosphor bronze with pure silver contacts. Insulating block is molded bakelite; attractive chrome faceplate. Aluminum frame,  $2\frac{1}{4}$ "x $5\frac{1}{4}$ ". Av. shpg. wt., 5 oz.

Stock No.	Type	Action	EACH
34 B 480	1427	DPST	2.79
34 B 481	1425	DPDT	2.79
34 B 482	1424	4PDT	2.86
34 B 483	12494	8PDT	6.20

## A-H&H LOCK SWITCH



Type 81715-L. Lock switch with key. SPST 3 amperes at 250 volts; 6 amperes at 125 volts. Sleeve diameter,  $1\frac{1}{2}$ ". Will fit panels to  $3\frac{1}{2}$ " thick. Size,  $1\frac{1}{4}$ "x $1\frac{1}{2}$ ". The switch must be open to remove key. Use on power tools, appliances, TV receivers, etc., for added safety factor. Shpg. wt., 2 oz. 34 B 156, 1-9, NET EACH.....1.63 10-99, EACH.....1.34

34 B 128, Extra key for above. Wt., 2 oz. NET.....1.6c

Type 81715-LE. As above, but key removable in open or closed position. 34 B 158, 1-9, NET EACH.....1.63 10-99, EACH.....1.34

## ECONOMY AC-DC SLIDE SWITCHES



A selection of low-cost, dependable switches produced by leading manufacturers. Require very little mounting space. Many uses in appliances, hi-fi equipment, radios, etc. Insulating-plated steel housing. Size,  $1\frac{1}{2}$ " wide x  $1\frac{1}{4}$ " long. Mounting centers,  $1\frac{1}{4}$ ". Type S-110-S is heavy duty; 6 amps at 125 volts; 3 amps at 250 volts. Others at 125 volts: Type SW724, 0.75 amps; Type SW725, 0.5 amps; Type S-516, 3 amps; Type S60A, 4 amps; Type S60B, 4 amps; Type S5-6, 0.5 amps. Type S5-6 has  $3\frac{1}{4}$ " bevel trigger with prong guide, solder lug terminals, spring return. Type S-110-S has screw terminals; all others have hot-tinned solder lugs for easy soldering. For special prices in quantities over 50, write for quotation. U.L. Approved. \*Indicates Wirt; † indicates Stackpole; all others made by Carling. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	1-9, EA.	10-24, EA.	25-49, EA.
34 B 491	SW724*	SPDT	22c	20c	18c
34 B 492	SW725*	DPST	22c	20c	18c
34 B 493	S-110-S	SPST	48c	44c	36c
34 B 494	S-516	SP2Cir.	56c	51c	42c
34 B 422	S60A	SPST	10c	9c	7c
34 B 423	S60B	SPST	10c	9c	7c
34 B 496	SS-6†	3PDT	30c	28c	25c

## BAT HANDLE TOGGLE SWITCHES

Ruggedly built A-H and H bat handle toggle switches. Underwriters' Laboratories Approved. All have bakelite insulation. Silver-plated lug terminals, except for 34 B 106 and 34 B 109 which have screw type terminals. Shank,  $1\frac{1}{2}$ " diameter,  $1\frac{1}{2}$ " long, except  $1\frac{1}{4}$ " long. With mounting nuts. Shpg. wt., each switch 3 oz.; 20 switches, 3 lbs.

Stock No.	Mfr's Type	Fig.	Action	Amps	Volts	1-9, EACH	10-99, EACH
34 B 195	20994-EW	D	SPST	3	125	.60	.49
34 B 196	21350-BP	D	SPDT	3	125	.73	.61
34 B 197	20902-DN	D	DPST	3	125	1.03	.85
34 B 198	20905-GA	D	DPDT	3	125	1.17	.96
34 B 109	80607-BJ	B	SPST	12	125	1.01	.83
34 B 106	80602-CA	B	DPST	15	125	1.74	1.44
34 B 103	82024-D*	E	DPDT	6	125	1.58	1.30

## PUSH-BUTTON SWITCHES

Momentary contact. †Indicates slow make and break type; ‡fast make and break type. 34 B 119 and 34 B 124 are normally closed, all others are normally open. Metal base, and  $3\frac{1}{8}$ " shank length, except 34 B 152,  $3\frac{1}{2}$ ". \*Two-circuit type. ‡Same as 3392 but with black bakelite button. Shpg. wt., 3 oz.

34 B 118	3592‡	F	SPST	3	250	1.02	.84
34 B 119	3392‡*	F	SP2	1	125	.73	.60
34 B 124	3392-AE‡	F	SP2	1	125	.90	.75
34 B 152	80630	F	DPST	12	125	1.49	1.23

**G** Type 86710-C. SPST push-button switch with snap-on bakelite button in red or black. Press button to close circuit; press to open. Rated at 3 amps, 250 volts; 6 amps, 125 volts. U.L. Approved. Threaded shank,  $1\frac{1}{2}$ "x $1\frac{1}{4}$ " long. With mtg. nuts. Shpg. wt., each, 2 oz.; 20,  $1\frac{1}{4}$  lbs. 34 B 161, Red. 34 B 162, Black. 10-99, EACH. 92c EACH.....1.12

Type 86710. Same as type 86710-C push-button switch above, but less snap-on bakelite button. Shpg. wt., 2 oz. 34 B 160, 10-99, EACH. 78c EACH.....94c

Type 3391-G. Momentary contact. SPST normally open. 1 amp, 125 v. AC. U.L. Approved. Threaded shank,  $1\frac{1}{2}$ "x $1\frac{1}{4}$ ". With mtg. nuts, lug and bakelite button. Shpg. wt., each, 2 oz.; 20,  $1\frac{1}{4}$  lbs. 34 B 159, 10-99, EACH.....61c EACH.....74c

## A-H&H INDICATING SWITCH PLATES



**L** For Toggle or Rotary Switches.  $1\frac{1}{2}$ " diameter polished aluminum plate for use with toggle or rotary switches. Has  $3\frac{1}{2}$ " hole. Attractive appearance; etched on black background. Shpg. wt., 2 oz. 34 B 151, NET EACH.....39c 20-99, EACH.....37c

**M** For Toggle Switches. Nickel-plated "On-Off" plate. Has  $1\frac{1}{2}$ " diameter hole for switch shank. 34 B 145, 4 oz. Package of 25.....59c 33 B 857, 2 oz. Package of 2.....8c

**N** Type 20590-1. For Toggle Switches. Nickel-plated brass stamping. Keyed to fit switch shank. Reads "On-Off." For  $1\frac{1}{2}$ " diameter shank. Shpg. wt. per pkg. of two, 2 oz. 34 B 157, Package of 2.....8c

## STEVENS-WALDEN SPINTITE SWITCH WRENCHES

Specially designed spintite wrenches for easy installation of toggle switches. For this purpose, they are much more convenient than "regular" or general purpose wrenches. Feature a very deep recess to accommodate even bat-handle type toggle switches. Knurled inside surface tapered to accommodate different sizes of ring nuts. Wrenches have wood handles. Shpg. wt., 6 oz.

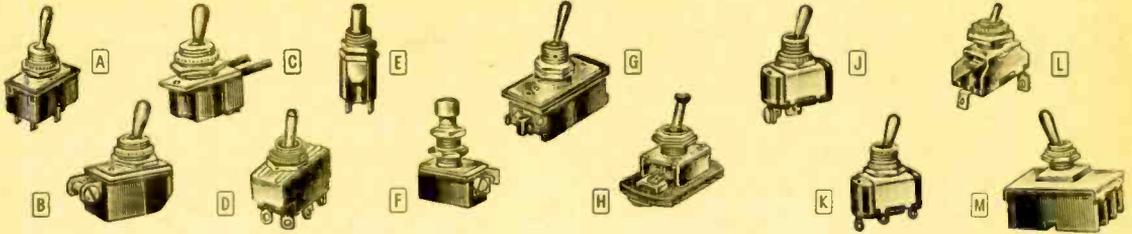
Type 3480. Specifically designed for use with A-H&H switches only. 46 N 056, NET EACH.....2.58

Type 3481. Specifically designed for use with Cutler-Hammer switches only. 46 N 167, NET EACH.....2.58

Type 36KB25. Latest easy grip, easy-to-use switch wrench. Specifically designed for use with Switchcraft Series 3000 LEV-R switches and Series 16,000 Telever type. Not for use with any other models. 50 N 208, NET EACH.....2.58

# Cutler-Hammer Switches

## DEPENDABLE TOP-QUALITY SWITCHES



### STANDARD AC-DC TYPE

Phenolic case, standard-duty toggle switches. All have  $\frac{1}{8}$ " diameter threaded stem,  $\frac{1}{16}$ " wire leads,  $\frac{1}{8}$ " screw terminals; all others have solder lug terminals. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Action	Fig.	Amperes		Stem Length	NET EACH	
				125V	250V		1-9	10-99
34 B 500	8280-K16	SPST	A	3	15	$\frac{1}{8}$ "	.52	.43
34 B 527	8280-K14	SPST	A	3	15	$\frac{1}{8}$ "	.52	.43
34 B 508	8381-K8	SPST	A	6	3	$\frac{1}{8}$ "	.60	.50
34 B 501	8282-K14	SPDT	A	3	1	$\frac{1}{8}$ "	.66	.55
34 B 528	8282-K12	SPDT	A	3	1	$\frac{1}{8}$ "	.66	.55
34 B 502	8360-K7	DPST	A	3	3	$\frac{1}{8}$ "	.95	.79
34 B 529	8360-K6	DPST	A	3	3	$\frac{1}{8}$ "	.95	.79
34 B 530	8363-K6	DPDT	A	3	3	$\frac{1}{8}$ "	1.09	.91
34 B 503	8363-K7	DPDT	A	3	3	$\frac{1}{8}$ "	1.09	.91
34 B 749	8280-K15	SPST	A	3	3	$\frac{1}{8}$ "	.52	.43
34 B 783	8290-K15	SPST	C	3	3	$\frac{1}{8}$ "	.64	.52
34 B 784	8290-K16	SPST	C	3	3	$\frac{1}{8}$ "	.64	.52
34 B 785	8295-K7	SPST	B	3	3	$\frac{1}{8}$ "	.64	.52
34 B 786	8295-K8	SPST	B	3	3	$\frac{1}{8}$ "	.64	.52
34 B 787	8381-K7	SPST	A	6	3	$\frac{1}{8}$ "	.60	.50
34 B 788	8391-K7	SPST	C	6	3	$\frac{1}{8}$ "	.64	.52
34 B 789	8391-K8	SPST	C	6	3	$\frac{1}{8}$ "	.64	.52
34 B 790	8396-K7	SPST	B	6	3	$\frac{1}{8}$ "	72c	59c
34 B 791	8396-K8	SPST	B	6	3	$\frac{1}{8}$ "	72c	59c
34 B 792	8370-K7	DPST	A	6	3	$\frac{1}{8}$ "	1.02	.85
34 B 793	8372-K7	DPST	B	6	3	$\frac{1}{8}$ "	1.25	1.04
34 B 632	8373-K7	DPDT	A	6	3	$\frac{1}{8}$ "	1.18	.97
34 B 794	8373-K7	DPDT	A	6	3	$\frac{1}{8}$ "	1.18	.97
34 B 795	8375-K7	DPDT	A	6	3	$\frac{1}{8}$ "	1.63	1.34

### PUSH-BUTTON AC-DC TYPE

Push-button type switches to control current by opening or closing door. Automatically turn lights on and off in refrigerators, telephone booths, closets, vaults, etc. Momentary contact type. Stem length,  $\frac{1}{8}$ ". Others,  $\frac{1}{4}$ ". Red button; others are black. Solder lug terminals. Normally-open type is "on" with door closed; normally-closed type is "on" with door open. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Amperes		NET EACH	
			125V	250V	1-9	10-99
34 B 548	8411-K4	SPST-N.O.	.75	.25	36c	32c
34 B 631	8411-K6	SPST-N.O.†	.75	.25	36c	32c
34 B 547	8411-K8	SPST-N.C.	.75	.25	25c	21c
34 B 549	8410-K2	SPST-N.O.	3	1	73c	61c

**F** Type 7208-K4 AC-DC Push-Push On-Off Switch. Push-button switch. For control of current by alternate impulses. With SPST action. Rated at 3 amps, 250 volts; 6 amps, 125 volts. With screw type terminals,  $\frac{1}{8}$ " diameter threaded stem;  $\frac{1}{8}$ " long. U.L. Approved. Shpg. wt., 1-9, EACH ..... 82c  
10-99, EACH ..... 68c

**E** Type 7196-K1 Momentary Type Normally Open Switch. (Not illustrated). SPST action. Rated at 3 amps, 250 volts AC or DC; 6 amps, 125 volts AC or DC. With screw terminals. Threaded stem diameter,  $\frac{1}{8}$ "; stem length,  $\frac{1}{8}$ ". U.L. Approved. Shpg. wt., 4 oz. 1-9, EACH ..... 1.07  
10-99, EACH ..... 88c

### EAGLE FLUSH-MOUNT PUSHBUTTON SWITCH

Efficient operating, low-cost knife switches for heavy-duty applications in making and breaking power circuits. Ruggedly built and compact in size. Ideal for limited space applications—for any power control such as motors, transmitters, mixing machines, or for stage lighting equipment. Provide smooth, easy action. All units are rated at 25 amperes, 125 volts AC. All have screw terminals. Available in bakelite or porcelain insulated bases as shown. Av. shpg. wt., 5 oz.



Stock	Mfr's Type	Action	Base	Size	NET EACH	
					1-9	10-99
34 B 884	612	SPST	Bakelite	1 3/8 x 1"	19c	17c
34 B 885	613	SPDT	Bakelite	2 3/8 x 1"	22c	20c
34 B 887	614	DPST	Bakelite	1 3/8 x 1 3/8"	32c	29c
34 B 888	615	DPDT	Bakelite	2 3/8 x 1 3/8"	36c	33c
34 B 889	617	SPST	Porcelain	3 1/2 x 1 3/8"	24c	21c

### EAGLE FLUSH-MOUNT PUSHBUTTON SWITCH

**Type 188.** Momentary contact type 6-leaf spider secures switch in  $\frac{3}{16}$ " hole. Ideal for signalling bells, lights, other similar applications.  $\frac{1}{2}$ " shank depth. Screw terminals. 2 oz. 1-9, EACH ..... 31c  
10-Up, EACH ..... 28c



### AC-DC HEAVY-DUTY TYPE

**G** For motor-starting and other similar heavy-duty applications.  $\frac{1}{8}$ " threaded stem. Screw terminals. Underwriters' Laboratories Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Amperes		Stem Lgth.	NET EACH	
			125 V	250 V		1-9	10-99
34 B 545	7320-K3	DPST	12	6	$\frac{1}{8}$ "	1.01	.83
34 B 408	7321-K2	SPST	12	6	$\frac{1}{8}$ "	1.01	.83
34 B 520	7321-K3	SPST	12	6	$\frac{1}{8}$ "	1.01	.83
34 B 516	7360-K8	DPST	15	10	$\frac{1}{8}$ "	1.74	1.44
34 B 517	7402-K4	DPST	1 1/2 hp	20	$\frac{1}{8}$ "	2.47	2.04
34 B 714	7361-K5	SPST	15	10	$\frac{1}{8}$ "	1.74	1.44
34 B 715	8690-K2	DPDT	15	10	$\frac{1}{8}$ "	3.86	3.18
34 B 717	8680-K1	DPDT	10	5	$\frac{1}{8}$ "	3.17	2.62
34 B 718	7360-K7	DPST	15	10	$\frac{1}{8}$ "	1.74	1.44
34 B 719	7402-K3	DPST	1 1/2 hp	20	$\frac{1}{8}$ "	2.47	2.04

### STANDARD AC TYPE

All rated at 6 amps at 125 v. and 3 amps at 250 v. Single-pole switches are Fig. K; double-pole are Fig. D. Solder lugs, except \*screw type terminals. †Center "OR" positions. Threaded stem dia.,  $\frac{1}{8}$ "; stem length,  $\frac{1}{8}$ ". U.L. Approved. 3 oz.

Stock No.	Mfr's Type	Action	NET EACH	
			1-9	10-99
34 B 640	7580-K4*	SPST	52c	43c
34 B 641	7580-K6	SPST	45c	38c
34 B 642	7581-K4†	SPDT	60c	50c
34 B 643	7581-K6†	SPDT	49c	41c
34 B 644	7582-K4*	SPDT	60c	50c
34 B 645	7582-K6	SPDT	49c	41c
34 B 646	7590-K4*	DPST	81c	67c
34 B 647	7590-K6	DPST	66c	55c
34 B 648	7591-K4†	DPDT	96c	79c
34 B 649	7591-K6†	DPDT	75c	61c
34 B 689	7592-K4*	DPDT	96c	79c
34 B 690	7592-K6	DPDT	73c	61c

### HEAVY-DUTY AC TYPE

Slow-make, slow-break mechanism for long, dependable use.  $\frac{1}{8}$ " diameter threaded stem.  $\frac{1}{8}$ " long. \*Center off. †Screw terminals; others have solder lug terminals. All have nominal rating of 10 amps at 250 v. AC and 15 amps at 125 v. AC. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Fig.	NET EACH	
				1-9	10-99
34 B 534	7501-K13	SPST	J	.52	.36
34 B 591	7500-K14†	SPST	J	.60	.41
34 B 592	7502-K13†	SPDT	K	.72	.49
34 B 536	7505-K4	SPDT	K	.72	.49
34 B 593	7504-K4†	SPDT	K	.72	.59
34 B 537	7561-K4	DPST	D	.81	.67
34 B 538	7560-K5†	DPST	D	.96	.79
34 B 539	7565-K3	DPDT	D	.96	.79
34 B 595	7564-K6†	DPDT	D	1.19	.98
34 B 539	7563-K4*	DPDT	D	.96	.79
34 B 596	7562-K4†	DPDT	D	1.19	.98
34 B 543	7611-K2	3PST	M	1.66	1.37
34 B 597	7610-K2†	3PST	M	1.93	1.60
34 B 523	7613-K2†	3PST	M	2.04	1.69
34 B 598	7612-K2*	3PDT	M	2.45	2.03
34 B 796	7503-K13*	SPDT	K	2.60	.50
34 B 798	7615-K2	3PDT	M	2.04	1.69
34 B 799	7614-K2†	3PDT	M	2.45	2.03

### SPST MIDGET TYPE

**L** Type 8098-K3. Midget switch, 3 amps at 125 volts AC, 0.75 amps at 125 volts DC, and 6 amps at 24 volts DC. Screw terminals. Threaded stem diameter,  $\frac{1}{8}$ "; stem length,  $\frac{1}{8}$ ". Has bat-handle; handle length,  $\frac{1}{2}$ " from end of threaded stem. Shpg. wt., 2 oz. 1-9, EACH ..... 41c  
10-99, EACH ..... 35c

### CENTER-OFF TYPE

**H** Type 7140-K6. SPDT switch with center-off position. 3 amps at 125 volts AC and 10 amps at 24 volts DC. Screw terminals. Threaded stem diameter,  $\frac{1}{8}$ "; stem length,  $\frac{1}{8}$ ". U.L. Approved. 3 oz. 1-9, EACH ..... 45c  
10-99, EACH ..... 37c

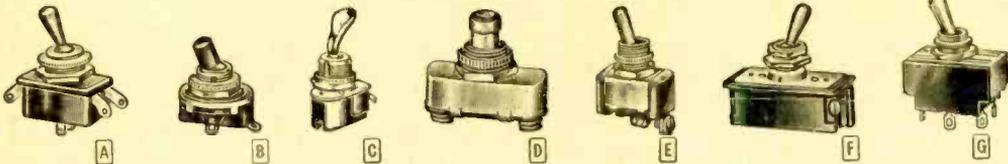
### ON-OFF PLATE

**Type 827-228F3.** Switch plate for "On-Off" indication of toggle switches. Designed to fit slot in threaded stem. Secured in position by mounting nut of switch. Mounts vertically. Shpg. wt. per pkg., 2 oz. 1-9, EACH ..... 8c



# Carling, Ohmite and JBT Switches

## CARLING SWITCHES



### AC-DC TOGGLE SWITCHES

**A** Highly dependable AC-DC toggle switches for medium duty applications. Type Nos. ending with 73 are of bat handle construction; those ending with 25 are ball handle. All have solder lug connections except \*wire leads. All have 1/8"-32 threaded stem. U.L. Approved. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Stem Length	Action	Amperes		1-9, EACH	10-99, EACH
				125V	250V		
34 B 092	110-25	7/8"	SPST	6	3	54c	49c
34 B 093	112-25	7/8"	SPDT	3	1	62c	56c
34 B 094	216-25	7/8"	DPST	3	1	81c	73c
34 B 095	316-25	7/8"	DPDT	3	1	89c	80c
34 B 096	2BB62-73	1 1/2"	SPDT	6	3	62c	56c
34 B 097	2BK62-73	1 1/2"	DPST	6	3	78c	70c
34 B 098	2BL62-73	1 1/2"	DPDT	6	3	86c	78c
34 B 180	111-16-73*	1 1/2"	SPST	6	3	46c	41c

### HEAVY-DUTY PLASTIC-TOGGLE AC SWITCHES

**B** Extremely compact AC switches for limited space applications. Require only 1/2" behind panels. Ideal for instrumentation and development use. Rated 15 amps at 125 v. and 7 1/2 amps at 250 v. Solder lug terminals. 1 1/2"-32 threaded stem; 3/4" stem length. U.L. Approved. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Color	Action	1-9, EACH	10-99, EACH
34 B 312	AA252-BL	Black	SPST	48c	44c
34 B 313	AA252-RD	Red	SPST	51c	46c

### MOMENTARY SPST AC-DC TOGGLE SWITCH

**C** Type 110-M-NO-93. With trigger handle. For instrumentation and test equipment use. Normally open. Lugs are silver-plated. AC-DC rating; 6 amps, 125 volts; 3 amps, 250 volts. Stem length, 1 1/2". Stem dia., 1/8"-32 thread. U.L. Approved. 3 oz.

34 B 149. 10-99, EACH..... 61c 1-9, EACH..... 68c

### PUSH-BUTTON SWITCHES

**D** Heavy-duty, push-type momentary contact switches. Rated 10 amps, 125-250 v. AC, N.o., normally open; n.c., normally closed. Screw terminals. 1 1/2" dia. stem; 3/8" long. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	1-9, EACH	10-99, EACH
34 B 398	172	SPST, n.o.	57c	51c
34 B 397	170	SPST, n.c.		

### JBT NON-SHORTING ROTARY SWITCHES



An excellent selection of rotary selector switches. All moving contacts are fully enclosed—minimizes dirt and corrosion. Made of durable, molded bakelite, with rigid 3-post deck suspension. Average contact resistance only 0.007 ohms; insulation resistance above 50,000 megohms. Current-carrying capacity, 1 amp; momentary, 5 amps. Rated 2000 volts rms between contacts and ground, except 6DT types, which are 1500 volts rms. All are continuous rotation type except \*6-pole, double-throw. Type MS-14 has 13 circuits and 1 "off" position per deck. Angular indexing, 25°/43". MS-20 will handle up to 19 circuits and 1 "off" position per deck. Letter B in type number indicates bonded construction, using cured laminations for ruggedization, shock-proofing and further enclosure. All are supplied with knob. Av. shpg. wt., 6 oz.

Stock No.	Mfr's Type	Gangs	Total Poles	Positions Per Pole	Depth	NET EACH
33 B 950	MS-14B-1	1	1	14	1 1/2"	2.30
34 B 951	MS-14-2	2	2	14	1 1/2"	2.50
33 B 951	MS-14B-2	2	2	14	1 1/2"	3.18
34 B 952	MS-14-3	3	3	14	1 1/2"	3.04
33 B 952	MS-14B-3	3	3	14	1 1/2"	4.07
34 B 953	MS-14-4	4	4	14	1 1/2"	3.97
33 B 953	MS-14B-4	4	4	14	1 1/2"	5.34
34 B 954	MS-14-6	6	6	14	2 1/2"	5.78
33 B 954	MS-14B-6	6	6	14	2 1/2"	7.84
34 B 955	MS-20-1	1	1	20	1 1/2"	2.50
33 B 955	MS-20B-1	1	1	20	1 1/2"	2.84
35 B 252	*MS-20-1-6DT	1	6	2	1 1/2"	3.18
33 B 956	*MS-20B-1-6DT	1	6	2	2	3.53
34 B 956	MS-20-2	2	2	20	1 1/2"	3.18
33 B 957	MS-20B-2	2	2	20	1 1/2"	3.97
34 B 958	MS-20-4	4	4	20	1 1/2"	5.24
33 B 958	MS-20B-4	4	4	20	1 1/2"	6.61
34 B 959	MS-20-6	6	6	20	2 1/2"	7.40
33 B 959	MS-20B-6	6	6	20	2 1/2"	9.46

### HEAVY-DUTY AC AND AC-DC TOGGLE SWITCHES

Rugged bat handle toggle switches, 1 1/2" long. All are AC-DC types, except 34 B 380 which is for AC applications only. \*Center off. Bakelite base with metal covering. Stem length, 1 1/2". Stem diameter, 1 1/2"-32 thread. †Screw terminals with 6-32 binding head screws; all other switches in listing have solder lug terminals. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Action	Amperes		1-9, EACH	10-99, EACH
				125 V	250 V		
34 B 380	2DA25-73†	F	SPST	12	6	.89	.80
34 B 183	2FA53-73	E	SPST	15	10	.48	.43
34 B 385	2FA54-73†	E	SPST	15	10	.54	.49
34 B 425	2FB53-73	E	SPDT	15	10	.54	.49
34 B 386	2FB54-73†	E	SPDT	15	10	.65	.58
34 B 184	2FC53-73	E	SPDT*	15	10	.54	.49
34 B 387	2FC54-73†	E	SPDT*	15	10	.65	.58
34 B 187	2GK53-73	G	DPST	15	10	.73	.66
34 B 389	2GK54-73†	G	DPST	15	10	.86	.77
34 B 188	2GL53-73	G	DPDT	15	10	.86	.77
34 B 167	2GM53-73	G	DPDT*	15	10	.86	.77
34 B 391	2GM54-73†	G	DPDT*	15	10	1.08	.97

### MOMENTARY AC TOGGLE SWITCHES

A selection of dependable bat-handle toggle switches designed for AC applications. Circuit maintained only while switch handle is held in position. A spring returns handle to previous position when handle is released. Excellent for test equipment, control panels, instrumentation, etc. Bat handle is 1 1/2" long. Stem length, 1 1/2". Stem diameter, 1 1/2"-32 thread. \*Solder lug terminals; all others have screw type terminals with No. 6-32 binding head screws as shown in Fig. E. †One side normally on; other side momentarily on; no center position. ‡Both sides momentarily on; off in center position. †One side normally on; other side momentarily on; off in center position. U.L. Approved. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Action	Amperes		1-9, EACH	10-99, EACH
				125 V	250 V		
34 B 056	6FA54-73	E	SPST n.o.	15	10	.68	.61
34 B 057	6FA58-73	E	SPST n.c.	15	10	.68	.61
34 B 186	6FB53-73*	E	SPDT†	15	10	.68	.61
34 B 388	6FC54-73	E	SPDT‡	15	10	.78	.71
34 B 059	6FC58-73	E	SPDT‡	15	10	.78	.71
34 B 062	6GK54-73	G	DPST n.o.	15	10	1.11	1.00
34 B 063	6GK58-73	G	DPST n.c.	15	10	1.11	1.00
34 B 064	6GL54-73	G	DPDT†	15	10	1.22	1.10
34 B 065	6GM54-73	G	DPDT‡	15	10	1.22	1.10
34 B 392	6GM58-73	G	DPDT‡	15	10	1.22	1.10

### OHMITE POWER TAP SWITCHES



All-ceramic high-current, power tap switches. Non-shortening, single-pole type. Feature large, solid silver-to-silver contacts. The 111 is rated at 10 amps, 150 volts. AC. Dia., 1 1/4". The 212 is rated at 15 amps, 150 volts. AC. Dia., 2 1/4". Model 312 is rated at 25 amps, 300 volts. AC. 150 v. between taps. Dia. 3 1/4". \*Two-in-tandem types; rated same as single types. Shpg. wt., 111, 5 oz.; 212, 10 oz.; 312, 1 lb. All are U.L. Approved.

#### MODEL 111

#### MODEL 212

Stock No.	Taps	Rotation	NET EACH	Stock No.	Taps	Rotation	NET EACH
34 B 227	3	60°	2.65	34 B 323*	3	90°	18.35
34 B 222*	3	60°	10.29	34 B 239	4	90°	6.6
34 B 228	4	90°	2.65	34 B 322*	4	90°	18.35
34 B 229	5	120°	2.70	34 B 240	5	120°	6.82
34 B 220*	5	120°	10.50	34 B 241	6	150°	6.82
34 B 230	6	150°	2.70	34 B 321*	6	150°	18.87
34 B 231	7	180°	2.82	34 B 242	7	180°	7.09
34 B 232	8	210°	2.82	34 B 243	8	210°	7.09
34 B 233	9	240°	2.94	34 B 244	9	240°	7.32
34 B 234	10	270°	2.94	34 B 245	10	270°	7.32
34 B 235	11	300°	3.03	34 B 247	12	330°	7.59
34 B 293*	11	300°	11.61				

#### MODEL 312

Stock No.	Taps	Rotation	NET EACH	Stock No.	Taps	Rotation	NET EACH
34 B 278	4	90°	9.58	34 B 272	10	270°	10.35
34 B 277	5	120°	9.58	34 B 271	11	300°	10.58
34 B 276	6	150°	9.82	34 B 270	12	330°	10.58

See other switch pages for 30° type switch plates.

# Switchcraft and Acro Switches

## SWITCHCRAFT QUALITY SWITCHES

### NON-LOCKING PUSH-BUTTON TYPE SWITCHES

**FF Switches.** Flat frame construction provides frame adaptable to any stack of contact springs. Simple, direct action movement. Excellent for replacement use in electric appliances and in the design of new appliances. Conventional spring stack assembly with bakelite spacers. Silver contacts rated at 3 amperes, 120 volts AC. One-piece, black button and shaft.  $\frac{3}{8}$ " diameter threaded shank,  $\frac{3}{8}$ " long. With locknut and washer  $\frac{3}{8}$ " n.o. means normally open, n.c. means normally closed. Shpg. wt., 3 oz.



Stock No.	Mfr's Type	Action		NET EACH
		Poles	Diagram	
34 B 994	1001	SPST n.o.	I	.62
34 B 995	1002	SPST n.c.	II	.62
34 B 996	1003	SPDT	III	.71
34 B 997	1004	DPST n.o.	IV	.76
34 B 998	1005	DPST n.c.	V	.76
34 B 999	1006	DPDT	VI	.91
34 B 969	1009	3PDT	VII	1.23

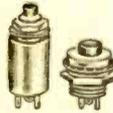
**Little Switches.** For limited space applications. One-piece button and shaft.  $\frac{1}{8}$ " Black button; red button. Nickel silver spring contacts. Spring sections are insulated.  $\frac{3}{8}$ " threaded shank,  $\frac{1}{2}$ " long. Recommended for low level currents only. With mounting hardware. Shpg. wt., 3 oz.



Stock No.	Mfr's Type	Action		NET EACH
		Poles	Diagram	
34 B 944	101†	SPST n.o.	I	.53c
34 B 945	102†	SPST n.c.	II	.53c
34 B 946	103†	SPDT	III	.59c
34 B 947	201*	SPST n.o.	I	.53c
34 B 948	202*	SPST n.c.	II	.53c
34 B 949	203*	SPDT	III	.59c

### "BUTTON" SWITCHES

Unusually small, momentary-action push-button switches. Small size makes it ideal for replacement in electric appliances and in the design of new appliances. Enclosed in metal housing; black or red plastic button. 903 and 913 are  $\frac{1}{4}$ " long; fit  $\frac{1}{8}$ " hole. 923 and 933 are  $\frac{3}{8}$ " long; fit  $\frac{1}{4}$ " hole. Mounting: 903, 903D, 913, 913D are for behind-panel mounting; Types 923, 923D, 933, 933D mount from front of panel. Rated at 250 ma, non-inductive load, AC (30 watts maximum). Shpg. wt., 2oz.



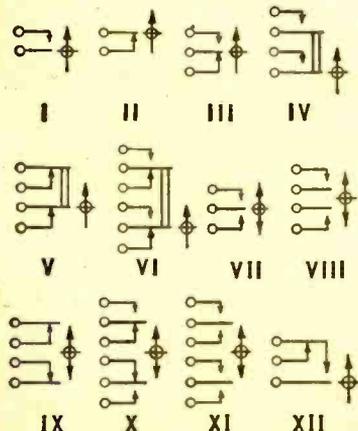
Stock No.	Type (Red)	Stock No.	Type (Black)	Action		NET EACH
				Poles	Diag.	
35 B 414	903	35 B 418	913	SPDT	III	.88
35 B 415	903D	35 B 419	913D	SPDT	XII	.88
35 B 416	923	35 B 420	933	SPDT	III	1.03
35 B 417	923D	35 B 421	933D	SPDT	XII	1.03

### SWITCHCRAFT STACK SWITCH KIT

**Model K-101.** Kit of component parts for assembling or repairing stack switches. Used in relays, remote control units, electronic organs, etc. Kit consists of 74 springs in 9 different thicknesses, over 115 phenolic spacers and insulators in 7 variations of design, hard-rubber insulating tubing, two different sets of stack assembling pins, two roller assemblies, assorted contacts, lifters, pushers, etc. Shpg. wt., 1 1/2 lbs. 34 B 871. NET 9.70



### SWITCHCRAFT SCHEMATIC DIAGRAMS



### LEV-R TYPE SWITCHES

Ultra-compact lever-action switches. Silver contacts, rated at 3 amps, 120 volts, non-inductive load. Length,  $3\frac{1}{4}$ "; width  $\frac{3}{8}$ ";  $\frac{3}{8}$ " n.o. means normally open; n.c., normally closed. \*3-position type. †Types 3034 and 3034L are operated to close either of two circuits keeping the other open. †Types 3035 and 3035L are operated to open one of two circuits keeping the other closed. Require  $\frac{1}{2}$ " mtg. hole. Shpg. wt., 3 oz.



Spring Return			Locking			Action			NET EACH
Stock No.	Type	Poles	Stock No.	Type	Poles	Diag.			
34 B 465	3001	34 B 471	3001L	SPST, n.o.	I	1.15			
34 B 464	3002	34 B 455	3002L	SPST, n.c.	II	1.15			
34 B 466	3003	34 B 472	3003L	SPDT	III	1.32			
34 B 467	3004	34 B 473	3004L	DPST, n.o.	IV	1.47			
34 B 456	3005	34 B 457	3005L	DPST, n.c.	V	1.47			
34 B 468	3006	34 B 474	3006L	DPDT	VI	1.62			
34 B 485	3009	34 B 484	3009L	3PDT		2.00			
34 B 469	*3033	34 B 475	*3033L	SPDT, n.o.	VII	1.47			
34 B 458	*3034	34 B 459	*3034L	DP 2-Ckt†	VIII	1.53			
34 B 464	*3035	34 B 477	*3035L	DP 2-Ckt†	IX	1.53			
34 B 478	*3036	34 B 479	*3036L	DP 2-Ckt†	X	.71			
34 B 470	*3037	34 B 476	*3037L	DPDT, n.o.	XI	1.73			

### "TINI-SWITCHES"

Subminiature push-button switches for limited space applications. Ideally suited for use in microphones, radio and automotive test instruments, inter-communication systems, electro-therapy equipment, etc. Quality constructed throughout.  $\frac{1}{4}$ " threaded shank;  $\frac{1}{16}$ " long. For low-level currents only. Require  $\frac{3}{8}$ " behind panel. \*n.o. means normally open; n.c., normally closed. Shpg. wt., 3 oz.



Stock No.	Type (Red)	Stock No.	Type (Black)	Action*		NET EACH
				Poles	Diag.	
34 B 831	951	34 B 834	961	SPST n.o.	I	.53
34 B 832	952	34 B 835	962	SPST n.c.	II	.53
34 B 833	953	34 B 836	963	SPDT	III	.59

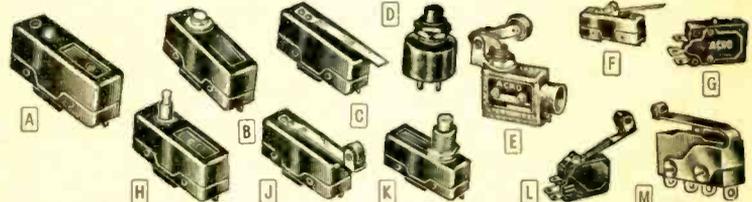
### CORD-TYPE PUSH-BUTTON SWITCHES

Specially designed, hand-held switch for use on control cords. Consists of a Type 903, 903D, 913, or 913D momentary-action "button" switch (left), threaded into one end of a bright nickel-plated sleeve. A precision, easily operated switch for remote control of recorders, lights, counters, many other devices. Sleeve is  $\frac{1}{8}$ " diameter and  $2\frac{1}{2}$ " long. Shpg. wt., 4 oz.



Stock No.	Type (Red)	Stock No.	Type (Black)	Action		NET EACH
				Poles	Diag.	
35 B 422	E903	35 B 424	E913	SPDT	III	1.47
35 B 423	E903D	35 B 425	E913D	SPDT	XII	1.47

### ACRO SNAP-ACTION SWITCHES



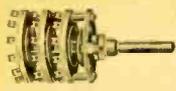
Current ratings are given at 125 volts AC. Pre-travel given in inches; operating force in ounces, except \*grams. All switches are SPDT except †SPST normally open, ‡SPST normally closed, §SP4 and ¶SP2. †With wire-leaf actuator; \*\*flat-leaf actuator; ††overtravel plunger with boot; §§ overtravel plunger only. All have solder terminals except RD and S-RD types which have screw terminals. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Oper. Force	Pre-travel	Size	Amps	NET EACH
35 B 016	TD-48L	F	12*	$\frac{3}{16}$ "	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	10	2.02 1.82
35 B 009	1MD1-1A	G	3-6	$\frac{1}{8}$ "		10	1.45 1.31
35 B 019	2MD3-1A	G	6-10	$\frac{1}{8}$ "		10	1.45 1.31
35 B 020	1CMD1-2ANX		20-27*	$\frac{1}{16}$ "		3	1.45 1.31
35 B 021	2CMD1-2ANX		33-44*	$\frac{1}{16}$ "	$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ "	3	1.45 1.31
35 B 024	1CMD1-2ANX-A22	G†	2.5*	.750"		3	1.75 1.58
35 B 030	2CMD1-2ANX-A24	G**	40*	.750"		3	1.75 1.58
35 B 038	1MD1-1A-A18M	L	2	$\frac{1}{16}$ "		10	2.05 1.85
35 B 028	3D0S-5P	D	10-15	.06-.09"	$\frac{3}{8} \times \frac{3}{8}$ " dia.	†12	1.75 1.58
35 B 029	3D0S-5P	D	10-15	.03-.06"	$\frac{3}{8} \times \frac{3}{8}$ " dia.	†12	1.75 1.58
35 B 031	ME-SI-P00D-R		3-6	.188"	$\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{8}$ "	10	1.70 .63
35 B 131	260-0008-0B	M	14-20	.100"	$\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{8}$ "	†10	1.99 1.79

### SWITCHES WITH MICRO EQUIVALENTS

Stock No.	Mfr's Type	Micro Equiv.	Fig.	Oper. Force	Pre-travel	Size	Amps	NET EACH
35 B 013	RD-5L	BZ-2RL		4-5	$\frac{1}{8}$ "		10	1.58 1.42
35 B 014	RD-2M	BZ-2RL2		5	$\frac{1}{8}$ "		10	2.02 1.82
35 B 285	RD-1A-1S	BZ-2R-A2	A	9-13	.010-.025"		15	1.56 1.40
35 B 286	RD-2M-1S	BZ-2R2-A2	J	5	.010-.025"		15	2.11 1.90
35 B 287	RD-5L-1S	BZ-2R1-A2	C	4-5	.010-.025"		15	1.72 1.55
35 B 288	RD-1P-1S	BZ-2R0-A2	K	9-13	.010-.025"		15	3.34 3.01
35 B 289	RD-70-1S	BZ-2R0-A2	B	9-13	.010-.025"		15	1.88 1.69
35 B 290	RD-10-1S	BZ-2R5-A2	H	9-13	.015-.050"		15	1.88 1.69
35 B 280	S-RD-7PN-1S	BZE-2RN	E†	9-24	.078"		15	5.70 5.13
35 B 281	S-RD-8PQ2-1S	BZE-2RQ2	E‡	10-18	$\frac{1}{8}$ "		15	7.65 6.89
35 B 284	S-RD-6PQ-1S	BZE-2RQ	E§	9-13	.010-.025"	$3 \times 3 \times 1$ "	15	4.40 3.96

# Centralab Switches



## MINIATURE STEATITE SWITCHES

**PA-2000 Series.** Compact rotary switches. Precision constructed to provide excellent RF characteristics. Rated 2 amps @ 15 v. DC. 150 ma. @ 110 v. AC. \*1 off, up to 9 progressively shorting positions. Switch  $1\frac{1}{4}$ " long. Av. shpg. wt., 4 oz. per section.

Shorting		Non-Shorting		Sec-tions	Total Poles	Pole Pos.	NET EACH	
Stock No.	Type	Stock No.	Type				1-9	10-24
35 B 095	*2042			1	1	2-10	1.76	1.62
34 B 900	2000	34 B 921	2001	1	1	2-12	1.94	1.79
34 B 901	2002	34 B 922	2003	1	2	2-6	1.94	1.79
34 B 902	2004	34 B 923	2005	2	2	2-12	2.76	2.54
34 B 903	2006	34 B 924	2007	3	3	2-5	1.94	1.79
34 B 904	2008	34 B 925	2009	3	3	2-12	3.53	3.24
34 B 905	2010	34 B 926	2011	4	4	2-6	2.76	2.54
34 B 906	2012	34 B 927	2013	4	4	2-12	4.23	3.89
34 B 907	2014	34 B 928	2015	1	5	2-3	1.94	1.79
34 B 908	2016	34 B 929	2017	5	5	2-12	5.06	4.65
34 B 909	2018	34 B 930	2019	1	6	2	1.94	1.79
34 B 910	2020	34 B 931	2021	2	6	2-5	2.76	2.54
34 B 911	2022	34 B 932	2023	3	6	2-6	3.53	3.24
34 B 912	2024	34 B 933	2025	6	6	2-12	5.88	5.40
34 B 913	2026	34 B 934	2027	4	6	2-6	4.23	3.89
34 B 914	2028	34 B 935	2029	3	9	2-5	3.53	3.24
34 B 915	2030	34 B 936	2031	2	10	2-3	2.76	2.54
34 B 917	2034	34 B 938	2035	2	12	2	2.76	2.54
34 B 919	2038	34 B 940	2039	3	15	2-3	3.82	3.51
34 B 920	2040	34 B 941	2041	3	18	2	3.82	3.51



## MINIATURE PHENOLIC SWITCHES

**PA-1000 Series.** Miniature phenolic-insulated switches. Compact—ideal for limited space applications. 30° indexing. Adjustable stop.  $1\frac{1}{4}$ " x  $1\frac{1}{4}$ " dia. Shaft,  $1\frac{1}{4}$ " long. Rated 2 amps @ 15 v. DC. 150 ma. @ 110 v. AC. Shpg. wt., 5 oz.

Shorting		Non-Shorting		Sec-tions	Total Poles	Pole Pos.	NET EACH	
Stock No.	Type	Stock No.	Type				1-9	10-24
35 B 050	1000	35 B 065	1001	1	2	2-11	1.47	1.35
35 B 051	1002	35 B 066	1003	1	2	2-5	1.47	1.35
35 B 052	1004	35 B 067	1005	2	2	2-11	1.47	1.35
35 B 053	1006	35 B 068	1007	1	3	2-3	1.47	1.35
35 B 054	1008	35 B 069	1009	3	3	2-11	2.65	2.43
35 B 055	1010	35 B 070	1011	1	4	2	1.47	1.35
35 B 056	1012	35 B 071	1013	2	4	2-5	2.12	1.95
35 B 057	1014	35 B 072	1015	4	4	2-11	3.12	2.87
35 B 058	1016	35 B 073	1017	5	5	2-11	3.65	3.35
35 B 059	1018	35 B 074	1019	2	6	2-3	2.12	1.95
35 B 060	1020	35 B 075	1021	3	6	2-5	2.65	2.43
35 B 062	1024	35 B 077	1025	2	8	2	2.12	1.95
35 B 063	1026	35 B 078	1027	4	8	2-5	3.12	2.87
35 B 064	1028	35 B 079	1029	3	12	2	2.65	2.43

## SEPARATE ASSEMBLIES FOR MAKING MINIATURE SWITCHES

**Type PA Phenolic Sections Only.** Carry the same ratings as above miniature switches. Excellent RF characteristics. Adjustable stop. With hardware. Shpg. wt., 2 oz.

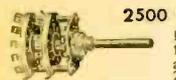
Shorting		Non-Shorting		Total Poles	Pole Pos.	NET EACH	
Stock No.	Type	Stock No.	Type			1-9	10-24
35 B 080	30	35 B 085	31	1	2-11		
35 B 081	32	35 B 086	33	2	2-5		
35 B 082	34	35 B 087	35	3	2-3	71c	65c
35 B 083	36	35 B 088	37	4	2		
35 B 236	40	35 B 237	41	1	2-11		

**Type PA Steatite Sections Only.** Custom and standard switches can be assembled by using these sections. \*60° index section. Wt., 2 oz.

Shorting		Non-Shorting		Total Poles	Pole Pos.	NET EACH	
Stock No.	Type	Stock No.	Type			1-9	10-24
35 B 040	PA-0	35 B 045	PA-1	1	2-12		
35 B 041	PA-2	35 B 046	PA-3	2	2-6	97c	90c
35 B 042	PA-4	35 B 047	PA-5	3	2-5		
35 B 044	PA-8	35 B 049	PA-9	6	2		
35 B 238	PA-11	35 B 240	PA-18	1	2-11	97c	90c
35 B 239	PA-12			1	2-10		
		35 B 241	PA-17*	1	2-6		

**PA-300 Series, Shaft and Index Assemblies.** Hardware for miniature switches (spacers, tie-rods, etc.). 30° indexing. Wt., 3 oz.

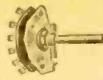
Stock No.	Mfr's Type	Shaft Length	Sections	NET EACH	
				1-9	10-24
35 B 092	300	2"	1-3	1.12	1.03
35 B 093	301	4"	4-6	1.47	1.35
35 B 094	302	6"	7-9	1.94	1.79



## 2500 SERIES—STEATITE INSULATION

Rotary switches. Excellent for RF use. Switch  $1\frac{1}{4}$ " x  $1\frac{1}{4}$ " dia. Section.  $\frac{1}{2}$ " spacing between sections for 1 and 2 section switches;  $1\frac{1}{2}$ " spacing for switches over 2 sections. Bushing,  $\frac{3}{8}$ " dia. x  $\frac{3}{4}$ " long. Shaft,  $1\frac{1}{4}$ ". Positive 30° index; adjustable stop. Shpg. wt., per section, 4 oz.

Shorting		Non-Shorting		Sec-tions	Total Poles	Pole Pos.	NET EACH	
Stock No.	Type	Stock No.	Type				1-9	10-24
35 B 214	2500	35 B 225	2501	1	1	2-6		
35 B 215	2502	35 B 226	2503	1	1	2-11	1.94	1.79
35 B 216	2504	35 B 227	2505	1	1	2-5		
35 B 217	2506	35 B 228	2507	1	3	2-3		
35 B 218	2510	35 B 229	2511	2	2	2-6		
35 B 219	2512	35 B 230	2513	2	2	2-11		
35 B 220	2514	35 B 231	2515	2	4	2-5	2.76	2.54
35 B 221	2516	35 B 232	2517	2	6	2-3		
35 B 223	2522	35 B 201	2523	3	3	2-11		
35 B 224	2524	35 B 202	2525	3	6	2-5	3.53	3.24



## UNIVERSAL AND INTERCOM SWITCHES

High-quality rotary action switches. Have laminated phenolic sections  $\frac{1}{4}$ " thick. Voltage breakdown is 1000 volts rms to ground. Rating: 2 amp at 15 v. DC; 150 ma at 110 v. AC. Metal is cadmium-plated. All are 30° indexing except 1443 and 1445 which are 15°. Shafts,  $1\frac{1}{4}$ " long.  $\frac{1}{4}$ " dia. full round. Bushing,  $\frac{3}{8}$ " x 32 thread  $\frac{1}{4}$ " long. \*1" behind panel.  $\frac{1}{4}$ " behind panel. †Positive in 2 pos., spring return in 3rd. All are non-shorting except ‡. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Description	NET EACH	
			1-9	10-24
34 B 088	1443*	SP, 23 pos., with stop	1.76	1.62
34 B 085	1450†	4PDT	1.03	.95
34 B 087	1451†	4PDT, spring-return	1.18	1.08
34 B 071	1448*	6P, 3 pos., spring-return	1.62	1.49
34 B 072	1449*	6P, 3 pos.	1.52	1.49
34 B 074	1445*	SP, 23 pos., cont. rotation	1.76	1.62

## INTERCOM AND RADIO SWITCHES

Rotary switches for use in radio-phonos, P.A. channel selectors, meter switching, intercom talk-listen and speaker switching. Silver-plated spring brass clips; cadmium-plated metal parts. Rated 2 amps at 15 v. DC; 150 ma. at 110 v. AC. Shaft,  $\frac{1}{4}$ " dia.,  $2\frac{1}{4}$ " long. Shorting contacts except \*non-shorting. †3 active positions with 5 amp, 110 v. AC switch. 1472 is for AM-FM-phonos selector use. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Description	NET EACH	
			1-9	10-24
34 B 080	1460	SPDT phono-radio sw.		
34 B 081	1461	SP-3-position selector	.88	.81
34 B 082	1462	DPDT bandswitch		
34 B 083	1463*	SPDT spring return		
34 B 084	1464*	DPDT spring return	.88	.81
35 B 235	1472*	DP 3-position		
34 B 073	1465†	SP-4-position W/AC sw.	1.47	1.35

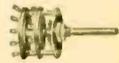
## LEVER ACTION SWITCHES

Low capacity. Use singly or in groups. \*Shorting type; others non-shorting. Front plate and lever cadmium-plated. Index: †Positive; ‡Spring-Return; †466, †467 are Positive and Spring Return; †475, tube tester replacement switch.  $1\frac{1}{4}$ " x  $1\frac{1}{4}$ ". Mtg. ctrs.,  $1\frac{1}{4}$ ". Knob and mtg. screws. Av. wt., 3 oz.

Stock No.	Type	Stock No.	Type	Poles	Pos.	1-9, EA.	10-24, EA.
34 B 021	1452**	34 B 026	1454†	2	3	1.03	.95
34 B 022	1453**	34 B 027	1455†	2	3	1.03	.95
34 B 025	1456**	34 B 030	1457†	4	2	1.18	1.08
34 B 024	1459**	34 B 029	1458†	4	2	1.18	1.08
34 B 023	1466*	34 B 028	1467†	4	3	1.03	.95
		35 B 198	1475†	1	3	1.03	.95

**MOUNTING PLATES.** For single or multiple mounting of lever-action switches. Black wrinkle finish steel. \*Chrome-plated. Av. shpg. wt., 4 oz.

Stock No.	Type	Switch's	Size	1-9, EA.	10-24, EA.
34 B 050	P1755	1	$1\frac{1}{2}$ x $2\frac{1}{2}$ "	.29	.27
34 B 051	P1756	2	$1\frac{1}{2}$ x $2\frac{1}{2}$ "	.29	.27
34 B 052	P1757	3	$2\frac{1}{2}$ x $2\frac{1}{2}$ "	.29	.27
34 B 053	P1758	4	$3\frac{1}{2}$ x $2\frac{1}{2}$ "	.29	.27
34 B 060	P222*	2	$2\frac{1}{2}$ x $4\frac{1}{2}$ "	.50	.46
34 B 061	P222*	1	$2\frac{1}{2}$ x $4\frac{1}{2}$ "	.50	.46



## 1400 SERIES—PHENOLIC INSULATION

Laminated phenolic-insulated rotary switch for use in band change and general tap applications. Compact design. Size:  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " dia. Bushings,  $\frac{3}{8}$ " x  $\frac{3}{4}$ ". Shafts,  $1\frac{1}{4}$ ". from end of bushing;  $\frac{1}{4}$ " dia. Voltage breakdown, 1000 v. AC. R.M.S. Rating: 2 amps. at 15 v. DC; 150 ma. at 110 v. AC. Has positive 30° indexing. With mtg. nut, washer,  $1\frac{1}{4}$ " knob. Av. shpg. wt., 6 oz.

Shorting		Non-Shorting		Sec-tions	Total Poles	Pole Pos.	NET EACH	
Stock No.	Type	Stock No.	Type				1-9	10-24
35 B 182	1400	35 B 163	1401	1	1	2-6		
35 B 183	1402	35 B 164	1403	1	1	2-11		
35 B 184	1404	35 B 165	1405	1	2	2-5	1.71	1.57
35 B 185	1406	35 B 166	1407	1	3	2-3		
35 B 186	1408	35 B 167	1409	1	4	2		
35 B 187	1410	35 B 168	1411	2	2	2-6		
35 B 188	1412	35 B 169	1413	2	2	2-11		
35 B 189	1414	35 B 170	1415	2	4	2-5	2.12	1.95
35 B 190	1416	35 B 171	1417	2	6	2-3		
35 B 191	1418	35 B 172	1419	2	8	2		
35 B 193	1422	35 B 174	1423	3	3	2-11	2.65	2.43
35 B 194	1424	35 B 175	1425	3	6	2-5	2.65	2.43
35 B 197	1430	35 B 178	1431	4	8	2-5	3.12	2.87

**P-270 Series, Shaft and Index Assemblies.** Complete hardware for 1400 Series switches, above. Also fits 2500 series steatite sections. (Spacers, tie-rods, etc.). 30° indexing. Shpg. wt., 3 oz.

Stock No.	Type	Shaft	Sections	1-9, EA.	10-24, EA.
35 B 497	P-270	2"	1-3	1.12	1.01
35 B 499	P-272	8"	6-10	1.94	1.75



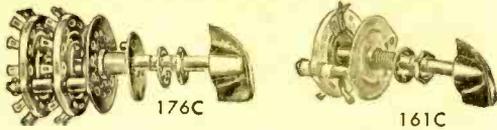
## AUTO RADIO SPEAKER SWITCH

**Type PK300 Switch Kit.** Contains a complete assembly for switching between dual speakers such as auto rear seat and front seat. Etched dial-mounting plate; dual speaker switch. Pointer knob is black, split knurl. With screws, instructions. Shpg. wt., 4 oz.

34 B 077	NET				1.03
34 B 086	Type 1483 Switch	SP 3-pos. switch for rear deck auto speaker. 2 amp @ 15 v. DC. Silver-plated contacts. 2 oz.	NET		.53¢

# Mallory Switches

## CERAMIC SECTION SWITCHES



Multi-contact ceramic-section selector switches. For minimum RF losses. All are non-shorting. Silver plated contacts. Maximum non-breaking current resistive load, 10 amps. 2 gang have wafers spaced 1/4" apart except spaced 1/8"; all others have 1" spacing between wafers. 30° indexing, except 190°; 1/4" base dia.; use plates below, at right. With 2" grooved shaft, knob and hardware. \*Additional "Off" position. †Rated 1000 v. DC and 100 watts. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Gangs	Total Poles	Positions per Pole	NET EACH
34 B 327	172C	1	1	11	1.94
34 B 328	173C*	2	2	5	
34 B 329	174C*	1	3	3	
34 B 331	176C	2	2	2	2.76
34 B 332	177C*	2	4	5	
34 B 333	178C*	2	6	3	
34 B 335	180C	3	3	11	3.53
34 B 336	181C*	3	6	5	
34 B 337	161C†	1	1	4	1.76
34 B 338	162C†	2†	2	4	2.50
34 B 339	163C†	3	3	4	3.23
34 B 340	164C†	4	4	4	3.97
34 B 341	165C†	5	5	4	4.70

Type 488 Dial Plate. For 160C switches, above. Shpg. wt., 2 oz.  
34 B 688. NET 12c

## LEVER-ACTION SWITCHES

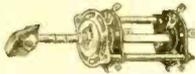
Positive-indexing, lever action switches—with shorting or non-shorting contacts. Indexing in 2, 3 or 4 positions with 20° spacing between positions. Types 6142, 6143 and 6243 have mounting brackets with round holes spaced for 1 1/4" centers. 5124 and 5224 have elongated mounting holes in the brackets, spaced 2 3/4" to 2 3/8" apart. Phenolic resin insulation. Maximum non-breaking current resistive load, 5 amps. With knob and hardware. Shpg. wt., 4 oz.



SHORTING		NON-SHORTING		Poles	Positions Per Pole	NET EACH
No.	Type	No.	Type			
34 B 382	5124	34 B 383	5224	2	4	1.12
34 B 365	6142			4	2	.97
34 B 366	6143	34 B 368	6243	4	3	.97

## "HAMSWITCH" TYPE 151L

Two-section, 5-position switch; 1 pole per section. Non-shorting type. Excellent for switching meter circuits. 2 1/4" spacing between sections. Rated at 1600 volts AC (rms) or 1500 volts DC. 60° indexing between positions. With brass bushing 1/4" long, 3/8" dia. and 2" long, 1/4" dia. shaft is grooved at popular lengths for easy cutting. Complete with knob, nut and lock washer. Shpg. wt., 6 oz.  
34 B 138. NET 2.20



## TYPE 13124L 24-POINT TAP SWITCH

Single circuit, 24 position, non-shorting switch. Continuous rotation. 1/4" bushing, 2" grooved shaft. Useful in test equipment. 15° indexing between positions. With knob, dial plate and hardware. 6 oz.  
34 B 295. NET 2.26

## MINIATURE PUSH-BUTTON SWITCHES

Push-button switches for limited-space applications. Eight circuit combinations. All switches listed below are non-locking; contact is made only when button is depressed. Silver contacts. Frame is cadmium plated. Mount in single hole. 7/8" diameter, on panels up to 1/4" thick. Mtg. radius is 1 1/8". Mtg. depth is 3/8" min. (Type 1011) and 3/4" max. (Type 1018). Voltage breakdown, 500 v. DC. Shpg. wt., 3 oz.



Stock No.	Type	Action	NET
34 B 432	1011	SPST—Make	.56
34 B 433	1012	SPST—Break	.56
34 B 434	1013	SPDT	.65
34 B 435	1014	DPST—Make 2	.71
34 B 436	1015	DPST—Break 2	.71
34 B 437	1016	DPDT	.85
34 B 438	1017	DP—Make 2, Break 1	.85
34 B 439	1018	DPDT—Make before break	1.18

## TYPE 3122 TV ANTENNA SWITCH

Efficient, high-quality antenna switch; for applications where 2 separate antennas are used with 1 set. Just turn the switch to select desired antenna. Easily mounts on TV rear safety panel. 1 1/4" dia.; shaft, 3/8", solder terminals. Complete with bar knob and all mounting hardware. Shpg. wt., 4 oz.  
34 B 296. NET 1.12

## TYPE 1400L CIRCUIT OPENING SWITCH

Opens any one of 12 "lines" for insertion of current reading meter while "through" circuit is maintained on other 11 lines. Multiplying resistors can be wired so that when switch opens line, proper resistor is inserted in circuit. For test sets, tube checkers, etc. Shaft, 1/2" dia.; length, 2". With bar knob, dial plate and hardware. Shpg. wt., 6 oz.  
34 B 290. NET 3.82

## TYPE 1200L & 1300L MULTI-GANG SWITCHES

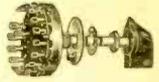
Versatile multi-gang switches for servicing and industrial applications. Have 1 fixed and 1 adjustable stop, silver-plated contacts, solid silver rotor contact slugs, and phosphor-bronze springs. 3- and 4-gang spaced 1"; all others 1/2". 2" notched shaft. Shorting-type make before break. Require 7/8" mtg. hole. With bar knob and hardware, less mtg. plate. Use 34 BB 600 plates below. \*With additional "off" positions with all circuits open. Av. Shpg. wt., 8 oz.



Shorting		Non-Shorting		Gangs	Total Poles	Pos. per Pole	NET EACH
Stock No.	Type	Stock No.	Type				
34 B 201	1211L	34 B 251	1311L	1	1	11	1.71
34 B 202	1215L*	34 B 252	1315L*	1	2	5	
34 B 203	1213L*	34 B 253	1313L*	1	3	3	
34 B 204	1212L*	34 B 254	1312L*	1	4	2	
34 B 206	1221L	34 B 256	1321L	2	2	11	2.12
34 B 207	1225L*	34 B 257	1325L*	2	4	5	
34 B 208	1223L*	34 B 258	1323L*	2	6	3	
34 B 209	1222L*	34 B 259	1322L*	2	8	2	
34 B 211	1231L	34 B 261	1331L	3	3	11	2.65
34 B 212	1235L*	34 B 262	1335L*	3	6	5	2.65
34 B 214	1241L	34 B 264	1341L	4	4	11	3.12
34 B 215	1245L*	34 B 265	1345L*	4	8	5	3.12
34 B 216	1251L	34 B 266	1351L	5	5	11	3.75
34 B 217	1256L	34 B 267	1356L	5	10	6	3.75
34 B 218	1261L	34 B 268	1361L	6	6	11	3.94
34 B 219	1266L	34 B 269	1366L	6	12	6	4.50

## 3100J & 3200J SINGLE GANG SWITCHES

Compact, enclosed, low-voltage switches. Have 2" notched shaft; 3/8" threaded bushing, 1/4" long. With bar knob and nut. All 1 1/8" base dia. types have adjustable stops. For band switching, etc. Use plates listed below. Shpg. wt., 4 oz.



Shorting		Non-Shorting		Poles	Positions	Base Dia.	NET EACH
Stock No.	Type	Stock No.	Type				
34 B 300	3115J	34 B 350	3215J	1	5	1 1/8"	82c
34 B 301	3112J	34 B 351	3212J	2	12	1 1/8"	
34 B 302	3122J	34 B 352	3222J	2	2	1 1/8"	
34 B 303	3121J	34 B 353	3221J	2	3	1 1/8"	
34 B 304	3126J	34 B 354	3226J	2	6	1 1/8"	
34 B 305	3134J	34 B 355	3234J	3	4	1 1/8"	.85
34 B 306	3142J	34 B 356	3242J	4	2	1 1/8"	.85
34 B 307	3143J	34 B 357	3243J	4	3	1 1/8"	.85
34 B 308	3117J	34 B 358	3217J	1	17	1 1/8"	1.26
34 B 309	3129J	34 B 359	3229J	2	9	1 1/8"	1.26
34 B 310	3136J	34 B 360	3236J	3	6	1 1/8"	1.35
34 B 311	3163J	34 B 361	3263J	6	3	1 1/8"	1.35

## DIAL PLATES

Types 372 to 390 for switches 1200L, 1300L and 1 1/8" base 3100J and 3200J. Others for 1 1/8" base 3100J and 3200J. Etched aluminum. Black background. 1 1/8" dia. 3/8" hole. Shpg. wt., 2 oz.



## 30° SPACING FOR 1 1/8" BASE SWITCHES

Type	Marking	Type	Marking
372	1 to 2	384	Off 1 to 4
373	1 to 3	385	Off 1 to 5
374	1 to 4	386	Off 1 to 6
375	1 to 5	387	Off 1 to 7
376	1 to 6	388	Off 1 to 8
377	1 to 7	389	Off 1 to 9
378	1 to 8	390	Off 1 to 10
379	1 to 9		
380	1 to 10		
381	1 to 11		
382	1 to 12		
383	Off 1 to 3		

## 20° SPACING FOR 1 1/8" BASE SWITCHES

Type	Marking	Type	Marking
453	1 to 3	474	Off 1 to 4
454	1 to 4	475	Off 1 to 5
455	1 to 5	476	Off 1 to 6
456	1 to 6	477	Off 1 to 7
457	1 to 7	478	Off 1 to 8
458	1 to 8	479	Off 1 to 9
459	1 to 9	480	Off 1 to 10
460	1 to 10	481	Off 1 to 11
461	1 to 11	482	Off 1 to 12
462	1 to 12	483	Off 1 to 13
467	1 to 17	484	Off 1 to 14
473	Off 1 to 3	486	Off 1 to 16

34 BB 600. Specify Type. 34 BB 650. Specify Type. 12c

34 B 670. Type 369. 0-100 plate for volume control.  
34 B 620. Type 391. Increase type plate for vol. control. NET EACH  
34 B 622. Type 393. 0-10 plate for rheostats and pots. EACH 15c  
34 B 624. Type 396. 0-10 plate for wire-wound controls.  
34 B 623. Type 394. 1-24 position. 15° opening. NET 12c

## RB254 UNIVERSAL MOUNTING BRACKET

"L" shaped Universal Mounting Bracket for baseboard or rear support mounting of all Mallory circuit selector switches, volume controls and jacks. Shpg. wt., 2 oz.  
34 B 420. NET 15c

## ATTENTION QUANTITY BUYERS

Allied can make immediate shipment on all switches in industrial quantities and at OEM prices. Write, wire or phone for prompt price quotations. Allied maintains the most complete stock of electronic components in the world and can supply any of them in industrial quantities—one order to Allied fills the whole bill.

# Inter-Matic and Tork Time Switches

## INTER-MATIC TIME SWITCHES



"SKIPPER"  
TIME  
SWITCHES

Type T171  
SPST

- Up To 12 On-Off Operations
- Can Be Set To Skip a Day

Permits "skipping" control cycle. Has 2 dials: a time dial and a day dial. To skip any days, small skipping screws are inserted into the day dial. "On" and "off" trippers are set in the time dial. Special "cutout" tripper advances the day dial every 24 hours. Up to 12 on and off operations per day can be obtained by adding extra "on and off" trippers. Range: minimum "on" or "off" time, 1 hour; maximum, 23 hours. Switch may be operated manually. Automatic reset resumes time cycle. Silver contacts are rated 35 amps at 125 volts (4000 watts). Steel case; gray finish. With three skipping screws, one on-cutout and one off tripper, and instructions.  $7\frac{1}{2} \times 5 \times 3\frac{1}{2}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.

Stock No.	Type	Action	List	NET
78 B 315	T171	SPST	\$17.95	11.67
78 B 316	T173	DPST	19.95	12.97
78 B 317	T175	SPDT	19.95	12.97

### TRIPPERS & SKIPPING SCREWS

Type 107T19A. On-Cutout Trippers. Replacement for "Skipper" types only. Shpg. wt., 3 oz.

78 B 319. NET EACH ..... 20c

Type 79T8A. Skipping Screws. For "Skipper" types only. Shpg. wt., 8 oz.

78 B 364. Pkg. of 2, EACH PKG. .... 9c

Type 107T8A. Set of "On and Off" Trippers. For all Inter-Matic switches (except T185). Shpg. wt., 2 oz.

78 B 324. NET PER SET ..... 26c



T101



P101

### TYPE T101 TIME SWITCH

Inter-Matic SPST time switch turns equipment "on" and "off" once in 24 hours. With extra trippers (see bottom of left column) will operate up to 12 times a day. Trippers can be added without removing the dial. Minimum time between settings is 1 hour. Manual operation does not interfere with settings. 35 amp contacts will handle a 4000 watt load at 125 v., 60 cyc. Gray steel case with knockouts. Size,  $5\frac{1}{2} \times 7\frac{1}{2}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.

78 B 322. List, \$11.95. NET ..... 7.77

Type T103. As above, but DPST.

78 B 321. List, \$13.95. NET ..... 9.07

Adapter Kit. Handy adapter kit makes the above units portable. Consists of 6 ft. cord, plug, etc. 15 amperes. Shpg. wt., 1 lb.

78 B 323. NET ..... 1.12

### TYPE P101 TIME SWITCH

Portable type, SPST plug-in time switch. Simple to install. Improved version carries a much heavier load than earlier models. Will handle any appliance that plugs into regular outlets. Provides many uses in the shop, store, or home. Easily set for from 1 to 12 on-off operations per day. Minimum "on" or "off" time, 1 hr.; maximum, 23 hrs. Controls lamps, signs, electric roasters, radios, TV sets, communications equipment, etc. Precision-built. Finest quality materials. Can be used with up to twelve trippers. May also be manually operated. Capacity: 10 amps at 125 volts.  $5\frac{1}{2} \times 7\frac{1}{2}$ ". U.L. Approved. For 110-120 v., 60 cycles AC. Shpg. wt., 4 lbs.

78 B 314. List, \$13.95. NET ..... 9.07



T185



T965

### TYPE T185 TIME SWITCH

Versatile switch that provides up to 14 "on-off" cycles. Each cycle is independently controlled and can vary from 5-60 min. Minimum interval between cycles, 1 1/2 hrs. Can be used as SPST normally open; SPST normally closed; or SPDT. Perfect for applications requiring more than one "on-off" cycle in a 24-hour period. Rated 35 amps, 125 v., AC. With 3 trippers (1 for each "on-off" cycle)  $7\frac{1}{2} \times 5 \times 3\frac{1}{2}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.

78 B 313. List, \$17.95. NET ..... 11.67

Extra Trippers. For above. 4 oz.

78 B 336. NET EACH ..... 84c

### TYPE T965 TIME SWITCH

Program timer for up to 96 operations in a 24 hour period. Minimum "on" or "off" period is 15 minutes. Can be used for 24 hour control of heating, ventilating and air conditioning systems. Ideal for programming industrial music systems. Easily set by depressing trippers located on dial face. Trippers are permanently attached—cannot be misplaced. Large terminal screws on bakelite board allow easy hookup. Switch is SPST type, rated 20 amps. Will repeat timing cycles without resetting. Synchronous motor is low speed, high torque type.  $7\frac{1}{2} \times 5 \times 3\frac{1}{2}$ ". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 3 lbs.

78 B 395. List, \$37.50. NET ..... 24.38

Type T966. For 210-250 v., 60 cycle AC.

78 B 396. List, \$38.50. NET ..... 25.03

## TORK SWITCHES—INTERVAL TIMERS



919

- Ruggedly Built
- Easy to Use
- U.L. Approved



8001

### MODEL 919 PORTABLE PLUG-IN

Portable, 24-hour, plug-in time switch—fully automatic. Accurate, rugged, dependable. Dozens of useful applications in and around home and office. Operates air conditioners up to 1/2 ton, TV sets, house lighting, bedside radios—any appliance. Can be set to operate for periods from 45 minutes to 23 hours, 15 minutes, in 15 minute intervals. Large face is easy to see, extremely simple to set. On-off levers are provided for manual setting. Heavy-duty timing motor. Capacity 10 amps, 1100 watts. Size  $3\frac{1}{2} \times 4\frac{1}{4}$ ". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 3 1/2 lbs.

78 B 304. List, \$13.95. NET ..... 9.07

Model 1919G. As above, but can control 1/2 or 1-ton air conditioner having 3-prong plug.

78 B 360. List, \$19.95. NET ..... 12.97

Extra Trippers. For above. Pair, 3 oz.

78 B 309. NET PER PAIR ..... 35c

### MODEL 8001 PROGRAM TIMER

Highly versatile unit provides almost any desired timing combination of intervals which are multiples of 15 minutes in duration. Combination of intervals repeats every 24 hours. Timer has a total of 96 tabs. Timer has 10-amp single-pole switch.  $8\frac{1}{2} \times 5\frac{1}{4} \times 4\frac{1}{4}$ ". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.

78 B 299. List, \$29.95. NET ..... 19.47



948

### MODEL 948 "TORKMASTER"

Recommended for low-cost installations where the same on-off time is required every day. Automatically turns electrical equipment "on" and "off" once over a 24-hour period. Minimum setting of timer is 2 hours. Easy to read, 24-hour dial is calibrated in 15-minute intervals. Switch is single pole with contacts rated at 35 amps. Ideal for window lights, hallways, coal stokers, defrosters, etc. May be opened by hand without disturbing pre-set adjustments. Blue-gray finished steel case with hinged cover. Has 1-electron motor; precision gears. Screw-type terminals.  $8\frac{1}{2} \times 5\frac{1}{4} \times 4\frac{1}{4}$ ". U.L. Approved. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 3 lbs.

78 B 308. List, \$11.95. NET ..... 7.77



4100

### MODEL 4100 "HOURMASTER"

Here's a highly versatile, heavy-duty, SPST time switch. Features combination 1-hour and 24-hour timing operation. Provides up to 24 hourly "on" cycles. Each "on" cycle may be accurately set in 1-min. Intervals for durations from 2 to 55 minutes. The operation as set on the 1-hour dial, may occur at any hour or hours of the day as set on the 24-hour dial. Can operate every 1, 2, 3, 4, 6, 12, or 24 hours. Use to control poultry feeding, crop curing, well pumping, lawn sprinkling, etc. Contacts rated at 30 amps.  $8\frac{1}{2} \times 5\frac{1}{4} \times 4\frac{1}{4}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 5 lbs.

78 B 295. List, \$24.95. NET ..... 16.22



2925

### SERIES 2925-P INTERVAL TIMERS

Interval timers for automatic timed operation of electrical appliances rated up to 1100 watts. Can be set for any time interval up to the maximum shown below. Ideal for timed control of such appliances as cookers, fans, roasters, waffle irons, sun lamps, coffee makers, etc. Setting pointer to desired time closes SPST 10-ampere switch and starts interval—when time has elapsed, switch opens automatically. Built-in AC receptacle. White enamel finish. With cord and plug.  $4\frac{1}{2} \times 3\frac{1}{2} \times 3\frac{1}{2}$ ". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 2 lbs.

Model 2925-4P. Max. setting, 4 hrs. 14.92

78 B 347. List, \$22.95. NET ..... 14.92

Model 2925-12P. Max. setting, 12 hours. 14.92

78 B 348. List, \$22.95. NET ..... 14.92

Model 2925-24P. Max. setting, 24 hours. 14.92

78 B 349. List, \$22.95. NET ..... 14.92

Model 2925-1P. Max. setting 1 hour. 14.92

78 B 362. List, \$22.95. NET ..... 14.92

### MODEL 1191 "LITTLE GIANT"

Automatically turns electrical equipment "on and off" at any pre-set time, once every 24 hours. On-off dial calibrated in 15 minute intervals. 45 minutes required between settings. Handles 35 amps at up to 3500 watts lighting load (4000 watts heating load) or 1 h.p. single phase motor. Manual operation if desired. Size,  $8\frac{1}{2} \times 5\frac{1}{4} \times 4\frac{1}{4}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Wt., 5 lbs.

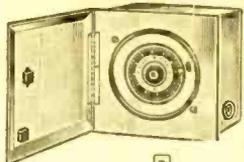
78 B 302. List, \$13.95. NET ..... 9.07

# Clock Timers and Foot Switches

## INTERMATIC CLOCK TIMERS



A



B



C



D

### MODEL RC2021-4 SWITCH

**A** Automatically turns on radios, TV sets, toasters, and other electrical devices—at any preset time within a 12-hour period. Also serves as a timepiece. May be installed in a small case with an AC outlet and line cord. All controls, off-automatic-on, time adjust and timer set, located on chrome dial face. Requires  $3\frac{1}{2}$ " dia. hole;  $3\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{4}$ ". Handles appliances drawing up to 15 amps. 1650-watt load. Mtg. ctr.,  $3\frac{1}{8}$ ". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 1 lb.  
78 B 399. List, \$8.00. 1 to 5, EACH.....5.73  
6 or More, EACH.....5.29

### MODEL T-1101 "LAMP-LYTER"

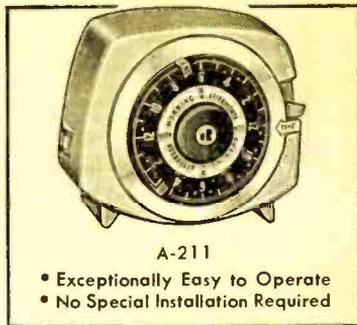
**B** Electrical time switch for flush-mounting in walls or hi-fi cabinets. Provides a timed "on" and "off" cycle for controlling lights, heaters, hi-fi, or appliances automatically. Min. "on" time, 15 min.; max., 23 $\frac{3}{4}$  hours. Can be switched "on" or "off" manually; timed cycle resumes automatically. SPST switch rated 15 amps, 1650 watts.  $6\frac{1}{2} \times 6\frac{1}{2} \times 2\frac{1}{8}$ ". Beige finished door has concealed hinges; magnet holds door closed. Requires 5x5" cutout. U.L. Approved. For 110-120 v., 60 cycle AC. 4 lbs.  
78 B 398. List, \$21.95. NET.....14.27

### MODEL A-401 "CLOCK-TIMER"

**C** Combination clock and switch. For automatically turning appliances "on" and "off" at preset times. Min. "on" time,  $\frac{1}{4}$  hour; max.,  $5\frac{1}{2}$  hours. SPST switch rated 15 amps, 1650 watts. AC receptacle for plugging in appliances. All controls are conveniently located on front panel. Green plastic case. Complete with 6-ft. cord and plug. Size (HWD),  $4\frac{1}{2} \times 4\frac{3}{4} \times 2\frac{1}{4}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 2 lbs.  
78 B 343. List, \$11.95. NET.....8.77

### MODEL A-301 "TIME-MINDER"

**D** Combination electric clock and signal timer. Can be set to time any pre-set interval from 1 min. to 4 hrs. Pleasant toned buzzer sounds at end of interval and keeps going until turned off manually. An excellent signalling device. Timer is accurate within seconds and easily set with large, easy-to-read pointer. Spruce green plastic case. Clock and timing interval are both set from front panel. No installation is necessary—just plug the timer in and it's ready to go. U.L. Approved. Has 6-ft. cord and plug. Size,  $4\frac{1}{2} \times 4\frac{3}{4} \times 2\frac{1}{4}$ ". For operation from 110-120 v., 60 cycle AC. 2 lbs.  
78 B 342. List, \$8.95. NET.....6.57



A-211

- Exceptionally Easy to Operate
- No Special Installation Required

### MODEL A-211 "TIME-ALL"

Time control switch for office, store or home. Excellent for controlling lights or appliances, etc. Has manual control with automatic reset. Turns lights "on" and "off" at preset times—gives house a "lived in" look to discourage prowlers while owners are out or away on a vacation. To revert to control clock, simply release manual control from "permanent" position.

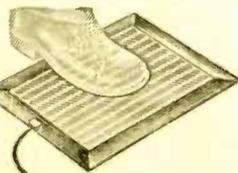
Min. "on" time, 15 min.; max., 23 hrs. 45 min. AC outlet for equipment to be controlled. Switch contacts will handle 15 amps, 1650-watt load. Supplied complete with 6-ft. cord, plug and instructions. Size,  $5 \times 4 \times 2\frac{1}{2}$ ". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 2 lbs.  
78 B 311. List, \$11.95. NET.....7.97

Model A-221. As above, but handles 7 amps, 875 watts. Shpg. wt., 2 lbs.  
78 B 397. List, \$10.95. NET.....7.29

## FOOT SWITCHES FOR GENERAL APPLICATIONS

### RECORA NEPTUNE SWITCH

Easily Actuated By Foot or Toe



Type NF-2. Easy operating foot switch—free both hands for work. SPST contacts rated 7 amps at 110 v. Waterproof, brown plastic construction. Use indoors or out. With 6' cord.  $\frac{3}{4} \times 6 \times 8$ ". Wt., 2 lbs.  
78 B 292. NET.....5.49

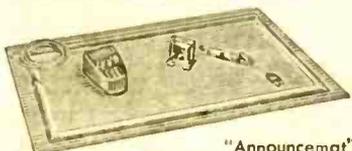
Type PSN-2. As above, with addition of series plug-socket—allows unit to be inserted into AC outlet with controlled apparatus inserted into socket.  $2\frac{1}{4}$  lbs.  
78 B 293. NET.....6.27

### ELECTROMATIC FOOT SWITCH

Model 1010. Snap-action foot switch. Provides a faster, more efficient means of switching electric motors and machines on and off. Ideal for controlling a variety of power tools, riveting and welding units, photo equipment, etc. Promotes safety—operator can instantly stop machine by releasing pressure on switch. Saves time and extra hand movement. Easy to install—just plug device to be controlled into the special socket and plug switch cord into AC wall socket. Normally-open SPST switch rated 10 amps, 115v. AC.  
Housed in durable metal case, with anti-skid pad on bottom, rubber foot tread on top.  $3\frac{1}{2}$  lbs. operating force. Size,  $1 \times 3 \times 4\frac{1}{4}$ ". With 6-ft. cord. Shpg. wt., 1 lb.  
78 B 382. NET.....5.48



### RECORA "SWITCHMAT" SWITCH



"Announcemat"

"Announcemat" Chime Alarm. Low-cost, practical alarm system for stores, offices, homes and industry. Signals the presence of visitors or intruders.  $\frac{3}{8}$ " thick, heavily ribbed brown vinyl plastic. Completely protected. Resistant to cleaning and sweeping compounds, oils, acids and most chemicals. Lies completely flat on floor. No installation problems—simply plugs into wall outlet. Operates on extremely low voltage supplied by transformer which is included. With 18x30" commercial-type Switchmat, transformer with 6-ft. cord and plug, 25-ft. low-voltage cable and chime signal alarm. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 19 lbs.  
78 BX 358, \$2.00 Down. NET.....23.96

### LINEMASTER "TREADLITE"

Model T-51-S. A compact, ruggedly constructed foot switch at low cost. Ideal for low amperage loads. SPDT momentary contact; may be wired normally open or normally closed, as preferred. Rated 5 amps, 110-250 volts. Has rubber treading; skid-proof rubber base pad. Black crackle finish casing.  $1 \times 2\frac{1}{2} \times 3\frac{1}{2}$ ". Shpg. wt., 7 oz.  
78 B 383. NET.....2.75  
Model T-51-S. Foot switch as above, but wired with 6-ft. cord and series plug. Shpg. wt., 7 $\frac{1}{2}$  oz.  
78 B 384. NET.....4.00

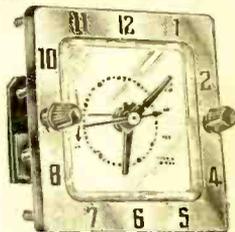


### "TELECHRON" CLOCK-TIMER



Electric Clock and Automatic Time Switch Turns on TV Radio, Etc. At Preset Time

With Knobs and Bezel



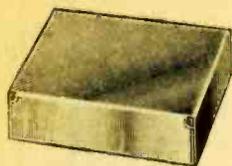
An exceptional value in a famous-name, combination electric clock and automatic time switch. The built-in SPST switch is rated 15 amps at 125 volts AC. Two easy-to-operate switch controls are located on the outer edge of the clock dial. Switch can be used for control of an AC radio or any appliance such as a coffee-maker, hot plate, etc.

One of the switch controls permits selecting manual "on" and "off" operation; or automatic turning on of the controlled device at a preselected time within a 12-hour period. Automatic operation can also be employed with a signal alarm sounding 10 minutes after "on cycle" begins. The other switch control permits selecting a definitely timed "on cycle" of up to one hour duration—can be used with radio as a "sleep switch."

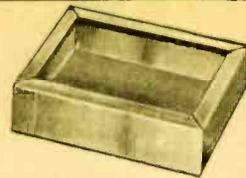
Can be installed in a small case with an AC outlet for portable use. Outer dial ring and sweep second hand are of polished brass; numbers are etched in brown. Dial face is finished in ivory with brown minute and hour hands. Time-adjust and alarm set are selected with  $4\frac{1}{2}$ " long control on rear of clock. Brass bezel is  $3\frac{1}{2}$ " square. Has 4 mounting studs. Requires four  $\frac{3}{16}$ " holes  $3\frac{3}{8}$ " apart. U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 2 lbs.  
78 B 363. NET.....5.49

# Bud Metal Products

## STANDARD CHASSIS BASES



High-quality, sturdily constructed chassis bases. Available in zinc-plated and black-wrinkle steel, and lightweight aluminum types. Carefully formed, one-piece construction; corners are reinforced and spot-welded. The four sides are folded at the bottom to provide additional strength; bottom fold also permits easy addition of bottom plate. Aluminum types are spot-welded with government approved equipment; same as used for welding aluminum aircraft parts. Steel chassis gauges: \*No. 22; †No. 20; ‡No. 18. Aluminum chassis gauges (aluminum gauge): ‡No. 18; \*\*No. 16; ††No. 14. Less bottom plates. AC-403: 2x9 1/2x5".



H. W. D. Inches	Black-Wrinkle Steel				Zinc-Plated Steel				Aluminum			
	Stock No.	Type	Lbs.	NET	Stock No.	Type	Lbs.	NET	Stock No.	Type	Lbs.	NET
2x9x4	80 P 456	CB-628*	1	1.05	86 P 277	CB-629*	1 1/2	1.27	86 P 930	AC-431†	3/4	1.08
2 1/2x9 1/2x5	80 P 457	CB-644*	1 1/2	1.34	86 P 905	CB-645*	1 1/2	1.64	86 P 112	AC-402†	3/4	1.15
1 1/2x9 1/2x5	80 P 458	CB-788*	1	1.18	86 P 906	CB-776*	1 1/2	1.66	86 P 113	AC-403†	3/4	1.22
3x6x4									86 P 932	AC-430†	3/4	1.31
3x7x5									86 P 933	AC-429**	1	1.39
3x9 1/2x5									86 P 114	AC-421†	1	1.57
3x10x5	80 P 459	CB-604*	1 1/2	1.24	86 P 271	CB-605*	1 1/2	1.80	86 P 127	AC-404†	1	1.60
3x13x5									86 P 934	AC-422†	1	1.80
3x14x6	80 P 460	CB-755†	1 1/2	1.71	86 P 907	CB-750†	2	2.01				
3x17x6									86 P 935	AC-433**	1 1/2	2.62
2x7x7	80 P 461	CB-789†	1 1/2	1.18	86 P 272	CB-1191†	1 1/2	1.47	86 P 115	AC-405†	3/4	1.32
2x9x7	80 P 462	CB-790*	1 1/2	1.37	86 P 273	CB-1192*	1 1/2	1.56	86 P 116	AC-406†	3/4	1.43
2x11x7	80 P 463	CB-791*	1 1/2	1.42	86 P 274	CB-1193†	1 1/2	1.64	86 P 117	AC-407†	1	1.55
3x12x7	80 P 464	CB-792†	1 1/2	1.54	86 P 275	CB-793†	2	2.01	86 P 118	AC-408†	1 1/2	1.96
2x13x7	80 P 465	CB-646*	2	1.51	86 P 276	CB-1194†	2	1.88	86 P 119	AC-409†	1	1.64
2 1/2x13 1/2x5	80 P 466	CB-647*	1 1/2	1.73	86 P 908	CB-1198†	2	2.13				
3x15x7	80 P 467	CB-649*	2	1.96	86 P X 909	CB-1189†	2 1/2	2.35	86 P X 936	AC-411**	1 1/2	2.62
3x15x8 1/2	80 P 468	CB-665*	2 1/2	2.20	86 P X 910	CB-666†	2 1/2	2.66	86 P X 937	AC-432**	1 1/2	2.28
3x17x8	80 P 469	CB-1068†	2 1/2	1.76	86 P X 911	CB-1066†	2 1/2	2.10				
2 1/2x17x7	80 P X 470	CB-648†	2 1/2	1.95	86 P X 912	CB-1199†	2 1/2	2.32				
3x17x7	80 P X 471	CB-757†	1 1/2	2.11	86 P X 913	CB-758†	2	2.54	86 P X 938	AC-423**	1 1/2	2.69
2 1/2x10x8	80 P 472	CB-701†	1 1/2	1.69	86 P 914	CB-702†	2	1.98				
2 1/2x12x8	80 P X 473	CB-703†	2 1/2	1.71	86 P 915	CB-704†	2 1/2	2.20				
3x12x8	80 P X 474	CB-759†	1 1/2	1.81	86 P 916	CB-760†	2	2.29	86 P 939	AC-424**	1 1/2	2.37
3x17x8	80 P X 475	CB-650†	2 1/2	1.67	86 P X 917	CB-774†	2 1/2	2.29	86 P X 940	AC-425**	1 1/2	2.46
3x17x8	80 P X 476	CB-651†	3 1/2	2.01	86 P X 918	CB-775†	3 1/2	2.57	86 P X 120	AC-412**	2	2.78
3x12x10	80 P 477	CB-652†	3	1.85	86 P 919	CB-1195†	3 1/2	2.20	86 P 121	AC-413**	1 1/2	2.62
3x14x10	80 P 478	CB-653†	4	2.00	86 P 920	CB-779†	4 1/2	2.39	86 P 122	AC-414**	2	2.78
2x17x10	80 P X 479	CB-654†	3 1/2	1.96	86 P X 278	CB-769†	3 1/2	2.34	86 P X 942	AC-415**	1 1/2	2.63
3x17x10	80 P X 480	CB-636†	4	1.96	86 P X 921	CB-1196†	5 1/2	2.99	86 P X 943	AC-416**	2 1/2	3.11
3x17x10	80 P X 481	CB-655†	5	2.49	80 P X 385	CB-637†	4	2.78				
3x23x10	80 P X 482	CB-656†	5 1/2	2.80	80 P X 913	CB-1197†	6	3.35				
2x17x11	80 P X 483	CB-657†	4 1/2	2.71	80 P X 923	CB-770†	4 1/2	2.75	86 P X 122	AC-426††	2 1/2	3.35
3x17x11	80 P X 484	CB-658†	4 1/2	2.71	86 P X 266	CB-771†	4 1/2	3.42	86 P X 123	AC-417††	3	3.89
2x17x12	80 P X 485	CB-663†	4 1/2	2.39	86 P X 925	CB-661†	4 1/2	3.03				
3x17x12	80 P X 486	CB-664†	5 1/2	2.85	86 P X 268	CB-662†	5 1/2	3.60	86 P X 124	AC-418††	3	4.00
2x17x13	80 P X 487	CB-659†	5	2.85	86 P X 269	CB-772†	5 1/2	3.65	86 P X 944	AC-419††	2 1/2	3.44
3x17x13	80 P X 488	CB-660†	5 1/2	3.34	86 P X 270	CB-773†	6	3.99	86 P X 125	AC-420††	3	4.17
3x17x10	80 P X 489	CB-640†	6 1/2	2.86	86 P X 926	CB-641†	7	3.44	86 P X 124	AC-421††	3 1/2	4.42
4x17x13	80 P X 490	CB-642†	7	3.84	86 P X 927	CB-643†	8	4.59	86 P X 126	AC-428††	4	5.15
5x17x10	80 P X 491	CB-623†	7 1/2	4.42	86 P X 928	CB-624†	8	5.23				
5x17x13	80 P X 492	CB-625†	8	4.83	86 P X 929	CB-626†	8 1/2	5.81				

### BOTTOM PLATES FOR CHASSIS BASES

Bottom plates to fit the chassis bases listed above. Ideal for shielding. In zinc-plated or black ripple heavy-gauge steel plate and aluminum. Four

raised bosses in corners to prevent marring and scratching of table-tops or shelves. Drilled for use with No. 6 self-tapping screws.

Size	Lbs.	Black-Wrinkle			Zinc Plated			Aluminum			
		Stock No.	Type No.	NET	Stock No.	Type No.	NET	Stock No.	Type No.	Lbs. NET	
5x7"	1	80 P 386	BP-705	.56	80 P 406	BP-706	.68	80 P 426	BPA-1589	1/2	.73
5x9 1/2"	1 1/2	80 P 387	BP-680	.61	80 P 407	BP-667	.73	80 P 427	BPA-1590	3/4	.73
5x10"	1 1/2	80 P 388	BP-536	.66	80 P 408	BP-538	.72	80 P 428	BPA-1591	3/4	.73
7x7"	1 1/2	80 P 389	BP-681	.90	80 P 409	BP-668	.95	80 P 429	BPA-1592	3/4	.75
7x9"	1 1/2	80 P 390	BP-682	.92	80 P 410	BP-669	.97	80 P 430	BPA-1593	3/4	.78
7x11"	1 1/2	80 P 391	BP-683	.93	80 P 411	BP-670	1.05	80 P 431	BPA-1594	3/4	.80
7x12"	1 1/2	80 P 392	BP-537	.97	80 P 412	BP-539	1.10	80 P 432	BPA-1595	1	.95
7x13"	1 1/2	80 P 393	BP-684	1.00	80 P 413	BP-671	1.18	80 P 433	BPA-1596	1	1.12
5x13 1/2"	1 1/2	80 P 394	BP-685	.82	80 P 414	BP-672	.98				
4x17"	2	80 P 395	BP-1069	.82	80 P 415	BP-1067	1.00				
7x17"	2	80 P 396	BP-686	.88	80 P 416	BP-673	1.34				
8x10"	2 1/2	80 P 400	BP-707	.90	80 P 417	BP-674	1.03				
8x12"	2	80 P 397	BP-709	1.04	80 P 418	BP-710	1.31				
8x17"	2 1/2	80 P 398	BP-687	.93	80 P 419	BP-674	1.51				
10x12"	2	80 P 399	BP-688	.93	80 P 420	BP-675	1.54				
10x14"	2	80 P 401	BP-517	1.22	80 P 421	BP-514	1.30				
10x17"	2 1/2	80 P 402	BP-689	1.18	80 P 422	BP-676	1.57				
11x17"	2	80 P 403	BP-690	1.18	80 P 423	BP-677	1.57	80 P 434	BPA-1597	1 1/2	1.49
12x17"	2 1/2	80 P 404	BP-691	1.24	80 P 424	BP-678	1.83				
13x17"	2 1/2	80 P 405	BP-692	1.44	80 P 425	BP-679	2.20	80 P 435	BPA-1598	1 1/2	2.03

### HEAVY-DUTY CHASSIS BASES



Ruggedly constructed chassis bases for heavy duty applications. Formed of one-piece heavy 1/2" steel. Corners are spot-welded and sides are folded over at bottom. Electro-zinc plated. Supplied complete with bottom plates and mounting screws.

Stock No.	Type	H. W. D.	Lbs.	NET
86 PX 240	CB-1765	3x17x8"	8	4.66
86 PX 242	CB-1767	3x17x11"	8 1/2	4.74
86 PX 243	CB-1768	2x17x13"	10	5.23
86 PX 244	CB-1769	3x17x13"	10 1/2	5.32
86 PX 946	CB-1770	4x17x13"	11 1/2	5.73

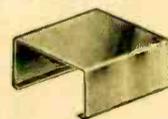
### OPEN-END CHASSIS



Open-end, heavy-gauge aluminum chassis. Have U-shaped construction with ends folded over 1/2" to provide additional strength. Available in a wide variety of sizes to accommodate nearly every construction requirement. Excellent for use with Bud cabinets specified in table below. Natural aluminum finish. Av. shpg. wt., 1 1/2 lbs.

Stock No.	Type	H. W. D.	For Cabinet	NET
80 P 437	CB-30	1 1/2x7x5"		.95
80 P 438	CB-41	1 1/2x7x5"	C-973	1.22
80 P 440	CB-996	1 1/2x9x5 1/2"	C-984	1.07
80 P 444	CB-997	1 1/2x9x5 1/2"	C-999, CU-1481	1.37
80 P 443	CB-997	1 1/2x11x7"	C-994, CU-1482	1.27
80 P 444	CB-998	1 1/2x13x7"	C-995, CU-1483	1.56
80 P 436	CB-38	2x6x7"	C-1584	.98
80 P 439	CB-39	2x8x7"	C-1585	1.15
80 P 442	CB-40	2x10x7"	C-1586	1.34

### MINIATURE ALUMINUM CHASSIS



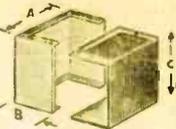
Open-end aluminum chassis for limited space applications. Excellent for use with miniature tubes and for sub-assemblies. Have 1/2" mounting flanges to allow addition of bottom plate. Natural aluminum finish. Av. shpg. wt., 3/8 lbs.

Stock No.	Type	H. W. D.	For Cabinet	NET
80 P 446	CB-1624	1x3 1/2x1 1/2"	CU-883	.41
80 P 452	CB-1617	1x3 1/2x1 1/2"	CU-1606	.40
80 P 448	CB-1626	1x4 1/2x2 1/2"	CU-729	.44
80 P 453	CB-1618	1x4 1/2x4"	C-1607	.49
80 P 454	CB-1619	1x5 1/2x4"	C-1608	.52
80 P 455	CB-1620	1x6 1/2x4"	C-1609	.54
80 P 445	CB-1623	1 1/2x2 1/2x2 1/2"	C-1608	.37
80 P 450	CB-1628	1 1/2x6 1/2x3"	C-1788	.52
80 P 449	CB-1627	1 1/2x4 1/2x3 1/2"	CU-729	.44
80 P 451	CB-1629	1 1/2x4 1/2x3 1/2"	CU-1098	.56
80 P 447	CB-1625	2x4 1/2x3 1/2"	C-1788	.47

# Bud Metal Products

## ALUMINUM MINIBOXES

Two-piece aluminum boxes with handsome gray hammertone or natural aluminum finish. Particularly suited for sub-assemblies. May be used for phono amplifiers, VHF and UHF converters, low-pass TVI filters, test and measurement units, etc. Two-piece construction permits easy installation of components and easy access to circuitry for servicing or wiring modifications. Flanges assure low RF leakage and high rigidity. Dual-purpose snap locks permit quick assembly and disassembly of units; also permit use with self-tapping screws (supplied).



Size AxCxB	Shpd. Wt. Lbs.	Gray Hammer- tone	Mfr's Type	NET EACH	Natural Aluminum	Mfr's Type	NET EACH
2 1/2 x 2 1/2 x 1 1/2	1/8	80 P 342	CU-2100A	.83	80 P 360	CU-3000A	.61
3 1/2 x 2 1/2 x 1 1/2	1/8	80 P 359	CU-2117A	.82	80 P 377	CU-3017A	.61
3 1/2 x 2 1/2 x 1 1/2	1/8	80 P 343	CU-2101A	.90	80 P 375	CU-3001A	.61
4 1/2 x 2 1/2	1/8	80 P 357	CU-2115A	.90	80 P 375	CU-3015A	.73
4 1/2 x 2 1/2 x 1 1/2	1/8	80 P 344	CU-2102A	.90	80 P 362	CU-3002A	.61
4 1/2 x 2 1/2 x 1 1/2	1/8	80 P 345	CU-2103A	.98	80 P 363	CU-3003A	.73
4 1/2 x 2 1/2 x 1 1/2	1/8	80 P 358	CU-2116A	.98	80 P 376	CU-3016A	.71
5 1/2 x 2 1/2 x 2 1/2	1/8	80 P 346	CU-2104A	1.07	80 P 364	CU-3004A	.76
5 1/2 x 2 1/2	1/8	80 P 347	CU-2105A	1.22	80 P 365	CU-3005A	.92
5 1/2 x 2 1/2	1/8	80 P 348	CU-2106A	1.07	80 P 366	CU-3006A	.80
6 1/2 x 4	1	80 P 349	CU-2107A	1.86	80 P 367	CU-3007A	1.44
7 1/2 x 3	1	80 P 350	CU-2108A	1.78	80 P 368	CU-3008A	1.37
8 1/2 x 3 1/2	1 1/8	80 P 351	CU-2109A	2.19	80 P 369	CU-3009A	1.69
10 1/2 x 1 1/2	1/8	80 P 355	CU-2113A	1.35	80 P 373	CU-3013A	1.13
10 1/2 x 3 1/2	1 1/8	80 P 352	CU-2110A	2.54	80 P 370	CU-3010A	1.98
12 1/2 x 2 1/2	1	80 P 356	CU-2114A	1.67	80 P 374	CU-3014A	1.34
12 1/2 x 4	1 1/8	80 P 353	CU-2111A	3.20	80 P 371	CU-3011A	2.66
17 1/2 x 4	2 1/8	80 P 354	CU-2112A	3.44	80 P 372	CU-3012A	2.86

## METAL UTILITY CABINETS

Metal utility cabinets for all types of electronic equipment. Excellent for housing receivers, monitors, VFO's, test equipment, frequency meters, transmitters, etc. Well adapted for shielding of high gain preamplifiers, RF sections, other special circuits. Two removable panels attach to flanges with self-tapping screws.



Size, H.W.D.	Mfr's Type	Wt., Lbs.	Stock No. (Steel)		NET EACH	
			Black	Gray		
4 1/2 x 2	CU833	1 1/4	86 P 200	80 P 332	1.07	
4 1/2 x 3	CU728	1 1/2	86 P 201	80 P 333	1.20	
6 1/2 x 4	CU729	2 1/4	86 P 202	80 P 334	1.35	
6 1/2 x 6	CU1098	3	86 P 203	80 P 335	2.05	
9 1/2 x 5	CU1099	4	86 P 204	80 P 336	2.29	
10 1/2 x 7	CU879	5	86 P 205	80 P 337	3.27	
10 1/2 x 8	CU880	8	86 P 207	80 P 339	3.93	
12 1/2 x 6	CU1124	6	86 P 206	80 P 338	3.22	
12 1/2 x 8	CU881	8	86 P 208	80 P 340	4.25	
15 1/2 x 7	CU882	9	86 P 209	80 P 341	4.42	
Size, H.W.D.	Mfr's Type	Wt., Lbs.	Etched Aluminum	NET EACH	Gray Hammer-tone	NET EACH
4 1/2 x 2	AU-1063	1 1/4	88 P 543	1.26	88 P 548	1.47
4 1/2 x 3	AU-1028	1 1/2	88 P 544	1.34	88 P 549	1.64
6 1/2 x 4	AU-1029	2 1/4	88 P 545	1.47	88 P 550	1.80
6 1/2 x 6	AU-1030	3	88 P 546	2.13	88 P 551	2.37
9 1/2 x 5	AU-1049	4	88 P 547	2.46	88 P 552	2.78

## DELUXE CABINET RACKS

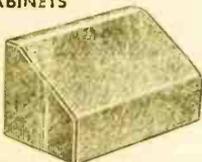
16 gauge steel cabinet with welded joints, recessed hinged top doors, snap locks. Models CR-1727, CR-1728, CR-1743, CR-1744 and CR-1745 have back doors with snap locks; other models with welded back panels. 1 1/4" deep. 22" wide. Include full size aluminum front panels.



Height	Panel Space	Mfr's Type	Wt., Lbs.	Gray	Black	Gray	NET EACH
				Wrinkle	Wrinkle	Hammer-tone	
8 1/2 x 3 1/2	7"	CR-1726	25	88 PU 563	88 PU 564	88 PU 562	14.97
10 1/2 x 3 1/2	8 1/2"	CR-1741	28	86 PU 729	88 PU 835	88 PU 557	16.37
12 1/2 x 3 1/2	10 1/2"	CR-1740	30	86 PU 730	99 PU 804	88 PU 556	16.74
14 1/2 x 3 1/2	12 1/2"	CR-1742	32	86 PU 731	98 PU 836	88 PU 558	19.72
15 1/2 x 3 1/2	14"	CR-1739	34	86 PU 732	86 PU 894	88 PU 559	21.52
19 1/2 x 3 1/2	17 1/2"	CR-1743	38	86 PU 733	88 PU 837	88 PU 559	25.70
23 1/2 x 3 1/2	31 1/2"	CR-1728	39 1/2	86 PU 895	86 PU 893	88 PU 554	31.34
28 1/2 x 3 1/2	26 1/2"	CR-1744	48	86 PU 735	98 PU 838	88 PU 560	29.54
32 1/2 x 3 1/2	21"	CR-1727	52	86 PU 897	86 PU 896	88 PU 553	27.50
26 1/2 x 3 1/2	35"	CR-1745	60	86 PU 734	98 PU 839	88 PU 561	32.98

## UNIVERSAL SLOPING-PANEL CABINETS

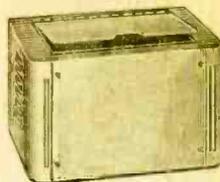
Versatile, streamlined sloping-panel cabinets available in steel or aluminum. Offers enough space to house a two or three miniature tube amplifier or gadget. One-piece detachable back and bottom fastened to body with self-tapping screws for easy service and replacement of components. Fully enclosed to exclude dust and moisture. Easily accommodate most small chassis. All units 4" high, 4 1/4" deep in gray hammertone finish.



Width	Steel	Mfr's Type	Shpd. Wt. Lbs.	NET EACH	Aluminum	Mfr's Type	Shpd. Wt. Lbs.	NET EACH
	Stock No.				Stock No.			
4"	88 P 642	C-1606	1/4	1.42	88 P 646	AC-1610	1/2	1.65
5"	88 P 643	C-1607	1/4	1.52	88 P 647	AC-1611	1/2	1.71
6"	88 P 644	C-1608	1 1/4	1.62	88 P 648	AC-1612	1 1/4	1.86
7"	88 P 645	C-1609	1 1/4	1.86	88 P 649	AC-1613	1 1/4	2.06

## NEW STREAMLINED CABINETS

Ideal cabinets for electrical or electronic devices not requiring excessive depth. Features recessed hinged cover with convenient finger lift; panels fit flush with embossed, rounded corner fronts. All components built into cabinets are easily accessible. A 3 1/4" high opening across the back for cables or rear controls. Louvered sides provide ample ventilation. All are 8" high and 8 1/4" deep except \*12" high and 12" deep. CD-1485 has 1/2" vertical chrome strip fastened to corners. Bud open end chassis are recommended for use in these cabinets. Choice of gray hammertone or black wrinkle finish.



Size Width	Panel	Mfr's Type	Gray Hammer-tone	Black Wrinkle	Wt., Lbs.	NET
						EACH
10 1/2"	8x8"	CD-1480	88 PX 650	88 PX 651	5 1/2	5.78
12 1/2"	8x10"	CD-1481	88 PX 652	88 PX 653	6	7.86
14 1/2"	8x12"	CD-1482	88 PX 654	88 PX 655	6 1/2	7.98
16 1/2"	8x14"	CD-1483	88 PX 656	88 PX 657	7	7.21
18 1/2"	8x16"	CD-1484	88 PX 658	88 PX 659	7 1/2	7.43
20 1/2"	12x18"	CD-1485*	88 PX 660	88 PX 661	15	14.65

## STREAMLINED FOUNDATIONS

Deluxe foundation units for use where an especially neat, pleasing appearance is required. Ideal for all types of electronic equipment. Feature modern styling and rigid construction.



Each unit consists of a removable top cover mounted on a chassis. Foundation covers are designed with louvered sides and perforated tops to provide proper ventilation and attractive styling. Strong aluminum handles are solidly fitted to each end of chassis to allow safe, convenient movement. All chassis are 3" high. Streamlined units are available in either black wrinkle or gray wrinkle enamel finish, with complementary chrome trim.

Size H.W.D.	Mfr's Type	Black Wrinkle	Mfr's Type	Gray Wrinkle	Wt., Lbs.	NET
						EACH
9x10 1/2 x 4 1/2	CA1750	80 P 493	CA1750G	80 P 497	4 1/2	6.62
9x12 1/2 x 4 1/2	CA1751	80 PX 494	CA1751G	80 P 498	5	7.86
9x17 1/2 x 4 1/2	CA1752	80 PX 495	CA1752G	80 PX 499	8	8.55
9x17 1/2 x 10"	CA1753	80 PX 496	CA1753G	80 PX 498	9	9.08

## SLOPING PANEL CABINETS

Sloping panel steel cabinets with hinged top for easy access to tubes and top-of-chassis components. Removable front panel permits easy attachment of chassis. Fit following sized chassis: Type C-1584, 7x6x2"; Type C-1585, 7x8x2"; Type 1586, 7x10x2"; Type C-1587, 7x12x2"; Type C-1588, 7x9x2"; Type C-1892, 8x12x2 1/4"; Type C-1893, 10x17x3"; Type C-1894, 7x13x2"; Type C-1896, 7x17x3".



Size H.W.D.	Wt., Lbs.	Mfr's Type	Stock No. Black	Mfr's Type	Stock No. Gray	NET
						EACH
6 1/2 x 7 1/2 x 7 3/8	3	C-1584	86 P 900	C-1584HG	88 P 576	3.23
6 1/2 x 9 1/2 x 7 3/8	3 1/2	C-1585	86 P 901	C-1585HG	88 P 577	3.67
6 1/2 x 11 1/2 x 7 3/8	4	C-1586	86 P 902	C-1586HG	88 P 578	4.25
8 1/2 x 13 1/2 x 8 1/2	5 1/2	C-1892	86 PX 903	C-1892HG	88 PX 581	5.69
10 1/2 x 17 1/2 x 10 1/2	9	C-1893	86 PX 904	C-1893HG	88 PX 582	7.48
8 1/2 x 14 1/2 x 8 1/2	3 1/2	C-1587	86 P 908	C-1587HG	88 P 579	4.42
8 1/2 x 10 1/2 x 8 1/2	3 1/2	C-1588	86 P 909	C-1588HG	88 P 580	4.91
8 1/2 x 14 1/2 x 8 1/2	4 1/2	C-1894	86 PX 970	C-1894HG	88 PX 583	5.23
9 1/2 x 14 1/2 x 8 1/2	5 1/2	C-1896	86 PX 971	C-1896HG	88 PX 584	7.53

## ALUMINUM AND STEEL CARRYING CASES

Ideal housings for portable transceivers, test instruments, power supplies, radio-control units, field strength meters, phono oscillators, etc. Ruggedly constructed to withstand hard usage. Front and back panels mount with self-tapping screws. Panels are easily removable to provide access to interior; can be used for mounting components such as meters, relays, transformers, power resistors, etc. Available in either welded steel for maximum strength, or in aluminum for light weight. Steel units in black wrinkle or gray hammertone finish; aluminum units in plain, or gray hammertone finish.



## PORTABLE STEEL CASES

Size H.W.D.	Mfr's Type	Wt., Lbs.	Stock No. Black	Stock No. Gray	NET
					EACH
9 1/2 x 5	CC-1095	3 1/4	80 P 798	80 P 813	2.95
6 1/2 x 5 1/2	CC-1091	3 1/4	80 P 799	80 P 814	2.95
12 1/2 x 5 1/2	CC-1096	4	80 P 808	80 P 816	4.10
7 1/2 x 6 1/2	CC-1092	4	80 P 809	80 P 817	4.10
15 1/2 x 7 1/2	CC-1097	5	80 PX 810	80 PX 818	4.59
10 1/2 x 8 1/2	CC-1100	5	80 PX 811	80 PX 819	4.74
9 1/2 x 7 1/2	CC-1093	5	80 PX 812	80 PX 848	5.73

## PORTABLE ALUMINUM CASES

Size H.W.D.	Mfr's Type	Wt., Lbs.	Stock No. Natural	NET EACH	Stock No.	NET
					Gray	EACH
9 1/2 x 5 1/2	ACC-2095	2	88 P 567	3.03	88 P 571	3.44
6 1/2 x 5 1/2	ACC-2091	2	88 P 565	3.03	88 P 569	3.41
12 1/2 x 5 1/2	ACC-2096	2	88 P 568	4.41	88 P 572	4.99
7 1/2 x 6 1/2	ACC-2092	2	88 P 566	4.41	88 P 570	4.99

# Bud Metal Products

## MINIATURE UTILITY CABINETS WITH ATTACHED CHASSIS



Sturdily-made, unusually compact, steel utility cabinets with a built-in chassis attached to the front panel. Especially suitable for standing-wave bridges, frequency meters, small transistorized receivers, code practice oscillators, decade boxes, crystal sets, and many other types of small, self-contained units. Removable front and rear panels fastened with self-tapping screws permit easy access to components and provide maximum layout flexibility. Black-wrinkle enamel finish.

Stock No.	Mir's Type	Cabinet H.W.D.	Chassis H.W.D.	Wt. Lbs.	NET EACH
80 P 326	C-1793	4x4x2"	1x3 1/4 x 1 1/2"	3/4	1.31
80 P 327	C-1794	4x5x3"	1x4 1/4 x 2 1/2"	1	1.45
80 P 328	C-1795	5x4x3"	1 1/2 x 3 1/4 x 2 1/2"	1	1.59
80 P 329	C-1796	6x5x4"	1 1/2 x 4 1/4 x 3 1/4"	1 1/4	1.67
80 P 330	C-1797	5x5x4"	1 1/4 x 5 1/4 x 3 1/4"	1 1/4	1.88
80 P 331	C-1798	6x6x6"	1 1/4 x 4 1/4 x 5 1/4"	2 1/4	2.13

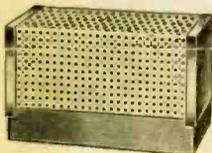
## PANEL-MOUNTING CHASSIS



Ideal for vertical chassis installation where space in depth is limited or front service is desired. Open-side chassis for standard 19" mounting. .062" aluminum with reinforced corners. 1" flange on ends, with 4 elongated holes for mounting. Front flange has std. panel notching. All other edges have 3/4" flanges. All models 17" wide, excluding flange, and 5 1/2" deep.

Stock No.	Type	Height	Lbs.	NET
86 PX 185	CB-1370	1 1/2"	1	2.25
86 PX 186	CB-1371	3 1/2"	1 1/2	2.54
86 PX 187	CB-1372	5 1/2"	2 1/2	3.78
86 PX 188	CB-1373	7 1/2"	3 1/2	3.19
86 PX 189	CB-1374	8 1/2"	3 1/2	3.68
86 PX 190	CB-1375	10 1/2"	3 1/2	4.34
86 PX 191	CB-1376	12 1/2"	3 1/2	4.74
86 PX 192	CB-1377	14 1/2"	3 1/2	5.23

## STANDARD AMPLIFIER FOUNDATIONS



Ideal for most amplifier requirements. Foundations consist of regular chassis with rugged metal covers. Solid pieces are used on ends of each cover for bracing and a snug fit to chassis. Heavy-gauge metal screening assures proper protection and ventilation of components. Metal handles provide portability. Types CA-699, CA-1225, and CA-1126 have 2 1/4" high chassis. Type CA-1128 has 3" high chassis. All units have a black wrinkle finish.

Stock No.	Type	H.W.D.	Lbs.	NET
80 P 697	CA-699	8 1/2 x 9 3/4 x 5 1/4"	3	5.50
80 PX 698	CA-1125	8 1/2 x 13 1/4 x 5 1/4"	4 1/2	6.30
80 PX 699	CA-1126	8 1/2 x 17 1/4 x 7 1/4"	6	7.11
80 PX 656	CA-1128	8 1/2 x 16 1/2 x 10 1/4"	7	7.37

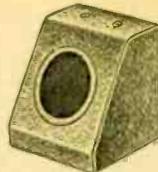
## SLOPING CHASSIS AMPLIFIER FOUNDATIONS



Each foundation consists of a 4" sloping front chassis on which is mounted a removable top cover; sloping front provides ample space for mounting of controls or instruments. Ventilators on front panel and louvers on sides allow circulation of air for dissipation of heat. Top cover has gray wrinkle finish with deluxe chrome trim; chassis has contrasting black wrinkle finish. With handles for easy, convenient carrying. Overall height, 9 1/2". Cover, 6" high. Base, 3 1/2" high. Dimensions given below are: TWC—top depth by chassis width by chassis depth.

Stock No.	Mir's Type	Size	Lbs.	NET
86 P 585	CA-1980	5x10x8"	5	8.51
86 PX 586	CA-1981	7x12x10"	6	9.16
86 PX 587	CA-1982	7x17x10"	8	11.88
86 PX 588	CA-1983	10x17x13"	10	10.97

## UNIVERSAL METER CASES



Sloping front meter case for use with 2" or 3" meters. Supplied with front panel for a 2" meter. Knockout ring enlarges hole to accommodate a 3" meter. Has one-piece back and bottom attached with 2 self-tapping screws. Top has two 1/4" knockouts for terminal posts or feed-through insulators. Steel or aluminum; both have gray hammer-tone finish. Size, 4 1/4 x 4 1/4".

Stock No.	Type	Material	Lbs.	NET
88 P 541	CM 1935	Steel	1	1.20
88 P 542	CMA 1936	Aluminum	1	1.44

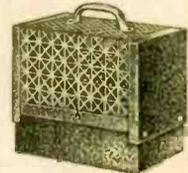
## INSTRUMENT AND RECEIVER CABINETS



Ruggedly constructed, moderately priced steel cabinets. Has recessed hinged cover for easy access. Front panel is held securely in place with self-tapping screws. Panel extends full width of cabinet—provides maximum space for installation of controls. Louvers on each side of cabinet assure ample ventilation. Black wrinkle enamel finish.

Stock No.	Type	H.W.D.	Lbs.	NET
80 P 378	C-973	7x8x8"	5	4.10
80 P 379	C-993	7x10x8"	5 1/2	4.74
80 PX 380	C-994	7x12x8"	5 1/2	5.15
80 PX 381	C-995	7x14x8"	7	7.45
80 PX 382	C-1190	8x16x8"	8	9.01
80 PX 383	C-975	9x15x11"	8	9.01
80 PX 394	C-999	12x18x12"	15	9.72

## MINIATURE AMPLIFIER FOUNDATION



Type CA-1754. Designed to meet the requirements of builders employing miniature tubes, transistors, capacitors and other miniaturized components. Chassis, which is an integral part of the unit, is only 2" high, 7" wide, and 5" deep. With cover fastened in place, entire unit stands only 6" high! All-steel construction. Removable cover includes a carrying handle. Cover is heavily perforated to allow sufficient circulation of air. Foundation cover is fastened to chassis sides by 4 self-tapping screws. Black wrinkle enameled finish. Shpg. wt., 2 lbs. 86 P 214, NET EACH.....3.92

## STANDARD RACK PANELS



A top-quality, heavy-duty rack panel constructed of 1/4" aluminum. All are 19" in width and have notched edges to fit mounting screw spacing of all standard telephone type relay racks. Use of aluminum holds dead weight to a minimum. Supplied in durable, attractive night gray hammer-tone finish.

Stock No.	Height	Wt., Lbs.	NET
88 PX 601	1 1/2"	1	1.07
88 PX 602	3 1/2"	2	1.39
88 PX 603	5 1/2"	2	1.88
88 PX 604	7 1/2"	2	2.37
88 PX 605	8 1/2"	3	2.78
88 PX 606	10 1/2"	3	3.52
88 PX 607	12 1/2"	4	4.01
88 PX 608	14 1/2"	4	4.66
88 PX 609	15 1/2"	5	5.23
88 PX 610	17 1/2"	5	5.73
88 PX 611	19 1/2"	6	6.30
88 PX 612	21"	7	6.87

## UTILITY HANDLES



Strong handles with comfortable grip. Ideal for mounting on cabinets to afford portability. Made of tubular aluminum with etched finish. Shpg. wt., 2 oz.

Stock No.	Type	Lgth.	Mtg. Ctr.	NET
86 P 849	UH-70A	5 1/4"	4 1/2"	35¢
86 P 899	UH-71A	3 1/4"	3 1/4"	29¢

## DELUXE ENCLOSED RACKS



Ruggedly constructed racks, 16 gauge steel with 1/4" panel supports. Features four sturdy supports at the bottom so casters may be fastened directly to base. Both sides and the door are well louvered to provide excellent ventilation. The door is hung on strong, loose joint hinges; is held closed by two aluminum die-cast plunger type snap-action catches. Handsome appearance is achieved with rounded corners and red lined chrome trim.

Accurately drilled and tapped for 19" panels. Shipped knocked down and complete with hardware necessary for assembly. Supplied in gray hammer-tone finish only.

Stock No.	Mir's Type	Overall Size	Panel Height	Lbs. NET EACH
88 PZ 503	CR-1774	42 1/4 x 22 1/2 x 17 1/2"	36 1/4"	90.44 2.7
88 PZ 500	CR-1771	47 1/4 x 22 1/2 x 17 1/2"	42"	95.50 0.08
88 PZ 501	CR-1772	56 1/4 x 22 1/2 x 17 1/2"	61 1/4"	122.62 6.08
88 PZ 502	CR-1773	82 1/4 x 22 1/2 x 17 1/2"	77"	150.75 5.4
88 PZ 505	CR-2074	42 1/4 x 22 x 22"	36 1/4"	120.61 8.84
88 PZ 504	CR-2071	47 1/4 x 22 x 22"	42"	127.69 9.97
98 PZ 868	CR-2072	66 1/4 x 22 x 22"	61 1/4"	150.87 5.56
98 PZ 869	CR-2073	82 1/4 x 22 x 22"	77"	175.04 0.01

## DESK-TYPE RACKS



A strong chassis ideally suited for mounting heavy components. Perfect for table mounting of low and medium power transformers, P.A. systems, and other electronic equipment. Designed for use with standard 19" panels. No exposed edges. Complete with necessary hardware. In gray hammer-tone finish.

Stock No.	Mir's Type	Panel Size	Overall Size	Wt. Lbs.	NET EACH
86 PU 879	RR-1248	21"	24x20 1/2 x 12"	15	8.92
86 PU 880	RR-1248	28"	31x20 1/2 x 12"	17	10.97

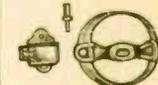
## CHASSIS MOUNTING BRACKETS



An excellent accessory for adapting racks and cabinets to specific needs. A rugged, top-quality bracket formed of heavy gauge steel. Cut away at the bottom to provide clearance for a chassis 3" high. Permits mounting chassis flush against panel. Finished in high-grade black enamel. Easily mounted. \*Indicates for use with 4" chassis.

Stock No.	Type	Ht.	Depth	Lbs. NET
86 P 210	MB-458	6 1/2"	8"	2 1.07
86 P 219	MB-448	6 1/2"	10"	3 1.32
86 P 218	MB-459	6 1/2"	11"	3 1.47
86 P 221	MB-449	6 1/2"	12"	3 1.71
86 P 224	MB-460	6 1/2"	13"	3 1.66
86 P 222	MB-450	8 1/2"	10"	3 1.93
86 P 223	MB-451	8 1/2"	13"	4 2.05

## HANDLE CATCH SET



Type CL-7777. A highly attractive plunger type handle and catch set. Handle is cast aluminum with chrome plated finish. Opens with slight pressure of thumb—closes with spring-type snap.

Assures efficiency and easy operation. Featured on all Bud Cabinet Racks and Relay Racks. Supplied complete with mounting hardware. Shpg. wt., 1/4 lb. 86 P 848, NET.....1.07

## PLASTIC CASES AND PANELS



Molded black plastic cases and panels designed for test instrument mounting. Sturdily constructed to protect meter and components. Cases have recessed corner bosses for flush mounting of panels. Pre-drilled for 1/4" self-tapping screws. Case walls and panels are 1/4" thick.

Stock No.	Size H.W.D.	Wt. Lbs.	NET EACH
86 P 286	6 1/4 x 3 1/4 x 2"	1 1/2	1.88
86 P 287	6 1/4 x 5 1/4 x 2 1/4"	2	2.28

## MATCHING PANELS

86 P 288	6x3 1/2"	1 1/4	55
86 P 289	6x3 1/2"	1 1/4	73

# Build the Best...

build premium-quality

# **knight-kits**

A PRODUCT OF ALLIED RADIO

save **50%** or more  
on the world's finest  
easiest-to-build  
electronic equipment

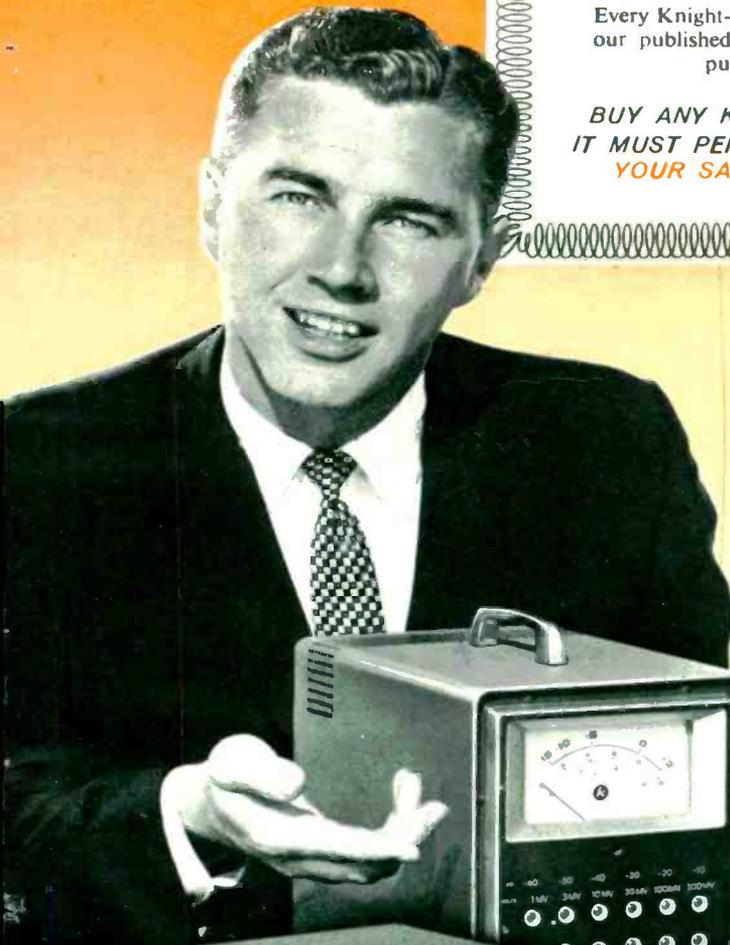


backed by our exclusive

## **MONEY-BACK GUARANTEE**

Every Knight-Kit is unconditionally guaranteed to meet our published specifications for performance or your purchase price is refunded in full

**BUY ANY KNIGHT-KIT! BUILD AND USE IT!  
IT MUST PERFORM EXACTLY AS CLAIMED...  
YOUR SATISFACTION IS GUARANTEED!**



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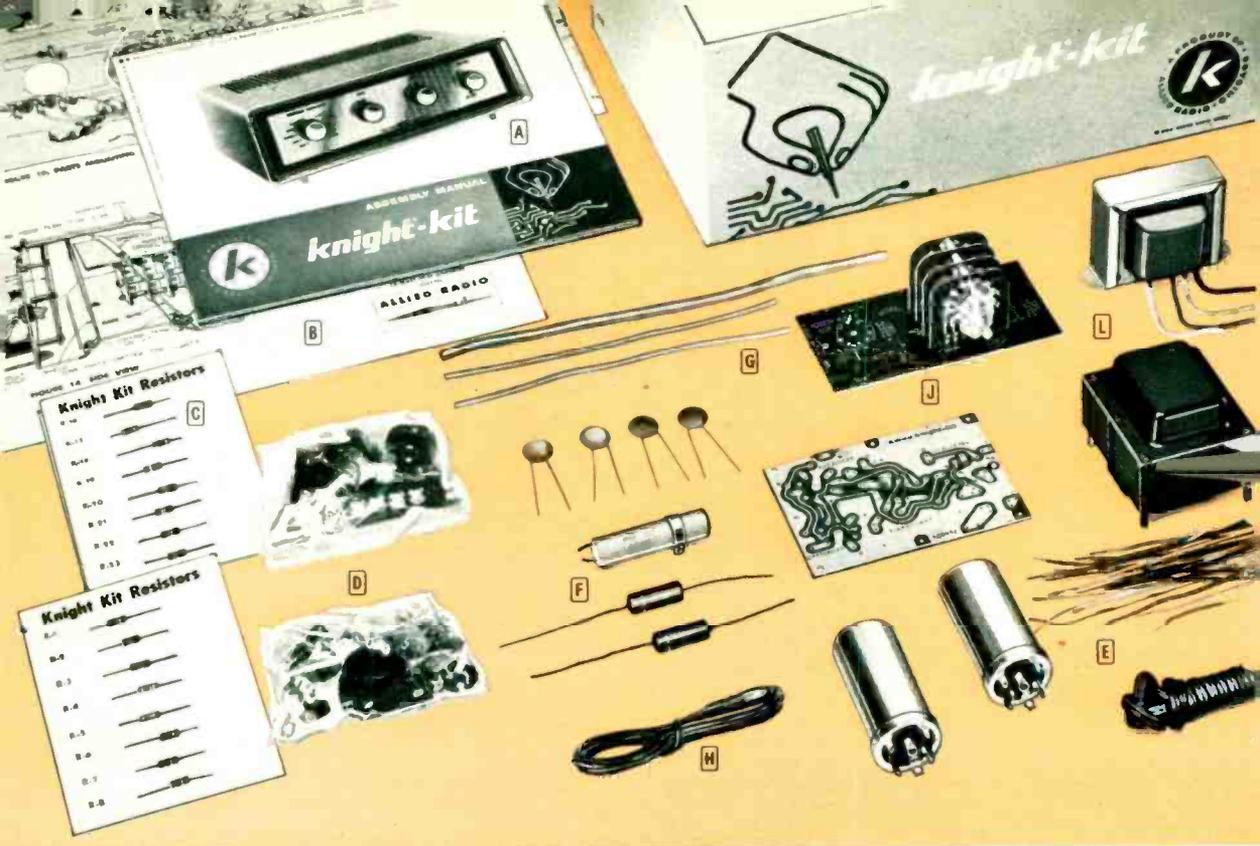
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*A product of Allied Radio—  
pioneers in electronic kit development*





## *knight-kits* are best because they're **CONVENIENCE-ENGINEERED** for easiest, most satisfying building . . . no electronic experience needed

Knight-Kit "Convenience Engineering" goes deep-down to the small but vital details. You'll appreciate this amazingly effective

technique from the moment you unpack your kit. Here is what exclusive "Convenience Engineering" means to you:

**A Superb Instruction Manuals**

Step-by-step instruction manuals are like "an instructor at your side"—tell you exactly what to do. They're a model of clarity—never any guesswork.

**B Wall-Sized Diagrams**

These picture diagrams can be tacked over your work table for ready reference—help you check your progress.

**C Carded Resistors**

Resistors—the most numerous single component in most kits—are neatly mounted on a single card, each with its identifying number clearly marked. No knowledge of color-code required.

**D Plastic Packaged Parts**

All small parts and hardware are packaged in clear plastic bags to simplify identification.

**E Pre-Cut Wire**

Wire is pre-cut to correct lengths, stripped, tinned and color-coded to save time—no measuring—no untangling.

**F Identified Parts Values**

Capacitors have values clearly marked on them; other parts are easily identified at a glance.

**G New Shielded Wire**

For easy stripping, this new wire employs a metal impregnated, plastic shield over regular insulated wire—plastic outer covering. No frayed ends.

**H New Eutectic Solder**

Employs a new formula—passes directly from molten to a solid state. Helps overcome "cold" solder connections.

**I Printed Circuitry**

Printed circuit boards and exclusive printed circuit switches, used in many Knight-Kits, eliminate difficult and time-consuming wiring.

**K Pre-Punched Chassis**

Heavily cadmium-plated, with all holes punched out. Parts, sockets, etc., fit perfectly into place.

**L Special Transformers**

High-quality, conservatively rated power transformers are employed for coolest operation. Audio transformers used in hi-fi kits are of special design for finest performance.

**COMPLETE—Ready To Assemble**

Knight-Kits come to you in perfect order, ready for easy assembly. Nothing else to buy—not even solder.



**Premium-Quality,  
Famous-Name Parts**

You'll find the most renowned names in electronics on Knight-Kit parts. Many parts are custom made—all must meet our rigid specifications.

**MONEY-BACK GUARANTEE**

Every penny of your purchase price is refunded in full, if your Knight-Kit does not meet our published specifications for performance—your assurance of satisfaction.

# ***knight-kits*** are **BEST—BY DESIGN**

The same painstaking attention to detail that goes into the most costly finished units is normal procedure for every Knight-Kit. These kits also offer many extra features and refinements which even further contribute to their reputation for unexcelled value.



**Expertly Engineered** by a staff of skilled specialists with many years of highly successful kit-development experience. You can be sure of unsurpassed circuit performance.



**Advanced Features** that make use of every technical advancement in the field of electronics—printed circuits, exclusive printed circuit switches, plug-in modules, etc.



**Quality Control** at every stage of development and thorough laboratory testing by highly experienced technicians—your assurance of flawless operation from your Knight-Kit.



**Professional Styling** that complements any decor, in any setting. Leading stylists have developed Knight-Kits into units of lasting beauty. You'll be proud of your kit's appearance!

## **NEW EASY PAY TERMS**

### **ONLY \$2.00 DOWN ON MOST KNIGHT-KITS**

Acquiring a Knight-Kit is easy on your pocketbook. You need pay only \$2.00 down on kits priced from \$20.00 to \$50.00—only \$5.00 down on kits priced from \$50.01 to \$200.00—and only \$10.00 down on kits over \$200.01. Complete the balance in small, easy-on-the-budget monthly amounts. Carrying charges are small and there's no "red tape." Open an Allied Easy Pay Account now—full details on our Time Payment page.

## **SCHOOL INQUIRIES INVITED**

Knight-Kits are among the most popular training kits in the educational field. They're perfect for science courses, radio-TV trade schools, etc., and particularly suitable for use in company-sponsored training programs. Beginners can build them easily and there's a kit for virtually every training need. They not only keep interest at a high level, but they give the student a chance to produce something of value—an instrument that can be put to practical use. Let us know your requirements—address our Educational Division. You'll receive a prompt reply.

*save up to 50% or more*

## **BUILD AND ENJOY THE BEST**

Nothing compares to the feeling of accomplishment and personal pride you'll derive from building a Knight-Kit. First choice among discriminating kit builders throughout the world, Knight-Kits give you performance that equals or surpasses factory-wired units costing much more. You get newest features, premium-quality parts and clearly written instruction manuals—and every kit comes to you in perfect order. Knight-Kit design and research facilities are dedicated to one purpose—creating the finest electronic equipment, in money-saving kit form. You can be sure of the utmost in value with a Knight-Kit.

*you'll be glad you built a knight-kit*

**A PRODUCT OF ALLIED RADIO**



# knight-kit

## STEREO HI-FI



## Deluxe 40-Watt Stereo Hi-Fi Amplifier Kit

**SETS NEW STEREO STANDARDS—UNSURPASSED IN PERFORMANCE AND STYLING**

ONLY  
**\$79<sup>50</sup>**  
\$5.00 Down

- Delivers 40 Watts of Powerful Stereophonic Reproduction
- Accommodates Every Stereo and Monophonic Source for Brilliant Reproduction
- Center-Channel Output for 3-Speaker Stereo Systems or Extension Speaker
- Vinyl Plastic Finish, Bonded to Case
- Exclusive Printed Circuit Switches and Plug-in "PAC" Units for Easy Assembly
- Single Knob Channel Balance and Separate Tone Controls for each Channel
- Offers Complete Control Versatility
- Outputs for Stereo Tape Recording—Stereo Tape Deck Input

For years-ahead features and outstanding performance—for styling of lasting beauty—the Knight-Kit Deluxe 40-Watt Stereo Hi-Fi Amplifier is absolutely the finest amplifier you can buy in money-saving kit form. Remarkably easy to assemble, this expertly engineered masterpiece will deliver 20 watts per channel into each of two speaker systems for 40 watts of dazzling stereo—or 40 watts into one or more speakers for monophonic use. Additionally, this versatile unit includes two fully integrated, built-in preamps to accommodate any stereo or monophonic source.

Besides offering everything necessary for thrilling 2-channel stereo, this sensational unit incorporates an important "plus" feature—a specially designed center channel output. Permits feeding full-range output to a center speaker—eliminates any "hole-in-the-middle" effect when speakers are widely spaced; also permits easy hook-up of extension speaker for remote listening—perfect for bringing music to any room in the house.

Assembling this deluxe amplifier is a marvel of simplicity. Printed circuit boards and exclusive printed circuit switches eliminate most of the wiring. Ingenious plug-in assemblies consisting of resistors and capacitors (PAC units) are employed. As a further aid, the use of specially designed, dual-chassis construction reduces assembly time to a minimum.

This superb unit features: five pairs of jacks for stereo inputs, including tape head; individual hum balance controls for each channel; single knob balance control; mode switch selects regular stereo, stereo reverse, and permits playing either the left or right channel through both outputs; dual-concentric clutch-type tone controls for convenient individual or simultaneous adjustment of channels; special ground post eliminates any hum-producing ground loops; output jacks for stereo tape recording; RCA 6973 special hi-fi audio output tubes; rumble and scratch filters; heavy, extruded aluminum front panel; compensated loudness control.

With the world-famous Knight-Kit step by-step instructions and giant-sized pictorial diagrams, you'll find this top-performing amplifier fun to build—even if you have no previous electronic experience. Beautifully styled metal cabinet is finished in attractive Cordovan Gray; front panel is Desert Beige extruded aluminum with Sand Gold trim. Ideal companion for the Knight-Kit Deluxe Stereo Tuner Kit listed in this section.

Everything is supplied in this deluxe stereo amplifier kit: cabinet, tubes, wire and solder, all parts and hardware, and detailed instructions. Size (HWD): 4 $\frac{1}{8}$ " (plus  $\frac{5}{8}$ " legs) x 15 $\frac{1}{2}$ " x 11 $\frac{1}{4}$ ". For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 23 lbs.  
83 YX 774. \$5.00 Down. ONLY ..... 79.50

# World's Finest Stereo Amplifier Kit



FOR THOSE WHO WANT TO BUILD THE VERY BEST

For those who insist on extraordinary performance, superior features and customized styling, the Knight-Kit Deluxe 40-Watt Stereo Amplifier is undeniably the finest choice by any standard of comparison. Perfect for use in any stereo or monophonic high-fidelity music system—Ideal companion for the Knight-Kit Deluxe Stereo Tuner Kit listed elsewhere in this section.



## EXCLUSIVE FEATURES



The use of printed circuit boards, exclusive printed circuit switches, and PAC units (complete resistor-and-capacitor plug-in assemblies) simplify assembly—you'll marvel at the ease with which you build this deluxe unit.

## SPECIFICATIONS

**Rated Power:** 40 watts (20 watts per channel).

**Peak Power:** 80 watts (40 watts per channel).

**Frequency Response:**  $\pm 1$  db, 15-35,000 cps at 10 watts;  $\pm 1$  db, 10-50,000 cps at 5 watts.

**Distortion:** Less than 0.5% at 20 watt output per channel.

**Hum and Noise:** Tuner input, -75 db; magnetic phono input, -60 db.

**Inputs (5 pairs):** Tape Head (NAB), Magnetic Phono, Ceramic Phono, Tuner and Auxiliary.

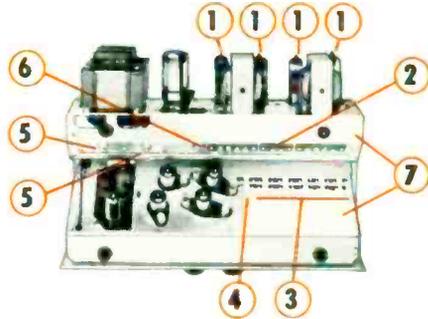
**Sensitivity:** Tape Head, 2.2 mv; Magnetic Phono, 2.2 mv; Ceramic Phono, 300 mv; Tuner, 300 mv; and Auxiliary, 700 mv.

**Controls:** Selector (Tape Head, Magnetic or Ceramic Phono, Tuner, or Auxiliary); Channel Selector (Stereo, Stereo Reverse, Left Channel only, Right Channel only, Left or Right Channels through both outputs).

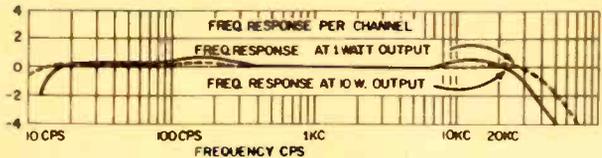
**Impedances:** 4, 8 and 16 ohms right and left channels; center channel, 8 or 16 ohms.

**Tubes:** 4—12AX7; 2—6CM8; 4—6973; GZ34 rectifier.

## CHECK THESE ADVANCED-DESIGN FEATURES

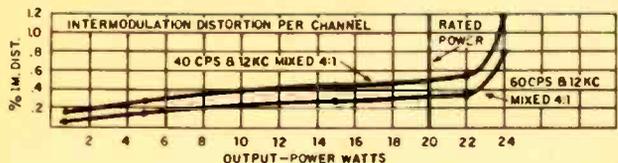


- ① Four RCA 6973 high-fidelity tubes for superior output.
- ② Unique center channel—eliminates "hole-in-the-middle".
- ③ Five pairs of stereo inputs—including tape head.
- ④ Special output jacks for stereo tape recording.
- ⑤ Separate hum balancing controls for each stereo channel.
- ⑥ Special ground post eliminates hum-producing ground loops.
- ⑦ Two-piece chassis for complete ease of assembly.



## PROOF OF PERFORMANCE

These curves clearly illustrate the superiority of the Deluxe 40-Watt Stereo Hi-Fi Amplifier Kit—compare before you buy.





## Deluxe Stereo Hi-Fi FM-AM Tuner Kit

**YEARS AHEAD IN FEATURES, STYLING AND PROFESSIONAL CIRCUITRY**

ONLY  
**\$87<sup>50</sup>**  
 \$5.00 Down

- New DSR Circuit for Distortionless FM
- Completely Independent FM and AM Sections for Stereo Reception
- Space Provision for Building-In Stereo Multiplex Adapter Circuit
- Variable-Width "Magic Eye" Tuning Indicator Serves As Slide Pointer
- Adjustable Automatic Frequency Control for "Lock-In" FM Tuning
- RF and IF Transformers in FM Section are Precisely Pre-Aligned to Assure Ease of Construction
- Heavy, Extruded-Aluminum, Gold and Beige Control Panel—Cordovan Gray Case

A distinguished example of far-sighted engineering and advanced design, the new Knight-Kit Deluxe Stereo FM-AM Tuner features Dynamic Sideband Regulation on FM, and many other innovations. As soon as FCC approval of multiplex is granted, a stereo FM adapter which fits right into its case, will be made available!

Check this array of extraordinary features. FM Section: *dual limiter-discriminator circuit* for extremely sensitive reception— $2\frac{1}{2}$  microvolts; *amazing DSR feature*, reduces distortion that may be caused by over-modulation at the FM station—assures cleanest sound; *continuously adjustable AFC* that permits you to adjust the amount of "pull-in" power so that you can also tune weak stations that are adjacent to strong stations; *pre-aligned RF coils and IF transformers*—no further adjustment necessary; separate, moving *bar-type "magic eye" tuning indicator*, plus flywheel weighted knob.

AM Section: *latest, highly efficient circuitry* with excellent sensitivity—see specifications on next page; *narrow and wide IF bandwidth*, for sharp or broad tuning, a custom feature; separate, moving *bar-type "magic-eye" tuning indicator*, plus flywheel weighted knob; *10-kc whistle filter*; *built-in loopstick antenna*, with connections for external antenna.

**General Features.** All circuitry employed in this marvelous new tuner is on printed circuit boards for fastest, easiest assembly. Since alignment is a critical factor that affects the quality of reception of all tuners, the Knight-Kit Deluxe Tuner features IF transformers that are carefully sweep-aligned at the factory—an extremely accurate procedure. Includes multiplex adapter jack, and separate cathode-follower outputs on FM and AM with level set controls. You can feed FM reception to one room—AM reception to another room!

Styled to match the Knight-Kit 40-Watt Stereo Amplifier and Stereo Preamp, the steel case has Cordovan Gray vinyl plastic permanently bonded to its surface for lasting beauty, with Desert Beige and Sand Gold escutcheons. With FM and AM sections, all tubes and parts. Size,  $4\frac{1}{8}$ " high ( $5\frac{3}{4}$ " with legs),  $15\frac{1}{2}$ " wide, 12" deep. For 105-125 v., 60 cycle AC. Shpg. wt., 18 lbs. 83 YX 731. \$5.00 Down. ONLY.....87.50

**MULTIPLEX ADAPTER KIT.** Allied will make available a multiplex adapter kit just as soon as the FCC sets a standard multiplex transmission system. The Deluxe Stereo FM-AM Tuner has space within its chassis for the addition of a multiplex adapter unit, with provisions on the panel for multiplex controls.

# Unique FM-AM Stereo Tuner Kit

BUILD IT YOURSELF . . . SAVE OVER 50%



STEREO HI-FI

First with the latest, Knight-Kit engineers combine "far-ahead" design with traditionally high standards of quality, to bring you the newest in audio components. Unquestioned leaders in kits for music lovers, Knight-Kit hi-fi components are always professional in performance and attractive in styling.



## WITH EXCLUSIVE DYNAMIC SIDEBAND REGULATION



Distorted FM



FM with DSR

One of the first really effective circuit improvements for FM tuners, DSR is to an FM tuner what inverse feedback is to an audio amplifier—a form of feedback that substantially reduces the small amount of distortion that is present in even costly tuners. Particularly effective on weak-signal FM stations, and on signals that tend to over-modulate, it "cleans up" these signals and makes them sound normal. Switch-operated, you can easily demonstrate DSR's amazing effectiveness in providing a crystal-clean signal.

## "MAGIC EYE" TUNING



For pin-point tuning accuracy, premium-quality EM84 "tuning eye" tubes are used. A moving beam of light closes to a narrow slit when you're "on" station.

## PRE-ALIGNED RF & IF COILS



RF and IF coils are expertly pre-aligned by the "sweep" method, a highly accurate procedure that eliminates any further critical adjustment.

## SPECIFICATIONS

### FM Section

**Tuning Range:** 88-108 mc.

**Sensitivity:** 2½ microvolts for 20 db of quieting.

**IF Frequency:** 10.7 mc.

**IF Bandwidth:** 200 kc at 50% Down.

**Hum & IF Noise:** 60 db below 1 V.

**AFC Pull-In:** ± 150 kc, variable.

**Output Impedance:** 3000 ohms, cathode follower.

**Harmonic Distortion:** Less than 1% (1000 µv, 100% modulation).

**Image Rejection:** 60 db.

**Antenna Impedance:** 300 ohms.

### AM Section

**Tuning Range:** 540-1640 kc.

**IF Frequency:** 455 kc.

**Sensitivity:** 3 microvolts for 10 db signal-to-noise ratio.

**Hum Level:** 60 db below 1 volt.

**Whistle Filter:** 40 db rejection.

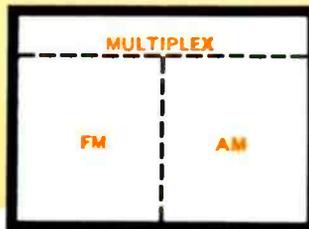
**Image Rejection:** 20 db.

**Output Impedance:** 3000 ohms, cathode follower.

**Frequency Response:** Narrow IF—20-7,000 cps, 6 db down at 3.5 kc; Wide—20-10,000 cps, 6 db at 6.5 kc.

**Tubes:** 4—6BA6, 2—6AU6, 2—12AU7, 6BE6, 6AW8, 12AT7, 6AL5, 2—EM84 "magic eyes"; EZ8t rectifier.

## Exclusive! Your Choice of Tuner Combinations



For the first time—a deluxe tuner kit divided into three separate sections. Allows you to purchase FM section only, and add other stages at your convenience.

You can purchase the new Knight-Kit Deluxe Stereo Tuner kit as a complete FM-AM unit (see opposite page); or as an FM tuner only (below), with provision for adding AM section later. Space and control facilities for adding FM multiplex adapter are provided for in the chassis; a multiplex adapter unit will be made available immediately after FCC-approval of a standard multiplex system is made.

### FM TUNER KIT ONLY

Consists of case, chassis and exact FM tuner section of FM-AM tuner on opposite page—ready to play as soon as assembly is finished. Features: DSR control for distortion-free FM reception; adjustable AFC; separate "magic eye", bar-type tuning indicator; etc. Panel has FM calibrations only. For 105-125 v., 60 cycle AC. Shpg. wt., 17 lbs. *Only \$5.00 Down.*

83 YX 732. ONLY . . . . . 68.50

### "ADD-IN" AM SECTION

Complete AM "add-in" section, for use with FM tuner at left. Includes: selectable IF bandwidths; "magic eye" bar-type tuning indicator; etc. Panel has complete FM-AM calibrations. Shpg. wt., 3 lbs.

83 Y 733. ONLY . . . . . 21.50

### "ADD-IN" MULTIPLEX SECTION

Available as soon as FCC sets standard FM multiplex system.

# knight-kit

STEREO HI-FI



## Deluxe Stereophonic Preamp Kit

**FINEST, MOST VERSATILE PREAMP KIT AVAILABLE—EASY TO BUILD—ALL NEW STYLING**

ONLY  
**\$64<sup>95</sup>**

\$5.00 Down

- Custom-Styled, Functional Cabinet with Permanently Bonded Vinyl Plastic Finish
- Separate Inputs for Stereo and Monophonic Sound Sources
- Printed Circuit Boards and Exclusive Printed Circuit Switches
- Six-Position Mode Switch—Highly Flexible
- Concentric Clutch-Type Controls—Permit Separate or Dual-Channel Adjustment
- DC-Powered Tube Filaments Assure Hum-Free Operation
- Highly Efficient L-C Scratch Filter
- Continuously Variable, Ganged Loudness Controls Provide Optimum Sound

The finest, most flexible preamplifier kit available today—and you save the famous Knight-Kit way by doing the easy assembly yourself! An outstanding example of advanced engineering techniques, this widely acclaimed control center is offered now in an all-new, ultra-smart, modern styling. In addition to the exceptional quality of its circuitry, it incorporates every desirable feature and control facility for stereophonic as well as monophonic reproduction.

Includes inputs to accommodate every music system accessory. Any type of stereo or monophonic operation is at the listener's fingertips—including reversed stereo channels and either channel through either or both outputs for monophonic use. There's never any need to interchange or unplug cables! Special, dual-concentric, clutch-type controls are utilized to permit convenient, precise adjustment of bass, treble, and level. The volume and tone of each channel may be regulated separately or simultaneously.

Advanced circuitry coupled with premium-quality components place this unit in the deluxe, custom category. Utilizes low-noise, premium-type 12AY7 tubes in the input stages, DC on all filaments and shielded power supply to minimize hum. Also contributing to top-quality performance are: dual-ganged, continuously variable loudness controls; special, LC-type scratch filter; rumble filter; cathode-follower outputs; 5 equalization positions for monophonic discs; etc.

Has separate tape recorder outputs which function independently of tone and volume controls—plus two AC convenience outlets for powering other music system components. Newly styled with attractive Desert-Beige and anodized Sand-Gold escutcheon and Cordovan Gray case. Supplied complete with tubes, all parts, wire and solder, and step-by-step instructions. 4 1/8" H (plus 5/8" legs) x 13 1/4" W x 7 1/2" D. For operation from 110-125 volts, 50-60 cycle AC. Shpg. wt., 17 1/2 lbs. 83 YX 768. \$5.00 Down. ONLY ..... 64.95

**SCRATCH FILTER CURVE**



Found only in the finest high-fidelity equipment, a pair of genuine L-C type scratch filters (with a choke for sharp cut-off), are used in the Knight-Kit Stereo Preamp Kit to eliminate scratch without affecting mid-range frequencies.

# Professional Stereo Preamp Kit Value



**ABSOLUTELY UNSURPASSED . . . THE BEST YOU CAN BUILD**

In addition to its amazing ease of assembly, your Knight-Kit Stereo Preamplifier Kit is absolutely guaranteed to meet our published specifications for performance or your entire purchase price is refunded in full. Only Knight-Kit offers this unconditional guarantee—your assurance of complete satisfaction.



## PROFESSIONAL FEATURES—TOP PERFORMANCE



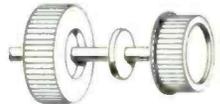
**Printed Circuit Switches.** This exclusive Knight-Kit development simplifies construction—eliminates ordinary, time-consuming switch wiring. You simply snap the switches into place and solder the prongs—saves hours of time, eliminates any chance of error, and assures neat, accurate wiring.



**Shielded Power Supply.** In addition to DC on all tube filaments, the entire power supply section of the Knight-Kit Stereo Preamp is completely shielded. No AC is present in any of the audio circuitry. This painstaking design results in amazingly clean, hum-free reproduction. Another Knight-Kit "plus".

## Dual Concentric Clutch-Type Controls

A smooth-working clutch, mounted internally on the shafts of dual-concentric bass, treble and level controls, permits individual or simultaneous channel adjustment.



## SPECIFICATIONS

**Frequency Response:**  $\pm \frac{1}{2}$  db, 7-120,000 cps through tuner input;  $\pm \frac{1}{2}$  db, 10-80,000 cps through microphone input (1-volt output reference level).

**Harmonic Distortion:** Less than 0.25% from 20-20,000 cps at 1 volt.

**IM:** Less than 0.7% at 1-volt output.

**Hum and Noise:** 60 db below 1 volt (Mag. Phono); 80 db below 1 volt (Tuner).

**Stereo Inputs (Five Pairs):** Magnetic Phono (RIAA), Ceramic Phono (RIAA), Tape Head (NAB), Tuner (Flat), Auxiliary (Flat).

**Monophonic Inputs:** G.E., Pickering, and Ceramic Phono (choice of RIAA, FFRR, Eur, 250-cps, or AES); Microphone (Flat).

**Input Sensitivity for 1-Volt Output (Stereo):** Tape Head and Magnetic Phono (2.5 mv), Ceramic Phono (70 mv), Tuner (150 mv), Auxiliary (500 mv).

**Input Sensitivity for 1-Volt Output (Monophonic):** G.E. Phono (2.2 mv); Pickering Phono (6 mv), Ceramic Phono (200 mv), Microphone (25 mv).

**Bass Controls:** Boost or attenuate 15 db at 20 cps.

**Treble Controls:** Boost or attenuate 15 db at 20,000 cps.

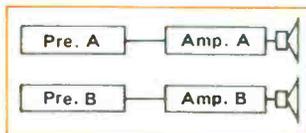
**Crosstalk Between Channels:** -45 db.

**Power Drain:** 25 watts.

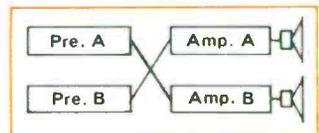
## MAXIMUM HIGH-FIDELITY FLEXIBILITY



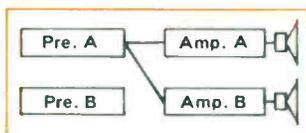
Combined on one simplified, convenient control are switching facilities that enable the listener to select instantly any desired mode of operation. This special, integrated selector switch chooses stereo normal, stereo reverse, either channel separately, or either channel monophonically through both outputs (see diagrams below).



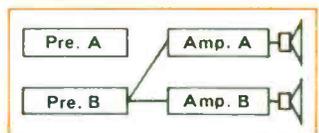
Normal Stereo



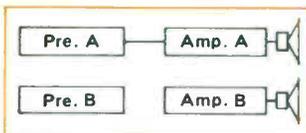
Reversed Stereo



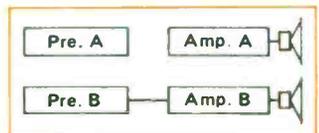
Channel A to Both Outputs



Channel B to Both Outputs



Channel A Monophonic



Channel B Monophonic

# knight-kit



## STEREO HI-FI



## Deluxe 60-Watt Basic Stereo Amplifier Kit

**UNSURPASSED PERFORMANCE FOR THOSE WHO WANT "ALL THE MUSIC"**

ONLY

# \$84<sup>50</sup>

\$5.00 Down

- Provides Superlative Stereophonic or Monophonic Music Reproduction
- Beautifully Balanced Performance with Phenomenal HI-FI Specifications
- Full 35 db of Feedback Aids in Reducing Distortion to Insignificance
- Unexcelled Design; Premium-Quality Parts
- Tremendous Reserve Power—60 Watts of Distortionless Audio
- Extremely Wide Frequency Response is Flat from 10 to 42,000 Cycles
- Has Built-In Signal Source for Precise Monophonic Channel Balance
- Professional Chrome and Black Styling

Nothing has been spared in the design of this extremely powerful basic stereo amplifier kit. A rare achievement, it is the finest unit of its type available and represents unbeatable craftsmanship and engineering skill. Perfect for use with any quality stereo preamp, it delivers flawless stereo or monophonic reproduction. Music lovers will appreciate its tremendous reserve power, which is more than ample for authentic reproduction of even the most thunderous orchestral passages. Study the features and specifications of this superb unit and you'll be convinced of its unsurpassed quality.

The Knight-Kit 60-Watt Basic Stereo Amplifier employs custom transformers, superior high-fidelity tubes, plus highest-quality capacitors and resistors. Briefly, every component part of the amplifier, from the smallest to the largest (including the heavy-duty power cord), was carefully chosen to complement the overall excellence and performance specifications of its linear circuitry. Low-noise resistors are used in all critical circuit stages. Exceptionally stable at all power levels, it has outstanding overload and recovery characteristics.

Hum and noise are negligible; response is extremely wide; and distortion is virtually non-existent. A single, convenient switch converts it from stereo to monophonic operation.

Heaters of rectifier tubes are connected in series to prevent half-wave operation—in the event that one rectifier filament fails, the other tube is protected. A built-in, 120-cycle audio test signal permits accurate balancing of the two channels by ear for outstanding monophonic reproduction. Also includes controls for precision balancing each pair of EL-37 output tubes. Two barrier-type speaker terminal strips permit quick and easy connection of speakers.

For easiest assembly, two printed circuit boards are employed—eliminate any possibility of error; provide uniformity of wiring to assure performance equal to the original, custom-assembled laboratory model. All controls, inputs and connections are on the front panel. Deluxe, heavy-gauge chassis in gleaming black and chrome; less cover, below. 9x14x8 $\frac{1}{4}$ ". For 110-125 v., 60 cycle AC. Shpg. wt., 39 lbs.

83 YU 777. \$5.00 Down. ONLY ..... 84.50



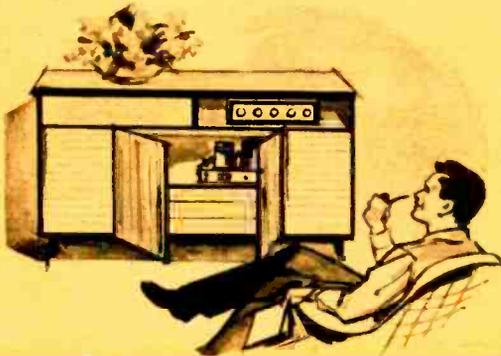
**METAL COVER FOR ABOVE.** Color-styled in attractive two-tone gray; perforated to permit adequate ventilation for top efficiency. Shpg. wt., 5 lbs.

83 YX 779. NET ..... 6.50

# Superb-Quality Basic Stereo Amplifier Kit

## DEFIES COMPARISON IN STEREO HI-FI VALUE

Before you buy, check the superior specifications of the Knight-Kit 60-Watt Basic Stereo Amplifier. A masterpiece of creative engineering and utilizing the finest components available, this brilliant stereo "powerhouse" not only meets, but surpasses the performance of many of the most costly units available. In fact, its dazzling performance puts it in a class by itself—an incomparable stereo hi-fi value!



STEREO HI-FI

### SPECIFICATIONS

**Rated Power:** 60 watts. 30 watts each channel, stereo; 60 watts monophonic.

**Peak Power:** 120 watts; 60 watts per channel.

**Frequency Response:** Each stereo channel,  $\pm 0.5$  db, 10 to 42,000 cps at 15 watts, 15 to 31,000 cps at 30 watts; monophonic,  $\pm 0.5$  db, 16 to 42,000 cps at 30 watts, 17 to 31,000 cps at 60 watts.

**Harmonic Distortion:** Stereo per channel, 0.15% at 30-watt output; monophonic, 0.08% at 60 watts.

**IM Distortion:** Stereo per channel, 0.15% at 30 watts; monophonic, 1.0% at 60 watts.

**Sensitivity:** Stereo per channel, 0.54 v. for 30 watts output; monophonic, 0.54 v., for 60 watts output.

**Hum & Noise (inputs shorted):** Stereo per channel, 90 db below 30 watts each channel; monophonic, 95 db below 60 watts.

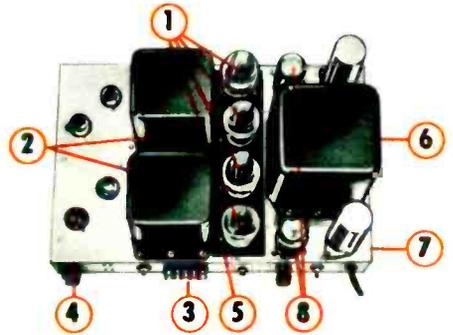
**Controls:** Individual Level Set for Channels A and B; Monophonic-Stereo Switch; Monophonic Gain Balance Test Switch; Off-On Switch.

**Output Impedances:** Stereo—4, 8, 16 and 32 ohms each channel; monophonic—2, 4, 8 and 16 ohms. These taps (more than found on conventional amplifiers), allow proper impedance matching with any speaker in stereo or monophonic applications.

**Stability:** No tendency for oscillations at any power level, even with no speaker connected or with purely reactive load.

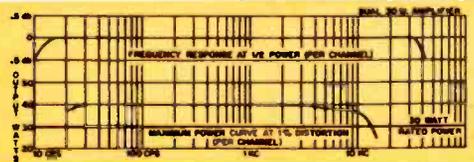
**Tubes:** 2—EF86/Z729/6267 voltage amplifier, 2—ECC83/12AX7/7025 driver-inverter, 4—EL37 power output; 2—GZ34/5AR4 rectifier.

### HIGHLIGHTS OF QUALITY

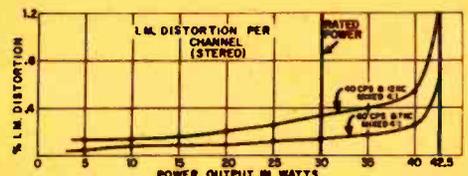


- ① Four EL37 audio output tubes, specially designed for use in high-fidelity circuits.
- ② Two extra-large, fully potted audio output transformers with core material and windings designed for high-fidelity use.
- ③ Two deluxe, molded phenolic barrier-type terminal strips for easy connection of speakers.
- ④ Level controls for precise, individual adjustment of A and B channels.
- ⑤ Vent Deck; a perforated metal strip that provides ample ventilation of the output stage.
- ⑥ Heavy-duty, fully potted power transformer assures excellent regulation.
- ⑦ Chassis made of heavy-gauge steel to assure rigidity; in gleaming chrome-plate.
- ⑧ Two GZ34/5AR4 rectifier tubes, with indirectly heated cathodes that delay application of high voltage for increased component life.

### PROOF OF PERFORMANCE



These two curves clearly demonstrate the ability of this amplifier to provide flat, distortionless frequency response—for cleanest reproduction even at extremely high power levels.



Knight-Kit Specifications Are Guaranteed—Or Your Money Back

# knight-kit



STEREO HI-FI



## Super-Value 20-Watt Stereo Hi-Fi Amplifier Kit

**THRILLING PERFORMANCE — HANDSOME STYLING — REMARKABLY LOW COST**

ONLY

**\$44<sup>50</sup>**

\$2.00 Down

- Quality Engineered for breath-taking stereo at extremely low cost
- Simplified Point-to-Point Wiring throughout for assembly
- DC on Preamp Tube Filaments—Hum and noise completely Inaudible
- Concentric Clutch-Type Control for volume and balance adjustment
- Versatile, One-Knob Selector Switch for stereo or monophonic operation
- Exclusive "Convenience Engineering" minimizes assembly time
- Unique Front Panel Design provides excellent ventilation of circuit
- Beautifully Styled Cabinet—Harmonizes with any decorative scheme

For superb performance, advanced design, and ultra-smart styling, the Knight-Kit 20-Watt Stereo Amplifier Kit represents an unsurpassed value. Exceptionally easy to assemble, this versatile unit will deliver 10 watts per channel into each of two speaker systems for 20 watts of stereo—or 20 watts to one or more speakers for monophonic use. Remarkably complete—yet low in cost—this superior amplifier includes two fully integrated, built-in preamps to accommodate magnetic cartridges. The simplified control facilities offered by this preamplifier section enable you to regulate the effect of your stereophonic sound with exceptional ease and accuracy.

A special clutch-type, dual-concentric level control (described on following page) provides convenient adjustment of volume on either channel individually or on both together. A single selector switch is incorporated to permit convenient, simplified selection of both the desired input source and the function—stereo, monophonic, stereo reverse, etc.

Among the many other superior features of this unit are: bass and treble controls boost or attenuate each channel simultaneously for complete control of tonal color; expertly designed push-pull output circuitry for clean high-fidelity output over the entire audible range of sound; DC operation of all preamp tube filaments for hum-free performance; built-in RIAA equalization for stereo and monophonic records; switched AC accessory outlet for added convenience—plus all of the excellent specifications shown on the following page.

Simplified point-to-point wiring and special two-piece chassis construction speed assembly time—assure perfect performance as soon as your kit is completed. No special tools are required—all you need are a screwdriver, long-nose pliers, and a soldering iron. French gray metal cabinet; aluminum panel with ebony trim. 4 $\frac{1}{4}$ " (plus  $\frac{3}{4}$ " legs) x 13 $\frac{1}{4}$ " x 9". Complete with all parts, cabinet, tubes, wire and solder and instructions. For 105-125 v., 60 cycle AC. Shpg. wt. 17 lbs.

83 YX 773. \$2.00 Down. ONLY..... 44.50

# Sensational Stereo Amplifier Kit Value



# knight-kit

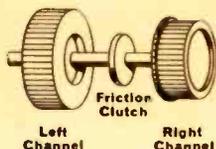
## STEREO HI-FI

### RIVALS FACTORY-WIRED UNITS COSTING FAR MORE

A rare combination of advanced-design, excellent performance and ultra-smart styling—and it's priced within easy reach of even the lowest high-fidelity budget. The Knight-Kit 20-watt Stereo Amplifier represents an outstanding achievement in stereophonic engineering—rivals factory-wired units costing more than twice as much! Feature for feature, it's a tremendous buy.



## STANDOUT FEATURES



Dual concentric, clutch-type level controls provide individual or simultaneous volume adjustment of each channel.



Single knob selector switch provides a wide choice of inputs and selection of stereo, stereo reverse, and monophonic operation—tops in convenience.

## SPECIFICATIONS

**Rated Power:** 20 watts (10 watts per channel).

**Peak Power:** 40 watts (20 watts per channel).

**Response:**  $\pm 1.5$  db, 20-20,000 cps at 1 watt;  $\pm 1.5$  db, 35-15,000 cps at 10 watts.

**Harmonic Distortion:** Less than 1.5% at 20 watts.

**Hum and Noise:** Better than 85 db below full output.

**Inputs** (4 pairs): Magnetic Phono, Ceramic or Crystal Phono, Tuner, and Auxiliary.

**Sensitivity:** Magnetic Phono, 6 mv.; Ceramic Input, 0.4 v.; Tuner and Auxiliary, 1 volt.

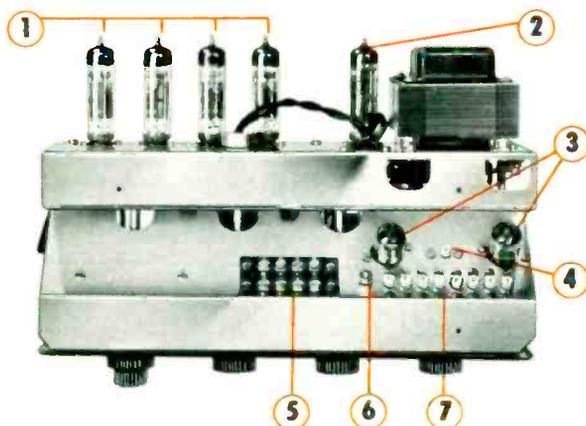
**Negative Feedback:** 13 db.

**Controls:** Selector (Stereo: Phono, Phono Reverse, Tuner, Tuner Reverse, Aux., Aux. Reverse; Monophonic: Phono, Tuner and Auxiliary); Bass (boosts or cuts 10 db at 35 cps); Treble/Off-On (boosts 5 db or cuts 7 db, at 10,000 cps); Volume.

**Impedances:** 4, 8 and 16 ohms.

**Tubes:** 2—ECC83/12AX7; 4—ECL82, EZ81/6CA4 rectifier.

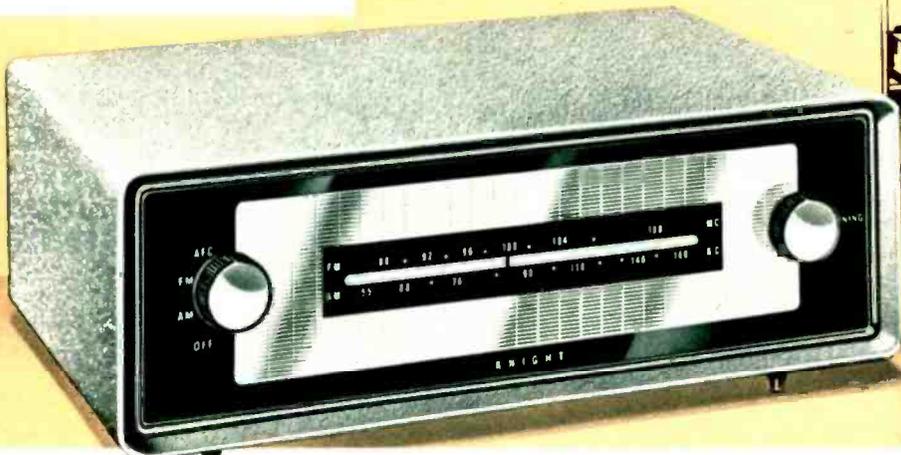
## CHECK THESE OUTSTANDING FEATURES



- ① Four ECL82 tubes (two per channel) provide clean, high-fidelity push-pull power output in each channel.
- ② High-efficiency EZ81 rectifier for superior power supply regulation and operational stability.
- ③ Premium-type ECC83/12AX7 preamplifier-equalizer tubes for clean, hum-free operation.
- ④ Special output jack from preamp "A" for optional use with a separate amplifier which does not have a magnetic cartridge preamplifier—provides maximum flexibility.
- ⑤ Two speaker output strips for stereo—4, 8, and 16-ohm taps. May be paralleled for monophonic use.
- ⑥ Special chassis ground post for eliminating ground loops between components of the entire music system.
- ⑦ Four pairs of stereo input jacks for Magnetic Phono, Crystal or Ceramic Phono, Tuner and Auxiliary.

## Exclusive knight-kit MONEY-BACK GUARANTEE

Your purchase price is refunded in full if your Knight-Kit does not meet our published specifications for performance—your assurance of complete satisfaction.



## Top-Value High-Fidelity FM-AM Tuner Kit

ONLY  
**\$49<sup>95</sup>**  
\$2.00 Down

- Time-Saving Printed Circuitry Simplifies Assembly
- High Sensitivity—2.5  $\mu$ v for 20 db Quieting on FM
- Built-in Output Jack for Stereo Multiplex Adapter
- Flywheel Tuning—Also AFC to "Lock in" Stations
- Pre-Aligned RF and IF Coils—No Adjustment Needed

First choice for the budget-minded high-fidelity enthusiast, the Knight-Kit FM-AM Tuner is truly an amazing value by any standard of comparison. This beautifully styled tuner brings you genuine hi-fi performance at far less cost than comparable factory-wired units. It's easy to assemble because most of the wiring is done for you on the printed circuit board—just install the parts on board and solder them in place. Simple instructions take you through the entire assembly, a step at a time—you'll point with pride at your accomplishment. An ideal companion for any Knight-Kit amplifier, or any other quality hi-fi amplifier.

The many advanced features designed into this tuner combine to make it an exceptional value. A tuned RF stage on FM provides high sensitivity—2.5 microvolts for 20 db quieting. Wide-range, flat frequency response guarantees true high-fidelity reception. Built-in ferrite AM antenna may be rotated for best reception in your location. Flywheel tuning enables you to glide from station to station, effortlessly; automatic frequency control (AFC) locks in FM stations, eliminating distortion due to mis-tuning. An AFC defeat switch helps tune distant stations.

In addition to the above features, the tuner has a cathode follower output plus an output which can be wired for "off-the-air" tape recording—or wired for an external multiplex stereo adapter to receive multiplex stereo broadcasts. Pre-aligned RF and IF coils mean that you can play the tuner—without further adjustment—as soon as assembly is complete. No special tools are required for assembly—the entire job can be easily accomplished with a soldering iron, screwdriver, and pliers.

You'll be proud to place this tuner where everyone can see its smart styling; it is completely enclosed in a beautiful French gray case, supported on tapered, chrome-finished legs. Centered on the ebony-and-aluminum control panel is an easy-to-read slide rule scale; stations are located by the self-illuminated neon glow pointer, as it moves across the scale with jewel-like orange brilliance.

Famous Knight-Kit "convenience engineering" assures easy, simplified assembly and saves hours of construction time. Everything is supplied—all parts, wire and solder, tubes, output cable, the attractive French gray steel cabinet, and detailed instructions with wall-size picture diagrams. Size, 4 $\frac{1}{4}$ x13 $\frac{1}{4}$ x8" (plus  $\frac{3}{4}$ " legs). For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt. 14 lbs.  
83 YX 787. \$2.00 Down. ONLY 49.95

### SPECIFICATIONS

#### FM Section

**Sensitivity:** 2 $\frac{1}{2}$  microvolts for 20 db quieting.

**Response:** 20-20,000 cps.

**Hum and Noise:** 60 db below 1-volt output.

**IF Bandwidth:** 200 kc at 50% down on curve.

#### AM Section

**Sensitivity:** 3  $\mu$ v for 10 db signal-to-noise ratio.

**Hum and Noise:** 60 db below 1-volt output.

**IF Bandwidth:** 8 kc at 50% down on curve.

#### General Specifications

**Controls:** Selector (AFC, FM, AM, and OFF); Tuning.

**Outputs (2):** Amplifier; stereo multiplex adapter or tape recorder (may be wired for either).

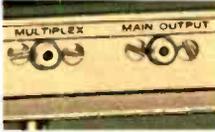
**Tube Complement:** 6AN8; 6BE6; 6BA7; 12AT7; 2-6AU6; ECC82/12AU7; 6AL5; plus 6X4 rectifier.

### MULTIPLEX ADAPTER KIT



Soon to be released—a multiplex stereo adapter for use with any Knight-Kit high-fidelity tuner.

**SPECIAL HIGHLIGHTS  
OF KNIGHT-KIT TUNERS**



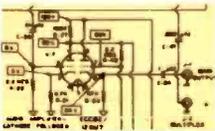
**MULTIPLIX & MAIN OUTPUTS**

Features a cathode follower type main output plus an output for connection of multiplex adapter—can be wired as a tape output if desired.



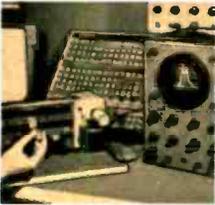
**EASY FLYWHEEL TUNING**

A gentle touch moves the neon-glow tuning pointer to the station you select—you glide from one station to another smoothly, effortlessly.



**CATHODE FOLLOWER OUTPUT**

Assures peak performance with any amplifier or recorder by perfectly matching any input impedance—permits use of long leads to amplifier without loss of high frequencies.



**FACTORY-ALIGNED COILS**

Pre-aligned RF and IF sections permit you to play the tuner as soon as you have completed assembly—no further adjustment necessary!

**FOR KNIGHT-KIT TUNERS**

At the present time, the FCC is studying various proposals for multiplex transmission. As soon as one system becomes standardized, Allied will make available an adapter kit for your Knight-Kit hi-fi tuner. You can depend on Knight-Kits for obsolescence-free, enjoyable service.

**Budget-Sparing  
FM Enjoyment**



**The Big Value Hi-Fi FM Tuner Kit**

ONLY  
**\$38<sup>95</sup>**  
\$2.00 Down

- 7-Tube Circuit for Better Performance
- Latest, Time-Saving Printed Circuitry
- Convenient Stereo Multiplex Adapter Jack
- Drift-Free AFC "Locks In" FM Stations
- Accurate, Pre-Aligned RF and IF Coils
- Superb Response:  $\pm \frac{1}{2}$  db, 20-20,000 cps

For low-cost high-fidelity anyone can afford—for performance surpassing factory-wired or kit models anywhere near its price range—choose the Knight-Kit FM tuner. A marvel of assembly ease, this popular performer utilizes a full 7-tube circuit for unusually clean, first-rate FM reception. Enjoy it with any Knight-Kit amplifier, or any other quality amplifier—unmistakably your best budget buy!

In addition to its excellent specifications, the tuner also features: *superb styling*, which is both attractive and functional; *printed circuit* for ease of assembly; *automatic frequency control (AFC)*, for "lock in" tuning of stations—with disabling feature for tuning in weak stations adjacent to strong stations; *pre-aligned RF and IF sections* to eliminate any need for adjustment; *front ventilation*, an integral part of panel design—no perforations in the top or at the sides of the handsome cabinet; *easy flywheel tuning* that permits you to glide from station to station smoothly and gently; *cathode follower output*; plus *FM multiplex output jack* for FM stereo broadcasts.

The attractive French gray steel cabinet has a control panel finished in bright aluminum with ebony trim—blends beautifully with any decor. Cabinet is further accented by its chrome-finished, tapered legs—you'll be proud to display the tuner anywhere. Supplied complete with cabinet, all parts, tubes, wire and solder and hardware. World-famous step-by-step instructions and wall-size picture diagrams guide you every move. Assembly is fun and easy—you can't go wrong. Size,  $4\frac{1}{4} \times 13\frac{1}{4} \times 8"$  (plus  $\frac{3}{4}"$  legs). For 105-125 v., 50-60 cycle AC. Shpg. wt., 13 lbs. 83 YX 751. \$2.00 Down. ONLY..... 38.95

**EXCELLENT SPECIFICATIONS**

- Sensitivity:** 4 microvolts for 20 db of quieting.
- Hum Level:** -45 db (from 1-volt output reference).
- Output Voltage:** 1 volt at 100 microvolts input 30% modulation; 2 volts at 1000 microvolts.
- Response:**  $\pm \frac{1}{2}$  db, 20-20,000 cps.

- Controls:** Tuning; Function Switch (Off, FM, FM/AFC).
- Outputs (2):** Amplifier; stereo multiplex adapter or recorder.
- Distortion:** only 0.6%.
- Tube Complement:** 6BQ7A, 6BA7, 12AT7, 2-6AU6, 6AL5, 12AU7; also 6X4 rectifier.

Select Knight-Kits for Deluxe Hi-Fi at Lowest Cost

# knight-kit



## HIGH-FIDELITY



## Super-Value 18-Watt High-Fidelity Amplifier Kit

**MORE FOR YOUR MONEY IN PERFORMANCE, ADVANCED FEATURES AND CUSTOM STYLING**

ONLY  
**\$39<sup>95</sup>**

\$2.00 Down

- Wide, Smooth Frequency Response from 20 to 30,000 cps
- Exclusive Knight-Kit Printed Circuit Switch for Time-Saving Assembly
- RCA 6973 High-Fidelity Audio Output Tubes for Top Performance
- Unusually Neat and Compact Styling
- Extremely Low Distortion and Wide Response for Authentic Hi-Fi Sound
- 7 Record Equalization Settings to Match Any Recording Characteristics
- 8 Inputs for Maximum Versatility
- Serves as Excellent "Add-On" Amplifier for Stereo Conversion

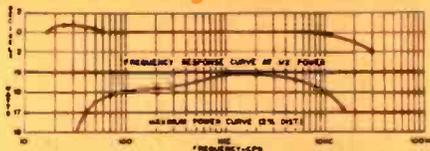
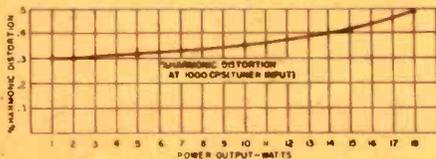
The renowned Knight-Kit 18-watt high-fidelity amplifier kit offers brilliant performance and custom styling at exceptionally low cost. Here is an amplifier designed to bring flawless hi-fi sound into your home at about one-half the cost of comparable commercially assembled units—an excellent unit around which a fine music system can be built. Ideally suited, too, as an "add-on" amplifier for stereo use. Delivers a full 18 watts output at a remarkably low 0.5% distortion; employs RCA 6973 audio output tubes specially designed for hi-fi.

Two special printed circuit boards contain the wiring for all tubes except the rectifier. Since the major part of the circuitry is on the printed circuit boards, assembly time is reduced to a minimum. Construction is even further simplified by the use of the exclusive Knight-Kit printed circuit switch—a valuable aid to the beginning kit builder. You're sure to find assembly a pleasant and rewarding experience—and you'll be proud of the high quality and strikingly smart appearance of the complete unit.

Among the many outstanding features of this fine amplifier are: 7 record equalization settings to compensate for different recording characteristics; separate tape recorder output for recording any program source independently of amplifier controls; equalized input for tape head; four high-gain inputs, four low-gain inputs; AC convenience outlet, etc. Ultra-smart styling highlights the appearance of this unit. Finished in attractive French gray with contrasting black and chrome panel to complement any decorative scheme.

With the world-famous Knight-Kit step-by-step instructions and wall-sized picture diagrams, you'll find this top-performing amplifier fun to build—even if you've had no previous electronic experience. Highest quality parts are used—your assurance of dependable service. Kit is supplied complete with tubes, all parts, wire and solder, easy-to-follow instructions. Size: 4½" high (plus ¾" legs), 13½" wide, 8" deep. For 105 to 125 v., 60 cycle AC. Shpg. wt., 15 lbs.

83 YX 797. \$2.00 Down. **ONLY**.....39.95



Frequency Response and Maximum Power

It's Easy to Build this  
Outstanding Amplifier  
... AND SAVE OVER 50%!



**FINEST PRINTED CIRCUITRY**

The exclusive printed circuit switch simplifies kit construction—eliminates critical switch wiring. Two printed circuit boards contain the wiring for all tubes except the rectifier. Most of the wiring is already done for you—just mount the parts and solder in place.

**SPECIFICATIONS**

**Rated Power:** 18 watts.

**Peak Power:** 36 watts.

**Frequency Response:** ±1 db, 20-30,000 cps at half power.

**Harmonic Distortion:** 0.5% at full rated output.

**Hum and Noise:** Better than 65 db below 18 watts.

**Sensitivity (For Full Output):** Tape Head and G.E. Phono, 5 mv; Picking Phono, 12 mv; Mic., 35 mv; Aux., 1.8 v.; Ceramic Phono, 0.5 v.; Tape Player, 0.4 v.; Tuner, 1.8 v.

**Controls:** Selector-Equalizer—Mic, Aux, Tuner, Tape, Magnetic, Ceramic, NAB Tape Head Equalization, and 7 phono equalization positions (RIAA, FFRR, NAB, AES, RCA, 500 cps, Col); Bass; Treble; Off-On/Volume; Tape Head-Phono switch.

**Output Impedances:** 4, 8, 16 ohms.

**Tubes:** 2—ECC83/12AX7; EF86/Z729; 2—6973/6CZ5; EZ81/6BW4 rectifier.

Excellent frequency response and extremely low harmonic distortion highlight the impressive performance of this top-quality amplifier (see graphs of both characteristics at bottom of preceding page).

**knight-kit**  
HIGH-FIDELITY

For Centralized  
Control of Any  
Stereo System Using Separate Amplifiers



**Universal Stereo Control Kit**

EASY TO BUILD ... EASY TO CONNECT ... EASY TO USE!

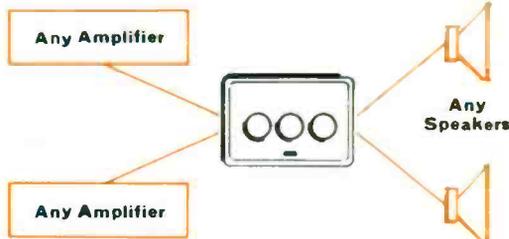
ONLY  
**\$9<sup>95</sup>**

- Centralized Control for any stereo system
- May Be Used with any two amplifiers
- Requires No Rewiring of amplifiers
- Includes Speaker phase reversing control
- Highly Compact—Smart modern styling

This versatile stereo control kit provides complete centralized control of any stereo system using separate amplifiers. Handles up to 20 watts of program material. No rewiring of amplifiers is required—simply connect the stereo control unit between the terminals of the speakers and the output terminals of the amplifiers. Lets you balance speaker system volume to obtain equal volume level from each channel; serves as a master gain control for adjustment of overall system volume; allows playing either stereo channel monophonically through either speaker or both simultaneously; permits reversed stereo. Also has phase reversal switch to assure optimum stereo performance. Lead length is not critical, making this an excellent unit for remote placement as a chairside control unit.

**Controls:** Volume; Balance; Selector (Stereo, B-Channel, B-Monophonic, Channel Reverse, A-Channel, A-Monophonic); Phase Reverse. Metal case in attractive French gray with contrasting ebony trim. Kit is supplied complete with all parts, wire and solder, and easy-to-follow, step-by-step instructions with wall-size picture diagrams. Size, 4½x7¾x4". Shpg. wt., 3½ lbs.

83 Y 778. ONLY ..... 9.95



Any mode of operation—stereo or monophonic—is at the listener's finger-tips with this highly versatile, easy-to-use stereo control kit. A real convenience!

# knight-kit

HIGH-FIDELITY



## Lowest-Cost True Hi-Fi Amplifier



Built-In Equalized Preamp for Magnetic Cartridges, plus Separate Bass and Treble Controls

## Sensational Value 12-Watt Hi-Fi Amplifier Kit

AN EASY-TO-BUILD, MONEY-SAVING BEST BUY

ONLY

# \$19<sup>95</sup>

\$2.00 Down

- Solid Value and Top Performance at Low Cost
- Employs Push-Pull EL84 Hi-Fi Output Tubes
- Preamp Equalized for Magnetic Cartridges
- Boost and Attenuate on Both Bass and Treble
- Perfect for Use in Monophonic Systems or for Low-Cost Conversion to Stereo



Designed so anyone can build it, and priced so everyone can afford it, the highly popular Knight-Kit 12-Watt Amplifier is truly an amazing value. This compact, custom-engineered amplifier kit brings you superb high-fidelity reproduction at far less cost than that of comparable factory-wired units. In addition to its outstanding performance, this kit offers you handsome styling that will look well on any table-top or shelf. Check the response curve and operating specifications—you'll agree that you're getting the most for your money with this kit.

It incorporates expertly designed circuitry with EL84 tubes in push-pull output for smooth, clean output over its entire range. Has exceptionally high inverse feed-back—15 db—for minimized distortion, and internal noise and hum have been reduced almost to the vanishing point. Included are inputs for phono and tuner, a preamp stage equalized for magnetic cartridges and separate bass and treble controls that both boost and attenuate for complete control of tonal color. For superior stereo, now or later, just add the stereo control described elsewhere in this section, and use the combination with any monophonic amplifier. With all parts, wire, solder and easy-to-follow instructions; less cover (listed below). 5x9<sup>3</sup>/<sub>4</sub>x6<sup>1</sup>/<sub>2</sub>". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 7<sup>1</sup>/<sub>2</sub> lbs. 83 Y 784. \$2.00 Down. ONLY..... 19.95

**METAL COVER FOR ABOVE** Attractive French-gray and chrome-trimmed perforated cover. Size, cover plus amplifier, 5x9<sup>3</sup>/<sub>4</sub>x7". Shpg. wt., 2 lbs. 83 Y 783. ONLY..... 3.95

### SPECIFICATIONS

**Rated Power:** 12 watts.

**Peak Power:** 24 watts.

**Response:** ± 1½ db, 30 to 15,000 cps at half power.

**Harmonic Distortion:** less than 1% at full power.

**Hum & Noise Level:** Better than 65 db below full power through Tuner input; 45 db through Phono input.

**Sensitivity (for full power output):** 1 v. at Tuner input, 10 mv at Phono input.

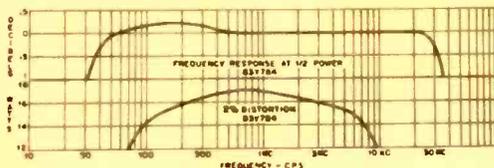
**Inputs:** Tuner and Magnetic Phono (RIAA equalized).

**Controls:** Bass (9 db bass boost or cut at 40 cps); Treble (9 db of treble boost or cut at 10 kc); Tuner-Phono switch; Volume; Off-On switch.

**Negative Feedback:** 15 db.

**Output Impedance:** 4, 8 and 16 ohms.

**Tubes:** 2—ECC83/12AX7, 2—EL84/6BQ5; EZ80/6V4 rectifier.



The frequency response curve at left clearly illustrates the clean, wide-range performance of the 12-Watt Amplifier.

Custom-Quality Hi-Fi at Real Savings

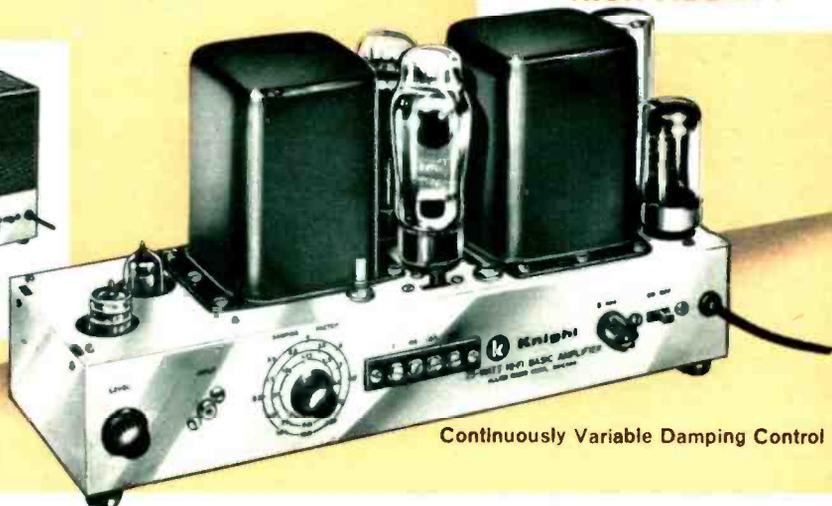


**knight-kit**

HIGH-FIDELITY



Beautiful Professional Styling—Gleaming Chrome-Plated Chassis



Continuously Variable Damping Control

## Deluxe 25-Watt Basic Hi-Fi Amplifier Kit

TOPS IN ITS CLASS FOR STABILITY AND CLEAN OUTPUT

ONLY

**\$44<sup>50</sup>**

\$2.00 Down

- Extremely Low Distortion—Only 0.11%
- Tremendously Wide Response, 14-45,000 cps
- Variable Damping Control Separately Calibrated to Each Speaker Impedance
- For Monophonic Use or Stereo "Add-On"

### SPECIFICATIONS

**Rated Power:** 25 watts.

**Peak Power:** 50 watts.

**Response:**  $\pm 0.5$  db from 14 to 45,000 cps at 25 watts.

**Harmonic Distortion** (at 25 watts): 0.11% at 1000 cps.

**IM Distortion** (at 25 watts): 60 cps and 7 kc mixed 4:1, 0.17%.

**Sensitivity:** 0.47 volts input for 25 watts output.

**Hum & Noise** (inputs shorted): 96 db below 25 watts.

**Damping Factor:** Continuously variable and separately calibrated for all amplifier output impedances. 4-ohm speaker terminal: calibrated from 0.5 to 10; 8-ohm: from 0.75 to 20; 16-ohm: 1.0 to 50.

**Controls:** Variable Damping; Balancing Adjustment; Level Set Adjustment; Off-On Switch.

**Tubes:** EF86Z/729/6267, ECC83/12AX7, 2—EL37; GZ34/5AR4 cathode-type rectifier.

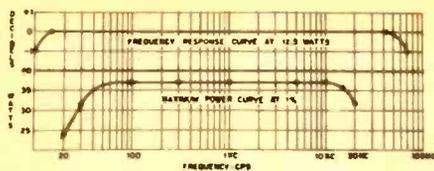
A triumph of engineering skill, the brilliant Knight-Kit 25-Watt Basic Amplifier is unquestionably the finest unit of its kind you can build. Rated for a full 25 watts of virtually flawless output, it reproduces the entire range of orchestral music with thrilling realism. Designed for use with any tuner or preamplifier having a full set of controls, it's the perfect choice for any monophonic music system—also makes an ideal basic "add-on" amplifier for stereo conversion.

Some of its deluxe features include: linear high-fidelity circuit that delivers over 25-watt output; continuously variable damping control, with separate calibrated scales for each speaker impedance, to assure optimum performance—prevents low-frequency distortion caused by overdamping or underdamping in speaker systems; custom-quality, potted output transformer for superior response; balance control for precise adjustment of output tubes; meter jack; low-noise precision resistors in critical stages; conservatively rated components for long life; and printed circuit board for easy, trouble-free wiring.

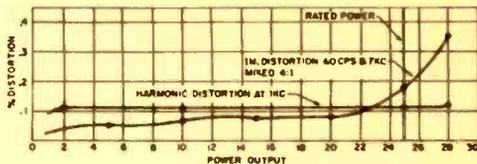
Styled in gleaming chrome plate. With all parts, tubes, wire, solder and instructions. Less cover, below. Size,  $4\frac{3}{4} \times 14\frac{1}{2} \times 7\frac{1}{8}$ ". For 105-125 volts. 60 cycle AC. Shpg. wt., 21 lbs.

83 YU 793. \$2.00 Down. ONLY ..... 44.50

METAL COVER FOR ABOVE. Satin-gold sides; black top. Wt., 3 lbs. 83 YX 794. ONLY ..... 4.75



Compare these response and power curves with other units before you buy—you'll be convinced of Knight-Kit superiority and value.



# knight-kit



## SAVE—Build Your Own Speaker Enclosures

**HIGH-FIDELITY**

**BEAUTIFULLY STYLED ...  
ACOUSTICALLY CORRECT**

You'll get top performance and greatest value from a Knight-Kit easy-to-assemble enclosure! Available in your choice of three lustrous, professionally hand-rubbed furniture veneers to harmonize with any decor—mahogany, limed oak and walnut.



KN-1265K



KN-1275K



KN-1215K

## Custom-Crafted Speaker Enclosure Kits

### KN-1265K DUCTED-PORT KIT

**ONLY \$39<sup>50</sup>** Easy-to-assemble, pre-finished enclosure kit for 12" or 15" speakers. Employs ducted-port design for performance equal to conventional bass reflex enclosures of much greater size. Features tight tongue-and-groove joints; non-resonant panels for superior acoustical characteristics; hand-rubbed, fine furniture veneers; pre-cut for KN High-Frequency Unit; contemporary styling; precision-made parts. Quickly assembled with a screwdriver. 32x17<sup>1</sup>/<sub>2</sub>x15". Specify mahogany, limed oak or walnut when ordering. Shpg. wt., 35 lbs.  
70 DU 402C. **ONLY 39.50**

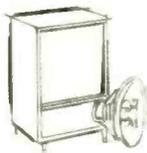
### KN-1275K DELUXE ENCLOSURE KIT

**ONLY \$59<sup>95</sup>** Truly fine furniture in kit form, the KN-1275K is ideal for use with the new high-compliance speakers. Highly versatile—accommodates any 2-way 12" or 15" speaker system and most 3-way systems. May be used as a tunable bass-reflex, ducted-port, or infinite baffle. 15" woofer mounts in bottom; 12" speaker mounts in front; removable adapter board may be used for mounting driver components. 3/4" panels. 33x21x20<sup>1</sup>/<sub>4</sub>". Specify mahogany, limed oak or walnut when ordering. Shpg. wt., 70 lbs.  
70 DZ 406C. **ONLY 59.95**

### KN-1215K DUAL DUCTED-PORT KIT

**ONLY \$54<sup>50</sup>** A striking example of distinctive styling and superb craftsmanship, the KN-1215K enclosure kit will accommodate any 12" or 15" speaker. A screwdriver is all you need to quickly assemble this pre-finished kit. Employs dual-ducted-port design and vibration-resistant 3/4" panels for smooth bass. Has lustrous hand-rubbed, furniture veneers; beautiful boucle-weave grille cloth; tapered legs with brass ferrules; adapter board for tweeter components. Size 27x32x16". Specify mahogany, limed oak or walnut. Shpg. wt., 75 lbs.  
79 DZ 265C. **ONLY 54.50**

### COMPLETE KNIGHT-KIT SPEAKER SYSTEMS



KN-1265K AND KN-800A. Save \$6.45. Consists of Knight KN-1265K enclosure kit and KN-800A 12" 3-way speaker. Specify mahogany, limed oak or walnut. Shpg. wt., 52 lbs.  
20 DZ 179-C2. **ONLY 78.00**



KN-1275K AND KN-600HC. Save \$9.90. Consists of Knight KN-1275K enclosure kit and KN-600HC 12" 3-way speaker. Specify mahogany, limed oak or walnut. Shpg. wt., 95 lbs.  
20 DZ 184C. **ONLY 110.00**

### KNIGHT-KIT ENCLOSURES ARE EASY TO ASSEMBLE—A SCREWDRIVER IS THE ONLY TOOL YOU NEED



Low in cost, these outstanding furniture kits feature the finest precision parts. Enclosures are constructed of top-quality 3/4" panels—pre-finished in rich, hand-rubbed wood veneers. Equipment cabinets are seasoned plywood, finished to match enclosures. Choose from lustrous mahogany, limed oak or walnut

veneers. Tight tongue-and-groove joints simplify assembly and insure quality of finished product. Only a screwdriver is required for construction. Beautifully styled to enhance any decor, Knight-Kit furniture products add a new dimension of enjoyment to any music system.

## Knight Speakers for Use in Knight-Kit Enclosures



KN-600HC

KN-800A

KN-820

## Assemble Your Own Equipment Cabinets

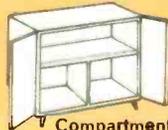


**knight-kit**  
HIGH-FIDELITY

**Genuine Hardwood Construction**  
**Lustrous Hand-Rubbed Veneers**



KN-1400K



Compartment Detail of KN-1400K and KN-1500K



KN-1500K

## Latest Knight Speakers

### KN-800A 12" 3-WAY SPEAKER

**NET \$44<sup>95</sup>**  
Popular, time-proven Model KN-800A 12" 3-way speaker. Incorporates a 12" woofer, conical mid-range radiator and compression-type tweeter for smooth, wide-range response, 35-15,000. Mechanical crossover at 2000 cps; electrical crossover at 4000 cps. Impedance, 16 ohms. Shpg. wt., 12 lbs.  
70 DX 298. NET ..... 44.95

### KN-600HC 12" HIGH COMPLIANCE SPEAKER

**NET \$59<sup>95</sup>**  
Featuring a powerful 4½-lb. ceramic magnet, the KN-600HC high-compliance speaker uses a new-type ½" thick plastic-foam bass cone. Efficient compression tweeter. Ideal for use in KN-1275 enclosure kit (see facing page). Heavy, die-cast frame. Response, 25-18,000 cps. 8 ohms. Shpg. wt., 27 lbs.  
70 DU 229. NET ..... 59.95

### KN-820 FULL-RANGE 12" SPEAKER

**NET \$16<sup>95</sup>**  
An economically priced full-range speaker of exceptional quality. Features cast frame for accurate cone suspension and voice coil alignment. Has 12" cone with whizzer-type center cone for smooth coverage over entire audio range. Response, 40-14,000 cps. Impedance, 8 ohms. Shpg. wt., 8 lbs.  
70 DX 223. NET ..... 16.95

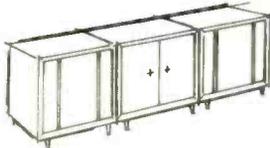
## Deluxe Equipment Cabinet Kits

### KN-1400K EQUIPMENT CABINET KIT

**ONLY \$59<sup>95</sup>**  
Designed by Allied to provide top convenience and attractive styling, the KN-1400K equipment cabinet kit will accommodate all components of a music system except the speaker. Rigidly constructed, it houses a record changer on base; tuner and amplifier; and has plenty of room for record storage. Compartment sizes: top, 6x32½x14½"; right, 13x18¼x14½"; left, 13x13½x14½". Overall size: 27" high, 33½" wide, 16" deep. Specify choice of mahogany, limed oak or walnut furniture veneers when ordering. Shpg. wt., 65 lbs.  
79 DZ 267C. ONLY ..... 59.95

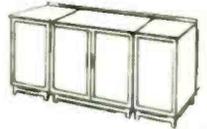
### KN-1500K EQUIPMENT CABINET KIT

**ONLY \$84<sup>50</sup>**  
A deluxe new equipment cabinet for all music system components except the speaker. Includes spacious record storage provisions. Styled in a handsome modern motif, this kit incorporates ¾" hardwood panels throughout—pre-finished in genuine wood veneers. Has white enamel interior for visibility; finished removable panel for top compartment. Top compartment, 8x34½x16½"; left, 15¼x16x16½"; right, 15¼x16x16½". Overall, 33x36x20¼". Specify choice of mahogany, limed oak or walnut veneers when ordering. Shpg. wt., 80 lbs.  
70 DZ 412C. ONLY ..... 84.50



### MATCHING BEAUTY...

Select a matched ensemble of the KN-1500K and KN-1275K or the KN-1400K and KN-1215K pre-finished furniture kits.



### BUILD YOUR COMPLETE MUSIC SYSTEM WITH KNIGHT-KITS

"Value" means highest quality at lowest cost—and nowhere can value be found to equal the dollar-for-dollar superiority of a complete Knight-Kit music system. See "Hi-Fi Systems" listings for complete Knight-Kit systems—or choose your own components individually. Either way you'll enjoy the very best for less!

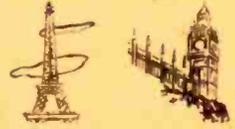


# knight-kit



## HOBBYIST KITS

# Broadcast, Long Wave, & Short Wave



Listening to short-wave stations from all over the world is fun—opens wide, new horizons of adventure.



At your fingertips—thrilling foreign stations, standard broadcasts, weather reports, aircraft beacons, etc.

## “Ocean Hopper” Receiver Kit . . . Fun to Build and Use

### UNLIMITED LISTENING ADVENTURES AT REMARKABLY LOW COST

ONLY

# \$16<sup>95</sup>

- Expertly Designed, Highly Sensitive Circuit
- Long-Wave Coil Includes Distress Frequency
- Extremely Easy To Assemble and Operate
- Convenient, Smooth-Action Bandspread Tuning

Easy to build and fun to use, this top-performing regenerative receiver really lives up to its name. It puts a world of listening pleasure at your fingertips—literally “hopping oceans” to bring in crisp, clear headphone reception from all corners of the earth. The exceptionally wide tuning range of the “Ocean Hopper”, using the plug-in coils listed below, includes all frequencies from 165 kilocycles to 35 megacycles—you can even pick-up calls on the 500-kc international distress frequency.

Tunes in virtually every type of radio transmission: marine, aircraft, weather reports, storm warnings, distress frequencies, aircraft beacon signals, Amateurs, standard broadcasts, government stations, international broadcasts, etc. A large main tuning knob and electrical bandspread help to make tuning simple and precise. Quality components and careful time-tested design assure you of outstanding results with this famous kit.

Front panel controls include Main Tuning, Bandspread, Antenna Trimmer and Off-On/Regeneration. Tubes are a 12AT6 detector and 50C5 audio output stage; 35W4 rectifier. Can accommodate a 3-4 ohm PM speaker for reception of strong local stations. Kit is supplied with plug-in coil to cover standard broadcast band, wood cabinet with handsome gray pyroxylin covering, chassis, tubes, wire and solder, and step-by-step instructions. Less extra plug-in coils (below), headphone and antenna (listed on preceding page). Size, 6x9½x5”. For operation from 105-125 volts, 50-60 cycle AC or DC. Shpg. wt., 6 lbs. 83 Y 749. ONLY . . . . .16.95

PLUG-IN COILS. Efficient high-coils for above. Long wave coil covers international distress frequency. Shpg. wt., each, 2 oz. . . . .79c

83 Y 741. Long Wave. 165-540 kc. ONLY . . . . .	} EACH, ONLY . . . . .	.65c
83 Y 742. Short Wave. 1.65-4.1 mc. . . . .		
83 Y 743. Short Wave. 2.9-7.3 mc. . . . .		
83 Y 744. Short Wave. 15.5-35 mc. . . . .		

PACKAGE OF ABOVE COILS. Coil set consisting of 1 long wave and 4 short-wave coils listed above. Shpg. wt., 1½ lbs. 83 Y 748. ONLY . . . . .2.95



**EASY TO ASSEMBLE**—even if you have no previous electronic experience. The use of an un-crowded chassis simplifies assembly—lots of room to work in!

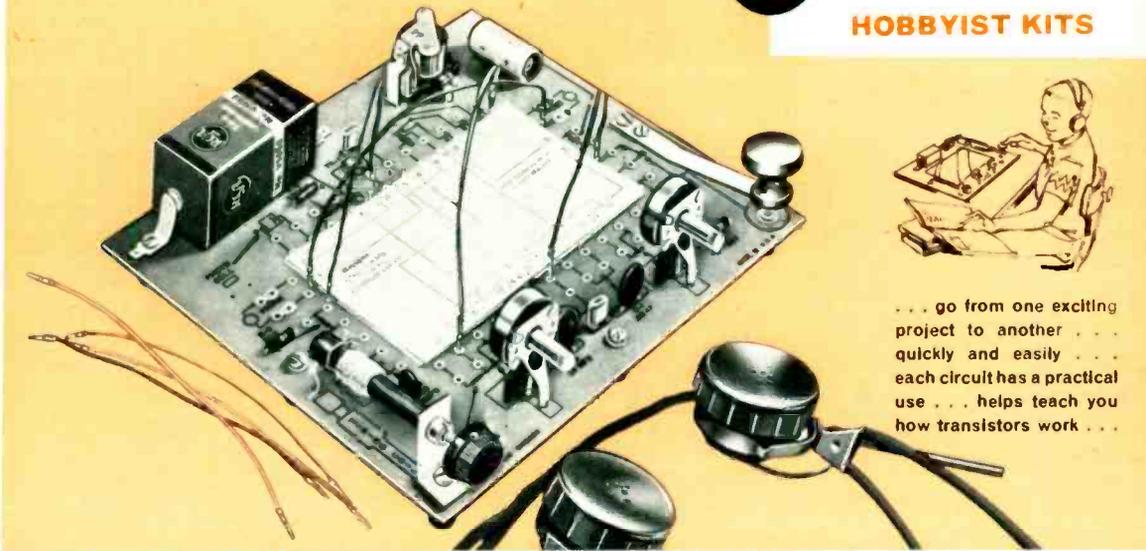
**QUICK COIL CHANGING**—easily accomplished through a “trap door” conveniently located on top of the cabinet. Simply open the door for access to plug-in coils when changing frequency band.

**EXCITING NEW COIL DEVELOPMENT**

Now—a specially designed long wave coil that permits you to receive the 500-kc international distress frequency!

An Electronic Marvel . . . Yours to Enjoy

**knight-kit**  
HOBBYIST KITS



. . . go from one exciting project to another . . . quickly and easily . . . each circuit has a practical use . . . helps teach you how transistors work . . .

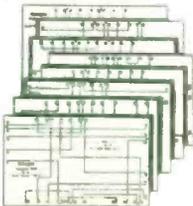
## Fascinating 10-Circuit Transistor Lab Kit

**FUN-FILLED PROJECTS . . . UNMATCHED ASSEMBLY EASE . . . COMPLETELY SAFE**

### BUILD ANY ONE OF THESE WONDERFUL PROJECTS:

- 2-Stage AM Radio
- Light-Operated Relay
- Wireless Broadcaster
- Code Practice Oscillator
- Electronic Switch
- 2-Stage Audio Amplifier
- Body-Capacity Burglar Alarm
- Electronic Timer
- Voice-Operated Relay
- Electronic Flasher

**EASY TO ASSEMBLE**—solder the basic parts in place; change from one circuit to another by simply plugging in leads.



### SPECIAL GUIDE CARDS FOR EACH EXPERIMENT

Simply place any of the 10 guide cards on the printed circuit board, and plug in the circuit leads where indicated to get a working circuit! Holes for "plug-in" leads are number-coded—it's easy—and it's fun! Absolutely safe, too.

ONLY

**\$15<sup>75</sup>**

- Highly Interesting, Practical Electronic Projects
- Exclusive "Plug-in" Leads for Unequaled Simplicity
- 10 Genuine Projects—No Duplication of Circuits
- Entire Board is an Advanced-Design Printed Circuit

Every plus feature has been designed into this fabulous lab kit to provide you with unlimited enjoyment—an outstanding outfit to give or receive. A marvel of electronic versatility, this sensational kit takes you from one fun-filled project to another—*there's no duplication of circuits!* Heart of this kit is its printed circuit board, clearly marked to indicate where all components go. Once the basic components are soldered into place, there's no further soldering. Exclusive "plug-in" leads from each component take all the guesswork out of each project. You simply place any one of the 10 guide-cards on the printed circuit board and plug the leads into the number-coded holes—just like a simplified telephone switchboard! *Engineered for absolute safety and unmatched assembly ease—without peer in its field.*

Entertaining and easy to follow, it demonstrates how transistors operate by means of 10 circuits that really work. An AM radio that gives loud, clear headphone reception—a wireless broadcaster that lets you "broadcast" to any nearby radio—an electronic switch of many uses—a voice-operated relay that controls the operation of a device through the use of sound—an oscillator for practicing code—etc.

Up-to-date in every detail, this top-value kit is an ideal supplement to school electronic courses. Maintains a high level of interest by employing the most effective teaching method known—permits "learning by doing". Includes a clearly written explanation of what each circuit does and offers a working demonstration of each completed project—there's no finer kit devised for the beginner, student, hobbyist, or experimenter. Supplied complete—nothing else to buy. With dual headphones which also serve as a microphone, plug-in circuit leads, 10 individual guide cards, 2 transistors, solder, relay and photocell, and an easy-to-understand manual. Battery powered; includes battery. Shpg. wt., 3 lbs.

83 Y 299. ONLY . . . . . 15.75



### SCHOOL INQUIRIES INVITED

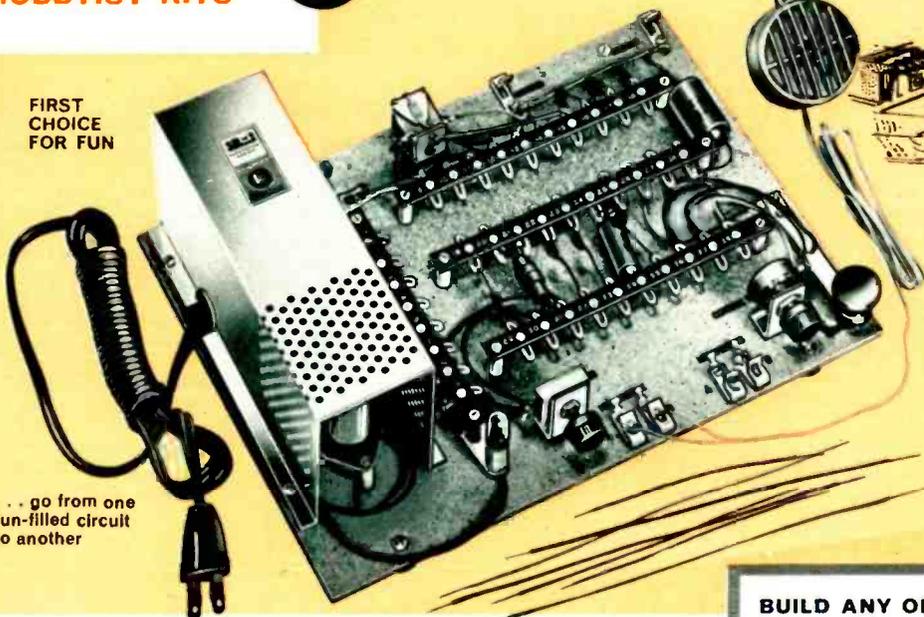
Quantity prices are available for schools—write to our Educational Division.

*Knight-Kits—the Logical Choice when Enjoyment and Safety are Important*



FIRST  
CHOICE  
FOR FUN

... go from one  
fun-filled circuit  
to another



## Remarkable 12-in-1 Electronic Lab Kit

**IT'S FUN TO LEARN ELECTRONICS THIS EASY WAY**

ONLY

**\$14<sup>95</sup>**

- Safety Designed—No Voltage Exceeds 25 Volts
- Numbered Terminal Strips for Ease of Assembly
- No Electronic Experience Required—No Special Tools
- Informative Manual Explains Every Working Circuit

Here's the world-famous Knight-Kit "12-in-1" lab—acclaimed by kit builders everywhere as the most enjoyable—most fun-filled way to learn the basic elements of electronics. A special safety-design transformer reduces all voltages to 25 volts or less. Completely safe, the kit is ideal for young and old alike—no previous electronic experience is necessary.

You can easily build any one of the 12 practical circuits listed at right. The informative manual you get with this ingenious kit tells you exactly what to do, and clearly explains how each circuit works. Once you solder the basic components into place, there's no need to change their position—the same basic parts are used for all the 12 circuits. It's amazingly simple to change from circuit to circuit. All you do is relocate a few wires according to the clear instructions given in the manual. You go from one interesting project to the next—each performs a practical function and graphically demonstrates important electronic principles. There's no finer or more fascinating way to get started in electronics than with this extremely versatile, skillfully engineered kit.

Enthusiastically endorsed by teachers and students, the "12-in-1" is designed to teach by doing. Step-by-step instructions guide you through each exciting circuit—you actually see how each electronic principle operates! In addition to schematic diagrams and circuit descriptions for each project, the manual has informative sections on commonly used schematic symbols, the International Morse Code, and capacitor and resistor color code markings—it's fun to learn the Knight-Kit way.

Includes 8x11" mounting board, 12K5 tube, mike, hardware, solder, wire, all parts and clearly detailed instructions. Less headphone, listed below. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 4 lbs.  
83 Y 272. ONLY ..... 14.95

SINGLE HEADPHONE. Quality headphone for use with kit, above. Impedance, 1000 ohms. Equipped with 4½-foot cord. Shpg. wt., 8 oz.  
59 Y 112. NET ..... 1.08

### BUILD ANY ONE OF THESE FASCINATING PROJECTS

*go from project to project by  
simply shifting wires!*

- **AUDIO CODE OSCILLATOR**  
Helps you learn the code.
- **ELECTRONIC FLASHER**  
Turns indicator light on and off at pre-set intervals.
- **VOICE-CONTROLLED RELAY**  
Lets you turn device on and off by speaking through mike.
- **CODE TRANSMITTER**  
Lets you send code signals through your radio.
- **AUDIO AMPLIFIER**  
Sends voice or music to remotely located headphones.
- **BROADCAST RECEIVER**  
Great for private radio listening from 550-1300 kc.
- **ELECTRONIC TIMER**  
For timing up to 30 minutes.
- **BODY-CAPACITY RELAY**  
Turns light on or off when you step on metal plate.
- **WIRELESS "BROADCASTER"**  
Be your own radio announcer—transmit through your radio.
- **BEAM OF LIGHT RELAY**  
Turns on appliances, etc., when actuated by light.
- **ELECTRONIC SWITCH**  
Use it to sound an alarm when it rains—amaze your friends.
- **MAGIC MUSIC OSCILLATOR**  
Have fun "making music" by using hands to control light.

# All-New Citizens Band Transceiver Kits

TWO-WAY RADIO EVERYONE CAN AFFORD



**knight-kit**

HOBBYIST KITS

## IDEAL FOR HOME, AUTO OR BOAT

Perfect for mobile or stationary applications—provides communication between points up to 20 miles apart, depending on antenna height and terrain.



### COMPLETE!

Ready to operate the moment it's assembled.

## C-27 Custom Citizens Band Superhet Transceiver Kit

BEAUTIFUL STYLING . . . EXCEPTIONAL PERFORMANCE

ONLY  
**\$79<sup>95</sup>**  
\$5.00 Down

- Easy-to-Use, Intercom-Type Talk-Listen Operation
- Dual-Conversion, High-Sensitivity Superheterodyne Receiver
- Adjustable Squelch Control

Enjoy 2-way radiotelephone communication—economically and efficiently—with this first-rate, do-it-yourself transceiver. Any citizen, 18 years or older, can get a license—*no examination is required*. May be used in stationary or mobile applications. Covers up to 20 miles depending on antenna height and terrain. Operates just like press-to-talk intercom—speaker also serves as mike. Features an extremely sensitive superhet receiver with built-in squelch and noise limiter; receiver can be tuned manually, or operated on a fixed frequency by using an optional receiving crystal. Sensitivity (manual) is better than 1  $\mu$ v for 10 db S/N; crystal, 1/2  $\mu$ v. Transmitter

section operates at maximum legal power input of 5 watts. Additional features include: distinctively styled, high-impact styrene case; dependable printed circuitry; pre-aligned IF transformers; etc. Complete with all parts, wire-type doublet antenna, and transmitting crystal (crystal can be supplied for any channel from 1 to 23—specify your preference, if any). Less DC mobile power supply and vertical antenna (bottom of page). 5x12x12". For 105-125 v., 60 cycle AC. Shpg. wt., 20 lbs. Available January, 1960.

83 YX 712C2. \$5.00 Down. ONLY . . . . . 79.95

83 Y 769. Optional Receiving Crystal. For fixed-frequency reception. 23 channels—specify. 3 oz. NET . . . . . 1.99

83 Y 714. Mobile Mtg. Bracket. 4 lbs. NET . . . . . 5.35

83 Y 719. Optional Hand-Held Mike. Press-to-talk type. Shpg. wt., 1 lb. NET . . . . . 9.50

83 Y 722. Optional Telephone Handset. 2 lbs. NET . . 24.95

## C-11 Citizens Transceiver Kit

ONLY  
**\$39<sup>95</sup>**  
\$2.00 Down

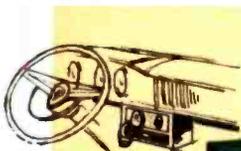
Low-cost super-regenerative receiver and 5-watt transmitter kit. Fits desk, car or boat. One-switch operation permits talk or listen. Receiver tunes all 23 channels. Has AC power supply—for mobile operation, use 6-12 v. power supply, below. With mike and transmitting crystal—specify channel (1 to 23), if you have preference. 6x10x8". Less antenna, mobile supply (below). For 105-125 v., 60 cycle AC. Shpg. wt., 10 lbs. Available December, 1959.

83 YX 713C-2. \$2.00 Down. ONLY . . . . . 39.95

83 YX 729. Vertical Antenna. 2 lbs. NET . . . . . 6.50

83 Y 724. Mobile Mtg. Bracket. 4 lbs. NET . . . . . 5.35

83 Y 723. 6-12 v. Mobile Power Supply. For mobile operation of above units. Wt., 6 lbs. NET . . . . . 10.95



Easily  
Installed In  
Car or Boat



Simple One-Switch  
Operation for Talk or Listen

Other Citizens Band Antennas on Page 406 251

# knight-kit

HOBBYIST KITS



## A 5-Transistor Portable with Big Tone



A personal portable radio you can be proud of—offers crisp, clear tone and strikingly smart appearance.



### Handsome 5-Transistor, Portable Superhet Radio Kit

IT'S EASY TO ASSEMBLE THIS HIGHLY POPULAR, LOW-COST UNIT

ONLY

# \$25<sup>95</sup>

\$2.00 Down

- Employs 5 Texas Instruments Co. Transistors
- Average Battery Playing Life, 200 Hours
- Beautifully Styled Extruded Case with Convenient Pull-Out Carrying Handle
- Printed Circuit Board for Easiest Building

Precisely designed and neatly styled, this up-to-the-minute portable easily ranks with the best of battery-operated radios. Its smart appearance and highly dependable operation will make you proud to own it, and equally proud to have built it yourself. Carrying weight of only 22 ounces and pull-out handle make it easy to take this personal portable with you wherever you go.

Among its many excellent features, you'll find: A big 3½" speaker, larger than is ordinarily used in portable radios of this type; premium-quality transistors and component parts, your assurance of a finished radio kit equivalent in performance to more expensive, pre-wired units; Class B push-pull audio output stage, for clear voice and music reproduction and extremely low battery drain; built-in ferrite loopstick antenna, for top-notch reception indoors or out; phone jack output to permit private listening with optional earphone, whenever you wish. To provide peak efficiency, IF transformers are custom pre-aligned with their associated transistors.

Extremely efficient circuit design results in very low battery drain—you can get up to 200 hours of playing time from a single, 9-volt battery! Assembling this Knight-Kit transistorized portable is simplicity itself—in remarkably little time and using only basic tools, you'll have a smooth-operating, professionally styled radio that delivers outstanding performance. A printed circuit board simplifies and speeds building.

Streamlined in design, the case is styled in eye-pleasing ivory and gold, accented by the use of ebony black panel trim. End plate with pull-out carrying handle, has gleaming gold finish. Two controls: Off-On/Volume and Tuning. Volume control is handy, recessed thumbwheel. Size, 3¾" high, 7½" wide, 1¾" deep. With all parts, wire and solder. Less battery and earphone (at right). Shpg. wt., 2 lbs.  
83 Y 771. \$2.00 Down. ONLY

25.95



#### EXCEPTIONAL QUALITY

The up-to-the-minute circuitry and orderly chassis layout (offering the utmost in accessibility to all parts and battery), reflect the painstaking care that has gone into the design of this fine portable—your assurance of top-quality performance.

9-VOLT BATTERY. Shpg. wt., ¼ lb.  
83 Y 772. NET. . . . . 1.30

EARPHONE. For private listening.  
Shpg. wt., 5 oz.  
59 Y 147. NET. . . . . 1.97

# Easy to Build, Transistor Pocket Radio



# knight-kit

HOBBYIST KITS



Pick up local stations without an external antenna—double your enjoyment at games, etc.

COMPLETE WITH EARPHONE AND BUILT-IN ANTENNA



## Fun-to-Build, Pocket-Sized 2-Transistor Radio Kit

OPERATES FOR MONTHS AND MONTHS FROM A SINGLE BATTERY



ONLY

**\$11.50**

- Clear, Powerful Reception of Local Stations
- Built-in Dynamic Earphone is Patterned After Professional Hearing-aid Types
- Fits Into Pocket; Can be Suspended from Belt
- Printed Circuit Board for Easiest Assembly

You'll find hundreds of uses for this low-cost 2-transistor radio—it's perfect for baseball and football games, picnics, hikes, cycling jaunts and many other outdoor activities, as well as private listening indoors. Compact and portable, it fits easily into your pocket and button-down flap allows it to be suspended from your belt, leaving your hands free. You're sure to find assembly an easy, thoroughly enjoyable project—and your enjoyment will be doubled when you start listening to its crystal-clear, local broadcast reception wherever you go.

Employs an extremely efficient, reflex-type, 2-transistor circuit that actually does the work of 3 transistors. And you'll get months and months of dependable service from the single, long-life battery (listed below), since transistors require an incredibly small amount of power. Works beautifully from its built-in, high-gain ferrite core antenna—*no external antenna is required to pick up local stations!* Another important feature of the pocket radio is its use of an air-dielectric, variable capacitor for smooth, accurate tuning. The miniature dynamic earphone, patterned after professional hearing-aid types, provides exceptionally good tonal quality. Only two controls: Off-On/Volume and Tuning. Carrying weight of the pocket radio is only 11 ounces!

Printed circuit board simplifies assembly, reduces building time and almost completely eliminates chance of wiring error. Step-by-step instructions are marvelously clear and won't let you go wrong; the entire radio can be assembled in one evening. Handsome tan case is plastic-impregnated and styled to resemble leather. Size, 4x3 $\frac{3}{4}$ x1 $\frac{3}{4}$ ". Includes 2 transistors, case, earphone with 3-ft. cord, wire, solder and all parts. Less battery, below. Shpg. wt., 1 $\frac{1}{2}$  lbs.

83 Y 263. ONLY ..... 11.50  
83 Y 264. 9-V. BATTERY FOR ABOVE. Shpg. wt., 4 oz. NET ..... .93

### A COMPACT MARVEL

Thanks to its printed circuit board, parts fit together with surprising ease on this unusually compact chassis. Its neat, careful layout illustrates the skill that has gone into its design. Even with no previous experience, the entire radio can be assembled in just one evening! You'll enjoy building it—you'll enjoy using it.



## Highly Popular "Ranger III" AC-DC Radio Kit

**HIGH-PERFORMANCE BROADCAST BAND RECEIVER . . . A REWARDING PROJECT**

ONLY  
**\$16<sup>95</sup>**

- Up-to-the-Minute Superheterodyne Circuit
- Remarkably Clear, Full-Toned Sound
- Modern, Attractively Styled Cabinet
- Simplified Point-To-Point Wiring

Here's a remarkably fine table radio in easy-to-build kit form. High-quality parts and expert design give outstanding superhet reception of the standard AM broadcast band. The clear, step-by-step instructions and giant-sized picture diagrams make construction an educational fun-filled project. No instruments or special tools are required. The entire job can be done with a soldering iron, screwdriver, and pliers. Construction of this quality kit will reward the builder with top performance, years of dependable service, and the pride of accomplishment that comes from building a working radio receiver.

Helps teach basics of radio—oscillator, RF and IF, etc. Has a quality Alnico V speaker and acoustically designed cabinet for clear, full tone. Sensitive superheterodyne circuit includes automatic volume control to reduce blasting and fading. Additional features include: cadmium-plated steel chassis; ball bearing capacitor for smooth, effortless tuning. The ebony plastic case, accented in white, complements any decor. Highly efficient Hi-Q loop antenna for maximum sensitivity.

A spacious chassis simplifies assembly—permits the builder to install all parts without crowding. As a further aid, resistors are carded and numbered for quick and easy selection; wire is pre-cut to correct lengths, stripped and color-coded. Miniature tubes include: 12BE6 converter, 12BA6 IF amplifier, 12AV6 detector-AVC-audio amplifier, and 50C5 power amplifier; 35W4 rectifier. With cabinet, chassis, wire, solder, tubes, all parts and instructions. Size, 5½x8¾x4½". For 105-125 v., 50-60 cycle AC or DC. Shpg. wt., 5 lbs.  
83 Y 736. ONLY . . . . . 16.95

### SCHOOL INQUIRIES INVITED

Quantity prices on the Knight-Kit "Ranger III" AC-DC Radio Kit are available for schools—write to our Educational Division.



### SO EASY TO ASSEMBLE

No previous electronic experience is required for easy assembly of this fine unit. Pre-punched chassis provides plenty of working space so that the builder can install and solder all parts in place without crowding.



### EXCELLENT FEATURES

Designed to provide top-notch performance, the radio features: quality Alnico V speaker; Hi-Q loop antenna; ball bearing capacitor; and cadmium-plated steel chassis.



# knight-kit

## HOBBYIST KITS



## Versatile "Ranger" Clock-Radio Kit . . . Easiest to Assemble

**FEATURES TELECHRON CLOCK, SLEEP-SWITCH AND APPLIANCE OUTLET**

ONLY

# \$24<sup>95</sup>

\$2.00 Down

- Crystal-Clear Broadcast Band Reception
- Top-Quality, Multi-Purpose Clock-Timer Unit
- Printed Circuit Board and Plug-In Modules for Unbeatable Ease of Assembly
- Ultra-Smart, Highly Attractive Cabinet Styling



### PRINTED CIRCUIT BOARD

A printed circuit board, containing virtually all of the circuit wiring, makes assembly of this kit remarkably easy and assures perfect performance.



### PRE-ASSEMBLED RESISTOR-CAPACITOR PLUG-IN MODULES

Resistors and capacitors in plug-in module form—a miracle of simplicity—one of the latest advances in kit design. Saves valuable time—simply plug the modules into the printed circuit board and solder them in place.

You'll be amazed at how easily this expertly engineered clock-radio kit goes together—and you'll be delighted with its first-rate performance. Thanks to its unique modularized circuit, anyone can assemble this kit in surprisingly little time. Specially designed module circuits (pre-assembled resistor and capacitor assemblies) are simply plugged into a matching printed circuit board and soldered in place. In addition to excellent reception of the standard AM broadcast band, it features a Telechron clock with a sleep-switch timer, plus an automatic radio wake-up/alarm switch and 1800-watt appliance outlet.

This highly versatile unit lets you go to sleep to music (it shuts off after any desired time lapse up to one hour); and it wakes you to music or with an alarm that starts 10 minutes after the music goes on—and if you wish, it will also automatically turn on your coffee-maker when you wake up. In addition, you can help safeguard your home by setting the timer to turn on lights while you're out for the evening.

Nothing has been overlooked in making the "Ranger" clock-radio a fascinating experience in kit-building—it's fun to build! No special tools are used for assembly; requires only a soldering iron and a few other basic tools. Clearly written step-by-step instructions and wall-sized picture diagrams tell you when and how to mount each part—it's like having a good instructor at your side!

The beautifully styled cabinet is attractively finished in ebony and white to harmonize with any surroundings. Luminous clock hands give you the correct time at a glance. Miniature tubes include: 12BE6, 12BA6, 12AV6, 50C5; 35W4 rectifier. Size, 6x9<sup>3</sup>/<sub>8</sub>x5<sup>3</sup>/<sub>8</sub>". With tubes, cabinet, wire and solder, all parts, Telechron clock, hardware and instructions. For operation from 105-125 v., 60 cycle AC. Shpg. wt., 6 lbs.

83 Y 737. \$2.00 Down. ONLY **24.95**

*Knight-Kits Are an Exclusive Product of Allied Radio Corporation*



## “Ranger III-PC” AC-DC Radio Kit with Printed Circuitry

HIGH SENSITIVITY, EASY-TO-PUT-TOGETHER, AND HANDSOMELY STYLED

ONLY

**\$18<sup>95</sup>**

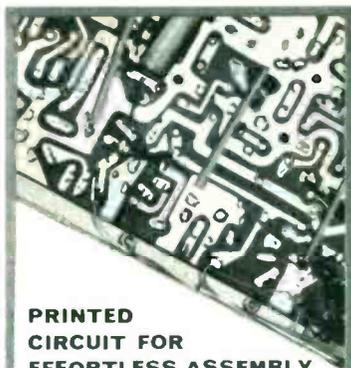
- Easy Assembly—Printed Circuit Board Is Marked to Indicate the Position of Each Part
- Beautifully Styled, Ivory and Brown Cabinet—Harmonizes With Any Room Decor
- Clear and Sensitive Broadcast Band Reception

Outstanding value in a smartly styled table model radio kit. Renowned for its top performance and incomparable ease of assembly—you can actually complete assembly in just one evening. Wiring consists of etched copper, laminated to a phenolic board; just mount the parts and solder in place—that’s all there is to it! Detailed, easy-to-follow instructions and giant-sized picture diagrams spotlight every step of assembly—it’s like having a good instructor at your side. All you need for quick, simple construction of the “Ranger III-PC” table radio, is a soldering iron and just a few other basic tools. Most of the point-to-point wiring is already completed for you on the advanced-design, printed circuit board—peak performance is assured.

Design features include an exceptionally stable, highly selective super-heterodyne circuit that covers the standard AM broadcast band; automatic volume control (AVC) to minimize blasting and fading; extremely efficient, built-in Hi-Q loop antenna for excellent signal reception; cadmium-plated steel chassis; smooth-operating ball-bearing tuning capacitor; multi-purpose miniature tubes. A new, extra-sensitive 50EH5 output tube delivers well over one watt of audio power to an efficient Alnico V permanent magnet speaker. The use of top-quality parts and skillful engineering, plus smart, functional design, combine to make this an outstanding radio with excellent tonal quality and clear, sensitive broadcast reception. At this low price, the “Ranger III-P6” radio kit is a remarkable value!

The modern styling of the lustrous ivory cabinet, is enhanced by the use of contrasting dark brown speaker grille. White knobs have gleaming gold inlays. Tuning dial of clear lucite features white numerals with Civil Defense positions indicated by pointers. 4 tubes plus 35W4 rectifier. Size, 5¼x10½x4¾". Includes cabinet, tubes, speaker, wire and solder, all parts and step-by-step instructions. For operation from 105-125 v., 50-60 cycle AC or DC. Shpg. wt., 5 lbs.

83 Y 738. ONLY .....18.95



### PRINTED CIRCUIT FOR EFFORTLESS ASSEMBLY

Wiring time is reduced to a minimum and construction is greatly simplified through use of a modern printed circuit board in the “Ranger III-PC”. One side of the board features a labeled outline of parts—shows you exactly where each part goes; accompanying instruction manual is a model of clarity!



It's a Radio! It's an Intercom!

**knight-kit**  
HOBBYIST KITS



Master Station  
with Remote Station  
and 50-ft. Cable



## Low-Cost Dual-Purpose "Ranger" Radio-Intercom Kit

**SERVES AS A SENSITIVE BROADCAST RECEIVER AND 2-WAY INTERCOM SYSTEM**

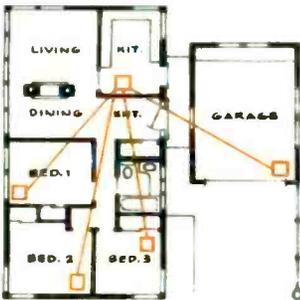
ONLY

**\$27<sup>50</sup>**

\$2.00 Down

- Terrific Time and Step-Saver in Home or Shop
- Selective Superhet Radio & Sensitive Intercom
- Master Station Employs Latest Printed Circuit
- Only Master Station Connects to Power Source
- Both Units Housed In Tastefully Styled Cabinets

### SO MANY HANDY USES!



### Extremely Versatile 3-In-One Operation

The drawing above shows Master station in kitchen, with Remote units placed in nursery, playroom and garage. Remotes can talk with each other and with Master. Radio broadcasts can be distributed to Remotes; switch on Master cuts out broadcasts without affecting intercommunication. Pressing Talk switch on Master or Remote silences radio. Nursery Remote may be left "on" for listening in by Master.

Remarkably low in cost, this flexible two-station radio-intercom kit consisting of a Master station and Remote unit, combines to give you—a sensitive, skillfully designed radio for receiving standard AM broadcasts; an efficient 2-way intercommunication system with a variety of uses: a music distribution system that enables you to transmit AM broadcasts to as many as three Remote units. Here's what the "Ranger" Radio-Intercom can do:

Remote stations can receive broadcasts from the Master, and call the Master station (automatically muting radio broadcasts from the Master as the call is made). Where two or more Remote stations are used, Remotes can talk with each other as well as with the Master station since the speaker in Remote units also acts as a microphone. Master hears all communication between Remote units. When the "Talk-Listen" switch on Remote units is left in "Talk" position, it transmits sounds to the Master unit—the perfect electronic "baby sitter" for use in nurseries or playrooms!

The Master station can originate calls and transmit radio broadcasts to Remote stations. Master has two separate volume controls: one for controlling radio volume, the other for controlling volume of Remote intercom transmissions. A push-button on top of the Master is used to originate calls; Remotes have slide switch for talking or listening to Master. Remote units always hear the Master regardless of the position of Remote switch. System accommodates up to 3 Remote units in parallel (see Extra Remote Station Kit, below). Only the Master station need be connected to an AC power source. Superhet radio includes highly efficient, built-in loop antenna.

Master, 5¼x10½x4¾"; Remote, 4¾x6½x4¾". Ivory color-styled styrene cases, with contrasting dark brown speaker grilles. With cases, tubes, wire and solder, 50' cable, all parts and instructions. For 105-125 v., 50-60 cycle AC. Shpg. wt., 9 lbs.

83 Y 739. Master and 1 Remote. \$2.00 Down. ONLY \$27.50

83 Y 298. Extra Remote Station Kit. Less cable. Shpg. wt., 3 lbs. NET 3.95

47 Y 684. Extra Cable. Shpg. wt., 100 ft., 2½ lbs. NET PER FOOT. 5c

### "The Intercom That Responds to a Whisper"

You'll be Impressed with the high-gain, audio amplifier circuitry used in this Intercom System kit. It picks up the slightest sounds—even a whisper can be heard!



## Highly Versatile 2-Way Intercom System Kit

### LOW-COST INTERCOMMUNICATION FOR HOME, STORE, OFFICE AND SHOP

ONLY  
**\$14<sup>95</sup>**

- Low in Cost—Remarkably Easy to Assemble
- Flexible Circuit & Switching Functions
- Includes One Master and One Remote Station
- Sensitive, High-Gain Audio Amplifier Circuit
- Complete with 50 Feet of Intercom Cable

One of the most useful kits ever designed—the Knight-Kit 2-Way Intercom System kit. Consisting of a Master station and Remote station, it has hundreds of uses in the home, office, store, shop, school, etc. Features a high-gain, 2-stage audio amplifier circuit (Master), with a 4" permanent magnet speaker in each station (also used as microphone). Skillfully engineered throughout, this smooth-working Intercom System kit can be quickly and easily built by anyone.

Here are some of the time and step-saving uses for this system: in the home, you can install a Master station and communicate with Remote stations in the basement, attic, garage, nursery, playroom or backyard. The system can accommodate up to three Remote units in parallel, and extra Remotes can communicate with each other. Perfect for electronic "baby-sitting", one Remote unit (with switch left in "Talk" position), can be installed in the nursery to permit continuous listening in. Thanks to its extremely high gain, it picks up even the slightest sounds.

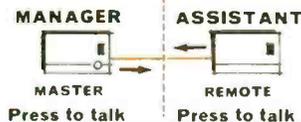
In the office or shop, communication can be of private or non-private nature by simple manipulation of "Press-to-Talk" switch on Master unit, and "Talk-Listen" switch on Remote station. Master station can communicate with Remote regardless of the position of switch on the Remote station. Master has volume control to regulate loudness of system; only the Master station need be plugged into a power outlet.

Size of each unit, 4 3/4 x 6 1/2 x 4 3/8". Metal cabinets styled in ivory with dark brown speaker grilles. Two-tube audio amplifier circuit; 35W4 rectifier. With all parts for building a Master and a Remote station, 50-ft. cable, etc. For 105-125 v., 50-60 cycle AC or DC. Shpg. wt., 8 lbs.

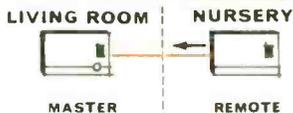
83 Y 297. Master and 1 Remote. ONLY 14.95

EXTRA REMOTE STATION KIT. For use with above. Less cable. Wt., 3 lbs. 83 Y 298. ONLY 3.95

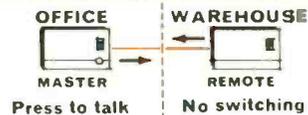
EXTRA CABLE. Shpg. wt., 100 ft., 2 1/2 lbs. 49 Y 604. NET PER FOOT 3c



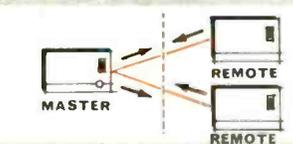
Privacy in 2-way talks. To talk, either station presses switch—stations cannot "monitor" each other unless desired.



With switch in "Talk" position on Remote station, all noises from baby's room are picked up clearly.



With Remote switch in "talk" position, Master and Remote can communicate with no necessity for Remote to operate switches.



Add Remote stations for increased usefulness. Remotes can talk to each other; Master can talk to all.

# "Trans-Midge" Radio Kit

LOW-COST MIDGET TRANSISTOR RADIO

- ONLY **\$2<sup>75</sup>**
- Employs High-Efficiency Transistor
  - Exceptionally Sensitive Reception
  - Operates From Single Penlight Cell
  - Handsome High-Impact Plastic Case

A tiny, 1-transistor radio kit that provides a fascinating, fun-filled evening for both experienced and beginning kit builders. This efficient radio will give clear head-phone reception throughout the standard AM broadcast band. Using a high-efficiency transistor, the "Trans-Midge" has excellent selectivity and displays remarkable sensitivity—pulls in stations loud and clear. The transistor serves as both a detector and an audio amplifier for greater audio volume. Requires the use of headphones and an external antenna (below).

Includes: efficient, slug-tuned coil for high sensitivity and excellent separation of stations; external knob to permit tuning in stations without opening the case; low-drain transistor which operates for months and months on single penlight cell supplied; durable, red plastic case. Less headphones and antenna kit (see below). Size:  $3\frac{5}{8} \times 2\frac{5}{8} \times 1\frac{1}{4}$ ". Shpg. wt., 8 oz. 83 Y 767. ONLY ..... 2.75

4000-OHM HEADPHONES. Shpg. wt.,  $1\frac{1}{4}$  lbs. 59 Y 149. NET ..... 2.15  
 ANTENNA KIT. Shpg. wt.,  $1\frac{1}{2}$  lbs. 83 Y 100. NET ..... 1.03



MIDGET-SIZE TRANSISTOR RADIO

Slightly larger than a package of cigarettes



Excellent selectivity and sensitivity—pulls in stations loud and clear

# Printed Circuit Transistor Radio Kit

- ONLY **\$3<sup>95</sup>**
- Printed Circuit Panel
  - Efficient Transistor
  - Single Penlight Cell
  - Ball-Bearing Capacitor

An amazing radio—small enough to rest comfortably in the palm of your hand—yet gives you months and months of operation from just a single, penlight battery. This popular kit introduces you to two of the latest marvels of electronics—the transistor and the printed circuit board—for easiest assembly and excellent performance. Delivers unusually clear headphone reception on the entire AM broadcast band.

The transistor is highly efficient—uses remarkably little current—lasts indefinitely. The printed circuit eliminates wiring—makes assembly easy. Has specially designed coil for exceptionally good sensitivity and selectivity. A ball bearing variable capacitor assures effortless tuning. With all parts, transistor, battery, etc. Less headphones and antenna, below.  $3\frac{1}{2} \times 3\frac{3}{8} \times 3$ ". 1 lb.

83 Y 765. ONLY ..... 3.95  
 4000-OHM HEADPHONES.  $1\frac{1}{4}$  lbs. 59 Y 149. NET ..... 2.15  
 ANTENNA KIT. Shpg. wt.,  $1\frac{1}{2}$  lbs. 83 Y 100. NET ..... 1.03



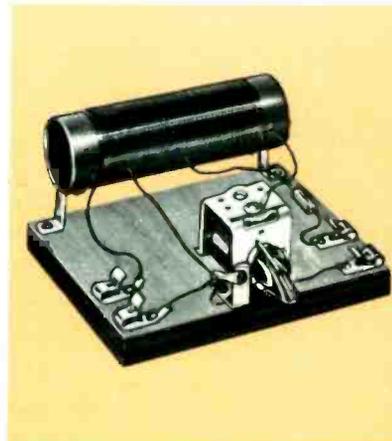
# Popular, Educational Crystal Set Kit

- ONLY **\$2<sup>50</sup>**
- Sensitive Crystal Diode
  - Smooth, Easy Tuning
  - Loud, Clear Reception
  - Efficient "Hi-Q" Coil

Thousands of beginners have started in electronics by building this famous, low-cost crystal set. It delivers loud, clear headphone reception of local broadcast stations. Circuit employs a fixed-type germanium crystal of the type developed for use in radar and other high-frequency detecting equipment. Crystal is pre-set and does not require adjustment as do old-fashioned crystal detectors.

A valuable educational experience, the kit provides high sensitivity combined with simplicity of operation. Easy to wind, specially designed Hi-Q coil provides very high efficiency and excellent selectivity. Ball-bearing, variable capacitor provides smooth tuning. Anyone can quickly and easily build this crystal set. With all parts, wire, solder and baseboard. Less headphone, antenna kit, below. Shpg. wt., 1 lb.

83 Y 261 ONLY ..... 2.50  
 1000-OHM HEADPHONE.  $1\frac{1}{4}$  lbs. 59 Y 112. NET ..... 1.08  
 ANTENNA KIT. Shpg. wt.,  $1\frac{1}{2}$  lbs. 83 Y 100. NET ..... 1.03



# knight-kit Ultra-Sensitive Photoelectric Relay Kit

HOBBYIST KITS



## PROVED SUPERIORITY

**Maximum Sensitivity.** Photocell is finest quality, super-sensitive cadmium selenide, the most sensitive type in existence. Even reacts to the light of a match.

**Highest Speed.** Extremely fast—tracks almost instantaneously. Relay actuates electrical devices even when light beam is interrupted up to 600 times per minute.

**Rugged Design.** Industrial users demand the utmost durability. That's why sturdiest thyatron circuit—Impervious to constant use at maximum speed—is used.

## Versatile Photoelectric Relay Kit

SAVE ON THIS EASY-TO-BUILD, MULTI-PURPOSE ELECTRONIC MARVEL

ONLY  
**\$12<sup>95</sup>**

- Perfect for Use in Home, Store and Industry
- Employs Extremely Sensitive Photocell
- Provides Remarkably Dependable Service
- Automatically Turns Lights On or Off
- Sounds Chimes, Opens Doors, Etc.

Build your own fast acting, ultra-sensitive photoelectric relay—quickly and easily, at remarkably low cost. Enjoy assembling this swift, silent workman that does 1001 jobs in home, store or plant. You'll find all kinds of uses for this light-controlled switching device—automatically controlling lights, opening doors, counting, burglar alarm, "announcer", etc. Use any light beam—automobile headlights, daylight, ordinary room illumination, even radiant light energy from molten metals—to activate it.

Employs highly sensitive cadmium-selenide (more sensitive than sulphide) photocell in a thyatron circuit. Relay contacts rated at 1.5 amps. Ideal as a dependable, accurate counter when attached to a counting device on a factory production line (see electric counters listed elsewhere in this catalog). Makes as many as 600 counts per minute. Absolute sensitivity, 250 milli-foot-candles. Power consumption only 3 watts.

Features selectable operation: "Trip" for burglar alarm—provides continuous ringing of alarm even though intruder steps out of path of light; and "Auto" if relay is to operate each time light is blocked—for chimes, counting devices, turning on lights, etc. Supplies 6.3 volts AC at 0.6 amps at terminals for direct operation of alarm, counters, chimes, etc. No special tools are used for assembly—only a soldering iron and a few other basic tools are required. Clear, detailed instructions guide your every move—you can't go wrong!

The photoelectric relay is supplied complete with cadmium-selenide photocell, metal case, wire and solder, all parts and step-by-step instructions. 5x3x5". For 105-125 v., 50-60 cycle AC. Shpg. wt., 4 lbs. 83 Y 702. ONLY 12.95



**LIGHT SOURCE KIT FOR ABOVE.** Long-life, sealed-beam light source. Operates relay at over 500 ft. distance. Removable deep-red filter makes beam invisible by day, barely perceptible by night. 6x6x4". For 105-125 v., 50-60 cycle AC. Shpg. wt., 4 lbs. 83 Y 703. Only 7.75  
77 Y 035. Chime For Use With Relay. 2 lbs. NET 4.70



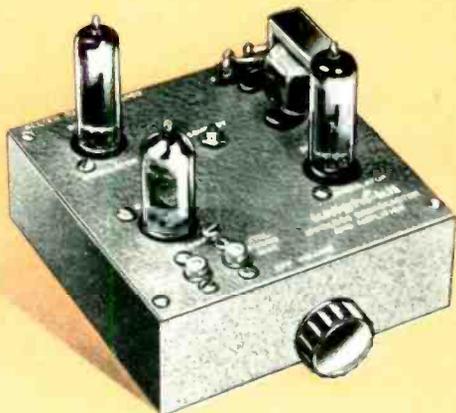
**FOR COUNTING**—use the relay for counting output on your factory production line—up to 600 counts per minute!

**FOR "ANNOUNCING"**—use the relay to activate a chime or buzzer when someone enters your home or store.

**FOR PROTECTION**—use the highly dependable relay to sound a chime or bell when an intruder disrupts the beam. Serves as a silent, ever-watchful burglar alarm for home or business.

**Yours . . . For a World of Fun!**

**IT'S A WIRELESS "BROADCASTER"  
IT'S A FINE AUDIO AMPLIFIER**



## Wireless Broadcaster-Amplifier Kit

**EASY TO ASSEMBLE . . . FUN TO OPERATE**

**ONLY**

**\$12<sup>50</sup>**

- Broadcasts Strong, Clear Signal
- Use with Phono or Microphone
- High-Gain Stage with Equalizer
- Use as an Audio Amplifier
- Plays Through Any Radio in House

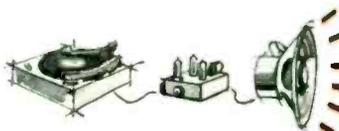
You get far more for your money with this versatile combination broadcaster-amplifier kit. Use it with a mike or phono to make announcements or play music through radios anywhere in the house—without any need for direct connection to the sets! May also be used as audio amplifier by attaching it to any PM speaker (3.2 to 16 ohms). Has input for magnetic cartridge. Can also be used with crystal cartridge or with a crystal or high-impedance dynamic mike. Puts out a clean, full-toned signal. When used as a wireless broadcaster, the volume may be controlled at broadcaster or at the individual radio receivers. Broadcasting frequency is adjustable from 600 to 1600 kc—easily tuned to any clear frequency on your radio set.

High-gain stage with equalization permits using magnetic cartridge without need for external preamp; equalization may be disconnected for use with mike. Supplied complete with all parts, wire, solder and easy-to-follow instructions. Size (HWD), 4½x5x6". For operation from 105-125 volts, 50-60 cycle AC, or DC. Shpg. wt., 3 lbs.

83 Y 706. ONLY . . . . . 12.50



Lets you make special "broadcasts" to any radio in your home—sing, speak, or play instruments.



Use it as an audio-amplifier—simply attach the unit to any speaker and record player.

**New!**  **knight-kit**  
**HOBBYIST KITS**

## Know What Your Charger Is Doing

**Get Accurate Charger Readings . . . Instantly**



**Illuminated meters  
give you readings  
at a glance**

## 12-Volt Ammeter-Voltmeter Kit

**IDEAL FOR USE IN CARS AND BOATS**

**ONLY**

**\$10<sup>75</sup>**

- Replaces Red-Light Indicator in Cars
- Indicates Charge/Discharge Current and Battery Voltage
- Meters Mounted Side-by-Side on Chrome-Plated Panel for Instant Readings

Accurate and dependable, this easy-to-install ammeter-voltmeter is perfect for motorists who want more than a flashing red light to tell them how their auto electrical system is working—excellent for boating enthusiasts, too. Shows the slightest malfunction of battery, generator or voltage regulator—eliminates all guesswork by giving precise indication of voltage and charge or discharge current. It's an extremely valuable accessory for cars with 12-volt systems.

Special, easy-to-read expanded voltmeter scale reads 9-15 volts; ammeter scale, 30-0-30 amps. Meter faces are illuminated by a vibration-proof pilot light; have large, white numerals on a dark background. Both meters are mounted side-by-side on a handsome chrome-plated panel which is trimmed with rubber. No soldering is required for assembly and installation—no adjustments to make. Accuracy is ±5%.

Supplied complete with #10 cables, universal mounting panel, all parts, instructions and information for using the ammeter-voltmeter in making voltage regulator adjustments. Shpg. wt., 1½ lbs.

83 Y 711. ONLY . . . . . 10.75

### EASY TO INSTALL

Supplied with universal mounting panel to make installation remarkably easy. Quickly mounts under the dash board—no special tools are required.



# knight-kit

## AMATEUR GEAR



Illustrated complete with  
SSB and Scope Accessories

## New T-400 Deluxe Amateur 400-Watt Transmitter Kit

THE VERY FINEST TRANSMITTER YOU CAN BUILD—FOR CW, AM AND SSB

400-WATT  
CW TRANSMITTER

# \$395<sup>00</sup>

\$10.00 Down

- Modular Add-In Accessory Units For Built-In AM and SSB
- Built-in Heterodyne Type VFO with Large 14" Slide-Rule Dial
- Adjustable Speech Compression Maintains High Modulation Level
- Meter Reads Final Grid, Screen and Plate Current Plus RF Output
- Covers 80 Thru 10 Meters; Easily Converted for 6 Meter Operation
- Completely TVI-Protected VFO and Final—Enclosed in Separate Shields
- Silicon Rectifier Power Supply for Cooler Performance, Better Regulation
- Built-in SSB and AM Modulation Indicator

The greatest transmitter value ever offered! Unique modular design, a tremendous array of advanced features, high power, and exceptionally handsome professional styling put the outstanding T-400 in a class all by itself—no other transmitter can give you so much for your money!

The basic unit consists of a complete 400-watt CW transmitter with provision for the inclusion of an AM modulator and an SSB generator (below right). With these units installed, all modes of operation, CW, AM and SSB, may be used. The 7034/4X150A final operates conservatively for prolonged tube life—400 watts input on AM, 600 watts P.E.P. input on SSB.

Provides coverage of the 80, 40, 20, 15 (or 6), and 10 meter bands. Frequency ranges are: 3.46-4.04 mc; 6.96-7.54 mc; 13.96-14.54 mc; 20.00-21.67 mc; 27.96-29.70 mc. Provision is made for easy conversion of the 15-meter band for 6-meter use (see below right); tuning dial is calibrated for both bands. A built-in, low-frequency heterodyne-type VFO, with crystal oscillator, provides precise dial resetability and high stability—operates at 4.9-5.5 mc for 80 through 20-meter operation; 3.8-5.6 mc for 15, 10 and 6-meter operation. VFO has edge-lit, oversized slide-rule dial 14" long and 4" wide for accurate frequency settings.

Front-panel meter reads final grid, screen and plate current; also indicates RF output. Silicon rectifier power supply provides cooler performance and better regulation. Has provision for panel mounting of optional 3" modulation monitoring scope (below). With pi-network output; output impedance, 30-600 ohms.

Size, 12x24x20". Ready for CW—includes VFO with crystals for all bands except 6 meters. Less SSB and AM accessories (below). For 115 or 220 v., 50-60 cycle AC. Shpg. wt., 140 lbs. Available Feb. 1960.

83 YZ 716. \$10.00 Down. NET	395.00
SSB GENERATOR. Shpg. wt., 25 lbs.	
83 YX 717. NET	69.95
AM MODULATOR. Shpg. wt., 10 lbs.	
83 Y 709. NET	24.95
LOW-LEVEL SPEECH AMPLIFIER. Required with either SSB or AM modules above. When both are installed, only a single amplifier is necessary. Has 300-3000 cps audio bandpass filter. Shpg. wt., 3½ lbs.	
83 Y 791. NET	9.95
MODULATION MONITOR SCOPE. With 3" CRT. 10 lbs.	
83 Y 718. NET	37.95
6-METER CONVERSION KIT. Shpg. wt., 8 oz.	
83 Y 792. NET	7.50

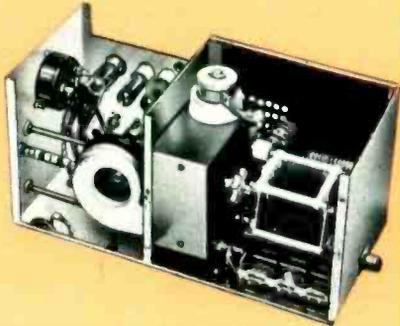
# This Sensational New Transmitter Offers Any Combination of CW, SSB or AM Phone



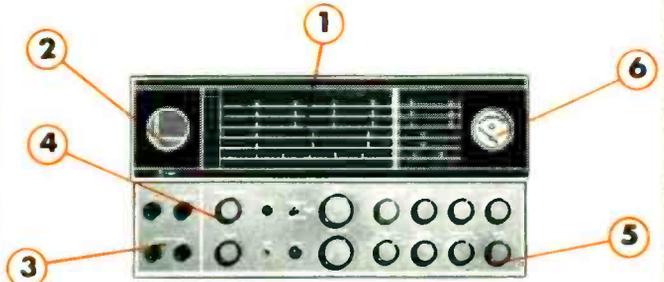
**knight-kit**

AMATEUR GEAR

New, unique modular design of the Knight-Kit 400-watt transmitter provides you with amazing versatility of operation—allows you to have any combination of the three operating modes: CW, AM or SSB, in your transmitter. Start with the basic CW unit and enjoy the dependable, far-reaching type of operation that this mode provides. Then, whenever you are ready, install the AM modulator and/or the SSB generator for clear, thrilling phone communication.



## ENGINEERED FOR PEAK PERFORMANCE



1. Stable heterodyne type VFO with large, 14" scale.
2. Optional modulation indicator shows AM and SSB patterns.
3. All SSB controls are located on front panel.
4. Exclusive variable speech compression circuit.
5. Pi-network output matches loads from 30 to 600 ohms.
6. Meter reads grid, screen and plate current plus RF power.

## UNIQUE MODULAR FLEXIBILITY

### SSB ADD-IN SECTION

Phasing type SSB generator module—fits inside T-400 transmitter. Provides 35 db carrier suppression. Front panel controls for adjusting VOX, anti-trip, and carrier null circuits.



### AM ADD-IN SECTION

High-efficiency, gated-screen, modulator with adjustable controlled carrier—fits inside T-400. Provides results equal to plate modulation at a fraction of the cost.

### SPEECH AMPLIFIER ADD-IN SECTION

Low-level speech amplifier for use with AM and SSB sections, above—fits into T-400. Has 300-3000 cps audio bandpass filter. True compression circuit (not clipping) maintains high level of modulation with minimum distortion.



### MODULATION INDICATOR

Optional 3" CRT modulation indicator—fits into basic T-400 transmitter. Gives visual indication of modulation level at all times. Shows trapezoid AM and bow-tie SSB patterns. Also aids in single side band alignment and transmitter adjustment.

## MORE FEATURES THAN ANY OTHER TRANSMITTER

- Covers 80 Thru 10 Meter Bands; Easily Converted to 6 Meter Operation
- Has 400 Watts Input Power on AM and CW; 600 Watts P.E.P. on SSB
- Low Operating Frequency, Highly Stable Heterodyne Type VFO
- Adjustable Speech Compression for Maintaining High Modulation Levels
- Has 300-3000 cps Speech Filter
- AM Modulator Provides High Efficiency Gated-Screen, Controlled Carrier Modulation
- Uses Screen-Clamp Keying on CW; VFO is Keyed to Permit Break-in Operation
- Phasing Type SSB Has Over 35 db Carrier Suppression
- Front Panel VOX and Anti-Trip Level Adjust Controls
- Connections on Rear for Relay Operation of Speaker Voice Coil and Standby
- Separately Shielded VFO and Final for TVI Protection
- 30-600 Ohm Pi-Network Output
- Silicon Rectifier Power Supply for Cooler Performance, Better Regulation
- Power Supply Has Half-Power Provision
- VFO Has Large, Easy-to-Read Slide-Rule Dial—14" Long and 4" Wide
- VFO Dial Fully Calibrated for All Bands Including 6 Meters
- Air Blower and Low Dissipation on 7034/4X150A Final for Prolonged Life
- Switch Provides Adjustable Low Level Carrier Output for Receiver Zeroing
- Sturdy, Cast Aluminum Front Panel

This Complete 400-Watt Transmitter Can Be Yours for Only \$10.00 Down



## Model R-100 Amateur Communications Receiver Kit

**AN OUTSTANDING RECEIVER WITH PROFESSIONAL FEATURES WORTHY OF THE ADVANCED HAM**

ONLY  
**\$104<sup>50</sup>**

\$5.00 Down

- Minimum Sensitivity, 1.5- $\mu$ v
- 300 cps to 4.5 kc Selectivity
- Printed Circuit Bandswitch
- Bandspread on 80-10 Meters
- Built-in Q Multiplier
- Printed Circuitry Throughout
- Constant-Running HFO
- Tunes 540 kc to 30 mc
- Vernier Dials—No Strings
- Extremely High Stability

An outstanding achievement in communications receiver engineering, this superb kit has gained phenomenal acceptance—there is no other receiver like it! Has all the features, selectivity and sensitivity of high-priced commercial units. Use of printed circuitry throughout assures stable, reliable operation and reduces assembly time—it's an unsurpassed value!

Covers 540 kc to 30 mc in 4 ranges; calibrated electrical bandspread on all Ham bands from 80-10; slug-tuned hi-Q coils; continuous VR tube-regulated B+ applied to HF oscillator lets you switch from standby to receive with no drift; built-in Q-multiplier peaks desired signal or nulls interference (60-db notch really takes out interference); delayed AVC; built-in noise limiter; provision for "building in" crystal calibrator listed on the following page.

Exceptional sensitivity is the keynote of this top-notch receiver. Better than 1.5  $\mu$ v sensitivity for a 10:1 signal-to-noise ratio, even on 10 meters. On 40 and 80 meter bands, its sensitivity is actually  $\frac{1}{2}$  to  $\frac{3}{4}$   $\mu$ v for the same signal-to-noise ratio. Broadcast band sensitivity is 4  $\mu$ v. Selectivity is variable from 300 cps to 4.5 kc at 6 db down. Exalted BFO injection provides high-quality SSB reception.

Only a little wiring experience and a few ordinary tools are required for anyone to construct this fine communications receiver. Carefully written, step-by-step instructions make assembly an easy matter.

**Controls:** Main Tuning, Bandspread Tuning, Band Selector, Q-Multiplier Selectivity, Q-Multiplier Tune, Peak-Off-Null, BFO Pitch, RF Gain, AF Gain, BFO-MVC-AVC-ANL, Off-Stdby-Recv-Cal, antenna trimmer and headphone jack. Coaxial, and screw-terminal antenna connectors for 50 to 300-ohm lines. Close-tolerance coils assure minimum alignment time. 455-kc IF. Gray metal case; chrome trim and black knobs. 10x10 $\frac{3}{4}$ x16". Complete with case, tubes, all parts, wire, solder, and instructions. Less speaker and S-meter, below. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 30 lbs.

83 YU 726. \$5.00 Down. ONLY.....104.50

**MODEL S-8 SPEAKER KIT.** Matching 4" speaker for Knight-Kit Communications Receiver. Features specially designed cone for peaking voice frequencies and reducing QRN. In handsome gray metal cabinet with chrome trim. Voice coil impedance is 8 ohms. Size, 6 $\frac{1}{2}$ x6 $\frac{1}{2}$ x4 $\frac{3}{8}$ ". Shpg. wt., 3 $\frac{1}{2}$  lbs.

83 Y 728. ONLY.....7.50

**M-5 S-METER KIT.** For the Knight-Kit Communications Receiver Kit, above. Calibrated in nine "S" units of approximately 6 db each so that each step is double the signal strength of the preceding one. The last two calibrations read +10 db and +20 db over S9. With all parts, wire and solder. Shpg. wt., 1 lb.

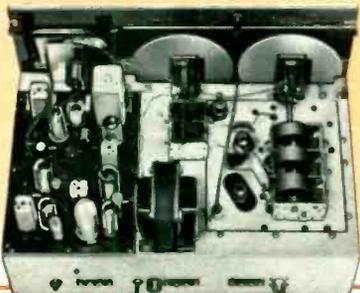
83 Y 727. ONLY.....10.75

See Crystal Calibrator Accessory on Next Page

# Build this Ultra-Modern Receiver



This outstanding receiver kit incorporates the most up-to-date advances of modern receiver engineering. It was designed by engineers, who are themselves licensed Amateur operators, to meet the highest standards of Amateur performance. As a result, they have produced an exceptionally capable receiver worthy of the advanced Ham. You'll marvel at its many unique construction features—the assembled unit is easily comparable to factory-wired receivers costing far more.



## SPECIFICATIONS

**Frequency Range:** Covers 540 kc to 30 mc in 4 ranges.

**Sensitivity:** 1.5  $\mu$ v for 10 db s/n ratio; 4  $\mu$ v on BC band.

**Variable Selectivity:** Q-multiplier, in Peak position, provides continuously adjustable IF bandpass from 300 cps to 4.5 kc at 6 db down; provides 60 db notch in Null position for rejection of interference.

**Q Multiplier:** Choice of peak or null across IF bandpass.

**Intermediate Frequency:** 455 kc.

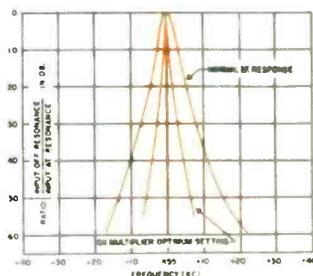
**Image Rejection:** 540-1650 kc—80 db on low end, 40 db on high; 1.6-4.6 mc—68 db on low end, 40 db on high; 4.4-12.4 mc—30 db on low end, 25 db on high; 12-30 mc—40 db on low end, 20 db on high end.

**Tube Complement:** 6BZ6 RF Amplifier, 6BH6 Mixer and HFO, 6AZ8 1st IF Amplifier, 6AZ8 2nd IF and 1st Audio, 6BC7 Detector-AVC-ANL, 6AW8A BFO and Power Amplifier, ECC83/12AX7 Q Multiplier; 6X4 Full-Wave Rectifier and 0B2 Voltage Regulator.

**Audio Output Impedance:** 8 ohms. For PM speaker.

## PROOF OF OUTSTANDING SELECTIVITY

The Knight-Kit receiver offers excellent selectivity characteristics. Note the selectivity curves shown at right: 1) Normal selectivity curve with the "Q" multiplier in the off position. 2) "Q" multiplier in the Peak position provides single-signal CW reception—makes stations "pop out" of the interference; "Q" multiplier Tune control lets you slide the "peak" across IF bandpass.



## UNSURPASSED DESIGN FEATURES

**Unique Printed Circuit Bandswitch.** A Knight-Kit exclusive—reduces assembly time to a minimum. Simply plug the bandswitch into the RF printed circuit board—makes 32 error-free connections simultaneously! Eliminates critical lead dress—you can't go wrong.



**Two Printed Circuit Boards.** Virtually all circuitry (RF, oscillator, converter, voltage regulator, IF, audio, BFO and rectifier stages) is on two printed circuit boards. Greatly simplifies construction, and makes an extremely important contribution to stability and overall performance.



## Low-Cost 100-kc Crystal Calibrator Kit

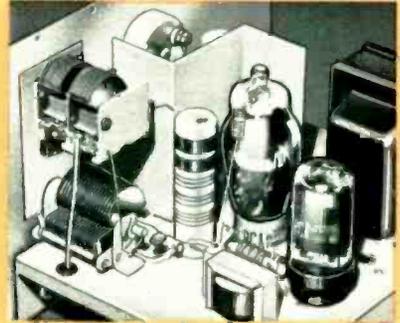


Low-cost frequency standard for Knight-Kit or other receiver. Gives marker every 100 kc up to 32 mc. Requires 6.3 v. at 0.15 amp and 150-300 v. DC at 3-6 ma. Trimmer for zero-beating with WWV; on-off switch. Size, 1 1/2 x 1 1/2 x 3". Supplied complete with tube, crystal, wire, solder and instructions. Shpg. wt., 1 lb.

83 Y 256. ONLY ..... 9.95



AMATEUR GEAR



Deluxe components used throughout... oversize power transformer... ceramic coil forms... 807 transmitting tube... ceramic-insulated, true transmitter-type variable capacitor in final amplifier.

## Model T-50 CW 50-Watt Transmitter Kit

LOW IN COST, HIGH IN QUALITY AND PERFORMANCE—IDEAL NOVICE "FIRST RIG"

ONLY

**\$39<sup>95</sup>**

\$2.00 Down

- Effective TVI Suppression
- Convenient Bandswitching—80 Through 10 Meters
- Efficient PI Antenna Coupler
- 50 Watts Input to 807 Final
- Heavy Copper-Finish Chassis

Features a 6AG7 as a modified-Pierce tuned-plate oscillator-multiplier when crystals are used; as a buffer-multiplier when used with a VFO. 50 watts input to an 807 final; 5U4G rectifier. Pi-section output circuit matches antenna impedances from 50 to 2000 ohms—may be used directly with a wide variety of antennas without any need for an external antenna tuner.

No finer value than this complete bandswitching CW transmitter kit—perfect for Novices and an excellent choice as a dependable, low-power rig for the advanced Ham. Employs 807 tube in final, ceramic coil forms and double-spaced tank capacitor. Important TVI suppression features include: heavy copper-finish chassis; firm metal-to-metal seals at all junctions; rugged metal cabinet; filtering and bypassing of AC, meter, keying and heater circuits. Can be operated crystal-controlled, or with VFO, such as the highly stable Knight-Kit V-44 below.

Has bandswitching on all bands; cathode keying of oscillator and final; metering of final plate and grid circuits; provisions for easy connection of an external AM modulator; power socket for supplying 6.3 v. AC and B+ to accessories. Controls: Oscillator Tuning; Antenna Loading; Grid-Plate Meter switch; Off-On switch. Key jack, VFO and crystal sockets. With all parts, tubes, etc. Supplied less crystal and key. Size, 8½x10½x8¼". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 18 lbs.

83 YX 255. \$2.00 Down. ONLY..... 39.95

## Model V-44 Self-Powered VFO Kit

HIGH STABILITY—BUILT-IN POWER SUPPLY

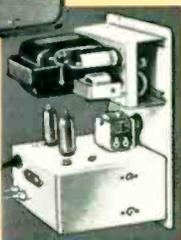
ONLY

**\$29<sup>95</sup>**

- Features Extremely High Stability and Excellent Oscillator Keying Characteristic
- Highly Effective TVI Suppression—Easy Tuning
- Built-in, Transformer-Type Power Supply

A deluxe, high-quality VFO kit at an incomparably low price. Calibrated for 80, 40, 20, 15, and 10 meters; output on 80 and 40 meters. 40-volt output on 80 meters and 20-volt output on 40 meters is more than adequate to excite oscillator stage of any transmitter. An ideal companion to the Knight-Kit T-50 50-watt transmitter described above. Drift-free, series-tuned Clapp oscillator uses 1% silver mica capacitors. Oscillator tank coil is wound on heavy ceramic form; air dielectric padders. Features TVI suppression; vernier planetary drive mechanism. Frequency stability is achieved by careful design and rigid mechanical construction. Voltage regulated for stable output. Tubes: 6BH6, 6AK6; 6X4 rectifier, 0A2 voltage regulator. With all parts, tubes, wire, solder, and step-by-step instructions. 6x6x8¾". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 10 lbs.

83 Y 725. \$2.00 Down. ONLY..... 29.95



2-section chassis, with power supply mounted above oscillator to keep heat from frequency-determining circuit.

Outfit Your Amateur Station With Knight-Kits

# Biggest Value Grid Dip Meter



No other Grid Dip Meter in this price class has all these features—molded coil socket, variable hairline, best system of coil color-coding, high stability across each band, range to 300 mc.



Color-Coded Coils Match Dial Ranges

## New Model G-30 Grid Dip Meter Kit—Outstanding Value

**A HAM SHACK "MUST" FOR PUTTING YOUR TRANSMITTER IN PEAK CONDITION**

ONLY  
**\$22<sup>95</sup>**  
\$2.00 Down

- Continuous Coverage, 1.5-300 Mc
- Lifetime, Molded Coil Socket
- Variable Hairline Cursor
- Easy-to-Use Color-Coded Coils
- Convenient, One-Hand Operation

You'll find hundreds of uses for this invaluable instrument in and around your Amateur station. It not only serves as a grid dip oscillator to determine the frequency of resonant circuits, but as an oscillating detector, signal generator, and absorption wavemeter. Covers 1.5-300 mc in 6 overlapping ranges. The finely calibrated dial, with its movable hairline cursor, allows extremely precise setting and highly accurate readings on any segment of its frequency range. You'll wonder how you ever got along without it!

Use it for receiver alignment, determining the exact length of transmitting and receiving antennas, adjustment of wave traps, determining inductance and capacitance, finding parasitic oscillations, adjusting antenna matching stubs, etc. Ranges are color-coded to match the coils. Has undamped meter movement for quick response and variable sensitivity control for optimum grid current adjustment. Stable oscillation—entire band may be tuned with one adjustment of regeneration control. It's small—it's light—it's the handiest grid dip meter available!

High-grade molded socket withstands rugged use—holds plug-in coils securely. Phone jack permits use as modulation monitor and regenerative detector. 6AF4A oscillator; selenium rectifier. Size,  $6\frac{1}{4} \times 3\frac{1}{2} \times 1\frac{1}{2}$ ". Includes plastic case with 6 coils, all parts, etc. For 110-120 v., 50-60 cycle AC only. Wt., 2 lbs. 83 Y 721. \$2.00 Down. ONLY..... 22.95

## Transistorized Code Practice Kit

ONLY  
**\$3<sup>95</sup>**

Advanced-design code practice oscillator at unusually low cost. Uses transistor circuit—powered by a single penlight cell! Amazingly low current consumption—one battery operates unit for months. 500 cps tone. Has output jacks for standard headphone tips; screw type terminals for key.

Housed in bakelite case with aluminum panel. With all parts, battery. Less phones and key, below. Size,  $2\frac{3}{8} \times 3\frac{3}{4} \times 1\frac{1}{2}$ ". Shpg. wt., 1 lb.

- |   |      |
|---|------|
| 83 Y 239. ONLY.....   | 3.95 |
| 59 Y 112. 1000-Ohm Headphone. Shpg. wt., $1\frac{1}{4}$ lbs. NET..... | 1.08 |
| 76 S 053. Johnson Model 114-300 Practice Key. Wt., 2 lbs. NET.....    | 2.25 |

## Model Z-52 SWR and Z-Bridge Kit

ONLY  
**\$5<sup>85</sup>**

For achieving peak antenna efficiency. Measures SWR from 1 to 150 mc. Also measures impedance on frequencies up to 100 mc. Use your own VOM as a null indicator. Has coaxial connectors. Can be used with 20 to 400-ohm lines. Accurate dial gives direct impedance reading. 1% precision resistor for calibration use.  $2\frac{1}{2} \times 3\frac{1}{2} \times 4$ ". With chart for converting meter readings to SWR, wire and solder. Less meter.  $1\frac{1}{2}$  lbs.

- |                     |      |
|---------------------|------|
| 83 Y 253. ONLY..... | 5.85 |
|---------------------|------|

Knight-Kits Have Easy-To-Follow Instructions



# knight-kit



INSTRUMENTS

# New! Fabulous Value

## PACE-SETTING LABORATORY INSTRUMENTS

### Now

**knight-kit** BREAKS THROUGH the professional instrument price barrier with new lab-type test equipment at unequalled savings...

Professional instrument kits, beyond comparison in performance, ingenuity of design, and money-saving value, are yours when you outfit your lab, production line or service bench with renowned Knight-Kit equipment.

Two newly developed instruments, designed for critical laboratory applications, exemplify the meticulous care and years-ahead "know how" that go into every Knight-Kit instrument. These new kits are the DC Laboratory Oscilloscope featuring IVA (Plug-In Interchangeable Vertical Amplifiers) and an AC voltmeter with remarkable **Automatic Range Selection**.

The oscilloscope is a marvel of versatility with its three separate plug-in amplifiers shown at right. The voltmeter not only measures AC voltages with extreme accuracy, but its "electronic brain" magically and instantly switches to the correct voltage range.

Kits like these demonstrate dramatically the creative thinking and inspired engineering that stand behind the entire line of Knight-Kit instruments—your finest values by far!

WITH

# IVA

plug-in  
INTERCHANGEABLE  
VERTICAL  
AMPLIFIERS

CHOICE OF:



**HIGH-GAIN**  
VERTICAL AMPLIFIER



**WIDE-BAND**  
VERTICAL AMPLIFIER



**DUAL-TRACE**  
VERTICAL AMPLIFIER

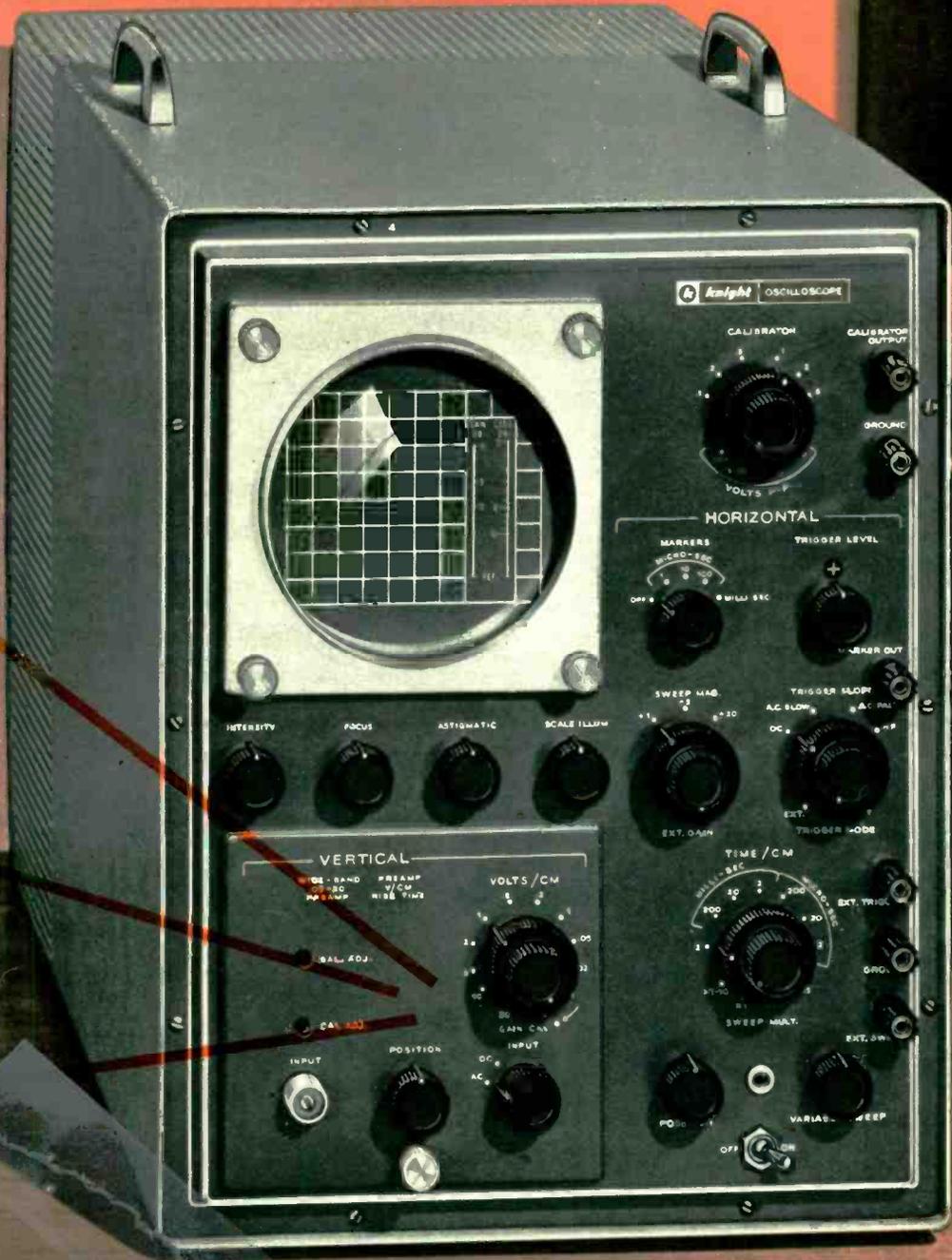
# DC Lab Scope with IVA



**knight-kit**

INSTRUMENTS

IN MONEY-SAVING BUILD-YOUR-OWN FORM



SEE NEXT PAGE  
FOR COMPLETE  
DESCRIPTION



YEARS AHEAD IN DESIGN



**Girder Construction.** Steel cabinet on girder frame for exceptional strength and rigidity.

## 5" DC Lab Scope Kit

WITH TRIGGERED SWEEP

ONLY

**\$285<sup>00</sup>**

\$10.00 Down

- Interchangeable Vertical Amplifiers
- DC Coupling Throughout
- Crystal-Controlled Timing Markers
- Sweep Timing Adjustable to 1%

Another Knight-Kit first! Designed with the future in mind, this superlative laboratory-type instrument is the only oscilloscope in kit form offering remarkably versatile "IVA"—Interchangeable Vertical Amplifiers.

Knight-Kit proudly announces a revolutionary new product in the field of precision test equipment—a 5" DC Lab Scope in world-famous Knight-Kit easy-to-build form. Featuring "IVA", a design technique previously employed only in the finest, most costly laboratory equipment, this superlative instrument employs plug-in Interchangeable Vertical Amplifiers for unlimited versatility. "IVA" sections slip in and out in seconds to match the Lab Scope to any desired application.

In addition to "IVA", you get an array of other premium-quality features with this brilliantly engineered scope: crystal-controlled timing markers—externally available for other uses; DC vertical and horizontal amplifiers; DC-coupled triggered sweep; electronically regulated power supply; extremely linear sweep—within 3% on all ranges; sweep timing accuracy adjustable to 1% with built-in markers; externally available voltage calibrator from 0.00001 to 50 volts peak-to-peak; two ranges of sweep expansion to allow observation of the smallest waveform detail; graph screen with high-legibility, edge-illuminated, etched markings; built-in camera mount; printed circuit boards in all critical stages; exclusive printed circuit switches; many others.

Incorporated in the expertly-engineered design of the DC Lab Scope is a unique new cathode ray tube, built exclusively to rigid Knight-Kit specifications. Both the horizontal and vertical deflection plates are brought out through the glass to achieve maximum band pass. All circuits are frequency-compensated—adjust accurately with the built-in voltage calibrator. A VTVM or any 20,000 ohms/volt VOM may be used to align the "IVA" Scope for precision laboratory performance.

An extremely wide sweep range—2 sec/cm to 0.1  $\mu$ sec/cm—provides an almost unlimited range of application for this unit. Three plug-in vertical amplifiers (available separately, see opposite page) cover virtually all laboratory scope applications. In addition, a blank plug-in chassis is available, into which the user can install any special-application preamp  $\epsilon$  may devise. Whether you're a lab technician, engineer, or serious experimenter—no other scope can offer you so much for so little. With tubes, all parts, wiring and solder and step-by-step instructions. 16x12 $\frac{3}{4}$ x10 $\frac{1}{2}$ ". Less vertical amplifiers. For 110-120 v., 50-60 cycle AC. Shpg. wt., 50 lbs. Available December, 1959. 83 YU 611. \$10.00 Down. ONLY 285.00

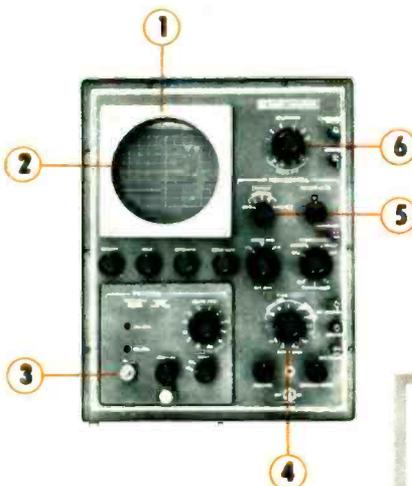
# Laboratory Precision at Lowest Cost



# knight-kit

## INSTRUMENTS

### THE ONLY BUILD-YOUR-OWN SCOPE WITH VERSATILE "IVA"!



### TRUE LAB-QUALITY FEATURES

1. Camera mounting studs—accept standard camera mounts.
2. High anode voltage and P-2 phosphor coating on CRT provide bright sharp trace—even on fast displays.
3. Vertical preamplifiers are plug-in type for highest versatility and convenience.
4. Calibrated triggered sweep from 2  $\mu$ sec/cm to 2 sec/cm.
5. Built-in crystal controlled marker oscillator provides markers from every microsecond to every millisecond.
6. Built-in voltage regulated peak-to-peak calibrator—reference voltages from 100  $\mu$ v to 50 volts.

### SPECIFICATIONS

#### SWEEP GENERATOR

**Sweep Range:** 2 sec/cm to 2  $\mu$ sec/cm (without expansion); 2 sec/cm to 0.1  $\mu$ sec/cm (with expansion).

**Sweep Expansion:** x5 and x10.

**Sweep Linearity:** Within 3% on all ranges.

**Sweep Timing Accuracy:** Within 5% overall (can be adjusted to 1% by use of built-in markers).

#### HORIZONTAL AMPLIFIER

**Sensitivity:** 1 v. p-p/cm

**Frequency Response:** DC to 1 mc (3 db down).

#### GENERAL

**Crystal Markers:** 1, 10, 100, 1000  $\mu$ sec. intervals, accurate to 1%. (Marker output available at front panel to provide highly stable, accurate frequency source for other applications.)

**Voltage Calibrator:** 0.1 volt to 50 volts peak-to-peak.

**Tube Complement:** 26 tubes; 2—1X2 HV rectifiers; 8 silicon diode rectifiers; CR

## Interchangeable Vertical Amplifiers

**HIGH-GAIN PREAMPLIFIER.** Differential-type high-gain preamplifier incorporating two separate input facilities. Permits accurate scope readings of the difference between two signals, cancelling DC from signals in order to read AC ripple, etc. **Sensitivity:** 0.0001 v. p-p/cm. **Response:** DC to 100 kc within 3 db down. **Differential Ratio:** 5000:1. **Input Impedance:** 1 meg shunted by 40 mmf. Shpg. wt., 5 lbs. 83 Y 612. \$2.00 Down. ONLY ..... 35.95



**WIDE-BAND PREAMP.** Precision preamp for high-frequency use of the Lab Scope. Excellent for high-frequency applications including color TV, etc. **Frequency Response:** DC to 10 megacycles within 3db down. **Sensitivity:** 0.01 v. p-p/cm. **Rise Time:** Approximately 0.04 micro-seconds. **Input Impedance:** 1 megohm shunted by 40 mmf in all positions of the attenuator. Shpg. wt., 5 lbs. 83 Y 613. \$2.00 Down. ONLY ..... 24.95



**DUAL-TRACE PREAMPLIFIER.** Designed for comparing of two separate signals. Rapid electronic switching permits both signals to be viewed simultaneously. **Sensitivity:** 0.05 v. p-p/cm. **Frequency Response:** DC to 10 megacycles within 3 db down. **Switching Rate:** Choice of 100 kc or alternate sweeps. **Input Impedance:** 1 megohm shunted by 40 mmf. Shpg. wt., 5 lbs. 83 Y 614. \$2.00 Down. ONLY ..... 48.95



### Low-Capacity Probe Kit

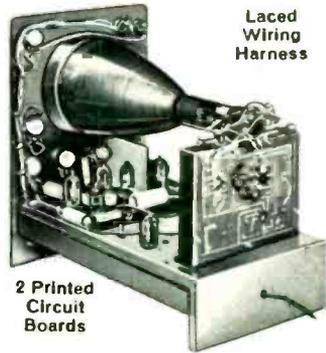
A low-capacity accessory probe for use with the 5" DC Lab Scope. Its use permits observation of signals without overload and distortion.



Has 10:1 attenuation and variable capacitor. **Input impedance:** 10 megohms; **input capacity:** 12-15 mmf. Shpg. wt., 2 lbs. 83 Y 616. ONLY ..... 4.50



83 Y 615. Blank Preamplifier Chassis. With knobs. Wt. 2 1/2 lbs. ONLY ..... 5.95



2 Printed  
Circuit  
Boards

Laced  
Wiring  
Harness

Two up-to-the-minute printed circuit boards for quick, easy, error-free assembly; laced wiring harness even further reduces assembly time.

## 5" Wide-Band Oscilloscope Kit

**HIGH-SENSITIVITY SCOPE THAT IS  $\pm 3$  DB, 5 CPS TO 5 MC**

ONLY  
**\$65<sup>75</sup>**

\$5.00 Down

- 25 mv/Inch Vertical Amplifier Sensitivity
- 600-kc Sweep Makes RF "Stand Still"
- 5-mc Bandwidth—Ideal for Color TV Service
- Push-Pull Output Amplifiers, Direct-Coupled to Deflection Plates

An excellent investment, this oscilloscope gives you more for your money than any other wide-band scope kit in the country. Provides performance equal to or better than commercially wired scopes costing far more. Extremely wide sweep range, wide response, and very high sensitivity make this an ideal unit for color TV servicing and hundreds of other high-frequency applications in laboratories, shops and factories. Feature for feature it's an incomparable value.

Push-pull vertical and horizontal amplifiers with cathode-follower inputs assure minimum circuit loading and almost zero wave-form distortion. 2nd anode voltage of 1400 volts provides a high-intensity trace. Excellent synchronization on complex waveforms is achieved by positive and negative locking. Gives faithful square wave response. Includes frequency-compensated input attenuator, one-volt peak-to-peak calibrating voltage and internal astigmatism control. Z-axis input permits intensity modulation of trace. Directly coupled positioning controls allow overshoot-free trace positioning. Retrace lines are effectively eliminated by blanking circuit. Green plastic graph screen; molded rubber cathode ray tube mount.

Complete with all parts, 5U1 cathode-ray tube, case, wire and solder. 14 $\frac{1}{2}$ x9 $\frac{1}{2}$ x16". Includes step-by-step instructions and giant-size diagrams. For 105-125 volts, 60 cycle AC. Shpg. wt., 29 lbs.

83 YU 144. \$5.00 Down. ONLY.....65.75

### SPECIFICATIONS

#### Vertical Amplifier

**Sensitivity:** 0.025 volt (rms) per inch.

**Response:**  $\pm 3$  db, 5 cps to 5 mc; only 1 db down at 3.58-mc color burst frequency.

**Input Impedance:** With x1 sensitivity—2.9 megohms and 21 mmf; x.1 and x.01 sensitivity—3.4 megohms and 12 mmf.

#### Horizontal Amplifier

**Sensitivity:** 0.6 volt (rms)/inch.

**Response:** Down only 3 db at 600 kc; 4 db at 1 mc. Locks in as high as 9 mc.

#### Sweep Generator

**Range:** 15 to 600,000 cps.

**Synchronization:** Internal Positive, Internal Negative, External and Line Frequency.

**Power Supplies:** Low-voltage supply employs 6X4 full-wave rectifier, with 6C4 voltage regulator. High-voltage supply employs 1V2 connected as half-wave rectifier to supply approximately 1400 volts for the CR tube *fo*, a high-intensity trace.

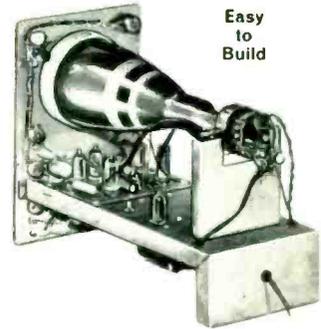


**VOLTAGE CALIBRATOR KIT.** Permits using Knight-Kit or any other scope as a precision peak-to-peak AC voltmeter. Puts a true square-wave voltage on screen. Range switch and calibrated potentiometer permit selecting any voltage between .01 and 100 volts.

5th position of switch feeds external signal directly to scope for comparison. Accuracy,  $\pm 6\%$ , all ranges. Shunt capacity, 15 mmf. Voltage-regulated output. 7 $\frac{3}{4}$ x5 $\frac{1}{4}$ x4 $\frac{1}{16}$ ". For 105-125 v., 50-60 cycle AC. Wt., 5 lbs. 83 Y 136. ONLY.....12.95

Highest Gain 5" Scope at This Price

**knight-kit**  
INSTRUMENTS



Easy  
to  
Build

Designed with the builder in mind. Has neat layout, printed circuit board, plus laced wiring harness—assembly is a snap!

### SPECIFICATIONS

#### Vertical Amplifier

**Sensitivity:** .025 volt (rms) per inch.

**Response:** ±3 db, 3 cps to 1.5 mc; ±6 db, 3 cps to 2.5 mc.

**Input Impedance:** 3.3 megohms shunted by 45 mmfd, constant at all attenuator positions.

**Calibrating Voltage:** 1 volt peak-to-peak square wave; regulated. Internally injected with spring-return side switch on front panel.

#### Horizontal Amplifier

**Sensitivity:** .07 volt (rms) per inch.

**Response:** ±3 db, 3 cps to 500 kc; ±5 db, 3 cps to 700 kc.

**Input Impedance:** 2.2 megohms shunted by 30 mmfd.

#### Sweep Generator

**Range:** 15 to 150,000 cps in 4 ranges; high-linearity phantastron circuit.

**Blanking:** Retrace blanking on all ranges.

**Power Supply.** Fused. Has copper-banded transformer to eliminate AC hum.

## 5" General-Purpose Scope Kit

IDEAL FOR RADIO-TV SERVICING & AUDIO WORK

ONLY  
**\$44<sup>95</sup>**  
\$2.00 Down

- Vertical Amplifier Flat to 1.5 mc
- Employs Phantastron Linear Sweep Generator
- Excellent Vertical Sensitivity—Three Times That of Similarly Priced Scope Kits
- Retrace Blanking on All Ranges

An unexcelled value at this low price—and a wise choice for general radio-TV servicing, audio work, and hundreds of other testing applications. Not only is the performance of this high-gain scope equal to or better than factory-wired units costing several times its low price, but it meets at least 90% of all oscilloscope requirements!

Circuit features include: vertical and horizontal picture-centering controls DC-coupled to CRT deflection plates—the proper centering adjustment is immediate, with no overshoot; blanking circuit to eliminate retrace lines on all ranges; frequency-compensated vertical input attenuator; internal and external, positive and negative synchronization; phantastron linear sweep generator; and high second-anode voltage for high-intensity trace.

Designed for fast, easy assembly, it employs a printed circuit board and laced wiring harness to reduce building time to a minimum—and to assure the same, high operating performance from every unit built. Picture diagrams show the exact location of all parts and wiring; easy-to-follow instructions guide your every move. Rugged steel case with disappearing handle; color-styled in blue with gray panel. Size, 9½x13¼x17¼". With all parts, 5" CRT with rubber gasket, wire and solder. For 105-125 volts, 60 cycle AC. Shpg. wt., 27 lbs.

83 YU 146. \$2.00 Down. ONLY 44.95

### Probes for knight-kit Scopes

**A** RF DEMODULATOR PROBE KIT. For observing modulation envelope of RF and IF signals—extends scope range to 250 mc. With cable. Wt., 12 oz.  
83 Y 148. ONLY 3.95

**B** LOW-CAPACITY PROBE KIT. 12 mmf input. With cable. For audio, video, sweep, sync signals. Prevents overloading and distortion. Shpg. wt., 12 oz.  
83 Y 147. ONLY 3.95



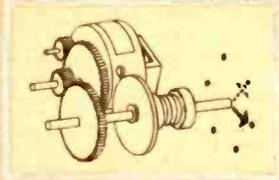
Allied Fully Guarantees the Specifications of All Knight-Kit Units

# knight-kit



## INSTRUMENTS

### New AC VTVM with exclusive **AUTOMATIC** RANGE SELECTOR



Has Electronically Actuated, Motor-driven Range Selector



## New AC VTVM with Automatic Range Finding

### FEATURING THE REVOLUTIONARY SELF-SEEKING RANGE SELECTOR

ONLY  
**\$99<sup>50</sup>**

\$5.00 Down

- Highly Sensitive Instrument—Three Millivolts Full Scale
- Unique Panel Lights Instantly show the Scale Range In Use
- Frequency Response from 20 cps to 2.5 mc —Overall Accuracy of 3%
- Precision-Engineered—Meets Industrial and Laboratory Requirements
- 11 Automatically Selected Ranges to 300 Volts Maximum—Also DB Scale
- Wide-Band Amplifier has Output Terminals to Permit Separate Use

Designed to meet the critical requirements of industry and laboratory, the revolutionary Knight-Kit AC VTVM represents a major breakthrough in kit engineering. Features exclusive Automatic Range Selector—a self-seeking mechanism that *automatically* selects the proper range the instant you touch the probes to the circuit—it races through the entire 11 ranges in less than 2½ seconds! Extremely sensitive—three millivolts full scale—this highly accurate instrument rivals factory-wired units costing several times its price. For dependable service, it has no peer.

Remarkably easy to use—there's no manual switch. Simply touch the probe to the circuit under measurement. The internal range switch of the VTVM is driven by the motor—and light indicators on the panel immediately shows the scale range in use! A separate switch stops—and *securely locks in*—the seeking mechanism on any range, if desired. Readings are amazingly quick and accurate—you save valuable time.

Additional highlights of this outstanding instrument include: precise trigger circuits that assure positive switching between ranges; dependable 100-microamp movement; long-life, coin-silver switch contacts; shock-mounted components to eliminate microphonics; regulated power supply; wide response from 20 cycles to 2.5 mc; etc. Feature for feature, it's the perfect unit for audio engineers and serious audio experimenters.

The highly stable, 3-stage built-in amplifier has cathode follower output—ideal for use as a preamplifier for other test equipment; may also be connected to scope for simultaneous wave form observation while making measurements. Employs up-to-the-minute printed circuitry for ease of assembly. Ruggedly constructed, vinyl-covered steel cabinet has handsome panel with easy-to-read meter. With all parts, tubes, 4-ft. cable and probe, wire, solder, etc. 10¼x6½x10¼". For 105-125 v., 60 cycle AC. Shpg. wt., 13½ lbs.

83 YX 608. \$5.00 Down. ONLY.....99.50

# High Sensitivity, Wide-Band AC VTVM Kit



# knight-kit

## INSTRUMENTS

### ONLY VTVM WITH AUTOMATIC RANGE SELECTOR

Bold, imaginative engineering combined with advanced performance techniques keynote this laboratory-quality instrument. Designed to take its place alongside the finest test equipment, this versatile unit is destined to create new trends in measurement devices. Incorporates the exclusive Automatic Range Selector for instant, highly accurate readings. For ease of operation, years-ahead features, and dependable service, the Knight-Kit AC VTVM has no peer. Once again, Knight-Kit offers exciting originality, superlative quality, and unsurpassed professional instrument value.



#### PILOT LAMP INDICATORS

A motor-driven selector switch automatically turns on proper lamp to indicate range in use. You get highly accurate readings at a glance and save valuable testing time!

#### SPECIFICATIONS

**Ranges:** .003, .010, .030, 0.1, 0.3, 1, 3, 10, 30, 100 and 300 volts.

**Scale Readings:** 0-1 v. (with 50 divisions) and 0-3 v. (with 30 divisions); also -15 to +2 db.

**Decibel Range:** -62 to +52 in 11 ranges.

**Response:** ±1 db, 20 cps to 2.5 mc; absolutely flat, 50 cps to 500 kc.

**Accuracy:** ±3% (with line voltage variation of 10%).

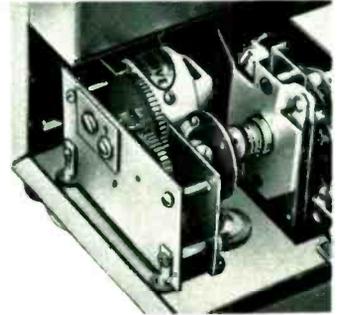
**Impedance:** 10 meg shunted by 15 mmfd, 3-300 volts; 25 mmfd, .003 to 1.0 volt.

**Amplifier Section:** Cathode follower output. Available output, 0.15 v. (34 db gain). Response: ±1 db, 20 cps-1.5 mc; flat, 30 cps to 300 kc.

**Tubes:** 3-6DK6, 6AW8, 2-12AT7, 12AX7, 2-6DR7, 5651; EZ90 rect.

### Remarkable *knight-kit* Engineering

#### MOTOR-OPERATED RANGE SWITCH



Heart of this unique testing instrument is its precision-engineered motor mechanism. Completely preassembled, the long-life DC-operated motor and gear box are activated the instant the probes are touched to the circuit under measurement. Once activated, the motor turns the internal switch to the proper range, and a light immediately flashes on the front panel to indicate the scale range in use. There's no need to set any manual range switch—valuable time is saved by the fast-acting motor movement. Exceptionally dependable nylon gears are employed to provide extremely smooth, quiet operation. Range switch can race through all 11 ranges in less than 2½ seconds, automatically and efficiently. Unit can be locked into any range by a flip of a switch!

#### HIGH-GAIN, WIDE-BAND AMPLIFIER



The highly stable, three-stage amplifier incorporated in this sensational AC VTVM features cathode follower output—another example of Knight-Kit superiority. Permits the unit to be used as a preamplifier for other test equipment; may also be connected to an oscilloscope for simultaneous wave form observation while making measurements. Perfect aid for use in the development of audio, video and pulsing circuitry. Printed circuitry employed is your assurance that the assembled kit will match the design prototype in quality and performance. See complete specifications of this first-rate test instrument in column at left. Compare its features with any other unit—factory-wired or kit—you'll soon discover why this outstanding AC VTVM is your best buy.

# knight-kit



## INSTRUMENTS



## Famous-Value Electronic VTVM Kit

**A HIGH-ACCURACY VTVM OF EXCEPTIONAL QUALITY—EASY TO BUILD—SAVES YOU MONEY**

ONLY  
**\$25<sup>75</sup>**

\$2.00 Down

- Large  $4\frac{1}{2}$ " Meter—200- $\mu$ a Movement—Easy-To-Read Two-Color Scale
- Reads AC Peak-To-Peak, AC rms, DC Voltage, and Resistance
- 1% Precision Resistors Throughout

- Highly Popular Balanced-Bridge, Push-Pull Circuit
- Finest-Quality Printed Circuitry
- 11 Megohm Input Resistance
- Direct-Reading Db Scale

Ideally suited for use in a wide range of service applications—as well as in the construction of original equipment—the Knight-Kit Vacuum Tube Voltmeter Kit represents an incomparable value. All the quality that years of experience and research in the field of kit design can provide has been incorporated in the development of this superb unit. Components of the finest quality—coupled with world-famous Knight-Kit easy, positive assembly—produce the kind of performance demanded by the quality-conscious technician, serviceman, and "do-it-yourself" enthusiast.

Wiring and assembly of this fine kit is truly a marvel of simplicity. The entire chassis is a laminated phenolic printed circuit board. With most of the wiring already completed on the printed circuit board, hours of time are saved and top performance is assured. A high input impedance—11 megohms—is incorporated in the circuit. Insures higher accuracy by preventing meter from loading down the circuit being tested.

Included among the many deluxe features highlighting this time-proven kit are highest-quality, low-leakage type switches; highly popular, balanced-bridge push-pull circuitry; film-type 1% precision resistors which assure extreme accuracy; and easy-to-read, two-color  $4\frac{1}{2}$ " meter. Incorporates a zero-center scale plus direct-reading type decibel scale. In addition, a polarity reversing switch is included to save valuable time during trouble-shooting. Tube complement includes a 12AU7 twin-triode meter bridge and a 6AL5 twin-diode full-wave rectifier.

Easy-to-follow, step-by-step instructions with giant-size picture diagrams simplify assembly. Highly attractive metal case is styled in blue with handsome gray front panel. Supplied complete with tubes, wire and solder, test leads, battery, and all parts. Size (HWD),  $7\frac{3}{4} \times 5\frac{1}{2} \times 4\frac{3}{16}$ ". For operation from 105-125 volts, 60 cycle AC. Shpg. wt.. 7 lbs.  
83 Y 125. \$2.00 Down. ONLY..... 25.75

# Build this Quality VTVM—Save Over 50%



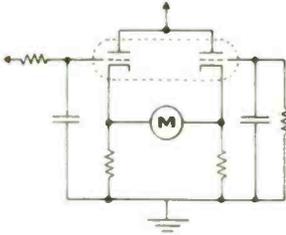
# knight-kit

## INSTRUMENTS

### CARRIES FAMOUS KNIGHT-KIT MONEY-BACK GUARANTEE

Offering the big "plus" in up-to-the-minute design, the famous Knight-Kit VTVM kit stands unequalled in both quality and value. Finest-grade printed circuitry; 1% precision resistors; low-leakage type switches—all add up to extremely reliable, highly accurate performance. Actually equals the operation and construction of

factory-wired instruments of twice the price or more! Years of engineering know-how—combined with the finest component parts available—are your assurance of top performance, highest accuracy, and extra years of dependable service from your Knight-Kit VTVM. Save the Knight-Kit way—you'll own the very finest!



Tops in quality, the Knight-Kit VTVM kit incorporates a time-proven, push-pull balanced-bridge circuit. Used in the most costly VTVM's, this circuit assures maximum accuracy and automatic meter burnout protection.

## SPECIFICATIONS

### DC Voltmeter

**Ranges:** 1.5-5-15-50-150-500-1500 volts full scale.

**Input Resistance:** 11 megohms (1 megohm in probe) all ranges.

**Accuracy:** ±3% full scale.

### AC Voltmeter

**RMS Ranges:** 1.5-5-15-50-150-500-1500 volts full scale.

**Peak-to-Peak Ranges:** 4-14-40-140-400-1400-4000 volts.

**Decibels:** -10 to +5.

**Response:** 30 cps to 3 mc.

**Accuracy:** ±5% full scale.

### Ohmmeter

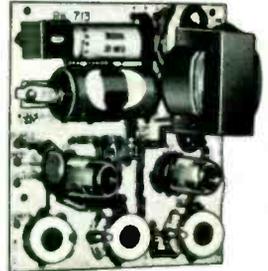
**Ranges:** 0-1000-10,000-100,000 ohms; 0-1-10-100-1000 megohms (center scales at 10, 100, 1000, 10,000, 100,000 ohms; 1, 10 megohms).

**Tubes:** 12AU7 twin-triode meter bridge; 6AL5 twin-diode full-wave rect.

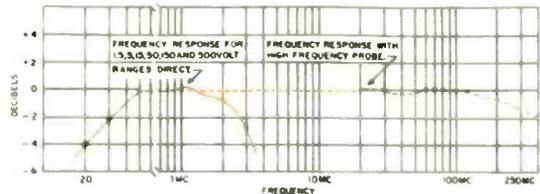
**Meter:** 200-microamp movement.

## COMPARE THESE OUTSTANDING FEATURES

**PRINTED CIRCUITRY** is incorporated as the basis for the expertly engineered Knight-Kit VTVM chassis. The entire chassis is assembled quickly and easily on a special printed circuit board—just mount the parts and solder in place. In addition to saving many hours of construction time, this deluxe feature guarantees accuracy of wiring and component placement—insures performance well within published specifications.



**EFFECTIVE SHIELDING**, plus dependable, positive contact when measuring DC voltages, is assured by the use of a genuine Amphenol connector at the DC probe input. Typical of the "quality-plus" details for which Knight-Kits are internationally famous, this added feature provides extra reliability.



**AC FREQUENCY RESPONSE.** Peak-to-peak AC voltages are measured with extreme accuracy by the Knight-Kit VTVM. Its sensitivity to frequencies from 30 cps to 3 mc make it an ideal unit for use in testing amplifiers, preamps, etc., for frequency response.

## Accessory Probes for VTVM

**HIGH-VOLTAGE PROBE KIT.** Designed to extend the DC voltage range of VTVM kit to 50,000 volts. Shpg. wt., 1½ lbs.  
83 Y 126. ONLY..... 4.75

**HIGH-FREQUENCY PROBE KIT.** Greatly expands the versatility of the Knight-Kit VTVM. Extends the AC frequency response range to 250 mc. Shpg. wt., 1½ lbs.  
83 Y 127. ONLY..... 3.75





Film-type precision multiplier resistors provide high accuracy and continued dependability.

**1000 Ohms/Volt VOM Kit**

**MEASURES DC & AC VOLTS, CURRENT & RESISTANCE**

ONLY  
**\$17<sup>95</sup>**

- Supplied Complete with Test Leads
- 4½" Meter with 400-Microamp Movement
- 1% Film-Type, Precision Resistors—Maintain Exceptional Stability
- 12-Position Range Switch; 38 Ranges

Another outstanding value in an easy-to-build Knight-Kit test instrument. Versatile and accurate, this first-rate 1000 ohm-per-volt VOM features a big 4½" meter with large, easy-to-read scale calibrations. Use of a 400 microampere basic meter movement provides 1000 ohm/volt sensitivity—even on AC. All multipliers used are precision, 1% film-type resistors that maintain extreme stability despite aging, temperature extremes, or conditions of high humidity.

This easy-to-operate VOM is perfect for radio-TV servicing, schools, laboratory use, Amateurs, etc. Designed for general, all-around use, this VOM will make practically any measurement needed on radio and electronic equipment. It measures AC or DC voltages up to 5000 volts in 7 ranges; AC or DC current up to 1 ampere in 4 ranges; decibels to +69 in 6 ranges; resistance to 1 megohm in 3 ranges—a total of 38 ranges. A single 1½-volt penlight battery supplies power for resistance measurements.

Unusually easy to assemble, this economy-priced VOM can be assembled and ready for use in a matter of a few hours. Step-by-step instruction manual is clearly written and illustrated to guide your every move. In addition, a "How to Use" section in the manual helps you take advantage of all the capabilities of this versatile test instrument.

**SPECIFICATIONS.** Ranges: AC, DC and output volts, 0-1-5-10-50-100-500-5000 (with sensitivity of 1000 ohms-per-volt); Resistance, 0-1000-100,000 ohms and 0-1 megohm (center scale readings of 60, 150 and 1500 ohms); Current, AC or DC, 0-1-10-100 ma and 0-1 amp; Decibels, from -20 to +69 in six ranges. Black bakelite case; with carrying strap. 6¾x5¼x3¾". With battery, test leads, wire and solder. Shpg. wt., 4 lbs. 83 Y 128. ONLY ..... 17.95

**NEW! Pocket VOM Kit**



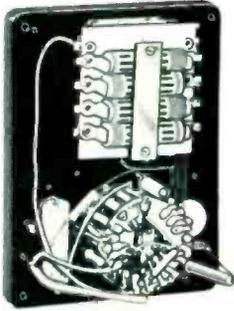
Pocket-size, and priced to fit any budget! Ideally suited for carry-around use, the Pocket VOM features 1000 ohms-per-volt sensitivity. It's perfect for checking radio-TV circuits, continuity and voltage of batteries, AC lines, etc.



Fits Easily in Palm of Hand

# Best-Buy, Sensitive Single-Switch VOM

LOW IN COST YET REMARKABLY ACCURATE



Single range-function switch speeds assembly and simplifies operation of this excellent unit.



## for the Home Workshop

ASSEMBLES IN A JIFFY

ONLY  
**\$9<sup>95</sup>**

- Compact, Lightweight and Low in Cost
- 1000 Ohms Per Volt DC Sensitivity
- 13 Ranges—Reads Voltage, Current, Etc.

A pocket-size 1000 ohm/volt VOM that's hardly larger than a package of cigarettes—and at a price that everyone can afford. This handy test instrument is a perfect choice for hobbyists who want a sensitive instrument at low cost. 1000 ohm/v. sensitivity means only moderate loading of circuits under test. The 2½" meter has an easy-to-read two-color scale; clear plastic window protects meter face from accidental damage. An ideal choice for use in the home, radio-TV servicing, experimenters, hobbyists, students, Amateurs, etc.

**RANGES.** DC Volts: 0-5-15-50-150-500. AC Volts: 0-15-50-150-500. DC Milliampers: 0-1-10-100. Resistance: 0-30,000 ohms (1200 ohms mid-scale). Input Resistance: 1000 ohms per volt on DC ranges. Has front panel zero-adjust. Employs 5% multipliers and shunts. Simple point-to-point wiring to input jacks which are already installed in case, makes assembly easy. With test leads, 1½-v. battery, etc. Only 2¾x3¾x1½". Shpg. wt., 1½ lbs. 83 Y 708. ONLY **9.95**

## 20,000 Ohms/Volt Kit

FOR ACCURATE MEASUREMENTS IN CRITICAL CIRCUITS

ONLY  
**\$29<sup>95</sup>**

\$2.00 Down

- 4½", 50-Microamp Meter—2% Accuracy
- Easy-to-Use, Single Range-Function Switch
- Employs 1% Precision Multiplier Resistors
- An Accurate, Reliable 32-Range Instrument
- American-Made Parts Throughout

You'll get the most for your money—and you'll get outstanding quality and performance with this carefully engineered, highly sensitive Knight-Kit VOM. Its 50-microamp meter sensitivity provides 20,000 ohms-per-volt input resistance on DC to assure accurate measurements in critical circuits. This enables you to read voltages in high-impedance circuits, without affecting circuit operation. For AC voltage measurements, input resistance is 5000 ohms-per-volt. An indispensable test instrument for the radio-TV serviceman, Amateur, laboratory technician and experimenter, it soon pays for itself in time and trouble saved.

All multipliers are 1% precision resistors to assure accurate measurements for the life of the instrument. The meter is an integral part of the molded panel. Meter size is an easy-to-read 4½"; movement is accurate within 2% of full scale deflection. Has front panel "zero adjust" control; single switch for selection of function and range.

**SPECIFICATIONS.** Ranges: AC, DC and output volts, 0-2.5-10-50-250-1000-5000. Resistance Ranges: 0-2000-200,000 ohms and 0-20 megohms; center scale readings are at 12, 1200 and 120,000 ohms. DC milliamps: 0.1-10-100; DC amperes: 0-1-10. Decibels: -30 to +63 in six ranges.

Building the Knight-Kit VOM is a pleasant and rewarding experience, since step-by-step instructions won't let you go wrong and the comprehensive picture diagrams show actual location of all parts and wiring. Black bakelite case, with carrying strap. Size, 6¾x5¼x3¾". Supplied complete with all parts, preassembled test leads, batteries, pre-cut wire and solder. Shpg. wt., 4 lbs.

83 Y 140. \$2.00 Down. ONLY **29.95**



COUNTER MODEL



Knight-Kit keeps the builder in mind with "plus" features like this one-piece, pre-assembled switch bank. You install one simplified unit—not 10 separate switches.



PORTABLE MODEL

## Model 600 Deluxe Tube Checker Kit

16 FILAMENT VOLTAGES—CHECKS VIRTUALLY ALL RECEIVING TUBE TYPES

COUNTER MODEL

**\$32<sup>95</sup>**

\$2.00 Down

- Now Checks Over 700 Different Tube Types
- Designed to Stay Up-to-Date
- Available In Portable or Counter Model
- Tests Most Popular Receiving Tubes and Many Industrial Types
- Large "Good-?-Replace" Meter Scale
- Convenient Line Voltage Adjustment Control
- Built-In Line Voltage Indicator
- Tests Cathode Emission as Well as Shorts, Open Elements, etc.

**COUNTER MODEL.** An accurate and highly dependable tester, this easy-to-build unit actually tests over 700 different tube types. Low cost and first-rate performance, plus ease of operation, make it the ideal tube tester for any radio-TV serviceman, experimenter, technician, etc. In addition to testing 4, 5, 6, and 7-pin large, regular, and miniature tubes, octals, loctals, 9-pin miniatures and pilot lamps, this quality unit also tests series-string AC-DC and TV types.

Tube performance is accurately measured by the amount of cathode emission. The large, easy-to-read  $4\frac{1}{2}$ " meter has a three-color "GOOD-?-REPLACE" scale. Incorporates testing facilities for shorts, open elements, and cathode-to-filament leakage.

The versatile Knight-Kit tube tester also provides an easy means of running continuity checks on wiring, electrical appliances, motors, etc. Features a built-in line-voltage indicator and line-adjust control to compensate for any line-voltage variations. Adjustable from the front panel, this control assures greater test accuracy and correct voltage for each tube rest. The user is provided with facilities for selecting 16 filament voltages from 0.63 to 117 volts—facilitates checking virtually all receiving tubes.

Blank panel socket accommodates future tube types. Universal selector switches permit setting up for any new tube type without wiring changes. The convenient roll chart is illuminated for easy readability. Supplied complete with all parts, wire and solder, and easy-to-follow instructions with wall size picture diagrams. Size: 5x14x10". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 15 lbs.

83 YX 143. \$2.00 Down. ONLY..... 32.95

**PORTABLE MODEL.** As above, but with fabrioid-covered portable wood case and handy carrying handle. Size,  $6\frac{1}{2}$ x14 $\frac{1}{2}$ x10 $\frac{1}{2}$ ". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.

83 YX 142. \$2.00 Down. ONLY..... 36.95

**TV PICTURE TUBE ADAPTERS.** Valuable service aids—ready to use. Permit testing TV picture tubes with Knight-Kit Tube Checker Kits, above. Shpg. wt., 1 lb.

83 Y 141. For up to 90° tubes..... 4.25  
83 Y 271. For 110° tubes..... 4.25

83 Y 117. Replacement Roll Chart. For Knight-Kit Model 600 tube checkers purchased before June, 1959. Lists over 700 tubes. 8 oz. NET..... 1.00

# An Amazing Tube Checker Kit Value



# knight-kit

INSTRUMENTS



This versatile, low-cost checker tests cathode emission and shorted elements — also continuity.



Unique, easy-to-replace loose-leaf tube charts.

## Famous Model 400 Low-Cost Tube Checker Kit

CHECK OVER 400 TUBE TYPES — SUPERB VALUE FOR HOME, SHOP, AND LAB

ONLY  
**\$19<sup>95</sup>**  
\$2.00 Down

- Pays for Itself Many Times Over
- Checks All Popular Receiving Tubes
- Tests Accurately for Cathode Emission
- Accurate Meter with Large, Easy-to-Read "Replace-Good" Scale
- "Hi-Lo" Line-Voltage Regulating Switch
- Fast-Setting Slide Switches
- Lightweight Design—Only 5½ Lbs.
- Safe, Loss-Proof Storage of Loose-Leaf Tube Charts

A tremendous value in an easy-to-build, tube checking instrument, the "400" tube checker kit is the lowest cost unit of its type available today. Far superior to ordinary "continuity checkers" usually offered in this low price range, the widely acclaimed Knight-Kit "400" is a genuine tube tester of amazing versatility.

Checks quickly and easily for shorted elements and cathode emission, as well as filament continuity. Fills a real need for experimenters, hobbyists, part-time radio-TV servicemen, students—anyone requiring a compact and accurate instrument for testing tubes encountered in a wide variety of electronic applications.

Checks 400 tube types including the most commonly used hi-fi, radio, and TV receiving tubes. Has sockets for 7-pin miniature, 9-pin miniature, octal and loctal-base tubes. A built-in, slide-out metal drawer, holding unique "Flip-Card" type tube charts in a loose-leaf binding, is an integral part of the cabinet—you can't lose the tube charts! "Flip-Cards" are replaced with ease in a matter of seconds. Includes "Hi-Lo" line-voltage compensator switch. Remarkably compact (only 2¾" high, 9½" wide, and 8" deep), this outstanding instrument is perfect for use almost anywhere—the ultimate in servicing convenience. Carrying weight is only 5½ pounds.

Easy-to-read meter has a red-green "Replace-Good" scale, plus special scale for checking diodes. Quick-setting, universal-type selector slide switches, used in conjunction with handy "Flip-Cards", permit rapid selection of any combination of pin connections. Fast and accurate, and lightweight, the "400" is an indispensable servicing instrument.

Easy-to-follow instructions permit assembly in minimum time. Sturdy metal case finished in gray, with front panel color-styled in ivory. Supplied complete with all parts, wire and solder, and easy-to-follow instructions. For operation from 110-125 v., 50-60 cycle AC. Shpg. wt., 7 lbs.  
83 Y 707. \$2.00 Down. ONLY.....19.95

### exclusive MONEY BACK GUARANTEE

Your purchase price is refunded in full if your Knight-Kit does not meet our published specifications. This guarantee is your assurance of unequalled quality and outstanding performance for years of service.

Knight-Kits Have Easiest-to-Follow Instructions

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## Giant Savings on These Fine Test Units

INSTRUMENTS

EASY TO ASSEMBLE—ACCURATE—DEPENDABLE



### RF Signal Generator Kit

TIME AND LABOR-SAVING TROUBLE-SHOOTER

ONLY  
**\$19<sup>75</sup>**

\$2.00 Down

- Precision-Wound Coils Throughout
- No Calibration Required
- Modulated or Unmodulated Output
- 400-Cycle Sine Wave Output

Build this wide-range, extremely stable RF signal generator and save two-thirds the cost of a comparable wired instrument. You can quickly build it without difficulty; easy, fully illustrated Knight-Kit instructions enable you to get the job done in the least amount of time. The large, semi-circular dial is calibrated clearly; the signal generator's range is covered in five separate bands, permitting close accuracy in the setting of individual frequencies. You'll find that it's an ideal instrument for alignment of RF and IF stages in radio and TV sets, and for trouble-shooting audio equipment.

Also serves as a TV marker generator when used with your sweep generator—excellent for use with the Knight-Kit sweep generator listed on opposite page. Delivers output on fundamentals from 160 kc all the way out to 112 mc; provides useful harmonic output to 224 mc. Output can be modulated at 400 cycles—has built-in sine-wave audio oscillator with output jack for 400-cycle output.

Features the high-stability Colpitts circuit. Jack for external modulation. Maximum audio output 10 volts. RF output, over 0.1 volt on all ranges. Step and continuous-type attenuator controls permit precise adjustment of output. Ready to use the instant you assemble it—no calibration needed. With all parts, tubes, wire, solder and instructions. 7x10x5". For 105-125 v., 50-60 cycle AC. Shpg. wt., 11 lbs.

83 Y 145. \$2.00 Down. ONLY..... 19.75

### Audio Generator Kit

GENERATES SINE WAVE OVER WIDE RANGE

ONLY  
**\$34<sup>95</sup>**

\$2.00 Down

- Up-to-the-Minute Circuit Design
- Less Than 0.25% Distortion
- 600-Ohm Output Impedance
- Range: 20 cps to 1 mc

A highly dependable audio generator kit featuring an up-to-date circuit developed by the U.S. Bureau of Standards. Its excellent specifications and low cost make it ideal for precise testing of hi-fi amplifiers, tone control circuits and speakers, or for other applications requiring calibrated, continuously variable audio signals. Performance equals or surpasses far costlier factory-built units. Operates into high impedance or 600-ohm standard broadcast line. Low distortion even at high output into either high-impedance or 600 ohms.

Uses 6CB6 Bridge-T R-C oscillator. *Frequency Range:* 20 cps to 1 mc; continuously variable in 5 ranges. *Output Voltage:* 10 v.,  $\pm 1$  db to 1 mc. *Output Impedance:* 600 ohms. *Distortion:* less than 0.25% from 100 cps through the audible range into high impedance; less than 0.5% when driving 600 ohm load at maximum output. Both a step-attenuated output voltage control and a continuously variable level control are provided in the output state. Optimum isolation between oscillator and load is provided by means of a second cathode-follower stage, resulting in exceptional stability.

Supplied complete with all parts, tubes (6CB6, 2-6CL6; 5Y3GT rectifier), pre-cut wire, solder and step-by-step instructions plus pictorial and schematic diagrams. Attractive blue metal case, 8½x11x7½", with light gray front panel. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 16 lbs.

83 YX 137. \$2.00 Down. ONLY..... 34.95

# Outstanding Sweep Generator Kit Value



COMPARABLE TO COSTLY LABORATORY-TYPE UNITS

INSTRUMENTS



### MAXIMUM LINEARITY

Exclusive variable-inductance sweep circuit provides linearity on a par with costly lab units. External control compensates for effects of aging and humidity.



## Superior TV-FM Linear Sweep Generator Kit

SAVE UP TO HALF WHEN YOU BUILD THIS HIGHLY ACCURATE TEST UNIT

ONLY  
**\$44<sup>95</sup>**  
\$2.00 Down

- Provides Extreme Sweep Linearity
- Fundamental Output to 250 mc
- Output Flat Within 1 db
- Electronic Blanking Circuit
- Continuously Variable Sweep
- Precise Output Adjustment

- Crystal-Controlled Marker Circuit
- Convenient Step-Down Dial Drive
- Automatic Gain Control Circuit
- Easy Point-to-Point Wiring
- Equipped with Coaxial Output Connector
- Complete with Coaxial Output Cable

An outstanding, low-cost instrument for TV and FM alignment—provides sweep linearity on a par with costly laboratory instruments. Continuous frequency coverage from 300 kc to 250 mc in 4 bands—all on fundamentals. In addition to television and FM servicing applications, this dependable unit is ideal for experimenters, hobbyists and electronics training.

Among the top features built into this RF sweep generator kit are: an exclusive Knight-Kit sweep system designed for exceptionally easy assembly and adjustment, plus high accuracy and linearity; electronic retrace blanking; and automatic gain control circuit which keeps output level constant over the swept range—flat within 1 db on all bands. RF output is in excess of 0.15 volts on all bands.

Specially designed electro-mechanical reactance modulator circuit provides exceptional linear sweep. Selectivity curve of TV or FM will show true wave form on a scope—alignment of the set is more precise. Sweep width is continuously variable from 0 to 13 mc. Has built-in crystal-type marker oscillator with dual crystal socket and convenient switch for selecting either of two marker crystals (not included). Crystal and external markers can be mixed. Phase control provides blanking shift from 0-180°. Step-type and continuous output controls, plus marker amplitude control. Filtered power transformer prevents RF leakage.

Output filter connected to 0 to 50 mc range output jack provides 20 db attenuation of undesirable harmonics above 50 megacycles. 5 volt rms, 60 cycle sine wave horizontal sweep voltage (for oscilloscope) available from front panel.

Step-down dial drive mechanism gives smooth tuning action. Large, clearly calibrated dial is easy to read. Skillfully engineered component layout for simplified assembly and efficient operation. Tubes: 6BQ7A fixed-frequency sweep oscillator and mixer, 6J6 variable-frequency oscillator, 12AU7 blanking, 6AQ5 series voltage regulator, 6AU6 regulator control, and 12AT7 marker oscillator; rectifier is a 6X5.

Complete with all tubes, wire and solder, all parts and instructions. Professionally styled steel cabinet finished in blue with gray panel; has disappearing handle. Size, 8½x12x7". For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 16 lbs.  
83 YX 123. \$2.00 Down. ONLY.....44.95

- 4.5-MC MARKER CRYSTAL. ±.005%. Shpg. wt. 3 oz.  
99 Y 286. ONLY.....4.80
- 5.0-MC MARKER CRYSTAL. ±.02%. Shpg. wt., 3 oz.  
99 Y 143. ONLY.....3.95
- 10.7-MC MARKER CRYSTAL. ±.02%. Shpg. wt., 3 oz.  
99 Y 145. ONLY.....3.95

# knight-kit

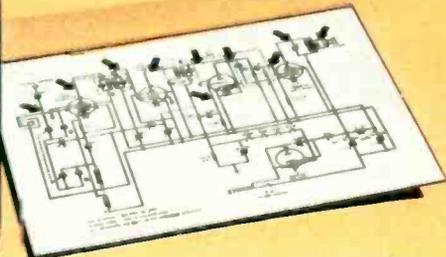


## Today's Best Buy in a Signal Tracer Kit

INSTRUMENTS



Perfect for extremely fast, convenient signal tracing by aural and visual methods—traces IF, RF, video and audio circuits. Exceptionally high amplification. Gain of 91,000—highest by far, in its price class.



## High-Gain Signal Tracer Kit

HIGHEST GAIN AT THIS PRICE . . . TOPS IN VERSATILITY

ONLY  
**\$26<sup>50</sup>**  
\$2.00 Down

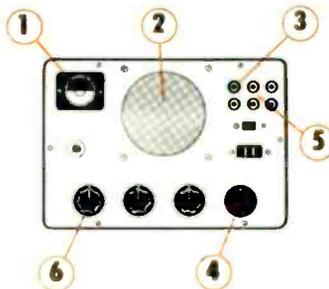
- Traces Signal from Antenna to Loudspeaker
- Allows You to Substitute Speaker, Output Transformer, B+ Voltages, Etc.
- Wattmeter Calibrated from 25 to 1000 Watts
- Equipped with Time-Saving 2-Way Probe

For speedier servicing and bigger profits, use the Knight-Kit high-gain signal tracer. This easy-to-build, extremely worthwhile unit will save you work and trim valuable time from hundreds of servicing jobs—once you've used this outstanding trouble-shooting instrument, you'll wonder how you ever got along without it.

It's ideal for servicing radios, TV sets and amplifiers—checks RF, IF, video and audio circuits. Employs pentode front-end for remarkably high amplification—has gain of 91,000—the highest in its price class. "Magic Eye" tube with calibrated attenuators clearly indicate signal presence and permit stage-by-stage gain measurements all the way from the antenna to the speaker. Only 6 mmf input capacitance. In addition to "Magic Eye" indicator, tracer has 4" speaker to permit audible signal tracing or use as a general-purpose audio amplifier. 2-position RF-AF probe supplied permits complete testing versatility and is more efficient than conventional, universal probe; one position of probe is for checking RF, IF and video stages; other position is for checking audio-frequency stages.

Noise test—applies DC to volume controls for amplification of noise characteristic. Built-in wattmeter is calibrated from 25 to 1000 watts—wider range than any other kit. Has provision for external oscilloscope or VTVM. Binding posts provide 280 v. B+ for external uses; permit easy output transformer or speaker check in audio amplifiers. Tubes: 6AU6 high-gain amplifier, 6AV6 amplifier and wattmeter rectifier, 6V6GT power amplifier; 6E5 "magic eye"; 6X4 rectifier. Attractively finished blue wrinkle case has contrasting gray panel. Size, 7x10x5". With disappearing carrying handle. With all parts, tubes, probe, pre-cut wire and solder and instructions. For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 12 lbs.  
83 Y 135. \$2.00 Down. ONLY . . . . . 26.50

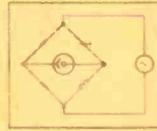
### CHECK THESE FEATURES:



- 1 "Magic Eye" indicator opens and closes to indicate relative signal strength.
- 2 4" speaker for aural tracing and substitution use—used with noise locator circuit, it quickly locates noisy controls and resistors, faulty transformers, and intermittent capacitors.
- 3 Special binding post accommodates VTVM or oscilloscope for precise readings during alignment.
- 4 Wattmeter is calibrated from 25 to 1000 watts—accurately indicates power consumption of device under test.
- 5 Binding posts allow use of the signal tracer as substitute transformer, audio amplifier, test speaker and power supply—a great servicing convenience.
- 6 4-step sensitivity control establishes sensitivity of the tracer. Gain control used in conjunction with sensitivity control permits intermediate sensitivity settings.



Built-in oscillator for accurately measuring the "Q" of coil under test—gives positive good or bad readings.



Employs laboratory-type, balanced-bridge method for making measurements.



## Low-Cost Flyback Checker Kit

**FAST TV DEFLECTION CIRCUIT REPAIRS**

ONLY  
**\$19<sup>50</sup>**

\$2.00 Down

- Has Widest Range in Its Field
- Large, Easy-to-Read 4½" Meter
- Indispensable for TV Servicing
- Exceptionally Accurate Readings
- Self-Contained Power Supply

Race through TV deflection circuit repairs—for bigger-than-ever servicing profits—with the Knight-Kit Flyback and Yoke tester! Use it to check instantly on the condition of all types of horizontal output transformers and deflection yokes, as well as linearity and width coils in TV sets. Provides an accurate check of any standard unit. Positively indicates the presence of shorted turns for any coil with a "Q" greater than 1, and an inductance between .003 henry and 2 henries.

Determines the continuity of any circuit with a resistance between 0 and 0.5 megohms. Checks a wider range of inductances than any other similar unit! 4½-inch meter with 400-microamp movement provides clear readings and high accuracy. Circuit uses 6S4A tube in pulsed oscillator arrangement. Self-contained power supply is of isolation transformer type, for full safety during servicing of any type of TV set.

A versatile, valuable instrument for TV servicing, the flyback checker is also unusually easy to build—assembly can be completed in a matter of hours using only the simplest of tools. The comprehensive manual, in addition to containing step-by-step instructions, also includes helpful hints on getting the most out of this skillfully engineered instrument. Metal case, 7¾x5½x5", has leather handle. Supplied complete with all parts, test leads, solder, wire, 6S4A tube, and step-by-step instructions. For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 6 lbs.

83 Y 118. \$2.00 Down. ONLY.....19.50

## Resistor-Capacitor Tester Kit

**HIGHLY ACCURATE BRIDGE-TYPE UNIT**

ONLY  
**\$19<sup>50</sup>**

\$2.00 Down

- "Magic Eye" Bridge Null Indicator
- Tests Capacitors at Rated Voltage
- Measures Resistance to 5 Megohms
- Employs Balanced-Bridge Circuit
- Reads Power Factor Directly

An extremely valuable instrument—skillfully engineered for dependable performance in any radio-TV service shop or laboratory. Measures resistances from 100 ohms to 5 megohms, and capacitances from 10 micromicrofarads to 1000 microfarads by the highly reliable bridge method. Maximum shadow on the "magic eye" tube clearly indicates bridge balance.

Checks for opens and shorts in paper, mica and ceramic capacitors; indicates the power factor of electrolytics by providing a direct-reading indication of the electrolytic's efficiency. Its large, easy-to-read dial, used in conjunction with the "magic eye" null indicator, shows resistance and capacitance at a glance. The "magic eye" is also used in testing for opens, shorts, intermittents, and in checking power factor. Capacitors are tested at actual working voltages. Has transformer-operated, half-wave rectifier power supply.

*Test Voltages:* 50, 150, 250, 350 and 450 volts. *Capacity Ranges:* 10 muf to .005 mfd, .001 to 0.5 mfd, 1 to 50 mfd, and 20 to 1000 mfd. *Resistance Ranges:* 100 to 50,000 ohms and 10,000 ohms to 5 megohms. *Accuracy:* ±10%. *Power Factor Range:* 0-50%. Uses 6E5 "magic eye"; 6X4 rectifier.

In portable metal case with blue-wrinkle finish. Size, 7x10x5". Supplied complete with tubes, solder, pre-cut wire and instructions. For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 10 lbs.

83 Y 124. \$2.00 Down. ONLY.....19.50

# knight-kit



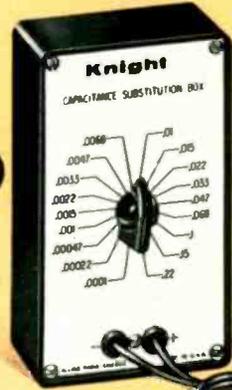
## Time and Money-Saving Instrument Kits

### INSTRUMENTS



Resistance Substitution Kit

Choice of 36 Resistor Values from 15 Ohms to 10 Megohms



Capacitance Substitution Kit

Has 18 Standard Capacitor Values from .0001 mfd to .22 mfd



## "In-Circuit" Capacitor Checker Kit

**CHECKS WITHOUT UNSOLDERING**

ONLY  
**\$12<sup>95</sup>**

- Widest Range of Any Kit
- Has "Magic-Eye" Indicator
- Checks 20 mmf to 2000 mfd
- Eliminates Cable Resonance

An invaluable aid to speedy servicing—at only one-third the cost of factory-wired units! Feature for feature, the world's finest economy priced capacitor checker kit. Has widest range, 20 mmf to 2000 mfd, through use of exclusive resonant circuit that tunes out test cable capacitance. Permits testing of capacitors while they are wired in the circuit. This time-saving feature is a real boon to servicemen and technicians—no need to unsolder connections in a set.

Exceptionally easy to operate. Just press a button—and the "magic-eye" indicator shows opens and shorts (not leakage). Checks by-pass, blocking, coupling and filter capacitors. The test for opens or shorts can be made on any capacitor of 20 mmf or greater, even if the capacitor is in parallel with a resistance as low as 50 ohms. The test for shorts can be made on any capacitor up to 2000 mfd, even when shunted by as low as 20 ohms. Offers accurate readings at a glance.

Sturdy steel case with attractive blue wrinkle finish and light gray panel; has convenient handle for ease of portability. No special tools are required for assembly—a soldering iron, screwdriver and pliers are all you need. Clearly written step-by-step instructions, plus wall-sized picture diagrams make assembly a marvel of simplicity. Size, 7<sup>3</sup>/<sub>4</sub>x5<sup>1</sup>/<sub>4</sub>x5". With tubes, wire, solder, instructions. For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 5 lbs.

83 Y 119. ONLY .....12.95

## Substitution Box Kits

**RESISTANCE SUBSTITUTION KIT**

ONLY  
**\$5<sup>95</sup>**

Find the correct resistance value required in a circuit—in minutes—with this convenient resistance substitution box. Saves valuable time in radio and TV servicing as well as in equipment design. Provides 36 values on two ranges. Low resistance range: 15 to 10,000 ohms. High resistance range: 15,000 ohms to 10 megohms. Slide switch selects either range. Accuracy is within  $\pm 10\%$ . 18-position rotary switch permits rapid setting to exact value needed. Switch has extra wafer to simplify wiring. All parts mount in compact case of bakelite; aluminum panel. Size, 6<sup>1</sup>/<sub>4</sub>x3<sup>3</sup>/<sub>4</sub>x2". Supplied with all parts, 18" leads, insulated alligator clips, wire, solder, hardware and instructions. Shpg. wt., 2 lbs.

83 Y 139. ONLY .....5.95

**CAPACITANCE SUBSTITUTION KIT**

ONLY  
**\$5<sup>95</sup>**

Cuts time and effort in finding correct values for replacement of badly damaged, illegible capacitors. Substitutes a wide range of EIA (RETMA) values. Ideal for laboratory and service shop use. Has 18 standard capacitor values from .0001 mfd to .22 mfd. Accuracy is within  $\pm 20\%$ . All values are 600 volts, except .15 and .22 which are 400 volts. An 18-position switch permits fast, convenient selection of values. In sturdy bakelite case with attractive anodized aluminum panel. Size, 6<sup>1</sup>/<sub>4</sub>x3<sup>3</sup>/<sub>4</sub>x2". Kit is supplied complete with all parts, 18" leads, insulated alligator clips, wire, solder, all hardware, and step-by-step instructions with wall-sized picture diagrams. Shpg. wt., 2 lbs.

83 Y 138. ONLY .....5.95

# Best Buys in Easy-to-Build Test Equipment



Versatile trouble-shooting instrument—shows transistor quality by checking important leakage-to-gain ratio.



## Transistor & Diode Checker Kit

**ONLY \$8<sup>50</sup>**

- Uses Highly Sensitive, 1-ma Movement
- Checks Germanium and Silicon Diodes, and Selenium Rectifiers

An extremely valuable instrument. The only low-cost transistor checker with adjustable Forward Current control—permits precise matching of transistor pairs. Checks leakage-to-gain ratio and noise level of all types of junction, point contact and barrier transistors. Can also check germanium and silicon diodes, forward and reverse-current conduction of selenium rectifiers. Makes continuity and short checks.

Features: spring-return leakage gain switch, calibration control, and separate sockets for PNP and NPN transistors. Has full vision, rugged bakelite cased meter with easy-to-read dial. The noise level test makes it possible to select low noise transistors for use in high gain stages. Either a signal tracer or headphones can be used with this checker for noise level measurements.

With all parts, 22½-volt battery and step-by-step instructions. Size, 5x3x2". Shpg. wt., 2½ lbs. 83 Y 149. **ONLY \$8.50**

## Heavy-Duty 6V-12V Battery Eliminator

**CONSERVATIVELY RATED HEAVY-DUTY POWER SUPPLY**

**ONLY \$37<sup>95</sup>**  
\$2.00 Down

- Provides Continuously Variable Output Voltage
- Delivers 15 Amps at 6V.—10 Amps at 12V.
- Can Be Used to Service Transistor Radios
- Ideal for Use as a Battery Charger

This heavy-duty DC power supply is ideal for testing auto radios, as well as Amateur and commercial mobile radio equipment. Also perfect for use in the servicing of portable transistor radios and hybrid as well as full-transistor car radios. Continuously variable output from 0 to 15 volts at higher current than any similarly priced battery eliminator kit. Handles current requirements of any 6 or 12-volt radio. Has dual filter for low-ripple output. Charges any 6 or 12-volt battery overnight.

Provides DC output of 0-8 volts or 0-15 volts. Continuous current rating: 15 amps at 6 volts, 10 amps at 12 volts. Intermittent current rating: 17.5 amps at 6 volts, 12.5 amps at 12 volts. Two meters provide current and voltage readings. Meter ranges: 0-15 volts DC; 0-20 amps DC.

Metal case has blue-wrinkle finish. 9x12½x7¾". With all parts, case, wire, solder, etc. For 105-125 v., 50-60 cycle AC. Wt., 18 lbs.

83 YX 129. \$2.00 Down. **ONLY \$37.95**

**KNIGHT-KIT MONEY-BACK GUARANTEE**—Your purchase price is refunded in full if your Knight-Kit does not meet our published specifications for performance. When you build a Knight-Kit, you can always be sure of unexcelled quality and dependability, plus outstanding value.



See Actual Proof of  
knight-kit Superiority

## Examine Our Instruction Manuals

CHECK THE DESIGN AND QUALITY FOR YOURSELF

ONLY **15c** Here's the finest way to check the quality of Knight-Kits at least expense to yourself. These easy-to-follow instruction manuals are the very same that are provided with Knight-Kit electronic kits, and they offer you an inexpensive preview. Contain full construction details, technical hints, operating data, schematic and picture diagrams. Read one—then judge for yourself! \*Available in January, 1960.

- 38 K 166. RF Signal Generator.
  - 38 K 183. VOM; 1,000 ohms-per-volt.
  - 38 K 099. Scope Voltage Calibrator.
  - 38 K 148. Capacitance Substitution Box.
  - 38 K 147. Resistance Substitution Box.
  - 38 K 199. Transistor Checker.
  - 38 K 184. Resistance-Capacitance Tester.
  - 38 K 188. In-Circuit Capacitor Checker.
  - 38 K 928. Flyback Checker.
  - 38 K 185. Vacuum-Tube Voltmeter.
  - 38 K 187. 2-Station Intercom.
  - 37 K 289. "12-In-1" Lab.
  - 38 K 295. 10-Circuit Transistor Lab.
  - 38 K 858. Crystal Set.
  - 38 K 936. 2-Transistor Pocket Radio.
  - 38 K 943. "Trans-Midge" 1-Transistor Radio.
  - 38 K 195. Printed Circuit 1-Transistor Radio.
  - 38 K 634. Photoelectronic Relay.
  - 38 K 835. Light Source.
  - 38 K 198. Impedance and SWR Bridge.
  - 38 K 296. 100-kc Crystal Calibrator.
  - 38 K 146. Transistor Code Practice Oscillator.
  - 38 K 161. "Ocean Hopper" Receiver.
  - 38 K 287. Wireless Broadcaster/Amplifier.
  - 37 K 290. "Ranger III" Table Radio.
  - 37 K 299. Economy "400" Tube Tester.
  - 37 K 299. "Ranger" Radio Intercom.
  - 37 K 291. Printed Circuit "Ranger III" AC-DC Radio.
  - 38 K 187. 2-Band "Space Spanner" Receiver.
  - 38 K 292. 12-Watt Hi-Fi Amplifier.
  - 38 K 871. Stereo Control.
  - 38 K 853. New 12-Volt Ammeter-Voltmeter.
  - 38 K 884. New Pocket-Size VOM.
  - 38 K 852. New Grid-Dip Meter.
- ANY MANUAL ABOVE. Postpaid in U.S.A. EACH ..... 15c

- 37 K 293. "Ranger" Clock Radio.
  - 38 K 298. 4-Band "Span-Master" Receiver.
  - 38 K 942. 5-Transistor Superhet Radio.
  - 38 K 165. Deluxe Tube Tester.
  - 38 K 168. VOM; 20,000 ohms-per-volt.
  - 38 K 098. 6-12 Volt Battery Eliminator.
  - 38 K 169. Audio Generator.
  - 38 K 196. TV-FM Sweep Generator.
  - 38 K 170. Signal Tracer.
  - 38 K 167. 5" Wide Band Oscilloscope.
  - 38 K 097. 5" General-Purpose Oscilloscope.
  - 38 K 944. Amateur Communications Receiver.
  - 38 K 180. Amateur Variable Frequency Oscillator.
  - 38 K 095. Amateur 50-Watt CW Transmitter.
  - 37 K 298. 25-Watt Basic Hi-Fi Amplifier.
  - 38 K 299. 18-Watt Hi-Fi Amplifier.
  - 38 K 941. Hi-Fi FM-AM Tuner.
  - 38 K 126. Hi-Fi FM Tuner.
  - 37 K 295. Hi-Fi Stereo Preamplifier.
  - 37 K 296. 60-Watt Basic Stereo Amplifier.
  - 38 K 883. New 20-Watt Stereo Amplifier.
  - 37 K 396. New 40-Watt Stereo Amplifier.
  - 37 K 391. New Deluxe Stereo FM-AM Tuner.
  - 37 K 392. \*New Deluxe Amateur Transmitter.
  - 37 K 383. New Lab-Type IVA DC Oscilloscope.
  - 37 K 394. New Lab-Type, Automatic AC VTVM.
  - 38 K 186. New Citizens Band Superregen Transceiver.
  - 38 K 045. \*New Citizens Band Superhet Transceiver.
- ANY MANUAL ABOVE. Postpaid in U.S.A. EACH ..... 25c

## Incomparable Values in Tools for Kit Builders



**A** TOOL CHEST KIT—INCLUDING SOLDER GUN. Budget-priced, 6-piece tool set. Includes these most-often-used tools: Weller Model 8100 100-watt solder gun; Knight 6" long-nose side-cutting pliers; Knight 5" diagonal cutters; Xcelite 6" screwdriver; Xcelite 4" narrow-blade screwdriver; rugged metal chest. Gun operates from 110-120 v., 60 cycle AC. Wt., 9 lbs.  
50 N 276. ONLY ..... 9.49

**A** TOOL CHEST KIT—INCLUDING SOLDER IRON. As above, but with Wall Model 14T 40-125 watt pencil-type soldering iron instead of Weller gun. For soldering printed circuit boards. Wt., 8½ lbs.  
50 N 277. ONLY ..... 9.49

**B** WEN MODEL 199 SOLDER GUN. Efficient, lightweight, 130-watt soldering gun. For 110-120 v., 60 cycle AC. Wt., 2¼ lbs.  
46 N 358. NET ..... 5.83

**C** WALL MODEL 14T SOLDER IRON. Pencil-type; perfect for close work on printed circuit boards. Thermostatic action—heating range from 40 to 125 watts. For 110-120 v., AC or DC. Shpg. wt. 7 oz.  
46 N 852. NET ..... 5.22

**D** KNIGHT 5" DIAGONAL CUTTERS. Ruggedly built. High-quality carbon steel. Shpg. wt., 10 oz.  
50 N 133. NET ..... 1.63

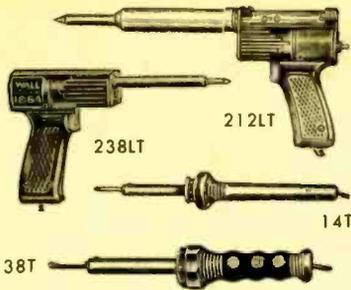
**E** KNIGHT 6" PLIERS. Long-nose, side-cutting pliers. 10 oz.  
50 N 132. NET ..... 1.82

**F** XCELITE MODEL R-146 6" SCREWDRIVER. Chrome-vanadium steel. Fluted plastic handle. Overall length, 10". Wt., 6 oz.  
45 N 796. NET ..... 78c

knight-kits ARE A PRODUCT OF ALLIED RADIO

# Weller and Wall Soldering Tools

## WALL SOLDERING TOOLS



### SOLDERING GUNS

Wall "Trig-R-Heat" guns feature thermostatic action and lightweight, transformer-less design. Just squeeze the trigger and the tip heats in seconds to the proper soldering temperature—automatically providing correct wattage for soldering job, whether heavy or light. The lightweight, balanced guns permit continuous, fatigue-proof operation. Narrow, 6½" barrel provides good reach into tight or crowded places. All guns have interchangeable tip-element assemblies. Steel-clad tips assure long service life. Tip-element assemblies are quickly and easily changed by means of plug-in, one-screw installation. Black plastic housing, U.L. Approved. For 110-120 volts, AC or DC.

Model 212LT. Wattage range, 300-670. ¼" steel-clad tip. Built-in 7-watt spotlight controlled by a separate, rear-mounted switch. Shpg. wt., 1½ lbs.  
**46 N 848. NET..... 11.07**

Model 214LTN. Similar to above, but employs ¼" tip. Wattage range, 150-400. Shpg. wt., 1½ lbs.  
**46 N 889. NET..... 9.77**

Model 238LT. Designed for lighter soldering applications. Wattage range, 75-150. Employs ¼" steel-clad tip. Built-in 7-watt spotlight controlled by a separate, rear-mounted switch. Shpg. wt., 1 lb.  
**46 N 853. NET..... 5.87**

Model 238T. Same soldering gun as described above, but less spotlight and rear-mounted switch. Shpg. wt., 1 lb.  
**46 N 846. NET..... 5.51**

### TIP-ELEMENT ASSEMBLIES

Replacement tip-elements for guns above. Quickly and easily interchanged. \*Fits 212-LT and 212LTN; fits 238LT and 238T.

Stock No.	Watts	Tip	Wt.	NET EACH	
				1-5	6-Up
46 N 870	*150-400	¼"	12 oz.	3.63	3.32
46 N 849	*300-650	½"	1 lb.	5.87	5.39
46 N 897	†75-150	¼"	10 oz.	2.94	2.70

### SOLDERING IRONS

Thermostatic action soldering irons. Fine for delicate soldering operations, yet built to withstand "production line punishment." Thermostatic action assures quick heating and higher wattage for heavier soldering jobs; reduced wattage for lighter jobs. Control action prevents tip-burning; maintains optimum heat. U.L. Approved. Lengths: 18HD, 7"; 14T, 8"; 38T, 12½". For 110-120 v., AC or DC. \*Pencil types.

Stock No.	Mfr's Type	Watts	Tip	Wt.	NET EACH	
					1-5	6-Up
50 N 394	18HD	25	¼"	7 oz.	5.22	4.80
46 N 852	14T	40 to 125	½"	7 oz.	5.22	4.80
46 N 854	38T	80 to 200	¾"	2 lbs.	6.53	6.00

### REPLACEMENT TIPS

†Walloy-RED tips for production line use.

Stock No.	Size	For	Wt.	NET EACH	
				1-5	6-Up
46 N 874	¼"	18T†	2 oz.	.98	.90
46 N 875	¼"	14T†	2 oz.	.98	.90
46 N 876	¾"	38T†	3 oz.	1.15	1.05
46 N 873	½"	18T	2 oz.	.14	.13
46 N 872	¼"	14T	2 oz.	.25	.23
46 N 855	¾"	38T	3 oz.	.39	.36

## WELLER SOLDERING KITS, GUNS, AND IRONS



### TOP BUYS IN SOLDER KITS

Exclusive Weller Dual Heat feature saves time, gives greater convenience and increases tip life.

8250AK  
Heavy-Duty

8200K  
Dual-Heat



Switches to:  
125 Watts  
90 Watts

### 8250AK HEAVY-DUTY KIT—250 WATTS

- Instant Heat—No Waiting
- Versatile Array of Tips

Extremely versatile heavy-duty soldering kit. Includes: Model 8250A 250-watt gun (with trigger switch control, pre-focused dual spotlights, black plastic housing); 1 coil of acid-core solder for metal work (for radio, TV or electrical work, use resin core solder; see solder listing); 1 chisel-point tip for general soldering; 1 smoothing tip for heat-sealing and mending plastic articles. 1 tip for cutting plastic tile and easy putty removal; and 1 wrench for quick, easy interchange of tips. With sturdy metal case. 2¼ x 1½ x 2½". For 110-120 v., 60 cycle AC. Shpg. wt., 7¼ lbs.

46 N 677. List, \$14.95. NET..... 10.99  
 3 or More, EACH..... 9.77

### 8200K DUAL-HEAT SOLDERING KIT

- Durable Iron-Plated Copper Tip
- Pre-focused Spotlight Lights Work

AS LOW AS **\$519** A top-value outfit containing everything you need for fast, professional soldering. Includes Model 8200 gun with dual-heat feature; solder-aid tool; cleaning brush; coil of Kester "Resin Five" solder. Gun has "trigermatic" control—instantly selects high (125 watt) or low (90 watt) heat. Spotlight illuminates work area. Tip is copper for superior heat transfer. For 110-120 v., 60 cycle AC. Shpg. wt., 2½ lbs.

50 N 280. List, \$7.95. NET EACH..... 5.83  
 3 or More, EACH..... 5.19  
 50 N 209. No. 8125 Replacement Tip For Above Gun. NET PER PKG. OF 2..... 25c

### HEAVY-DUTY GUNS

MODEL 8250A 250-WATT SOLDERING GUN. Ideal for production line use, service shop, home workshop, etc. Air-cooled transformers, pre-focused dual spotlights. Long-life, low-cost, easily replaceable tips. Rugged, high-impact plastic housing. Convenient pistol grip with trigger switch. Streamlined design permits reaching tight, difficult spots. U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 4 lbs.

46 N 678. List, \$12.95. NET..... 9.52

MODEL D-550—200, 275 WATTS. As above, but dual-heat type. Operates at 200 or 275 watts. Shpg. wt., 3¾ lbs.

46 N 641. List, \$16.25. NET..... 11.71

### MODEL D-440 MEDIUM-DUTY GUN

Dual-heat soldering gun. Trigger switch selects choice of 100 or 150 watt heat. Specially designed for homecraft and all hobby uses. When used with cutting and smoothing tips listed below, it performs a wide variety of household applications, including furniture repair, cutting plastic wall tile, etc. For 110-120 v., 60 cycle AC. Shpg. wt., 3 lbs.

46 N 644. List, \$12.95. NET..... 9.52

### SOLDERING TOOL ACCESSORIES

A wide assortment of tips and replacement parts for soldering guns. All are products of excellent workmanship—fully guaranteed.

#### VERSATILE ACCESSORY TIPS

Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	Use With Models	NET EACH
46 N 681	6110	Cutting	S-400, D-440, & 8100	35c
46 N 682	6120	Smoothing	S-500, D-550	35c
46 N 683	6130	Cutting	S-500, D-550	35c
46 N 684	6140	Smoothing	& 8250A	35c

#### CHISEL-POINT TIPS

2 per Pkg. Av. shpg. wt. per pkg., 3 oz.

Stock No.	Type	Use With Models	PKG.
46 N 574	7135	8100, S-400, D-440	25c
46 N 573	7250	8250A, S-500, D-550	35c
46 N 579	7300	S-107, D-207. Not interchangeable with tips above.	25c

#### SOLDER GUN REPLACEMENT PARTS

Shpg. wt., 3 oz.

Stock No.	Type	Descrip.	Use With Models	NET
46 N 625	7325	Tip nut.	WS-100, WD-135, S-400, D-440 and 8100	.15
46 N 630	7417	Tip nut.	WS-200, WD-250 S-500, D-550	.15
46 N 626	7323	Switch.	All single-heat models.	1.22
46 N 627	7324	Switch.	All dual-heat models.	1.37

### MODEL 8100 GUN

- Instant Heat
- Twin Spotlights
- Compact Design

100 watt soldering gun that heats in only 5 seconds. Convenient fingertip control—no need to unplug. Twin spotlights illuminate the working area, eliminate shadows. Does quick, accurate soldering—even in difficult places. U.L. Approved. For 110-120 v., 50-60 cycle AC. 2¼ lbs.

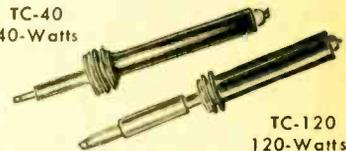
50 N 049. List, \$5.95. NET..... 4.37

3-11, EACH..... 4.08 12-Up, EACH..... 3.89



### TEMPERATURE-CONTROLLED IRONS

TC-40  
40-Watts



TC-120  
120-Watts

- Automatically Maintains Right Heat
- No Overheating—Saves Current

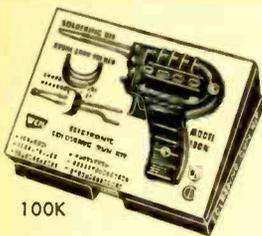
Advanced-design soldering irons with built-in temperature control. Automatically maintains correct soldering temperature. Model TC-40 gives controlled 40 watts for light jobs such as printed circuits, etc.; Model TC-60, 60 watts for light to medium-duty work; Model TC-120, 120 watts for medium to heavy-duty jobs. For 110-120 v., 50-60 cycle AC. With plug-in cord.

Stock No.	Model No.	Watts	Shpg. Wt.	NET
50 N 211	TC-40	40	6 oz.	6.61
50 N 212	TC-60	60	7 oz.	7.35
50 N 213	TC-120	120	11 oz.	8.46

### REPLACEMENT TIPS FOR ABOVE IRONS

Stock No.	Model	For Iron	Size	Oz.	PKG. OF 2
50 N 391	WT-40	TC-40	¼"	2	.74
50 N 392	WT-60	TC-60	¾"	3	1.04
50 N 393	WT-120	TC-120	¾"	4	1.76

# Soldering Guns and Irons



## FAMOUS WEN SOLDERING KITS AND GUNS

Combining proven design principles with the latest engineering features for high efficiency at low cost.



### 100K SOLDERING GUN KIT

- Includes Plastic Cutting Tip
- With Coil of Solder

Make fast work of jobs around the house—with this popularly-priced, general purpose soldering gun kit. Excellent for all types of repair work including cutting plastic tile. Kit is built around highly efficient transformer-type Model 100 Soldering Gun. Featherlight, and compact, it heats up in no time at all—develops full 100 watts heat in 2½ seconds. Well-balanced, pistol grip handle allows continuous, fatigue-free use. Built-in spotlight is angled to focus on work area. Extra-long, steel-nosed long life tip and easy access to hard-to-reach areas. Durable, shock-proof ebony black housing. Included with the kit is Model 19-C-1 Plastic Cutting Tip that cuts rubber or asphalt tile as well as softening and removing hardened putty. Gun operates from 110-120 v., 50-60 cycle AC. U.L. Approved. Shpg. wt. 2½ lbs. **5.83**

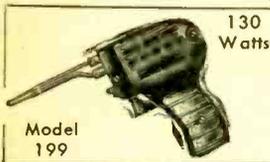
### MODEL 250K SOLDER GUN KIT

An outstanding value in a highly versatile solder gun kit. Excellent for home electrical repairs, radio and TV work, furniture repair, plastic tile cutting, repair of toys, etc. Includes Model 250 gun that heats up in 5 seconds, three tips for a variety of uses, double end nickel

### 199K SOLDERING GUN KIT

Highly versatile, multi-purpose solder gun kit. Includes the Model 199 130-watt gun, one 5-ft. roll of rosin-core solder, three different tips for a wide variety of jobs, plus an attractively styled heavy-gauge metal kit box. Gun reaches soldering temperature in just 2½ seconds after squeezing trigger. Tips are quickly interchanged to meet specific applications. Well-balanced, pistol-grip handle assures fatigue-free operation. Single trigger automatically controls heat and built-in spotlight. Pre-focused spotlight assures shadow-free working area. Tips include: Model 19-B-4 long-nosed standard tip for repair of household wiring, radio and TV appliances, lamps, etc.; Model 19-F-33 flat iron tip specially designed for removing dents and repairing scratches in woodwork or furniture, heat-sealing of wax paper packages and plastic bags, etc.; Model 19-C-1 for cutting plastic, rubber or asphalt tile, etc. For 110-120 v., 60 cycle AC. U.L. Approved. 4 lbs. **7.33**

plated wrench, 5-ft. roll of solder, and attractive metal carrying case. Gun has built-in spotlight; handle is shock-resistant plastic. Case, 8x9x3". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt. 5 lbs. **11.72**

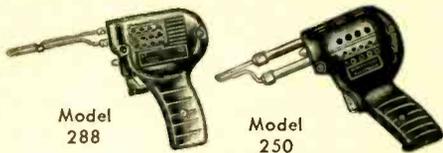


MODEL 199—130 WATTS

- Heats in Just 2 ½ Seconds
- High Efficiency—Excellent Balance

Extremely popular, low-cost soldering gun. Heats in just 2½ seconds. Excellent balance for faster, easier soldering. Efficiency comparable to guns of much higher wattage ratings. Has steel nose long-life tip. Spotlight focuses on work. Rated at 130 watts. Lightweight; only 1½ lbs., for use over long periods of time without fatigue. Heat and shock resistant cherry-red plastic handle. Overall length less tip, 5" 6" cord. U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 2½ lbs. **4.30**

No.	Type	Description	NET
46 N 359	19-B-4	Standard Tip	34¢
46 N 328	19-C-1	Plastic Cutting Tip	41¢



MODEL 288—200 WATTS

Economy-priced, heavy-duty 200-watt soldering gun. Delivers large volume of heat within 5 seconds—for all types of heavy duty work. Special tip design also makes this an excellent gun for a wide variety of delicate, light duty jobs. Long reach tip for easy access to hard-to-reach places. Built-in spotlight focuses directly on work; eliminates shadow. Spotlight goes on and off with gun. Lightweight unit is beautifully balanced for fatigue-free continuous use. Entire housing made of high-impact, shatter-proof plastic. Lustrous, ebony black finish. Length with tip, 9½"; less tip, 4½". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 3½ lbs. **7.33**

### MODEL 250—250 WATTS

Heavy-duty soldering gun at low cost. Rated at 250 watts. Heats in 3 seconds. Excellent for radio-TV repair work and provides plenty of heat for heavy soldering jobs. Straight-line design and built-in spotlight for illuminating work areas. Nickel-plated corrosion-resistant tip. U.L. approved. For 110-120 v., 60 cycle AC. Length, 6½". Shpg. wt., 4 lbs. **9.52**

No.	Type	Description	NET
46 N 326	25-A-4	Standard Tip	17¢
46 N 327	25-X-20	Feraloy Tip	34¢
46 N 330	25-C-1	Plastic Cutting Tip	34¢

### U-4 FINE SOLDERING TIP KIT

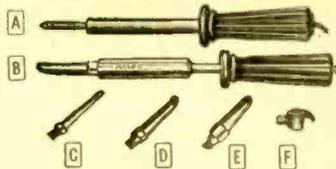
Includes universal fine soldering radio tip for Wen soldering gun Models 100, 199, 288, and 250. Package also contains 2 couplers and 5 ten inch lengths of No. 14 solid copper wire. Shpg. wt., 8 oz. **51¢**

### MODEL 100 BUDGET GUN

Low Cost 100 Watts

Highly efficient 100-watt soldering gun. Ideal for general purpose soldering jobs around the shop or home. Quick heating—reaches operating temperature in 2½ seconds. Features include a built-in spotlight for illuminating work area, easy-action trigger switch, comfort-styled pistol grip, and extra-long, steel-nosed tip for easy access to hard-to-reach places. Shock-resistant black plastic housing. Length with tip, 8"; less tip, 4½". 5" high. For 110-120 volt, 50-60 cycle AC. Wt., 2 lbs. **4.76**

## "KWIK-HEAT" IRONS



**A MODEL 200 150-W. THERMOSTAT CONTROLLED SOLDERING IRON.** Small, lightweight production tool for close, tight soldering on electronic components and printed circuits. Designed for production line use. Heats up to full operating temperature within 80 seconds. Built-in thermostat maintains correct temperature, delivering fast power when required or conserving heat during stand-by periods. Core assembly and outer shell are corrosion resistant, stainless steel. Length, 12½". With chisel tip. For operation from 110-125 volts, 60 cycle AC. Shpg. wt., 12 oz. **6.97**

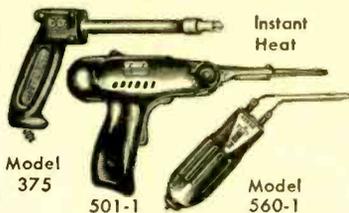
**B MODEL 300 225-WATT THERMOSTAT-CONTROLLED SOLDERING IRON.** As above, but 225 watts for heavy duty use. Heats in 90 seconds. 13" long. With ¼" chisel tip. Shpg. wt., 1 lb. **10.47**

### TIPS FOR MODELS 200, 300

\*For Model 200. Av. shpg. wt., 5 oz.

Stock No.	Fig.	Description	NET
46 N 561	C	Small taper point	1.26
46 N 562	D	Gradual taper point	1.30
46 N 565	E	Heavy, with chisel tip	1.37
46 N 566	F	Melting pot; holds 1 oz.	1.30
46 N 633		Chisel point*	.77

## LENK SOLDERING IRONS



### ECONOMY PISTOL GRIP IRON

**Model 375.** All-purpose 80-watt pistol grip iron. Highly dependable, heavy-duty element. Heavy chrome-plated barrel. Tip dia. ¼". U.L. Approved. With individual spools of acid core and rosin core solder. For operation from 110-120 v., AC or DC. Shpg. wt., 1½ lbs. **2.57**

### INSTANT HEAT SOLDER GUNS

**Model 501-1.** Balanced 180-watt soldering gun with adjustable swivel tip for any angle soldering. Automatically-focusing light. 10½x5½". For 110-120 v. AC. Wt., 2½ lbs. **10.17**

**Model 560-1.** 65 watt, instant heating gun, with 45° angle tip. Automatic light focuses on work. Overall size, 9½x2½". U.L. Approved. For 110-120 v. AC. Shpg. wt., 1½ lbs. **5.54**

### PENCIL TYPE IRONS



**Model 251 Pencil Type 25-Watt Soldering Iron.** Lightweight, compact and extremely sturdy. Has ¼" dia. tip; weighs only 4 oz. Tiny barrel and tip permit easy access to tight spots. Perfect for production line use and printed circuits. For 110-120 v. AC or DC. 8 oz. **4.41**

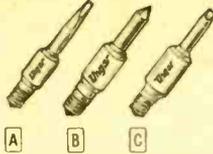
Type 256. As above, but built for heavier work—rated 40 watts. Shpg. wt., 8 oz. **4.41**

Stock No.	For Model No.	Dia.	Wt.	NET
43 N 714	375	3/8"	4 oz.	48¢
43 N 988	501-1		4 oz.	55¢
43 N 989	560-1		4 oz.	47¢
46 N 942	251, 256	1/8"	3 oz.	33¢
46 N 946	251, 256	1/4"	3 oz.	48¢

# Ungar Soldering Equipment

## ELEMENT TIPS

Element-tips for all Ungar handles and the 260 pistol. Types 533, 536, 539, 1233 have copper tips; Types 1236 and 1239, silver-plated iron tips.



Type 4036, iron-clad copper; Types 4033 and 4039, silver-plated, iron-clad copper. Types 1233 and 4033 have a 1 1/4" long x 1/4" dia. tip; Types 1239, 4036 and 4039, 1 1/4 x 3/8", Types 536, 539 and 1236, 1 1/4 x 5/8"; Type 533, 1 1/4 x 3/8". U.I. Approved. For 110-120 v., AC-DC. Av. shpg. wt., 2 oz.

### 23 1/2 WATTS—650-700° F. TIP TEMP.

Stock No.	Mfr's Type	Flr.	Description	1-9	10-49	50-UP
50N 400	533	A	Long Chisel	.98	.79	.75
46N 582	536	B	Pyramid	.98	.79	.75
46N 585	539	C	Chisel	.98	.79	.75

### 37 1/2 WATTS—750-800° F. TIP TEMP.

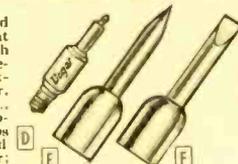
Stock No.	Mfr's Type	Flr.	Description	1-9	10-49	50-UP
50N 401	1233	A	Long Chisel	1.18	.96	.90
46N 592	1236	B	Pyramid	1.18	.96	.90
46N 593	1239	C	Chisel	1.18	.96	.90

### 47 1/2 WATTS—850-1000° F. TIP TEMP.

Stock No.	Mfr's Type	Flr.	Description	1-9	10-49	50-UP
46N 647	4033	A	Long Chisel	2.35	1.91	1.80
46N 648	4036	B	Pyramid	2.35	1.91	1.80
46N 649	4039	C	Chisel	2.35	1.91	1.80

## THREAD-ON ELEMENTS, "MINI-TIPS"

For high-speed industrial repeat soldering. High heat transfer. Element shanks nickel-plated copper. For 110-120 v., AC-DC. U.I. Approved. PL tips nickel-plated iron-clad copper; others, unplated copper. Av. wt.: tips, 4 oz. per 10; elements, 2 oz.



### D ELEMENTS

Stock No.	Mfr's Type	°F. of Inserted Tip	Watts	1-9	10-49	50-UP
50N 402	1237	750-800	37 1/2	1.18	.96	.90
50N 403	4037	850-900	47 1/2	2.35	1.91	1.80

### "MINI-TIPS"

Stock No.	Mfr's Type	Fig.	Descr.	Lx.Dia.	NET EACH		
50N 404	PL111	F	Pencil	.59	.49	.45	
50N 405	PL113	E	Chisel	3/8 x 1/4	.59	.49	.45
50N 406	111	E	Pencil	.20	.17	.15	
50N 407	113	F	Chisel	.20	.17	.15	

## MODEL 507 SOLDERING KIT

A complete set of soldering tools and continuity tester. Contains: 776 handle, heavy-duty element-tip (825° F.) for general-purpose use; precision heating element and tiplet (650° F.) for fine soldering such as printed circuits, etc.; trouble light with circuit tester; 20 terminal connectors; 1 sheet emery paper; solder; insulating tape, and instructions. For operation from 110-120 v., AC-DC. Shpg. wt., 1 lb. 46N 657, 1-5, NET EACH ..... 4.41  
6 or More, EACH ..... 3.92



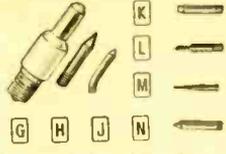
## 250 DELUXE SOLDERING KIT

The Ungar 250 is a top-value, deluxe soldering kit that offers maximum convenience and versatility. This compact combination is perfect for shop use—provides the perfect tip and element for any soldering job. Includes the 776 handle (see above, right) and sixteen different-sized interchangeable tips, element units and tiplets—a quality collection of precision soldering tools. 2x1 1/4 x 9" metal case. For 110-120 v., AC-DC. Shpg. wt., 5 lbs. 50N 408, 1-5, NET EACH ..... 22.05  
6 or More, EACH ..... 20.00



## ELEMENTS AND TIPLETS

Element threads into handle (handles are listed at left); soldering tiplet threads into element. Provides easy interchangeability.



**G Thread-In Elements.** Fit all Ungar handles and 260 Pistol. 1235, 4035 and 4045 have silver-plated steel shanks; 535, a silver-plated iron shank. 535, 1235 and 4035 elements are for use with the 300 and PL300 series tiplets below. 4045 element is for use with the 800 series tiplets and the de-soldering tiplets below. For 110-120 v., AC-DC. U.I. Approved. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	°F. of Inserted Tip	Watts	1-9	10-49	50-UP
46N 605	535	600-650	23 1/2	.98	.79	.75
46N 609	1235	700-750	37 1/2	1.18	.96	.90
46N 622	4035	800-850	47 1/2	2.35	1.95	1.80
50N 105	4045	800-850	47 1/2	2.35	1.95	1.80

**PL300 Series Plated Tiplets.** For use with 535, 1235 and 4035 elements above—thread into end. Nickel-plated iron-clad copper. 1/4" O.D. Tapered needle has 1/4" point, micro-needle is 3/4". PL331, PL333, PL338 have 1" unthreaded length; PL332, 1 1/4"; PL340, 3/4", 2 oz.

Stock No.	Mfr's Type	Fig.	Description	1-9	10-49	50-UP
46N 495	PL331	H	Pencil	.47	.38	.36
46N 496	PL332	J	Offset Pencil	.47	.38	.36
46N 497	PL333	K	Chisel	.47	.38	.36
50N 101	PL338	L	Tapered Needle	.47	.38	.36
50N 409	PL340	M	Micro-Needle	.47	.38	.36

**300 Series Unplated Tiplets.** Same as those of the corresponding Type Nos. listed in the PL300 series above, but unplated copper.

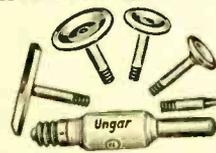
Stock No.	Mfr's Type	Fig.	Description	1-9	10-49	50-UP
46N 606	331	K	Pencil	.16	.13	.12
46N 607	332	L	Offset Pencil	.16	.13	.12
46N 608	333	M	Chisel	.16	.13	.12

**PL-800 Series Plated Tiplets.** For use with 4045 element above—thread into end. Nickel-plated iron-clad copper. 3/4" O.D. for high heat transfer. PL823 and PL824 have 1" unthreaded length; PL833 and PL834, 1 1/4" unthreaded length. Av. shpg. wt., 2 oz.

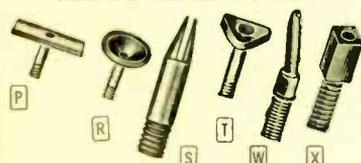
Stock No.	Mfr's Type	Fig.	Description	1-9	10-49	50-UP
50N 410	PL823	N	Pyramid	.47	.38	.36
50N 411	PL824	K	Chisel	.47	.38	.36
50N 412	PL833	K	Chisel	.78	.64	.60
50N 413	PL834	J	Offset Chisel	.78	.64	.60

## 270 DESOLDERING KIT

Complete kit for quick removal of components from printed circuit boards. 776 handle (not shown). 4045 element, tiplets shown (listed below). Cups melt solder on tube sockets. Slotted tiplet melts solder and straightens wires and tabs. Bar for straight-line melting. 1 1/2 x 7 1/4 x 4 1/4" metal case. Shpg. wt., 1 1/4 lbs. 50N 109, 1-5, NET EACH ..... 5.35  
6 or More, EACH ..... 4.70



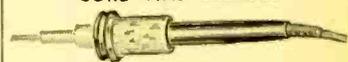
## NEW DESOLDERING TIPPLETS



Designed for fast, easy printed circuit reworking. Thread into 4045 element. Cup tiplets melt solder on tube sockets—use 854 for 8 and 9-pin, 855 for 7 and 8-pin, 856 for 5-pin. Slotted tiplets melt solder on and straighten tabs and leads—use offset for close-to-board work. Bars for straight-line melting. Triangle is for electrolytic capacitors. Drilled cube removes center pins of tube sockets and harness leads. Av. shpg. wt., 1 lb. per 10.

Stock No.	Mfr's Type	Flr.	Description	1-9	10-49	50-UP
50N 414	854	R	1" Cup	.59	.48	.45
50N 415	855	R	3/4" Cup	.59	.48	.45
50N 416	856	R	5/8" Cup	.59	.48	.45
50N 108	857	S	Slotted	.59	.48	.45
50N 417	858	P	Bar	.59	.48	.45
50N 418	86	T	Triangle	.59	.48	.45
50N 419	862	W	Offset Slotted	.59	.48	.45
50N 420	863	X	Drilled Cube	.59	.48	.45

## REDESIGNED 776 CORD AND HANDLE



- Spring Socket Holds Tip Firmly
- New Thermal Insulation
- Durable "Soft Touch" Cork Grip

New, improved 776 handle for exacting industrial soldering requirements. Wide selection of easily changed thread-in element units and tiplets make the 776 unique in its versatility for printed circuitry, miniature and sub-miniature systems. Durable, fatigue-free, lightweight and extremely cool—perfect for continuous use on the production line. Low initial cost, high durability and simple maintenance—an extremely economical choice.

Spring socket holds element unit solidly in place—assures full electrical contact. Internal ceramic and glass insulator for lowered handle temperature. Handle incorporates a stainless steel heat deflector. "Soft-Touch" cork grip, conforming cord housing. Octagonal guard prevents rolling. Has 6-ft. polyvinyl cord. 5" overall length. U.I. Approved. Less tip and element (left). Shpg. wt., 4 oz. 50N 304, 1-9, NET EACH ..... 1.18  
10-49, EA. .... .97 50-UP, EA. .... .90

## COMPLETE SOLDERING PENCILS



Here are three complete, compact soldering irons for general purpose work. Each is a combination of the redesigned 776 handle listed above and one of the element-tip units listed at left. Handle can also be used with any of the other elements and element-tip units on this page. The 23 1/2-watt 536 delivers 650-700° F. to a copper pyramid tip. The 37 1/2-watt 1236 element-tip, also pyramidal, delivers 750-800° F.—tip is silver-plated solid iron. The 4033 is an 850-1000° F., 47 1/2-watt element-tip with silver-plated iron-clad copper chisel tip (long taper). For operation from 110-120 v., AC-DC. Av. shpg. wt., 6 oz.

Stock No.	Description	1-9	10-49	50-UP
50N 302	Has 536 Element-Tip	2.16	1.75	1.68
50N 303	Has 1236 Element-Tip	2.35	1.91	1.83
50N 305	Has 4033 Element-Tip	3.53	2.97	2.74

## TYPE 260 SOLDER PISTOL

- "On-Target" Soldering
- Light-weight
- Tip Rotation



Pistol-grip soldering iron for rugged production-line use, as well as for use by amateurs, experimenters and builders. Designed for comfortable working and "on target" soldering. Special knob permits quick rotation of element-tip to best position for application of heat. Consists of No. 660 handle and tellurium copper chisel element-tip (800° F.). Tough phenolic handle also takes any other element-tips and element-tiplet combination. 6 ft. extra-flexible cord. For 110-120 v., AC-DC. Shpg. wt., 1 lb. 50N 103, 1-5, NET EACH ..... 3.53  
6 or More, EACH ..... 2.87

No. 660 Handle, 260 Solder Pistol less element-tip—handle only. Wt., 1/2 lb. 50N 104, 1-6, NET EACH ..... 2.35  
7-49, EACH ..... 1.91  
50 or More, EACH ..... 1.80

## NO. 400 "KLEEN-TIP" KIT

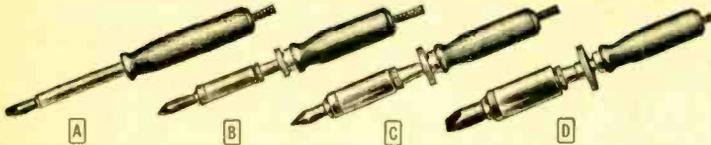
Quick, efficient way to remove oxides and excess solder from tip. Insures better connections and longer tip life. Special sponge, phenolic tray and bench bracket. 1 lb. per 12. 50N 421, 1-9, NET EACH ..... 98  
10-49, EA. .... .81 50-UP, EA. .... .75



No. 485 Refill Sponges, 1 lb. per 24. 50N 422, 1-9, NET EACH ..... 39  
10-49, EA. .... .33 50-UP, EA. .... .30

# Quality Soldering Irons

## AMERICAN BEAUTY SOLDERING IRONS



Fit any soldering application. Special iron-plated tips, available for all models, greatly reduce pitting and redressing. Casing and body are one-piece seamless steel. Lightweight, shatterproof rubberoid-coated handles. 6-ft. cords. Withstand insulation breakdown test of 1100 v.

### MODEL 3128—60 WATTS

**A** Designed for light work. Includes  $\frac{1}{4}$ " copper tip. Handy for hard-to-get-at spots. With stand. Length, 12 $\frac{1}{4}$ ". For 110-120 volts, AC or DC. Shpg. wt., 1 lb. 46 N 674. NET..... 4.25  
6 or more, EACH..... 4.05

#### REPLACEMENT TIPS AND ELEMENT

For Model 3128 iron. Type 9272 Replacement Element has mica insulation; includes handling-spring, tube and terminal assembly.

No.	Type	Description	Oz.	NET
46 N 675	3728	Copper tip	3	.30
46 N 620	3728-1P	Iron-plated tip	3	.57
46 N 670	9272	Element	6	2.30

### MODEL 3138—100 WATTS

**B** An excellent general purpose iron for home use. Also widely used in TV, radio, telephone and switchboard work and similar applications.  $\frac{3}{8}$ " dia. copper tip. Polished chrome plated metal parts. Has cooling baffle. With stand. Length, 12 $\frac{1}{2}$ ". For 110-120 volts, AC or DC. Shpg. wt., 2 $\frac{1}{2}$  lbs. 46 N 655. NET..... 6.50  
6 or more, EACH..... 6.20

#### REPLACEMENT TIPS AND ELEMENT

For Model 3138 iron.

No.	Type	Description	Oz.	NET
46 N 656	3738	Copper tip	6	.42
46 N 821	3738-1P	Iron-plated tip	6	.69
46 N 666	9273	Element	16	2.70

### MODEL 3158—200 WATTS

**C** For medium-heavy factory and production work and for working on industrial electronic equipment.  $\frac{3}{8}$ " diameter copper tip. With stand. Length, 13 $\frac{3}{4}$ ". For 110-120 volt AC or DC. Shpg. wt., 3 lbs. 46 N 650. NET..... 7.80  
6 or more, EACH..... 7.45

#### REPLACEMENT TIPS AND ELEMENTS

For 3158 iron. Tips are  $\frac{3}{8}$ ". Element is chromenickel wire on mica insulated steel rod.

No.	Type	Description	Lbs.	NET
46 N 652	3758	Copper tip	1	.98
46 N 822	3758-1P	Iron-plated tip	1	1.35
46 N 665	9275	Element	1 $\frac{1}{2}$	3.60

### MODEL 3178—300 WATTS

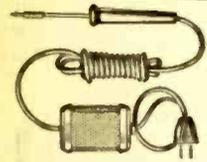
**D** Excellent heavy-duty soldering iron. Ideal for service and production work. Standard equipment in factories and shops. Length 14 $\frac{1}{2}$ "; tip dia.,  $\frac{1}{2}$ " net wt., 2 $\frac{1}{2}$  lbs. With cord, stand and tip. For 110-120 volts, AC or DC. Shpg. wt., 4 lbs. 46 N 671. NET..... 10.40  
6 or more, EACH..... 9.90

#### REPLACEMENT TIPS AND ELEMENT

For Model 3178 iron.

No.	Type	Description	Lbs.	NET
46 N 672	3778	Copper tip	2	1.95
46 N 823	3778-1P	Iron-plated Tip	2	2.36
46 N 673	9277	Element	1 $\frac{1}{2}$	4.95

### MODEL T-30 SUPER HOT SOLDERING IRON



- For Heavy-Duty Use
- Maintains Even Heat

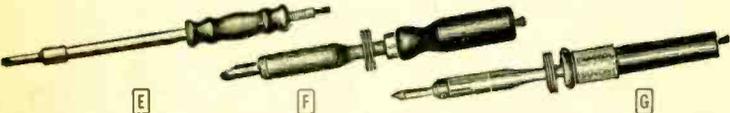
Advanced-design, 30-watt transformer-type soldering iron features exclusive "Red Hot Tip." Excellent heat-stability for heavy-duty, precision jobs. Split-coil in handle permits quick, easy change of tip-elements. Penicil-type, lightweight handle. With pre-tinned, long-life  $\frac{1}{8}$ "-dia. pyramid tip. Has 7-ft. cord. 1 $\frac{1}{2}$ " v. transformer in cord isolates iron from AC line. For 110-120 v., 50-60 cycle AC. Shpg. wt., 2 lbs. 50 N 050. 6-Up, EACH..... 11.80 1-5, EACH..... 12.40

50 N 151. As above, but with  $\frac{1}{4}$ " tip dia. 6-Up, Each..... 11.80 1-6, EACH..... 12.40

#### REPLACEMENT TIPS. For Model T-30 iron above. Wt., 2 oz.

Stock No.	Tip-Element	1-11,EA.	12-Up,EA.	Stock No.	Tip-Element	1-11,EA.	12-Up,EA.
50 N 052	$\frac{1}{8}$ " Pencil	2.15	1.70	50 N 054	$\frac{1}{8}$ " Pencil	2.15	1.70
50 N 053	$\frac{1}{8}$ " Chisel	2.15	1.70	50 N 055	$\frac{1}{8}$ " Chisel	2.15	1.70

## DRAKE GENERAL-PURPOSE & INDUSTRIAL IRONS



### ECONOMY MODELS

**E** Model 5—40 Watts. Low-cost, light-duty soldering iron. Length, 10". With  $\frac{1}{4}$ " screw-on pencil tip and stand. For 110-120 volts, AC-DC operation. Shpg. wt., 10 oz. 46 N 505. List, \$2.10. NET..... 1.23

**F** Model 315—60 Watts. General-purpose soldering iron. For light and medium-duty applications. With screw-on type  $\frac{3}{8}$ " pyramid tip and stand. For operation from 110-120 v., AC-DC. Shpg. wt., 12 oz. 46 N 521. List, \$2.80. NET..... 1.65

### MODEL 400 INDUSTRIAL—60 WATTS

**F** Small, continuous-duty 60-watt iron for close work. Only 9" long, with  $\frac{1}{4}$ " tip. Baffle plates radiate heat away from handle. Supplied complete with 6-ft. heater cord, rubber plug and stand. For operation from 110-120 v., AC-DC. Shpg. wt., 14 oz. 46 N 538. List, \$6.50. NET..... 3.82

### MODEL 360 "PEE-WEE"—35 WATTS

**G** 35-watt iron for delicate work. Supplied with  $\frac{3}{8}$ "  $\frac{1}{4}$ " pyramid tips and stand. Cork insulator on handle; heat radiating baffles. 7 $\frac{1}{2}$ " long. Designed to fit tool kit. For operation from 110-120 v., AC-DC. Shpg. wt., 8 oz. 46 N 532. List, \$5.50. NET..... 3.23

### MODEL 325 STANDARD—100 WATTS

Not illustrated. General-purpose soldering iron. Overall length, 13".  $\frac{3}{8}$ " adjustable pyramid tip. Supplied with stand. For operation from 110-120 v. Shpg. wt., 1 $\frac{1}{2}$  lbs. 46 N 523. List, \$6.50. NET..... 3.82

#### REPLACEMENT TIPS

Copper tips. \*Indicates set of two tips.

Stock No.	Description	Oz.	For Iron	NET
46 N 537	$\frac{1}{4}$ " straight pencil*	3	5	44c
46 N 535	$\frac{3}{8}$ " pyramid	6	325, 325	44c
46 N 514	$\frac{3}{8}$ " pyramid	6	315	53c
46 N 533	$\frac{3}{8}$ " pyramid*	2	350	18c
46 N 513	$\frac{3}{8}$ " pyramid	2	400	29c
46 N 547	$\frac{3}{8}$ " straight pencil*	2	350	15c
46 N 548	$\frac{1}{2}$ " 45° pencil*	2	350	15c



#### TEMPERATURE CONTROLS

Accurate controls for keeping iron temperature constant for delicate soldering. Variable from 300 to 600° F. For 110-120 v., AC or DC.

Stock No.	Model	For Iron	Oz.	List	NET
50 N 221	40	40-watt	12	\$8.00	4.70
50 N 222	60	60-watt	12	\$9.00	5.29

## ANTEX C-115 PRECISION MINIATURE SOLDERING IRON

Weights Only 1 Oz.



Easy To Handle

- No Transformer Required
- Constant 626° F. Temperature
- Ideal for Miniaturized Circuitry

Low-cost, feather-light iron for precise soldering of miniaturized circuitry. Heats up in just 45 seconds; delivers constant 626° F. directly from 110 v. AC without transformer. 50 meg-ohm insulation between element and tip makes it ideal for work around semi-conductors—there's no danger of current damage. Unit is perfectly balanced, even after hours of use you remain fatigue-free. Requires 3-wire plug below. Length 6 $\frac{1}{2}$ ". Made in England. 3 oz. 50 N 282. NET EACH..... 6.22  
6 or more, EACH..... 4.26

Eagle Model 209 3-Wire AC Plug. For use with Precision Soldering Iron listed above. Shpg. wt., 3 oz. 50 N 316. NET EACH..... 54c

Replacement Tips for Precision Soldering Iron. Install in seconds. \*Heavy duty type. Shpg. wt., 1 oz.

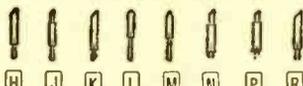
#### NICKEL-PLATED TIPS

Stock No.	Type	Size	NET EACH
50 N 287	Chisel	$\frac{3}{32}$ "	49c
50 N 283	Spade	$\frac{3}{32}$ "	49c
50 N 288	Chisel	$\frac{1}{16}$ "	59c
50 N 284	Spade	$\frac{1}{16}$ "	59c
50 N 289	Chisel	$\frac{1}{8}$ "	59c
50 N 285	Spade	$\frac{1}{8}$ "	59c
50 N 286	*Spade	$\frac{1}{8}$ "	59c

#### IRON-PLATED TIPS

Stock No.	Type	Size	1-5, EACH	6-Up, EACH
50 N 293	Chisel	$\frac{1}{16}$ "	1.47	1.22
50 N 290	Spade	$\frac{1}{16}$ "	1.47	1.22
50 N 294	Chisel	$\frac{1}{8}$ "	1.47	1.22
50 N 291	Spade	$\frac{1}{8}$ "	1.47	1.22
50 N 295	Chisel	$\frac{1}{4}$ "	1.47	1.22
50 N 292	Spade	$\frac{1}{4}$ "	1.47	1.22

## ORYX MINIATURE INDUSTRIAL IRONS



#### $\frac{1}{4}$ -OUNCE SOLDERING IRONS

Perfect for the most delicate soldering. Quick heating, low-voltage design. Operate from 6-v. AC or DC. Use with step-down transformer (below) or other 6-v. source. All are  $\frac{1}{4}$  oz. and 6" long, except  $\frac{1}{4}$  oz. and  $\frac{1}{4}$ " long. All have replaceable tips, except fixed tip shown in solder iron illustration above. Tips are described in table (below). †Develops 813° F for high-temperature applications. ‡Develops 1000° F. Av. wt., 2 oz.

Stock No.	Model	Tip (Fig.)	Watts	1-11, EACH	12 or More, EACH
46 N 817	16	fixed	6	4.85	4.36
46 N 818	5A	J	6	4.85	4.36
46 N 819	9-6	H	8.3	4.85	4.36
46 N 828	11	L	10	6.81	6.32
46 N 829	12-6	K	12	4.85	4.36
46 N 830	*18	N	18	7.35	6.91
46 N 909	125	R	25	7.84	7.40

#### REPLACEMENT TIPS

For above irons, except Model 6. Tips made of special copper alloy and are nickel plated. \*Pure nickel end for long life. Av. wt., 2 oz.

Stock No.	Fig.	For Model	Dia.	EACH
46 N 831	J	6A, 9-6	$\frac{3}{32}$ "	.49
46 N 843	I	6A, 9-6	$\frac{3}{32}$ "	.49
46 N 844	K	12-6	$\frac{3}{32}$ "	.49
46 N 845	L*	11	$\frac{3}{32}$ "	1.76
46 N 877	M*	11	$\frac{3}{32}$ "	1.76
46 N 898	N	18	$\frac{3}{16}$ "	1.22
46 N 899	P*	18, 25	$\frac{3}{16}$ "	1.81
46 N 912	R	25	$\frac{1}{4}$ "	2.30

Step-Down Transformer. For all irons above, except Model 25. Has holder for iron. Rated 18 watts. 4 $\frac{1}{2}$ -ft. AC cord. 2 $\frac{1}{4}$ " x  $\frac{1}{4}$ ". For 110-120 v., 60 cycle AC. Wt., 2 lbs. 46 N 923. NET..... 4.85  
Transformer for Model 25. As above, but rated at 25 watts. 46 N 924. NET..... 5.83

# Selected Solder and Tools

## KESTER SOLDERS

### ROSIN CORE SOLDER

Plastic rosin-filled thin solder. Flux filling flows easily for neater and quicker soldering.  $\frac{1}{2}$ " solder is recommended for general-purpose radio and electrical work;  $\frac{1}{8}$ " for fine, delicate work. 40% tin and 60% lead, except \*50-50.



Stock No.	Size	Spool Wt.	Shpg. Wt.	NET
46 N 901	$\frac{1}{2}$ "*	1 lb.	1 1/4 lbs.	1.11
46 N 902	$\frac{1}{8}$ "	5 lbs.	6 lbs.	5.35
46 N 930	$\frac{1}{2}$ "	1 lb.	1 1/4 lbs.	1.14
46 N 931	$\frac{1}{8}$ "	5 lbs.	6 lbs.	5.50
46 N 919	$\frac{1}{2}$ "*	1 lb.	1 1/4 lbs.	1.14
46 N 939	$\frac{1}{8}$ "*	5 lbs.	6 lbs.	5.50

### "RESIN FIVE" CORE SOLDER

Features "Resin 5" flux—non-corrosive and non-conductive. Makes soldering easier and faster. Handy coil,  $\frac{1}{16}$ " dia.; spool,  $\frac{1}{2}$ " dia. 40% tin and 60% lead. \*60% tin, 40% lead.

Stock No.	Size	Spool Wt.	Shpg. Wt.	NET
50 N 310	$\frac{1}{2}$ "*	5 lbs.	5 1/2 lbs.	7.20
46 N 916	$\frac{1}{2}$ "	1 lb.	1 1/4 lbs.	1.11
46 N 900	$\frac{1}{8}$ "	3 oz.	1 lb.	.17
50 N 311	$\frac{1}{2}$ "*	5 lbs.	5 1/2 lbs.	7.35

Printed-Circuit Solder—60/40 Type. Com-pounded of 60% tin; 40% lead. For copper-etched printed circuits.  $\frac{1}{16}$ " dia. 46 N 926. 1-lb. Spool. 1 1/4 lbs. NET... 1.51

### ACID CORE SOLDER

Acid core solder for all general soldering other than electrical connections.  $\frac{1}{16}$ " dia. Acid flux saves time; makes a lasting job. 40% tin and 60% lead.

46 N 905. Handy Coil. 3 oz. NET... 17c  
46 N 906. 1-lb. Spool. 1 1/4 lbs. NET... 1.11

### SOLDERING PASTE

Gives fine, even distribution of fluxing ingredients. For easier, non-corrosive soldering. 2 oz. cans. Shpg. wt., 5 oz.  
46 N 915. 10-Up, EA. 10 1/2c 1-9, EA... 12c

### KESTER TINNING BLOCK

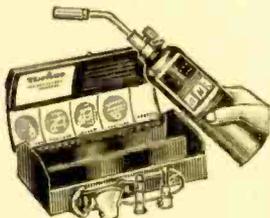
Cleans and tins soldering irons quickly. Replaces sal ammoniac. Will not crumble or cause any corrosion. Shpg. wt. 1 1/4 lbs.  
46 N 922. NET... 65c

### BLENDED TAPE SOLDER

Tape of 40/60 tin-lead solder with rosin flux. Just use a match, candle, cigarette lighter or torch for rapid soldering. Tape is wrapped around wires to be joined or metal to be bonded, and heat is applied. Flux is activated at 190° and dissipates at 210°—forms a bond that will not corrode. Has same protective qualities as bar or spool solder. 28" long—enough for 100 connections. Shpg. wt., 2 oz.  
46 N 979. List. 25c. NET... 17c



### TURNER PROPANE-GAS "TORCH" KIT



Safe, highly versatile propane torch kit. Does light and heavy duty soldering, heating and burning—like having four tools in one. All brass torch has heavy-duty valve with drag spring on knob for positive control of flame. Quick lighting propane provides a hot, clean flame. Has pencil-point burner for general applications; heavy-duty burner for big jobs. All brass flame spreader is easily attached to burner with set screw, spreads flame to full two inches for paint burning or heating asphalt tile. Solid copper, chisel point solder tip screws into all brass socket for easy attachment to burner. Tip heats in seconds. Torch is supplied complete with tank of fuel and handy spark lighter. In steel storage case, 3" high, 10 1/4" wide, 6" deep. Shpg. wt., 6 1/2 lbs.  
50 N 081. List. \$9.95. NET... 6.95

## ERSIN MULTICORE SOLDER

5-core solder for high-speed, precision soldering. Melts rapidly with less heat. Pure tin, lead, and non-corrosive Ersin flux. 40% tin; 60% lead. In 14-gauge (.080"), 16-gauge (.064"), and 18-gauge (.048") 1-lb. spools. Manufactured in England, used internationally. Shpg. wt., per spool 1 1/2 lbs.



Stock No.	Gauge	NET PER SPOOL	
		1-27	28-Up
46 N 995	14	1.41	1.18
46 N 991	16	1.43	1.20
50 N 313	18	1.47	1.24

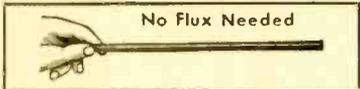
Service Pak. 18-gauge, 60/40 5-core solder. Shpg. wt., 12 oz.  
46 N 997. NET... 50c

## NEW ERSIN "SAVBIT" SOLDER

High-strength copper-tin-lead alloy solder. Has virtually same melting point and greater strength than tin-lead alloys.

Stock No.	Size	Spool Wt.	Shpg. Wt.	NET
50 N 121	14 Ga.	1 lb.	1 1/4 lbs.	1.75
50 N 122	(.080")	7 lbs.	8 1/2 lbs.	11.97
50 N 123	16 Ga.	1 lb.	1 1/4 lbs.	1.77
50 N 124	(.064")	7 lbs.	8 1/2 lbs.	12.11

## CHEMALLOY FLUXLESS ALUMINUM SOLDER

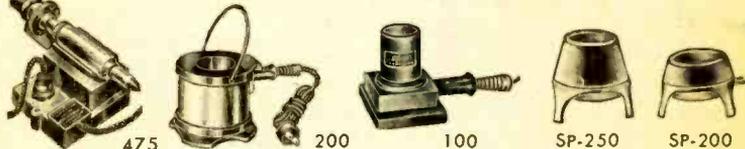


- For Aluminum, Brass, Copper
- Extremely Strong Joints
- Safe and Easy To Use

Easy-to-use solder joins any aluminum, copper, and brass surfaces without need for metal cleaning or special fluxes. Ideal for repairing plates and castings. Simplifies metal fabricating and work with aluminum chassis. Use heat source like propane torch, hot plate or heavy soldering iron. Metals can be either soldered or welded, depending on application time of heat. Joints can be made stronger than the metals themselves. Any metal that takes soft solder can be joined to aluminum by coating the aluminum with Chemalloy. Can be used with very thin-gauge metal without burning. Special composition curbs any corrosion due to electrical effects and allows use as dry-bearing metal. Use 500° solder for thin-gauge metal, 800° for heavy work. Can also be used on coatings, deposits, etc.

Stock No.	Unit	Temp.	Shpg. Wt.	NET EACH
50 N 083	2-2 oz. bars	500°	6 oz.	.59
50 N 314	2-2 oz. bars	600°	6 oz.	.59
50 N 085	2-2 oz. bars	800°	6 oz.	.59
50 N 086	1-lb. bulk	500°	1 1/4 lbs.	1.39
50 N 087	5-lb. bulk	500°	5 1/2 lbs.	5.95
50 N 315	1-lb. bulk	800°	1 1/4 lbs.	1.49

## REGULATING STAND AND SOLDER POTS



### AMERICAN BEAUTY "475" TEMPERATURE REGULATING STAND

Thermostatically controlled soldering iron rest. Maintains soldering iron temperature—even while the iron is connected to current and not in actual use. Eliminates tip burning and necessity for frequent retinning. Perfect for production line and service bench. Plastic body. Sol-

dering iron cradle of copper alloy. Has heater cord and plug receptacle. For use with soldering irons from 80 to 660 watts input, up to 240 volts, AC only. Stand does not include a soldering iron. Shpg. wt., 2 1/2 lbs.  
46 N 658. NET... 5.25

### DRAKE SOLDER POTS

Model 200—300 Watts. Heavy-duty production type solder pot. Excellent for dip soldering wires, plugs, coils and printed circuits. 2 1/2" x 2" deep well holds up to 2 lbs. solder. With detachable cord and plug set. Extension lip protects cord from solder. For 110-120 v., AC or DC. Shpg. wt., 6 lbs.  
46 N 555. List. \$12.00. NET... 7.06

Model 100—150 Watts. Ideal solder pot for general light-duty work. Excellent for tinning wires, component leads, plugs, etc. 1 1/2" dia. x 1" deep well holds 1 lb. of solder. With cord. For 110-120 v., AC or DC. Shpg. wt., 3 lbs.  
46 N 556. List. \$9.50. NET... 5.59

### LECTROHM SOLDER POTS

Solder pots for work requiring individual dipping pots. For tinning small wires, leads, etc. Sizes—SP-200: 2 1/2" ht., 2 1/2" dia., 3/4" cup depth; SP-250: 3 1/2" ht., 2" dia., 1 1/4" cup depth. Complete with 6 foot detachable cord. For 110 volt operation, AC or DC.

Stock No.	Type	Capac.	Watts	Wt.	NET
46 N 880	SP-200	1 1/2 lbs.	200	3 1/2 lbs.	4.98
46 N 881	SP-250	2 lbs.	250	3 1/2 lbs.	4.98

Replacement Nickel-Chrome Elements. Shpg. wt., 3 oz.  
46 N 882. Type A. For SP-200. NET... 1.42  
46 N 883. Type B. For SP-250. NET... 1.42

## BURGESS ELECTRIC SPRAYER KIT



Complete, Ready to Use

Sprays Most Liquids

- Precision-Ground Nozzle
- Fast and Efficient, Easy To Use

Model VS-810. Multi-purpose electric sprayer kit that handles a variety of spraying jobs. Sprays paints, varnishes, enamels, almost any liquid that can be applied by spraying. Adjuster-knob regulates spray from heavy to extra-fine. Variable direction nozzle permits spraying up or down while holding sprayer level. Special "fogging" nozzle shoots extra-fine mist stream—desirable for insecticides. External compressor and hoses are not required. Has trigger-type switch, 24 oz. graduated glass jar.

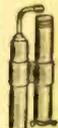
Sapphire nozzle resists abrasive action. Corrosion-proof stainless steel piston will not rust or foul—precision fit for smooth operation. Kit also includes 4-oz. auxiliary touch-up jar, and full set of spare parts including strainer attachment that keeps out paint lumps and dirt.

With hand sander and instructions. Operating mechanism sealed in a brown, shockproof, rustproof housing. Kit supplied in an attractive steel carrying case with folding handle and safety clamp. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 8 lbs.  
50 N 234. List. \$29.95. NET... 19.97

Model VS-800 Spray Gun Only. Same high quality spray gun as that in kit above. With 24-oz. jar and line cord. Size, 5 1/2 x 2 1/2". Shpg. wt., 3 1/2 lbs.  
50 N 235. List. \$12.95. NET... 8.63

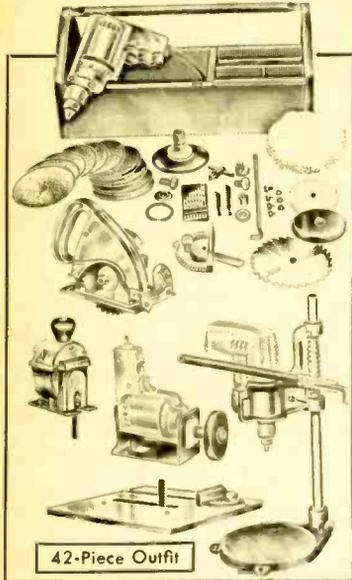
## LENK BLOW TORCH

Model 108. Handy, small-size alcohol torch for light jobs. Easily fits into coat pocket or tool chest. Copper heat conductor attached to wick insures instant starting. Curved nozzle positioned over flame tube. Screw caps on flame tube permit quick filling and prevent leakage. Double barrel, self-generating. Tubes made of nickel-plated steel for long-lasting service. Screw-on cap protects nozzle when not in use. Burns commercial or denatured alcohol. 5 1/2 x 2 x 1". Shpg. wt., 1 lb.  
43 N 701. NET... 2.06



# Power Tool Kits—Quality Grinders

## THOR "SUPER" 1/4" DRILL KIT



42-Piece Outfit

- Complete 42-Piece Electric Drill Kit
- Drills, Saws, Grinds, Polishes, Sands, Etc.
- Contains Most Commonly Used Accessories

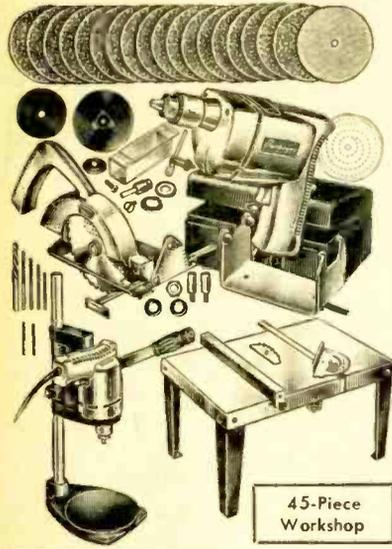
Complete, 42-piece electric drill kit. A compact home workshop consisting of a powerful drill and everything necessary to perform hundreds of do-it-yourself projects in home maintenance, as well as all sanding, grinding, sawing and polishing tasks.

Includes all accessories most commonly used by the home craftsman. Kit contains: Thor No. 20 power drill; 9 assorted drill bits in the most popular sizes; sturdy drill stand; attachments for circular saw and jigsaw; bonnet; rubber backing pad; 10 assorted grade sanding discs; grinding wheel; cloth buff; 6-piece arbor set; rugged steel saw table; steel tote box; paint stirrer; sturdy steel post for use between saw table and bench.

Powerful, highly efficient Model 20 drill included in kit features self-aligning thrust bearings to assure smooth operation. Heavy-duty 2.5 amp motor is designed for cool, continuous operation without overheating. Gear-type chuck, with positive holding action, takes drill shanks up to 1/4" diameter. Has locking pin on momentary-contact trigger switch. Drill has no-load speed of 2400 rpm; full load speed is 1500 rpm. Contoured housing fits hand comfortably. Drill length, 7". U.L. Approved. For 110-120 v., AC or DC. Shpg. wt., 20 lbs. \$2.00 Down.

50 NX 297, List, \$54.95. NET. 31.99

## DORMEYER "MATCHED CRAFT" TOOL SET



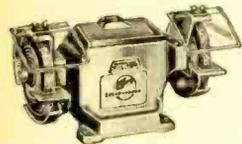
45-Piece Workshop

Model 5-3905. Highly versatile, 45-piece home workshop set. Drills, saws, polishes, grinds, sands, etc., and contains everything the home craftsman or serviceman could ask for—at an unusually low price! Workshop includes: the Model 5-2400 1/4" drill; horizontal drill stand; stationary drill press; six 4" sanding discs (60 grit); six 4" sanding discs (120 grit); 4" sandpaper pattern; 3" buffing wheel; 4" rubber backing pad; 3" grinding wheel; set of seven assorted steel drill bits; 6-piece arbor set with plastic case; 5-1103 saw attachment with rip fence—converts drill to highly useful 4 1/2" power saw; 4 1/2" combination saw blade; sturdy, tilting saw table with miter gauge and rip fence—miters, levels, cross-cuts and rips; steel case.

Model 5-2400 1/4" drill included in the set, is an indispensable home and shop tool. Has geared chuck to securely grip drill bits and attachments. Precision cut, hardened steel gears for super-torque drive. Comfortable, extra-long pistol grip provides easier handling and safety. Built-in switch lock; locks drill "on" or releases instantly. Self-lubricating bearings; smooth-operating motor. No-load speed, 2200 rpm. Die-cast, polished aluminum housing. U.L. Approved. For operation from 110-120 v., AC or DC. Shpg. wt., 22 3/4 lbs. \$2.00 Down.

46 NU 396, List, \$49.95. NET. 36.97

## THOR HIGH-QUALITY GRINDERS

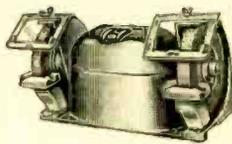


Model 118. Speed Grinder. Bench-type power grinder for the small shop, garage, or home workshop. Widely

used by model makers, hobbyists, schools, etc. Designed for medium or light work loads. Light in weight for easy portability.

Comes complete with 2 grinding wheels, 1—40 grit and 1—70 grit. Wheels are 4 1/2 x 1/2" with 3/8" center hole. Dependable 3/2-hp motor provides 3450 rpm, no-load speed. In cast aluminum body with parts tray, water cooling tray, tool rests and eye shields. With 6-ft. cord. Length, 9 1/4". For 110-120 v., 60 cycle AC only. 7 1/4 lbs.

50 NX 321, List, \$19.95. NET. 14.00



Model 127. Heavy Duty Speed Grinder. Deluxe bench grinder for all heavy-duty grinding applications in shops, garages and homes.

Keeps tools keen-edged, ready for use. Rubber feet protect work surface.

Has 2 grinding wheels: 1—46 grit and 1—75 grit. Wheel size: 6 x 3/4 x 1/2". Powerful 1/2-hp induction motor has no-load speed of 3450 rpm. Has self-aligning, composition, oil-less bearings; 1-piece cast aluminum body; adjustable tool rests with angle guides; eye-shields; 6-ft. cord. Length, 16". U.L. Approved. For 110-120 v., 60 cycle AC only. 19 1/2 lbs. \$2.00 Down.

50 NX 322, List, \$37.50. NET. 26.30

## THOR 20 UK 1/4" DRILL KIT

Complete "Power-Package" For Home Handymen

Sturdy Steel Carrying Case



Efficient, economy drill kit. Ideally suited to the requirements of the home handyman, hobbyist and others requiring the use of a dependable electric drill. Consists of a powerful 1/4" drill, accessories and a sturdy, steel carrying and storage case.

No. 20 drill, with powerful 2.5 amp motor, provides ample power for all drill accessories and attachments. Geared chuck with key assures firm, non-slip grip on drill bits and accessories. Can be used as an efficient sander, polisher and buffer, as well as a powerful drill—ideal for do-it-yourself jobs.

Kit includes: No. 20 drill; 9 assorted drill bits; 3 1/2" wool polishing bonnet; 4" rubber backer plate; 10 sanding discs; all necessary adapters and flanges; steel carrying case. Case size, 10 3/4 x 6 3/4 x 3 3/8". For 110-120 v., 60 cycle AC. Shpg. wt., 9 lbs.

50 NX 323, List, \$20.95. NET. 14.35

## THOR 60 IMPACT WRENCH-DRILL

Powerful Impact Wrench



9 Pieces

Wrench-Drill Combination

Powerful impact wrench-drill combination tool. Supplied with 6 most commonly used nut-driver sockets; 3-jaw, gear-type, 1/2" chuck and steel carrying case. As impact wrench, is perfect for assembly work or machinery repair and maintenance. Couples directly to nut-driver sockets—providing powerful torque. By use of sturdy gear-type chuck, wrench is easily converted to 1/2" drill. Can be used with attachments to do work of screwdriver, polisher, sander, hole saw, etc. With 3-cond., 10' cord. Case size, 10 1/2 x 11 3/4 x 16 1/4". For 110-120 v., AC or DC. Wt., 21 lbs. \$5.00 Down.

50 NU 018, List, \$89.50. NET. 66.82

## THOR 30-K 3/8" DRILL KIT



Drill kit with extra-power, 3/8" geared-chuck drill. Drill has speed of 610 rpm under load—permits accurate control for drilling steel, masonry, concrete, etc. Provides ample power for screwdriver attachment, wood boring to 1 1/4", hole sawing to 2". Includes: 5—5" sanding discs; 5 1/2" wool polishing bonnet; 5" rubber backing pad; steel paint mixer; set of 6 wood augers (3/8" to 1"); 9 drill bits. In steel case, 12 x 7 1/4 x 5". For 110-120 v., 60 cycle AC. Wt., 10 lbs. \$2.00 Down.

50 NX 324, List, \$35.00. NET. 23.70

# Electric Drills - Bits

## WEN MODEL 808

**3/8" DRILL**

Speed Dual

3000 RPM

1000 RPM



Only \$2.00 Down

Unique, extremely versatile, 2-speed drill featuring dual power take-offs.

Works efficiently with any high or low speed attachment. Simply insert chuck into high-speed power take-off for effortless drilling through steel, wood, aluminum, brass, or copper; insert chuck into low-speed power take-off for drilling such materials as masonry and concrete.

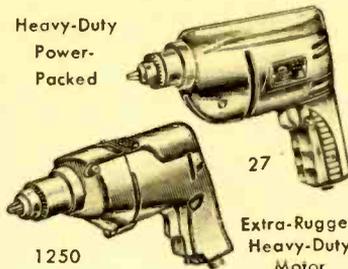
Streamlined full 3/4" capacity drill with genuine geared 1/2" chuck featuring ball thrust bearings and high torque motor. Removable extra grip-handle included for maximum ease of handling at either speed. Squeeze-type momentary contact switch with convenient "lock-on" button; comfort-grip "D" type handle. Easy-to-change speed—no gear shifting.

The 1000 rpm speed for heavy drilling and for polishing without danger of burning fine finishes. The 3000 rpm speed is highly efficient for drilling small holes, as well as for rotary sawing, sanding and wire brushing operations. Lustrous silver-gray finish. Overall length, 12 1/4"; 6-ft. heavy-duty rubber-covered cord. 2 amperes. U.L. Approved. For 110-120 volts AC-DC. Shpg. wt., 5 lbs. For 110-120 volts AC-DC. 46 N 947. List, \$29.95. NET 19.97

## THOR 1/4" POWER DRILLS

Heavy-Duty Power-Packed

1250



Extra-Rugged Heavy-Duty Motor

### MODEL 1250 DRILL

Heavy-duty, 1/4" drill featuring sealed, ball-thrust and needle-spindle bearings. Gear-type chuck. No-load 2000 rpm; full-load, 1300 rpm. Length, 9", 10-ft., 3-conductor cord. U.L. Approved. For 110-120 volts, AC or DC. 3.1 amp. Shpg. wt., 5 lbs. Only \$2.00 Down. 46 N 454. List, \$44.00. NET EACH 32.85 3-Up, EACH 30.80

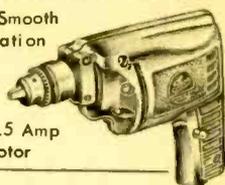
### MODEL 27 DRILL

Power-packed 1/4" drill featuring ball-bearing design for ultra-smooth operation. Rugged geared chuck with key. Fits all bits with shanks up to 1/4" dia. Has anti-friction, heavy-duty thrust ball bearing on spindle. Speed: 2200 rpm no-load, 1400 rpm full-load. Trigger type, momentary-contact switch with convenient locking pin. Length, 9", 10-ft., 3-conductor cord. 2.5 amps. U.L. Approved. For 110-120 v., AC or DC. Shpg. wt., 5 lbs. 46 N 999. List, \$27.95. NET EACH 19.56 3-Up, EACH 18.34

### MODEL 20 BUDGET DRILL

Ultra-Smooth Operation

Full 2.5 Amp Motor



- Highly Efficient 1/4" Size
- Smooth Ball-Thrust Bearings
- Gear-Type Chuck and Key

A truly outstanding value in an efficient 1/4" electric drill. For servicemen, hobbyists, etc. Lightweight and economical—a "natural" to meet do-it-yourself requirements. Rated at 2.5 amperes; has the extra power to handle the many attachments for electric drills. Designed for years of trouble-free service. Excellent for a wide variety of jobs—maintenance, farm, garage, hobby and repair shop.

Gear-type chuck takes drill shanks up to 1/4" diameter. Drills holes to 1/4" diameter in steel, and to 1/2" diameter in hardwood. Self-aligning, ball-thrust bearings assure smooth operation. Has locking pin on momentary-contact trigger switch. No-load speed, 2400 rpm; full-load speed, 1500 rpm. Supplied with chuck key. Overall length 9".

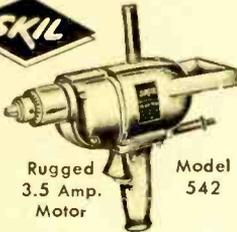
Die-cast aluminum housing for minimum weight combined with sturdiness and durability. Beautifully polished finish wipes clean. 6-ft. lead cord included. U.L. Approved. For 110-120 volts, AC or DC. Shpg. wt., 3 1/4 lbs. 50 N 009. List, \$18.95. NET EACH 11.49 6-Up, EACH 10.60

## EXTRA TORQUE 1/4" AND 1/2" POWER DRILLS

Model 549



Compact Lightweight Large 2.5 Amp Motor



Rugged 3.5 Amp Motor

Model 542

### MODEL 549 1/4" DRILL

Heavy-duty 1/4" drill features large 3.0 amp motor for an extra margin in power. Gives top-performance on all drilling jobs or when used with 1/4" drill accessories. Has over-sized fan for cool-running motor—prolongs the useful life of drill. Precision helical gears transmit power efficiently for smooth operation. Sturdy gear-type chuck fits all tool shanks up to 1/4". Rugged aluminum housing with pistol-grip. Momentary contact trigger has locking pin. No-load speed, 2500 rpm. Overall length, 8 3/4". With chuck key. Heavy 3-conductor rubber cord with ground connector. U.L. Approved. For 110-120 v., AC or DC. Shpg. wt., 4 1/2 lbs. 50 N 193. List, \$29.95. \$2.00 Down. NET 22.36

### MODEL 542 1/2" DRILL

Power-packed 1/2" drill with rugged 3.5 amp motor and 3 separate handles. Heavy-duty end-thrust bearings and self-aligning bronze bearing-type chuck takes up to 1/2" shanks. Drills holes in steel up to 1/2" in dia.; 1" in wood. Pistol-grip handle has momentary-contact switch with locking pin. No-load speed, 500 rpm. Heavy 3-conductor rubber cord. With chuck key. Length, 12 1/4". For 110-120 v., AC-DC. Wt., 11 lbs. 50 N 194. List, \$49.95. \$2.00 Down. NET 37.29

## BEAVER HIGH-SPEED SAW DRILL BITS

A remarkably versatile all-purpose bit for use with any 1/4" or 1/2" electric drill, including drill presses. Made of the finest abrasive-resistant steel, it drills, saws and reams in practically any material. Use it for angle iron, pipe, wood, plastics, sheet metal, radio chassis, rack panels, etc. Easy to use since it drills its own starter hole. Cuts circles, ovals, squares, scrolls and all types of unusual holes. Works on objects too large to put on a jig-saw. An extremely helpful tool for the serviceman, woodworker, electrician and hobbyist. Excellent for making cutouts in record changer boards, speaker enclosures and equipment panels. Flutes designed for non-clogging operation at high speed. The three models listed below have cutting edges especially shaped for the recommended types of material to be cut. Av. shpg. wt., 3 oz.

46 N 795. All-Purpose Bit. NET 1.65  
46 N 796. Wood Bit. EACH  
46 N 797. Heavy-Metal Bit. EACH

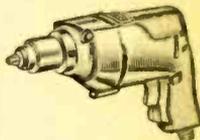


- For 1/4" or 1/2" Electric Drill
- Of Abrasive-Resistant Steel

## THOR 3/8" POWER DRILLS

### MODEL 325 DRILL

High-quality 3/8" drill rated for standard industrial service. Drills holes to 3/8" diameter in steel, to 3/4" in hardwood. No load speed is 1000 RPM, full load speed 650 RPM. Has 3/4" gear-type chuck with key. Bronze bearings on armature shaft, intermediate shaft and gears. One heavy-duty radial and thrust ball-bearing on working end of chuck spindle. Single-pole switch with locking pin. Universal series wound motor is AC-DC. 6-ft. 3-conductor lead cord included. 9 3/4" long. For 110-120 v., AC-DC. 3 amps. 4 1/2 lbs. 50 N 317. List, \$34.95. \$2.00 Down. NET EACH 24.47 3-Up, EACH 22.94



### MODEL 1275 DRILL

Heavy-duty, industrial rated 3/8" drill (similar to model 325 above) featuring all-sealed anti-friction ball and needle bearings. Ball bearings on armature shaft; needle bearings on intermediate shafts and gear case. Drills holes to 3/8" dia. in steel, to 3/4" dia. in hardwood. No load speed is 1000 RPM, full load speed 650 RPM. 3/4" geared chuck with key. Heavy duty two-pole switch with locking pin. 10-ft. 3-conductor cord is included. Overall length 9 3/4". U.L. Approved. For operation from 115 volt. AC-DC. 3.1 amps. Shpg. wt., 4 1/2 lbs. 50 N 318. List, \$46.00. \$2.00 Down. NET EACH 33.60 3-Up, EACH 31.50

## THOR 1/2" POWER DRILLS

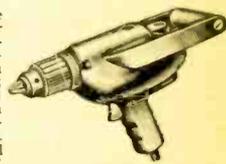
### MODEL 1430-R DRILL

New, 1/2" drill features powerful 6.5 ampere motor and built-in reversing switch on handle. Drills holes to 1/2" dia. in steel, to 1" dia. in hardwood. Rotating rear handle locks in any position through complete 360°. No load speed 550 RPM, full load speed 400 RPM. 3 heavy-duty ball bearings on upper and lower armature shaft and spindle. Highly polished, die-cast aluminum alloy housings. 1 1/4" overall length. 6.5 amp. Includes 1/2" geared chuck with key, 10-ft. 3-conductor lead cord. For 115 v., AC-DC. Shpg. wt., 9 lbs. 50 N 319. List, \$54.95. \$2.00 Down. NET EACH 38.47 3-Up, EACH 36.06



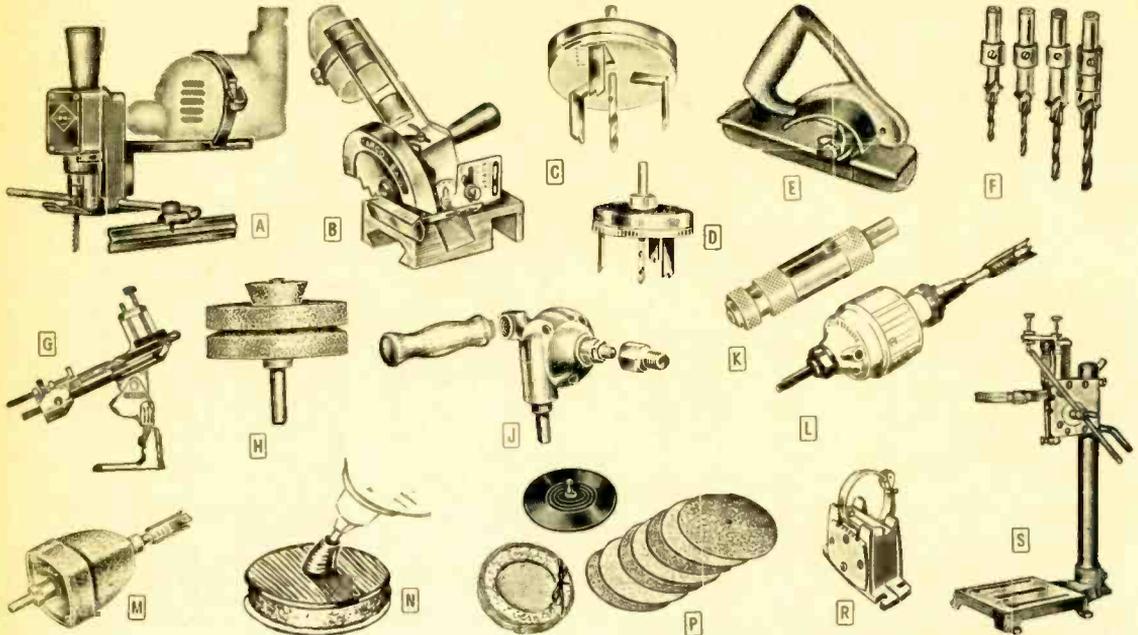
### MODEL 400 1/2" DRILL

Outstanding power and performance are combined in this heavy-duty 1/2" drill. For drilling in both metal and wood. Removable side handle for close drilling. Heavy-duty radial and end-thrust ball bearings on spindle. Other bearings are self-aligning bronze. No load speed 650 RPM; full load speed 425 RPM. 1/2" geared chuck with key. Momentary contact switch with locking pin. 3-wire line cord. U.L. Approved. Lightweight aluminum housing. Overall length 13". 5.5 amp. For 110-120 volts, AC or DC. Shpg. wt., 11 lbs. 46 N 455. List, \$39.50. \$2.00 Down. NET 25.33 3-Up, NET EACH 23.75



# Power Drill Accessories

## SHOP ATTACHMENTS FOR ELECTRIC DRILLS



Convert a portable power drill into a complete home workshop. The accessories attach to your drill easily and quickly to become

a power saw, a power screwdriver, power planer, sander, buffer or polisher. Ruggedly built for years of dependable service.

**A Arco 560 Jig Saw.** Versatile jig-saw attachment—has adjustable circle-cutter and rip-gauge. Fits any  $\frac{1}{4}$ " electric drill. Cuts perfect circles up to 20" in diameter; rips up to 10" wide. Does work of jig, keyhole, coping, rip, crosscut, band and hacksaw. Cuts plywood, plastic, etc.—even 2x4 lumber. Air-blower keeps sawdust away from blade. Cuts openings for plumbing, switch-boxes, etc., without boring starting hole. Has right-angle drive. With blade. Shpg. wt., 2½ lbs.  
50 N 231. List, \$10.95. NET **7.30**

**Extra Blades.** For above jig-saw attachment. Assortment of six blades—2 coarse; 2 medium; 2 fine-tooth. For cutting plywood, wallboard, hard and soft woods, etc. Shpg. wt., 2 oz.  
50 N 232. List, \$1.95. NET **1.30**

**B Arco 456 Circular Saw.** Converts any  $\frac{1}{4}$ " drill into a power saw. "Dado-Arbor" swivels saw blade to cut any groove up to  $\frac{1}{2}$ " wide by 1" deep. Graduated depth gauge is adjustable for cutting to depth of 1½"; bevel gauge is accurately calibrated for making cuts from 0 to 45°. Rugged, right-angle steel gear from 0 to 45°. Gear case contains self-lubricating bearings. With rip guide, yoke, and 5" "Arco Safecut" blade. 4 lbs.  
50 N 000. List, \$12.95. NET **8.63**

**REPLACEMENT BLADES.** 5" blades for Arco 456. Tempered tool steel;  $\frac{1}{4}$ " bore.  $\frac{1}{4}$  lb.

Stock No.	Type	Description	EACH
50 N 001	250T	Safecut blade	1.33
50 N 002	252T	Crosscut blade	
50 N 003	253T	Rip blade	
50 N 004	255T	Combination blade	

**C Skill 19781 Hole Saw.** Attachment for any  $\frac{1}{4}$ " drill. Cuts holes from 1½" to 2½". For cutting adjustment, simply loosen clamping nut and rotate or "dial" bottom plate for desired diameter. Steel cutters bore wood, plastic and composition. 1½ lbs.  
50 N 269. List, \$4.95. NET **3.99**

**D Erwood 355 Dial Saw.** Use with brace, electric drill, drill press, lathe, milling machine. Has  $\frac{3}{8}$ " shank. Dials and cuts holes of any size, 1½" to 3½", in metals, woods, plastics. Also rotary wood planer and groove cutter. With set of high-speed metal cutting blades, one  $\frac{3}{8}$ " Pilot drill. Wt., 1½ lbs.  
50 N 373. List, \$9.70. NET **6.72**

**E Rotox "Roto-Plane" Attachment.** Planes at any angle—with, across or against grain of wood. Depth of cut is adjustable (0° to  $\frac{1}{8}$ "). Guide edge provides automatic planing at a true 90°. Diagonal shearing action eliminates deflections from knots, etc. Specially designed, 6-flute, spiral steel cutter is deep hardened and precision ground. Planing width, 1½". Die-cast aluminum housings. 3 lbs.  
45 N 872. List, \$11.95. NET **8.78**

**F Arco Screw-Drills.** Combination pilot hole drill and countersink. Steel bit,  $\frac{1}{4}$ " shank. \*Wood-screw size. Av. shpg. wt., 2 oz.

No.	Type	*For	1-5, EA.	6-Up, EA.
50 N 010	1106	#6	75c	65c
50 N 011	1108	#8		
50 N 012	1110	#10		
50 N 013	1112	#12		

50 N 014. Set of 4 drills above. 6 oz. **2.84**  
1 to 5 Sets, PER SET **2.46**  
6 or More Sets, PER SET **2.46**

**G G-H 825 Drill Grinding Tool.** Drill-holding jig. Holds drill in correct position for accurate repointing and sharpening. Use with either hand or electric grinder. Jig bolts to table or bench. 1 Handles these drill sizes: Fractional— $\frac{1}{8}$ " to  $\frac{3}{4}$ "; Number size—No. 30 to No. 1; Letter size—A to Z; Millimeter size—3.0 to 19.0. Attachment is fully adjustable and ruggedly built. Shpg. wt., 2 lbs.  
46 N 106. List, \$6.60. NET **5.17**

**H Babco Knife and Scissors Sharpener.** Attachment fits into the chuck of any  $\frac{1}{4}$ " electric drill. Beveled groove between 2 grinding wheels sharpens any knife quickly and efficiently. Cup guide on end of shaft holds scissors at proper angle for sharpening. 5 oz.  
50 N 377. List, \$1.50. NET **1.15**

**J Babco 742 Right-Angle Drive.** Use with  $\frac{1}{4}$ " electric drills for drilling in confined spaces such as between joists or shelves, crowded radio and TV chassis, etc. Fits directly on  $\frac{1}{4}$ "-24 threaded spindle (male or female). Choice of 2 speed ratios; half drill speed for polishing and double drill speed for sanding. Shpg. wt.,  $\frac{1}{2}$  lb.  
50 N 375. List, \$4.49. NET **3.31**

**Babco 730 Right-Angle Drive.** Heavy duty. For  $\frac{1}{2}$ " drills. Shpg. wt., 1 lb.  
50 N 376. List, \$19.95. NET **14.70**

**K Ideal 90-072 Rotary Impact Drill Attachment.** Converts any heavy duty,  $\frac{1}{4}$ " electric drill into a masonry impact drill. Will take regular masonry bits.  $\frac{3}{8}$ " bit drills 1½" deep hole in concrete in 30 seconds. Female threaded shank attaches directly to male threaded drill shaft. Just remove drill chuck and screw on. With roto-lock chuck and 3 adapter bushings for bits. Wt., 1 lb.  
50 N 374. List, \$30.00. NET **23.52**

**L Babco 825 5-1 Speed Reducer.** Fits any  $\frac{1}{4}$ " electric drill or any drill press. 5-to-1 gear reduction produces large torque increase, more power at slower speed. Drives or removes up to No. 14 screws easily. Drills masonry or wood. Reverses for tapping up to 5 holes per minute. With  $\frac{1}{4}$ " and  $\frac{1}{2}$ " adapters,  $\frac{1}{4}$ " adapter sleeve, screwdriver bit with sleeve. 1 lb.  
50 N 005. List, \$13.95. NET **10.29**

**M Babco 815 Screwdriver Attachment.** Friction clutch screwdriver attachment for  $\frac{1}{4}$ " electric drills. Hard rubber male cone and metal female cone for sufficient clutching power to drive up to #12 x 1¼" wood screws. Can mount attachment in chuck of  $\frac{1}{4}$ " drill or on spindle after chuck has been removed. Heavy, oil-retaining bronze bearings take both thrust and radial loads. Includes:  $\frac{1}{4}$ " shank to  $\frac{1}{4}$ "-24 thread adapter; screwdriver bit with finger sleeve. Shpg. wt., 1 lb.  
50 N 378. List, \$4.95. NET **3.71**

**N Babco 30 Foam Disc Sander Kit.** New, 5" foam rubber backing pad with  $\frac{1}{4}$ " "rubber-nex" swivel drive. Spindle fits any  $\frac{1}{4}$ " electric drill. Perfect for sanding flat, curved or irregular surfaces—no gouges or swirl marks. The soft foam backer gives the sanding disc a vibration-free contact with wood. Supplied complete with 6 assorted sanding discs for wood or metal. Shpg. wt.,  $\frac{1}{4}$  lb.  
50 N 238. List, \$2.25. NET **1.65**

**Babco 509 Replacement Discs.** Pkg. of 6 sanding discs. Shpg. wt.,  $\frac{1}{4}$  lb.  
50 N 239. NET **.37**

**P Babco 407 Sanding and Polishing Kit.** Complete sanding and polishing kit that can be used with any electric power drill. Takes most of the work out of wood or metal finishing operations. It sands, smooth-buffs and polishes with assorted sanding discs and a genuine, high-quality lambswool bonnet. Kit permits completing sanding and buffing operations in a fraction of the normal time. Has a 5" rubber backing pad (fits into chuck of drill), 6" lambswool bonnet and 7 assorted sandpaper discs. Shpg. wt., 10 oz.  
46 N 364. List, \$1.95. NET **1.43**

**R Babco 912 Horizontal Drill Stand.** Sturdy one-piece metal drill stand clamps or screws firmly on any bench or shelf. Ideal for converting any  $\frac{1}{4}$ " electric drill into a handy bench tool. Increases efficiency in any workshop. Perfect for sanding, buffing, grinding and wire brushing; both hands are free to do the work. A heavy-duty clamp holds drill securely in position on stand; an adjustable nut keeps drill at a level working position. 6 lbs.  
50 N 379. List, \$2.75. NET **2.02**

**S Babco 946 Drill Press Stand.** Drill stand converts any  $\frac{1}{4}$ " plastal grip electric drill into a lever operated drill press. Has positive-action locking to hold drill at height selected. Has 2½" stroke. Drill press head stays in position—only slide moves. Take-up rib on slide maintains precision fit for smooth operation. Handle provides up to 15-to-1 leverage. Leverage is set with thumbscrew adjustment. Adjustable depth stop for drilling holes to identical depths. Wt., 6 lbs.  
50 N 233. List, \$13.95. NET **10.25**

# Power Tool Kits — Drill Accessories

## COASTAL WIRE WHEELS AND BRUSHES



Wire wheels and brushes for home and servicing uses. For any electric drill or grinder that will accept a 1/4" shaft. Both wheel and cup type brushes are stocked in fine and coarse grades. Type Nos. ending with "C" are coarse. Those ending in "F" fine. Excellent for removing rust and oxide coatings before painting or plating. \*Similar to Fig. A, but has shank.

Stock No.	Fig.	Mfr's Type	Dia.	Mtg.	Wt. Oz.	NET EACH
50 N 023	A	91CF	2"	1/4" Shank	4	.59
50 N 024	A	91CC	2"	1/4" Shank	4	.54
50 N 026	A	91EF	3"	1/4" Shank	6	.69
50 N 027	A	91EC	3"	1/4" Shank	6	.67
50 N 028	B	92C	2"	1/4" Shank	4	.89
50 N 029	B	92F	2"	1/4" Shank	4	.99
50 N 200	A	P94F	4"	1/2" Bore	8	.89
50 N 201	A	P94C	4"	1/2" Bore	8	.69
50 N 202	A	P96F	6"	1/2" Bore	12	1.25
50 N 203	A	P96C	6"	1/2" Bore	12	1.03

**Muslin Buff.** High-quality 6" muslin buffing wheel and bar of jewelers rouge in sealed plastic bag. Ideal for the craftsman or the hobbyist. For buffing and polishing silver, copper, brass, etc. Has 1/2" bore, can be used with arbor listed below. Shpg. wt., 4 oz. 50 N 204. NET **81c**

**Muslin Buff.** Identical to above, but has 4" diameter. Shpg. wt., 3 oz. 50 N 205. NET **49c**

**725 Arbor.** For holding wire and buffing wheels shown above. Has 1/4" shank, 1/2" body. Can be used with any 1/4" capacity electric drill. Has machined and nickel plated body. Packed in clear plastic bag. Shpg. wt., 8 oz. 50 N 206. NET **44c**

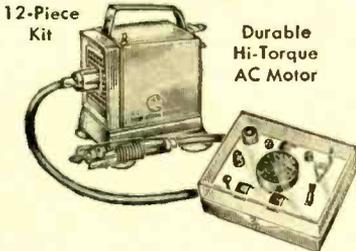
**Bag of 5" Assorted Sanding Discs.** Set of 6 sanding discs. Supplied in useful plastic bag. Shpg. wt., 8 oz. 50 N 207. NET **23c**

## DRILL CHUCK KEYS

**1/4" Chuck Key.** For gear-type chucks. Made of highest quality materials. Shpg. wt., 4 oz. 50 N 195. NET **53c**

**1/2" Chuck Key.** Same as above, but for 1/2" chucks. Shpg. wt., 5 oz. 50 N 197. NET **64c**

## DREMEL MODEL 64 "FLEX-SHAFT" POWER UNIT



Extra rugged AC motor with 30" flexible shaft. Built to withstand hard usage—ideal for use in workshops, laboratories, schools, etc. Grinds, drills, carves, engraves, sands and polishes. Shaft is equipped with a lightweight, easy-to-handle plastic handpiece. Will not heat up even under continuous use. Has a steel finger grip for close detail work. Accommodates 1/8", 3/16" and 1/4" collets.

Powerful motor operates at 3450 rpm. Has no carbon brushes or commutator to service. Bronze bearings require no oiling. Unit has non-slip rubber suction feet and convenient carrying handle. Chrome and enamel finish.

Supplied with extra collet and instructions. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 6 1/2 lbs. 45 N 233. List, \$32.50. NET **21.66**

**Model 674 Kit.** For above. Includes: 1 steel cutter, 1 twist drill, 2 wheel points, 2 bristle brushes, 1 sander, 3 sander bands and 2 collets. In plastic box. 2 lbs. 45 N 234. List, \$5.15. NET **3.49**

## CENTURY "MAGIC BLACK" HIGH-SPEED DRILLS



7-Drill Set

13-Drill Set

Drill Only



High-Speed Drills



Masonry Set

Complete assortment of top-quality drill bits. All sets feature special "Magic Black" temper to insure extra long life and keep points sharp longer. Supplied in handy containers.

**7-Drill Set.** 7 drills, 1/16" to 1/4" in 1/32" graduations. Shank sizes same as drill diameters. Supplied in handy, hinged, clear plastic container. All units are conveniently indexed so that desired drill bit can be located immediately. Shpg. wt., 6 oz. **2.90**

**5-Drill Set.** Includes 5 drills, 1/4" to 1/2" in 1/16" graduations. Have 1/4" diameter shanks. With handy, indexed container of transparent plastic; drill bits are easily visible for quick selection. Shpg. wt., 1 lb. 46 N 784. NET **6.70**

**13-Drill Set.** Includes 13 drills, 1/16" to 1/2" in 1/32" graduations. Packed in Huot Index Drill Case. Opens like a book with every drill instantly accessible and identified. Case size, 4 3/4 x 2 1/4". Shpg. wt., 9 oz. 46 N 782. NET **5.44**

**15-Drill Set.** 15 quality drills, 1/16" to 1/2" in 32nds. Sizes over 1/4" have 1/4" shank. Huot Case has space for 14 more drills in 1/4" graduations. Case, 7 x 4 1/4". Shpg. wt., 3 lbs. 46 N 786. NET **17.01**

**60-Drill Set.** Complete assortment of 60 drills. In 12 sizes 1 to 60. Packed in a steel Huot Index Drill Case for protection and maximum accessibility. Case opens like book for quick selection of desired bit. Size of case, 4 3/4 x 3 3/4 x 2 1/4". Shpg. wt., 1 1/4 lbs. 46 N 717. NET **21.44**

## CENTURY MASONRY DRILL



**Type L-56 18" Carbide Drill.** Extra long for drilling 1/2" holes in brick, concrete, stone, etc. 4 1/4" flute. Carbide tip provides clearance for expansion shields, plugs, etc. Shank dia., 3/8". Shpg. wt., 1 1/4 lbs. 50 N 199. NET **5.25**

## SPECIAL-PURPOSE DRILL BITS

**4-Piece Masonry Drill Set.** 1/4", 3/8", 1/2" and 5/8" shanks fit standard 1/4" electric drills. Carbide tips for drilling concrete, bricks and plaster. In plastic roll. Shpg. wt., 5 oz. 46 N 718. NET **3.17**

**Chrome Steel Drill Bit Set.** Set of 5 chrome-alloy steel bits for electric drills. For use on aluminum and other soft metals. Sizes, 1/4", 3/8", 1/2", 5/8" and 1". Have 1/4" shanks. In hinged, clear plastic box. Shpg. wt., 1 lb. 46 N 787. NET **3.18**

## "MAGIC BLACK" INDIVIDUAL DRILLS

High-speed drill bits in sizes from 1/16" to 1/2". Feature "Magic Black" super-hard temper. Drills packaged in plastic. Sizes over 1/4" have 1/4" shank. Av. shpg. wt., 3 oz.

Stock No.	Size	NET	Stock No.	Size	NET
46 N 723	1/16"	.17	46 N 734	1 1/2"	.48
46 N 724	1/8"	.19	46 N 735	1 3/4"	.52
46 N 725	3/16"	.20	46 N 737	1 7/8"	.60
46 N 726	1/4"	.20	46 N 739	1 7/8"	.90
46 N 727	5/16"	.23	46 N 741	1 1/2"	1.09
46 N 728	3/8"	.24	46 N 743	3/4"	1.12
46 N 729	1/2"	.25	46 N 745	1 1/2"	1.37
46 N 730	5/8"	.29	46 N 747	3/8"	1.73
46 N 731	3/4"	.39	46 N 749	1 1/2"	1.97
46 N 732	1 1/8"	.42	46 N 781	1/2"	2.24
46 N 733	1 1/4"	.46			

## HIGH-SPEED INDIVIDUAL DRILLS

For wood, plastic, thin aluminum sheets, etc. 1/4" shanks. Av. wt., 3 oz. In plastic sleeves.

Stock No.	Size	NET	Stock No.	Size	NET
50 N 351	1/8"	63c	50 N 356	1 1/2"	78c
50 N 352	3/16"	66c	50 N 357	1 3/4"	81c
50 N 353	1/4"	75c	50 N 358	1 7/8"	81c
50 N 354	5/16"	75c	50 N 359	1"	84c
50 N 355	3/8"	78c			

**6-Piece Hi-Speed Power Bit Set.** 1/4", 1/2", 3/8", 5/8", 1", 1 1/2". For wood, sheet metal, etc. 1/4" dia. shanks. In plastic sleeves. 12 oz. 50 N 350. NET **4.47**

**12" Bit Extension.** 1/4". With hex key. 7 oz. 50 N 360. NET **1.20**

## VERSATILE POWER TOOL KITS



V-760



G-A-K



No. 2

### BURGESS V-760 TOOL KIT

Marking, engraving and craftsman's kit. Ideal for many industrial identification applications as well as servicing and hobbyist uses. Kit includes Burgess Vibro-Tool, ten all-purpose attachments and sturdy steel storage case. Extremely compact and easy-to-carry. Uses include: jewelry engraving; tool and instrument marking; decorating and engraving metal and glass; embossing metal; marking bottles and glass slides; copper and steel plate etching; leather tooling and cutting, etc. For 110-120 volt, 60 cycle AC. Shpg. wt., 3 1/2 lbs. 46 N 290. List, \$14.95. NET **9.77**

### THOR G-A-K TOOL KIT

Low-cost, 28-piece power tool kit. Speedy Grinder has powerful AC-DC 20,000 rpm motor; self-aligning bronze bearings. Slide-type switch. Ideal for precision cutting and grinding of intricate parts. Kit includes: 4—grinding stones; 4—cutting burrs; 3—brushes; 1—polishing tool; 2 mandrels; and 12 sanding discs. With case and manual. For 110-120 v., 60 cycle AC or DC. 2 1/2 lbs. 46 N 365. List, \$17.95. NET **12.56**

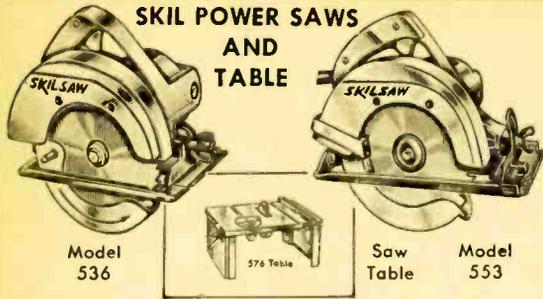
### DREMEL MOTO-TOOL KITS

**Moto-Tool Kit No. 2.** Offers a powerful tool for heavy-duty jobs. Features a sturdy, 27,000 rpm rotary motor—operates dependably under long periods of continuous use. Attachments include: emery wheel points, wire and fibre bristle brushes, mandrels, drum sander and a variety of high-speed steel cutters. Collet with lock pin permits quick changing of attachments. Self-aligning bearings are mounted in felt oil retainers—minimizes oiling. Kit comes complete in attractive, white plastic box. Size, 3 3/8 x 5 1/2" deep. Supplied with instructions. For operation from 110-120 volts, AC or DC. Shpg. wt., 4 lbs. 46 N 378. List, \$27.50. NET **20.53**

**Moto-Tool Kit No. 1.** As above, but designed for light-capacity grinding, polishing, etc. Popular with model makers, lab technicians and hobbyists. Numerous attachments supplied with this kit make it possible to do precision jobs in much less time. Collet chuck. Complete with 34 accessories. For 110-120 v., AC or DC. Shpg. wt., 3 1/2 lbs. 46 N 377. List, \$23.50. NET **17.53**

# Power and Jig Saws

## SKIL POWER SAWS AND TABLE



Model 536

576 Table

Saw Model 553 Table

### MODEL 536 6 1/2" SAW

Rugged power hand saw with many professional features. Efficient 1-hp motor delivers power to spare on tough cuts. No-load speed is 6300 rpm. Variable torque clutch provides built-in motor protection—saw shaft spins free if blade binds or jams in cut. Telescoping lower guard shields blade—retracts as blade enters work. 6 1/2" blade cuts 2 3/4" deep at 90°; 1 3/4" at 45°. Cuts "2x4's" at 45°. 3/8" round arbor. Equipped with safety retractor handle; enclosed single-pole, momentary-contact trigger switch; all-sleeve bearings. Easy-to-read calibrations allow accurate, adjustable bevel-cut setting from 0° to 45°. Overall 9 1/2". Included are: combination blade, blade wrench, two-wire cord and connector. U.L. Approved. For 110-120 v., AC or DC. Shpg. wt., 12 lbs. 45 NX 224. List, \$49.95. \$2.00 Down. NET ..... 37.29

MODEL 17984 RIP FENCE. For Model 536 saw above. Shpg. wt., 4 oz. 50 N 278. List, \$2.95. NET ..... 2.34

### MODEL 553 7 1/4" SAW

- Powerful Home Workshop Power Saw
- Suitable for Heavy-Duty Construction Use

Designed for heavy-duty construction use. Handles tough framing and rafter cuts. Easily cuts through "2x4's" even at 45° bevel. Has powerful 1 1/4-hp motor; no-load speed, 6300 rpm; variable torque clutch. Saw shaft will spin free if the blade binds or jams in cut. Makes accurate 90° cuts. Easy-to-reach depth-of-cut adjustment locks saw rigid at desired cutting depth. Telescoping lower guard shields blade. 7 1/4" blade cuts to 2 3/4" depth at 90°; 1 3/4" at 45°. Diamond arbor. U.L. Approved. For operation from 110-120 v., AC or DC. Shpg. wt., 16 1/2 lbs. 45 NX 222. List, \$79.95. \$5.00 Down. NET ..... 59.69

MODEL 20271 RIP FENCE. For Model 553 saw above. Shpg. wt., 4 oz. 50 N 279. List, \$1.50. NET ..... 1.19

MODEL 576 SAW TABLE—For 536 & 576. Converts Skil saws to bench saws. 21x16 1/2" table top. 14" high. By adjusting blade height, can be used for grooving, notching, and dadoing. Has easily adjustable miter and rip guides. Shpg. wt., 15 1/2 lbs. 45 NX 226. List, \$19.95. NET ..... 14.89

13282 STEEL CARRYING CASE FOR 553 SAW. 12 1/2 x 11 1/4 x 2 3/4". Wt., 13 lbs. 45 NX 223. List, \$18.00. NET ..... 13.44

18606 STEEL CARRYING CASE FOR 536 SAW. 11x11x 12 1/4". Shpg. wt., 8 1/4 lbs. 45 NX 225. List, \$16.00. NET ..... 11.95

## THOR POWER SAWS



For Home and Shop

450

70

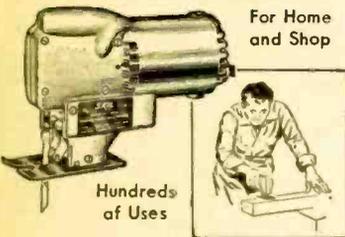
### MODEL 450 6 1/2" SAW

A heavy-duty, power hand saw which fully meets all the requirements for trade use by carpenters and contractors. Rugged, dependable, economical tool for general purpose use. Top quality design and construction features assure fast, accurate cuts. A fine addition to either a professional or a home craftsman tool kit. Power, balance and ease of handling make this saw the favorite of do-it-yourselfers and professional carpenters alike. Rugged 1 1/4-hp (9 ampere) motor has no-load speed of 5500 rpm. Automatic blade guard with lifter handle for plunge cuts. Spring-loaded, ball-bearing mounted blade guard exposes only portion of blade required while cutting. Large 6 1/2" blade cuts to 2 3/4" depth at 90°; 1 1/4" at 45°—cuts "2-by-4's" at 45°. Minimum depth of cut 1/4". Graduated angle adjustment easily adjusts to any angle between 90° and 45°. Comfortable, easy-grip handle with momentary-action trigger switch with locking pin and guard. Tempered steel blade made of correct gauge to provide long life and most economical service. With combination (rip and crosscut) blades, heavy-duty rubber covers for accurate setting. Smooth, effortless cutting even through a "2x4" yet this saw is lightweight and perfectly balanced. Cuts 1 1/2" stock at 45° and 2 1/4" at 90°. Safety slip-clutch feature provides protection against motor burn-out, excessive wear on gears and bearing—saw shaft will spin free if blade binds or jams in cut; gives extra safety needed against possible saw "kick-back." Telescopic blade guard shields blade—automatically retracts as blade enters work. Wide range cutting vision for greater cutting accuracy. Oversize switch. Supplied with "7" combination blade—smooth-cutting, long-lasting—for faster cutting with a minimum of blade wear. An all-purpose blade, suitable for ripping and crosscutting. Die-cast, lightweight aluminum motor housing. For 110-120 volts, AC or DC. Shpg. wt., 15 lbs. 46 NX 788. List, \$49.95. \$2.00 Down. NET ..... 34.97

### SPEEDWAY MODEL 70 7" SAW

10 ampere motor provides full 1.5-hp for both home and workshop use. Quality-built and powerful to tackle the most rugged jobs with ease. Used by construction workers, electricians, service men; speeds any remodeling job, cabinet-making or carpentry work. And budget-priced for an outstanding workshop value. Features heavy-duty motor, 6000 rpm speed. Built-in calibrator for 0° to 45° cutting; gives easy, fast-locking "one-point" adjustment; easy-to-read calibrations for accurate setting. Smooth, effortless cutting even through a "2x4" yet this saw is lightweight and perfectly balanced. Cuts 1 1/2" stock at 45° and 2 1/4" at 90°. Safety slip-clutch feature provides protection against motor burn-out, excessive wear on gears and bearing—saw shaft will spin free if blade binds or jams in cut; gives extra safety needed against possible saw "kick-back." Telescopic blade guard shields blade—automatically retracts as blade enters work. Wide range cutting vision for greater cutting accuracy. Oversize switch. Supplied with "7" combination blade—smooth-cutting, long-lasting—for faster cutting with a minimum of blade wear. An all-purpose blade, suitable for ripping and crosscutting. Die-cast, lightweight aluminum motor housing. For 110-120 volts, AC or DC. Shpg. wt., 17 lbs. 50 NX 274. List, \$36.00. Only \$2.00 Down. NET ..... 26.66

## SKIL 514 JIG SAW



For Home and Shop

Hundreds of Uses

- Fast Orbital Blade Action
- Cuts Plastic, Metal, 2" Lumber
- Weighs Only 3 1/2 lbs.

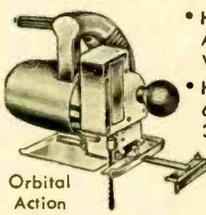
Jig saw with extremely efficient orbital cutting action which reduces blade "drag" for faster cutting with a minimum of blade wear. Exclusive roller-follower head supports and guides blade while cutting to provide added support. A useful multi-purpose saw for any craftsman for its crosscuts, rips, scrolls, notches. Can be used to cut intricate patterns easily and fine decorative curves accurately—including inside curves and cutouts. Use it for starting a hole for pocket cuts—no need to drill hole in stock. Powerful 1/2" stroke cuts practically any material including 2" lumber, plywood, plastics and metal. Features Universal AC and DC motor; 4000 rpm no-load speed; ball-thrust and cushion-mounted sleeve bearings throughout; single pole toggle switch. Equipped with 3-wire cord and connector, blade wrench, 3 jig saw blades. Overall length 9 1/2" amp. For 110-120 volts, AC or DC. Wt., 5 lbs. List, \$37.50. 50 NU 074. \$2.00 Down. NET ..... 35.54

### REPLACEMENT BLADES

FINE BLADE. Shpg. wt., 3 oz. 50 N 075. NET ..... 64c

COARSE BLADE. Shpg. wt., 3 oz. 50 N 076. NET ..... 33c

## WEN 909 "ALL-SAW"



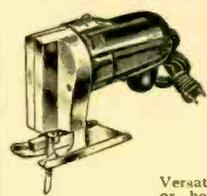
Orbital Action

Heavy-duty, fast-cutting 7 1/2" power saw for every kind of sawing. Circle gauge to cut curves and perfect circles easily. Cuts curves, straight cuts or fine pattern work in masonry, bakelite, wood, metals, tiles, formica, wallboard, plexiglas, plasterboard, asbestos. Cuts all metals—aluminum, brass, copper, steel—from thin gauge to 1/2" thick. Curved foot plate enables saw to start its own inside cut anywhere. Will easily cut logs up to 6" diameter. 7 1/2" saw blade makes 90° cuts in 6x6"; 45° cuts in 4x4's. Features powerful 1/2-hp motor, finger control trigger switch, heavy-duty hardened gears, heavy-duty roller and oilite bearings. Cutting blade in line of sight for "extra" accuracy on critical cuts. Air stream in front of saw keeps line of cut clean. Well balanced with conventional saw grip, auxiliary grip knob. Equipped with an easily adjusted rip guide for accuracy and dependable alignment. Complete with 8-ft. 3-wire cord with adapter, 7 blades, rip guide, circle cutter, 45° tilting base plate. 7 1/2 x 8 1/2". U.L. Approved. For 110-120 v., AC or DC. Wt., 8 1/2 lbs. List, \$44.95. 50 N 236. Only \$2.00 Down. NET ..... 33.02

MODEL 9T2 SAW TABLE ONLY. With protractor, jointer, circle cutter, rip fence, 5 blades, front switch. 15-15 1/2" x 7 1/2". 12 lbs. 50 NX 320. List, \$14.95. NET ..... 10.99

MODEL 900 REPLACEMENT BLADE SET. 7 assorted blades. Including coarse, medium and fine. Shpg. wt., 1 1/2 lb. 50 N 237. List, \$3.40. NET ..... 2.50

## WEN 505 SABRE SAW



Extremely Versatile

- Works as Rip Saw, Jig Saw, Band Saw
- Use as Coping, Crosscut, Scroll, Hack, Keyhole Saw

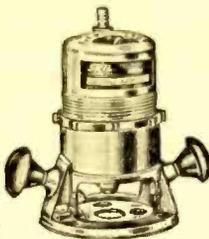
Versatile power saw for shop or home—with power to spare on tough cuts. 8 saws in one—can be used as a rip saw, coping saw, band saw, crosscut saw, scroll saw, keyhole saw for professional-looking carpentry, electrical or cabinet work. Rotary type, Universal 1.8 amp motor delivers 2650 strokes per minute under load. Length of stroke, 3/8". Cuts any material including wood, hardwood, plaster, hard rubber, electrical conduit, even leather. Will cut 1/2" cold-rolled steel or 2x4 lumber easily. Makes its own starting holes or inside cuts. Also makes straight, curved, circular or irregular cuts easily and accurately. Lightweight saw with minimum vibration, easy-grip cool operating handle, heavy-duty slide switch. Built-in fan automatically blows an air stream over the work to keep guide line free of sawdust. Equipped with 6-ft. heavy-duty cord and molded plug; fine, medium and coarse saw blades. Overall length of 6 1/2". U.L. Approved. For operation from 110-120 volts, AC or DC. Shpg. wt., 4 lbs. List, \$29.95. 46 N 362. \$2.00 Down. NET ..... 19.81

WEN MODEL 505K SABRE SAW KIT. Has Model 505 multi-purpose saw for any craftsman. Overall length of saw is 6 1/2". Kit includes rip-saw attachment; circular or scroll saw blade; both coarse and medium wood-cutting blades; fine scroll blade; non-ferrous metal-cutting blade; extra fine blade for bakelite, ferrous metal, formica, etc. Metal carrying case. Motor U.L. Approved. For 110-120 volts, AC or DC. Shpg. wt., 6 1/2 lbs. List, \$32.95. 45 N 899. \$2.00 Down. NET ..... 22.01

# Quality Power Tools

## SKIL 530 1/2-HP ROUTER

Heavy-duty router for builders, home craftsmen—anyone engaged in wood-working. Lightweight and easy to handle, it makes short work of grooving shelves, dadoing, beading, rabbeting, mortising, veining, cove cutting, etc. Also handles a wide range of decorative cuts. Powerful 1/2 horse-power motor maintains top bit speed for faster, smoother, more accurate work. No-load speed, 23,000 rpm. Adjusts for cutting depth. Clear plastic guard deflects wood chips during line-of-sight routing. Base dia., 5 3/4"; 6 1/2" high. Takes bit slanks to 1/4". With 1/2" collet and wrench. For operation from 110-120 v., AC or DC. Shpg. wt., 8 lbs. \$2.00 Down.



50 N 263, List, \$59.50, NET..... 44.42

**Model 16890 Gauge Block.** Combination straight and circular edge guide for Model 530 Router above. Shpg. wt., 1 lb. 50 N 264, List, \$3.15, NET..... 2.52

**Routing Bit Set.** Assorted 1/4" routing bits for use with router above. Shpg. wt., 1 1/4 lbs. 50 N 265, NET..... 7.50

**Model 3650 Plane Attachment.** Converts Model 530 Router to low-cost plane—an ideal accessory unit. Has accurate depth and bevel adjustments to handle all types of edging work. With chip deflector, 16° slice and micrometer adjustment for leveling spiral cutter with rear shoe. Includes spindle and spiral cutter. Size (LWD), 16x2 1/2x1 1/4". Shpg. wt., 6 lbs. 50 NX 325, \$2.00 Down, NET..... 41.55

## WEN 202 SANDER

New, quiet operating sander polisher for home workshops. Features full 1 3/4 sq. inch working sanding surface. Streamlined functional design, with comfortable palm grip makes jobs easier—reduces fatigue while working in hard-to-get-at places. Has exceedingly smooth action, there's no whip or bounce, a minimum of vibration on the user's hand. Positive, straight line sanding action—sands with the grain, works its way all the way into corners. Powerful vibrator motor works at speed of 14,400 strokes per minute. Stays cool under continuous use. Strong, self-tightening clamp pulls and tightens paper, locks into position. Slide switch turns unit on and off. Plastic case, utility black. 5 1/2" long, 2 1/2" wide, 3 3/4" high. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 4 lbs.

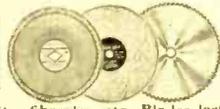


50 N 326, List, \$13.95, NET..... 10.25

**Model 404 Heavy-Duty Sander Kit.** Versatile kit for rough sanding or fine polishing. 20 sq. inches of sanding surface. All features of above, plus 15 sandpaper sheets, 2 polishing cloths, steel case. 6 1/2x3 1/4x4". For 110-120 v., 60 cycle AC. Shpg. wt., 6 1/2 lbs. 46 N 329, List, \$19.95, NET..... 14.66

## POWER SAW BLADES

**SKIL Perma-Grit Blades.** Speed cutting time and decrease chance of accidental damage. Will not chip thin center, plywood, masonite, fiberglass, etc. Blades last for years—never need sharpening. \*For sawing; †For sanding.



Stock No.	Type	Fits Saw	WT.	NET
45 N 213	*19911	536	12 oz.	4.08
45 N 212	*19909	553	1 1/4 lbs.	4.76
45 N 214	†20155	536	3/4 lb.	5.56
45 N 215	†20153	553	1 lb.	6.68

**Steel Alloy Blades.** Special nickel, chrome, molybdenum steel alloy. \*Fits 3/8" round arbor. †Fits diamond arbor. 3/4 lb.

Stock No.	Blade Type	Fits Saw	NET EACH	
			1-5	6-UP
45 N 216	†7 1/4" Combination	553	1.89	1.69
45 N 217	†6 1/2" Combination	536	1.89	1.69
45 N 218	†7 1/4" Cross Cut	553	1.89	1.69
45 N 219	†6 1/2" Cross Cut	536	1.89	1.69
45 N 220	†7 1/4" Rip	553	1.89	1.69
45 N 221	†6 1/2" Rip	536	1.89	1.69
50 N 327	*7 1/4" Combination	70	1.89	1.69
50 N 007	†6 1/2" Combination	450	1.89	1.69

## THOR POWER SANDERS

### MODEL 16 SPEED SANDER

- Smooth Operation
- Heavy-Duty Motor
- Orbital Type



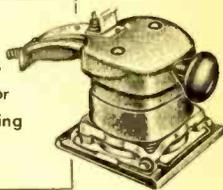
Powerful, ruggedly-built, heavy-duty orbital sander. Extremely useful addition to your workbench. For hundreds of sanding jobs in the home or shop; may also be used for buffing and polishing. Compact, lightweight and well balanced—ideal for vertical and overhead sanding. Functionally-designed handle assures fatigue-free use. Easily does in minutes, sanding jobs that would require many hours of hard work when done by hand. 3/8" orbital action duplicates hand sanding motion. Gives smooth surface required for French finishing.

Features rugged 6200-rpm series-wound motor. Has sealed and shielded factory lubricated ball bearings for smooth operation and long life. Ventilating slots in top and sides of housing; motor runs cool even after long sanding operations.

Sanding surface: 4 1/2x5 1/2"; requires 4 1/2x6 1/2" sandpaper. Convenient off-on slide switch on handle. Durable cast aluminum body for minimum weight and extra ruggedness. Overall size: 5 1/4" high, 4 1/2" wide, 9 1/2" long. With 10-ft. 3-conductor cord. For operation from 110-120 v., AC or DC. Wt., 8 lbs. \$2.00 Down. 47 N 097, List, \$34.95, NET..... 23.98

### MODEL 150 SANDER

- Lightweight
- Buffs, Sands
- 2-Pole Motor
- Large Sanding Surface

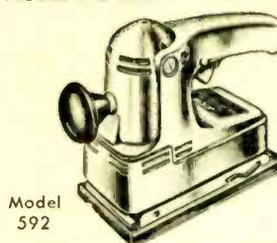


Highly versatile sander that makes any job easier. Orbital motion and large sanding surface are ideal for rough sanding as well as smooth finishing. Sands, finishes or polishes vertically or horizontally. Functional styling allows gripping for long intervals without fatigue. Built to be used with either wet or dry abrasives. Has powerful 2-pole 3450-rpm induction motor. Equipped with convenient on-off switch on handle. Rugged cast aluminum body is perfectly balanced for lightweight, easy handling. Sanding area: 4 1/2x5 1/4" with 3/8" orbit. Requires 4 1/2x6 1/2" sandpaper sheets. Size: 4 1/2" high, 4 1/2" wide, and 9" long. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 7 lbs. 46 N 375, List, \$24.95, NET..... 17.12

**Model 150KA Sander Kit.** Includes 15T Sander; 18 assorted abrasive sheets; 2 free-abrasive felt pads useful for rubbing and polishing operations; one neoprene contour pad; one lamb's wool polishing cover; and steel carrying case. Shpg. wt., 10 lbs. \$2.00 Down. 46 NX 467, List, \$39.50, NET..... 27.10

## SKIL POWER SANDERS

### MODEL 592 ORBITAL SANDER



Model 592

Sands and Polishes

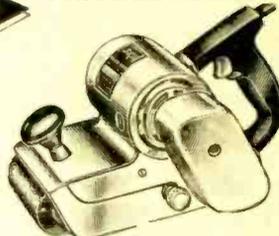
Highly versatile orbital sander. The ideal electric sander for the professional wood craftsman, or the do-it-yourself hobbyist. Can be used for coarse or fine-finish sanding; also for polishing and buffing with the polishing pad listed below.

Shape of sanding surface allows sanding all the way up to vertical edges and into inside corners. Powerful rotary motor delivers 5500 rpm and is practically stall-proof. Die-cast aluminum alloy housing is lightweight and rugged. Has trigger-type switch with convenient "lock-on" button.

Extra handle permits applying added pressure and provides more control when sanding rough surfaces. Less sanding sheets. Uses standard 3 1/4x9" sheets. Overall size: 6 1/2x9 5/8x3 1/2". For operation from 110-120 volts AC or DC. Shpg. wt., 7 lbs. \$2.00 Down. 50 NX 079, List, \$49.95, NET..... 37.30

**Polishing Pad.** For above. Wt., 3 lbs. 50 N 096, List, \$1.50, NET..... 1.12

### NEW MODEL 405 BELT SANDER



Simple To Use

Professional-quality sander with the speed and power to quickly smooth down rough lumber, remove old paint and varnish, or put a flawless finish to cabinet or furniture jobs. An outstanding tool for hobbyists, carpenters and cabinet makers.

Belt moves at rate of 1350 ft. per minute. Husky universal motor transmits full power through precision-cut gears and rugged cog belt. Haas ball and sleeve bearings for smooth, extremely dependable operation. Uses extra-wide 4" sanding belts. Flush design allows sanding right up to vertical edges. Simple locking device for quick, easy belt changing. Rugged, die cast aluminum housing.

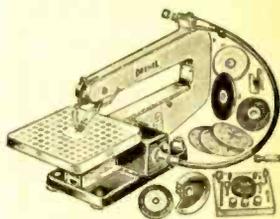
6 1/2x6 1/4x1 1/2". Less sanding belts. For 110-120 v., 60 cycle AC-DC. Shpg. wt., 16 lbs. 50 NX 328, List, \$89.50, NET..... 63.65

**Box of 10 Assorted Belts.** Wt., 1 1/2 lbs. 50 N 078, List, \$8.25, NET..... 6.60

## DREMEL MOTO-SHOP KIT

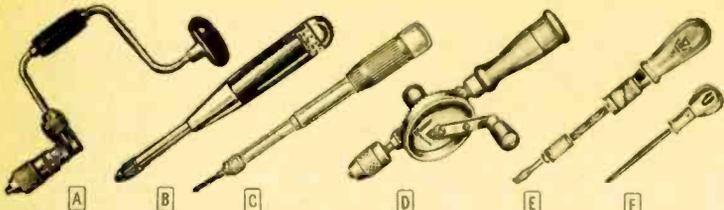
- Multi-Purpose Home Workshop For All Ages
- Large Capacity 15" Jig Saw

Popularly-priced power workshop featuring large capacity 15" Jig Saw equipped with a power takeoff and disc sanding attachment. Includes 23 accessories for complete versatility—literally thousands of applications for the home and hobby shop. Rocker action saw has tilting table for greater handling convenience, 3450 rpm rotary motor and blade safety guard. Flexible plastic shaft adapts to hand grinders, drills, polishes, carves, sharpeners, etc. Accessories include: Lightweight, plastic handpiece; rubber backing pad and adapter; 3 sanding discs; grinding wheel; cloth buffing wheel; wire brush wheel, wheel guard, adapter, and polishing compound stick. Kit also has a twelve-piece set for use with flexible shaft. Contains abrasive wheels, collet adapters, router, brush and drill. Saw handles any job—from intricate scroll work to full-size furniture. Lightweight and completely portable, can be set up on a card table or kitchen counter. Ideal in homes where space is limited. Perfect for youngsters just getting started. Makes models, puzzles, toys, birdhouses, wall shelves, etc. Also recommended for handicraft programs in schools, scout troops, YMCA's, Boy's Clubs, etc. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 17 lbs. \$2.00 Down. 46 NX 952, List, \$49.95, NET..... 37.30



# Quality Hand Tools

## MILLERS FALLS HAND TOOLS



**A** Model 1710 Brace. Low-priced brace for square shank bits. Has adjustable forward-reverse ratchet control for use in limited space. Barber chuck with alligator jaws. 10-inch sweep. Ball bearing head mount. Hardwood head and handle. Shpg. wt., 2 1/4 lbs.  
50 N 022. List, \$6.19. NET..... 4.64

**B** Model 100 Automatic Drill. Push-type drill with multiple-toothed spiral mechanism and internal spring return. Top part of handle is rounded to fit comfortably into the hand. Hollow red plastic handle stores 8 fluted-shank drills (supplied). Size, 1/4" to 1 1/4". Shpg. wt., 1 1/2 lbs.  
46 N 038. List, \$5.95. NET..... 4.46

**C** Model 170 Automatic Drill. Has convenient, quick-action chuck. Locks or releases with slight forward thumb pressure. Serrated, red plastic handle has 4 compartments—holds up to 12 drill bits. Complete with 4 drills: 3/64", 1/8", 3/16", and 1/4". 10 1/4" long. Shpg. wt., 3/4 lb.  
46 N 307. List, \$4.00. NET..... 3.00

**D** Model 1425 Hand Drill. High quality drill has double pinion gears for smooth action. Drive gear and pinions have precision-cut teeth. 3-jaw chuck takes drills up to 1/4" in dia. Nickel plated frame and chuck. Hollow handle stores drills. Shpg. wt., 2 lbs.  
50 N 174. List, \$4.95. NET..... 3.71

### MODEL 1220 PLANE-R FILE

Efficient tool with 2-way handle for use as file or plane. Shapes, de-burrs, finishes all woods and metals. Blade 1 1/4 x 10 1/4". A titanium body.

1 1/4" long. With 1227 blade, 10 oz.  
50 N 186. List, \$3.49. NET..... 2.62

50 N 187. 1226 Blade. Med. 2 oz. NET. 73c

50 N 188. 1227 Blade. Coarse. 2 oz. NET. 73c

### MODEL 29 SPIRAL RATCHET SCREWDRIVER

**E** Easy action tool. 1/4" bit drives or draws #4 to #8 screws. Reliable ratchet and quick-return spring. Nickel-plated with hardwood handle. Length, 10". Wt., 1/2 lb.  
50 N 189. List, \$3.50. NET..... 2.62

### MODEL 10 HANDY AWL

**F** Has nicely pointed alloy steel blade, 2 3/4" long. Nickel-plated ferrule. Hardwood handle. Overall length 4 7/8". Wt., 1 oz.  
50 N 190. NET..... 26c

## HANSON ECONOMY HAND DRILL

An exceptionally well-balanced, inexpensive hand drill with knurled, hardened steel chuck. Will take drill bits up to 1/4" in diameter. Hardwood handle, with screw-on cap; has convenient storage space for extra drills. Has wooden side knob. Drill can be used with carbon steel or high-speed steel drill bits for drilling through wood, metal or plastic. All wooden parts are lacquer-finished. Overall length, 11 1/2". Shpg. wt., 1 1/4 lbs.  
46 N 030. NET..... 1.65

## ALL-PURPOSE HAND SAWS



**G** Coping Saw. Excellent, all purpose coping saw. Natural hardwood, lacquered handle. Special ratchet locks blade in position. Supplied with 6 1/2" blade. Throat depth, 4 1/4". Shpg. wt., 3/4 lb.  
45 N 878. NET..... 49c

Type 124. Replacement Blades. Wt., 2 oz.  
45 N 876. Pkg. of 2. PER PKG..... 10c

**H** Pistol-Grip Hacksaw. Sturdily-constructed hacksaw, adjustable for 8 to 10" blades. Rugged frame is highly polished spring steel. Large thumbscrew for easy tightening of blades. Sure-grip green handle of high-impact, tough molded plastic. Supplied with 10" blade. Shpg. wt., 1 1/4 lbs.  
46 N 090. NET..... 1.11

**J** Forsberg V-35 Four-Way Keyhole Hacksaw. Handy lightweight saw for all general purpose work. Cuts metal, wood, plaster, conduit, etc. Blade is 7 1/2" long. 24 teeth/inch—can be faced in 4 directions. Wt., 6 oz.  
46 N 341. NET..... 29c

Extra Keyhole Saw Blades. Wt., 2 oz. NET. 12c  
46 N 342. NET EACH..... 12c

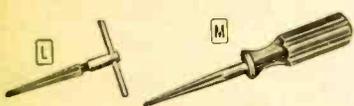
**K** Millers Falls Model 525 Keyhole Hacksaw. Cuts metal, wood, plaster, etc. Has a replaceable 12" blade; 10 teeth per inch. Blade can be rotated and locked in any of 8 positions for easier odd-angle cuts. Handle fits blades below. Shpg. wt., 9 oz.  
46 N 102. List, \$2.20. NET..... 1.65

### 12" ACCESSORY BLADES

No.	Type	Teeth Per Inch	Oz.	EACH
46 N 103	24	24 (For metal)	3	45c
46 N 104	27	7 (For wood)	3	49c

Replacement Blade Set. Contains 1 fine and 1 coarse blade, both 10". Shpg. wt., 3 oz.  
46 N 091. NET, PER SET OF 2..... 18c

## HAND-HELD REAMERS



**L** Henry Hanson Type 120. For enlarging holes in chassis, panels and other materials. Handle provides firm grip for heavy work; removable for use in drill chuck. Precision machined from carbon steel. Point, 1/8" dia.; shank, 1/2" dia., 5 1/2" long. Wt., 9 oz.  
46 N 243. NET..... 94c

**M** Master Reamer. Tapered from 1/4" tip to 3/8". Made of finest tool steel. Plastic handle. A very handy tool for the radio and TV repairman, experimenter, electrician, etc. Length, 8". Shpg. wt., 6 oz.  
46 N 244. NET..... 88c

## KNEISLEY MINIATURE DRILL SET



**Type KS-1115 Carbon Drill Set.** An excellent addition to any plant or home workshop. Set consists of 20 extremely durable drills in a wide variety of sizes, from No. 61 (.039") to No. 80 (.0135"). An indispensable aid for all types of jobs calling for precision drilling. Component parts are manufactured of the highest grade carbon steel. Units are hardened by a unique method, assuring precision production. Included with the set is a 4-jaw chuck with 3/8" shank for using drills in standard chucks. Entire set is covered by transparent moulded lucite case. Various drills are always in sight for fast, convenient reference. Handy container fits anywhere, takes little space. Wt., 6 oz.  
46 N 799. NET..... 6.29

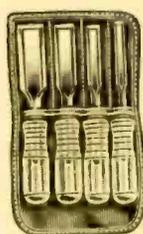
## BRINK & COTTON CARRIAGE CLAMPS



Sturdily-constructed "C" clamps of high-grade malleable iron. Have greater than usual throat depth and two heavy reinforcement ridges at corners. Permits deeper reach and greater pressure in threads and vice-type handles. Maximum required pressure may be applied by hand alone. Rocking swivel pads at screw ends for equalizing pressure when clamping on irregular surfaces. Type 141 has screw diameter of 3/4". Type 142, 1/2". Type 143, 3/8". Type 242, 1/4". Type 242 is especially rugged for heavy duty applications.

Stock No.	Mfr's Type	Capacity	Depth	Wt. Oz.	NET EACH
50 N 163	141	1"	1 1/2"	3	21c
50 N 164	142	2"	1 1/2"	4	29c
50 N 165	143	3"	2"	12	60c
50 N 166	242	2"	1 1/4"	8	45c

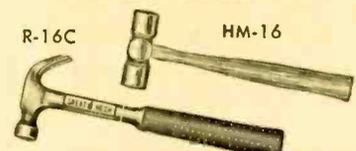
## MILLER FALLS CHISEL SET



Model 1434. Kit of 4 expertly designed wood chisels. Carefully balanced chisels feature thin, keen-edged blades which permit deeper, more efficient cutting action. Blades are high-carbon chisel steel. Heavy metal bolsters absorb shock and prevent handle from splitting. Handles are durable, transparent plastic, firmly bonded to blades. Deep cove design for comfortable, sure grip. All chisels have 3 1/2" handles. Overall length, 6 3/4". Blade widths are 1/4", 3/8", 1/2" and 3/4". Gray and red plastic carrying case. Wt., 1 1/2 lbs.

50 N 217. List, \$6.95. NET..... 5.21

## QUALITY HAMMERS



**R-16C** **HM-16**  
VLCHEK HM-16 Soft Face Hammer. Plastic-faced hammer for driving bushings and wrist pins, body bumping, straightening bent chassis, etc. Steel head has 1 1/2" dia. faces of red vinyl and amber tenite. Will not mar aluminum or soft metals. Hickory handle. Length, 12 3/4". Shpg. wt., 1 lb.  
50 N 161. NET..... 2.73

Great Neek R-16C. Deluxe, well balanced claw hammer. One-piece construction eliminates head loosening. Precisely tempered claws for easily pulling small nails. Rubber cushioned handle for secure grip and excellent shock absorption. Length, 13". Wt., 1 1/2 lbs.  
45 N 848..... 3.19

## MILLERS FALLS COUNTER SINK

Model 710. Made of fine-grade high-speed steel. For use in any material ordinarily machinable with a high-speed cutter. Cuts fast and clean in soft steel, iron, wood and similar materials. Has 5 carefully ground flutes for fast cutting at 82° angle for wood and machine screws. Shank, 1/4". Fits any brace or drill. Overall length of unit is 2 1/2". Shpg. wt., 6 oz.  
46 N 156. List, \$1.65. NET..... 1.22

## G-H CENTER PUNCHES

**N** Model 79. Hand pressure on handle triggers powerful spring which drives punch. Extremely valuable builder's aid. Simply turn top of handle to adjust tension for light or heavy punch. Size, 3/8" dia. x 5". Replaceable point. Wt., 5 oz.  
46 N 195. NET..... 3.10  
46 N 196. 79P. Extra pt. EA. 33c

**P** Model 806. For use with handling having countersunk mounting holes—hinges, switch plates, etc. Tapered end fits into hole, automatically finds correct center. Just tap pin and work is accurately marked. Punch and pin made of steel. Shpg. wt., 2 oz.  
46 N 218. NET..... 38c

# Quality Workshop Tools

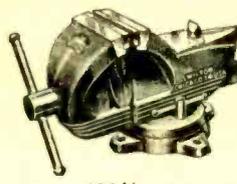
## SHOP AND BENCH VISES



149



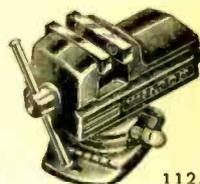
665A



633 1/2



364



1125

### BRINK & COTTON NO. 149 VISE

Compact clamp vise ideally suited for radio work. Securely holds small parts for soldering, filing, cutting, etc. Smooth, easy action. Can be clamped to bench or table up to 2" thick. Jaws are 1 1/4" wide, open to 1 3/4", and are machined to meet squarely for a firm grip. Shpg. wt., 2 3/4 lbs.

46 N 015. NET. . . . . 1.50

### MILLERS FALLS NO. 217 VISE

For holding work on drill-press bed or work bench. Radiomen find it perfect for holding parts to be soldered, sawed or drilled.



Sturdy steel jaws are 2 3/8" wide. Have parallel faces extending to 3 1/2". Removable swivel jaw is provided for holding odd-shaped parts. Slide-bar type handle and fine thread on screw give excellent leverage for solid, reliable grip on work. Shpg. wt., 5 lbs.

46 N 064. NET. . . . . 8.25

**Model 665A Vise.** An excellent tool for the home workshop. Three rapid-acting vises—woodworking, metal working and pipe vise—all rolled into one. Removable fiber-board jaw faces clamp wood without marring. 5" wide serrated steel jaws provide powerful grip for metal jobs. Built-in pipe jaws hold pipes of 1/2" to 2 1/2" dia. Jaws are 3/4" deep. Max. jaw opening 5 1/2". Swivel base. Enamel finish. Shpg. wt., 3 1/2 lbs.

46 NU 953. NET. . . . . 18.03

**Model 663 1/2.** As above but 3 1/2" jaw. Opens to 3 1/2". Shpg. wt., 19 lbs.

50 N 148. NET. . . . . 11.37

**Model 633 1/2 Vise.** Durable "Shop-King" utility vise for all types of metal work. A fine value for the home workshop. Has removable pipe jaws, serrated top jaws, wire cut-off tool and locking 360° swivel base. Jaws are 3 1/2" wide; open to 4". Pipe jaws accept pipes from 1/4" to 1 1/2" dia. Smooth action opening and closing—slide-bar spins with one hand. 4 built-in mtg. lugs. Shpg. wt., 20 lbs.

46 NU 866. NET. . . . . 9.80

**Model 634 Vise.** As above, but 4" jaw. Opens to 4 1/2". Shpg. wt., 30 lbs.

46 NZ 867. NET. . . . . 14.27

### WILTON QUALITY VISES

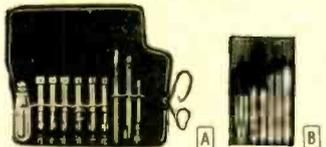
**Model 364. Vise and Positioner.** Ruggedly-built utility vise mounted on famous Pow-Ram positioner. Excellent combination for work on small electronic assemblies or parts. Single-handed release of positioner level-bar permits rotating or tilting work to any desired angle. Tightening of lever bar freezes work solidly in place. Provides a second pair of hands for production workers, servicemen or home craftsmen. Permits single clamping of work in vise. Positioner is cadmium-plated steel. Capacity, 15 lbs. Vise jaws are smooth steel; 2 1/4" wide; open to a maximum of 2 1/4". 5 lbs.

50 N 149. NET. . . . . 13.60

**Model 1125. Low-cost, exceptionally useful vise for the home workshop.** Quality constructed to handle most types of light, general work. Sturdy one-piece body is equipped with protected screw and removable steel jaws. Jaws open to a maximum of 2 1/4". Jaw width, 2 1/4". Smooth action opening and closing controlled by slide-bar which can be spun with one hand. Easy-turn swivel base allows unit to be swung instantly to any desired position. Heavy-duty thumbscrew locks it securely in place. Attractive, baked red enamel finish. 2 mtg. holes in base. Shpg. wt., 5 1/4 lbs.

46 N 896. NET. . . . . 3.90

### ECONOMY TOOL KITS



#### COMBINATION DRIVER SET

**A** A complete nut and screwdriver set, in a handy pocket-sized roll. Multi-purpose, 10-piece tool set contains 6 nut driver blades, 3 screwdriver blades and a clear amber plastic handle with an aluminum adjustable screw chuck. Blades are made of hardened and tempered tool steel, nickel plated to prevent rusting. Nut driver blades are for hex sizes 3/16", 1/8", 3/16", 1/4", 5/16", 3/8". 3 screwdriver blades: 1 large and 1 small standard screwdriver blade and 1 Phillips screwdriver blade. Each tool kept in place in its own transparent compartment. Plastic roll case has size markings under hex blade compartments for easy identification. Convenient tie string. A low-priced, extremely useful kit for the serviceman. Wt., 1 lb.

46 N 463. NET. . . . . 1.69

#### 5-IN-1 SCREWDRIVER SET

**B** Screwdriver set containing five most-commonly-used screwdriver types. Interchangeable blades are easily inserted into aluminum screw chuck of the shock proof, unbreakable amber plastic handle. Hardened and tempered tool steel blades are nickel plated. Set contains: 1/4"x3 1/2" cabinet blade; 3/16"x3 1/2" cabinet blade; Phillips No. 1 (3/16"x4 1/4") blade; Phillips No. 2 (1/4"x4 1/4") blade; 1/4"x4 1/4" key-stone blade; plastic handle. Includes durable plastic roll-up holder with handy tie string. An economical, extremely versatile addition to the shop or home tool chest. Shpg. wt., 8 oz.

46 N 096. NET. . . . . 64c

#### 10-PIECE RATCHET SOCKET SET

Ratchet set with 8 heavy-duty sockets. 3 1/2" extension bar for hard-to-reach places. 3-position ratchet, right, rigid, or left. Five 6-point sockets for hex nut sizes: 3/16", 1/4", 5/16" and 3/8". Three 12-point sockets: 1/2", 3/4" and 7/8". Length, 6 1/2" plus 3 1/2" extension. Unbreakable, amber plastic handle. Shpg. wt., 1 lb.

46 N 464. NET. . . . . 1.09

### HENRY HANSON ACE TOOLS



D



E



F



G

#### TAP AND DIE SET

**Model 614V.** Complete set of high-quality, popular size taps, dies and accessories—39 pieces in all. Contains 1 each tap and die: 4-36, 6-32, 8-32, 10-24, 10-32 and 12-24 (Machine Screw Standard) 1/4"-20, 3/8"-18, 1/2"-16, 5/8"-14 and 3/4"-13 NC (U.S. Standard), 1/4"-28, 3/8"-24, 1/2"-28, 5/8"-20 and 3/4"-20. NF (S.A.E. Standard), 1/4" pipe. Includes die stock, tap and reamer wrench, T.T. tap wrench, screwdriver and screw pitch gauge. Dies are V-notch adjustable. Green plastic case. Shpg. wt., 4 lbs.

46 N 245. NET. Only \$2.00 Down. . . . . 21.38

#### RADIO TAP AND DIE SET

**Model 21.** 12-piece set covering basic threads most often used in radio work. An excellent, low-cost set for the radio serviceman, hobbyist, experimenter, or engineer. Includes 1 each plug tap and die, sizes 6-32, 8-32, 10-24, 12-24, 1/4"-20. Dies are solid type, 1" dia. High carbon, tempered steel assures long tap life. In mahogany box. Shpg. wt., 3 lbs.

46 N 025. NET. . . . . 6.38

#### HIGH-SPEED DRILL BITS

**Model 113.** Set of 13 high-speed drill bits, 1/8" to 1/4" in 1/4" graduations. Carefully tempered and precision-ground to assure long life. Complete with convenient, hinged plastic case. Shpg. wt., 6 oz.

50 N 059. NET. . . . . 4.45

#### FLEXIBLE-SHAFT SCREWDRIVER



Handy, new flexible-shaft 1/4" square driver for socket wrenches. Flexible shaft permits working around corners for driving or removing screws in awkward, hard-to-get-at places. Ideal for radio-TV servicemen, industrial repairmen, Hams, hobbyists and homeowners. Has rugged, hardened alloy steel head set on a laminated, flexible steel shaft. Handle is made of unbreakable plastic for dependable service. Overall length, 6 3/4". Shpg. wt., 6 oz.

50 N 224. NET. . . . . 94c

#### FLEXIBLE-DRIVE SOCKET SET

Excellent for use around corners and out-of-the-way places. Extremely handy in the radio-TV service shop. Shaft is made of tough, laminated steel wires. Transmits full twisting power from handle to hex nut. Thick cadmium plating. Shockproof amber handle. 8 1/2" overall length. Includes 6 hex sockets, sizes: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8". With plastic case. 10 oz.

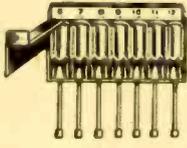
46 N 067. NET. . . . . 1.96

# Xcelite Nutdrivers & Screwdrivers

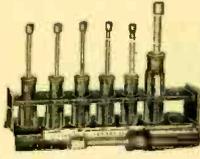
## HEX NUTDRIVER SETS



99PR



127



137



17

### MODEL 99PR NUT & SCREWDRIVER SET

Versatile, chrome-plated 13-piece set in durable, plastic roll-up kit. Includes  $\frac{3}{16}$ ",  $\frac{1}{2}$ ",  $\frac{3}{8}$ ",  $\frac{5}{16}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ " and  $\frac{1}{2}$ " nut drivers; 2 combination screwdrivers ( $\frac{3}{16}$ " and  $\frac{9}{16}$ " standard, No. 1 and No. 2 Phillips); rugged plastic handle. Shpg. wt., 2 lbs. 45 N 738, List, \$14.45. NET..... 8.67

Model 99x10 8"-Extension. For above. 5 oz. 45 N 787, List, \$1.45. NET..... 87c

### MODEL 137 NUTDRIVER SET

7 color-coded nutdrivers with self-supporting rack. Ideal for workshop table. Colors and sizes: black— $\frac{3}{16}$ ", red— $\frac{1}{4}$ ", yellow— $\frac{3}{8}$ ", green— $\frac{1}{2}$ ", blue— $\frac{3}{8}$ ", red— $\frac{1}{2}$ ", and brown— $\frac{3}{8}$ ". Polished steel shafts. The  $\frac{1}{2}$ " and  $\frac{3}{8}$ " drivers have hollow shafts for use when tightening nuts over long screws. Shpg. wt., 3 lbs. 45 N 734, List, \$10.70. NET..... 6.42

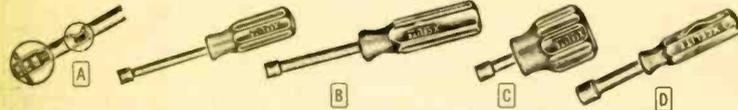
### MODEL 17 NUTDRIVER SET

Seven nutdrivers in the most commonly used sizes for radio-TV work. A valuable addition to any work bench. With durable color-coded plastic handles and polished alloy steel shafts. Sizes and colors: black— $\frac{3}{16}$ ", brown— $\frac{1}{8}$ ", red— $\frac{1}{4}$ ", orange— $\frac{3}{8}$ ", amber— $\frac{1}{2}$ ", green— $\frac{3}{4}$ " and blue— $\frac{1}{2}$ ". Set includes metal rack for holding nutdrivers in an upright position when not in use. Shpg. wt., 2 1/2 lbs. 45 N 733, List, \$9.05. NET..... 5.43

### MODEL 127 NUTDRIVER SET

Color-coded plastic handles indicate socket sizes instantly. Sockets are deep enough to handle two nuts. Depth of shaft hole,  $\frac{1}{4}$ ". Includes 7 wrenches, sizes  $\frac{3}{16}$ " to  $\frac{1}{2}$ " in  $\frac{1}{32}$ " steps. Sturdy metal holder in red wrinkle finish. Can be fastened to wall for added convenience. Size,  $7\frac{1}{2} \times 7\frac{1}{2} \times 1\frac{1}{2}$ ". Shpg. wt., 2 1/4 lbs. 45 N 735, List, \$9.60. NET..... 5.76

## HEX NUTDRIVERS



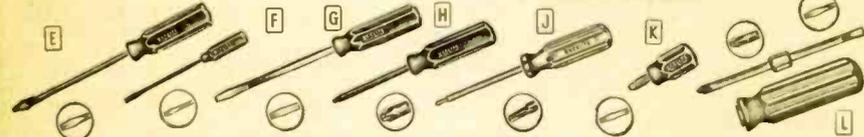
Shafts of chrome-vanadium electric furnace steel. Socket wells are deep enough to handle two nuts simultaneously. All Xcelite nutdrivers have color-coded, plastic handles. Fig. A shows types having a hollow shaft for tightening nuts on long screws. Fig. B is

standard type. Fig. C is stubby type for use where space is limited. Fig. D is a pocket style nutdriver with clip and hexagonal handle. Type HS-18 fits  $\frac{3}{16}$ " volume control nuts. Shpg. wt., 6 oz., except models S-8, S-10, S-12, which are 5 oz.

Stock No.	Mfr's Type	Fig.	Nut Size	Handle	Length	NET EACH
45 N 779	HS-8	A	$\frac{3}{16}$ "	Red	6"	.87
45 N 780	HS-10	A	$\frac{1}{4}$ "	Amber	6"	.87
45 N 781	HS-11	A	$\frac{1}{2}$ "	Green	6"	.90
45 N 782	HS-12	A	$\frac{3}{8}$ "	Blue	6"	.90
45 N 783	HS-14	A	$\frac{3}{8}$ "	Brown	7"	1.02
45 N 784	HS-16	A	$\frac{1}{2}$ "	Red	7"	1.05
45 N 785	HS-18	A	$\frac{3}{8}$ "	Orange	7"	1.08
45 N 786	HS-20	A	$\frac{1}{2}$ "	Amber	7"	1.23
45 N 813	6	B	$\frac{3}{16}$ "	Black	6"	.72
45 N 814	7	B	$\frac{1}{4}$ "	Brown	6"	.72
45 N 815	8	B	$\frac{3}{8}$ "	Red	6"	.72
45 N 816	9	B	$\frac{1}{2}$ "	Orange	6"	.72

Stock No.	Mfr's Type	Fig.	Nut Size	Handle	Length	NET EACH
45 N 817	10	B	$\frac{1}{2}$ "	Amber	6"	.72
45 N 818	11	B	$\frac{3}{8}$ "	Green	6"	.72
45 N 819	12	B	$\frac{3}{8}$ "	Blue	6"	.72
45 N 820	S-8	C	$\frac{3}{16}$ "	Red	3 1/2"	.57
45 N 858	S-10	C	$\frac{3}{16}$ "	Amber	3 1/2"	.57
45 N 859	S-12	C	$\frac{3}{16}$ "	Blue	3 1/2"	.57
45 N 324	P-3	D	$\frac{3}{16}$ "	Amber	3 1/2"	.48
45 N 325	P-4	D	$\frac{3}{16}$ "	Red	3 1/2"	.48
45 N 326	P-5	D	$\frac{3}{16}$ "	Amber	3 1/2"	.48
50 N 141	P-8	D	$\frac{3}{16}$ "	Red	3 1/2"	.48
50 N 142	P-10	D	$\frac{3}{16}$ "	Amber	3 1/2"	.48
50 N 143	P-12	D	$\frac{3}{16}$ "	Blue	3 1/2"	.48

## SCREWDRIVERS



**E** Round Shaft. Winged design of embedded end of blade prevents turning of blade in handle. Available in lengths from  $4\frac{1}{4}$ " to 12".

Stock No.	Mfr's Type	Shaft Size		Overall Length	Shpg. Wt.	NET EACH
		Dia.	Length			
43 N 845	R-182	$\frac{1}{8}$ "	2"	4 1/2"	3 oz.	.32
43 N 846	R-184	$\frac{1}{8}$ "	4"	6 1/2"	3 oz.	.39
43 N 847	R-186	$\frac{1}{8}$ "	6"	8 1/2"	4 oz.	.42
43 N 848	R-188	$\frac{1}{8}$ "	8"	10 1/2"	4 oz.	.54
45 N 795	R-144	$\frac{1}{8}$ "	4"	8"	6 oz.	.75
45 N 796	R-146	$\frac{1}{8}$ "	6"	10"	6 oz.	.78
45 N 797	R-148	$\frac{1}{8}$ "	8"	12"	7 oz.	.84

**F** Set-Screw Types. High-quality precision-ground, narrow-blade screwdrivers designed to fit standard set-screws in knobs, pulleys, couplers, etc. Have convenient pocket clips.

Stock No.	Mfr's Type	Shaft Size	Overall Length	Shpg. Wt.	NET EACH	
43 N 830	R-3323SS	$\frac{3}{16}$ "	3"	5"	2 oz.	.27
43 N 831	R-184SS	$\frac{3}{16}$ "	4"	6"	2 oz.	.27

**G** Square Shaft. Available in lengths from  $7\frac{1}{2}$ " to 18".

Stock No.	Mfr's Type	Shaft Size		Overall Length	Shpg. Wt.	NET EACH
		Dia.	Length			
43 N 829	S-3164	$\frac{3}{16}$ "	4"	7 1/2"	4 oz.	.66
43 N 832	S-144	$\frac{1}{4}$ "	4"	8"	6 oz.	.81
43 N 833	S-146	$\frac{1}{4}$ "	6"	10"	6 oz.	.87
43 N 834	S-148	$\frac{1}{4}$ "	8"	12"	7 oz.	.96
43 N 837	S-388	$\frac{3}{8}$ "	8"	12 1/2"	1 lb.	1.38
43 N 838	S-3812	$\frac{3}{8}$ "	12"	18"	1 1/2 lb.	1.98

**H** Phillips Screwdrivers. \*Stubby type. †With pocket clip.

Stock No.	Mfr's Type	Shaft		Overall Length	Shpg. Wt.	NET EACH
		Tip	Length			
45 N 345	P-12S†	No. 0	2"	4"	1 oz.	.39
43 N 876	X-101	No. 1	3"	6 1/2"	5 oz.	.69
43 N 877	X-108	No. 1	6"	10"	5 oz.	.75
43 N 878	X-102	No. 2	4"	7 1/2"	6 oz.	.87
43 N 879	X-1020	No. 2	10"	13 1/2"	8 oz.	1.17
43 N 881	X-103	No. 3	6"	10"	10 oz.	1.17
43 N 882	SX-101	No. 1	6"	2 1/2"	3 oz.	.63
43 N 883	SX-102	No. 2	6"	3 1/2"	5 oz.	.69

**J** Clutch Head Screwdrivers. Fit clutch head screws used in sheet metal assemblies, electronic gear, etc. Non-friction hold type.

Stock No.	Mfr's Type	Shaft Size	Overall Length	Shpg. Wt.	NET EACH	
50 N 144	G183	$\frac{1}{8}$ "	4"	6 1/2"	3 oz.	.72
50 N 145	G5324	$\frac{3}{16}$ "	4"	7 1/2"	4 oz.	.81
50 N 146	G3164	$\frac{3}{16}$ "	4"	7 1/2"	4 oz.	.81

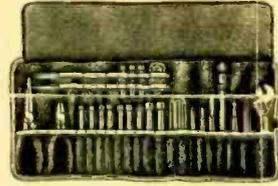
**K** Stubby Screwdriver  $\frac{1}{4}$ " square shaft, polished blade. Ideal for work in cramped space.

Stock No.	Mfr's Type	Shaft Size	Overall Length	Shpg. Wt.	NET EACH	
43 N 844	S-141	Regular	1 1/4"	3 3/4"	5 oz.	.51

**L** Combination-Blade Screwdrivers.

Stock No.	Mfr's Type	Blade Combination	Overall Length	Shpg. Wt.	NET EACH
45 N 746	CR1	$\frac{3}{16}$ " Regular #1 Phillips	7"	4 oz.	
45 N 747	CR2	$\frac{3}{16}$ " Regular #2 Phillips	7"	5 oz.	1.38
45 N 748	CR3	$\frac{3}{16}$ " Regular #3 Phillips	7"	10 oz.	

## XCELITE SERVICE MASTER KIT



Type 99SM Service Master Kit. An extremely versatile set of high-quality tools. Meets almost every radio-TV servicing need. Set contains: long-nose pliers; diagonal pliers; 6" adjustable wrench; nine regular nutdrivers in sizes from  $\frac{3}{16}$ " through  $\frac{1}{2}$ ";  $\frac{1}{4}$ " stubby nutdriver;  $\frac{3}{16}$ " stubby nut driver;  $\frac{3}{8}$ " stubby nut driver;  $\frac{3}{16}$ " slotted screwdriver;  $\frac{3}{16}$ " slotted screwdriver; No. 1 Phillips screwdriver;  $\frac{1}{4}$ "- $\frac{3}{8}$ " reamer;  $\frac{1}{4}$ "- $\frac{1}{2}$ " reamer; 8" extension; regular handle; stubby handle.

All tools are made of tough alloy steel and have high polished nickel-chrome finish. A convenient roll-up kit with separate pocket for each tool is included. Shpg. wt., 2 1/4 lbs. 43 N 884, List, \$37.25. NET..... 22.35

## SERIES 99 INTERCHANGEABLE TOOLS

Series "99" tools are replacements in service-men's sets (99PR and 99SM listed on this page). Handle used interchangeably with screwdriver and nut driver blades listed. Av. wt., 3 oz.

Stock No.	Type	Description	NET
45 N 327	99-1	Regular handle	69c
45 N 328	99-6	$\frac{3}{16}$ " Nutdriver	54c
45 N 329	99-7	$\frac{1}{2}$ " Nutdriver	54c
45 N 330	99-8	$\frac{1}{4}$ " Nutdriver	54c
45 N 331	99-9	$\frac{3}{8}$ " Nutdriver	54c
45 N 332	99-10	$\frac{3}{8}$ " Nutdriver	54c
45 N 333	99-11	$\frac{1}{2}$ " Nutdriver	54c
45 N 335	99-14	$\frac{3}{8}$ " Nutdriver	72c
45 N 336	99-16	$\frac{1}{2}$ " Nutdriver	72c
45 N 337	99-81	$\frac{3}{16}$ " and $\frac{3}{32}$ " slotted screwdriver	90c
45 N 338	99-82	No. 1 and No. 2 Phillips screwdriver	90c
45 N 339	99-83	$\frac{3}{16}$ " and $\frac{3}{32}$ " Reed & Prince screwdriver	90c
45 N 787	99X10	Extension	87c

## BERYLLIUM-COPPER SCREWDRIVERS

Non-sparking, non-magnetic, explosion-proof screwdrivers. Beryllium-copper screwdrivers will not "give" or shear off with normal use. \*Indicates blade length.

Stock No.	Type	Blade Size	Wt.	NET
45 N 341	BR186	6x $\frac{1}{8}$ "	2 oz.	.75
45 N 342	BR1810	10x $\frac{1}{8}$ "	2 oz.	.81
45 N 343	BR146	6x $\frac{1}{8}$ "	5 oz.	1.65
45 N 344	BR148	8x $\frac{1}{8}$ "	5 oz.	1.77

High-quality, rugged screwdrivers in choice of blade sizes and lengths. Highly polished, chrome vanadium steel shafts imbedded in tough Xcelite plastic handles—will not loosen, even under rigorous use. Handles fluted for sure grip.

# Screwdrivers and Hex-Nut Drivers

## SELECTED VACO TOOLS

### PHILLIPS SCREWDRIVER SET



**Type P550.** Set contains five of the most popular Phillips screwdrivers. Designed to handle most-common applications quickly, easily and efficiently. Easy-grip handles are constructed of shock-proof Amberyll. Long-wearing blades are made of tough, wear-resistant vanadium steel. Tools not available separately—sold as complete kit only. Shpg. wt., 1 1/2 lbs.

Type	Overall	Blade	For Screws
P1	6 1/2"	3/16x3"	No. 4 and smaller
P2	7 3/4"	1/4x4"	No. 5 to No. 9
P3	10"	5/16x6"	No. 10 to No. 16
P5	3 1/2"	1/8x1 1/2"	No. 5 to No. 9
P6	3"	1/8x1 1/4"	No. 4 and smaller

43 N 880. List, \$5.72. NET..... 4.49

**Type P01 Screwdriver.** For Nos. 0-1 Phillips type screws. Shock-proof Amberyll handle. Chrome vanadium blade, 2 1/2x1/4". 1 oz. 43 N 788. NET..... 55c

### HIGH TENSION TESTING SCREWDRIVER



**Type AN-2.** Handy pocket-clip model with neon bulb in handle. Glows bright or dim to test auto ignition of any high AC RF source. 3 1/2" long, 1/2" dia. blade. Wt., 2 oz. 43 N 745. NET..... 78c

**Type AN-44.** As above. 7/8x1/4" dia. blade. 43 N 746. NET..... 1.30

### INSULATED BLADE SCREWDRIVER

**Type V-R-261.** Useful screwdriver for work in crowded "live" circuitry. Prevents shorts. 6x1/4" blade fully insulated with break-resistant plastic. Amberyll handle. Wt., 3 oz. 43 N 861. NET..... 71c

### SLIMLINE POCKET CLIP DRIVER



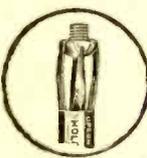
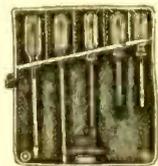
**Type A86.** Screwdriver with convenient pocket clip. Shockproof plastic handle, 5/8x1/2" dia. permits high torque to be applied against stubborn screws. 3/4" dia. blade is made of hardened tool steel; length is 3/2". Overall length, 6". Shpg. wt., 3 oz. 50 N 380. List, 75c. NET..... 59c

### DOUBLE-END NUT DRIVER



**Type DE-810.** The two most popular hex nut drivers combined into one tool that fits in the breast pocket. Single tool takes care of most jobs. Has 1/4" hex nut driver on one end, other end has 3/8" hex nut driver. Overall length, 6". Shpg. wt., 4 oz. 50 N 381. List, \$1.00. NET..... 77c

### "HOLD-E-ZEE" SCREWDRIVER KITS



Type RT-52

Special Crosspoint Bit

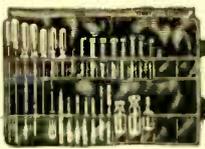
**Type RT-52.** Top-quality screwdriver kit for electronic use. Includes one each: TR-4, with 3/2x4" hex blade; PR-4, 3/2x4", for Phillips head screws; TR-6, 3/2x6"; TR-8, 3/2x8"; TS-7, 7/2" 7". Spring-steel gripper holds screws for starting in difficult-to-reach places. Handles have exclusive "lock-block" construction to prevent blade from twisting. Blades are chrome-vanadium steel. In handy, easy-to-carry roll pouch. Shpg. wt., 1 1/4 lbs. 43 N 972. List, \$4.50. NET..... 3.31

**Type TK-5.** Similar to above, but for mechanics and car owners. Has 1 each: TS-4, 3/2x4"; PS-4, 3/2x4", for Phillips head screws; TH-6, 3/2x6". Also one each of TR-4 and PR-4 described above. 1 1/2 lbs. 43 N 971. List, \$5.25. NET..... 3.86

## VACO TOOL SETS



RT-14



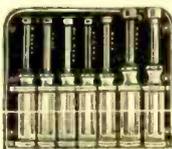
TV-27



ZF-40



SP-500



K-7



ZA-70

### HANDY COMBINATION KIT

**Type RT-14.** All blades fit the shock-proof Amberyll handle provided. Kit includes: Handle; 6" extension piece; 7 nut drivers, sizes 3/8", 1/4", 3/16", 1/2", 3/8", 1/2"; 2 Phillips drivers, No. 1 and No. 2; and 3 regular drivers, sizes 1/4", 3/8" and 1/2". All drivers are of high-quality chrome-alloy steel. With 14-section leatherette tool roll. Shpg. wt., 1 1/2 lbs. 45 N 829. List, \$11.20. NET..... 8.78

### 27-PIECE TV AND RADIO KIT

**Type TV-27.** Includes: 1 medium and 1 heavy-duty handle; #1 and #2 Phillips bits; 1/4", 3/8" and 1/2" regular bits; 6" bit extension; 3/8", 1/4", 3/16", 1/2", 3/8" and 1/2" hex-nut bits; 1 medium and 1 small offset regular screwdriver; 1/2" stub; 3/4" pocket-clip; #1 Phillips; 1/4" screw-holding; 1/2" insulated-blade; 3/4" screw-holding; 3/4" insulated-blade screwdriver; 3/8" metal-tip aligner; 1/8"x10" non-magnetic adjuster; 3/2" fiber television aligner. Shpg. wt., 2 1/2 lbs. 45 N 831. List, \$24.70. NET..... 19.36

### BRISTOL TYPE KIT

**Type ZF-40.** Interchangeable blade tool kit for fluted spline recess screws. Contains 4 blades in the following sizes: .068"; .075"; .093"; .109". Includes Amberyll handle with clutch to hold blades. Packed in 7 section plastic tool roll. Shpg. wt., 8 oz. 50 N 382. List, \$4.15. NET..... 3.23

### BRIDGEPORT SUPER GRIP DRIVERS



Extremely rugged, quality-made screwdrivers. Special comfort-designed vinyl plastic grip is permanently locked into an unbreakable plastic handle—will not slip, slide, twist or come off in use. Fits hand perfectly—permits high torque to be applied against stubborn screws. Shockproof handle is highly resistant to oil, water, gasoline, etc. Hot-forged steel blade is nickel-plated for extra durability. Precision cross ground points and blades assure perfect matching with screw slot.

Types B-452 and B-453 are electrician's types; types B-454 and B-455 are mechanic's types; type B-456 is Phillips type with No. 1 point; B-457 is Phillips type with No. 2 point.

Stock No.	Mfr's Type	Blade Size	Shpg. Wt.	NET EACH
50 N 385	557	4x3/4"	2 1/2	44c
50 N 386	558	6x3/4"	3	48c
50 N 387	559	4x1/2"	3	52c
50 N 388	560	6x1/2"	3 1/2	59c
50 N 389	561	3x3/4"	2 1/2	56c
50 N 390	562	4x1/4"	3	63c

### OFFSET SCREWDRIVERS



Excellent for spots inaccessible to standard types. Heat-treated and tempered steel with screwdriver blade at each end.

**A** For Phillips screws, sizes 1 to 9. 4 1/4" long. Shpg. wt., 4 oz. 45 N 835. NET..... 51c

**B** For standard screws. 3/4" blades. 4 1/2" long. Shpg. wt., 4 oz. 43 N 843. NET..... 54c

### NUT DRIVER KIT

**Type SP-500.** New, 5-piece set of high-quality color drivers. Contains drivers for the five most popular hex nut sizes. Sizes are: 3/8", 3/16", 1/4" and 1/2". Have full polished chrome shafts and extra large, colored-for-size, comfort-designed handles. Specially treated sockets assure long-wearing use—fit long bolt extensions. Finished in durable two-tone plastic box with hinged cover. A valuable service aid. Size of box, 5x7x2". Shpg. wt., 2 lbs. 43 N 982. List, \$5.00. NET..... 3.88

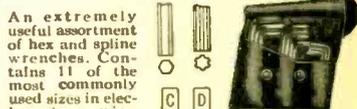
### INSULATED HEX NUT DRIVER SET

**Type K-7.** Set includes 7 hex-nut drivers with color-keyed shafts. Permits immediate selection of correct hex driver for the job. Completely insulated, all-hollow shafts. Sure-grip handles; extra-hard sockets. In convenient, plastic tool roll with individual holders marked for size and color. Shaft length, 3". For hex-nut sizes: 3/8", 1/4", 3/16", 1/2", 3/8", 3/16" and 1/2". Shpg. wt., 1 1/2 lbs. 43 N 906. List, \$9.00. NET..... 7.06

### 7-PIECE ALLEN SET

**Type ZA-70.** Kit contains the 7 most popular hex key sizes—3/8", 3/16", 3/32", 1/8", 1/16" and 1/16". Furnished with a 7-section plastic tool pouch and an Amberyll handle which holds the 6 interchangeable blades. Blades are hardened tool steel. Shpg. wt., 10 oz. 50 N 383. List, \$4.78. NET..... 3.74

### WALSCO HEX & SPLINE WRENCHES



An extremely useful assortment of hex and spline wrenches. Contains 11 of the most commonly used sizes in electronic equipment. Key-type, L-shaped wrenches fit screws ranging in size from No. 2 to 3/8". 7 are hex or Allen type (see Figure C above). The remainder (Figure D). Precision-forged from high-grade carbon steel for exact fit. Neatly packed in a leatherette case. Shpg. wt., 1/2 lb. 46 N 166. List, \$2.25. NET..... 1.32

### ALLEN WRENCH SET

Excellent set of 6 L-shaped wrenches to fit 7 most popular-sized Allen-head screws. Nos. 4, 5, 6, 8 and 10 as well as 1/4" and 3/8" sizes. Made of extremely tough "Alenoy" steel. Keys are neatly packed in convenient, leatherette case which fits into pocket. Shpg. wt., 3 oz. 46 N 072. NET EACH..... 71c

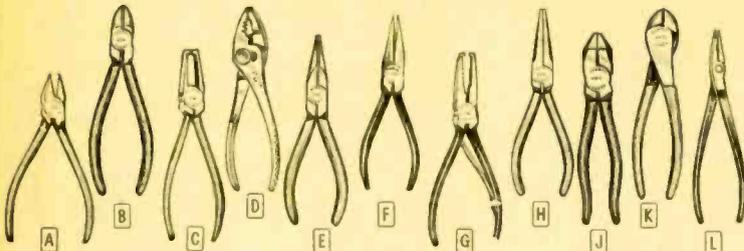
12 sets or more, EACH..... 64c

### MOODY JEWELERS SCREWDRIVERS

**Type JS-6.** Complete set of 6 precision-built, jeweler's screwdrivers. Blade sizes are: .025", .04", .055", .070", .080" and .100". Chuck noses are grooved for blade size indication by touch. In box, 3/4x1/4x3 1/4". Wt., 1/2 lb. 50 N 384. List, \$4.20. NET..... 2.89

# Quality Pliers and Wrenches

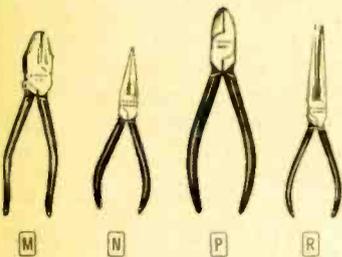
## KRAEUTER HIGH-QUALITY INDUSTRIAL TOOLS



A complete selection of famous Kraeuter tools for radio-TV work, servicemen, technicians, production lines—anywhere high-quality, dependable tools are required. Hammer forged from high grade tool steel and precision finished. All have resilient, acid and grease resistant, vinylite "Cushion-Grip" handles and polished heads. Av. shpg. wt., 1 lb.

Stock No.	Fig.	Type	Description	1-5, EA.	6-Up, EA.
50 N 110	A	4625	5" Needle Point Diagonal Cutters with Spring	3.16	2.88
46 N 402	B	4501	5" Narrow Head Diagonal "Oblique" Cutters	2.24	2.04
46 N 403	B	4501	6" Narrow Head Diagonal "Oblique" Cutters	2.57	2.36
46 N 414	B	2612	6" Wire-Stripping Diag. Cutters (w/spring)	3.09	2.82
50 N 113	C	5627	5 1/2" Resistor Terminal End-Cutting Pliers	3.31	3.02
50 N 329	D	356	5 1/2" Combination Pliers	1.69	1.54
50 N 330	E	1641	5" Short Chain Needle-Nose Pliers (with cutter)	2.35	2.14
46 N 401	E	1661	6" Long Chain Needle-Nose Pliers (with cutter)	2.54	2.32
46 N 404	E	1671	6" Long Chain Needle-Nose Pliers (no cutter)	1.98	1.80
50 N 331	E	1781	7" Long Chain Needle-Nose Pliers (with cutter)	3.09	2.82
46 N 419	F	1663	6" Radio and Ignition Nose-Cutting Pliers	3.23	2.94
50 N 112	F	1650	6" Long Jaw End-Cutting Pliers (w/spring)	2.98	2.70
46 N 413	H	1741	6" Long Flat-Nose Pliers (no cutter)	2.06	1.87
50 N 332	J	1801	6" Linemen's Side Cutting Pliers	2.61	2.38
46 N 408	J	1801	6" Electrician's Side Cutting Pliers	3.60	3.28
46 N 400	J	1830	6 1/2" Electrician's Side Cutting Pliers	2.31	2.10
46 N 411	K	4610	7" Heavy-Duty Diagonal Cutters	2.20	2.28
50 N 110	L	71	8" Long Reach Short-Jaw Nose-Cutting Pliers	3.05	2.78

### KNIGHT TOP-VALUE PLIERS



- Unsurpassed Tool Values
- One-Year Guarantee
- High-Grade Carbon Steel
- Made By Leading Manufacturer

Knight pliers offer exceptionally high quality at an economy price. Made by one of the nation's leading tool manufacturers. Drop-forged from high grade carbon steel, and carefully heat treated. Ideal tools for the engineer, electronics repairman and the hobbyist. These pliers have been precision machined, fitted and adjusted. Will give years of dependable service. All have semi-polished heads and cushion grip handles. Av. shpg. wt., 10 oz.

Stock No.	Fig.	Description	NET EACH	1-5	6-Up
50 N 131	M	6 1/2" Side-cutting pliers	1.77	1.66	
50 N 132	N	6" Chain-nose with cutters	89	76	
50 N 210	N	6" Chain Nose Pliers	1.55	1.44	
50 N 133	P	5" Diagonal cutting pliers	1.69	1.58	
50 N 134	P	6" Diagonal cutting pliers	1.92	1.79	
50 N 135	R	7" Chain-nose with cutters	2.29	2.14	

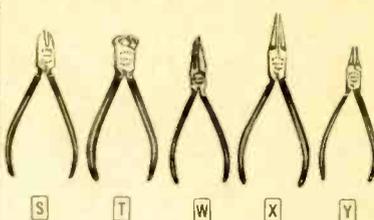
### ADEL METAL "NIBBLING" TOOL



"Nibbles" holes, slots or openings in sheet metal. A real time-saver; leaves smooth, flat edge on holes. Easily munches 18-gauge steel, or aluminum and other soft metals up to 1/8" thick. Minimum hole size, 3/16" diameter. Durably constructed; easy to use. Shpg. wt., 8 oz.

43 N 863, 12-71, EA. 3.60 1-11, EA. 3.85  
Replacement Punch for Above. Easy to install. Shpg. wt., 2 oz.  
50 N 130, NET 1.67

### KRAEUTER JEWELERS' PLIERS



Precision-made pliers for work on miniaturized electronic assemblies and all types of delicate mechanisms. Widely used by hobbyists, experimenters, watchmakers, etc. Drop-forged from high-quality tool steel and polish finished. With cushion grips. Av. shpg. wt., 5 oz.

Stock No.	Fig.	Type	Description	NET
46 N 418	S	81	4 1/2" Diag. Cutting Pliers	2.28
50 N 333	T	82	4 1/2" End Cutting Pliers	2.65
46 N 415	W	83	4 1/2" Chain Nose Pliers	2.14
46 N 416	X	84	4 1/2" Flat Nose Pliers	2.14
46 N 417	Y	85	4 1/2" Round Nose Pliers	2.14

### KRAEUTER JEWELERS' PLIER SETS

- Set of Most Popular Types
- Pliers Matched in Size
- Machined From Tool Steel



Type 90. Complete set of 5 jewelers' precision pliers in durable black zipper storing case. Contains every popular size of jewelers' pliers. Used extensively for delicate, precision work on miniature mechanical and electronic equipment. For hobbyists, experimenters, watchmakers, etc. Set consists of 1—Type 81 diagonal cutters, 1—Type 82 end cutters, 1—Type 83 chain-nose pliers, 1—Type 84 flat-nose pliers, and 1—Type 85 round-nose, round jaw pliers. Types 83, 84 and 85 with smooth jaws. Type 81 designed for close cutting of small soft wires. High-quality tool steel, heat treated and polished. Tools are 4 1/2" long. Supplied with case. Shpg. wt. 1 1/4 lbs.  
46 N 423, NET 13.58

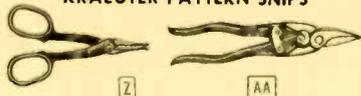
Type 89. (Not illus.) Set same as above except with 3 jewelers' precision pliers. Most often used types for wiring and assembling. Set includes 1—Type 81 diagonal cutting pliers, 1—Type 84 flat-nose pliers, 1—Type 83 chain-nose pliers. From high-quality tool steel. Heat treated to withstand shock and abuse. Polished to a gleaming finish. Excellent for the well-equipped service shop. Each tool is 4 1/2" long. In black zipper case. Shpg. wt., 1 lb.  
46 N 435, NET 8.46

### KRAEUTER 10" JOINT PLIERS



Type 710. Extremely versatile, slip-joint pliers. Drop-forged tool steel. Five parallel adjustments from 3/8" to 1 1/2". T section for added strength in lower jaw. Milled teeth assure firm, non-slip gripping. Polished finish. Cushioned grips. 10" long. Wt., 10 oz.  
46 N 421, NET 2.39

### KRAEUTER PATTERN SNIPS



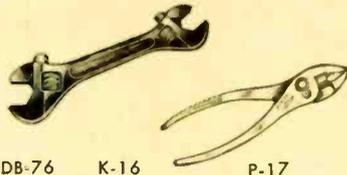
Z Type K-13. Combination pattern snips. Designed to cut either curved or straight lines in sheet metal, plastics, rubber, leather, etc. Drop forged from top-quality tool steel. Blades stay sharp and have uniform shearing action over entire length. Pocket sized—only 7" long, 1 1/4" cut. Shpg. wt., 10 oz.  
46 N 422, NET 1.75

AA Type S3. Multiple action snips for cutting sheet metals up to 18 gauge cold rolled steel. Drop-forged tool steel blades are serrated. Handles are black enameled. 10" long; cut 1 1/2". Shpg. wt., 1 lb.  
50 N 334, NET 3.23

Type L1. (Not illus.) As above, but for cutting to left. 10" long, 1 1/2" cut. 1 lb.  
50 N 335, NET 3.23

Type R2. (Not illus.) As above, but for cutting to right. 10" long, 1 1/2" cut. 1 lb.  
50 N 336, NET 3.23

### DIAMOND TOOLS



DB-76 K-16 P-17

### ADJUSTABLE WRENCHES

Type DB-76. Double-ended wrench. Drop forged "Diamalloy" tool steel. Carefully machined to close tolerances for smooth dependable service. Finished in chrome nickel with highly polished heads and satin finished handle. Capacities are 1/2" and 3/4". 1/2" jaws are 1/2" at tip with 3/8" maximum head thickness; 3/4" jaws are 3/4" at tip with 1 1/2" maximum head thickness. Length, 6" Shpg. wt., 6 oz.  
45 N 770, NET 2.74

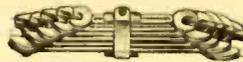
Type DB-78. Double-ended as above but with 3/4" to 1 1/2" capacity. Shpg. wt., 10 oz.  
50 N 115, NET 3.09

### TYPE K SLIP-JOINT PLIERS

Slip-joint combination pliers with convenient wire cutting groove. Excellent for all general purpose work. Precision milled jaws provide a firm, non-slip grip on large or small objects of any shape. Knurled handles. "Side cutting."

Stock No.	Type	Description	WL	NET
50 N 116	K-15	5" Long, 1/4" Jaw Capacity	10 oz.	.79
46 N 460	K-16	6" Long, 1/4" Jaw Capacity	12 oz.	1.86
50 N 337	"P-17"	7" Long, 1/4" Jaw Capacity	8 oz.	1.35
50 N 117	K-18	8" Long, 1/4" Jaw Capacity	14 oz.	1.09

### VLCHEK DOUBLE END WRENCH SETS



Type X2564. 5-piece open-end wrench set. Made of tempered carbon steel. Ten openings, 1/2" and 3/8", 3/8" and 1/2", 1/2" and 3/4", 3/4" and 1/2", 1/2" and 3/4", 3/4" and 1/2". Sizes marked on wrenches. Rust resistant. Wt., 1/2 lb.  
46 N 265, NET 1.43

Type X2567. 5-piece open-end wrench set. As above but 3/8", 1/2", 3/4", 1/2", and 3/4". Sizes marked on wrench. Shpg. wt., 1 1/4 lbs.  
46 N 266, NET 1.79

Type X3412. 5-piece combination box and open-end wrench set. 3/8" to 3/4", 3/4" and 1/2", 1/2" and 3/8", 3/8" and 1/2", 3/8" and 1/2". Sizes marked on wrenches. Wt., 3/4 lb.  
50 N 120, NET 2.10

# Utica and Assorted Hand Tools

## UTICA ADJUSTABLE WRENCHES

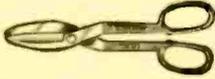


**Type 91 Adjustable Wrench.** Thin pattern design. Easily slip into tight places. Drop-forged from tough alloy steel. Thumbscrew adjustment holds jaws firmly. Chrome finished head. \*Tip thickness.

Stock No.	*Thick-ness	Size	Jaw Open	Shgp. Wt.	NET EACH
46 N 481	1/8"	4"	1/2"	2 oz.	1.84
46 N 482	3/16"	6"	3/4"	4 1/2 oz.	1.84
46 N 483	1/4"	8"	1"	8 oz.	2.17
46 N 484	5/16"	10"	1 1/4"	1 lb.	2.76
46 N 485	3/8"	12"	1 3/8"	1 1/2 lbs.	4.05

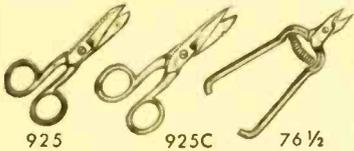
## UTICA STRAIGHT CUT TIN SNIPS

**Type 270.** High-quality tin snips for straight cutting, medium-duty applications. 7" length. Sturdy tempered, forged steel construction. Cutting edge holds sharpness. Powerful, lever action makes cutting easier and faster. Ring-type handles provide firm, comfortable grip. Shgp. wt., 12 oz. **1.73**



46 N 490. NET

## CLAUSS INDUSTRIAL SCISSORS



A selection of special purpose scissors and shears. Type 76 1/2 is a filament nip—has polished blades. Type 925 are electrician's scissors. Made of finest cutting steel—nickel plated. Ideal for cutting tape, rubber, etc. 925C is the same but has wire stripping notches on back of blade. Type 4217 are industrial shears for shop use. Type 4218 is identical but larger (see table).

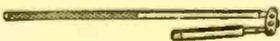
Stock No.	Mfr's Type	Length	Cut Length	Wt. Oz.	NET EACH
45 N 841	76 1/2	6 1/2"	3"	5	2.96
45 N 896	925	7"	1 1/4"	3	1.84
45 N 942	925C	5"	1 1/4"	3	2.14
46 N 305	4217	7"	3"	5	3.31
46 N 304	4218	8"	4"	6	3.67

## STEVENS-WALDEN RADIO WRENCH SET

**Model 3100S-14.** This compact, 14-piece socket set will cover the vast majority of hex-head bolt and nut sizes encountered in radio, television and high servicing. A highly valuable wrench set for repairmen, technicians, Amateurs, etc. The small size of this set makes it ideal for carrying in tool boxes. Set includes: universal joint handle with sliding "T" bar; one straight spin type driver with amber plastic handle; 3/8", 1/2", 3/4", 5/8", 3/4", 1/2", 3/8" and 3/16" hex sockets; 3 double-square sockets in 3/8", 1/2" and 3/4" sizes. Universal joint in handle makes it easy to reach hard-to-get-at places. Tools have bright chrome finish. Supplied in sturdy steel case with handsome red enamel finish. Shgp. wt., 1 1/4 lbs. **46 N 165. NET PER SET..... 5.52**



## "MAGIMMICK JR."



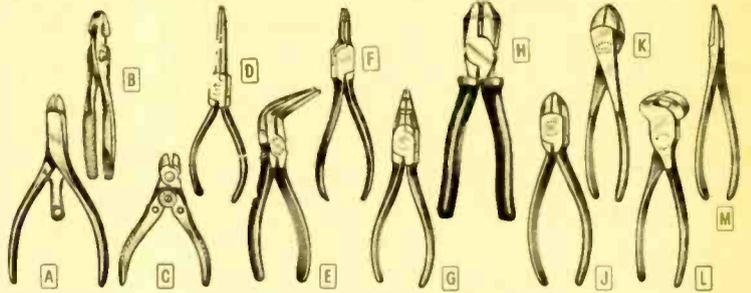
A very useful tool when working in restricted space. Consists of permanent magnet mounted on a swivel-joint extension handle. Retrieves nuts, bolts, etc. in hard-to-reach places. Indispensable when working on miniaturized units, in corners, in dim light, etc. 10" long. Shgp. wt., 6 oz. **46 N 084. NET..... 1.20**

## HANDY STEEL TWEEZER



Finely tempered, nickel-plated steel tweezers. Size, 6 1/2" long. For all types of delicate work. Aids in servicing transistorized equipment. Holds wires, nuts, screws, etc. Easy to hold. Shgp. wt., 4 oz. **46 N 095. NET..... 53c**

## UTICA HIGH-QUALITY CUTTERS AND PLIERS



All types of electrical wiring, repair work and assembly jobs are easier with fine-quality tools. Utica supplies a wide variety of pliers, cutters and snips that are ideal for use by manufacturers, servicemen, Amateurs, experimenters—any who insist upon tools offering the utmost in smooth action, dependability and long life under the hardest use. Precise, scientifically controlled heat treating and hardening of the finest tool steels assure superior and uniform quality. Precision-fit joints provide free, positive action under all conditions of operation. Accurate, easy cutting and gripping are assured by careful alignment of jaws and cutting edges. Handles on all types are of proper size and shape for completely comfortable grip and balance. Av. shgp. wt., 10 oz.

No.	Fig.	Type	Description	NET
46 N 425	A	101	4 1/2" Midget, Scissors-Type Snips	2.70
46 N 728	B	7	5" Combination Slip-Joint Pliers	.63
45 N 727	B	7	6" Combination Slip-Joint Pliers	.63
46 N 466	C	470-5	5" Printed Circuit Cutting and Crimping Snips	3.46
50 N 167	D	775	5 1/2" Long Nose Pliers	2.87
46 N 475	D	777	6" Long Needle Nose Pliers	2.22
46 N 476	E	888	6" Curved Needle Nose Pliers	2.62
46 N 426	F	896	6" Cutting and Stripping Pliers	2.79
46 N 478	G	2291	6" Insulation Stripping Pliers	2.43
46 N 489	H	3950	6" Linemen's Side Cutters	4.05
46 N 470	J	45	6" Aviation Diagonal Cutters	2.78
46 N 471	K	40	7" High-Leverage Diagonal Pliers	2.50
46 N 474	L	260	7" End Cutting Nippers	2.99
46 N 477	M	82	8" Assembly Pliers, Needle Nose	2.38

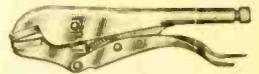
## STEVENS-WALDEN TOOL SETS

### "SPINTITE" SET 3800B15

Deluxe 15-piece radio and electrical set. Includes 7 hex wrenches in following sizes: 3/16", 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8"; three screwdrivers; one combination reamer and awl; and one universal handle which holds all tool shafts. Also includes 6" long-nose pliers, 5" diagonal cutters, and insulated screwdriver and wrench. With tool roll. 2 1/4 lbs. **46 N 055. NET PER SET..... 13.59**



## "TRU-CUT" LOCK WRENCH



**Type 10-DC.** Rugged, heavy-duty tool. Applies tremendous pressure with minimum effort—up to 1000 lbs.! Non-slip grip holds objects of any shape. Can be used as quick-clamp, pipe wrench, toggle press, or hand vise. Finger-tip release opens wrench instantly. Knurled-head adjustable bolt sets tool for sizes up to 1 1/2". Nickel-plated hardened steel. 10" long. Shgp. wt., 1 1/4 lbs. **46 N 434. NET..... 1.72**

## MOODY WRENCH AND SCREWDRIVER SETS

### SC-5 SCREWDRIVER SETS

Set of miniature screwdrivers contains 4 interchangeable hardened steel blades in sizes .001", .055", .070" and .080" plus 1 awl. Blades insert quickly and securely into screw type chuck. Excellent for camera and watch repairing, radio and appliance work, etc. Complete set includes 4 blades, awl, handle and handy plastic base with transparent dust cover. Base keeps blades in place, easy to find. Shgp. wt., 8 oz. **43 N 859. NET PER SET..... 99c**  
**12 sets or more, PER SET..... 89c**



**Type PA-5.** Combination Phillips head screwdriver set and Allen head wrench set. Contains No. 0 and No. 1 Phillips type driver and Nos. 4, 6 and 8 Allen type wrench. With handle, stand and cover. Shgp. wt., 7 oz. **43 N 857. NET PER SET..... 1.64**  
**12 sets or more, PER SET..... 1.47**

### SH-2 SCREWDRIVER SET

Tiny screw-holding screwdriver set. Contains "Swivel-top" driver handle with solid locking chuck which accommodates either 2 1/2" or 1 1/2" spring steel blades. Each blade can interchangeably take spring steel clip specially designed to securely hold tiny screws. A valuable aid when servicing radio and TV sets, building electronic kits of all types, etc. Transparent plastic case holds driver, both blades and spring steel clip. Shgp. wt., 3 oz. **43 N 803. NET PER SET..... 81c**  
**12 sets or more, PER SET..... 73c**



### BW-5 MAGNETIC SOCKET WRENCH SET

Wrench kit containing five tiny, interchangeable hexagonal socket wrenches with magnetized swivel top handles. Provide easy means of removing or inserting small nuts or screws in hard-to-get-at places—magnet retrieves small, metal parts. Particularly suitable for close work in crowded radio and TV chassis. A valuable tool kit for the repairman, hobbyist or experimenter and builder. Wrenches are quickly and easily interchangeable, fit securely in screw type chuck. Socket wrench sizes: 3/16", 1/8", 3/16" and 1/4". Wrenches are made of heat treated steel. Handle is nickel-plated brass. In transparent plastic container with attractive colored base. Wt., 5 oz. **43 N 862. NET PER SET..... 2.61**  
**12 sets or more, PER SET..... 2.39**

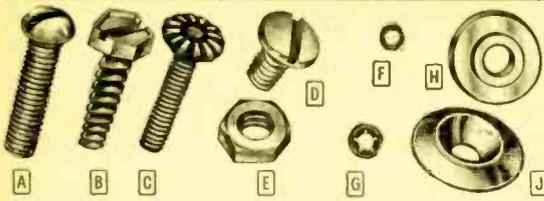


### OE-5 OPEN END WRENCH SET

Set of 5 tiny offset open end wrenches. All wrenches are made of tough, heat-treated steel and are interchangeable in the handle. Designed to facilitate removing or attaching all sizes of tiny nuts commonly found in hobby, electrical, automotive, aeronautical and other small, intricate mechanical devices. Especially desirable for sub-miniature work in electronics. Wrench sizes supplied: 3/16", 1/8", 3/16", 1/4" and 5/16". Wrenches and handle are supplied in convenient, attractive base with transparent plastic dust cover. Shgp. wt., 3 oz. **43 N 804. NET PER SET..... 1.64**  
**12 sets or more, PER SET..... 1.47**



# G-C Hardware



General hardware for radio-TV construction and repair. Available in 35¢ quantities packed in plastic boxes or in lots of 100 and 1000. Nuts, screws and washers are nickel plated except Fig. C (brass finish). 35¢ container with hardware in handy, reusable, hinged plastic box. \*G-C part number for 100 and 1000 lot pkgs. only.

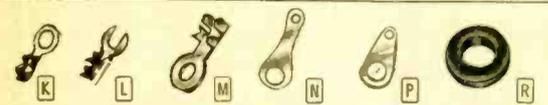
Prompt shipment from stock on all radio-TV hardware listed below.

**A Round Head Screws.** General-purpose type in most sizes required for repair and construction jobs in radio, television and electronics. Plated steel. Shpg. wts.: 3 oz.; 14 oz.; and 5 lbs.

Size	35¢ container		Part No.*	100 Lot Pkg.		1000 Lot Pkg.	
	No.	Quan.		No.	NET	No.	NET
4-36x1/4"	44 N 502	40	6005	42 N 700	.48	44 N 742	3.79
4-36x1/2"	44 N 503	35	6006	42 N 701	.51	44 N 745	4.10
4-36x3/4"	44 N 504	35	6007	42 N 702	.60	44 N 748	4.76
6-32x1/2"	44 N 505	40	6008	42 N 703	.52	44 N 704	4.16
6-32x3/4"	44 N 506	30	6009	42 N 704	.61	44 N 712	4.83
6-32x1"	44 N 507	30	6010	42 N 705	.71	44 N 717	5.68
6-32x1 1/4"	44 N 508	30	6011	42 N 706	.82	44 N 722	6.53
6-32x1 1/2"	44 N 509	30	7141	42 N 707	.98	44 N 727	7.83
8-32x1/2"	44 N 518	30	6013	42 N 708	.69	44 N 739	5.43
8-32x3/4"	44 N 519	25	6014	42 N 709	.73	44 N 754	5.86
8-32x1"	44 N 525	25	6015	42 N 710	.79	44 N 757	6.35
8-32x1 1/4"	44 N 535	25	6016	42 N 711	.91	44 N 762	7.27
8-32x1 1/2"	44 N 546	20	6017	42 N 712	1.04	44 N 769	8.32
10-32x1 1/2"	44 N 548	20	6020	42 N 713	.93	44 N 778	7.48
10-32x1 3/4"	44 N 549	20	6021	42 N 714	1.10	44 N 781	8.75
10-32x1"	44 N 553	17	6022	42 N 715	1.22	44 N 784	9.84

**B Self-Tapping Screws.** Flat-slotted type. Ideal for panel and rack mounting. No tapping of metal required. Plated steel. Hex head with deep screwdriver slot. Shpg. wts.: 4 oz.; 12 oz.; and 4 1/2 lbs.

4x1/4"	44 N 564	35	6090	42 N 716	.95	44 N 804	7.57
6x1/4"	44 N 565	30	6091	42 N 717	.95	44 N 809	7.57
6x1/2"	44 N 566	25	6093	42 N 718	1.05	44 N 813	8.58
8x1/2"	44 N 567	20	6096	42 N 719	1.22	44 N 824	9.78
10x1/2"	44 N 569	15	6099	42 N 720	1.71	44 N 834	13.67



**Solder Lugs.** Sturdy, tinned solder lug units. Easily accommodate the screw numbers given below; No. 8 holes also take No. 6 screws. \*Part no. for 100 and 1000 lot pkgs. only. Shpg. wts.: 2 oz.; 4 oz.; 1 lb.

Size	35¢ container		Part No.*	100 Lot Pkg.		1000 Lot Pkg.	
	No.	Quan.		No.	NET	No.	NET
# 8, Fig. K	44 N 603	30	7442	42 N 746	1.12	44 N 637	8.93
# 8, Fig. L	44 N 604	30	7445	42 N 747	1.17	44 N 640	9.37
#10, Fig. M	44 N 605	30	1021A	42 N 748	1.45	44 N 643	11.60
# 8, Fig. N	44 N 607	30	7455	42 N 749	1.81	44 N 648	11.65
# 8, Fig. P	44 N 608	30	7451	42 N 750	.85	44 N 649	6.85

**R Rubber Grommets.** Soft, black stock. Size shown below in chassis mounting holes wired. Shpg. wts.: 2 oz.; 4 lbs.

1/4"	44 N 618	10	1041-2	42 N 751	1.10	44 N 437	8.75
3/8"	44 N 619	14	1042	42 N 752	1.23	44 N 440	8.88
1/2"	44 N 620	12	1042	42 N 753	1.66	44 N 443	13.23
5/8"	44 N 627	10	1043	42 N 754	1.86	44 N 446	14.85
1"	44 N 628	8	1043-1	42 N 755	2.81	44 N 449	22.59
1 1/4"	42 N 785	35	5711	42 N 756	3.46	42 N 786	27.69
1 1/2"	42 N 787	35	7569	42 N 757	5.63	42 N 788	45.02

**S Rubber Tack Bumpers.** Tacks molded-in. For wooden cabinets, etc. Shpg. wts.: 2 oz.; 8 oz.; 4 lbs.

3/8" O.D.	44 N 774	10	1075	42 N 758	1.81	44 N 164	14.49
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**C Ornamental Head Screws.** Popular sizes of round head screws for electronics. For use on panels, etc. \*G-C part number for 100 and 1000 lot pkgs. only. Shpg. wts.: 4 oz.; 13 oz.; 6 lbs.

Size	35¢ container		Part No.*	100 Lot Pkg.		1000 Lot Pkg.	
	No.	Quan.		No.	NET	No.	NET
6-32x1/4"	44 N 573	25	1097	42 N 721	1.05	44 N 672	8.38
8-32x1/4"	44 N 575	12	1099	42 N 722	1.57	44 N 678	12.50

**D Binding Head Machine Screws.** For general machine shop use. Plated. Shpg. wts.: 4 oz.; 7 oz.; 2 1/2 lbs.

6-32x1/2"	44 N 576	35	7152	42 N 723	.52	44 N 694	4.15
6-32x3/4"	44 N 577	35	7153	42 N 724	.55	44 N 696	4.41
6-32x1"	.....	.....	7118	42 N 725	.63	44 N 622	5.01
8-32x1/2"	.....	.....	7119	42 N 726	.71	44 N 624	5.64
8-32x3/4"	.....	.....	7120	42 N 727	.77	44 N 625	6.13

**E Hex Nuts.** Plated steel. Shpg. wts.: 4 oz.; 8 oz.; 3 lbs.

4-36x1/4"	44 N 584	30	6041	42 N 728	.65	44 N 907	5.18
4-36x1/2"	44 N 579	30	7230	42 N 729	.72	44 N 911	5.70
8-32x3/4"	44 N 585	30	7233	42 N 730	.72	44 N 916	5.15
10-32x3/4"	44 N 585	30	6044	42 N 731	.94	44 N 919	7.53
6-32x1/2"	44 N 586	30	6042	42 N 732	.68	44 N 953	5.40
8-32x1/2"	44 N 587	30	6043	42 N 733	.72	44 N 954	5.73

**F Split Lockwashers.** Tempered steel. Wts.: 2 oz.; 4 oz.; 2 lbs.

# 6 screw	44 N 588	65	6504	42 N 734	.45	44 N 663	3.56
# 8 screw	44 N 589	55	6505	42 N 735	.37	44 N 666	2.94

**G Internal Star Lockwashers.** Shpg. wts.: 2 oz.; 4 oz.; 1 1/4 lbs.

# 6 screw	44 N 597	60	7326	42 N 736	.45	44 N 924	3.56
# 8 screw	44 N 598	60	7328	42 N 737	.49	44 N 929	3.90
#10 screw	44 N 599	60	7330	42 N 738	.49	44 N 934	3.90

**H Extruded Fiber Washers.** Fiber washers in choice of 4 sizes. Overall thickness 1/16". Av. shpg. wts.: 3 oz.; 14 oz.; and 5 lbs.

No. 6	42 N 771	35	6525	42 N 739	.84	42 N 772	6.76
No. 8	42 N 773	35	6526	42 N 740	.92	42 N 774	7.76
No. 10	42 N 775	35	6527	42 N 741	.92	42 N 776	7.39
1/4"	42 N 777	35	6528	42 N 742	.92	42 N 778	7.39

**J Cup Finishing Washers.** Nickel-plated cup washers for rack panel mounting, etc. Av. shpg. wts.: 3 oz.; 14 oz.; and 5 lbs.

No. 6	42 N 779	35	6161	42 N 743	.39	42 N 780	3.13
No. 8	42 N 781	35	6162	42 N 744	.41	42 N 782	3.31
No. 10	42 N 783	35	6163	42 N 745	.54	42 N 784	4.37



**Snap Hole Plugs.** Fill hole size listed. All are Fig. T with solid top, except † which is Fig. W with screen vent top. \*G-C part number for 100 and 1000 lot pkgs. only. Shpg. wts.: 3 oz.; 1 1/4 lbs.; 10 lbs.

Size	35¢ container		Part No.*	100 Lot Pkg.		1000 Lot Pkg.	
	No.	Quan.		No.	NET	No.	NET
1/4"	44 N 659	8	1711-A	42 N 759	2.10	44 N 846	16.80
3/8"	44 N 679	8	1711	42 N 760	2.79	44 N 847	22.30
1/2"	44 N 689	6	1712	42 N 761	2.98	44 N 293	23.81
3/4"	44 N 699	5	1714	42 N 762	3.53	44 N 296	28.22
1"	44 N 707	5	1715	42 N 763	6.17	44 N 299	38.80
1 1/4"	44 N 396	1	1708†	42 N 766	20.96	44 N 395	167.58

**X Cable Clamps.** Fit cable sizes below. Wts.: 3 oz.; 12 oz.; 5 lbs.

1/8"-3/8"	44 N 708	25	6251	42 N 767	.96	44 N 334	7.68
3/16"-1/2"	44 N 713	20	6252	42 N 768	1.09	44 N 337	8.71
1/4"-3/4"	44 N 732	15	6253	42 N 769	2.04	44 N 342	16.32
5/8"-1"	44 N 733	15	6253	42 N 770	1.24	44 N 345	9.93

**Y Rubber Feet.** Take screws, nails, etc. For wood or metal cabinets. Shpg. wts.: 3 oz.; 9 oz.; 4 1/4 lbs.

3/8" O.D.	44 N 763	8	1075B	42 N 764	.89	44 N 155	7.15
5/8" O.D.	44 N 764	8	1075F	42 N 765	2.18	44 N 158	17.35

## HANDY PLASTIC BOXES OF MOST-OFTEN NEEDED SERVICING HARDWARE

Most-often needed hardware used in radio, TV and electronics—packed in convenient plastic boxes. No loss or spillage. \*Approx. quan.

All items are precision-made from high-quality materials to insure dependable service. All are assortments. Av. shpg. wt.: 4 oz.

Stock No.	Description	Quan.*
43 N 332	Extra small size escutcheon and wood screws.	25
43 N 302	Wood screws w/round and countersunk heads.	25
43 N 300	1/4"-1" mach. screws w/round & flat heads: Nos. 6, 8, 10.	35
43 N 301	Nos. 2 & 4 screws & nuts. TV back-cover screws.	35
43 N 304	Nickel-plated rack screws & cup washers.	15
43 N 303	Sheet metal screws, ass't.—6, 8, 10. Hex & slotted.	25
43 N 318	Phono needle set screws—2-56, 2-64, 1-72.	12
43 N 329	Spade bolts, #6 hole size.	15
43 N 306	Assorted set screws—6-32, 8-32, 10-32.	15
43 N 322	Self-locking speed nuts.	30
43 N 331	Ass't. internal lockwashers.	50
43 N 307	Nuts—6-32, 8-32, 10-32.	30

NET PER BOX..... 35¢

Stock No.	Description	Quan.*
43 N 308	Hex & ring mounting nuts. Used on controls, switches.	15
43 N 380	Ass't. extruded fibre washers.	30
43 N 330	Insulating washers. Nos. 6 to 1/4".	35
43 N 312	Steel washers for #4, 6, 8, 10, 1/2" screws.	80
43 N 313	Rings & C-washers for 3/16"-1/4" shafts.	25
43 N 316	Snap-hole plugs—1/4" to 1".	6
43 N 317	Ass't. ventilating hole plugs.	3
43 N 341	Ass't. TV cord rivets.	50
43 N 319	Solder lugs—#6-10.	30
43 N 342	Metal spacers. For #6 & 8 screws.	12
43 N 343	Insulated spacers for #6 & 8 screws.	12
43 N 321	Twin lead wiring nails.	35
43 N 320	Cotter & hairpins.	50
43 N 323	Cable clamps, 1/4 to 3/8".	20

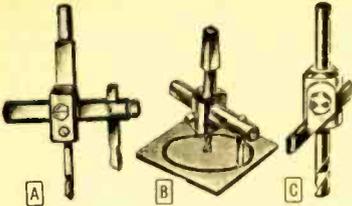
NET PER BOX..... 35¢

Stock No.	Description	Quan.*
43 N 310	Large expansion springs.	10
43 N 311	Small expansion springs.	10
43 N 312	Small size dial drive springs.	10
43 N 338	Large and small dial drive springs.	8
43 N 339	Radio knob springs.	18
43 N 327	Rubber feet w/wood screws.	8
43 N 325	Cord strain relief for POSJ type wire.	5
43 N 344	Allen wrench set. 4 hex: for #4 to 10 set screws. #2-6 cap screws.	Set of 4
43 N 345	Spline wrenches for set screws to 1/4" & cap screws to No. 8.	Set of 4
43 N 315	Rubber chassis mounts.	10
43 N 314	Rubber grommets. For cables and metals to 1/2".	15
43 N 335	Standard thin dial cord.	10 ft.
43 N 336	Standard dial cord.	10 ft.

NET PER BOX..... 35¢

# Chassis-Cutting Tools—Hardware

## GENERAL HARDWARE CIRCLE CUTTERS



Cut holes accurately in wood, sheet metal, plastics, etc. Round shank type for use in drill press; square shank type for hand brace. Drill acts as center pilot, keeping cutter in alignment. Removable pilot drill and cutter blade. Horizontal cross-bar and cutting bits are instantly adjustable. Blade of hardened tool steel. Polished cutting edges. Shpg. wt., 8 oz.

No.	Fig.	Shank	Hole Size	NET
45 N 600	A	Round 1/4"	1/8" to 4"	1.69
45 N 602	B	Square 1"	1" to 5 1/2"	2.10
45 N 603	A	Round 3/8"	1" to 5 1/2"	2.10
45 N 350	A	Round 1/2"	1" to 5 1/2"	2.11
45 N 351	A	Round 1/2"	1 3/4" to 8"	4.64

Replacement Cutter Blades. For above. Hardened tool steel. Shpg. wt., 4 oz.  
45 N 610, NET EACH..... 44c

### CLARK HOLE CUTTER

**C** Type 100. Cuts holes 3/8" to 1 1/2" in dia., in metals up to 1/8" thick. 1/2" pilot drill with 1/2" round shank for electric drills. Fully adjustable. Shpg. wt., 5 oz.  
45 N 620, NET..... 3.67

## BARGAIN HARDWARE KIT

Save on this amazingly low priced assortment of rivets, rubber grommets, nuts, screws, lock washers, right angle brackets, self-tapping screws, eyelets, and other useful radio and TV hardware. Valuable collection of often needed parts for the electronics repairman, hobbyist and ham operator. Includes nickel and cadmium plated, and solid aluminum pieces. Supplied in convenient transparent plastic container. Shpg. wt., 1 1/4 lbs.  
44 N 315, NET..... 97c



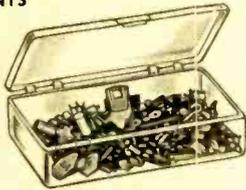
## G-C SCREW AND NUT ASSORTMENT

No. 7060. Two-pound assortment of most often used nuts and screws in radio-TV, electronics repair, experimenting and building. A valuable assortment for the ham, hobbyist, repairman. Also excellent for household repairs. Nut sizes from 4-40 to 8-32, screw sizes from 1/4" to 1". All pieces nickel and cadmium plated. Rust resistant. Supplied in handy plastic container. Shpg. wt., 2 1/4 lbs.  
50 N 030, NET..... 87c



## G-C HOME-SHOP ASSORTMENTS

Handy assortments of most-often-needed hardware. Provide many hard-to-get screws, springs, solder lugs, nuts, and bolts often needed by experimenters and servicemen. Screws in a wide variety of head styles, diameters and lengths. Spring assortment includes those needed for repairs on dial cords, push buttons, etc. Both extension and compression springs included. Each assortment packed in plastic hinged-cover box. Only popular sizes that are most wanted for repair jobs.



No. 9116 Solder Lug Assortment. Includes generous quantity of different size solder lugs. For all types of electrical connections—particularly suited for radio chassis, control panels, test instruments. Shpg. wt., 1 1/2 lbs.  
43 N 370, NET..... 97c

No. 9117 Screw and Nut Assortment. Contains various size screws, nuts and bolts. Ideal addition to the tool box. Popular sizes used for mounting terminal strips, transformers, relays, switches, etc. Shpg. wt., 1 1/2 lbs.  
43 N 371, NET..... 97c

No. 9118 Spring Assortment. Practical package of different type springs for use with dial cords, push-buttons, etc. Generous quantity includes both extension and compression springs. In plastic box. Shpg. wt., 1 1/4 lbs.  
43 N 372, NET..... 97c

No. 9193 Sheet Metal Screw Assortment. A selection of sheet metal screws for all applications. 700 screws in 8 assorted, popular sizes from 4 1/2" x 8x1". Easily selected from compartmented plastic box. Shpg. wt., 2 lbs.  
50 N 172, NET..... 3.24

No. 9199 Machine Screw Assortment. Assortment of round head screws and nuts. Machine screws from 4-40x1/2" through 8-32x1/2". Hex nuts from 4-40x3/4" through 8-32x3/4". 675 pieces total, in handy plastic box. Shpg. wt., 1 1/2 lbs.  
50 N 173, NET..... 3.24

## GREENLEE CHASSIS PUNCHES

Series 730 Round Punches. Permit easy, rapid cutting of round holes in metal chassis for sockets, switches, controls, plugs, meters, transformers, panel lights, and other equipment. Cut smooth openings in sheet metal, bakelite or hard rubber. Cuts through metals up to 1/8" thick. Just turn cap screw to cut hole—can be operated with ordinary wrench. No reaming or filing required. All punches require 3/8" hole for lead screw, except 1 1/4" hole, and 1 1/4" hole. Av. shpg. wt., 1 1/2 lbs.



No.	Size	NET	No.	Size	NET
46 N 169	1 1/2"	2.29	46 N 002	1 1/2"	2.86
46 N 177	1 1/2"	2.29	46 N 175	1 1/2"	2.65
46 N 000	1 1/2"	2.29	46 N 176	1 1/2"	3.00
46 N 170	1 1/2"	2.29	46 N 180	1 1/2"	3.39
46 N 001	1 1/2"	2.29	46 N 011	1 1/2"	3.97
46 N 171	1 1/2"	2.29	46 N 013	1 1/2"	4.50
46 N 172	1 1/2"	2.51	46 N 111	1 1/2"	5.60
46 N 178	1 1/2"	2.65	46 N 116	2"	6.04
46 N 173	1 1/2"	2.65	46 N 181	2 1/4"	6.57
46 N 179	1 1/2"	2.65	46 N 209	2 3/4"	11.02
46 N 174	1 1/2"	2.65			

Ball-Bearing Cap Screws. For use with Type 730 punches that have a 3/4" cap screw. Reduce friction for easy operation. Shpg. wt., 1 lb.

50 N 168. Type AV249-BB. For 1 1/2", 1 1/4" and 1 1/8" chassis punches. NET..... 2.07

50 N 169. Type AV304-BB. For 1 1/4", 2", 2 1/4" and 2 3/4" chassis punches. NET..... 2.24

Replacement Cap Screws. For round hole punches listed above. Av. shpg. wt., 4 oz.

Stock No.	Size	For Punch Size	NET
46 N 182	1/2"	1/2" and 3/8"	26c
46 N 183	3/8"	3/8" to 5/8"	30c
46 N 168	1"	1" (except 1 1/2")	30c
46 N 299	3/8"	1 1/2", 1 1/4", 1 1/8"	39c
46 N 343	1/2"	1/2" to 2 1/2"	53c

Series 731 Square Punches. For quickly cutting smooth openings in sheet metal, bakelite or hard rubber. Cut holes in metal up to 1/8" thick. Drive screw fits into 1/2" hole which can be drilled or made with 1/2" round punch. Operates with an ordinary wrench for drive power. Oblong-shaped or large square holes for power transformers can be made by overlapping cut. Shpg. wt., 2 lbs.

46 N 269. For 1/2" hole. NET..... 3.66  
46 N 276. For 3/8" hole. NET..... 3.74  
46 N 277. For 1/2" hole. NET..... 4.18  
46 N 278. For 1" hole. NET..... 4.94

Series 732 Keyed Punches. Cut holes for keyed sockets—simplifies and speeds mounting of radio parts. Punches cut clean accurate holes—no sawing or drilling, reaming and filing needed. Simply insert punch in small drilled hole, turn with an ordinary wrench. Require 1/2" hole except 1 1/4" hole. Av. wt., 1 1/2 lbs.

No.	Size	NET	No.	Size	NET
46 N 214	1 1/2"	4.31	46 N 189	1 1/4"	4.66
46 N 184	1 1/2"	4.10	46 N 193	1 1/4"	4.94
46 N 186	1 1/4"	4.41			

Series 733 "D" Punches. Simplify and speed work of making "D" shaped openings. For high-frequency miniature tube sockets and other equipment using this type opening. Drive screw require 3/8" hole. Av. wt., 1 lb.

45 N 352. For 1/2" hole. NET..... 3.97  
45 N 353. For 3/8" hole. NET..... 4.23

## NEW TRI-TAP TOOLS

One tool taps 3 thread sizes. Choice of 3 models, each with detachable handle. Tap easily removed for compact storing. A precision tool for use by the electronic technician, journeyman electrician, and the TV repairman. Av. shpg. wt., 8 oz.

Type HT-24. Taps 3 thread sizes: 6/32, 8/32, 10/32. With detachable handle. 2.06  
45 N 354, NET EACH.....

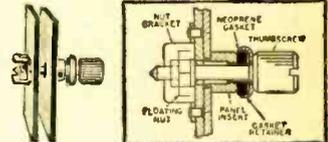
Type HT-25. Taps 3 thread sizes: 6/32, 8/32, 10/24. With detachable handle. 2.06  
45 N 355, NET EACH.....

Type HT-29. Taps 3 thread sizes: 6/32, 10/24, 1/4/20. With detachable handle. 2.06  
45 N 356, NET EACH.....



## RAYTHEON INDUSTRIAL HARDWARE

Quality stainless steel industrial hardware designed to meet government specifications. Av. shpg. wt., 2 oz.  
**Captive Screws** in two different lengths. \*Length less cured in holes of suitable dimensions by flaring end on an arbor press. Nut Bracket Assemblies. Nut entirely captivated—bracket and nut supplied as one unit. Both have iridescent chromate film. Gaskets and Gasket Retainers. For use where a dualport, splash-proof seal is required. Gasket of neoprene; gasket retainer of stainless steel. Gasket dimensions given in table below are I.D., O.D. and thickness. Retainer dimensions are I.D. and screw hole size. Av. shpg. wt., 2 oz.



### CAPTIVE SCREWS

Stock No.	Mfr's Type	Thread Size	Length*	NET EACH			
				1-99	100-199	200-499	500-999
45 N 357	209-1032P2	10-24	1/2"	.40	.36	.34	.32
45 N 358	209-1032P46	10-24	1"	.50	.36	.34	.32
45 N 359	209-1032P5	1/4-20	1"	.50	.45	.43	.40

### PANEL INSERTS

Stock No.	Mfr's Type	Thread Size	Hole Dia.	NET EACH			
				1-99	100-199	200-499	500-999
45 N 360	364-1020P2	10-24	1 1/4"	.15	.135	.125	.12
45 N 361	364-1020P22	10-32	1 1/4"	.15	.135	.125	.12
45 N 362	364-1020P8	1/4-20	1 1/4"	.20	.18	.17	.16

### NUT BRACKET ASSEMBLIES

Stock No.	Mfr's Type	Thread Size	Mtg. Ctrs.	NET EACH			
				1-99	100-199	200-499	500-999
45 N 363	203-1154G2	10-24	1 1/4"	.12	.11	.10	.095
45 N 364	203-1154G3	10-32	1 1/4"	.12	.11	.10	.095
45 N 365	203-1154G4	1/4-20	1 1/4"	.19	.17	.16	.15

### GASKETS

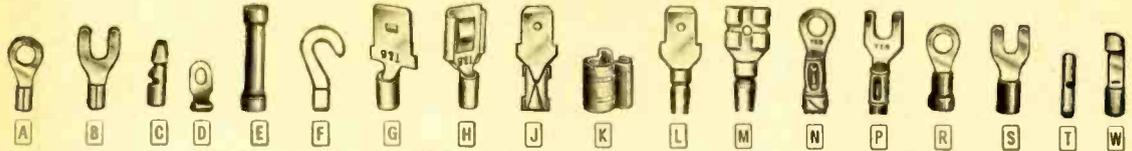
Stock No.	Mfr's Type	Dimensions	NET EACH			
			1-99	100-199	200-499	500-999
45 N 366	287-1114P1	3/8x3/8x3/8"	.02	.018	.017	.016
45 N 367	287-1114P2	1/2x3/8x3/8"				

### GASKET RETAINERS

Stock No.	Mfr's Type	Dimensions	NET EACH			
			1-99	100-199	200-499	500-999
45 N 368	362-1037P1	3/8x3/8"	.05	.045	.042	.04
45 N 369	362-1037P2	1/2x3/8"				

# Quality Terminals—Installation Tools

## TERMINALS FOR EVERY USE



### VACO SOLDERLESS TERMINALS & TOOLS

Assorted terminals for general purpose use, radio and TV servicing and production, and automotive servicing. Terminals form a perfect, electrical connection between terminal barrel and stripped wire. Use with Type 1930 or 1902 crimping tools listed below. Available in a wide variety of types and sizes to meet practically any wiring requirements. Of copper alloy for maximum conductivity and minimum voltage drop. Primary terminal connects quickly and easily with only one crimp. \*Included in 2195 kit shown below. †1/4" male tab. ‡Female tab socket. §1/4" angle male tab. ¶Angle female tab socket. \*\*1/4" male tab on one end; takes Fig. C 3/4" snap terminal on other end. ††Female tab socket on one end; takes Fig. C 3/4" snap terminal on other end. Av. shpg. wt., per pkg. of 100, 8 oz. 100 terminals per pkg.

NON-INSULATED						INSULATED						
Wire Size	Stud Size	Fig.	Stock No.	Mfr's No.	Net per pkg. (100 per pkg.)	Stock No.	Mfr's Type	NET PER PKG.				
					1-9	10-49	50-UP	1-9	10-49	50-UP		
22-16	4-6	A	42N 800	2300*	2.18	2.00	1.08	42N 828	6300	3.97	3.65	1.97
22-16	4-6	A	42N 801	2301*	2.18	2.00	1.08	42N 829	6301	3.97	3.65	1.97
22-16	8-10	A	42N 802	2302*	2.18	2.00	1.08	42N 830	6302	3.97	3.65	1.97
16-14	4-6	A	42N 803	2400*	2.18	2.00	1.08	42N 831	6400	3.97	3.65	1.97
16-14	4-6	A	42N 804	2401*	2.18	2.00	1.08	42N 832	6401	3.97	3.65	1.97
16-14	8-10	A	42N 805	2402*	2.18	2.00	1.08	42N 833	6402	3.97	3.65	1.97
16-14	12-14	A	42N 806	2403	2.71	2.50	1.35	42N 834	6403	4.67	4.29	2.32
12-10	8-10	A	42N 807	2502	2.71	2.50	1.35	42N 835	6502	4.67	4.29	2.32
12-10	12-14	A	42N 808	2503	3.61	3.33	1.80	42N 836	6503	5.73	5.27	2.85
22-16	4-6	B	42N 809	2600*	1.94	1.78	.96	42N 837	6600	3.97	3.65	1.97
16-14	4-6	B	42N 810	2601*	2.18	2.00	1.08	42N 838	6601	3.97	3.65	1.97
16-14	8-10	B	42N 811	2602*	2.18	2.00	1.08	42N 839	6602	3.97	3.65	1.97
22-16	4-6	B	42N 812	2700	1.94	1.78	.96	42N 840	6700	3.97	3.65	1.97
16-14	4-6	C	42N 813	3202	1.69	1.55	.84					
22-16	8-10	D	42N 814	3802	2.18	2.00	1.08					
16-14	8-10	D	42N 815	2900	2.18	2.00	1.08					
22-16	8-10	E	42N 816	3101	1.69	1.55	.84	42N 841	6101	3.97	3.65	1.97
16-14	4-8	F	42N 817	3102	1.69	1.55	.84	42N 842	6102	3.97	3.65	1.97
12-10	4-8	F	42N 818	3103	2.18	2.00	1.08	42N 843	6103	4.41	4.05	2.19
22-16	4-8	G	42N 819	3300*	2.18	2.00	1.08					
18-14	4-8	H	42N 820	3401†	2.18	2.00	1.08					
18-14	4-8	H	42N 821	3402‡	2.18	2.00	1.08					
18-14	4-8	H	42N 822	3501§	2.18	2.00	1.08					
18-14	4-8	H	42N 823	3502¶	2.18	2.00	1.08					
adapter		J	42N 824	3601**	3.61	3.33	1.80					
adapter		K	42N 825	3602††	3.61	3.33	1.80					
adapter		L	42N 826	3701**	3.30	3.03	1.64					
adapter		M	42N 827	3702††	3.30	3.03	1.64					

### VACO SERVICE KIT



With Crimper

Terminals with\* in listing above included in kit. Clear plastic container. 8 1/2 x 6 x 1 1/4". Shpg. wt., 2 lbs. 44 N 479. NET 8.77

### VACO CRIMPING TOOLS



Model 1930. Designed especially for crimping insulated solderless terminals. Shears bolts and machine screws as well as crimps terminals. Tapped for machine screws in sizes 4-40, 6-32, 8-32, 10-24, 10-32; strips insulation from #22, #20, #18, #16, #14, #12, and #10 AWG wire. Has 2 crimping dies. Steel jaws with red plastic handles. 1 lb. 42 N 844. NET 4.16

Model 1902. As above, except for non-insulated solderless terminals. With 3 crimping dies. Shpg. wt., 1 lb. 44 N 843. NET 3.87

Model 1930. Designed especially for crimping insulated solderless terminals. Shears bolts and machine screws as well as crimps terminals. Tapped for machine screws in sizes 4-40, 6-32, 8-32, 10-24, 10-32; strips insulation from #22, #20, #18, #16, #14, #12, and #10 AWG wire. Has 2 crimping dies. Steel jaws with red plastic handles. 1 lb. 42 N 844. NET 4.16

### THOMAS AND BETTS TERMINALS

Have a barrel section into which a conductor is staked, and either a ring or spade tongue type terminal connection. Allied can supply any type of Thomas & Betts terminals (including types not listed below) in 5000 quantity lots. Write for prices. All Sta-Kon terminals and connectors are U.L. Approved. \*With insulation grip. †Self-insulated, with insulation grip. ‡Insulated connectors. †Disconnects. Av. shpg. wt., per pkg. of 100, 7 oz.; per pkg. of 1000, 3 1/2 lbs. 100 per pkg. Insulated types use nylon.

Stock No.	Fig.	Mfr's No.	Wire Size	Stud Size	NET PER PKG.		
					1-9	10-UP	
43N 756	A	A18-6	22-18	6			
43N 757	A	A18-10	22-18	10			
43N 758	A	B14-6	20-14	6			
43N 759	A	B14-8	20-14	8	3.75	3.00	
43N 760	A	B14-10	20-14	10			
43N 761	A	B14-14	20-14	14			
43N 762	A	C10-6	16-10	6			
43N 763	A	C10-10	16-10	10	4.69	3.75	
43N 764	A	C10-14	16-10	14			
43N 765	N	B14-6G*	16-14	6			
43N 766	N	B14-10G*	16-14	10			
43N 767	B	A18-6F	22-18	6	3.75	3.00	
43N 768	B	B14-10F	20-14	10			
43N 769	B	B14-6FG*	16-14	6			
43N 770	P	B14-10FG*	16-14	10			
43N 771	R	RA18-6†	22-18	6			
43N 772	R	RA18-10†	22-18	10			
43N 773	R	RB14-6†	16-14	6	5.63	4.50	
43N 774	R	RB14-10†	16-14	10			
43N 775	S	RA18-6F†	22-18	6			
43N 776	S	RA18-10F†	22-18	10			
43N 777	S	RB14-6F†	16-14	6	5.63	4.50	
43N 778	S	RB14-10F†	16-14	10			
43N 779	S	RB14-10F†	16-14	10			
43N 780	T	2RA18§	22-18		6.88	5.50	
43N 781	T	2RB14§	16-14		6.88	5.50	
43N 782	H	B14-250F†	20-14		3.75	3.00	
43N 783	G	B14-250F†	20-14		3.75	3.00	

### THOMAS & BETTS INSTALLING TOOLS



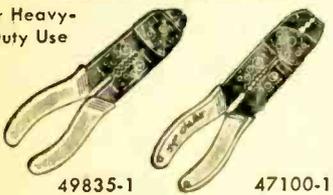
Model WT-111M. High-quality wide-range piler tool with rugged wire cutters. For use with series A, B, and C uninsulated terminals listed above; also with T & B, AB and PT terminals. Shpg. wt., 1 lb. 43 N 784. NET 3.50

Model WT-100. Versatile tool installs terminals for wire sizes #22-#10; applies wire joints of #22-#10 wire; cuts or strips both stranded and solid wires. Stakes insulated and bare Sta-Kon terminals. Measures bolt lengths; chases and cleans bolt threads; cuts through bolts up to #10 size. Shpg. wt., 1 lb. 42 N 845. NET 3.95

### A-MP CRIMPING TOOLS AND SOLDERLESS TERMINALS

#### "SUPER CHAMP" CRIMPING TOOL

For Heavy-Duty Use



Type 47100-1. Versatile hand tool for electricians, maintenance men, etc. Crimps insulated solderless terminals, shears machine screws, measures stud sizes, cuts and strips wire. Shears machine screws: 4-40, 6-32, 8-32, 10-32 and 10-24. Separate notches strip insulation from #18, #16, #14 and #12 AWG wire. Measures stud (machine screw) sizes: 4, 6, 8, 10, 12, 1/4", 3/8" and 1/2". Designed for heavy-duty use—made of hardened tool steel, has insulated yellow plastic handles for a secure and comfortable grip. Shpg. wt., 1 lb. 45 N 321. NET 4.95

Type 49835-1. Same as above, but for crimping non-insulated terminals. 44 N 453. NET 4.95

#### TERMINAL KIT



Terminal kit containing an assortment of the 12 most popular terminal types for general wiring. 215 insulated, solderless terminals are supplied plus the heavy-duty "Super Champ" crimping and wiring tool described at left. Terminals and tool come in one handy, compact transparent plastic case which makes a handy storage or carrying box. Ideal for radio-TV and electrical servicemen, automobile repairmen, hobbyists, etc. Eliminates need for soldering—will save time and labor on many occasions. Compartmented plastic box makes it easy to select the proper terminal—also shows at a glance when it is time to order more. Assortment includes ring, spade-butt and nylon closed-end connectors. For all wire sizes from 10 to 22 and most-often used stud sizes. An invaluable outfit for general wiring. Box size, 9 1/2 x 6 1/2 x 2". Shpg. wt., 2 lbs. 45 N 322. NET 17.95

#### GENERAL WIRING TERMINALS

Eliminate soldering. Simple crimping operation provides extremely strong, neat, vibration-proof connection. Inside of connector ribbed. †Insulated terminals—plastic outer sleeves. Wire size, 14 to 16, except #16 to 22, U.L. Approved. Shpg. wt., 8 oz. 100 per pkg.

Stock No.	Fig.	Mfr's No.	Type	Stud Size	PER PKG.
45 N 301	R	34149††	Ring	8-10	5.91
45 N 302	R	34142††	Ring	4-6	5.91
45 N 303	E	34070††	Butt		7.09
45 N 304	R	34158*	Ring	4-6	5.91
45 N 305	R	34161*	Ring	8-10	5.91
45 N 306	S	34165*	Spade	4-6	5.91
45 N 307	S	34167*	Spade	8-10	5.91
45 N 308	E	34071*	Butt		7.09
45 N 309	S	34154††	Butt	5-6	5.91
45 N 310	A	33214†	Ring	8-10	4.23
45 N 311	A	34194†	Ring	4-6	3.71
45 N 312	T	31818†	Butt		4.41
45 N 313	A	34197†	Ring	4-6	4.23
45 N 314	A	33217†	Ring	8-10	3.71
45 N 315	B	33477†	Spade	4-6	4.73
45 N 316	B	33219†	Spade	8-10	4.73
45 N 317	W	31762†	Knife		8.72
45 N 318	W	31763†	Knife		8.72
45 N 319	C	34846	Shur-Plug		2.14
45 N 320		36840*	Recep.		6.55

# Wire Strippers and Staplers

## VACO SOLDERLESS TERMINALS



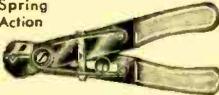
Extra Terminals. Popular sizes of Vaco terminals. Av. shpg. wt., per pkg., 3 oz. \*Used in Vaco Type 2195 kit.

Stock No.	Fig.	Mfr's No.	Type	Wire Size	Stud Size	Pks. Qty.
44 N 476	A	2300*	Ring	22-16	4-6	41
44 N 481	A	2301*	Ring	22-16	4-6	41
44 N 482	A	2302*	Ring	22-16	8-10	41
44 N 477	A	2400*	Ring	16-14	4-6	41
44 N 485	A	2401*	Ring	16-14	4-6	41
44 N 486	A	2402*	Ring	16-14	8-10	41
44 N 487	A	2403*	Ring	16-14	12-14	32
44 N 489	A	2502	Ring	12-10	8-10	32
44 N 490	A	2503	Ring	12-10	12-14	24
44 N 498	...	2600*	Stud	22-16	4-6	45
44 N 492	B	2601*	Spade	16-14	4-6	41
44 N 493	B	2602*	Spade	16-14	8-10	41
44 N 494	A	2702	Spade	12-10	8-10	32
44 N 495	C	2802	Flag	22-16	8-10	41
44 N 496	C	2902	Flag	16-14	8-10	41
44 N 432	D	3101	Butt	22-16	...	52
44 N 433	D	3102	Butt	16-14	...	52
44 N 434	D	3103	Butt	12-10	...	41
44 N 499	E	3300*	Hook	22-16	...	45

NET PER PKG. .... 98c

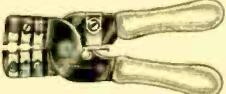
## K. MILLER WIRE STRIPPERS—CUTTERS

Model 101-S. Spring Combination Action wire stripper and cutter. Adjusts to strip insulation from any wire up to No. 8, solid or stranded. Calibrated adjustment for convenient resetting to exact jaw opening for any wire. Hardened steel blades. Spring lock holds blades closed when not in use. 5" long. 4 oz. .... 1.17



Model 100. As above, but without spring lock. Shpg. wt., 4 oz. .... 87c

Model 200. Combination coaxial cable stripper, cutter and slitter. Strips clean without nicking center conductor or fraying shield. Adjustable blades are factory adjusted for RG59/U cable. 3 step operation leaves cable ready for installation of coaxial connector. With hardened tool steel blades. Shpg. wt., 8 oz. .... 13.47



## WALSCO "TWISTO" WIRE STRIPPER

Type 692-00. Wire stripper for rapid removal of toughest insulation. Can be inserted into chassis without removing wire. Adjustment for wire sizes 12 to 22. Built-in stop for production stripping. Spring steel blades. 4 1/2" long. Shpg. wt., 8 oz. .... 2.65



592-03. Replacement Blades. Wt., 2 oz. 46 N 441. List, \$1.00. NET PER SET. 59c

## MPC WIRE STRIPPER

An easy-to-use spring-steel wire stripper and cutter. Has screw for adjusting cutting blade gap for any size wire to No. 12. Length, 5 1/2". Shpg. wt., 5 oz. 46 N 036. NET ..... 66c



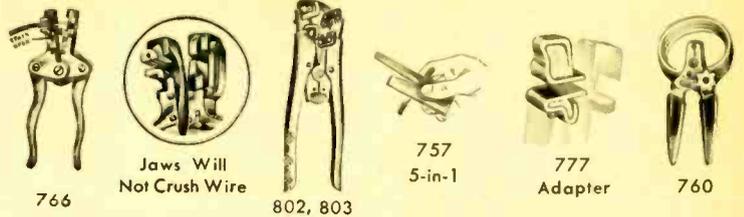
## G-C "SPEEDX" FUSE PULLERS

High-quality fuse pullers designed for quick removal of cartridge-type fuses. Provide maximum safety and ease of operation. Features non-slip construction. Laminated insulation of high dielectric material prevents shock from dangerous high voltages.



Stock No.	Type	For Fuses	Wt.	NET
45 N 836	5523	1/4" to 1/2"	6 oz.	41c
45 N 837	5526	1/2" to 1 1/4"	7 oz.	97c

## GENERAL CEMENT WIRE STRIPPERS



766 Jaws Will Not Crush Wire 802, 803

Completely eliminate damage from pulling or tugging on wire ends. Remove insulation only from all types—no crushing or nicking of wire. Strip wire ends or any spot along wire.

Deluxe Models. Equipped with "delayed return action" to prevent crushing of fine stranded wires. Easy to use. Just insert wire into jaws and squeeze handles. Has hardened steel cutting blades. Shpg. wt., 1 1/4 lbs.

46 N 225. Type 766. For 12 to 20 wire.  
46 N 226. Type 766A. For 14 to 30 wire.  
NET EACH ..... 5.82

Standard Models. Same design as above, but without "delayed return action." A smooth-operating, highly efficient tool at very moderate cost. Hardened blades. Shpg. wt., 1 1/4 lbs.

46 N 003. Type 733. For 12 to 20 wire.  
46 N 004. Type 733A. For 14 to 30 wire.  
NET EACH ..... 4.66

Type 766K Kit. A complete, versatile kit to fill most service and production line needs. Contains the Deluxe Wire Stripper described above and 7 different size hardened steel blades in special steel box. For wire sizes from No. 8 up to No. 30. Inside cover of box contains a guide listing of blades to use for various wire sizes. A practical addition to tool box. Shpg. wt., 2 1/4 lbs. 46 N 229. NET ..... 11.73



Speedstrip Wire Strippers. Automatically strips insulation from wires neatly and quickly. Have "stay-open" feature to prevent crushing fine or stranded wires. Strips ends or at any point along a wire. With automatic stop return and built-in wire cutter. Precision-ground blades of hardened steel. Av. wt., 8 oz.

Stock No.	Mfr's Type	For Wire	NET EACH
50 N 341	802	10-22	5.82
50 N 342	803	8-14	5.82

## STRIPPER BLADES

Stock No.	Mfr's Type	For Wire	NET EACH
50 N 344	812	10-22	1.62
50 N 345	813	8-14	1.62

Type 757 6-in-1 Stripper. Can be used as a wire stripper, cutter, scraper, winder, and as a screwdriver. Strips insulation easily without cutting wire. Shpg. wt., 3 oz. 43 N 905. NET ..... 29c

Model 777 Teflon Wire Stripper Adapter. Fits all G-C Speedex strippers to strip Teflon wire. A practical addition to complete wire stripper kit. Shpg. wt., 4 oz. 50 N 346. NET ..... 1.22

Type 760 Strip-er-Clip. Features seven-step thumb gauge which adjusts to even number sizes from 14 to 26 gauge. Safeguard prevents nicking or cutting. Wt., 8 oz. 50 N 347. NET ..... 1.35

## ARROW STAPLE GUNS

### MODEL T-25 CABLE STAPLER

Excellent gun for precise, rapid stapling of all round wires or small objects up to 1/4" diameter. Ideal for telephone, thermostat, intercom, or doorbell wiring. Gun has grooved-guide for exact fit of staple over wire. Also has automatic stop. Loads 85 rounded-crown staples. Size, 5 1/2 x 7 1/2". Shpg. wt., 2 1/4 lbs. 46 N 491. List, \$15.00. NET ..... 12.49

### STAPLES FOR MODEL T-25

No.	Width	Length	Quantity	Wt.	NET
45N 790	3/4"	7/8"	5000	1 lb.	3.33
45 N 492	3/4"	9/8"	5000	1 lb.	3.33
45 N 791	3/4"	9/8"	5000	1 lb.	3.74

### T-50 GENERAL PURPOSE STAPLER

Heavy-duty gun takes six staple sizes for many uses. Excellent for screening, insulation, canvas, wire, ceiling tile, upholstery, etc. Double leverage action for powerful drive with minimum squeeze pressure. Patented non-jamming mechanism. All steel construction with chrome finish. Loads 85—050° staples. 5 1/2 x 7 1/2 x 3/4". Shpg. wt., 2 lbs. 46 N 292. List, \$12.50. NET ..... 10.41

### STAPLES FOR MODEL T-50

No.	Width	Length	Quantity	Wt.	NET
45 N 792	3/4"	3/4"	5000	1 lb.	2.29
45 N 793	3/4"	3/4"	5000	1 lb.	2.08
45 N 789	3/4"	3/4"	5000	1 lb.	2.20
46 N 294	3/4"	3/4"	5000	1 lb.	2.92

### MODEL T-75 CABLE STAPLER

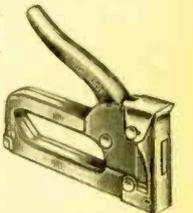
Powerful gun for non-metallic sheathed cable or objects up to 1/2" in diameter. Groove in gun envelopes wires and cables to assure clean damage-free stapling. All steel construction with chrome finish. Automatic stop-gauge for uniform penetration of staples. Load capacity, 53—075° staples. 5 1/2 x 7 1/2". 2 1/4 lbs. 46 N 493. List, \$15.00. NET ..... 12.49

### STAPLES FOR MODEL T-75

No.	Width	Length	Quantity	Wt.	NET
45 N 798	1/2"	9/8"	1000	1 1/4 lbs.	1.88
45 N 799	1/2"	3/4"	1000	1 1/4 lbs.	1.88
46 N 494	3/4"	3/4"	1000	1 1/4 lbs.	2.08

### MODEL JT-21 JR ECONOMY STAPLER

- Combines Speed & Ease of Operation
- Precision Built for Dependable Service



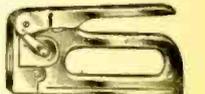
Efficient easy-action staple gun at an unusually low price. Ideal in the shop for tacking down twin-line, grill cloth, and acoustic padding. Excellent for many home uses such as screening, upholstery, shelving, lining, etc. Drives staples firmly in place with minimum squeeze pressure—employs special non-jamming mechanism. Built-in extractor allows easy removal of driven staples. Gun locks to fit in pocket—prevents accidental operation. All-steel construction—built for dependable service. Loading capacity of 100 staples. Size, 1/4 x 6 1/2 x 3 1/2". Shpg. wt., 1 lb. 45 N 653. List, \$4.95. NET ..... 3.97

### STAPLES FOR MODEL JT-21 JR

No.	Width	Length	Quantity	Wt.	NET
45 N 654	1 3/32"	3/4"	1000	4 oz.	49c
45 N 655	1 3/32"	3/4"	1000	4 oz.	49c

### T-32 MEDIUM-DUTY STAPLER

Excellent for 300-ohm twin-lead, intercom cable, screens, shades, upholstery, light insulation or plastic sheeting. Non-jamming mechanism has double leverage action. All steel construction with chrome plating. Safety-lock handle. Loading capacity of 150—.032° staples. Size, 5 x 7 1/4". Wt., 1 1/4 lbs. 46 N 062. List, \$10.50. NET ..... 8.74



### STAPLES FOR MODEL T-32

No.	Width	Length	Quantity	Wt.	NET
47 N 096	7/16"	3/4"	5000	1 lb.	1.87
46 N 063	7/16"	3/4"	5000	1 lb.	2.08

# Tools, Slide Rules, Labeling Tape

## LUFKIN TAPE RULES



### WHITE CLAD "MEZURALL" TAPE RULES

**A** White clad 1/2-in. "Mezurall" steel tape rules. Practical, all purpose tape rules for construction and general home use. Easy-to-read jet black markings against a durable, snow white background on bonderized, tempered steel blade. Self-adjusting end hook for accurate butt end and hook-over measurements. Marked on both edges, one side. First 12 inches of upper edge graduated to 32nds, balance to 16ths.

No.	Type	Feet	Oz.	List	NET
50 N 175	W926	6	4	\$1.19	.80
50 N 176	W928	8	5	1.39	.93
50 N 177	W9210	10	6	1.69	1.13
50 N 178	W9212	12	7 1/2	1.98	1.32

### "MEZURMATIC" TAPE RULES

**B** White clad tape rules with touch control blades, ball bearing rewind governors, heavy-duty end hooks and non-slip design cases. End hook self-adjusting for accurate measurements. Blade graduated on top edge in feet and inches to 16ths, bottom edge in 16ths with first 12 inches graduated to 32nds. Bold, jet black markings on snow white background.

No.	Type	Feet	Oz.	List	NET
50 N 179	W728	8	7	\$1.69	1.33
50 N 180	W7210	10	7 1/2	1.98	1.33
50 N 181	W7212	12	8	2.29	1.53

### CHROME-CLAD "MEZURMATIC" TAPE RULES

**B** As above with durable, non-glaring, rust and corrosion resistant, chrome clad blade. Series of electro platings strengthens all metal blades. Final plating is satin chrome white. Jet black graduations on both edges; 16ths, with first 12" to 32nds on one edge.

No.	Type	Feet	Oz.	List	NET
50 N 182	C728	8	7	\$2.40	1.60
50 N 183	C7210	10	7	2.70	1.80

### BANNER WHITE-CLAD TAPES



High-quality, 1/4" wide steel tapes featuring durable construction and accurate, highly legible markings. The ideal general-purpose measuring tapes for carpenters, plumbers, surveyors, and for general shop use. Have easy-to-read jet black figures and graduations on a snow white background. The hard, smooth, triple-baked synthetic finish on bonderized steel is easy to keep clean, extra mar-proof. Hook ring on free end for "walk-away" measuring—enables one person to measure unassisted. Folding flush handle is opened by push pin. Durable, vinyl covered, steel case.

No.	Type	Ft.	Lbs.	List	NET
50 N 184	HW223	50	1	\$5.49	3.67
50 N 185	HW226	100	2	7.49	5.00

### CENTRAL 1" PRECISION MICROMETER



- Positive Lock
- Easy to Read

**Model 12RL.** A high quality, moderately priced 0-1" micrometer designed for the critical user. An ideal tool for the machine shop, auto shop or the hobbyist. Spindle has ratchet that adjusts to any touch for accurate measurements. Extra space between large graduations for easy accurate readings. Flat precision ground and highly polished spindle and anvil. Black steel frame and knurled, chromium plated thimble. Can be locked at any setting. Pre-adjusted with gauge blocks. Wt., 8 oz.

50 N 060, List. \$13.50. NET. 9.95

### HANSON ECONOMY 1" MICROMETER

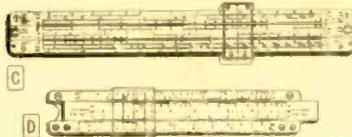


- Pre-Tested and Adjusted

Precision-made micrometer. Has full-range accuracy of .0005". Carefully designed to assure minimum frame distortion. Employs smooth-operating, screw-type anvil to permit simplified zero adjustment. Includes spring-friction stop for improved accuracy. Frame, thimble and ratchet are fully chrome-plated to inhibit rust. Each micrometer factory adjusted. Shpg. wt., 7 oz.

46 N 249, NET. 2.77

## ACU-MATH SLIDE RULES



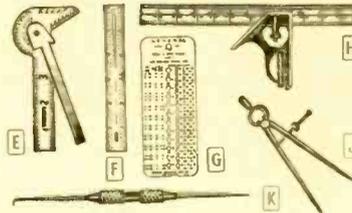
**C** Model 1311 Professional 10" Slide Rule. Here's an extremely easy-to-read, high-quality 10" slide rule. Features include: white nitrate plastic sheet face, bonded to corrosion-resistant magnesium core; stainless steel brackets; crystal-clear lucite cursor; Inlaid calibrations and numerals; Trig and Log Log numerals in red. Scales on one side: L1, O1, I, K, A, B, T, ST, S, D and LL1. Other side: L1, O2, L1, O3, DF, C1F, C1F, C1, C, D, LL3, and L1, 2. Supplied complete with sheath and instruction booklet. Shpg. wt., 1 lb.

46 N 333, List. \$13.95. NET. 9.95

**D** Model 1211 6" Pocket Slide Rule. Precision-made, easily readable pocket slide rule. Employs same quality construction features as the Model 1311 above, but with fewer scales. Perfect low-cost rule for the student. Scales on one side: K, A, B, C1, C, D and L1; S and T on other. Fluid-action slide assembly; clear lucite cursor. Inlaid, permanently accurate calibrations are quickly and easily read. Supplied complete with simulated-leather sheath and easy-to-follow instruction book. Shpg. wt., 5 oz.

46 N 332, List. \$3.95. NET. 2.99

## CHASSIS LAYOUT TOOLS



**E** Multi-purpose Steel Rule. Can be used as 4" scale in 32nds and 64ths, drill point gauge, square, level protractor, center finder, circle divider, tap-drill table. Made of stainless steel. In leather case. Shpg. wt., 4 oz.

46 N 153, NET. 1.26

**F** 6" Steel Rule and Wire Gauge. Made of stainless steel. Front graduated in 32nds and 64ths, also B & S wire gauge. Back has decimal equivalents. Identifies No. 8 to 20 wire. Shpg. wt., 2 oz.

46 N 061, NET. 41c

**G** Drill and Steel-Wire Gauge. For gauging machine screw taps, sizes 1 to 60. Indicates decimal equivalents. Lists taps with tap-drill and body-drill sizes, 1/4-28 to 2-56. Made of heavy-gauge steel, specially hardened and tempered. Shpg. wt., 5 oz.

46 N 060, NET. 1.29

**H** Combination Steel Rule. 12" etched-steel combination square. Graduated in 8ths and 16ths on one side, 16ths and 32nds on the other. Head locks on 1" blade. Scriber in head. Shpg. wt., 1 1/4 lbs.

50 N 308, NET. 79c

**J** Steel Dividers. Stiff tempered, bow spring and tapered fulcrum spoon to assure rigidity and accurate measuring. Needle points are replaceable. Split adjusting nut. Length, 6". Shpg. wt., 6 oz.

46 N 089, NET. 2.45

**K** 9" Scriber. Two-point machinists' scriber with knurled finger-hold. Wt., 3 oz.

50 N 309, NET. 39c

**L** 12" Stainless Steel Bench Rule. (Not illustrated.) Has two sides graduated in 8ths, 16ths, 32nds, and 64ths. 1/4" wide. Shpg. wt., 2 oz.

46 N 088, NET. 65c

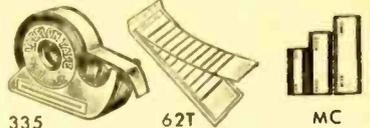
## MILLERS FALLS TORPEDO LEVEL



**Model 690.** Accurate, lightweight level with one 45° plumb, one 90° plumb and one level. Molded, high strength, glossy, black bakelite body. Top plate of heavy, polished "nickeloid"; sets flush with body to protect the level glass. Impervious to moisture; unaffected by changes in temperature. Bottom has V-groove. Size, 9x1 1/4x 1/4". Shpg. wt., 7 oz.

46 N 309, NET. 2.02

## LABELON "WRITE-ON-IT" TAPE



**335** Plastic labeling tape with special carbon writing surface sandwiched between 2 layers of acetate. Writing stays legible; surface is protected by plastic. Resists dirt, water, oil, etc. Sticks firmly to any surface without moistening. Border color, color in which writing appears.

—Black, red, blue. Av. shpg. wt., per 400-in. roll: 5 oz.

Stock No.	Mir's Type	Width	1-11, EACH	12-23, EACH	24 or More, EACH
52 N 751	335†	5/8"	1.52	1.39	1.31
52 N 752	415*	1/2"	1.71	1.57	1.48
52 N 754	425*	3/8"	1.71	1.57	1.48
52 N 755	435†	1/4"	1.71	1.57	1.48
52 N 757	515*	3/4"	1.91	1.75	1.65
52 N 761	615*	1"	2.11	1.93	1.82

## TABLETS FOR TYPEWRITER USE

Each has 45, 3-inch strips. Write black; colors given are borders. Av. wt., 5 oz.

Stock No.	Type	Width	Color	NET EA.
52 N 775	62†	3/4"	Blue	98c
52 N 776	63†	3/4"	Red	
52 N 777	64†	3/4"	Green	
52 N 778	64†	3/4"	Green	

**MC "LABELON" LABELS.** Self-sticking, Mylar-covered labels. Writing surface accepts ink, pencil, or typing. Resist rain, dirt, grease, acids, —100 to 300° F. 2 oz. per box.

Size	Mir's Type	No. Per Box	Stock No.	Per Box	
1/4x3"	MC4A	56	50 N 361	50 N 362	50 N 363
3/4x1 1/2"	MC53	100	50 N 364	50 N 365	50 N 366
1/2x2"	MC61	66	50 N 367	50 N 368	50 N 369
1x2 1/2"	MC82	40	50 N 370	50 N 371	50 N 372

## SKIL PERMA-GRIT TOOLS

### HAND SANDER KIT



Outlasts Hundreds of Sandpaper Sheets

Skil hand sander featuring remarkably efficient Perma-Grit sanding sheets. Tungsten-carbide grit cuts faster and easier than sandpaper. Grit resists clogging. With one fine and one medium-coarse sheet. 2 1/4x5 1/4" sanding surface. Shpg. wt., 1 1/4 lbs.

50 N 061, List. \$2.95. NET. 2.48

Extra Sheets. For above. Shpg. wt., 3 oz.

Stock No.	Type	Description	EACH
50 N 150	18764	Fine	1.05
50 N 151	18973	Fine grit	
50 N 152	18982	Medium	
50 N 153	18763	Coarse	

### PERMA-GRIT FILES



Feature Perma-Grit tungsten-carbide abrasive for faster, easier filing of wood, plastics and composition. Self-cleaning action. Flat file is composed on one side, fine on the other. 1 1/2" coarse, 1 1/2" overall length. Shpg. wt., 8 oz.

Stock No.	Type	Description	EACH
50 N 062	18730	Flat file	1.89
50 N 063	19859	*Contour, coarse	1.64
50 N 064	19860	†Contour, fine	1.64

### PERMA-GRIT SAND SHEETS

Long-life tungsten-carbide sand sheets for electric oscillating sanders. Standard 3 1/2x9". Conveniently pre-formed. Shpg. wt., 5 oz.

Stock No.	Type	Description	EACH
50 N 154	18700	Fine	2.48
50 N 155	18701	Medium	
50 N 156	18702	Med. Coarse	
50 N 157	18703	Coarse	
50 N 158	18704	Very fine	

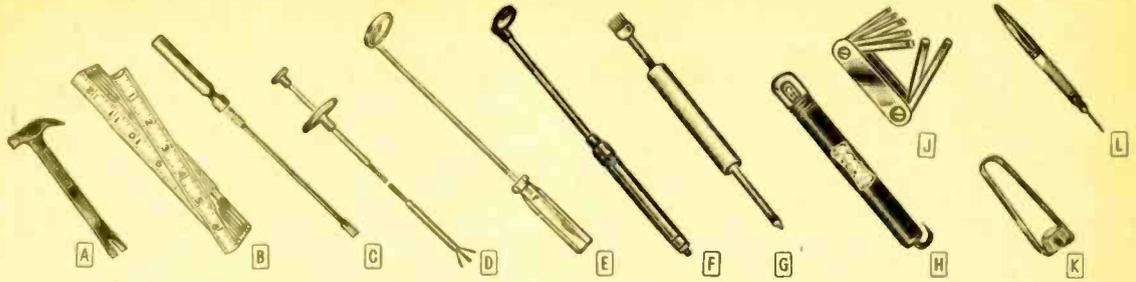
### VLCEK PUNCH AND CHISEL SET



Type 3256. Excellent low-cost set. Forged from high carbon tool steel. Set contains 1/2" and 3/4" edge chisels, 1/4" and 1/2" solid punches and 1/4" center punch. Bright plated. Set is supplied in clear face plastic pouch. Shpg. wt., 1/4 lb.

50 N 125, NET. 1.32

# Service Tools and Tube Caddies



## ALL-PURPOSE SERVICING TOOLS

- A All-Steel Utility Hammer.** Claw handle for pulling nails, dismantling cabinets, etc. Made of finest hardened and tempered steel—withstands roughest use. Excellent for use in workshop or home. Ideal size for carrying in tool box or belt. Overall length, 9½". Shpg. wt., 1½ lbs. **43 N 900. NET 87c**
- B Millers Falls Model 1460 6-ft. Rule.** 6-ft. folding rule for the shop worker or handy-man. Has large easy-to-read black numerals on white enamel background. Graduated in 16ths. Made of selected hardwood, with concealed brass-plated joints that assure smooth easy action. Shpg. wt., 5 oz. **50 N 147. NET 64c**
- C Hunter TV-12 Tuning Slug Retriever.** Retrieves Standard Coil slugs without removing chassis from cabinet. Automatic holding mechanism. 11" L. Wt., 9 oz. **42 N 012. NET 2.64**
- TV-16.** As above but 15" long. 12 oz. **42 N 013. NET 3.18**
- TV-20.** As above but 20" long. 1 lb. **46 N 452. NET 3.92**
- D Miller 345 Pick-Up Tool.** Invaluable for the serviceman. Press button to open claws—release to close over object. Flexible 14" shaft. Shpg. wt., 1 lb. **42 N 014. NET 89c**

- E G-C 5090 Inspection Mirror.** For inspecting parts, connections, etc. in tightly wired radio and TV sets, auto radios, etc. Handy for reading parts numbers and inspecting solder and wire connections in out-of-sight places. 8" length allows user to get into crowded chassis with ease. Indispensable for radio and TV servicemen, Amateurs, experimenters, etc. Mirror dia. 1". Shpg. wt., 5 oz. **42 N 121. NET 38c**
- F G-C 8725 Illuminated Inspection Mirror.** Permits inspection of parts otherwise hidden from sight. Consists of anodized aluminum flashlight with 6" lucite rod and 1" hinged-mounted mirror. Plastic housing prevents shocks. Locking switch allows one-hand operation. With bulb. Requires 2 penlight cells (below). 12¼" Shpg. wt., 6 oz. **42 N 130. NET 1.97**
- Burgess Type Z Cell.** 1½-volt cell for use with 42 N 130, above. Shpg. wt., 3 oz. **53 J 031. NET EACH 9c**
- G G-C 9088 Soldering Aid Tool.** A "must" for easier soldering. One end has a stiff wire brush for cleaning wire and terminals before soldering; other end is specially shaped to hold wires securely during soldering. Solder will not stick to chrometipped, probe end of tool. Especially handy for printed circuit repairs, neat solder connections, etc., 8" long. Shpg. wt., 4 oz. **42 N 001. NET 97c**

- H G-C 705 Handy Trouble Light.** No radio-TV serviceman or technician should be without this handy light. Illuminates dark corners in chassis—excellent for visual inspection of components in cabinets, etc. Casts light without glare; small size won't get in the way. With bulb and 5½-ft. cord. For 110-120 v. AC or DC. Shpg. wt., ½ lb. **42 N 120. NET 1.32**
- J Vlichek Hex Key Wrench Set.** Hardened nickel-chrome alloy steel wrenches. Fitted in a steel frame like pocket-knife blades. Each wrench can be used independently in most suitable position. In popular sizes from .050" to ¼". Nickel-plated steel frame. Handy, plastic carrying case. Shpg. wt., 4 oz. **50 N 128. NET 88c**
- K Knob-Puller.** A very helpful tool kit item. Knob-puller easily removes all types of hard-to-grip, push-on knobs. Simply place blades in back of knob, close handles, and pull forward. Prevents damaging either knob or cabinet. Shpg. wt., 4 oz. **46 N 077. NET 32c**
- L Pres-to-Drop Oil.** Press on plunger to release one drop of oil. Prevents over-oiling. Transparent fountain-pen reservoir holds oil supply. Also ideal for dispensing radio and TV chemicals in hard-to-reach places. Contains oil—ready to use. Shpg. wt., 3 oz. **46 N 065. NET 95c**

## NEW LEATHER TOOL HOLSTER

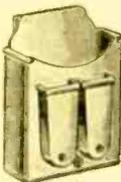
Top-quality, genuine cowhide leather tool pouch. Easily attaches to any belt by a reinforced leather loop. Perfect for use by servicemen, repairmen, electricians, etc. Has two small compartments plus one large compartment—perfect for holding on-the-job tools such as pliers, wrenches, wire cutters, tube pullers, etc. Black finish. Less belt, below. Wt., 9 oz. **47 N 001. NET 3.69**



- Leather Belts.** For above. Wt., 5 oz. **47 N 002. Size 32-38. NET 1.49**
- 47 N 003. Size 40-46. NET 1.49**

## G-C 8943 "TUX" TOOL HOLSTER

A perfect accessory for servicemen, electricians, etc. Excellent for service calls and antenna installations; the required tool is always available at your side. Attaches to belt by two metal loops. Has two narrow compartments and one full-size compartment. Plenty of room for securely holding most needed tools, such as wrenches, wirecutter, screwdrivers, pliers, tube puller, etc. Made of tough, flexible polyethylene plastic. Holds its shape. Shpg. wt., 6 oz. **46 N 345. NET 2.44**



## NEW FEDTRO "FLASH-DRIVER"

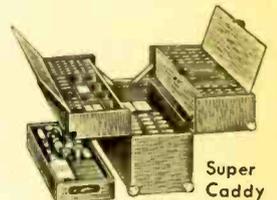
Unique screwdriver featuring a built-in flashlight to illuminate work area. Has plastic handle; belt clip. Uses 2 batteries (not included; below). Screwdriver 9½" long. ⅜" blade. Shpg. wt., ½ lb. **47 N 099. NET 1.29**

**53 J 031. Penlite Battery.** 3 oz. EACH. **9c**



## ARGOS TELEVISION TUBE CADDIES

**Super Tube Caddy.** A ruggedly built, double-door type tube caddy that provides quick accessibility to tubes, tools and small parts. Designed to carry up to 325 tubes—one of the largest tube caddies available on the market today! Contains plenty of extra space to accommodate meters, probes, soldering gun or iron, assorted leads, tools—plus fuses, bulbs, and miscellaneous small parts. Has convenient, removable tray. "Egg crate" design for smaller tubes and parts. Reinforced corners for maximum service. Handsomely styled in gray tweed leatherette. Strong, comfort-grip handle. Size (HWD), 16¼x24x8¼". Shpg. wt., 16½ lbs. **86 NX 153. List, \$36.60. \$2.00 Down. NET 21.51**



Super Caddy

**Junior Tube Caddy.** Smaller version of Super Tube Caddy listed above. Easy-to-carry size for quick trips. Carries up to 143 tubes—with ample room for meter, tools, etc. Size (HWD), 15¼x12¼x8". Shpg. wt., 10 lbs. **86 NX 155. List, \$17.50. NET 10.29**

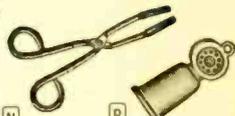


Carry Caddy

**Carry-All Caddy.** Exceptionally versatile tube caddy. Carries up to 262 tubes—with plenty of space for a soldering gun, meter, probes, and assorted small parts. Features "break away" design—opens outward from the center to permit easy access to contents. Has reinforced, metal corners for durable service. Handsomely finished caddy is covered with gray-tweed leatherette. 8x15x21". Shpg. wt., 13 lbs. **86 NX 129. List, \$26.50. NET 15.63**

## TUBE PULLERS AND PIN STRAIGHTENERS

**M G-C Type 5093.** Compact tube puller—an extremely valuable aid for the radio-TV serviceman. Easily fits into tube caddy or tool chest. Has an aluminum body with rubber cup; for 7-pin miniature tubes. Durable construction. Shpg. wt., 2 oz. **46 N 094. NET 1.06**



**G-C Type 8106.** As above, but for 9-pin miniature tubes. **46 N 155. NET 1.06**

**N G-C Type TL-201.** Scissors-type tube puller with rubber tips. Unusually handy tool. Shpg. wt., 12 oz. **46 N 092. NET 97c**

**P G-C Type 9130 Tube Gadget.** 3 tools in one. Quickly and easily straightens 7 or 9 pin miniature tube pins; pulls tubes. Extremely helpful where pins have been bent by removal or insertion of tube. Shpg. wt., 3 oz. **42 N 016. NET 73c**

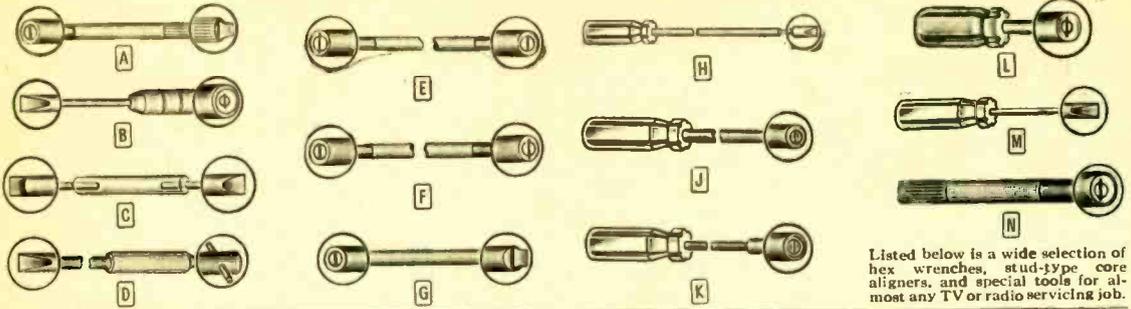
**R G-C Type 5191.** Precision-built pin straightener for 7-pin miniature tubes. Features a ruggedly constructed steel die for lasting service. Shpg. wt., 6 oz. **46 N 227. NET 73c**

**G-C Type 8105.** As above, but for use with 9-pin tubes. Shpg. wt., 6 oz. **46 N 228. NET 73c**

**G-C Type 8655.** (Not illustrated.) Valuable, dual-service pin straightener. Accommodates both 7-pin and 9-pin miniature tubes. A "must" for radio-TV servicemen. Shpg. wt., 6 oz. **46 N 230. NET 1.47**

# Alignment Tools and Servicing Aids

## G-C TV ALIGNMENT AND TUNING TOOLS

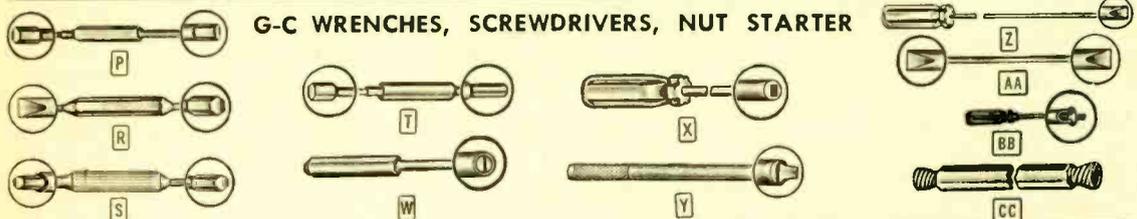


Listed below is a wide selection of hex wrenches, stud-type core aligners, and special tools for almost any TV or radio servicing job.

Stock No.	Type	Fig.	Description	Oz.	NET
42 N 378	8276	A	Short duplex aligner	3	50c
42 N 381	8275	B	Zenith universal aligner	3	50c
42 N 383	5097	C	K-Tran and 1F aligner	3	76c
42 N 391	8274	D	9° nested core aligner	3	73c
42 N 382	8271	E	Stackpole stud-type core aligner	3	56c
42 N 392	8721	F	9° duplex #4 & #6 stud aligner	3	79c
42 N 393	8722	F	7° duplex #4 & #6 stud aligner	3	65c
42 N 395	8277	G	2 1/2" duplex aligner	3	50c

Stock No.	Type	Fig.	Description	Oz.	NET
42 N 386	8607	H	1 1/4" nylon tip alliner	4	1.12
42 N 387	8608-IE	J	Replacement nylon tip for above	3	.18
42 N 397	8273	K	All-purpose TV aligner	3	.68
42 N 399	8272	L	1F and oscillator aligner	3	1.09
42 N 348	9298	L	2" blade alignment tool	5	.41
42 N 394	8195	M	Channel tuning tool	3	.71
42 N 398	8196	N	2 1/2" TV and FM tuning tool	3	.38

## G-C WRENCHES, SCREWDRIVERS, NUT STARTER



Stock No.	Type	Fig.	Description	Oz.	NET
42 N 377	8606	P	Zenith-Admiral nylon hex wrench	3	.47
42 N 380	8282	R	Zenith wrench and aligner	3	.35
42 N 379	9091	S	1 1/2" hex nylon wrench	3	.47
42 N 346	9296	T	1 1/2" nylon hex (.075") wrench	4	.62
42 N 347	9050-L	W	Zenith nylon hex wrench	3	.47
42 N 349	6035	X	RCA VHF channel selector wrench	3	1.06
42 N 396	5000	Y	Alignment screwdriver	3	.32
42 N 384	8988	Z	1 1/2" blade plastic screwdriver	3	.91

Stock No.	Type	Fig.	Description	Oz.	NET
42 N 385	8989	Z	16" blade plastic screwdriver	3	1.21
42 N 388	8728-AA	AA	7" long bone-fiber screwdriver	3	.38
42 N 389	8728-AA	AA	As above, but 12" long	3	.44
42 N 390	8729-AA	AA	As above, but 16" long	3	.56
42 N 419	9346	BB	3 1/4" long Mini-Hold screwdriver	3	1.94
42 N 420	9347	BB	As above, but 7" long	3	2.20
42 N 409	9147	CC	1/4" & 3/8" hex nut starter	3	1.50

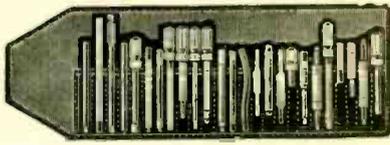
## G-C TOP-QUALITY ALIGNMENT TOOL KITS



9200

**Type 9200 Panel Kit.** A convenient, wall-mounting type kit of the most-needed alignment tools. Contains 27 different tools for all popular makes of TV sets. Each tool has separate slot identified by shape and size number. Tools in this kit are selected to cover most alignment jobs on all popular radio and TV sets. The finest materials are used—low-loss plastics, tips of hardened spring steel, extra-hard bone fiber that can be re-ground as tool wears.

**Includes:** Alignment screwdrivers in various lengths, special short tools, alignment wrenches, channel tuners, core aligners, oscillator adjustment tools, trimmer and 1F aligners, solder probe tool, stainless steel brush and scraper, nylon replacement tip, special hex tools, etc. Tools are stored in three-color steel panel, drilled for two-hole mounting. Shpg. wt., 3 lbs. 42 NX 341, List, \$27.50. NET ..... 16.22

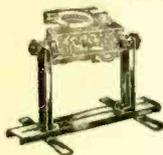


8283

**Type 8283 Master Deluxe TV Tool Kit.** A complete service alignment tool kit for alignment repair work. Contains 25 high-quality alignment tools not over 9" long. Flexible tool-case has heavily stitched edges and fold-over flap. Includes: TV K-Tran tool, TV Core Aligner, TV Long Reach Aligner, TV Flexible Wand, TV Short Tool for 1F, etc. Leatherette roll case. Shpg. wt., 1 lb. 42 N 005, List, \$22.50. NET ..... 13.23

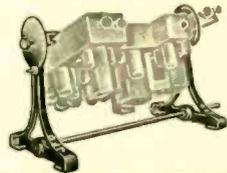
**Type 8280 Deluxe Television Alignment Tool Kit.** Handy roll-type durable leatherette case with 16 specially engineered TV tools. The steel tips are all extra thin and are made of the best grade of hardened spring steel. Includes TV "Shorty" Duplex Aligner, TV Tuning Wand, TV Core Aligner, TV Oscillator Tool, TV Long Reach Aligner, etc. 8 oz. 42 N 006, List, \$13.50. NET ..... 7.94

## G-C CHASSIS CRADLE



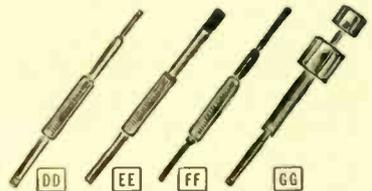
**Model 5212.** Easy-to-use, adjustable cradle holds chassis securely. A valuable accessory for the serviceman, builder and experimenter. Eliminates fumbling with makeshift setups to hold bulky chassis—prevents breakage of tubes or other above-chassis parts and equipment. Complete 360-degree rotation permits tilting work to the most convenient angle. Ideal for working on power supplies, TV sets, transmitters, record changers, etc. All-steel construction. Size, 24" long, 14" high, 12 1/2" wide. Shpg. wt., 7 lbs. 86 NX 034, NET ..... 7.35

## JFD "REPAIRACK"



**Model 79-3.** Sturdy, cast-iron rack for supporting chassis. Securely holds any chassis of up to 200 lbs. Full 360-degree rotation permits positioning work to any convenient angle. Accommodates practically any chassis up to 32" in length. Allows faster, more efficient repair work. Separate chassis clamps on each side have thumb-screws for positive holding action. 14 1/2"x32x15". Wt., 18 lbs. 86 NX 038, List \$45.00. NET ..... 26.46

## WALSCO TEL-A-TURN ALIGNMENT TOOLS



- DD** No. 2587 Tel-A-Turn Screwdriver. Tuning tool of tough fiberglass. Automatically counts turns. Standard tips on one end, small 1/4" tip on other end. Shpg. wt., 3 oz. 42 N 342, NET ..... 97c
- EE** No. 2586 Tel-A-Turn IF Aligner. Fiberglass tuning tool that automatically counts turns. One end fits #4 stud, the other fits #6 stud. Shpg. wt., 3 oz. 42 N 343, NET ..... 97c
- FF** No. 2588 Tel-A-Turn Hex Aligner. Valuable tool of fiberglass that automatically counts turns. One end is 100° hex, the other end is 125° hex. Shpg. wt., 3 oz. 42 N 344, NET ..... 97c
- GG** No. 2589 Concentric Color-TV Tool. New non-conductive tool for concentric color-TV control shafts. Separate knobs for outer and inner controls. Shpg. wt., 3 oz. 42 N 345, NET ..... 1.17

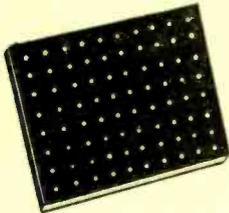
## REAR CONTROL TV TUNING AID



Highly useful fingertip tuning aid for remote adjustment of television rear panel controls. No mirrors needed. Has sturdy alligator clip attached to one end of long-life cable; small knob at other end for tuning. Simply attach clip to any rear mounted control—bring cable around to front of television set and turn knob to make adjustments. Flexible—rolls up to carry. Overall length, 5 ft. 8 oz. 46 N 248, NET ..... 2.89

# Workshop Aids, Plastic Stock

## PIN-UP BOARD



**Model 102.** Four separate squares of perforated hardboard, each 18x24". Provide 12 square feet of storage space. A convenient and attractive way to store tools and a great variety of other small accessories. Pin-up rack includes 62 specially designed fixtures for hanging saws, hammers, planes, pliers, files, wrenches, etc. Includes four, 4-oz. nail and screw jars, two shelf brackets, screwdriver holder. Hardboard is of 1/4" thickness—forms an unusually tough and durable surface. Supplied complete with hooks, mounting screws, spacers and detailed instructions. Shpg. wt., 15 lbs.  
86 NX 178. List, \$7.98. NET ..... 5.87

**Model 102W. Workshop Unit.** Contains all tool hooks, rack, brackets, jars, mounting screws and spacers listed in unit above, but less perforated hardboards. Includes 62 fixtures plus mounting hardware. Shpg. wt., 3 lbs.  
50 N 127. List, \$3.85. NET ..... 2.83

## MILLERS FALLS UTILITY KNIFE

**Model 333.**

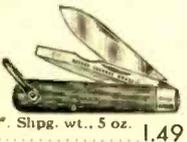
Versatile knife of a 1001 uses in shop or home. Cuts rubber, veneer, linoleum, etc. Die-cast, 2-section handle contains 4 extra blades, .018" thick. Each blade has 3-positioning notches. Blades are end-to-end reversible—a total of 10 cutting edges. Sturdy, comfort-grip handle has hole for convenient hanging. 5" long. Shpg. wt., 1/2 lb.  
46 N 308. NET ..... 67c



**Replacement Blades.** Package of 5 blades for above. .018" thick. Shpg. wt., 1 oz.  
50 N 171. NET ..... 33c

## ULSTER K-29W ELECTRICIAN'S KNIFE

Rugged knife for the electrician, serviceman, etc. Two blades: combination screwdriver-wirecraiper; spear-shaped blade. Brass center safety lock. Black, full-grip handle. Length of knife when closed, 3 3/4". Shpg. wt., 5 oz.  
45 N 843. NET ..... 1.49



## WALSCO PROTECTO-TUBE

**Type 18-K.** Synthetic plastic high-voltage tubing for insulating the handles of pliers, screwdrivers, etc. Tubing is applied by treating with expanding solution which swells tubing for application to tool handles. Tubing then shrinks and remains firmly in place. Contains 12 ft. of tubing and expanding solution. Easy to apply. Shpg. wt., 12 oz.  
43 N 132. NET ..... 1.18



## AMPHENOL POLYSTYRENE SHEET STOCK & CEMENT



Extremely low-loss, 4x8" polystyrene sheets. Excellent for use in AC, DC and RF applications including VHF, UHF and SHF. High dielectric strength. Colorless; does not deteriorate under adverse climatic conditions. Does not stretch or warp. No moisture absorption. Also fine for dial and gauge glass use. Easy to cut and fit. Can be drilled and tapped.

No.	Type	Size	Wt.	NET
71 H 738	19-0628	4x8x1/8"	3 oz.	20c
71 H 739	19-0938	4x8x3/32"	4 oz.	24c
71 H 746	19-1258	4x8x1/4"	5 oz.	36c
71 H 749	19-1878	4x8x3/8"	6 oz.	46c
71 H 748	19-2508	4x8x1/2"	8 oz.	50c

## VIS-A-PART BOARDS

- For Small Parts
- Keeps Parts in Sight



Convenient wallboard for storage of small parts. Keeps parts in sight for immediate selection. Consists of attractive masonite board with up to 24 glass storage jars. Jars easily slide in or out of holder clips with one simple motion. Parts are always within easy reach. Durable masonite board is pre-punched to permit hanging on any wall. Perfect for use in radio-TV service shops, machine shops or home workshops. Available in two popular sizes.

**12-Jar Type.** Size of board, 8 3/4" high; 18" wide. Shpg. wt., 4 1/2 lbs.  
86 NX 246. List, \$3.25. NET ..... 1.91

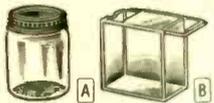
**24-Jar Type.** Size of board, 18" high; 18" long. Shpg. wt., 9 lbs.  
86 NX 245. List, \$6.00. NET ..... 3.53

**Replacement Jars.** Individual replacement jars for above. Shpg. wt., 2 oz.  
46 N 207. NET EACH ..... 8c

**Holder Clips.** Same as used in boards above. Wt. per pkg. of 2, 2 oz.  
46 N 204. Pkg. of 2, PER PKG. .... 20c

## STORAGE CONTAINERS

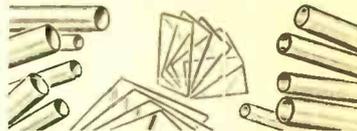
**A Glass Jar.** Ideal storage for small parts. Metal screw cap protects contents from dust and moisture. Ideal for use on the radio-TV service bench, in the home workshop, etc. 2 1/2" high; 2" in diameter. Shpg. wt., 7 oz.  
44 N 500. NET EACH ..... 6c  
12 or More, EACH ..... 5c



**B Plastic Container.** Durable, clear-view plastic containers for small parts. Perfect for use on the service bench for storing resistors, capacitors, screws, nuts, washers, etc. Smooth operating sliding covers keep out dust. Containers may be stacked or set side by side. Size: 2 1/2 x 1 1/2 x 2 1/2". Shpg. wt., 2 oz.  
44 N 501. NET EACH ..... 21c  
12 or More, EACH ..... 18c

## POLYSTYRENE SHEETS, RODS AND TUBING

An excellent selection of high-grade polystyrene sheets, rods and tubing. Ideal for AC, DC, and RF applications including VHF, UHF and SHF. Rods and tubing are excellent material for making insulators or coil forms. Sheets may be used for shielding or dial and gauge glass.



All have extremely low-loss factor at ultra-high frequencies. Have high dielectric strength, excellent arc resistance and insulating properties. No moisture absorption. Highly stable under varying climatic conditions. Always retain original dimensions—will not stretch or warp. Easy to cut any size. May be sawed, drilled or tapped. Sheets are transparent. All tubing has satin finish except "clear"; all rods are frosted except "clear".

### POLYSTYRENE SHEETS

Stock No.	Size	Thick-ness	Shpg. Wt.	NET EA.		Stock No.	Size	Thick-ness	Shpg. Wt.	NET EA.	
				1-9	10-49					1-9	10-49
71 H 865	12x12"	1/16"	8 oz.	4.07	3.66	71 HX 870	12x24"	1/16"	1 lb.	7.64	6.88
71 H 866	12x12"	3/32"	10 oz.	4.70	4.23	71 HX 871	12x24"	3/32"	1 1/4 lbs.	8.97	8.07
71 H 867	12x12"	1/8"	12 oz.	5.39	4.85	71 HX 872	12x24"	1/8"	1 1/2 lbs.	10.39	9.35
71 H 868	12x12"	3/16"	1 lb.	7.01	6.31	71 HX 873	12x24"	3/16"	2 lbs.	12.89	11.60
71 H 869	12x12"	1/4"	1 1/2 lbs.	9.99	7.19	71 HX 874	12x24"	1/4"	3 lbs.	15.34	13.81

### 12" POLYSTYRENE RODS

Stock No.	Dia.	Shpg. Wt.	NET EACH		Stock No.	Dia.	Shpg. Wt.	NET EACH	
			1-9	10-49				1-9	10-49
71 H 875	1/8"	2 oz.	.03	.02	71 H 880	1/2"	6 oz.	.47	.42
71 H 876	3/16"	3 oz.	.07	.06	71 H 881	5/8"	8 oz.	.71	.64
71 H 877	1/4"	5 oz.	.12	.11	71 H 882	3/4"	8 oz.	.98	.88
71 H 878	5/16"	6 oz.	.18	.16	71 H 883	7/8"	8 oz.	1.39	1.25
71 H 879	3/8"	6 oz.	.25	.22	71 H 884	1"	8 oz.	1.86	1.67

### 12" TUBING

Stock No.	O.D.	I.D.	Shpg. Wt.	NET EA.		Stock No.	O.D.	I.D.	Shpg. Wt.	NET EA.	
				1-9	10-49					1-9	10-49
71 H 885	3/8"	1/8"	2 oz.	1.09	9c	71 H 889	3/8"	5/8"	4 oz.	31c	28c
71 H 886	1/2"	3/8"	3 oz.	1.46	13c	71 H 890	1/2"	5/8"	4 oz.	39c	35c
71 H 887	5/8"	3/4"	3 oz.	1.86	16c	71 H 891	3/4"	5/8"	6 oz.	55c	49c
71 H 888	3/4"	1/2"	3 oz.	2.56	22c						

Write for prices on larger quantities.

# Steel Cabinets—Stands—Trucks

## EQUIPTO METAL PRODUCTS

### GENERAL PURPOSE STORAGE CABINETS



18 Drawers

No. 11, 18-Drawer Cabinet. Ideal for storing small parts in easily accessible order. Each drawer is equipped with two removable cross-dividers—adjustable to any 1" interval of drawer length. Jam-proof drawers have large, convenient handles. Instant-visibility label holders on drawers and dividers. Heavy-duty all-steel frame. Olive green finish. Drawer size, 3½x5½x11". Overall size, 13½x34x12". Units may be stacked for greater storage space. Shpg. wt., 62 lbs.

86 NZ 011, Only \$2.00 Down. NET... 27.90

No. 22, 18-Drawer Cabinet. As above, but 18" deep. 3½x5½x17" drawers. 95 lbs. 86 NZ 099, Only \$2.00 Down. NET... 37.90

Type 8711 Lengthwise Dividers. For No. 8 and No. 11 cabinets. 9 oz. 5 per pkg. 86 N 871. PER PKG... 50¢

Type 8720 Cross Dividers. For No. 11 and No. 22 cabinets. 6 oz. 5 per pkg. 86 N 872. PER PKG... 50¢



8 Drawers

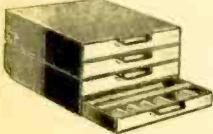
No. 8, 8-Drawer Cabinet. General-purpose storage cabinet. Excellent for storing small parts, supplies, etc. in workshops, offices—anywhere. An ideal companion for 18-drawer cabinet at left. Parts with loose wire ends are kept completely safe from accidental damage. Especially suited for radio-TV servicemen. Heavy-duty, welded steel frame holds 8 drawers on 2 levels. Each drawer has 2 cross-dividers, adjustable on 1" centers, making a total of 24 compartments. Smooth-operating drawers are made of heavy steel—will not stick or jam together. Have full-size handles and slot holders for label cards. Durable baked olive-green enamel finish. Drawer size, 3½x5½x11". Cabinet size, 10x25½x12". May be stacked for convenience. Shpg. wt., 33 lbs.

86 NU 012, NET... 15.95

Type 8605 Drawer. Same drawer as in cabinet above. Popular for use as parts trays on open shelves. Less dividers, below. 2½ lbs. 86 N 869, NET... 90¢

Type 8720 Cross Dividers. For type 8505 drawer above. Slant top for easy labeling. Shpg. wt., 6 oz. 5 per pkg. 86 N 872. PER PKG... 50¢

### "LITTLE GEM" AND COMBINATION CABINETS



"Little Gem" Cabinets. Can be used individually or locked together firmly when stacked. Drawer stops prevent accidental spilling. Dividers adjustable on 1½" centers. Fit

drawer bottom tightly—no creeping of parts under dividers. 1½x11" label holders on drawer fronts. Olive-green baked enamel finish. Size of each drawer, 11" long, 11" wide and 1½" high. No. 1, 2-Drawer Cabinet. With dividers for 24 compartments. 3½x11x11". Wt., 7 lbs. 86 NX 065, NET... 6.95

No. 2, 4-Drawer Cabinet. With dividers for 48 compartments. 6½x11x11". 15 lbs. 86 NX 066, NET... 13.90

No. 3, 6-Drawer Cabinet. With dividers for 72 compartments. 9x11x11". 23 lbs. 86 NU 067, NET... 20.85

Type 8730 Dividers. Can be added to each drawer to provide up to 28 compartments per drawer. Size, 1½x2½x1½". 4 oz. 5 per pkg. 86 N 068, PER PKG... 50¢



No. 12, Combination Cabinet. An indispensable unit for safe, convenient storage of both small and medium-sized parts. This highly versatile cabinet combines all the features of "Standard" drawer units, above, with the safety and convenience for tiny parts storage of the "Little Gem" drawers at left.

Large, handy label holders are provided on each drawer for quick identification of parts. This deluxe unit includes 14 "Standard" drawers with dividers to provide up to 3 compartments per drawer; and 4 "Little Gem" drawers with dividers for up to 12 compartments per drawer.

"Standard" drawers are 3¼" high, 5½" wide, 11" in length. "Little Gem" drawers are 1½" high, 11" wide, 11" in length. Overall size of cabinet, 13¼" high, 34" wide, 11½" deep. Olive-green finish. Shpg. wt., 68 lbs. 86 NZ 096, Only \$2.00 Down. NET... 39.30

### STURDILITE STEEL DRAWER

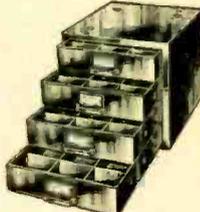


A real convenience for work benches, shelves, desks, cabinets, and numerous other applications. This ruggedly-built steel drawer mounts easily in a matter of minutes—never warps. Incorporates a special safety-

stop device to positively prevent accidental spilling of contents. Bottom of drawer is constructed of extra-thick hardboard.

Smooth-action drawer slides supplied with unit, attach to underside of any table. Never stick—withstanding constant use. Drawer capacity, 5" high, 15" wide, 18" long—provides plenty of storage space for tools, parts, etc. Blue-gray baked enamel finish. With steel slides, safety stop, hardware. Shpg. wt., 10 lbs. 86 NX 284, NET... 4.95

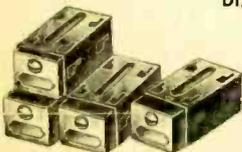
### UNION 410 4-DRAWER STEEL CHEST



Sturdy all-steel chest for keeping often-used parts within handy reach. Can be used for storing all types of radio and TV hardware or small parts. Excellent for the home workshop, repairshop, hobbyist, experimenter, etc. Has four easy-slide drawers, each 2x9x1½".

Each drawer has removable dividers—enough supplied to make anywhere from 2 to 12 compartments per drawer. Drawers also have label holders for quick, easy identification of contents. 10x10x11½". Wt., 10½ lbs. 86 NX 019, NET... 4.97

### DIXIE INTERLOCKING DRAWERS



Small steel trays for storage of all types of radio-TV hardware and small parts. May be used separately or ganged together. Each unit interlocks with others at top sides and bottom. Drawers may be assembled to fit irregularly shaped spaces. Each unit measures 2½x2½x5". Label holders make it easy to identify contents. Shpg. wt., 10 oz.

86 N 023, 10 or More, EACH... 38¢ 1-9, NET EACH... 42¢

Drawer Dividers. For above. Wt., 4 oz. 3 per pkg. 86 N 179, PER PKG... 10¢

### STEEL STANDS AND TRUCKS

#### STURDY STEEL TRUCKS



Rugged, dependable stock handling carts for a wide variety of applications. Incorporate heavy steel construction with round beaded edges for exceptional strength and rigidity.

Feature easy rolling, 5" diameter solid rubber-tired wheels for smooth, quiet operation. Wheels are stationary in front, swivel in rear—cart is easily kept under control at all times. Designed especially for use in narrow aisles between rows of shelving, and numerous other trucking jobs.

Has durable olive-green baked enamel finish. Top tray may be inverted for applications requiring a flat surface. Trays are 4" deep—will safely handle loads up to 600 lbs. Paper carrying shelf, below, fastens to push bar—provides a convenient "check off" surface when filling orders, replenishing inventory, etc.

Stock No.	Mfr's Type	Description	Wt., Lbs.	NET EACH
86 NZ 090	150	36x24x36"	70	39.90
86 NZ 092	145	36x16x30"	60	29.90
86 N 093	146	Paper carrying shelf (not illustrated); 8½x11"	5	2.50

#### CHASSIS AND TEST UNIT STANDS



Convenient, highly durable stands for radio and television chassis, industrial electronic equipment, and test instruments. Excellent for use in service shops, labs and factories. Ideal for moving chassis to service bench, etc. Also excellent for bringing test instruments to stationary-type industrial equipment.

Unusually rugged construction; withstands severe use even under heavy loads. Can be used in narrow aisles. Convenient bottom shelf provides handy storage space for small tools, extension cords and other accessories.

Made of heavy steel with olive-green baked enamel finish. Solid rubber-tired wheels. 2½" in diameter for smooth, quiet operation. Size, 18" wide, 24" long and 34" high.

Stock No.	Mfr's Type	Description	Wt., Lbs.	NET EACH
86 NZ 087	710	Metal top	55	16.30
86 NZ 088	711	Wood top	57	17.80

#### HUOT DRILL CASES



Sturdy drill cases for compact storage and quick, convenient selection of the right drill for the job. Ideal for shop, school or home. Prevents misplacing drill bits and protects them from dirt and moisture. Holds drill bits securely even when

bits are shortened by long use. Cases are made of heavy gauge steel. A convenient index clearly shows drill sizes at a glance. Supplied less drills. 60-Drill Capacity. Accommodates one each of standard drill sizes 1 to 60. Ideal for safe, loss-proof storage of a large assortment of the most commonly-used small drill bits. Decimal equivalents and machine-screw tap information is included on the heavy steel case. Size, 3¼x4½x1". Shpg. wt., 1 lb. 46 N 790, NET... 1.84

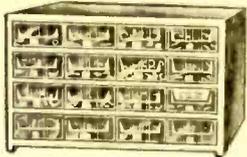
15-Drill Capacity. Similar to above, but accommodates 15 bits from ¼" through ½" in diameter in ½" intervals. Overall size, 4x7x1½". Shpg. wt., 2 lbs. 46 N 716, NET... 1.84

29-Drill Capacity. As above, but takes 29 bits from ¼" to ½" in steps of ¼". Includes U.S.S. and S.A.E. tap information. Size, 4x7x1½". Shpg. wt., 3 lbs. 50 N 084, NET... 2.18

13-Drill Capacity. Same as above, but holds 13 bits from ¼" through ½" in ¼" steps. Size, 2½x4½x¾". Shpg. wt., 1 lb. 44 N 842, NET... 81¢

# Tool Boxes—Parts Containers

## "HAZ-BIN" SMALL PARTS STORAGE CABINETS



Beautifully Styled—Clear Plastic Drawers

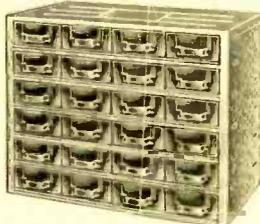
Space-conserving cabinets for small parts and hardware storage. Excellent for the radio-TV serviceman, store, home workshop, etc. Clear plastic drawers,  $1\frac{1}{2} \times 2\frac{1}{4} \times 5\frac{1}{4}$ ", are separated into three sections by removable dividers.

Parts are clearly visible to permit easy identification. Index cards are supplied to fit slots on front of drawers. Cylindrical stub handles provide easy grip without blocking view of index cards. Back-stop prevents accidental pull-out of drawers; contents cannot spill. Additional cabinets can be attached to back, side or top.

Rubber feet prevent marring or scratching of tabletop, or shelf. Durable, welded all-steel cabinets; attractive, baked-on, silver-gray Hammertone finish.

Stock No.	Mfr's Type	No. Draw.	H. W. D.	Wt. Lbs.	NET EACH
86 NX 047	J-16	16	$8\frac{1}{2} \times 12\frac{1}{2} \times 6$	8	6.48
86 NX 143	J-20	20	$10\frac{1}{2} \times 12\frac{1}{2} \times 6$	9	7.48
86 NX 144	J-24	24	$12 \times 12\frac{1}{2} \times 6$	10	9.48
86 NX 048	J-32	32	$15 \times 12\frac{1}{2} \times 6$	13	11.98
86 NU 039	J-64	64	$15 \times 25\frac{1}{2} \times 6$	29	23.98

## UNION "STACKMASTER" HEAVY STEEL CABINETS



Feature "Lok-Tabs" for Easy Expansion

Ruggedly constructed multi-drawer steel cabinets for general storage of small items. Ideal units for the home workshop, radio and TV service shops, factory, office, lab, etc. Feature convenient "Lok-Tabs" that enable cabinets to be stacked in any direction—permits expansion of storage space as need arises. Cabinets can be quickly and easily detached from one another to provide any desired arrangement as additions are made. Cabinet frame is made of heavy-gauge welded steel. Clear, all-plastic drawers have built-in index cardholder and removable partitions. Special safety-stop on drawers prevent accidental spilling of small parts. All drawers are  $5\frac{1}{2}$ " long,  $2\frac{1}{2}$ " wide,  $1\frac{1}{4}$ " deep. Cabinet frames are finished in handsome silver Dentone baked enamel.

Model U-24. 24-drawer cabinet. Size, $11 \times 6 \times 12\frac{1}{2}$ ". Shpg. wt., 9 lbs.	6.22
86 NX 783. NET	
Model U-12. 12-drawer cabinet. Size, $5\frac{1}{2} \times 6 \times 12\frac{1}{2}$ ". Shpg. wt., 6 lbs.	3.70
86 N 784. NET	
Model U-18. 18-drawer cabinet. $11 \times 6 \times 12\frac{1}{2}$ ". 6 middle drawers, $5\frac{1}{2}$ " wide; 12 side drawers, $2\frac{1}{2}$ " wide (6 ea. side). Wt., 9 lbs.	6.22
86 NX 158. NET	

Compact, four-drawer, three-way interlocking cabinets. The ideal solution for storage of small parts, tools, etc. Perfect for limited-space applications. Extremely handy for the radio and TV serviceman, mechanic, hobbyist, home craftsman, etc. Each cabinet is a complete unit with four, individual, one-piece drawers. Cabinets can be stacked either vertically or horizontally and locked together. For stacking on workbench or table.

Frames have counterstank locking devices on top and both ends. Each drawer is complete with metal snap-in separators for up to four individual compartments. Separators will not shift or slide—each is completely rigid. Drawers have folded, reinforced corners with strong tubular and folded sides. Made of rugged, one-piece steel frame.

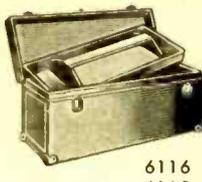
Safety stops to prevent accidental spilling. Individual drawer size,  $1\frac{1}{2} \times 2\frac{1}{4} \times 5\frac{1}{4}$ "; cabinet,  $1\frac{1}{2} \times 11\frac{1}{2} \times 6$ ". Gray finish. Shpg. wt.,  $1\frac{1}{2}$  lbs.

86 N 781. NET EACH

## QUALITY STEEL UTILITY CHESTS



1501



6116  
6119



5414

## HAMILTON UTILITY BOXES

Model 1501. Sturdily constructed, drawn-metal tool and general utility box. Handy cantilever tray rises and slides aside when lid is raised. Tray has 3 compartments:  $1-2\frac{1}{2} \times 6$ ",  $1-1\frac{1}{2} \times 6$ ", and  $1-9\frac{1}{2} \times 6$ ". Case has full-drawn, seamless, rounded corners with a snap-type lock. Lock has eye for padlock insertion if desired. Case accommodates a soldering iron, screwdriver, pliers, wrenches, test leads, etc.; extremely compact and easy to carry. An excellent value at a remarkably low price. Finished in high-gloss green baked enamel. Overall size,  $4\frac{1}{2} \times 14\frac{1}{2} \times 6\frac{1}{4}$ ". Shpg. wt., 3 lbs.

86 N 156. NET 1.50

Model 1602. Similar to above, but has two trays. Mahogany,  $5\frac{1}{2} \times 14\frac{1}{2} \times 6\frac{1}{4}$ ". Wt.,  $3\frac{1}{2}$  lbs. 86 N 229. NET 2.70

Model 21-1. An excellent, heavy-duty tool and tote box. Ideally suited for use in the home or shop. Easily accommodates most often-used tools.

Consists of a ruggedly constructed steel box with a spacious tote tray. Tray has comfort-grip, tubular handle for easy, balanced portability.

Features unique, double handle design to prevent box from accidentally opening while being carried. Made of heavy gauge steel; spot welded for extra strength. Gray finish,  $8\frac{1}{2} \times 21 \times 7\frac{1}{4}$ ". Wt., 8 lbs. 86 N 230. NET 4.72



## UNION "SUPER STEEL" TOOL CHESTS

Sturdy steel chest with convenient, removable tray. Has two heavy-duty drawbolts plus center padlock eye. Continuous hinge welded to cover and case. Beautifully balanced and easy to carry. Indispensable for the radio and TV serviceman, kit builder, experimenter, mechanic and home craftsman. Also excellent for gardening, fishing tackle, or general purpose use. Easily accommodates commonly-used tools—soldering iron, screwdriver, pliers, etc. Has ruggedly designed steel handle. Has blue, hard-baked enamel interior. Exterior has silver gray hammertone finish. Available in two sizes.

Type 6116. Overall size (HWD),  $7 \times 16 \times 7$ ". Shpg. wt.,  $6\frac{1}{2}$  lbs. 86 NX 018. NET 4.89

Type 6119. Same as above, but overall size is  $7 \times 19 \times 7$ ". Shpg. wt., 7 lbs. 86 NX 017. NET 5.14

## UNION WATERTIGHT TOOL BOX

Type 5414. Ruggedly constructed, watertight utility chest with two cantilever-mounted trays. Large tray capacity makes it ideal for storing tools or small parts. Upper tray is divided into seven equal compartments; lower tray contains one full length, one 2/3 length and two smaller compartments. Full-grip steel handle. Finished in green hard-baked enamel; green enamel interior.  $7\frac{1}{4}$ " wide, 7" high and  $14\frac{1}{2}$ " long. Shpg. wt., 5 lbs. 86 NX 045. NET 3.16

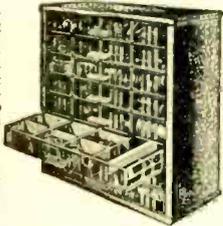
Type 5419. Similar to above but longer. 9 compartments in upper tray; 6 in lower. Center key lock with bolt catches on each side.  $19\frac{1}{2}$ " long,  $7\frac{1}{4}$ " high. Wt., 7 lbs. 86 NX 154. NET 4.45

## AKRO-MILS "E-Z FIND FULL-VIEW" CABINETS

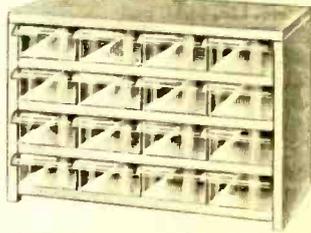
Convenient cabinets for storing small parts. Drawers are crystal-clear styrene,  $1\frac{1}{2} \times 2\frac{1}{2} \times 3\frac{1}{2}$ ". Each drawer is divided into 4 compartments—can be divided further with dividers supplied. Drawer pulls out with full grip, centered handle.

Safety catch prevents drawer spillage. Cabinet is of double-wall, heavy-gauge steel. All corners are completely rounded. Cabinet will stand on bench, stack together, or hang on wall. 4 ball feet are stamped into each cabinet base with matching depressions in top. Perfect for radio-TV service-shop, home workshop, hardware store, etc. Attractive baked on gray enamel finish.

No.	Type	Drawers	H.W.D.	Lbs.	NET
86 NX 759	V-12	12	$6 \times 12\frac{1}{2} \times 6$ "	6	3.98
86 NX 767	V-24	24	$10\frac{1}{2} \times 12\frac{1}{2} \times 6$ "	9	6.98
86 NX 773	V-32	32	$14 \times 12\frac{1}{2} \times 6$ "	12	8.98



## AKRO-MILS "M" SERIES SMALL PARTS CABINETS



An excellent assortment of metal cabinets for storage of small parts. Ruggedly constructed cabinets have plastic drawers that are 2" deep and 11" long. Drawers may be partitioned into numerous compartments with snap-in-place dividers provided. Supplied with index labels.

### SERIES M3C CABINETS

All drawers are 3" wide. Cabinets are 11" deep and  $17\frac{1}{2}$ " wide. Last two numbers in Type indicate number of drawers in cabinet.

Stock No.	Mfr's Type	Height	Wt. Lbs.	NET EACH
86 NX 547	M3C-10	$6\frac{1}{4}$ "	12	11.50
86 NX 548	M3C-15	$8\frac{1}{4}$ "	17	17.50
86 NX 549	M3C-20	$11\frac{1}{2}$ "	20	22.50
86 NX 576	M3C-30	$16\frac{1}{2}$ "	26	33.50
86 NX 577	M3C-40	$22\frac{1}{2}$ "	32	44.50
86 NX 578	M3C-50	$27\frac{1}{4}$ "	39	56.50

### SERIES M4B CABINETS

All plastic drawers are 4" wide. Cabinets are 11" deep. Last number in Type indicates number of drawers in cabinet. All cabinet types listed below are  $17\frac{1}{2}$ " wide.

Stock No.	Mfr's Type	Height	Wt. Lbs.	NET EACH
86 NX 579	M4B-8	$6\frac{1}{4}$ "	11	10.98
86 NX 597	M4B-12	$8\frac{1}{4}$ "	15	15.98
86 NX 598	M4B-16	$11\frac{1}{4}$ "	18	20.98
86 NX 599	M4B-24	$16\frac{1}{4}$ "	24	31.98
86 NX 622	M4B-32	$24\frac{1}{4}$ "	31	41.98
86 NX 623	M4B-40	$27\frac{1}{4}$ "	38	52.98

# General Cement Paints & Chemicals

FAMOUS, HIGH-QUALITY CHEMICALS, PAINTS & KITS



No. 43 "Pill-O-Bond" Cement. Thermoplastic cement. Bonds all materials.  
 43 N 210. 2 fl. oz. Wt., 6 oz. NET ..... 47  
 43 N 211. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 1.23  
 43 N 450. 1 gal. Wt., 10 lbs. NET ..... 12.35

No. 31 Radio Service Solvent. Cement thinner for removing old speaker cement, etc.  
 43 N 451. 2 fl. oz. Wt., 5 oz. NET ..... 44  
 43 N 157. 4 fl. oz. Wt., 1/2 lb. NET ..... 71  
 43 N 163. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 79  
 43 N 452. 1 gal. Wt., 10 lbs. NET ..... 4.70

No. 8460 "De-Ox-Id" Kit. Safely cleans and prevents oxidation on circuit contacts. With needle injector for easy application. 2 oz. bottle. Shpg. wt. 1/2 lb.  
 43 N 453. NET ..... 1.38

No. 19. "De-Ox-Id" Only. Less applicator.  
 43 N 127. 1 fl. oz. Wt., 4 oz. NET ..... 65  
 43 N 128. 2 fl. oz. Wt., 6 oz. NET ..... 94

No. 47 TV High Voltage Corona Dope. Prevents corona shorts. Air-drying.  
 43 N 145. 2 fl. oz. Wt., 6 oz. NET ..... 71  
 43 N 454. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 2.29

No. 50 "Red-X" TV High Voltage Corona Dope. Red corona dope. 2 fl. oz. Wt., 6 oz.  
 43 N 455. NET ..... 71

No. 53 Recording Head Cleaner. Dissolves oxide accumulations that cause gradual loss of recording sensitivity.  
 45 N 203. 1 fl. oz. Wt., 4 oz. NET ..... 56c  
 45 N 204. 2 fl. oz. Wt., 5 oz. NET ..... 94c

No. 30 Service Cement. Vibration-proof cement for radio and speaker repairs.  
 43 N 456. 2 fl. oz. Wt., 6 oz. NET ..... 47  
 43 N 166. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 1.23  
 43 N 156. 16 fl. oz. Wt., 2 1/4 lbs. NET ..... 2.15  
 43 N 457. 1 gal. Wt., 10 lbs. NET ..... 7.61

No. 32 Bakelite Cement. For bonding phenolic to phenolic or any other material.  
 43 N 296. 2 fl. oz. Wt., 6 oz. NET ..... 47

No. 65 "Control Kleener." Lubricating and cleaning compound for use with 9280 Control Gun (below). 16 fl. oz. Wt., 1 1/4 lbs.  
 43 N 046. List, \$3.25. NET ..... 1.91

## CONTROL GUN



Type 9280. Handy device for cleaning and lubricating volume controls. For use with No. 65 Control Kleener. Listed above. 7 1/4 x 3/4". Shpg. wt., 8 oz.  
 43 N 045. List, \$6.25. NET ..... 3.67

Type 9282. Control Gun Adapter. For 9280 Gun. For extra long shanks. 2 oz.  
 43 N 062. List, 75c. NET ..... 44c

Type 9281. Control Gun Adapter. Converts gun for special auto radio controls. 2 oz.  
 43 N 063. List, 75c. NET ..... 44c

No. 37 "Q-Dope" (Coil Dope). Liquid polystyrene designed for use with RF, VHF, and UHF components.  
 43 N 472. 2 fl. oz. Wt., 6 oz. NET ..... 47  
 43 N 473. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 1.18  
 43 N 471. 1 gal. Wt., 10 lbs. NET ..... 10.58

No. 41. "Q-Dope" Thinner. Solvent for dissolving polystyrene, "Q-Dope", or any other polystyrene dopes and cements.  
 43 N 469. 2 fl. oz. Wt., 6 oz. NET ..... 44

No. 90 Red Glyptal Insulating Varnish. Protective anti-corona insulation coating.  
 43 N 460. 2 fl. oz. Wt., 6 oz. NET ..... 56  
 43 N 461. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 1.62  
 43 N 462. 1 gal. Wt., 10 lbs. NET ..... 11.76

No. 127 Contact and Crystal Cleaner. Safely cleans contacts and crystals.  
 43 N 463. 4 fl. oz. Wt., 1/2 lb. NET ..... 65  
 43 N 464. 16 fl. oz. Wt., 2 1/4 lbs. NET ..... 1.47

No. 35 Rubber-to-Metal & Phono Drive Cement. For cementing rubber phono and dial drives to shafts and pulleys; also rubber mountings to chassis, etc.  
 43 N 465. 2 fl. oz. Wt., 6 oz. NET ..... 47  
 43 N 466. 4 fl. oz. Wt., 1/2 lb. NET ..... 71  
 43 N 467. 16 fl. oz. Wt., 2 1/4 lbs. NET ..... 2.15

No. 210 Electronic Contact Cleaner. Red, safe all-purpose contact cleaner.  
 43 N 160. 2 fl. oz. Wt., 6 oz. NET ..... 53  
 43 N 161. 4 fl. oz. Wt., 1/2 lb. NET ..... 65  
 43 N 468. 16 fl. oz. Wt., 2 1/4 lbs. NET ..... 1.47

No. 49 "TV Tube Coat." Conductive coating for coating TV picture tubes.  
 43 N 474. 2 fl. oz. Wt., 6 oz. NET ..... 71  
 43 N 475. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 1.56

No. 57 Fungus Varnish. Prevents moisture absorption and fungus growth.  
 43 N 476. 2 fl. oz. Wt., 6 oz. NET ..... 56  
 43 N 477. 8 fl. oz. Wt., 1 1/4 lbs. NET ..... 1.03  
 43 N 478. 1 gal. Wt., 10 lbs. NET ..... 12.94

No. 10 Non-Toxic "Electro-Tet" Cleaner. Chloroethane cleaner. Similar in action to carbon tetrachloride, but safer to use—non-toxic. Non-flammable, fast-drying. 1 gallon can. Shpg. wt., 10 lbs.  
 43 N 479. NET ..... 6.94

Type Z5 Transistor Silicone Compound. Made to insure efficient transfer of heat from transistor to chassis. Without adequate heat transfer, temperature rise may cause damage to transistor. Factory-applied to transistor and chassis on new equipment, and should be re-applied whenever transistors are replaced. Tube applicator. Shpg. wt., 2 oz.  
 43 N 009. List, \$2.50. NET ..... 1.47

## "TIPON" TOUCH-UP TUBES

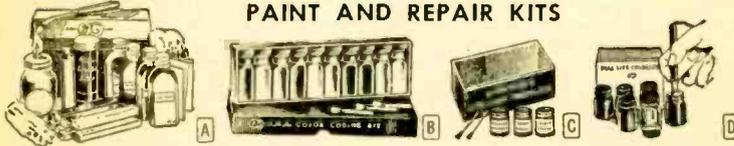


Restore appearance of radio, TV and hi-fi cabinets, furniture, appliances. Quickly conceals scratch marks—merely brush on. Shpg. wt., 4 oz.

Stock No.	Type	Color
43 N 373	5850	Walnut Furniture
43 N 374	5851	Mahogany Furniture
43 N 375	5852	Blonde Furniture
43 N 376	5853	Gold All-Purpose
43 N 377	5854	Appliance White
43 N 378	5855	Black All-Purpose

NET EACH ..... 77c

## PAINT AND REPAIR KITS



**A** Type 901 Cabinet Repair Kit. Includes everything needed for professional repairing of dents or scratches on wood, plastic, bakelite, metal. Assortment of 10 shades of shellac sticks, bottles of light and dark oil stain, metal shading varnish, polish. "Magic Scratch Remover," alcohol lamp, alcohol, spatula, touch-up brushes, steel wool, sandpaper and wiping cloth. Supplied in convenient metal storage box. With complete, easy-to-follow instructions. Shpg. wt., 3 lbs.  
 43 N 115. List, \$9.75. NET ..... 5.73

**B** Type 677 EIA Color Coding Kit. Fast-drying lacquer enamels—all standard EIA colors: black, brown, red, orange, yellow, green, blue, purple, gray and white. Supplied with brushes. Shpg. wt., 1 1/2 lbs.  
 43 N 112. List, \$2.45. NET ..... 1.44

**C** Type 184-0 Luminous "Lite-Koat" Kit. A long-life, non-poisonous, luminous coating that emits light in the dark. Coating absorbs light in the daytime. Powder, thinner, protective compound. Shpg. wt., 2 1/4 lbs.  
 43 N 111. List, \$5.40. NET ..... 3.18

**D** Type 66-5 "Diat-Lite" Coloring Kit. For bulbs, dials—instant drying. Includes: red, green, blue, amber, solvent. Bulbs may be colored by dipping. Wt., 4 oz.  
 43 N 110. List, \$1.85. NET ..... 1.09

Scratch Sticks. For repairing scratches on wood surfaces. Wt., 5 oz.  
 43 N 113. Type 909-M. Mahogany. 43 N 368. Type 909-W. Walnut. 43 N 369. Type 909-I. Oak. List, 80c. NET EACH ..... 47c



"SPRA-KOAT" PAINTS  
 Wrinkle Varnish. Can be air-dried or baked—gives a wrinkle finish comparable to professional oven-baked jobs either way. Perfect for chassis, panels and racks. Makes composition board and bakelite panels look like wrinkle-finish steel panels. Same finish as that employed by manufacturers on P.A. equipment, transmitters, 16 fl. oz. In convenient spray can. Wt., 1 1/4 lbs.

Stock No.	Mfr's Type	Color	NET EACH	
			1-5	6-Up
43 N 028	60-12	Black	2.02	1.92
43 N 029	60-13	Gray		

Telephone Black and Gray. A satin-finish enamel. Telephone black is perfect for power control and meter panels. Telephone gray gives professional appearance to test equipment, etc. Dries quickly after spraying. Provides moisture resistance. For wood or metal. 16 fl. oz. Shpg. wt., 1 1/4 lbs.

Stock No.	Mfr's Type	Color	NET EACH	
			1-5	6-Up
43 N 033	62-12	Black	2.02	1.92
43 N 034	62-13	Gray	2.02	1.92

Hammer Finish. For applying professional hammer finish to panels, racks, chassis and instrument cases. Perfect for refinishing scratched and scarred metal surfaces. Air-dries quickly. 16 fl. oz. Shpg. wt., 1 1/4 lbs.

Stock No.	Mfr's Type	Color	NET EACH	
			1-5	6-Up
43 N 035	83-12	Brown	2.02	
43 N 036	84-12	Blue	2.02	1.92
43 N 037	85-12	Silver	2.02	



## PRINTED CIRCUIT PAINT

No. 21 Silver Print. The same pure silver compound used by manufacturers in printed circuit designs. Use it to repair all printed circuits and to touch up circuits around eyelets, rivets, and other parts. Handy for servicemen, experimenters and engineers. Brush-in-cap. 1 Troy oz. Shpg. wt., 4 oz.  
 43 N 159. List, \$7.75. NET ..... 4.56

No. 20 Copper Print. As above, but copper. 2 fl. oz. Wt., 2 oz.  
 43 N 079. List, \$2.00. NET ..... 1.18

## "SPRA-KLEEN" CONTACT CLEANER

Type 8666. Efficient cleaner for electrical contacts—cleaner is simply sprayed on contacts or control and mechanism is worked a few times. 6 fl. oz. Shpg. wt., 10 oz.  
 43 N 025. NET ..... 88c

## "ZERO-MIST" SPRAY

Type 8667. Permits instant location of circuit components that are intermittent with temperature changes. Merely spray suspected components and junctions one at a time with "Zero-Mist"—cools immediately. Quickly pinpoints faulty capacitors, resistors, transistors, cold solder and oxidized junctions—any circuit unit that fails with a temperature variation. 16 fl. oz. Shpg. wt., 1 1/4 lbs.  
 50 N 099. NET ..... 2.39

## NO. 60 "RUF-KOAT" VARNISH

Air-drying wrinkle varnish for amplified test equipment, chassis, etc. Gives a professional-looking appearance—same type as used by original manufacturers. Can be air-dried or baked.

Black	Brown	Gray	Size	Lbs.	NET
43 N 480	43 N 481	43 N 482	4 fl. oz.	1/4	.82
43 N 483	43 N 484	43 N 485	16 fl. oz.	2 1/2	2.20
43 N 486	43 N 487	43 N 488	32 fl. oz.	2 1/2	3.23



## SILICONE RESIN SPRAY

No. 14. Use this clear, silicone resin spray after repairing or replacing parts in printed circuits. Forms a protective coating which prevents shorts and arcing. Insulates, waterproofs and provides barrier against dust. Application is simple—pressing of button at top of can releases the spray. Used by manufacturers to assure dependable performance of printed circuits. Dries rapidly and requires no baking. Spray can. Contents, 6 fl. oz. Shpg. wt., 10 oz.  
 43 N 027. List, \$3.25. NET ..... 2.39

# Chemicals and Paints

## SERVICING CHEMICALS

### "NO NOISE" SOLUTION

Remarkably effective chemical formula for cleaning, lubricating and protecting TV front-ends, controls, switches, etc. In 6 oz. aerosol spray can. 2 oz. bottle is complete with dropper. Shpg. wts., 6-oz. can. 10-oz., 2-oz. bottle, 6 oz.

43 N 142, 6 oz. NET.....2.20  
43 N 143, 2 oz. NET......98c



### MERIX ANTI-STATIC SOLUTION

Prevents accumulation of static charges on smooth-surfaced substances such as plastics, metals, records, recording discs, etc. Treated surface becomes static-free and no longer attracts dust or lint. Removes static caused crackling noise on all types of records. Single bottle treats approximately 400 records. Non-inflammable. Can be safely used on face of TV tube. 4 oz. plastic bottle. Shpg. wt., 8 oz.

43 N 144, NET.....88c



### QUIETROLE CLEANER AND LUBRICANT

Radio-TV general purpose lubricant and cleaner. Eliminates noise from TV front-end tuners and volume-tone controls without removal from chassis. Non-inflammable and non-corrosive liquid; remains effective indefinitely. Also recommended for use on switches, pushbuttons, bearings, dial shafts, contacts, etc. An indispensable tool box item for the radio-TV serviceman. Shpg. wts.: 2-oz. bottle, 7 oz.; 4-oz. bottle, 14 oz. \*With eye dropper.

43 N 102, 4-oz. bottle, NET.....1.66  
43 N 103, 2-oz. bottle, NET.....2.49



## CHEMTRONICS CHEMICALS

No-Arc Hi-Voltage Insulator. No. 501-1. Used by servicemen and manufacturers to prevent arcing and to eliminate corona shorts. Non-inflammable, fast drying—with high voltage (20,000 v.) insulating properties. 2 oz. bottle. Wt., 1 lb.

44 N 398, NET.....87c



Tun-O-Lube. No. 605-4. Used by servicemen to clean and lubricate all types of tuners. Easy to apply. Non-inflammable. Will not affect electrical properties nor harm insulators. 2 oz. bottle. Wt., 1 lb.

44 N 399, NET.....77c

### INSL-X TOOL DIP

A red liquid plastic that hardens into a tough, insulating coating when applied with pliers, wrenches and other tools used in electrical work. Minimizes shock hazard. Dielectric strength, 1500 v. per mil. Remove cap from container and dip handle of tool into liquid; may be dipped repeatedly if heavier coating is desired. Dries in 24 hours. Resists acids, alkalis or other corrosive compounds. Shpg. wt., 6 oz. can, 10 oz.; 32 oz. can, 2 1/4 lbs.



Stock No.	Contents	NET EACH	24 or More, EACH
42 N 400	6 oz.	.79	.71
42 N 401	32 oz.	2.83	2.55

### INSL-X E-16 INSULATING SPRAY

Electrical insulation in handy spray can. Has non-clogging spray valve. Insulates parts, wiring, tools, etc. Has same insulating properties as above. Dielectric strength, 800-1200 volts per mil. 12-oz. can. Shpg. wt., 1 1/2 lbs.

Stock No.	Color	Contents	NET EACH	24 or more, EACH
42 N 402	Clear	12 oz.		
42 N 403	Aluminum	12 oz.	1.19	1.07
42 N 404	Black	12 oz.		

### ECCOBOND 26 EPOXY CEMENT

All-purpose epoxy resin patch kit used in repair of tools, hardware items, furniture. Also used as a bonding agent for metals, plastics, wood and ceramics. Kit consists of two separate tubes; equal amounts of resin are squeezed out, mixed and applied. Cure is complete in 4 hours at room temperature or in minutes at 150° F. 1 lb.

44 N 397, NET.....1.98



## KRYLON PLASTIC AND ENAMEL SPRAYS

### CLEAR PLASTIC SPRAY

Can spray a crystal-clear acrylic that dries in minutes to form a hard, waterproof coating. Coating has high dielectric strength—eliminates corona and arcing when sprayed on high voltage coils and leads in socket of high voltage rectifiers on transformers, ignition wiring, etc. Has a dielectric strength of 400 volts per mil. Spray on bell part of metal picture tubes to minimize accumulation of dust. Use on radio-TV antennas to prevent rusting and pitting. Makes antennas salt-spray and chemically resistant. Use for weatherproofing outside lead-in connections. Assures added safety and better quality work on all installation and service jobs. Has many uses around shop and home. Comes in ready-to-use, 16-oz. size handy spray can. Shpg. wt., 1 1/2 lbs.

43 N 133, NET.....1.27

### ENAMEL SPRAYS

Highly attractive, non-fading, enamel sprays. Excellent for either interior or exterior use—provide a handsome, durable finish. Available in a wide variety of colors. Extremely quick drying—in 3 minutes. Non-clogging spray valve. 16-oz. can. Shpg. wt., 1 1/2 lbs.

No.	Color	No.	Color
43 N 134	Bright Silver	43 N 109	Bright Gold
43 N 064	Bright Copper	43 N 107	Hunter Green
43 N 059	Flat White	43 N 208	Sun Green
43 N 137	Glossy White	43 N 054	Chrome Yellow
45 N 206	Antique Ivory	45 N 209	Pastel Yellow
43 N 106	Flat Black	43 N 055	Regal Blue
43 N 138	Glossy Black	43 N 056	Cherry Red
43 N 053	Light Gray	43 N 044	O. D. Khaki
43 N 108	Machine Gray	43 N 043	Int'l Orange
45 N 207	Dove Gray		

NET EACH.....1.17

Saves time and money for radio-TV servicemen. Protects and preserves electronic equipment, for "touch-up" jobs.



Handy spray cans of clear plastic or colored enamels for small area jobs in all workshops.

### ZINC CHROMATE PRIMERS

Handy, "always ready" 16-oz. spray-on cans containing zinc chromate metal primers. Choice of yellow or green. Primer is rust inhibitive—will retard rusting action. Dries rapidly to form a strong bond with metal—resists peeling and cracking. Accepts finish coats readily. Ideal for prime coating metal antenna towers, masts, etc. Specially prepared—does not settle hard in can. Shpg. wt., 1 1/2 lbs.

45 N 210, Yellow Primer, NET.....1.27  
45 N 211, Green Primer, EACH.....1.27

## WALSCO RADIO, TV AND HI-FI CHEMICALS

Walcolub B Lubricant No. 22. A highly effective lubricant in a convenient tube-type dispenser. Used extensively by servicemen for hard-operating volume controls, pushbuttons, tuning mechanisms, etc. Protects against corrosion. 1 1/2 oz. tube. Wt., 5 oz.

43 N 124, NET.....53c

Tunerlub. No. 25. Prevents noisy operation of TV tuning units and similar high frequency applications. Free of zinc or other metal oxides. Cleans and protects contacts from oxidation. 1 1/2 oz. tube. Shpg. wt., 5 oz.

43 N 126, NET.....53c

"Lubriplate." No. 23. Super lubricant for phonograph, record changer and tape recorder motors and mechanisms. Reduces friction, prevents wear and corrosion and restores smooth, quiet operation. 2 oz. tube. Shpg. wt., 6 oz.

43 N 125, NET.....53c

No-Slip Belt Dressing. No. 260. A highly effective dressing for belts and cords used on dial drive mechanisms in radio and TV sets. Eliminates annoying slippage and keeps belt drives operating smoothly. Also keeps cords pliable and prevents fraying. Supplied in 2 oz. bottle. Shpg. wt., 6 oz.

43 N 167, NET.....47c

Radio Dial Oil. No. 27. A light-bodied lubricating oil for all electronic and electrical appliances. Free of corrosive acids. Prevents rusting. 2 oz. bottle. Shpg. wt., 6 oz.

43 N 172, NET.....35c

Cap Needle Injector. No. 989. Surgical-grade needle with oil-resistant neoprene bulb—attached to bakelite bottle cap. Permits easy application of Contactene or Dial Oil to band-switches, volume controls, etc., without disassembling. Shpg. wt., 2 oz.

43 N 198, NET.....44c

### G-C GUN TYPE SPRAY CAN HANDLE

Inexpensive spray can handle attaches to any spray can—converts the can into a spray gun! Useful in home, shop or office for applying paints, service chemicals, cleaners, special finishes, insecticides, etc. etc. A real convenience for servicemen, technicians and engineers. Shpg. wt., 3 oz.

45 N 201, NET.....88c



### G-C SPRAY CAN EXTENSION

Extremely useful attachment for spray cans—concentrates spray and directs it to desired area. Ideal for cleaning controls and tuners without removing them from chassis. One end of 9" extension tubing fits over nozzle of can. Fits all spray cans. Shpg. wt., 2 oz.

45 N 202, NET.....88c



Carbon Tetrachloride. No. 111. Dissolves dirt and grease. Ideal for cleaning noisy switch contacts. Non-explosive and non-inflammable. 4 oz. bottle. Shpg. wt., 12 oz.

43 N 154, NET.....53c

Super Polish. No. 230. Removes old polish, grease or dirt from cabinets. Forms hard, high-gloss film. 8-oz. bottle. Wt., 1 1/4 lbs.

43 N 179, NET.....59c

Polystyrene Cement. No. 57. For bonding Polystyrene parts, coating coils. Brush-in-cap. 4 oz. bottle. Shpg. wt., 12 oz.

43 N 174, NET.....71c

Plastic Cement. No. 40. A highly effective adhesive for general repair work. Repairs plastic knobs and cabinets. Also cements metal, glass. Brush-in-cap. Supplied in 2-oz. bottle. Shpg. wt., 6 oz.

43 N 171, NET.....47c

Insulating Varnish. No. 190. Fast drying; for coils, transformers, solenoids, motors, etc. Provides a moisture-proof, highly acid-resistant coating. 2 oz. bottle. Shpg. wt., 6 oz.

43 N 173, NET.....50c

### RAPID "BRUSHPLATER"

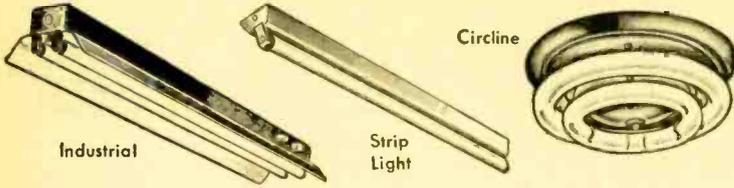
For quick, easy electro-plating of small metal items such as hardware, trim, metal knobs, etc. Plating process is exceedingly simple—just make a few electrical connections and brush surface to be plated with metal compound. Includes 1 oz. metal cleaner, 1 oz. metal polish, plating compound, 3/8" brush wires and plating clips, and polishing stick. Requires 2 or 3 No. 6, 1 1/2-volt cells (see battery pages). Shpg. wt., 1 lb.



Stock No.	Mfr's Type	Plating Compound	NET EACH
43 N 090	200	Nickel	
43 N 081	202	Cadmium	
43 N 082	204	Copper	1.67
43 N 083	205	Brass	
43 N 084	206	Silver	2.66
43 N 085	207	24 K Gold	4.61

# Fluorescent Fixtures—Lanterns

## MITCHELL FLUORESCENT FIXTURES



### STANDARD INDUSTRIAL FIXTURE

**Model 2098. 48" Standard Fixture.** Uses two 48" Type T-12, 40-watt fluorescent lamps. High-gloss gray enamel for easy cleaning and maximum light reflection. Power factor corrected to reduce inductive effects. Supplied with brackets for hanging from ceiling and knock-outs to permit flush or stem mounting. Fixtures may be hung on chains, flush-mounted separately, or mounted end-to-end in a continuous row. Starters located on side for easy replacement without removing lamps or reflector. 48 1/2" x 11 1/2" x 5 5/8". With reflector, starters and ballasts. Less lamps and chains. U.L. Approved. For 105-125 volts, 60 cycles AC. Shpg. wt., 17 lbs.  
**91 NU 260, NET EACH ..... 9.43**  
 3 or More, EACH ..... 8.70

### INDUSTRIAL RAPID-START FIXTURE

**Model 2098 RS.** As above, but rapid-start type. For 105-125 v., 60 cycle AC. Wt., 17 lbs.  
**91 NU 315, NET EACH ..... 11.18**  
 3 or More, EACH ..... 10.32

### CIRCLINE FLUORESCENT FIXTURES

**Model 665C.** Low-cost, single-lamp, chrome-plated fixture with "instant-start" feature. Provides clear, glareless illumination—equivalent in light produced to a 100-watt incandescent bulb. An excellent lighting fixture for use in average-size kitchens, basement work areas, small offices, dens, etc. Handsome chrome finish complements any room. Lamp is held securely in place by tempered, spring-steel clips. With 12"-diameter, 32-watt Circline lamp. U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 9 lbs.  
**91 NX 279, NET EACH ..... 8.63**  
 3 or More, EACH ..... 7.87

### MODEL 705 WALL BRACKET



Attractive fluorescent wall bracket for general purpose use in the home or shop. Features an adjustable shade for directing light. Has handy

### FLUORESCENT STRIP LIGHTS

Each unit has provision for secure locking to adjacent units in all anywhere. White, baked enamel finish. With starters. Less lamps. For 110-120 v., 60 cycle AC. U.L. Approved. See fluorescent lamps on next page.

#### 1 LAMP—20 WATT 24"

**Model 316.** Normal power factor. Perfect for salesrooms, corridors. Shpg. wt., 4 lbs.  
**91 NX 195, NET EACH ..... 2.76**  
 3 or More, EACH ..... 2.54

#### 1 LAMP—40 WATT 48"

**Model 318.** Single strip for 40-watt lamp. Normal power factor. Shpg. wt., 6 lbs.  
**91 NX 196, NET EACH ..... 4.59**  
 3 or More, EACH ..... 4.24

#### 2 LAMP—40 WATT 48"

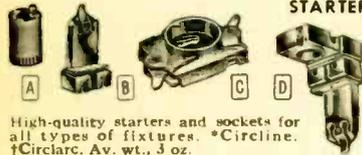
**Model 265.** High power factor. Gives maximum illumination using two 48" tubes. 8 lbs.  
**91 NX 197, NET EACH ..... 8.91**  
 3 or More, EACH ..... 8.23

**Model 841C.** Chrome-plated 2-lamp fluorescent fixture in attractive circular design. Improved light diffusion. With 12" dia. 32-watt and 8" dia. 22-watt rapid-start lamps, hardware and glass pendant. For 110-120 v., 60 cycle AC. U.L. Approved. 11 lbs.  
**91 NX 262, NET EACH ..... 13.90**  
 3 or More, EACH ..... 12.67

**Model 847C.** Deluxe model with three self-starting lamps. Chrome plated. With 40, 32 and 22-watt lamps. For 110-120 v., 60 cycle AC. U.L. Approved. Shpg. wt., 15 lbs.  
**91 NX 241, NET EACH ..... 22.55**  
 3 or More, EACH ..... 20.55

flush-type electrical outlet on side panel. Triple-chrome finish. Rotary type on-off switch. 20x2 1/4"x2". With starter. Takes 15-watt bulb. Less lamp. U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 3 1/2 lbs.  
**91 NX 287, NET EACH ..... 5.36**  
 3 or More, EACH ..... 4.95

### STARTERS & SOCKETS



High-quality starters and sockets for all types of fixtures. \*Circline. †Circline. Av. wt., 3 oz.

#### A STARTERS

Stock No.	Mfr's Type	Watts	1-9, EACH	10-UP, EACH
78 N 850	FS2	14, 15, 20	20c	18c
78 N 851	FS4	30 or 40	20c	18c
78 N 854	FS12	32	28c	25c
78 N 855	FS22	14, 15, 18* 20-22†	28c	25c

#### B LAMPHOLDER SOCKETS

Stock No.	Watts	Color	1-9, EACH	10-UP, EACH
78 N 860	14, 15, 20	Black	21c	19c
78 N 861	30 or 40	White	22c	20c

#### C STARTER SOCKET

Standard Dual-Loc remote starter socket.  
**78 N 859, 1 to 9, NET EACH ..... 16c**  
 10 or More, EACH ..... 14c

#### D STARTER SOCKET & LAMP HOLDERS

Stock No.	Watts	Color	1-9, EACH	10-UP, EACH
78 N 865	14, 15, 20	Black	42c	38c
78 N 866	30 or 40	White	44c	40c

### "LIFETIME" MODEL 5015 ALL-PURPOSE LANTERN



For Home or Auto  
 Powerful Sealed-Beam Lamp on Swivel Mount

An excellent multi-purpose lantern at low cost. Features a powerful, sharp focus, sealed-beam lamp. Lamp is fully adjustable through 180-degree swivel—directs light towards any desired area. Lamp and handle fold down for easy storage—may be conveniently carried in the auto or stored in the home. Has three-way switch for off-on-manual-flash operation. Ideal emergency or trouble light for servicemen, motorists, etc. Flasher feature is perfect for warning signals. Uses one 6-volt lantern battery (Burgess F4H listed below). Handsomely finished in bright, red baked enamel with contrasting chrome trim. Lamp is 4" in diameter. Less battery. Size, 4x3x2 1/4". Shpg. wt., 2 lbs.  
**78 J 222, NET ..... 3.28**

**Type F4H Burgess Battery.** Lantern battery for use with above. One required. Shpg. wt., 1 1/4 lbs.  
**53 J 028, NET ..... 87c**

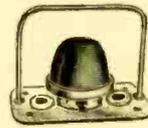
## BURGESS QUALITY LANTERNS AND FLASHLIGHTS

### RADAR BEARCAT LANTERN



**Model TW9.** This focusing lantern puts light where you need it—near or far. Wide-angle or pinpoint light with twist of built-in focusing ring. Has steelclad battery and waterproof switch for safe, efficient outdoor use—in any weather. Powerful light beam can be seen for one-half mile. Two insulated knurled nuts hold battery. Red, baked enamel finish. Size, 8 1/2"x5 1/4"x4 1/4" (including battery). Shpg. wt., 4 lbs.  
**78 J 227, List, \$6.95, NET ..... 4.34**

### "RADAR-LAMP" LANTERN



Model TW34



Model TW7

**Model TW7.** Here's an outstanding portable lantern with super-intensity lamp. Completely leakproof and weatherproof. Simple to operate and convenient to carry. Battery can be replaced in seconds—two insulated knurled nuts hold battery firmly to head assembly. 9 1/4"x5 1/4"x2 1/4" (including battery). With TW1 6-v. battery. Wt., 4 1/2 lbs.  
**80 J 686, List, \$8.95, NET ..... 5.53**

**TW34 Flasher Light.** Similar construction to "Radar Lamp" above—attaches to top of TW1 battery. Provides red light which flashes on and off. Chrome plated. 4x2 1/4"x5 1/4". Less battery, below. Shpg. wt., 1 lb.  
**80 J 687, List, \$3.95, NET ..... 2.53**

**RL22 Storage Bracket.** Bracket with spring clips to hold "Radar Lamp" (above) to floor or wall of car or truck. Wt., 1 lb.  
**80 J 688, List, \$1.50, NET ..... 1.00**

### "RADAR-LITE" LANTERN

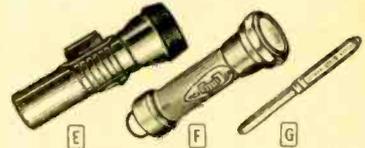


**Model TW3.** Super power, all purpose lantern. Sealed beam lamp develops 40,000 candlepower. Automatic red flashing signal on movable arm, swings 90°. Battery is lantern body—can be installed in seconds. Convenient to carry. Chrome handle. 1 1/4"x9 3/4"x3 1/2". Lamp, 4 3/4" dia. With TW-1 6 v. battery. Wt. 6 lbs.  
**78 J 270, List, \$12.40, NET ..... 7.63**

**Model TW4.** As above, but less flasher.  
**78 J 228, List, \$9.95, NET ..... 6.13**

**TW1 Battery.** For TW3, TW4, TW7, TW9, TW34. Wt., 3 1/2 lbs.  
**80 J 680, List, \$2.45, NET ..... 1.63**

### FLASHLIGHTS



**E Model 159.** Chrome-plated, 2-cell flashlight. Has Alnico magnet that holds fast to steel; red "brite-glo" head. Uses 2—No. 2 cells. With lamp; less battery. Wt., 1 lb.  
**53 J 107, List, \$1.79, NET ..... 1.20**

**F Model 350.** A fine 2-cell flashlight. Fiber barrel with rubber cushioned head, end cap. Pre-focused and weatherproof. Uses two No. 2 cells. With lamp. Less batteries. 1 lb.  
**78 J 229, List, \$1.90, NET ..... 1.28**

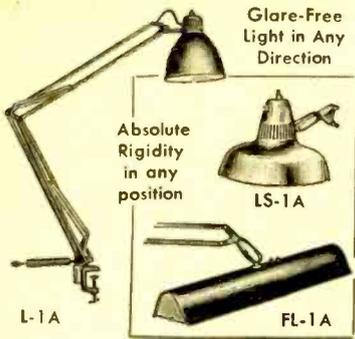
**Model 450.** As above, but uses three No. 2 cells and PR3 lamp. Less batteries. 1 1/4 lbs.  
**78 J 235, List, \$2.15, NET ..... 1.44**

**G Type 152 Penlight.** Duo-Tone and chrome finish. Uses two No. 7 cells. With No. 224 bulb. Less batteries. Wt. 5 oz.  
**78 J 245, List, 88c, NET ..... 59c**

See Index for battery listings.

# Desk Lamps—Fluorescent Lamps

## LUXO ADJUSTABLE LAMPS



Glare-Free Light in Any Direction

Absolute Rigidity in any position

LS-1A

### MODEL L-1A ALL-ANGLE LAMP

The Luxo lamp, made in Norway, is famous for its precision construction and exceptional flexibility. Provides excellent illumination, instantaneous fingertip adjustment, and absolute rigidity in any position. The perfect lamp for service shop and work bench. Swings from a straight vertical position to within a few inches of the floor. May be raised, lowered, or turned with a touch of the fingers. Has two extension arms, 45" long. Swivel joints are spring-loaded; knurled nut controls overall tension. Porcelainized shade has large vents at top for heat dissipation. On-Off switch conveniently located at top of shade. Supplied with clamp for easy attachment to bench or table up to 1 1/4" thick. Dove gray finish. Durably built and light in weight. U.L. Approved. Uses standard light bulb. Less bulb. Shpg. wt., 5 lbs.

91 NX 296, List, \$23.50. NET ..... 17.62

### MODEL LS-1A FLAIR LAMP

Precision-balanced lamp blends with modern office furniture or contemporary home furnishings. Perfect light for detailed work—light can be raised, lowered, tilted or turned to any angle to cover entire desk area. A perfect study lamp; a versatile lamp for use in offices, laboratories, and home work shop. On-off switch conveniently located on reflector. Total length 45", with 360° sweep. Handsome dove gray finish. U.L. Approved. With clamp-type mounting bracket for surfaces up to 1 1/4" thick. Clamps to drawing board or desk. Uses standard 60 watt light bulb. Less bulb. Shpg. wt., 5 lbs.

91 NX 207, List, \$24.50. NET ..... 18.37

### MODEL FL-1A FEATHER-TOUCH ALL-ANGLE FLUORESCENT LAMP

This all-purpose fluorescent lamp features "feather-touch" positioning—may be raised, lowered, or turned with a touch of the fingers. Unique, spring-loaded extension arms always stay in desired position. Lamp housing is also adjustable—may be turned up, down, or sideways—always remains at same angle regardless of arm positioning. Uses 15-watt tubes for glare-free light. Shade is 19" long by 4 1/2" wide—has convenient push-button-type starter. Equipped with clamp for easy mounting on work bench, desk, or table. Handsome dove gray finish. Extends to 45". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Less lamps (requires 2 Type T8 18" lamps as listed below). Shpg. wt., 9 lbs.

91 NX 228, List, \$29.50. NET ..... 22.12

## FLEXO ADJUSTABLE LAMPS



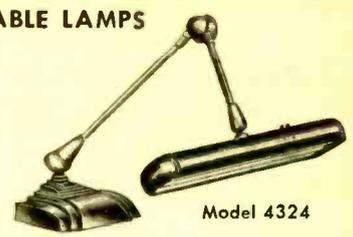
Model 4303

### MODEL 4303 ALL-PURPOSE LAMP

A well-designed all-purpose lamp. Head tilts vertically 180° and turns 300° on its axis. Upper elbow swings in 160° vertical arc; lower elbow swings in 110° vertical arc. Extends to 36". Spring-controlled swivel joints. Push-button off-on switch. Easily installed—two bolts clamp base firmly to surfaces up to 3" thick. Bronze finish. Requires two T8, 15-watt lamps. For 105-125 v., 60 cycle AC. U.L. Approved. Less lamps (below). Shpg. wt., 10 lbs.

91 NX 225, List, \$20.95. NET ..... 15.40

3 or More, EACH ..... 14.38



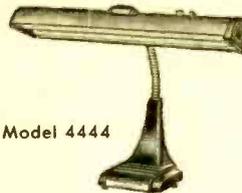
Model 4324

### MODEL 4324 PORTABLE DESK LAMP

Portable desk model. Similar to Model 4303 (left) but with weighted base. For desks where screw clamp cannot be used. Raises and lowers, extends and tilts in any direction. Stays in position. Ideal for fine precision work, service bench use, industrial assembly lines, etc. Gives a light without glare or shadows. Attractive streamline base design has pen and pencil grooves. Double arm extends 32". U.L. Approved. For 105-125 volts, 60 cycle AC. Less lamps (requires 2 T8 15-watt lamps as listed below). Shpg. wt., 23 lbs. \$2.00 Down.

91 NU 226, List, \$28.95. NET ..... 21.28

3 or More, EACH ..... 19.86



Model 4444

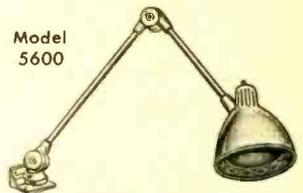
### MODEL 4444 "FLEXARM" TWIN-LIGHT

Shade has 8° to 14° swing. Sturdy metal base. Heavy-gauge steel shade, 2 1/4 x 4 1/2 x 18". White enameled reflector. Push-button switch. Requires two T8, 15-watt fluorescent lamps. Bronze finish. U.L. Approved. For 105-125 v., 60 cycle AC. Less lamps (below). Wt., 10 lbs.

91 NX 146, List, \$14.95. NET ..... 10.95

Model 4448. As above, except uses one T8, 15-watt fluorescent lamp. Wt., 7 lbs.

91 NX 208, List, \$10.95. NET ..... 8.04



Model 5600

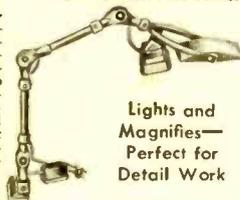
### MODEL 5600 "COOL-SHADE" LAMP

Low-cost, fully adjustable bench lamp. Fingertip control—rigid in any position. Shade vented for heat dissipation. Swivels at base, shade and each joint. Entirely spring-controlled in base, middle joint and shade. Maximum extension, 42". Convenient on-off switch on shade. Shade dia. 5 1/2"; 7" deep. Universal base for clamping or screw mounting—either vertical or horizontal. Less standard bulb. Gray finish. U.L. Approved. Shpg. wt., 3 1/2 lbs.

91 NX 142, List, \$11.95. NET ..... 8.77

## FOSTORIA MAGNIFIER INSPECTION LAMPS

Model A Magnifier. Combines a magnifier with concentrated lighting of 6x6" (36 sq. in.) viewing area. Optically ground acrylic plastic lens and lighting units are suspended from two 10" adjustable arms for mounting on bench or table.

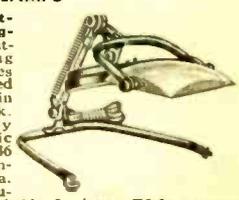


Lights and Magnifies—Perfect for Detail Work

For easy viewing of assembly, inspection, testing. Lamp moves both horizontally and vertically. Uses two 4-watt T5 fluorescent lamps. Mounting base 4 1/2" high with 360° swivel collar. Clamp included. Metallic gray finish. For 110-120 volts, 60 cycle AC. Less lamps (listed below), 5 lbs.

91 NX 173, \$2.00 Down. NET ..... 44.10

Model DS Portable Stand Magnifier. Illuminated magnifying viewer increases production speed and accuracy in precision work. 6x6" optically ground acrylic lens provides 36 sq. in. distortion-free viewing area. Adjustable illumination is afforded by 2-4-watt T5 fluorescent lamps. Flexible friction collar disc joints instantly position lens and light. Lens and lighting unit suspended on sturdy portable stand of 1/2" tubular steel construction with rubber feet. Handsome hammer tone metallic-silver finish. Size, 9 1/2 x 12 x 10". For 110-120 volts, 60 cycle AC. Less lamps (below), 5 lbs.



91 NX 171, \$2.00 Down. NET ..... 39.20

## STANDARD AND CIRCLINE FLUORESCENT LAMPS

Standard and Circline fluorescent lamps listed below represent sizes most frequently employed in office, industrial and home applications. Use a fraction of the power of incandescent-type bulbs. White lamps have light characteristic which approximates that of standard incandescent bulbs. Daylight lamps provide light with a slightly bluish tinge approximating natural daylight. Cool-white lamps are 4500° Kelvin. Lamp life is approximately 2000 hours. \*Circline lamps; size shown in table is the diameter of the lamp circle. All lamps below have medium-size bi-pin bases except Type T5 (miniature bi-pin) and Circline lamps which have 4 pin bases. † Rapid-start lamps.

Stock No.	Type	Watts	Size	Tube Dia.	Color	Sid. Pkg.	Lb. Wt.	NET EACH	In Std. Pkg. EA.
91 N 172	T5	4	6"	3/8"	Cool-white	24	3/8	1.30	1.04
91 N 521	T5	6	8 1/2"	3/8"	White	24	1/2	1.35	1.08
91 N 511	T12	14	15"	1 1/8"	Cool-white	24	1	1.10	.88
91 N 500	T8	15	18"	1"	Daylight	24	1	1.15	.92
91 N 514	T12	15	18"	1 1/8"	Cool-white	24	1	1.10	.88
91 NX 502	T12	20	24"	1 1/2"	Daylight	24	1 1/2	1.15	.92
91 N 535	T9*	22	8 1/2"	1 1/2"	Cool-white	12	1 1/2	3.50	2.80
91 N 516	T10*	32	12"	1 3/4"	Cool-white	12	1 3/4	3.50	2.80
91 NX 538	T10*	40	16"	1 3/4"	Warm-white	12	1 3/4	4.60	3.69
91 NX 534	T12*	40	48"	1 3/4"	Cool-white	24	2	2.25	1.00
91 NX 506	T12*	40	48"	1 3/4"	Daylight	24	2	1.30	1.04

## ADVANCE FLUORESCENT BALLASTS

Wide selection of high-quality ballasts for all popular fixtures. Normal power factor types are 55-65% corrected. High power factor types are 90-100% corrected. L-132 is for standard Circline. U.L. Approved. For 105-125 volts, 60 cycle AC. \*Lamp watts.



1-LAMP BALLAST—NORMAL POWER FACTOR						
No.	Type	Watts*	Size	Ctrs.	Lbs.	NET
78 N 889	L-115	15	4 1/4 x 2 1/8"	3 3/4"	1	1.00
78 N 891	L-120	20	4 1/4 x 2 1/8"	3 3/4"	1	1.00
78 N 892	L-132	32	6 1/2 x 1 1/2 x 1 1/2"	6"	3	1.85
78 N 885	LO-14-20-C	14, 15, 20	3 1/4 x 1 1/2 x 1 1/4"	2 1/4"	3/4	.68
78 N 888	RLQC-140	32, 40	6 1/2 x 2 1/2 x 1 1/2"	6"	3	2.95
2-LAMP BALLAST—NORMAL POWER FACTOR						
78 N 898	L-220	20	6 1/4 x 2 1/8"	5 3/4"	1 1/2	2.05
2-LAMP BALLAST—HIGH POWER FACTOR						
78 N 896	S-240	40	1 1/4 x 2 3/4 x 1 1/4"	1 1/4"	4 1/2	5.15
78 N 897	RSHM-240	40	9 1/2 x 2 1/2 x 1 1/4"	8 1/4"	4 1/2	6.00
78 N 886	SEQM-275-S	55, 74	14 3/8 x 3 3/4 x 1 1/2"	13 3/4"	9 1/2	9.60

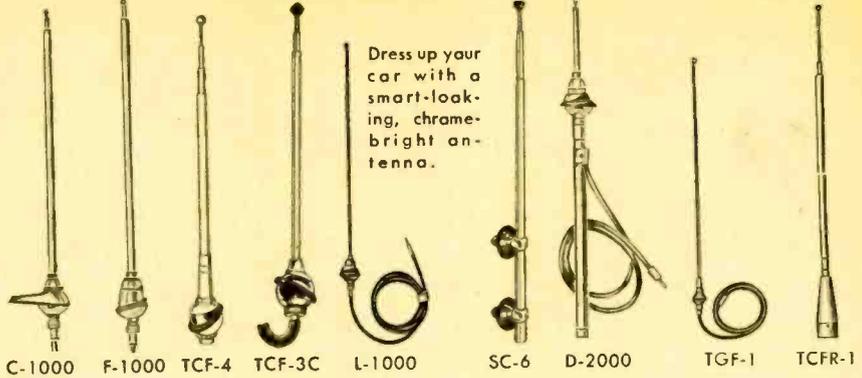
# Auto Antennas and Vibrators

## WARD AUTO RADIO ANTENNAS

Replace your  
worn antenna



Improve car radio reception with a modern antenna of advanced design. Save at Allied's low prices.



Dress up your car with a smart-looking, chrome-bright antenna.

### NEW CUSTOM ANTENNAS

Custom "Lok-matic" auto antennas for 1958 and 1959 Fords and Chevrolets. 3 triple chrome-plated brass sections extend from minimum of 19 1/2" to 56". Fast, positive, simple installation is done entirely from outside. Antenna mounts on top of any fender, complements the up-to-date styling of your auto. Unit is safeguarded by completely waterproof polystyrene dielectric insulation. With 54" low loss lead cable. Exclusive "Lok-matic" mount is coated with heavy layer of chrome for attractiveness and durability. Av. shpg. wt., 1 1/4 lbs.

Stock No.	Type	Automobile	Year	EACH
91 CX 214	C-1000-58	Chevrolet	1958	4.09
91 CX 215	C-1000-59	Chevrolet	1959	
91 CX 216	F-1000-58	Ford	1958	
91 CX 217	F-1000-59	Ford	1959	

### TOP-COWL AND FENDER TYPES

Model TCF-4. High-quality smartly styled antenna for either top-cowl or fender mounting. Ball mounting permitting adjusting up to 35°. The four telescoping sections extend to 57". Attractive chrome finish for lasting beauty. Sleek and modern—easy to install. With 54" lead cable. Shpg. wt., 1 1/4 lbs. 92 CX 576. List, \$6.95. NET..... 3.67

Model TCF-3C. A top-notch antenna that offers deluxe appearance and fine performance. Has popular "Eight Ball" design for simplified installation on top cowl. Will fit any car. It adjusts to any desired angle. Has 3 sections—extends to 56". Constructed of triple chrome-plated brass tubing; has 54" lead-in. With instructions. Shpg. wt., 1 lb. 97 CX 213. List, \$5.90. NET..... 2.95

### "LOK-MATIC" UNIVERSAL TYPE

Model L-1000. Exclusive mounting principle—the interlocking parts drop into place automatically. Provides tighter installation, positive fit and built-in waterseal. Easily installed by one man in minutes, completely from outside! Fits any hole 7/8 to 1 1/4". Its 3 sections extend to 56". Has 54" cable. Adjusts up to 43° angle. Shpg. wt., 1 1/4 lbs. 92 CX 579. List, \$6.75. NET..... 3.97

### SIDE-COWL TYPE

Model SC-6. Chrome-plated brass, side-cowl antenna. 3 sections—extends to 156". Low-loss 2-stanchion mount with bakelite and chrome insulators. New positive shielding eliminates use of shield can. Detachable 36" polyethylene insulated vinylite covered, high "Q" lead-in. Simple to install. Will fit even on irregular car bodies. Shpg. wt., 1 1/4 lbs. 97 CX 215. List, \$5.45. NET..... 3.20

Model SC-8. Popular side-cowl antenna. 4 sections—extends to 100". 3 sections extend to 36" vinylite covered high "Q" lead-in. Fits irregular car bodies. Shpg. wt., 1 1/4 lbs. 97 CX 216. List, \$7.65. NET..... 4.50

### DISAPPEARING TYPE

Model D-2000. Easily-Installed "Lok-matic" type that virtually disappears when collapsed to minimum of 6 1/4". 3 sections extend to 52". Installed from outside the car on cowl or fender. Completely waterproof, polystyrene insulation. With 54" lead. Shpg. wt., 2 lbs. 92 CX 580. List, \$7.95. NET..... 4.67

### "DURA-RAMIC" AUTO ANTENNAS

Model TGF-1. Colorful auto antennas—constructed of opaque, corrosion-proof fiberglass. Extremely flexible. Made from millions of pregmated strands woven together and resin-impregnated under pressure. The antenna elements are completely imbedded in the protective fiberglass. Excellent sensitivity in low-signal areas. Equal to metallic-type antennas. Features "Eight-Ball" top-cowl mounting. Adjusts to any desired angle. Fits any car. Has 54" vinylite covered, shielded lead-in. Length, 36". Available in 7 attractive opaque colors. Shpg. wt., 1 lb.

92 CX 002. Red.	92 CX 006. White.
92 CX 003. Blue.	92 CX 007. Yellow.
92 CX 004. Green.	92 CX 009. Chrome.
92 CX 005. Brown.	

List, \$5.95. NET EACH..... 3.50

### REPLACEMENT ANTENNA MAST

Model TCFR-1. 3-section replacement mast for weather-worn or broken antennas. Easily fits over stub of old antenna. Set screws provide secure mounting. Extends to 57". Shpg. wt., 1 1/2 lb. 92 CX 595. List, \$2.43. NET..... 1.43

### ANTENNA LEAD EXTENSIONS

Additional lead cable lengths for fender and rear mount installations.

Stock No.	Mfr's Type	Length	Shpg. Wt.	NET E.A.
49 C 557	C-9	18"	6 oz.	.53
49 C 558	C-12	24"	7 oz.	.71
49 C 556	C-42	15-ft	1/2 lb.	1.91



### MALLORY REPLACEMENT VIBRATORS

Carefully designed, precision built vibrators offering long, trouble-free life. Provide extremely low cost per-hour of use. Springs are fabricated of high-grade clock-spring steel; held in perfect alignment by a rugged frame. Flexible 105-strand lead wire won't break—connections stay intact. Fully backed by years of outstanding performance. If Mallory type number is not known, write to Allied, stating make, model, tube lineup or part number of the original vibrator—we will recommend correct replacement. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Volts	Size	List	NET EACH
56 P 000	4-3	6	1 1/2 x 2 1/2"	\$2.35	1.32
56 P 154	12-3	12	1 1/2 x 2 1/2"	2.45	1.38
56 P 155	2-4	12	1 1/2 x 2 1/2"	2.45	1.38
56 P 0524	294	6	1 1/2 x 3 1/2"	4.90	2.88
56 P 120	509P	6	1 1/2 x 2 1/2"	4.15	2.44
56 P 156	G1803C/G567C	12	1 1/2 x 3 1/2"	9.95	5.85
56 P 077	716	6	1 1/2 x 3 1/2"	7.70	4.53
56 P 079	1801S/725C	6	1 1/2 x 3 1/2"	8.55	5.03
56 P 080	G1801S/G725C	12	1 1/2 x 3 1/2"	9.95	5.85
56 P 110	1603S/826C	6	1 1/2 x 3 1/2"	6.35	3.73
56 P 086	F826S/F826C	32	1 1/2 x 3 1/2"	7.70	4.53
56 P 111	G1603S/G826C	12	1 1/2 x 3 1/2"	7.70	4.53
56 P 092	854	6	1 1/2 x 3 1/2"	4.90	2.88
56 P 113	1601/859	6	1 1/2 x 2 1/2"	4.70	2.76
56 P 132	G1601/G859	12	1 1/2 x 2 1/2"	4.70	2.76
56 P 118	W1601/W859	4	1 1/2 x 2 1/2"	4.90	2.88
56 P 094	870	6	1 1/2 x 2 1/2"	4.90	2.88
56 P 133	G1602/G883	12	3 1/2 x 1 1/2"	4.70	2.76
56 P 121	903M	6	1 1/2 x 2 1/2"	3.60	2.12
56 P 159	1701	6/12	1 1/2 x 2 1/2"	9.60	5.64
56 P 160	1751	6	1 1/2 x 2 1/2"	9.80	5.76
56 P 127	T4002	2	1 1/2 x 1 1/2 x 2 1/2"	10.70	6.29
56 P 128	T4003	2	1 1/2 x 2 1/2"	9.80	5.76
56 P 135	1501/4501	6	1 1/2 x 2 1/2"	6.35	3.73
56 P 140	M1501/M4501	24	1 1/2 x 2 1/2"	6.90	4.06
56 P 144	G1807/G4548	12	1 1/2 x 3 1/2"	8.55	5.03
56 P 145	G1801/G4549	12	1 1/2 x 3 1/2"	8.55	5.03
56 P 131	G1501/G4501	12	1 1/2 x 2 1/2"	6.90	4.06
56 P 138	1807/4548	6	1 1/2 x 3 1/2"	7.70	4.53
56 P 139	1801/4549	6	1 1/2 x 3 1/2"	7.70	4.53

### CORNELL-DUBILIER INVERTER VIBRATORS



Heavy-duty vibrators for Cornell-Dubilier "Powercon" inverters. Also replace vibrators in many mobile amplifiers. Vibrators with VB and VC in Type No. are mounted in sponge rubber for minimum noise and maximum stability. Vibrators with VD in Type No. are less sponge rubber; have liner for greater heat dissipation. \*Tandem types have higher power handling capacity; have two 6-pin plugs on case. Av. shpg. wt., 1 lb.

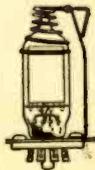
Stock No.	Mfr's Type	Volts	Used in "Powercon" Models	NET EACH
82 P 753	6VB6H	6	6DC6, 6/10DH6, 6RS, 6S8, 6SW8	7.94
82 P 789	6VD6H	6	6SM15, 6SW15	13.82
82 P 777	2563	6	6/12D5, 6L6, 12L8	6.09
82 P 782	12VB6H	12	12DC6, 12R8, 12S10, 12SW10	7.94
82 P 783	*12VD6H	12	12DC12, 12H15, 12RU15, 12SH20, 12SW15	13.82
82 P 779	2530	12	12SP2, 12LM4	2.44
82 P 780	2532	12	12M6	4.53
82 P 788	*110VC6H	110	110H35, 110RT35, 110SH40, 110SW35, 220SH40	13.82
82 P 784	2533	110	110LM5	2.44

Type C3. Ruggedly constructed vibrator that is direct replacement for Mallory 12-3 at left. 12 volts. Shpg. wt., 1 lb. 56 P 146. NET EACH..... 1.38

Type C1. 6-volt vibrator that directly replaces Mallory vibrator type 4-4 in column at left. Shpg. wt., 1 lb. 56 P 153. NET EACH..... 1.32

### "MINI-SPRING" TUBE HOLD-DOWNS

Hold tubes securely in place. Prevent breakage and assure greater stability. Particularly valuable where tubes are mounted upside down or in a horizontal position; also excellent for portable radios, portable test and measurement equipment, mobile transmitters and receivers, and other equipment subject to vibration and shock. For use with 7 or 9 pin miniature tubes. Mount with nut and bolt, or may be installed with rivet. Av. shpg. wt., 3 oz. 3 per package.



Stock No.	Type	Height	For Tubes	Per Pkg.
41 H 121	562	2 1/2"	6A05, 6X4, 35B5, 35W4, 50B5, etc.	26c
41 H 122	561	1 1/2"	1R5, 6AG5, 6AT6, 6BE6, 6CA, etc.	26c
41 H 123	560	1 1/2"	6AJ5, 6AK5, 6AL5, 6AS6, 6N4, etc.	26c
41 H 124	563	1 1/2"	12AT7, 12AU7, etc.	26c

# Outstanding Quality and Unbeatable Value with KNIGHT P.A. EQUIPMENT

## ONE FULL YEAR GUARANTEE

All Knight amplifiers are guaranteed for one full year against defects in material and workmanship. Skillfully engineered and conservatively rated, they can be run 24 hours a day.



for the best in sound . . .

Knight P. A. equipment offers superior sound coverage. Highest quality components, plus first-rate design, results in rugged, truly dependable amplifiers. In any P. A. application, the Knight name is your assurance of supremacy in performance and value.

Check These Superior Features



The use of more copper and iron in the specially designed Output Transformers assures you of better sound quality.

## It's Easy to Select a Sound System

In all likelihood, you'll find exactly the P.A. system you require on one of the following pages.

If not, here are the easy steps to follow in selecting a sound system to meet your needs:



**YOUR SPEAKERS.** Read "How to Select a Public Address Speaker" at the beginning of the P.A. speaker section. Then decide on how many speakers you'll need to cover a particular area.



**YOUR AMPLIFIER.** It's easy to determine the power rating of your amplifier. For example, if you plan on using 5 trumpets with 10 watts of power per trumpet, multiply 5 times 10. Power required is 50 watts—thus, our Knight 60-watt amplifier would give excellent sound coverage.



**YOUR MICROPHONES.** Any high-impedance dynamic or crystal microphone will give excellent performance with any Knight P.A. amplifier (except the mobile unit). Choice of mike is determined primarily by its intended use—see first page of mike listings.

**USE OUR FREE CONSULTING SERVICE.** Our audio experts will be glad to help you plan a complete P.A. system, or make additions to your present system. For our recommendations, tell us whether background noise is low, moderate or heavy; give approximate audience size; and include a rough sketch of the area to be covered along with dimensions.

### BUY ON OUR EASY TERMS

The finest sound equipment in the P.A. field is readily available to you on our Easy Pay Plan—the most liberal plan in the entire field of electronics. Full details in last section of this Catalog.

### 15-DAY MONEY-BACK TRIAL OFFER

If, after 15 days, the Knight P.A. system you buy, (for cash or on Easy Pay), is not everything we claim it to be—send it back. We'll refund every penny of the purchase price, less only transportation charges.



Trumpet Protector Switch protects trumpets from low-frequency burnout by blocking frequencies which could harm voice coil.



Phono Fader Control increases or decreases volume of either phono input. Center position cuts out both phono inputs.



Specially designed Impedance Selector adds greatly to the ease and speed with which you can change your speaker arrangement. Use either speaker jacks or screw terminals for fast setup.

**KN 3032****2 MIKE INPUTS**

Inputs for two microphones—with individual volume controls for added convenience and versatility.

**HIGH-GAIN TUBES**

Employs the latest, ruggedized high-gain tubes—for reliable service.

## Popular KNIGHT P.A. Systems

**SPECIFICATIONS**

**Power Output:** Full 32 watts.

**Response:** ±2 db, 30-20,000 cps.

**Hum:** 78 db below rated output.

**Inputs (5):** 2—Microphone, 2—Phono, 1—Magnetic Phono.

**Controls:** Microphone (2), Phono Fader, Off-On/Tone, Microphone-Magnetic Phono switch; also has hum balance adjustment.

**Impedance:** Output taps of 4, 8, 16, 250 and 500 ohms, as well as 70.7-volt output.

**Tubes:** 2—ECC83/12AX7, 6AV6, 2—6L6GB; 5U4GB rectifier.

**Styling:** Charcoal-black case with white and aluminum-luster panel. Black knobs with brushed aluminum inserts.

### Knight Model KN-3032 32-Watt P. A. Amplifier

NET  
**\$59<sup>95</sup>**

Only \$5.00 Down

- 32 Watts—Covers up to 90% of All P.A. Needs
- Two Mike Inputs; Five Tubes Plus Rectifier
- One Magnetic and Two Crystal Phono Inputs
- Tone, Phono Fader, and Two Microphone Controls

An outstanding P.A. value, the Knight 32-Watt Amplifier is a triumph of skillful engineering. Its highly attractive, ultra-compact styling features a tilted control panel for operator convenience; handsome cabinet with deep-well hand grips for easier carrying. Adaptable to every P.A. use, the unit is perfect for music, paging, general coverage under high-noise conditions, and a multitude of other P.A. uses.

Features: phono fader control for selection of either of 2 high-level program sources (tape recorder, changer or tuner) and phono, with volume control of each from a single knob; tape output for simultaneous recording and P.A.; impedance selector for greatly simplifying speaker hook-up; trumpet protector feature—protects trumpets from low-frequency burnout; speaker output taps to permit the use of up to 32 speakers. Size, 6½x15½x11". With all input plugs. Less record player, below. U.L. Approved. Made in U.S. For 110-120 volts, 60 cycle AC. Shpg. wt., 26 lbs.

88 SU 810. NET ..... 59.95  
 MODEL KN-3132 32-WATT AMPLIFIER WITH 4-SPEED RECORD PLAYER INSTALLED. As above, but with record-playing attachment. Shpg. wt., 28 lbs. 88 SU 926. Only \$5.00 Down. NET ..... 79.50



**COVERS UP TO  
2000 PERSONS**

### Knight 32-Watt Deluxe Sound System

Less Record Player

**\$136<sup>89</sup>**

You Save \$19.00

Dynamic Microphone; Microphone Cable; Knight 3-section Microphone Stand; 50-Ft. Speaker Cable and Plugs. System price offers substantial savings of \$19.00.

The Knight 32-watt amplifier has provisions for future plug-in expansion of the system; controls and input jacks provided permit the addition of a tuner, tape recorder or extra microphone at any time. The deluxe wood wall baffles are finished in walnut to harmonize with any decor; heavy-duty 12" speakers. Shure's microphone has a cardioid pick-up pattern—excellent for both voice and music. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 70 lbs.

25 PA 100. Only \$5.00 Down. NET ..... 136.89

SYSTEM WITH 4-SPEED PHONO. As above, but has record player installed on amplifier. Wt., 72 lbs. 25 PA 200. Only \$19.00. NET ..... 156.44



# featuring the KN-3032 32-Watt Amplifier

## Knight Deluxe 32-Watt All-Portable Sound System

Less Record Player  
**\$164<sup>87</sup>**  
 You Save \$20.00

- Powerful Amplifier Delivers Top Performance
- "Balanced Load"—For Fast, Easy Portability
- Heavy-Duty 12" Speakers Provide Clean Response
- Excellent Mike with Dynamic Cardioid Pattern

Combining power with versatility, this deluxe sound distribution system covers 90% of all portable P.A. requirements—and saves you \$20.00. Two perfectly balanced carrying cases contain the entire system, making it easy to transport and set up in a jiffy. System includes: Knight KN-3032 32-Watt Amplifier; E-V 664 Dynamic Microphone; Microphone Cable; Atlas CS-33 Mike Floor Stand; Two Heavy-Duty 12" Speakers, each rated at 25 watts, installed in a Carrying Case that comes apart to form two separate baffles for the speakers within; and two 30-Ft. Speaker Cables with Plugs.

Use this system for musical background, sound-effects, or announcements. Set it up in minutes—it readily adapts itself to any job, big or small. Ruggedly constructed for long, dependable service. Wood cases have durable plastic brown-tweed finish—handsomely contrasted green grilles. Speaker case is 19½x16x17"; amplifier case is 11½x17x12". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 84 lbs.  
 25 PA 101. Only \$5.00 Down. NET 164.87

SYSTEM WITH 4-SPEED PHONO. As above, but has record player mounted on amplifier. You save \$20.00. Shpg. wt., 86 lbs.  
 25 PA 202. Only \$5.00 Down. NET 184.42

EXTREMELY VERSATILE  
 PORTABLE P.A. SYSTEMS FOR:



TRAVELING DANCE BANDS



THEATER GROUPS



SCHOOL GATHERINGS

## Knight Standard 32-Watt Portable System

Less Record Player  
**\$126<sup>93</sup>**  
 You Save \$14.00

A complete, one-case 32-watt portable P.A. system, packed with exclusive Knight features—at savings of \$14.00. Sets up quickly; packs away easily. System includes: Knight KN-3032 32-Watt

Amplifier; E-V 951 Crystal Cardioid Microphone; Atlas CS-33 Mike Floor Stand; Mike Cable; two powerful 12" P.A. Speakers with 25-Ft. Cables and Plugs.

Carrying case separates into two individual baffles when opened. Speaker-amplifier case has attractive blue-green and ivory leatherette covering, with matching plastic grille. Size (HWD): 24½x18x11". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 55 lbs.  
 25 PA 102. Only \$5.00 Down. NET 126.93

SYSTEM WITH 4-SPEED PHONO. Same as above, but with 4-speed record player mounted on amplifier. Ceramic cartridge, installed in player, is unaffected by heat and humidity. System is ideal for general indoor or outdoor P.A. use. Allied's famous system price brings you savings of \$14.00. Shpg. wt., 57 lbs.  
 25 PA 203. Only \$5.00 Down. NET 147.38



# KN KNIGHT Super-Power P.A. Systems

3060

Featuring the KN-3060 Amplifier

... for BIG P.A. Sound



- Tremendous Power—Minimum Distortion
- Fills the Need for Any Sound Job
- Honky Screwdriver Speaker Connections
- Perfect for Overcoming High Noise Levels

AVAILABLE WITH RECORD PLAYER INSTALLED



For added versatility, order the KN-3060 complete with 4-speed record player installed—see listing, below.

## Knight KN-3060 60-Watt Public Address Amplifier

### SPECIFICATIONS

**Power Output:** Full 60 watts.  
**Response:** ±2 db, 20-20,000 cps.  
**Hum:** 71 db below rated output.  
**Inputs (5):** 2—Mic, 2—Phono, 1—Magnetic Phono.  
**Controls:** Mic (2), Phono Fader, Bass, Treble, Mic/Mag switch, and Off-On.  
**Output Impedances:** 4, 8, 16, 250 and 500 ohms, plus 70.7-volt.  
**Tubes:** 2—ECC83/12AX7, 6C4, 2—6CA7/EL34, 5Y3GT, 5U4GB rectifiers.

NET

**\$88<sup>95</sup>**

\$5.00 Down

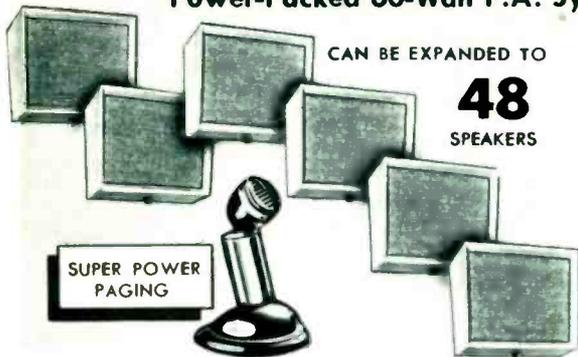
Designed by experts to give you the most for your P.A. dollar, this power-packed amplifier is perfect for stadiums, industrial plants, raceways, church tower chime systems, schools—wherever maximum coverage is necessary. There's hardly a big job it cannot do—and with the aid of the 60-watt power booster listed elsewhere in this section, its P.A. uses are practically limitless. Some of its superior features include: trumpet protector switch to protect your trumpets from burnouts; phono fader control with center-off position to provide smooth transition from one phono input to the other; hum balance adjust; etc.

All-metal black case; white-and-aluminum panel. 6 $\frac{3}{16}$ x17 $\frac{1}{4}$ x11". With input plugs. Less record player, below. U.L. Approved. For 110-120 volts, 60 cycle AC. Made in U.S. Shpg. wt., 37 lbs.

88 SU 812. Only \$5.00 Down. NET 88.95

MODEL KN-3160. Above, with record player installed. Shpg. wt., 39 lbs. 88 SU 928. Only \$5.00 Down. NET 108.50

## Power-Packed 60-Watt P.A. Systems—Featuring the KN-3060



CAN BE EXPANDED TO

**48**

SPEAKERS

### 60-Watt Heavy-Duty P.A. Paging System

NET

**\$199<sup>95</sup>**

Save \$17.16

Here's the perfect choice when you need a "big voice" for indoor paging. System includes: Knight KN-3060 60-Watt Amplifier; Shure 520SL Microphone on Stand; 6—Utah 70.7-Volt Speaker-Baffle Combinations, each with separate volume control. Less speaker cable below, right. Specify mahogany or blonde baffle finish. For 110-120 v., 60 cycle AC. Shpg. wt., 84 lbs.

25 PA 106. Only \$5.00 Down. NET 199.95

UTAH 70.7-V. SPEAKER-BAFFLE. Additional units for use with above. 9 $\frac{1}{2}$ x12x6". Specify mahogany or blonde when ordering. Shpg. wt., 7 lbs.

90 DX 073C. NET EACH 16.95



### 60-Watt Church Tower P.A. System

NET

**\$272<sup>50</sup>**

Save \$50.92

Designed for electronic chime or carillon installations. Save \$50.92 over total cost of individual components. This matched system includes: Knight KN-3060 60-Watt Amplifier; 4—E-V 848CDP Speakers; Collaro TSC-7404-Speed Changer on Base; E-V Ceramic Cartridge with Diamond and Sapphire Styli Installed. Less cable, below. Changer base in choice of mahogany, blonde or walnut—specify when ordering. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 123 lbs.

25 PA 205. Only \$10.00 Down. NET 272.50

OUTDOOR SPEAKER CABLE. For above. 100 ft., 7 lbs. 47 W 549. PER FT. .7c 100'-Up, PER 100' 6.23

# KNIGHT High-Power P.A. Systems



Featuring the KN-3016 Amplifier

... for Dependable P.A. Service

- Superior Design—Dependable Performance
- Three Controls for Simplified Operation
- Plenty of Power for Smaller Auditoriums
- U.L. Approved—Guaranteed for One Year



## AVAILABLE WITH RECORD PLAYER INSTALLED

For added P.A. versatility, order the Knight KN-3116 complete with quality 4-speed record player installed—see listing, below.



## Knight KN-3016 16-Watt Public Address Amplifier

### SPECIFICATIONS

- Power Output:** Full 16 watts.
- Response:**  $\pm 2$  db, 30-15,000 cps.
- Hum:** 72 db below rated output.
- Inputs (3):** Microphone, 2—Phono.
- Controls:** Microphone, Phono Fader, Off-On/Tone; also has hum balance adjustment.
- Output Impedances:** 4, 8, 16, 250 and 500 ohms, plus 70.7-volt.
- Tubes:** 6AV6, ECC83/12AX7, 2—6V6GT; 5T3GT rectifier.

NET  
**\$49<sup>95</sup>**

\$2.00 Down

Designed with the user in mind, this dependable P.A. performer is the perfect choice for smaller auditoriums, moderately sized halls, church and school recreation rooms, etc. Has many custom features. A tape output jack permits simultaneous recording and P.A. use. Convenient phono fader control allows you to increase or decrease the volume of either phono input—returning knob to the center position cuts out both phono inputs. Terminal strip for quick, easy setting up. Has provisions for accommodating up to 16 speakers.

Handsomely styled metal case is finished in black with white and aluminum panel. Size, 6 $\frac{1}{2}$ x15 $\frac{1}{2}$ x11". Supplied with all input plugs. Less record player, listed below. U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Made in U.S. Shpg. wt., 25 lbs.

88 SU 809. Only \$2.00 Down. NET

49.95

MODEL KN-3116. Above, with record player installed. Shpg. wt., 28 lbs.

88 SU 925. Only \$5.00 Down. NET

69.50

## Moderate-Power 16-Watt P.A. Systems—Featuring the KN-3016



COVERS UP TO 1000 PERSONS



Blankets an Area up to 10,000 Square Feet



COVERS UP TO 1000 PERSONS



### 16-Watt Permanent P.A. System

NET  
**\$86<sup>91</sup>**  
Save \$10.00

You'll find exceptional value in this highly dependable, low cost sound system—priced to save you \$10.00. System includes: Knight KN-3016 16-Watt P.A. Amplifier; two Wellcor Wall Baffles; two 12" Quam Heavy-Duty P.A. Speakers; Knight 3-Section Microphone Stand;

Astatic M-332 Crystal Microphone; and 50 ft. of speaker cable. Baffles have neutral finish that harmonize with any surrounding. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 54 lbs.

25 PA 103. Only \$5.00 Down. NET

86.91

### 16-Watt Deluxe Portable P.A. System

NET  
**\$103<sup>25</sup>**  
Save \$10.00

Here's a portable sound system that offers you plenty of power, maximum convenience, and top dependability—at savings of \$10.00. System includes: Knight KN-3016 16-Watt P.A. Amplifier; two Quam 12" Heavy-Duty P.A. Speakers; Atlas CS-33 Mike Floor Stand; Astatic M-332 Crystal Mike; Knight Combination Speaker-Amplifier Case; and 50-ft. speaker cable. Case comes apart to form two baffles. For 110-120 v., 60 cycle AC. Shpg. wt., 68 lbs.

51 PA 505. Only \$5.00 Down. NET

103.25

ABOVE WITH RECORD PLAYER INSTALLED. For greater versatility. Shpg. wt., 57 lbs.

25 PA 204. Only \$5.00 Down. NET

106.46

ABOVE WITH RECORD PLAYER INSTALLED. Adds greater versatility. Shpg. wt., 71 lbs.

51 PA 606. Only \$5.00 Down. NET

122.80

Public Address Equipment Is Available on Allied's Easy Payment Plan

325

# Professional KNIGHT High-Fidelity P.A. Amplifier



## NOISE-FREE INPUTS



Cannon connectors used for all mike inputs insure positive contact for peak performance.

## VISUAL OUTPUT CHECK



Accurate 6-range level meter permits visual check of exact power output at all times.

## SPECIFICATIONS

**Power Output:** Full 35 watts.

**Response:** ±2 db, 20-20,000 cps.

**Distortion:** 2% at rated output.

**Hum:** -71 db.

**Inputs:** 3—mike; 2—high level phono; 1—magnetic phono.

**Controls:** 3—Mike Volume; 2—Phono Volume; Bass; Treble; Master Volume; Mike-Magnetic switch; On-Off; 6-position meter range selector switch; High-Low Impedance input switch.

**Output Impedance:** 4, 8, 16, 250 and 500 ohms; 70.7 volt.

**Styling:** Black metal case with brushed-chrome front panel.

## KN-3035 Professional Hi-Fi P.A. Amplifier

NET  
**\$119.95**  
\$5.00 Down

- Genuine High-Fidelity Sound in a Highly Versatile P.A. Amplifier
- Separate Bass and Treble Controls—Master Volume Control
- Convenient Remote Control Mike-Mixer Available Separately
- Mixing Inputs for 3 Mikes—2 Hi-Level, 1 Lo-Level Phono Inputs

A P.A. amplifier of outstanding versatility, suited to even the most demanding of applications. Engineered for exceptional convenience and highest quality, this deluxe unit delivers a full 35 watts of audio output with genuinely impressive true high-fidelity reproduction. The extensive array of "plus" features includes complete mixing of 3 microphones, with remote mixing facilities (below, right); plug-in transformers for converting mike inputs to low impedance; large, easy-to-read VU meter with 6-position range selector switch on rear panel; etc.

A special trumpet protector switch switches in and out from rear panel—attenuates response sharply below 150 cps. This feature permits operating at high power levels without danger of driver burnout—even over prolonged periods of usage.

Also incorporates convenient output impedance selector socket; output tube balancing control; tape recorder output jack for recording material going through P.A. system; etc. Less plug-in low impedance mike transformers and remote control unit (see below). Size, 6 $\frac{3}{4}$ "x17 $\frac{1}{4}$ "x11". U.L. Approved. Made in U.S. For 110-120 v., 50-60 cycle AC. Shpg. wt., 28 $\frac{1}{2}$  lbs.

93 SU 055. \$5.00 Down. NET... 119.95

**PLUG-IN LOW IMPEDANCE TRANSFORMER.** Matches 50-600-ohm mikes. Shpg. wt., 1 lb.

93 S 068. NET... 13.50

**REMOTE CONTROL UNIT.** For use with KN-3035 amplifier only. Fades and mixes 3 mike inputs up to 1000 ft. away. With 50 ft. cable. 5x2 $\frac{1}{2}$ "x1". Wt., 1 $\frac{1}{2}$  lbs.

93 S 070. NET... 12.75



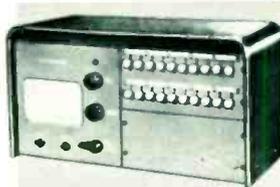
## Knight Versatile 60-Watt Power Amplifier

NET **\$69.50**  
Only \$5.00 Down

- Perfect for Sports Arenas, Stadiums, etc.
- Ideal for Boosting Church P.A. Systems for Chime or Carillon Installations

Model KN-3061. Step up your P.A. system by a full 60 watts of audio power with this versatile booster-amplifier! For use with any P.A. amplifier that delivers 0.5 volt or more at its speaker terminals. **Output:** Full 60 watts. **Hum:** -71 db. **Response:** ±2 db, 20 to 20,000 cps. **Input for 60-Watt Output:** 0.4 volt. **Output Impedances:** 4, 8, 16, 250 and 500 ohms; plus 70.7-v. output. **Controls:** Off-On, Volume; also has hum balance adjustment. Trumpet protector switch; tape output jack. **Tubes:** ECC83/12AX7, 6C4, 2-6CA7/EL34; 5Y3GT, 5U4GB rectifiers. 2 $\frac{1}{2}$ "x15x8 $\frac{1}{4}$ ". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 24 lbs.

93 SU 694. Only \$5.00 Down. NET... 69.50



## Knight Centralized P.A. Control Unit

NET **\$77.50**  
Only \$5.00 Down

- Highly Versatile—Handles 40 Stations
- For Use with Any P.A. Amplifier
- Provides Any Combination of Stations

Handles 20 stations; adapter panel (below) permits the addition of 20 more keys. Controls include a volume control, talk-listen-program switch, and an "all-call" switch. Self-contained speaker may be used as a microphone; a jack is provided for an external microphone. Applications include school, hospital and factory intercom systems. Requires no power—connects to amplifier input and output. Size, 9x17 $\frac{1}{4}$ "x7". Shpg. wt., 1 $\frac{1}{2}$  lbs.

93 SX 056. Only \$5.00 Down. NET... 77.50

**EXTRA 20-KEY PANEL.** For control unit above. 1 $\frac{1}{4}$  lbs.

93 SX 057. Only \$2.00 Down. NET... 29.50

## Knight Professional Rack Panel Kits for P.A. Units



Give your P.A. equipment professional appearance and centralization by mounting Knight P.A. components in standard relay racks; everything you need is in these new panel kits! Handsomely finished in brushed chrome, easy to keep clean and new-looking. When your Knight units are mounted in this way, they will make a compact integrated package, provide full ventilation. Matching blank panels also available. Each kit includes a brushed chrome dress panel, rugged steel U-pun assembly, and hardware.

Stock No.	Description	Height	Shpg. Wt., Lbs.	NET EACH
93 SX 058	For KN-3035 Amplifier	7"	6 $\frac{3}{4}$ "	9.95
93 SX 059	For KN-3032 Amplifier	7"	7 $\frac{1}{2}$ "	9.60
93 SX 060	For KN-3060 Amplifier	7"	7 $\frac{1}{2}$ "	9.75
93 SX 061	For KN-3061 Booster	8 $\frac{1}{4}$ "	7 $\frac{1}{2}$ "	9.40
93 SX 063	Phono Drawer on Slides	10 $\frac{1}{2}$ "	14"	12.90
93 SX 064	Blank Panel	3 $\frac{1}{2}$ "	3"	3.60
93 SX 065	Blank Panel	5 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	3.90
93 SX 066	Blank Panel	7"	4 $\frac{1}{4}$ "	4.35
93 SX 067	Blank Panel	8 $\frac{1}{4}$ "	4 $\frac{1}{4}$ "	4.60

# FLEX-PAK Public Address Equipment by *Bogen*

NEW! Bogen "M" Series P.A. Components

Embodying the latest refinements in professional P.A. components, the new "Flex-Pak" "M" series offers top quality—higher flexibility.



Easy to Install . . .  
Easy to Service . . . Easy to Carry!

## Type MXM Mixer-Preamplifier Control Unit

NET  
**\$142.50**

Only \$5.00 Down

- Expertly Engineered—Broadcast Quality Throughout
- Meets the Most Critical P.A. and Recording Requirements
- Highly Accurate Level Meter Monitors All Channels in Use
- Blends Five Separate Inputs with Precision Control

A superbly engineered instrument for critical P.A. applications, or high-quality, professional recording on location. Five independently controlled microphone inputs are provided, one convertible to a phono cartridge input. An accurate level meter permits continuous monitoring of the combined output of all channels in use. Built-in sockets accept plug-in low impedance transformers listed below, for use with extraling microphone leads. Output is high impedance, or may be easily converted to low impedance with T-165A 600-ohm transformer, for remote broadcast or recording work. Hi-Z output for connection to supplementary booster-amplifiers.

**Output:** 30 milliwatts at less than 2% distortion; 6 milliwatts at less than 0.5% distortion. **Peak Output:** 45 milliwatts. **Controls:** 5—Gain; 4—Speech Filter; Microphone-Tuner-Phono; Bass; Treble; Off-On-Master Gain. **Tubes:** 2—12AX7, 6CG7, 4—6X4, 6BF6, 6X4 rectifier. **Frequency Response:** ±1 db. 20-20,000 cps. **Hum:** 60 db below rated output. For 110-120 v., 50-60 cycle AC.  $5\frac{1}{4} \times 16\frac{1}{4} \times 13"$ . 21 lbs.

88 SU 854. List, \$237.50 NET. . . 142.50

**T-165A OUTPUT TRANSFORMER.** Converts output impedance to 600-ohm broadcast standard. Shpg. wt., 1 lb.

91 S 700. List, \$17.50 NET. . . . 10.50



No special tools are required to inspect, clean, or otherwise maintain Bogen "Flex-Pak" amplifiers. Just loosen four thumb-screws,

slide the case back and off, and you have complete and convenient access to the entire chassis.



"Flex-Pak" units are as portable as small lightweight luggage. Convenient, carrying handles are provided at the side of each unit for maximum ease of portability. They're light, too! Ideal for carry-about use at shows, fairs, special demonstrations, etc.



An exclusive Bogen "plus"—a convenient write-in space over each gain control. This handy feature aids in preventing errors in making balance adjustments and volume settings during a program—or when several people will be operating P.A. system. Markings are easily erased whenever necessary.



M and MX Series  
Deluxe Phono Tops



Model MX30;  
MX60



M330  
M60

## BOGEN "FLEX-PAK" ACCESSORIES

**M AND MX SERIES PHONO TOPS.** Precision-quality 4-speed phono attachments, supplied in kit form. Kit includes phono top, mounting brackets and hardware. Easily attached; no tools needed. All have Ronette turnover cartridge; variable speed control. For 110-120 v., 60 cycle AC. Wt., 6 lbs.

MODEL LPA-4. For M330 amplifier. 91 SX 715. List, \$69.00. NET. . . 41.40

MODEL LPB-4. For MX60, MX30, M60, MXM. 91 SX 717. List, \$69.00. NET. . . 41.40

**"CONTROL-GUARD" LOCKING PLATES.** For locking "Flex-Pak" control settings. 2 lbs. MODEL LK-1. For M330. 91 SX 718. List, \$7.75. NET. . . 4.65

MODEL LK-2. For MX60, MX30, M60, MXM. 91 SX 719. List, \$8.00. NET. . . 4.80

**MODEL T-155 PLUG-IN TRANSFORMER.** Connects low impedance mikes to "Flex-Pak" units. Impedance, 200 ohms. 1 lb. 99 S 184. List, \$17.50. NET. . . 10.50

## "DELUXE" 30 & 60-WATT AMPLIFIERS

Leaders in Bogen's "Flex-Pak" series. Feature constant voltage output taps and 4 independently controlled microphone channels (one convertible to phono). Black and gray styling with leather carrying handle.

**Response:** ±2 db. 35-20,000 cps. **Distortion:** Less than 1%. **Hum:** —60 db. **Controls:** 4—Gain; Mike-Phono Switch; 2—Speech Filters; Off-On/Treble; Bass; Master Gain. **Output Impedances:** 4, 8, 16, 83 ohms, balanced 25-volt line, 70-volt line.  $5\frac{1}{4} \times 16\frac{1}{4} \times 13"$ . For 110-120 v., 50-60 cycle AC.

**MX30 30-WATT AMPLIFIER.** Power output: 30 watts; 45 watts peak. **Tube Complement:** 1—7247, 4—12AX7, 2—6L6GC, 1—GZ34 rectifier. Shpg. wt., 31 lbs. 88 SU 851. List, \$225.00. NET. . . 135.00

**MX60 60-WATT AMPLIFIER.** Power output: 60 watts; 90 watts peak. **Tube Complement:** 1—7247, 4—12AX7, 2—7027A, 3—GZ34 rectifiers. Shpg. wt., 37 lbs. 88 SU 850. List, \$290.00. NET. . . 174.00

## "SUPERB" 30 & 60-WATT AMPLIFIERS

Ideal amplifiers for high-quality P.A. work. Have 3 independently controlled microphone channels (one convertible to phono). Phono input is equalized for all cartridges. Black and gray case with leather handle.

**Response:** ±2 db. 35-20,000 cps. **Distortion:** Less than 1%. **Hum:** —60 db. **Controls:** 3—Gain; Mike-Phono Switch; Speech Filter; Off-On/Treble; Bass. **Output Impedances:** 4, 8, 16, 163 ohms, balanced 25-volt line, 70-volt line, 30-watt,  $5\frac{1}{4} \times 13\frac{1}{2} \times 13"$ ; 60-watt,  $5\frac{1}{4} \times 16\frac{1}{4} \times 13"$ . For operation from 110-120 v., 50-60 cycle AC.

**M330 30-WATT AMPLIFIER.** Power output: 30 watts; 45 watts peak. **Tube Complement:** 1—12AX7, 3—12AX7, 2—6L6GC, 1—GZ34 rectifier. Shpg. wt., 29 lbs. 88 SU 853. List, \$187.50. NET. . . 112.50

**M60 60-WATT AMPLIFIER.** Power output: 60 watts; 90 watts peak. **Tube Complement:** 1—7247, 3—12AX7, 2—7027A, 3—GZ34 rectifiers. Shpg. wt., 37 lbs. 88 SU 852. List, \$231.25. NET. . . 138.75



# It's Easy to Select a Microphone Best Suited to your Requirements

The data on this page is designed to help you choose the microphone best suited to your specific requirements. Should you need any additional information, our free consulting service is available to you. Write to our Audio Division and tell us what use you have in mind—home or professional recording, P. A., etc. You'll get a prompt reply.

**CRYSTAL, CERAMIC, DYNAMIC?** Crystal mikes are popular because of their low cost and relatively wide frequency range. They are recommended for use only in temperate climates since they are permanently damaged by extremes of temperature or humidity. Ceramic mikes offer similar performance, at lower output, and are able to withstand wide climatic variations. Dynamic mikes feature wider, smoother, peak-free response; thus reducing the tendency toward feedback (howling) in P.A. systems. Dynamics are indispensable for high-quality professional use. They are the least susceptible to damage from shock and extremes of temperature or humidity. For hi-fi home recording or better P.A. installations, your best values are dynamic mikes in the \$40 to \$60 range.



**DIRECTIONAL CHARACTERISTICS.** All-directional mikes (also called omni and non-directional) pick up sounds equally well from all directions. They are excellent for use in conference or studio work—require careful acoustical control. All the new pencil-type microphones are all-directional. Bi-directional mikes pick up sound from the front and the back only. The most directive mike is the cardioid (uni-directional), which accepts sound from the front only, and is widely used by singers and speakers when pickup of background noise must be minimized. The cardioid is ideal for P.A. since it reduces feedback (howling) from the speaker system. Good crystal and ceramic cardioids cost about \$14 to \$30; good dynamic cardioids, about \$40 to \$60.



**ABOUT STANDS & CONNECTORS.** All of the microphone stands listed in this section have 3/4"-27 threaded fittings. This is a standard thread that will fit any threaded mike or adapter. The microphone can be attached to either a desk stand or a floor stand, as required.



All mikes are supplied less the connecting plug for attaching the cable to the amplifier. This is because the type of connector on the amplifier varies with manufacturer. The connectors mentioned in the descriptions of microphones, on these pages connect the cable to the microphone. For a complete selection of connectors for attaching mike cables to amplifier and recorder inputs, see listings under "Connectors" in index at back of this catalog.

**LONG MIKE LINES AND DB RATINGS.** Most P.A. amplifiers and tape recorders have high-impedance inputs. A high-impedance mike can be used with cables up to 45 ft. in length. For longer lines, use a low-impedance mike and a line-matching transformer. (Write to our Audio Division for a free copy of Allied's helpful bulletin, "Installing Long Microphone Lines"). Db ratings give you an idea of the relative sensitivity of a mike. Since the numbers are negative, -50 db provides a louder output than -55 db. Mikes having a range of -45 to -52 db are usually used with recorders costing under \$200. Professional-quality microphones generally have a lower output (-52 to -62 db), although they achieve better tonal quality because of their superior design.



## FAMOUS QUALITY TURNER MICROPHONES

NEW



Model 250



95D



80



82-3H



204

### MODEL 250 DYNAMIC DESK MIKE

**NET \$29.11**  
**\$2.00 Down**  
 Turner's all new, unique dynamic microphone. Incorporates both a handy "touch-to-talk" switch with "lift-to-talk" feature—mike is "on" when lifted; "off" when set back down on desk top. Its rugged, one-piece die-cast base and stand make it ideal for any application requiring a dependable desk type mike. Highly recommended for use with P.A. and paging systems as well as tape recorders, Amateur radio use, and many other applications.

Frequency response is smooth from 100 to 10,000 cps. Output level, -54 db. High impedance output matches inputs of most P.A. amplifiers and tape recorders. Finished in highly attractive, gleaming satin chrome. Size, 7 3/4"x3 1/2"x5 1/2". Shpg. wt., 3 lbs.  
 90 S 200, List, \$49.50, NET ... 29.11

**MODEL 254.** Similar to model 250 above, but crystal type and less "lift-to-talk" switch. Frequency response, 60-8500 cps; output level, -51 db. Attractive gray wrinkle finish. Shpg. wt., 3 lbs.  
 90 S 201, List, \$23.50, NET ... 13.82

### ALL-DIRECTIONAL MICROPHONES

**MODEL 95D DYNAMIC.** An attractively styled, all-directional high-impedance microphone. Slim silhouette styling makes it ideal for stage use—won't hide performer's face. Response, 100 to 10,000 cps. Output, -58 db. Size, 7 3/4" long, 1 1/8" diameter. With 20 ft. cable. Shpg. wt., 1 3/4 lbs.  
 99 S 526, List, \$37.50, NET ... 22.05

**MODEL 80 CRYSTAL.** Low cost, extra-compact high impedance mike. Ideal for budget P.A. systems, etc. where a small, all-directional mike is required. Frequency response, 80-7000 cps. Output level, -54 db. Size, 4 1/2" long, 3/8" diameter. Complete with 7-ft. shielded cable. Shpg. wt., 9 oz.  
 99 S 525, List, \$15.95, NET ... 9.38

**MODEL 82-3H CRYSTAL.** Consists of Model 80 compact high-impedance crystal mike (described above), mounted on a special "hands free" chest holder. Incorporates a fully adjustable, flexible gooseneck mike support. Ideal for use on switchboards and numerous other applications requiring freedom of both hands while mike is in use. With 20-foot shielded cable. Shpg. wt., 1 1/2 lbs.  
 99 S 529, List, \$22.75, NET ... 13.38

### COMPLETE MICROPHONE PACKAGES

Complete microphone packages featuring advanced-design, high-impedance mikes. Ideally suited for Amateur use, P.A., tape recording, and numerous other applications. Ruggedly constructed, these top quality units feature sturdy, die-cast casings finished in beautiful satin chrome.

Available with either dynamic or crystal elements, microphone packages include the following accessories: handy desk stand for P.A., paging systems, Amateurs, etc.; floor stand adapter for connecting microphone to any conventional stand; lavalier assembly for suspending mike from neck; provides convenient "hands free" use of mike. Both mike types listed below are supplied complete with 12 foot shielded cables. Shpg. wt., 2 lbs.

**MODEL 204D DYNAMIC.** Response, 60-13,000 cps. Output level, -53 db. Complete with all accessories listed above.  
 90 S 202, List, \$47.50, NET ... 27.93

**MODEL 204X CRYSTAL.** Response, 60-10,000 cps. Output level, -51 db. Complete with all accessories listed above.  
 90 S 203, List, \$30.00, NET ... 17.64

# TOP-VALUE DYNAMIC, CRYSTAL & CERAMIC MIKES



DN-HZ



JT-30



788

A-8



**Model 77**  
**Cardioid Mike**  
**\$48<sup>51</sup>**

Only \$2.00 Down

High-fidelity uni-directional dynamic cardioid microphone. Features extremely high front-to-back cancellation of 18 db for highest resistance to pickup from the rear—virtually eliminates possibility of feedback.

Essentially flat frequency response, 30 to 15,000 cps. Operates efficiently and dependably under all ordinary conditions in hot or cold climates—provides the same high-quality performance when used outdoors as well as indoors. "Pop" and "blast-proof" Mylar diaphragm is impervious to moisture, humidity, solvents and oils.

Has output level of -52 db. Incorporates Off-On switch with convenient "lock-on" feature. Multi-switch impedance selector permits choice of: "L", 30-50 ohms; "M", 150-250 ohms; and "H", high impedance. Equipped with standard 5/8"-27 thread. Handsomely styled in smooth, non-reflecting satin-chrome finish—has contrasting black grille liner cloth. Overall size, 8" high, 2 1/8" wide, 2 5/8" deep. Complete with 20-ft. 2-conductor shielded cable. Wt., 3 lbs. 93 S 269. List, \$82.50. NET.....48.51

## DN-HZ "COMMENTATOR" DYNAMIC

A top-performing, all-directional high-impedance microphone. Ruggedly constructed, the "Commentator" features a handy, tilting-head swivel mount. An ideal unit for all general purpose semi or non-directional applications. Frequency response, 50-7000 cps. Output level, -55 db. Handsomely finished in opalescent gray baked enamel with gleaming chrome grille and trim. 5/8"-27 threaded mounting, 10-ft. cable. Wt., 2 1/2 lbs. 99 S 304. List, \$39.70. NET.....23.34

## POPULAR "SPOKESMAN" MIKES

**MODEL JT-30.** A budget-priced, all-purpose microphone. Ideal for P.A., recording, communications, etc. High impedance. Supplied with removable hand grip and interlocking desk-type stand. Detaches easily from hand grip for mounting on standard floor stands. Response, 30-10,000 cps. Output level, -50 db. Gray Hammerfin with chrome grille and trim. 5-ft. cable. Shpg. wt., 2 1/2 lbs. 99 S 302. List, \$18.40. NET.....10.82

**MODEL JT-30C.** As above, but ceramic type. Output, -54 db. Shpg. wt., 2 lbs. 99 S 422. List, \$18.90. NET.....11.11

## "FUTURA" SERIES DYNAMICS

Top-quality mikes with all-directional pickup. Impedances can be internally selected without special tools. Employ tough "Mylar" "pop" and "blast" proof diaphragm; die-cast head assembly. Complete with 5/8"-27 swivel thread adapter; lavalier assembly complete with belt clip and 20-ft. shielded cable for "walk-around" use.

**MODEL 788 "METRO".** Response, 50-13,000 cps. Impedance and level: 150 ohms, -58 db; high impedance, -55 db. Off-On switch can be locked in "On" position. Size, 8 1/2" x 1 3/8". Shpg. wt., 12 oz. 99 S 413. List, \$79.50. NET.....46.74

**MODEL 888 "TEMPO".** Response, 50-15,000 cps. Impedance and level: 50 ohms, -57 db; 200 ohms, -58 db; high impedance, -56 db. Size, 9 1/4" x 1 1/4". 1 1/2 lbs. 99 S 414. List, \$110.00. NET... 64.68

**MODEL 988 "VOGUE".** Exceptionally uniform response, 40-20,000 cps. Impedance and level: 50 ohms, -57 db; 150 and 250 ohms, -58 db. 9 1/2" x 1 3/8", 1 1/2 lbs. 99 S 416. List, \$150.00. NET.....88.20

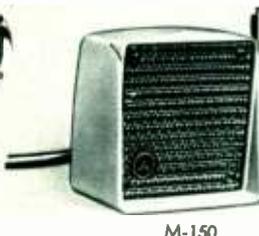
**A-8 DESK STAND.** For above. 5/8"-27, 1 1/2 lbs. 94 S 031. List, \$8.25. NET... 4.85



T-3



D-104



M-150

**NEW**

Amazingly Low in Cost—  
Exceptionally High in Quality  
And Performance



**Slim Crystal Mike**

M-332 on A7 Stand



Complete With Lavalier Cord

**MODEL T-3 "PIONEER" CRYSTAL.** Attractive all-directional high impedance microphone. Has metal seal crystal for protection against moisture and humidity. Frequency response, 30-10,000 cps. Level, -51 db. Handy swivel hinge for tilting head, 5/8"-27 thread. 15-ft. cable included. Shpg. wt., 2 lbs. 99 S 300. List, \$29.30. NET.....17.23

**MODEL G STAND.** For use with T-3, DN-11Z, D-104, and other mikes. 5/8"-27 thread. Has convenient grip-to-talk, slide-to-lock switch. With 6-ft. cable, 2 1/4 lbs. 94 S 011. List, \$24.95. NET.....14.67

**MODEL D-104 "PREMIER" CRYSTAL.** High impedance mike. Popular among Amateurs. Response, 30-7,500 cps. Output level, -45 db. Produces the maximum amount of speech in the voice range. Metal sealed to protect crystal from moisture, 5/8"-27 thread. With 5-ft. cable. Shpg. wt., 1 3/4 lbs. 99 S 309. List, \$31.00. NET.....18.23

**NEW! MODEL M-150 CRYSTAL.** Top-value in a high-output crystal mike featuring smart, ultra-modern design. Offers a semi-directional pickup pattern and smooth, wide range frequency response. Ideal for numerous applications: Amateur communications equipment, home recording of voice and music, and inexpensive paging, intercom, or public address systems.

Stands upright on desk or table top—fits comfortably into palm of hand for convenient carry-about use. Attractively styled case is made of high-impact ivory plastic with rigidized, gold metal grille. Unit is remarkably lightweight—only 3 1/2 ounces.

Frequency response, 30 to 10,000 cps with 5-megohm load resistance. Output level, -44 db. Overall size, 2 3/8" high, 2 3/8" wide, 1 1/2" deep. Supplied complete with 5-foot extra-flexible, single conductor shielded cable. Shpg. wt., 1/2 lb. 90 S 250. List, \$6.50. NET.....3.82

NET  
**\$10<sup>53</sup>**

**MODEL M-332.** Low-cost, wide-range crystal microphone. Ideal for all-around, general purpose use, such as tape recording, public address, and communications work. Can be used indoors or outdoors. Beautifully styled with satin chrome, pressure-cast housing and contrasting black satin grille. All-directional; high impedance. Uniform and smooth frequency response, 30 to 15,000 cps. Output level, -57 db. Includes lavalier cord assembly for convenient, "no-hands" use in "walk-about" applications. Also has stand adapter for mounting on 5/8"-27 threaded desk and floor stands. Complete with 8-ft. shielded cable. Size, 4 1/2" x 1 1/4" x 1 1/4". Shpg. wt., 1 lb. 94 S 091. List, \$17.90. NET.....10.53

**MODEL M-332-S.** Same high quality crystal microphone as above with same specifications, but with built-in Off-On switch. Complete with lavalier cord assembly, 5/8"-27 stand adapter and 8 feet of shielded cable. Shpg. wt., 1 lb. 94 S 094. List, \$19.90. NET.....11.70

**MODEL A-7 DESK STAND.** For use with models M-332 and M-332-S above. Wt., 4 oz. 90 S 253. List, \$2.45. NET.....1.44

## ALLIED SUPPLIES GENERAL MICROPHONES FOR EVERY PURPOSE

From budget-priced general purpose microphones to the finest of broadcast studio microphones—you'll find them all at Allied. Just look over the wide selection on these and the following pages for the ones you need.

**SHURE**



555



556S



737A



333



300

**POPULAR SHURE MICROPHONES**

**"UNIDYNE" CARDIOID DYNAMIC MICROPHONE**

MODEL 555. Rugged, cardioid dynamic microphone designed to withstand severe mechanical shock as well as heat and moisture. Cardioid feature permits placement of microphone at a distance from performer 75% greater than all-directional microphones. An excellent choice as a singer's or announcer's microphone. Response from 50 to 15,000 cps. Switch selects impedances of 35-50 ohms, 150-250 ohms, and high impedance. Output is -57 db at high impedance. Swivel mounting. Satin chrome finish. 3/8"-27 thread. Detachable, 18-ft., 2-conductor shielded cable. Size, 4x2 1/2x3 1/2". Shpg. wt., 1 1/4 lbs.

99 S 395. List, \$83.00. NET. **48.80**

MODEL 556S. Deluxe version of above. Constructed and tested within extremely close tolerances to give improved frequency response and directivity. Smooth response from 40 to 15,000 cps. Live rubber isolation unit in stand connector deadens vibrations from floor. With Cannon XL-3. Shpg. wt., 4 1/2 lbs.

99 S 396. List, \$135.00. NET. **79.38**

**"MONOPLEX" CARDIOID CRYSTAL MICROPHONE**

MODEL 737A. High output, cardioid, crystal microphone. Cardioid feature (above) makes this a superior moderate cost microphone in P.A. and tape recording applications. Head tilts to change pickup to all-directional. Crystal element is sealed against adverse effects of moisture. Output is -53 db, high impedance. Response: 60 to 10,000 cps. Satin chrome finish. 3/8"-27 thread. Detachable, 15-ft. shielded cable. Size, 4x3 1/2x1 1/2". Shpg. wt., 2 1/4 lbs.

99 S 380. List, \$46.00. NET. **27.05**

**UNI-DIRECTIONAL RIBBON MICROPHONES**

MODEL 333. An ultra-cardioid microphone made to rigid tolerances and designed for the ultimate in wide response and directional characteristics. Ribbon element. Response, ±2.5 db, 30-15,000 cps. Minimizes pickup of moving props, scuffing feet, and other background noises. Has Voice-Music switch; also 3-position switch to select 50, 150 or 250-ohm impedance. Output, -60 db. Has wind and blast filter, and live rubber isolation unit in stand connector. 3/8"-27 thread. Non-reflecting bronze finish. 3 3/8x1 1/2x1 3/4". Detachable, 20-ft. shielded cable with Cannon XL-3. Wt., 4 lbs.

99 S 456. List, \$250.00. NET. **147.00**

MODEL 330. "Unitron" mike, similar to above. Less Voice-Music switch; satin-chrome finish. Shpg. wt., 4 lbs.

94 S 090. List, \$120.00. NET. **70.56**

**"CONCERT-LINE" RIBBON MICROPHONES**

MODEL 300. Deluxe bi-directional microphone. Shock mount; Voice-Music switch. Response, ±2.5 db from 40 to 15,000 cps, 30-50 ohms, 150-250 ohms and high impedance. Output is -57 db at high impedance. Bronze finish. 3/8"-27 thread. Detachable, 18-ft. shielded cable with Cannon XL-3. 6x1 1/2x1 3/8". Wt., 3 3/4 lbs.

99 S 397. List, \$150.00. NET. **88.20**

MODEL 315. As above, but less rubber shock mount and Voice-Music switch. Frequency response, 50-12,000 cps. Output, -57 db. Satin-chrome finish. Shpg. wt., 3 1/4 lbs.

99 S 398. List, \$89.50. NET. **52.63**

**All-Directional Microphones**

Respond equally well to sounds from all directions (360°) in a plane perpendicular to the axis of the microphone. Ideal for soloists, orchestras, stage productions, etc. Their small diameter makes them suitable for use where microphone must be hand held; or for lavalier use (suspended from neck). Also called omni-directional.



Complete with Lavalier Cord and Clip



**"COMMANDO" MICROPHONES**

MODEL 415. Slim-grip, controlled-magnetic, high-impedance mike. Has all-directional pick-up pattern. Response, 60-10,000 cps. Output level is -55 db. Rugged, die-cast metal case is satin-chrome finished. Polystyrene cap is gray. With 3/8"-27 swivel adapter, and 7-ft., single-conductor, non-detachable shielded cable, 6 1/2" long. dia. of head, 1 3/4"; dia. of handle, 1 1/8". Wt., 1 lb.

94 S 085. List, \$27.50. NET. **16.17**

MODEL 420. All-directional, controlled-magnetic lavalier mike. Frequency response from 60 to 10,000 cps. Output is -55 db. Dual impedance; 150-to-250 ohms and high impedance. Gray finish polystyrene case, 20-ft., 2-cond., shielded cable, and lavalier cord with clip. 3 1/8x1 1/8". Wt., 1/2 lb.

94 S 086. List, \$30.00. NET. **17.64**

MODEL 430. All-directional, controlled-magnetic mike with press-to-talk switch. Response, 60-10,000 cps. Output, -55 db. Dual impedance; 150-to-250 ohms and high impedance. Satin-chrome, die-cast, metal case. Detachable, 15-ft., 2-cond., shielded cable, 6 1/8" long; dia. of head, 1 1/4"; dia. of handle, 1 1/8". With cover plate (may be attached for "On" operation). 3/8"-27 swivel adapter. Wt., 1 1/2 lbs.

94 S 087. List, \$38.50. NET. **22.64**

**MODEL 525 STUDIO MICROPHONE**

All-directional, professional dynamic microphone. Dynamic range of 125 db. Response, ±2.5 db from 40 to 15,000 cps. Switch selects impedance of 50, 150 and 250 ohms.

Custom-built to provide high-fidelity reproduction of voice and music. May be used on a floor or desk stand, hand held, suspended from neck or clipped to belt. Ruggedly built for indoor or outdoor use—unaffected by temperature and humidity.

Output, -61 db at all impedances. Case is bronze; head is beige. With neckcord for lavalier use, belt-clip, A-25 swivel adapter for 3/8"-27 stand, and detachable 20-ft. shielded cable with Cannon XL-3. 8 1/2" long and 1 3/8" diam. Wt., 3 1/4 lbs.

99 S 454. List, \$200.00. NET. **117.60**

**MODEL 535 SLENDYNE MICROPHONE**

Moderately-priced, all-directional dynamic microphone. Especially suitable for public address applications. 60-13,500 cps. Built-in switch for selecting output impedances of 50-250 ohms, and high impedance. Output, -61 db. With swivel adapter, 3/8"-27 thread. Detachable, 18-ft., 2-conductor shielded cable with Cannon XL-3. 1 1/4" diameter and 7 1/2" long. Shpg. wt., 3 lbs.

99 S 657. List, \$72.50. NET. **42.63**

**MODEL 51 "SONODYNE" DYNAMIC MICROPHONE**

Moderately priced, semi-directional microphone for recorder and public address applications. Immune to effects of temperature and humidity. Frequency response from 60 to 10,000 cps. Has multi-impedance switch; 35 to 50 ohms, 150 to 250 ohms, and high

impedance selected by screwdriver adjustment. Output, -52 db. Satin chrome finish. 3/8"-27 thread. Swivel mount. Detachable, 15 ft., two-conductor shielded cable. Size, 5 3/8x3 1/2x2 1/4". Shpg. wt., 3 1/2 lbs.

99 S 378. List, \$49.50. NET. **29.11**



Ideal for Indoor and Outdoor Applications

51



707A 520



710A 510C



715 215



S-38



777

## FOR EVERY AUDIO AND P.A. PURPOSE

### MODEL 707A CRYSTAL MICROPHONE

Popular, low-cost, semi-directional microphone. Response, 30-7000 cps. Output, -50 db, high impedance. Gray enamel; chrome trim.  $3\frac{1}{2}$ "-27 thread,  $2\frac{3}{4}$ " dia.,  $3\frac{1}{4}$ " long. 7-ft. cable. 2 lbs. 99 S 361. List. \$19.50. NET 11.47

### MODEL 520 "GREEN BULLET" MICROPHONE

Controlled-magnetic version of above. Response, 100-9000 cps. Output, -52.5 db; high impedance. Green enamel; chrome trim.  $3\frac{1}{2}$ "-27 thread,  $2\frac{3}{4}$ " dia.,  $3\frac{1}{4}$ " long. 7-ft. cable. Wt.,  $1\frac{1}{2}$  lbs. 99 S 383. List. \$22.50. NET 13.23

### ASSORTED LOW-COST MICROPHONES

MODEL 710A "REX." Semi-directional crystal microphone for home recorders, Amateur radio, etc. Response, 60-9000 cps. Output, -50 db, high impedance. Complete with 7-ft. cable. Burgundy-red metallic finish.  $3\frac{7}{8}$ "x $2\frac{1}{2}$ "x $1\frac{1}{2}$ ".  $3\frac{1}{2}$ "-27 thread. Wt.,  $1\frac{1}{4}$  lbs. 99 S 386. List. \$14.00. NET 7.05  
99 S 387. Model 710S. As above, with Off-On switch. NET. 8.23

MODEL 510C "HERCULES." Semi-directional, controlled-magnetic microphone. Ideal for indoor or outdoor use. Resists effects of heat and humidity. Response, 100-7000 cps. Output, -52.5 db, high impedance. Complete with 7-ft. cable. Green finish.  $3\frac{7}{8}$ "x $2\frac{1}{2}$ "x $1\frac{1}{2}$ ".  $3\frac{1}{2}$ "-27 thread. Shpg. wt.,  $1\frac{1}{2}$  lbs. 99 S 384. List. \$19.00. NET 9.99  
99 S 385. Model 510S. As above, with Off-On switch. NET 11.17

### MODEL 715 "STARLITE" MICROPHONE

Extremely popular, high-output crystal microphone featuring ultra-smart design. Semi-directional; ideal for home recording, intercom, etc. Has a retractable, built-in stand that converts mike into self-supporting unit. Output, -50 db, high impedance. Response, 60-10,000 cps. Impact-resistant, polystyrene case; gray and black finish.  $3\frac{1}{2}$ "x $2\frac{3}{4}$ "x $1\frac{1}{2}$ ". 5-ft., single-cond. cable. Wt.,  $1\frac{1}{2}$  lbs. 94 S 089. List. \$8.00. NET 4.70

MODEL 215. As above, but ceramic. Output, -56.5 db.  $1\frac{1}{2}$  lbs. 94 S 088. List. \$8.00. NET 4.70

### MODEL 777 "SLIM-X" MICROPHONE

Multiple-purpose crystal microphone. Can be worn as a lavalier, hand held, or mounted on stand. In vertical position, pickup pattern is all-directional. Response, 60-10,000 cps. Output, -62 db. High impedance. Satin-chrome finish. Detachable 7-ft. cable. With neck-strap holder.  $3\frac{1}{2}$ "-27 thread.  $4\frac{3}{8}$ "x $1\frac{1}{2}$ ". Wt., 1 lb. 99 S 616. List. \$25.00. NET 14.70  
99 S 617. Model 777S. As above, with Off-On switch. NET 15.88

S-38 BASE. For above. Requires A-25, below. Wt.,  $1\frac{1}{2}$  lbs. 94 S 038. List. \$4.50. NET 2.65

A-25 SWIVEL ADAPTER. For 777 mike and any stand listed in this catalog.  $3\frac{1}{2}$ "-27 thread. Swings 90° in vertical plane. 8 oz. 94 S 039. List. \$5.50. NET 3.23



R5



R7



C15C



R5T



505B

A86A

520SL

### REPLACEMENT PARTS AND CONVERSION KITS

MODEL R5 MICROPHONE CARTRIDGE. High-impedance, controlled-magnetic type. Response, 100-9000 cps. Output, -51.5 db. Fits Shure mikes: 505, 510 and 520. May be used for modification of almost any crystal microphone to magnetic type. Depth  $2\frac{1}{2}$ " dia. with mtg. ring,  $2\frac{1}{4}$ " dia. less ring.  $1\frac{1}{8}$ ". Shpg. wt., 4 oz. 41 S 934. List. \$11.00. NET 6.47

MODEL R7 MICROPHONE CARTRIDGE. High-impedance crystal type. High output and very smooth response. Response, 50-10,000 cps. Output, -50 db. Used in Shure 707A, 708A and most other Shure crystal mikes. Depth,  $3\frac{1}{2}$ " dia. with rubber ring,  $2\frac{1}{2}$ " dia. less ring,  $1\frac{1}{2}$ ". 5 oz. 41 S 945. List. \$8.25. NET 4.85

MODEL C15C RETRACTING MICROPHONE CORD. Heavy, rubber-covered 4-conductor (not shielded) cable for use in mobile transmitters, etc. Extends to length of 5-ft.; only 1-ft. long when retracted. Color-coded wires with tinned ends. Replaces cables in the following Shure mikes: CB10, 10B, 101, 10F, 12, 12A, 12C, 15, 15B, 15C, 15D, and all "100" series. Shpg. wt.,  $\frac{1}{2}$  lb. 41 S 932. List. \$6.25. NET 3.67

MODEL R5T MIKE CONVERSION KIT. Converts any Shure hand-held communications mike—or any mike having similar dimensions—into a high-intelligibility, controlled-magnetic mike. Consists of a controlled-magnetic cartridge and transistor preamp. Reduces background noise and provides maximum dependability—an excellent choice for police, taxi, marine, amateur, and commercial two-way radio systems now employing carbon-type microphones.

Output, -4.0 db at 500 ohms. Recommended applied voltage, 6 v. DC. Requires a screwdriver, long-nose pliers and soldering iron for quick installation. With instructions. Shpg. wt.,  $\frac{1}{2}$  lb. 94 S 418. List. \$25.00. NET 14.70

MODEL C10C RETRACTING MICROPHONE CORD. Not illus. Tinsel-coiled microphone cord. Ideal for use with any dynamic or magnetic microphone where a shielded cable will prevent the pickup of hum. Extends to length of 6 ft.; only 1 ft. long when retracted. Cord has trimmed and tinned leads; supplied with Amphenol MC4M connector attached. Shpg. wt.,  $\frac{1}{2}$  lb. 94 S 439. List. \$12.00. NET 7.06

MODEL 520SL "DISPATCHER." Ruggedly-built, controlled-magnetic microphone. Has grip-to-talk, slide-to-lock switch bar that operates microphone and relay circuits. Response, 100-9000 cps. Output, -52.5 db. High impedance. Chrome and green with 7-ft., 2-cond. shielded cable.  $9\frac{1}{2}$ " high; 5" base. Shpg. wt., 5 lbs. 99 S 388. List. \$45.00. NET 26.46

MODEL 505B "RANGER." Controlled-magnetic mike. Die-cast case. 100-9000 cps. Output, -50 db at 250 ohms. Blue-gray finish. With mounting bracket and 5-ft. 4-cond. cable.  $3\frac{1}{8}$ "x $2\frac{3}{4}$ "x $1\frac{1}{2}$ ".  $1\frac{1}{2}$  lbs. 99 S 392. List. \$32.00. NET 18.81

MODEL 505C. Similar to 505B, but high impedance. Output, -50.5 db. With 5-ft. 3-cond. (one cond. shielded) cable. 99 S 389. List. \$32.00. NET 18.81

MODEL 505T. Similar to 505B, but with built-in transistor preamp. 200-4000 cps. Output, -1 db at 500 ohms. Requires 6 v. DC. With C15C cable.  $1\frac{1}{2}$  lbs. 94 S 417. List. \$48.50. NET 28.52

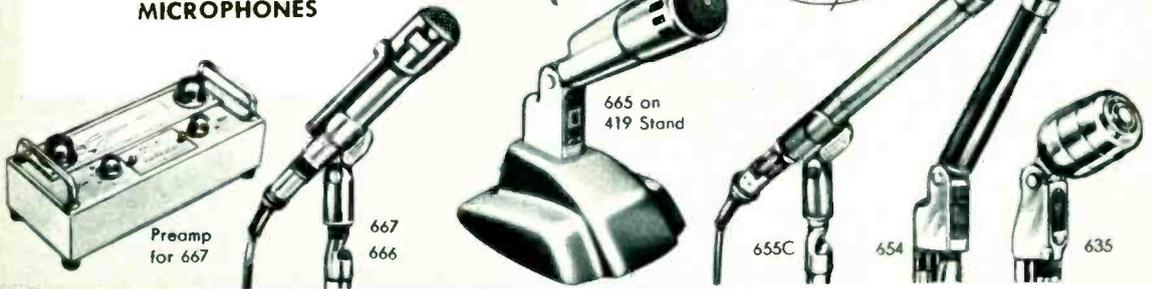
MODEL A86A TRANSFORMER. For running lines from low-imp. mikes to high-imp. inputs. Matches 35-50 or 150-250 ohms.  $\pm 1$  db. 20-20,000 cps.  $2\frac{7}{8}$ "x $1\frac{1}{2}$ ". 2 lbs. 41 S 917. List. \$17.50. NET 10.29

MODEL S36A STREAMLINED DESK MOUNT Fits all Shure mikes except Series 505, 100, 76B and 420. Similar to base of 520SL.

above. Shpg. wt.,  $1\frac{1}{4}$  lbs. 94 S 035. List. \$6.50. NET 3.82

# Electro-Voice

## BROADCAST AND TV MICROPHONES



### Variable "D" Cardioid Dynamic Mikes

**MODEL 667.** Featuring an adjustable response curve to compensate for the acoustics of any hall, studio, auditorium, the 667 is ideal for network TV and other exacting and difficult applications. When the job is tough—use the 667! Supplied with a special transistor preamp providing 20 response characteristics, individual bass and treble control, and four levels of attenuation. Sound enters in three apertures in the microphone case, and is then combined in such a way as to assure extremely smooth frequency response and total absence of "proximity effect." Response is uniform, 35 to 16,000 cycles. Output level, variable, -30 to -48 db. Designed to work into 250, 150 or 50-ohm circuits. Noise level is -123 dbm; dynamic range at maximum gain setting is 120 db. Microphone is 1 3/4 x 7 3/4"; preamp, 9 x 3 3/4 x 3 1 1/2". With 50-ft. and 20-ft. cables and connectors. 1/2" pipe thread with 3/8"-27 adapter. 4 lbs.

94 SU 093. List. \$600.00. NET. **352.80**

**MODEL 666.** Superior dynamic microphone for important broadcast and TV applications; variable "D" construction produces effective cardioid pattern—discriminates against unwanted sound from sides and rear. Response is substantially flat from 30 to 16,000 cps; average front-to-back ratio, 24 db. Output level, -55 db; adjustable to 50, 150 or 250 ohms. 1 3/4 x 7 1/2". Supplied complete with clamp-on adapter for 1/2" and 3/8"-27 stands and detachable 20-ft., 3-conductor shielded cable. Shpg. wt., 1 lb.

99 S 593. List. \$255.00. NET. **149.94**

**MODEL 366 BOOM SHOCK MOUNT.** For 666 or 667. Wt., 12 oz. 94 S 057. List. \$40.00. NET. **23.52**

**MODEL 524 WIND SCREEN.** For 666 or 667. Wt., 2 oz. 94 S 083. List. \$8.00. NET. **4.70**

**MODEL 665.** Similar in design and function to Model 666 mike, but for less exacting applications. Response, 40 to 15,000 cps. Output, -55 db. Recessed switch permits quick selection of 50 or 250 ohms. Dia., 1 3/8"; 7 3/8" long. 18-ft., 3-conductor shielded cable and adapter for 1/2" and 3/8"-27 stands. Shpg. wt., 2 lbs.

99 S 530. List. \$150.00. NET. **88.20**

### Famous "Slim Trim" Dynamic Studio Mikes

**MODEL 655C.** "Slim-Trim" dynamic mike for highest quality professional recording and broadcasting. Wide frequency response, all-directional pickup range, and light weight (only 7 oz.), make it ideal for TV staging and audience participation. Breath-blast filter head. Response is essentially flat from 40 to 20,000 cps. Output level, -55 db. Quickly changed impedances of 50, 150 and 250 ohms (connected for 50 ohms when shipped) on terminal board in case. Cast aluminum case is non-reflecting gray. Dia., 1 1/8"; 10 3/8" long. With clamp on adapter for 1/2" and 3/8"-27 stands; detachable, 20-ft., 3-conductor, shielded cable. Shpg. wt., 1 1/4 lbs.

99 S 579. List. \$200.00. NET. **117.60**

**MODEL 654.** Moderately priced mike, similar to 655C, but for less critical applications. All-directional. Response, 50 to 15,000 cps. Output, -55 db. Switch selects 50 or 250-ohm impedances. Diameter, 1 1/8"; 10 1/8" long. 3/8"-27 thread. With detachable, 18-ft., 3-conductor shielded cable. Shpg. wt., 1 1/4 lbs.

99 S 583. List. \$100.00. NET. **58.80**

### RUGGED TV & BROADCAST DYNAMIC MIKE

**MODEL 635.** Sturdily built and low in price, the Model 635 has a reputation as a studio "workhorse." Response is uniform, 40 to 15,000 cps. Level, -55 db. Recessed switch selects 50 or 250-ohm impedances. Cast zinc, chrome-plated case. 3/8"-27 thread. Dia., 2"; 6 1/2" long. With detachable, 18-ft., 3-cond. shielded cable. Shpg. wt., 1 3/4 lbs.

99 S 327. List. \$82.00. NET. **48.22**

### DESK STANDS FOR PROFESSIONAL MICROPHONES

**MODEL 419.** Illustrated above with 665 mike. For use with 665, 664 and 654 microphones. Shpg. wt., 3 lbs.

94 S 082. List. \$10.00. NET. **5.88**

**MODEL 420.** Similar to 419 desk stand, with clamp for mounting 666, 655C, 646 and 647 microphones. Shpg. wt., 4 lbs.

94 S 056. List. \$20.00. NET. **11.76**

### Professional Lavalier Dynamic Mikes



**MODEL 646A.** All-directional, TV and broadcast dynamic mike. This unusually small, 7-oz. mike can be hung from neck, hand-held, used in desk stand or suspended from boom. Particularly suitable wherever concealment of mike, mobility, or freedom of hands is desired. Response, 50-10,000 cps. Recessed screw high-frequency adjustment. Output level, -57 db. Low-impedance—works into 50 250 ohm inputs. Lathe-turned aluminum case in non-reflecting gray. Diameter, 1"; 6 1/4" long. With 30-ft. cable, carrying bag, neck cord, belt clip. Shpg. wt., 1 lb.

93 S 408. List. \$147.50. NET. **86.73**

**MODEL 649A.** An ultra-small lavalier microphone—only 3/8" in diameter and 3 3/8" long. Weighs only 3 ounces. Frequency response, 60 to 12,000 cps. Output, -60 db. Low-impedance—works into 50-250 ohm inputs. All other specifications same as Model 646, described above. With 30-ft. cable, carrying bag, neck cord and belt clip. Shpg. wt., 1 lb.

93 S 476. List. \$105.00. NET. **61.74**

Model 653

**NEW!**

Model 652

- Built-in Breath and Wind Filter
- Non-reflecting Nickel Finish
- Excellent for TV Applications
- Baffles for Mid-Range Boost

### EV "Almost Invisible" Mikes

**MODEL 652.** Very thin contour combined with light gray, non-reflecting nickel finish, makes the Model 652 ideal for use where a microphone should not be obvious. Flexible tubing brings moving coil closer to user for full range, "pop-free" response. Two plastic baffles provide either a 3 or 6 db boost in the 6000 cps range for added articulation and "presence." Without baffles response is flat from 50-12,000 cps. Output level -60 db. Matches 50 250 ohms. With VA-12 cable connector, 20' cable, and Model 300 stand coupler; 3/8"-27 thread. Length, 25". 1 1/2 lbs.

88 SX 994. List. \$120.00. NET. **70.56**

**MODEL 652A.** Same, but 15" long. Shpg. wt., 1 lb. **70.56**

88 SX 999. List. \$120.00. NET. **70.56**

**MODEL 653.** Same as 652A, but has desk stand. 2 lbs. **76.44**

88 SX 995. List. \$130.00. NET. **76.44**



# Electro-Voice

## P.A. AND GENERAL-PURPOSE MICROPHONES



### All-Directional Microphones

**MODEL 636 "SLIMAIR" DYNAMIC.** A very fine all-directional mike for tape recording. Provides excellent reproduction of individual and group singers and speakers; choirs, orchestras, etc. Also can be used for public address—"baton" styling does not hide the speaker's face. Wire mesh blast-filter permits outdoor use. 90° swivel. Response, substantially flat from 60 to 15,000 cps. 150-ohm or high impedance (connected for high-impedance output when shipped). Output level, -55 db. Chrome-plated steel case. 1 1/4" dia., 10 1/4" long. 3/8" 27 thread. On-off switch. With detachable, 18-ft. 2-conductor shielded cable. Shpg. wt., 2 lbs.  
**99 S 581.** List, \$72.50. NET **42.63**

**MODEL 636G.** As above, but finished in gold.  
**99 S 591.** List, \$77.50. NET **45.57**

**MODEL 623 SLIM DYNAMIC.** Low-cost, all-directional dynamic mike. Ideal for P.A., recording and communication use. Slim size makes it inconspicuous and easy to handle. Smooth response from 60 to 12,000 cps. Output level, -56 db. Choice of 150-ohm or high impedance output (connected for high-impedance when shipped). On off switch. Chrome-plated. Dia., 1 1/4"; 7 1/2" long. 3/8" 27 thread. With detachable, 18', 2-cond. shielded cable. Wt., 2 lbs.  
**99 S 595.** List, \$57.00. NET **33.52**

**MODEL 630 DYNAMIC.** Highly popular all-directional mike designed for public address, dispatching call systems, industrial applications, recording and general communications service. Uniform response from 60 to 11,000 cps. Output level, -55 db. Choice of 250-ohm or high-impedance output. 250-ohm mike supplied with detachable 18-ft., 2-cond. shielded cable; high-impedance mike with detachable 18-ft., single-cond. shielded cable. Chrome-plated. On-off switch. Dia., 2"; 6 1/2" long. 3/8" 27 thread. Shpg. wt., 2 lbs.  
**99 S 347.** 250-Ohm Impedance. List NET  
**99 S 336.** High-Impedance. Each, \$52.50 EACH..... **30.87**

**MODEL 911 "MERCURY" CRYSTAL.** For low-cost P.A. applications, home recording, Amateur communications, etc. All-directional pickup pattern becomes slightly directional with increased frequency. Response, 50 to 9000 cps. Output level -50 db. High-impedance output. Chrome-plated case, 2 3/8"x3 1/8"x6 1/4" long. 3/8" 27 thread. With 18-ft. detachable cable. Shpg. wt., 2 1/2 lbs.  
**99 S 554.** List, \$32.50. NET **19.11**

### Crystal Cardioid Microphone

**MODEL 951.** Excellent crystal microphone using exclusive variable "D" principle to achieve cardioid directivity and uniform frequency response. Designed to fulfill requirements of wide-range reproduction under a wide variety of P. A. applications; pop-proof wire mesh grille minimizes wind and breath noises. Uniform polar response makes it highly suitable for noisy locations, or where much echo is present. Response, 50 to 11,000 cps. Output level, -55 db. Handsome satin-chrome finish, die-cast zinc case. Size, 1 3/4"x5 1/2". With 18 ft., shielded, single-conductor cable. Shpg. wt., 1 1/2 lbs.  
**94 S 092.** List, \$49.50. NET..... **29.11**

### Lavalier Microphones

**MODEL 647 DYNAMIC.** Small, ruggedly designed all-directional mike for general P.A. use. Extremely versatile—can be hand-held, suspended from neck, used on desk stand or suspended from boom. Excellent wherever concealment, mobility or free use of hands is desired. Peak-free response from 60 to 10,000 cps. Output level, -57 db. 150-ohm or high impedance. Black aluminum with chromium trim. Dia., 1"; 5" long. Supplied complete with neck cord, belt clip, 2 wrenches and detachable, 18-ft. 2-conductor cable. Shpg. wt., 1 1/2 lbs.  
**99 S 538.** 150-Ohm Impedance. List. NET  
**99 S 585.** High-Impedance. Each, \$82.50 EACH.... **48.51**

**MODEL 924 CRYSTAL.** Ultra-small, all-directional mike for P.A., home recording, paging and Amateur radio use. Response, 60 to 8000 cps. Output, -60 db. High-impedance. Chrome-plated. 1 1/2" dia., 3 3/8" long. With neck cord, clip, 18 ft. cable, 12 oz.  
**99 S 594.** List, \$20.00. NET **11.76**

**MODEL 418 DESK STAND.** Similar to Model 419 illustrated on opposite page. For 951, 911, 636, 635, 630 and 623 microphones. Cast iron, gray finish. Shpg. wt., 4 lbs.  
**94 S 059.** List, \$10.00. NET **5.88**

**MODEL 502 MATCHING TRANSFORMER.** Allows connecting long-line, low-impedance mikes to amplifiers with high-impedance input. Supplied complete with connector and 2-ft. single cond. cable. Shpg. wt., 1 lb.  
**94 S 084.** List, \$17.50. NET..... **10.29**

### Model 664 Variable "D" Dynamic Microphone

NET  
**\$49.98**

Only \$2.00 Down

- Perfect for Auditoriums Having High Reverberation
- Performer Can Work Twice As Far from Microphone
- Does Not Boom When Performer "Crowds" Microphone
- Excellent for Outdoor Use—No Street Noise Pick-Up

This skillfully designed, ruggedly constructed mike is a superb P.A. performer. Picks up from front only—provides high front-to-back discrimination against unwanted sounds, without close-talking boominess.

Employs variable "D" (variable distance) construction to produce cardioid pattern. Highly useful for PA where ambient noise and severe reverberations exist.

Provides natural reproduction of voice and music—increases working distance from microphone—provides greater protection against feedback problems. Equipped with a "pop-proof" wire mesh grille, the 664 minimizes wind and breath blasts—excellent for outdoor public address use in fixed or mobile installations. Diaphragm is shield-

ed from dust and magnetic particles. Rugged construction and use of non-metallic diaphragm permits smooth response over a wide frequency range. Withstands high humidity, temperature extremes and severe mechanical shock. Virtually indestructible under normal use. Can be used on floor or desk stand, or carried in the hand.

Response from 40 to 15,000 cycles. Output level, -55 db. Has 150-ohm and high-impedance output. Supplied wired for high impedance. 3/8" 27 thread. Cast zinc case, finished in glistening chrome.

With on-off switch; and detachable, 18-ft. 2-conductor cable. Diameter, 1 1/4"; 7 3/4" long. Shpg. wt., 2 lbs.  
**99 S 531.** List, \$85.00. NET..... **49.98**



Cardioid Pattern

Three Tuned Cavities Provide High Directivity Across The Entire Audio Range

For Free Consultation on Selection of Microphones, Write to Our Audio Division

# SPECIAL-PURPOSE AND LOW-COST MICROPHONES



**NEW!**



**MODEL 644**  
**SOUND SPOT MIKE**  
 NET  
**\$64.68**  
 \$5.00 Down

Sensational uni-directional dynamic mike that allows you to stand 4 times as far as you would with a conventional mike. Combination cardioid and distributed front opening gives distinct, natural reproduction. New design principle allows pickup from front only, cancels out noise from side and rear. Cancellation exceeds 20 db—practically no pickup of random sound whatsoever. Reverberation and feedback are reduced to the vanishing point—greater freedom for indoor speaker placement. Excellent for outdoor use as well—withstands wind blasts, and is impervious to shock. Smooth response from 40-12,000 cps. Output level -52 db. Dual high and low impedance selected by changing one tap on MC4M connector. Die-cast zinc case with 3/4" aluminum tube. Diameter, 2 3/8"; length, 16". Supplied with 18-ft. cable. Shpg. wt., 22 lbs.  
 90 S 207. List, \$110.00. NET... 64.68



926 912

**MODEL 926 CRYSTAL.** Response, 60-8000 cps. Rising frequency characteristic for crisp reproduction of speech. High impedance. Modern slim-trim styling. 6 3/4 x 1 3/8". 18-ft. cable. Shpg. wt., 1 1/2 lbs.  
 99 S 596. List, \$29.50. NET... 17.35



920

**MODEL 912 CERAMIC.** Plastic-cased; safe for use with AC-DC units. Useful for home recording and small P.A. systems. Response, 70-7000 cps. 5-ft. cable. Wt., 1 lb.  
 93 S 229. List, \$7.50. NET... 4.41



605

**"CENTURY" SERIES.** Popular for home recording, paging and P.A. Inner element insulated for safe use in AC-DC circuits. 3/8"-27 stand adapter; 5-ft. cable, 1 lb.



415

"Century Series"

**MODEL 715 "CENTURY" CERAMIC.** Humidity-proof ceramic element; output, -55 db. Response, 60-7000 cps. High impedance. Size, 3x2 1/2x1".  
 99 S 586. List, \$13.00. NET... 7.65

**MODEL 715-S "CENTURY" CERAMIC WITH "ON-OFF" SWITCH.** Incorporates the same fine construction as the Model 715 listed above. Equipped with slide-to-talk, On-Off switch. Ideal for conference use, home tape recording, paging systems, etc. Heat-and-humidity proof ceramic element.  
 93 S 227. List, \$15.00. NET... 8.82

**MODEL 415 DESK STAND.** For "Century" microphones. Holds mike at 15° tilt for desk use. Shpg. wt., 6 oz.  
 94 S 050. List, \$1.75. NET... 1.03



**NEW MODEL 7295**  
**CARDIOID CERAMIC**  
**MICROPHONE**  
 NET  
**\$15.58**

Exceptionally low-priced uni-directional cardioid mike. Offers high front-to-back discrimination. For home or P.A. use. Response, 60-8,000 cps. Output level, -55 db. Handy On-Off switch. Gray zinc front, plastic back. Dia., 1 3/8"; 8 3/2" long. With 10-ft. cable. Shpg. wt., 1 lb.  
 93 S 223. List, \$26.50. NET... 15.58  
**MODEL 729.** As above, less switch.  
 93 S 222. List, \$24.50. NET... 14.41  
**MODEL 727 CERAMIC.** All-directional, with desk stand and floor stand adapter. Response 60-8,000 cps. Output level -55 db. 7 7/8 x 1 1/2 x 1 1/4". 5-ft. cable, 1 1/2 lbs.  
 93 S 226. List, \$18.00. NET... 10.58

## Noise-Cancelling Differential Microphones



205KK 600D/602

**IDEAL FOR VEHICLES, FACTORIES**

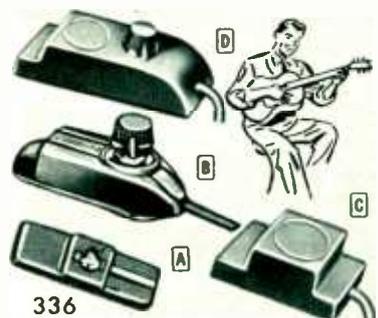
These microphones provide excellent intelligibility in the midst of high surrounding noise levels. Sounds originating more than a few inches away enter both sides of the mike, cancel each other out. Only the user—no further than 2" away—is heard. Use for 2-way radio or P.A. communication.

**MODEL 602D DIFFERENTIAL DYNAMIC.** Extra-rugged microphone for mobile P.A. and communication use. Semi-directional pickup pattern. Response is flat from 100 to 7000 cps. Output level, -55 db. High impedance. Has press-to-talk switch for mike and relay control. Black phenolic case. 2 1/2 x 2 x 4". 5-ft. cable. Wt., 10 oz.  
 93 S 224. List, \$57.50. NET... 33.81

**NEW MODEL 602 DYNAMIC.** (Not differential.) 250 ohm impedance.  
 99 S 323. List, \$47.50. NET... 27.93

**MODEL 205KK DIFFERENTIAL CARBON.** Close-talking, noise-cancelling, single-button carbon mike. Provides maximum intelligibility under high noise conditions. Blastproof, waterproof, and shock-resistant. Response, when held close to sound source, 100 to 1000 cps. Output level at 1/2", -50 db. Press-to-talk switch can also be used for relay control. Black phenolic case, 2 1/2 x 2 1/2 x 4". Supplied complete with handy mounting bracket, 5-foot coiled three-conductor cable. Shpg. wt., 1 lb.  
 99 S 590. List, \$45.00. NET... 26.46

## MICROPHONES FOR MUSICAL INSTRUMENT AMPLIFICATION



**A AMPERITE MODEL SKH.** Attaches directly to sounding board or body of instrument. Excellent for piano, cello, guitar, etc. Hi-Z magnetic. Frequency response 40-9,000 cps. Output level -10 db. 3/4 x 3 x 1". With 12-ft. cable. Shpg. wt., 10 oz.  
 99 S 406. List, \$12.00. NET... 7.06

**B AMPERITE MODEL KKH.** Has all the features and same specifications as unit listed above, plus a volume control.  
 99 S 408. List, \$18.00. NET... 10.58

**KONTAK STRAP** (Not illustrated). For mounting Amperite SKH or KKH on flat-top guitars. Shpg. wt., 4 oz.  
 41 S 902. NET... 59c

**C KNIGHT CONTACT MICROPHONE.** An unusually fine value. Delivers smooth, natural response from 50-10,000 cps. Also serves as excellent supplementary mike for recording musical instruments. High-impedance magnetic type. With 12-ft. cable and screw-type connector. Wt., 1 lb.  
 99 S 517. NET... 5.95

**D** Same unit as above, but equipped with built-in volume control.  
 99 S 516. NET... 7.50

**MODEL 75-MC-1P PHONE PLUG ADAPTER FOR KNIGHT MICROPHONES.** (Not illustrated) Shpg. wt., 2 oz.  
 41 H 962. NET... 30c



# New KNIGHT Cardioid Dynamic

Presenting true professional styling and performance in a highly directional microphone—at an exceptionally low price. Superior Knight engineering allows you to stand twice the distance from the mike—with equal sensitivity.

## KNIGHT DYNAMIC MICROPHONES

### KN-4500 ALL-DIRECTIONAL MICROPHONE

NET **\$24<sup>95</sup>**  
 \$2.00 Down

- Includes Attractive, Matching Desk Stand
- High-Quality Dynamic Element Provides Excellent Voice and Music Reproduction
- Screw-Type Connector & Phone Plug Adapter

### KN-4550 CARDIOID MICROPHONE

NET **\$39<sup>95</sup>**  
 \$2.00 Down

- Professional Quality At Moderate Cost
- Super-Cardioid Anti-Feedback Pattern
- Smooth, Wide Response; 60-13,000 cps.
- Tough, Durable Acoustalloy Diaphragm

An unexcelled value in an all-directional, high-fidelity dynamic microphone. The low-cost, versatile Knight KN-4500 mike comes equipped with desk stand, 10-ft. cable, screw-type connector and phone plug adapter. It can be readily connected to 90% of all tape recorders—standard-thread base (5/8"-27), allows it to be quickly connected to any standard microphone floor stand.

The omni-directional pick-up pattern and wide frequency response of the KN-4500 make it perfect for such general purpose applications as paging and P.A. use, home recording, lecture work, recording of conferences, panel discussions, etc. Because it responds equally well to sounds from all directions, it's ideally suited for soloists, orchestras, stage productions, etc. Home recordists will appreciate the truer, clearer tone it gives to recordings—P.A. users will immediately recognize new, better-than-ever intelligibility in their messages. Its moving-coil dynamic element is virtually indestructible and highly resistant to humidity. Rugged, die-cast metal housing with chip-proof nickel plated finish.

Wide-range response, from 60 to 12,000 cps assures natural reproduction of both voice and music. High-impedance output. Size, 1 5/8 x 7 1/2"; tip proof, die-cast base is 5/8" in diameter. Strikingly styled in gold and black. Made in U.S. Shpg. wt., 4 lbs. 94 S 097. Only \$2.00 Down. NET. 24.95

The greatest value anywhere in a cardioid pattern, dynamic microphone. This professional-quality unit is ideal for use with recorders as well as public address systems of all types—wherever improved sound quality is desired. Check the outstanding features of the KN-4550 against any microphone in its price class—you'll be convinced it's an amazing buy. Extremely high front-to-back ratio reduces the effects of audience noise, picks up sound only from the front. There's greater freedom of movement for the performer. Stand twice the distance from the mike—there is no audible loss of response. Words and music are faithfully reproduced. Wide frequency response of 60-13,000 cps meets professional standards.

The astonishing clarity and trueness of tone is made possible by two separately tuned chambers in the microphone housing. The diaphragm is constructed of rugged, durable acoustalloy—the toughest material yet devised for microphone diaphragms. It will stand up even under the most extreme climatic conditions.

Output level, -57 db. Impedance can be adjusted at connector for either 150 ohms or Hi-Z. In sturdy, long-lasting, pressure cast case, with attractive satin chrome finish. With On/Off switch. Fits all standard floor and desk stands. Diameter, 1 1/4"; 7 1/4" long. 18 ft. cable, screw-type connector at mike. Made in U.S.A. 2 lbs. 93 S 479. Only \$2.00 Down. NET 39.95

## SWITCHCRAFT STEREO AND MONOPHONIC MIXERS

### Add Musical Highlights and Sound Effects to Your Voice Recordings

Even though your recorder may have only a single microphone input, you can increase its versatility and provide separately controlled inputs for up to four sound sources with a mixer. Feed signals from TV, radio, phonograph and microphone to your recorder—you can blend in or fade out signals from these sources for professional-type voice recordings.

#### STEREO MIXERS

**MODEL 306.** Extremely versatile mike mixer with four monophonic channels that convert to 2-stereo channels with flip of handy lever switch. Perfect for providing stereo music accompaniment to narration of your home movies. Four input jacks on rear panel; high impedance circuitry. Two phono jacks for output to amplifier or tape recorder. Size, 2x3x6". Shpg. wt., 1 1/2 lbs. 93 S 218. List, \$22.50. NET 13.23

**MODEL 306TR.** Same as above, but with two battery-operated transistor amplifiers. With battery. Shpg. wt., 1 1/2 lbs. 93 S 219. List, \$37.50. NET 22.05

**41 H 341.** Audio Connector Cable. For above. 36". Phono pin plug on one end, phone plug on other. Shpg. wt., 4 oz. NET EACH 88c

#### MONOPHONIC MIXERS

**MODEL 301.** Ultra modern, 4-channel, high impedance microphone mixer. Permits mixing of four signals such as mike, phono, tuner, etc., into a single output. Inputs accept standard 2-conductor phone plugs; standard phone jack output. Completely self-contained. Tan panel, brown knobs with gold inserts. Size, 2x3x6". 1 1/2 lbs. 93 S 216. List, \$19.50. NET 11.47

**MODEL 301TR.** As above, but with transistor-powered amplifier for best high frequency response. Powered by battery supplied with unit. Shpg. wt., 1 1/2 lbs. 93 S 217. List, \$36.00. NET 17.64



306



301

#### SWITCHCRAFT MINI-MIX AUDIO MIXERS

Accommodate 2 high impedance inputs. With separate gain controls, recessed inside housing. Very low loss factor. Size, 2 1/2 x 1 1/2 x 1 1/4". Shpg. wt., 1 oz.

**TYPE 310.** Phone jack input, phone plug output fitting standard jacks. 41 H 953. NET 4.67

**TYPE 311.** As above, but with longer output to fit recorders with recessed jacks. 41 H 988. NET 5.26

**TYPE 316.** Miniature unit with pin plug input, phone plug output. 41 H 343. NET 4.67

**TYPE 320.** Male mike connector input with female mike connector output. 41 H 954. NET 4.67



"Mini-Mix"

# QUALITY MICROPHONE STANDS, BOOMS, AND BASES



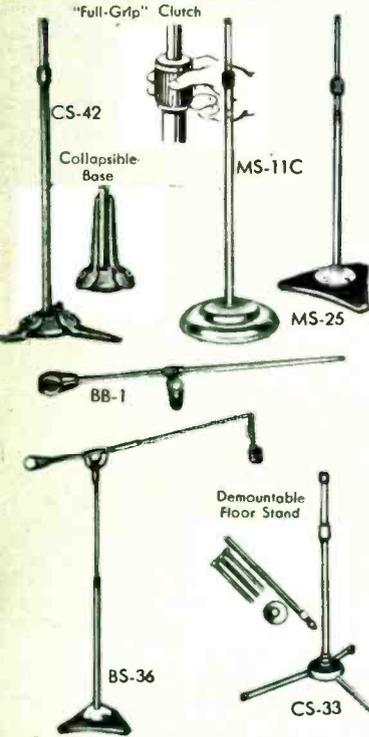
## VALUE-PACKED KNIGHT MICROPHONE STANDS

- Remarkably Low Cost
- Accept Most Mikes
- Chrome-Plated Finish
- Versatile Design
- Smooth Clutch Action
- Tip-Proof, Iron Base

**THREE-SECTION MODEL.** An outstanding value in a highly popular, compact microphone stand—carrying height only 25". Accommodates most desk-type and floor-type mikes. Can also be used with lavalier-type mikes having adapter. Two smooth-action clutches provide adjustment from 25" to 61". Ideal for portable use. Chrome-plated stem; gray, cast-iron base has 10" diameter.  $\frac{5}{8}$ "-27 thread. Shpg. wt., 10 lbs.  
94 SX 001-2. NET ..... 7.35

**TWO-SECTION MODEL.** Exceptional value in a quality-constructed microphone stand. Features a smooth-operating clutch that provides convenient adjustment of two-section stand from 35" to 64". Accommodates all of the floor-type and desk-type microphones listed in this section—perfect for use with lavalier-type mikes having adapter. Chrome-plated stem; cast-iron base, 10" dia.  $\frac{5}{8}$ "-27 thread. Wt., 10½ lbs.  
94 SX 004-2. NET ..... 5.73

## SELECTED ATLAS MICROPHONE STANDS AND BOOMS



**MODEL CS-42 COLLAPSIBLE BASE STAND.** Here's an excellent microphone stand featuring the stability of a cast-iron base—plus the added convenience of easy carrying. Base consists of three legs—permanently fixed to the stem—that can be quickly folded or unfolded and securely locked in place. The stand is adjustable from 34" to 62" and can be adjusted to any desired height by a "velvet-action" clutch mechanism. Upright tubular assembly is chrome-plated for dependable wear. Collapsible base is finished in gunmetal gray. Special pads on each of the three legs absorb vibrations and prevent damage to floor surfaces. Standard  $\frac{5}{8}$ "-27 thread. Shpg. wt., 9 lbs.  
88 SX 860. List. \$12.50. NET ..... 7.35

**MODEL BB-1 "BABY BOOM" STAND ATTACHMENT.** Quickly converts any floor stand having a  $\frac{5}{8}$ "-27 thread to a boom-type stand. Permits a quick, fixed positioning of microphone anywhere within a 5-ft. circle. Heavily chrome-plated boom attachment is 32" long. Gray crackle-finish fittings. Counterbalance weight can be adjusted easily for use with any mike. All swivel parts are precision die castings—provide smooth operation. Shpg. wt., 4½ lbs.  
94 SX 019. List. \$7.50. NET ..... 4.41

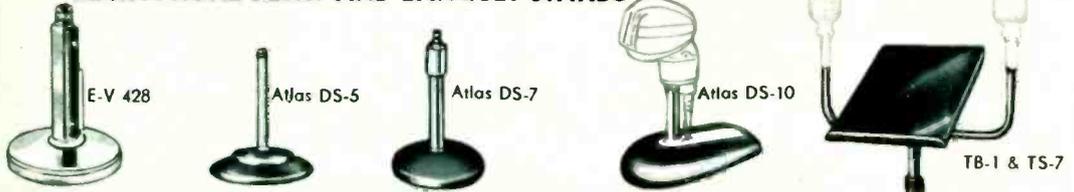
**MODEL BS-36 PROFESSIONAL BOOM STAND.** Similar in construction to Model MS-25 (left, below), but with removable 62" boom arm. Gyromatic swivel joint at end of boom allows microphone to hang in the proper position regardless of how the boom arm is moved. Has convenient "snap-on" hangers for attaching cable to stand. Vertical height is adjustable from 48" to 72". Heavy base has a diameter of 17"; has pads to permit gliding over floor with a minimum of friction. All tubular sections are chrome-plated; base is gray. 33 lbs. \$2.00 Down.  
94 SU 021-2. List. \$63.00. NET ..... 37.04

**MODEL MS-11C FLOOR STAND.** Low-cost microphone floor stand with high-quality features. Equipped with "Full Grip" clutch mechanism—allows stand to be quickly and quietly adjusted to any height from 35" to 65". Excellent for use in school auditoriums, etc., where the microphone must be easily positioned to the proper height for different users. Rugged base includes self-leveling, shock-absorbing pads. Reinforced with three "anti-tip" points in base for added rigidity. Chrome-plated base and stand; retains lasting beauty. Base diameter, 10".  $\frac{5}{8}$ "-27 thread. Shpg. wt., 12 lbs.  
94 SX 012-2. List. \$13.00. NET ..... 7.64

**MODEL CS-33 DEMOUNTABLE FLOOR STAND.** Three-section microphone stand designed for both fixed and portable applications. Fully collapsible for transporting within amplifier or speaker carrying case. Requires no tools for assembly or demounting. Legs are held in place with "finger-operated" spring lock and can be quickly removed. Features automatic "sleeve-action" clutch mechanism to permit remarkably easy height adjustment—stem quickly responds to any upward or downward pressure of the hand. Adjustable from 26" to 64". Collapsed size, 22½". Self-leveling legs tipped with rubber—prevent skidding. Attractive chrome-plated finish for long wear.  $\frac{5}{8}$ "-27 thread. Shpg. wt., 4 lbs.  
94 SX 016. List. \$13.50. NET ..... 7.94

**MODEL MS-25 "AIR-LOCK" MIKE FLOOR STAND.** Features "air-lock" cushioning of telescoping section. Controlled escape of air allows only slow, quiet collapse into lower section. Microphone stand extends from 37" to 66". Heavy base is 17" dia.; provides firm support for boom arm attachment. Will not tip even with a heavy microphone. Chrome-plated stem. Gray-finished base.  $\frac{5}{8}$ "-27 thread. Shpg. wt., 20 lbs.  
94 SU 029-2. List. \$26.00. NET ..... 15.29

## MICROPHONE DESKS AND BANQUET STANDS



**E-V 428 TOUCH-TO-TALK STAND.** Here's a deluxe, versatile microphone desk stand with touch-to-talk feature. Has 6½" touch-to-talk bar on side of stem with locking button at top. Slight pressure will close circuit. DPDT switch for controlling relay or shorting out microphone. Switch assembly removable from base. Satin chrome finish; gray plastic switch lever. Stem height, 7". Sturdy die-cast base; dia., 5½".  $\frac{5}{8}$ "-27 thread. Shpg. wt., 2 lbs.  
94 S 053. List. \$17.50. NET ..... 10.29

**ATLAS DS-7 ADJUSTABLE DESK STAND.** Height is adjustable from 8" to 13". Incorporates full-sized clutch mechanism for quick, smooth change of stand height. 2-section stem uses  $\frac{5}{8}$ " and  $\frac{7}{8}$ " tube combination. All tubular sections finished in chrome. Gray crackle base. 6" diameter. Rubber base pads prevent scratches. Standard  $\frac{5}{8}$ "-27 thread. Shpg. wt., 3 lbs.  
94 S 014. List. \$5.00. NET ..... 2.94

**ATLAS TB-1 DUPLEX MIKE MOUNT.** For use with any floor stand or Model TS-7 stand below—no extra connectors needed. Permits use of 2 mikes on a single stand with proper spacing to keep the speaker "on the mike." Convenient desk attachment holds written material for ready reference; attachment is removable. Chrome and cadmium plating. 9x11" desk of molded composition; black finish.  $\frac{5}{8}$ "-27 thread. 2½ lbs.  
94 S 072. List. \$11.00. NET ..... 6.47

**ATLAS DS-5 DESK STAND.** Low-cost microphone desk stand. Chrome-plated stem, 4" high. Cast-iron base; 6" diameter. Rubber base pads.  $\frac{5}{8}$ "-27 thread. 2 lbs.  
94 S 077. List. \$3.00. NET ..... 1.76

**ATLAS DS-10 DESK STAND.** Modern, functional design. The cable is concealed in slot underneath center section of chrome trim. Space under base for on-off or press-to-talk switch. Gun-metal enamel finish. Rubber pads.  $\frac{5}{8}$ "-27 thread. Wt., 1½ lbs.  
94 S 073. List. \$5.00. NET ..... 2.94

**ATLAS TS-7 BANQUET STAND.** For use with TB-1 duplex mount, above. Ideal for speakers' table. Chrome-plated. Height: extended, 17½"; closed, 10½". All chrome. Base dia., 10". Wt., 11 lbs.  
94 S 074. List. \$11.00. NET ..... 6.47

## Magnetic Telephone Pickup



High-impedance coil units designed to permit recording both sides of a telephone conversation. Ideal for home or business—eliminate guesswork and misinterpretations. Require no electrical or physical connection to the telephone—simply place telephone on pickup. Plug into the mike input of your tape recorder or amplifier.

**A** ELECTRO-DUCER TELEPHONE PICKUP. For any telephone. Has removable coil. 1x 6 1/2x9 1/2". 12-ft. cable. Shpg. wt., 1 lb. 99 R 482. List. \$12.50. NET..... 7.35

**B** MAGNETIC RECORDING INDUSTRIES VA-938 PICKUP. For any phone. 1 1/4x3/4x4". 5' cord. less plug. Wt., 8 oz. 99 R 478. NET..... 2.98

**C** ELECTRO-SCRIBER TELEPHONE PICKUP. For standard rectangular-base cradle telephones. Heavy rubber construction. With 8-ft. cable and 3-prong Jones plug. Size: 1 1/4x 5 7/8x8 1/4". Shpg. wt., 1 1/4 lbs. 99 R 489. List. \$12.50. NET..... 7.35

**D** KORD-O-KOIL MAGNETIC PICKUP. For cradle telephones only. 5 1/2x3 1/2x9 1/4". Attractive leatherette finish. 6-ft. cord and phone plug. Shpg. wt., 1 1/4 lbs. 99 R 486. List. \$10.00. NET..... 5.88

## Versatile Mixer-Preamplifier



### NEW CHALLENGER MODEL MX6

- Both Mixes and Preamplifies
- Mixes Radio or Phono with Voice
- Provides Additional Mike Inputs to High-Fidelity Amplifier

An excellent self-powered four-channel mixer and preamplifier. Has provisions for mixing four high-impedance mike inputs for an amplifier or tape recorder (up to four mikes can be fed into the Aux input of hi-fi amplifier or tape recorder). Can also mix radio and/or phono signals with microphone signals. A virtual necessity when multi-microphone recordings of large groups are made, or for special recording effects.

Features an individual gain control for each input channel to permit precise adjustment of signals being mixed. Has a neon bulb pilot light on front panel.

Provides gain of 59 db for microphone; 30 db for phono. Frequency response is  $\pm 2$  db, 50-15,000 cps. Hum is -70 db below rated output. Input impedance: mic, 0.5 megohm; phono, 0.5 megohm. Output impedance: less than 1000 ohms (cathode follower). Controls: Power-On/Off, Microphone 1, Microphone 2, Microphone 3, and Microphone 4. Size, 5 1/2x8x4 3/4". For 110-120 v., 60 cycle AC. Shpg. wt., 5 1/2 lbs. 88 SX 855. List. \$65.00. NET..... 39.00

## Low-Noise Program Preamp



### BOGEN MODEL RP-2

- Perfect for Remote Broadcasts
- Ideal for Driving Boosters
- Cage with Built-in Professional VU Meter Available

Professional-quality, low-noise program pre-amplifier designed for use at remote pickup points. Contains separate input channels for one microphone and one phonograph. Separate mixing controls for each channel permit mixing of inputs. Output is designed to feed either a booster amplifier or a low impedance line (telephone) separately or simultaneously. Perfect for churches, schools, stadiums, theaters, etc.

Provides mike gain of 76 db; phono, 35 db. Has a bass cut-off switch (20 db) for speech clarity. Sensitivity: mike, 3.5 mv.; phono, 0.4 v. Size: 5 1/4x11x7 3/4" (6 1/2" high with cage, below). For 110-120 volts, 60 cycle AC. Shpg. wt., 5 lbs. 88 SX 856. List. \$90.00. NET..... 54.00

MODEL CAGVU2. Cage with meter for Model RP-2, above. Meter provides visual indication of modulation level to prevent overloading of telephone lines. Also ideal for maintaining desired volume level when driving a booster feeding speakers which are remotely located. Wt., 2 lbs. 88 SX 857. List. \$31.25. NET..... 18.75

## MICROPHONE ACCESSORIES



**E** "Y" TYPE MICROPHONE CONNECTOR. Consists of two males and one female. Shpg. wt., 2 oz. 41 H 996. NET..... 97c

**F** ATLAS GN-13 FLEXIBLE GOOSE NECK. For any mike stand or fixture. Provides complete flexibility of mike positioning. 3/8"-27 male and female threads. 13" long. Shpg. wt., 1 lb. 94 S 027. List. \$2.75. NET..... 1.62

**F** ATLAS GN-19 FLEXIBLE GOOSE NECK. As above, but 19 inches long. Shpg. wt., 1 1/2 lbs. 94 S 075. List. \$4.00. NET..... 2.35

**G** ATLAS SO-1 SNAP-ON MIKE ATTACHMENT. Fits desk or floor-type stands. Permits mike to be snapped on or off quickly and easily. Durably constructed. Shpg. wt., 1 lb. 94 S 017. List. \$2.75. NET..... 1.62

**H** ATLAS CH-1 CABLE HANGER. Fits on all stems, 3/8" to 1 1/4" diameter. Durable chromium finish. Shpg. wt., 1/2 lb. 94 S 076. List. \$2.50. NET..... 1.47

**J** SWITCHCRAFT MODEL 329 MIKE VOLUME CONTROL. For high-impedance microphones having single-conductor detachable cable. Screws in between mike and cable. Shpg. wt., 6 oz. 41 H 946. NET..... 4.09

**K** ATLAS AD7 EXTENSION ROD. Rigid, lightweight tubing, 3" long. Each end has 3/8"-27 male thread. Shpg. wt., 3 oz. 41 S 913. List. 60c. NET..... 35c

**K** ATLAS AD8 EXTENSION ROD. 6" long. Shpg. wt., 4 oz. 41 S 907. List. 70c. NET..... 41c

**L** "SAVE-UR-MIKE" COVER. Plastic-coated celanese cover for protection of mike. Shpg. wt., 2 oz. 41 S 995. NET..... 69c

**M** AMPHENOL 75-MC1S SWITCH. Push-to-talk switch with lock. Requires no soldering; standard threads. Wt., 6 oz. 41 H 950. NET..... 1.08

**N** ATLAS BC-1 BRACKET CLAMP. 6" stem. Shpg. wt., 1 lb. 94 S 028. List. \$3.50. NET..... 2.06

ATLAS SW-1 GYROMATIC SWIVEL. (Not illustrated.) Locks microphone at any desired angle. 4 1/2" long. Shpg. wt., 1 1/2 lbs. 94 S 067. List. \$4.50. NET..... 2.65

ATLAS MIKE STAND ADAPTERS. An excellent assortment of quality adapters for desk and floor-type microphone stands. All are chrome-plated for dependable, long use. Shpg. wt.: Models AD1, AD2, AD3, AD4, AD5, and AD10, 2 oz.; AD11 and AD12, 6 oz.

Stock No.	Mfr's Type	Fig.	Description	NET EACH
41 S 928	AD1	R	For adapting RCA mikes. 1/2" male to 3/8"-27 female.	50c
94 S 060	AD2	P	1/8" pipe female to 3/8"-27 male.	35c
94 S 061	AD3	S	1/8" pipe female to 3/8"-27 female.	35c
94 S 062	AD4	P	3/4" long. 3/8"-27 male thread.	18c
94 S 063	AD5	S	3/8"-27 to 3/8"-27 female coupling.	35c
94 S 066	AD10	S	Adapts W.E. mikes. 3/8"-24 female to 3/8"-27 female.	71c
41 S 906	AD11	W	Mike base flange. Female. 3/8"-27.	41c
41 S 905	AD12	T	Mike base flange. Male. 3/8"-27.	41c

# How To Select A Public Address Speaker

It's easy to select and install P.A. speakers. Study the time and labor-saving suggestions outlined below. If you need any further information, simply

write to Allied's Audio Division. Our audio experts will aid you by recommending specific components—specially suited to meet your individual needs.

**FOR QUIET INDOOR AREAS** such as offices, classrooms, etc., select cone-type speakers. A variety of wall and ceiling type baffles for housing cone speakers is offered on the following pages. Popular speaker sizes are 8" and 12". The 8" speakers provide excellent reproduction of voice and music; however, in applications where extended low frequency response is necessary, 12" speakers are recommended.

The wattage ratings given for speakers indicate the maximum power (volume level) they will handle without distortion. Average size class rooms, private offices, etc., normally require no more than 2 watts for adequate sound coverage.

Large warehouses, auditoriums, etc., will require as much as 10 watts per speaker. Cone-type speakers are not recommended for use under conditions of high humidity or where corrosive vapors are present.

**IN CORROSIVE VAPOR AREAS** such as plating factories and chemical labs., select a fiberglass-constructed horn. Allied stocks a wide variety of these horns to meet any application. Write to our Audio Division for special recommendations requiring submergence-proof or explosion-proof speakers to meet your specific needs.

**HOW MANY SPEAKERS TO USE** depends upon the particular area. Average offices require flush-mounted ceiling speakers spaced about 15 feet apart. Large indoor trumpets (using about 15 watts each) should be placed about 25 to 50 feet apart. In extremely noisy areas, small trumpets (using about 5 watts each) should be placed near each specific location to be covered.

**FOR NOISY INDOOR AREAS AND OUTDOORS** select a trumpet-type speaker.

Weather-proof speakers are best for outdoor applications. The diameter of a trumpet bell determines its bass response—the larger the bell, the greater its bass response. Horn size determines the angle of sound coverage—as the horn size increases, the sharpness of the dispersion angle and the penetrating power increase.

Unless otherwise specified, trumpet-type speakers require drivers. There is no advantage in selecting a driver with better low frequency response than the horn with which it is to be used. When an impedance-matching transformer is needed, select a driver with a built-in transformer to simplify installation.

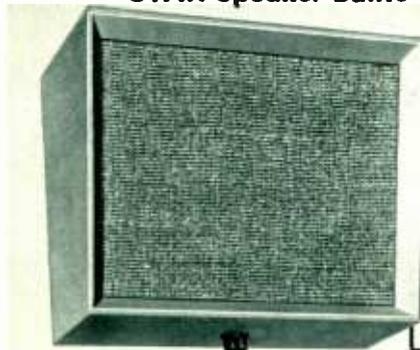
Drivers listed have screw terminals or binding posts. The University 1B8, Jensen VII-91 and Electro-Voice 847 are for use with paging systems in very noisy areas. These are equipped with built-in drivers. For free consultation, write to our audio experts.

**OUTDOOR AREA COVERAGE** is influenced by weather conditions and terrain. Where coverage is required for spectator gatherings, place speakers near the audience. For distance coverage, such as used in church towers, use 4 projectors in a cluster—driven by a Knight 60-watt amplifier. This arrangement will cover from 1/4 to 1/2 mile. To double this radius, 4 times the power is required. Consult Allied for free advice, you'll receive prompt recommendations.

**USE OF TRANSFORMERS** is recommended when extensive lengths of cable—or more than 4 speakers—are employed. You will find drivers containing built-in transformers on the following pages; transformer-wired speakers, below. Write for Allied's free "Multiple Speaker Installations" bulletin, a highly informative release.

## UTAH Speaker-Baffle Combinations

Delivers TWICE  
The Sound Per Watt!



### 8-OHM SPEAKER-BAFFLE

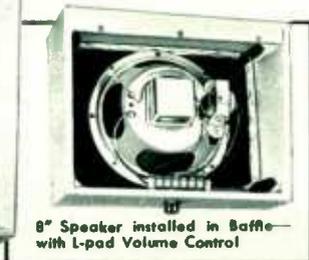
- Completely Wired—Ready to Use
- Has L-Pod Type Volume Control
- In Mahogany or Blonde Finish

NET  
**\$13<sup>95</sup>**

Utah's fabulous, dual-diameter speaker—a major speaker advancement—installed in baffle! Speaker employs a specially machined, permanent magnet that combines two magnetic field alignments into a single, dual-diameter unit.

Magnet unit attains efficiency and power nearly twice that of conventional speaker magnets—delivers twice as much sound per watt. Combination includes: full-range 8" speaker, attractive "picture frame" baffle, and prewired L-pod type volume control—completely installed, ready to use.

Power handling capacity, 20 watts. Impedance, 8 ohms. 9 1/2 x 12 x 6". Specify mahogany or blonde. Shpg. wt., 6 lbs.  
90 DX 072C. NET **13.95**



8" Speaker installed in Baffle—  
with L-pad Volume Control

### 70.7-VOLT SPEAKER-BAFFLE

- Has Quality 10-Watt Transformer
- Choice of Mahogany or Blonde
- Fully Wired—Ready to Install

NET  
**\$16<sup>95</sup>**

Ready-to-use speaker-baffle combination identical to the unit listed at left, but with a built-in 70.7-volt transformer for use with sound distribution systems. Available in choice of mahogany or blonde to harmonize with any motif.

For building a new sound system, or increasing the versatility of your present system, determine wattage rating need for each room—add ratings together—choose an amplifier with a rating which is at least equal to the total rating of the speaker load.

Screw-type terminals are marked for 10, 5, 2.5, 1.25 and 0.62 watt output. Size, 9 1/2 x 12 x 6". Specify mahogany or blonde finish. Shpg. wt., 7 lbs.  
90 DX 073C. NET **16.95**



70-Volt  
Speaker  
Assembly

### PRE-WIRED 8" P.A. SPEAKERS

Offer the same ease of installation as the units at left. Argos and Wellcor baffles have pre-drilled hole for volume control.

**8" SPEAKER & VOLUME CONTROL ASSEMBLY.** An economical unit for extending coverage of existing sound systems—ready for installation in the baffle of your choice. Includes a heavy-duty 8" speaker for efficient reproduction of voice and music; pre-wired volume control on 18" cable for controlling sound level at speaker. No soldering. Has 4.64 oz. Alnico V Magnet. Capacity, 10 watts 8 ohms. Shpg. wt., 3 lbs.  
70 D 284. NET **6.65**

**70.7-VOLT 8" SPEAKER & VOLUME CONTROL.** Similar to above, but with built-in transformer for use with 70.7-volt speaker distribution systems. Includes 8" speaker with pre-wired volume control on 18" cable for individual sound level adjustment. No soldering—just attach speaker line to screw terminals (marked 10, 5, 2.5, 1.25, and 0.62-watt output). For building an efficient sound system, simply determine wattage rating needed for each room—add ratings together—choose amplifier with a rating which is at least equal to the total rating of the speaker load. Wt., 4 lbs.  
70 D 285. NET **8.65**

## ARGOS Wall and Corner Baffles



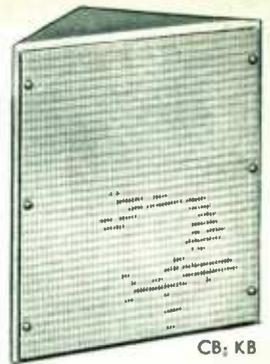
SCB;  
SKB



Series PB



DWB; WB



CB; KB

### NEW SLANTING FRONT BASS REFLEX CORNER Baffles

**DELUXE SERIES.** Handsomely styled, extremely versatile bass reflex enclosures. Excellent for music systems, P.A., etc. Simple installation—speaker bolts are already installed. Rigidly constructed of reinforced plywood, covered with plastic-coated fabric in simulated wood finish. Acoustically padded. Plastic matching grille cloth. Specify blonde or walnut when ordering.

MODEL SCB-8A. For use with 8" speaker. Volume, 680 cubic inches. Size (HWD): 15x17 $\frac{1}{2}$ x9 $\frac{1}{2}$ ". Shpg. wt., 5 lbs.  
70 DX 487C. NET. . . . . 7.74

MODEL SCB-12A. For use with 12" speaker. Volume, 1240 cubic inches. Size (HWD): 20 $\frac{1}{2}$ x21x10 $\frac{1}{2}$ ". Shpg. wt., 9 lbs.  
70 DX 488C. NET. . . . . 10.73

**ECONOMY SERIES.** As above, but have open backs. Available in blonde or walnut—specify choice when ordering.

MODEL SKB-8. For 8" speaker. 15x17 $\frac{1}{2}$ x9 $\frac{1}{2}$ ". Wt., 4 lbs.  
70 DX 485C. NET. . . . . 5.88

MODEL SKB-12. For 12" speaker. 20 $\frac{1}{2}$ x21x10 $\frac{1}{2}$ ". Wt., 8 lbs.  
70 DX 486C. NET. . . . . 7.64

### NEW "PRESTIGE" WALL-MOUNTED Baffles

Attractive wall-type baffles for quick, easy installation of 8" or 12" speakers. Handsome wood-grain pyroxylin-covered enclosures feature latest "forward-front" design for pleasing effect and efficient dispersion of sound. Grille cloth styled in modern woven decorator pattern. Include speaker mounting hardware and convenient knock-out plug for installing individual speaker volume control. Available in choice of two beautiful finishes to complement any decorative surrounding. Specify blonde or walnut.

MODEL PB-8. For 8" speaker. 16 $\frac{1}{2}$ x14x7". Wt., 3 $\frac{3}{4}$  lbs.  
70 DX 497C. NET . . . . . 5.14

MODEL PB-12. For 12" speaker. 13 $\frac{3}{4}$ x18 $\frac{1}{2}$ x9". Wt., 6 $\frac{1}{2}$  lbs.  
70 DX 498C. NET . . . . . 7.64

### NEW DELUXE WOOD WALL Baffles

Feature white birch veneer construction. Attractive plastic grilles. With hardware. Specify blond or walnut when ordering.

MODEL DWB-8A. For 8" speaker. 10 $\frac{1}{2}$ x9 $\frac{1}{2}$ x6 $\frac{1}{2}$ ". Wt., 3 lbs.  
70 DX 491C. NET . . . . . 5.88

MODEL DWB-12A. For 12" speaker. 14x13 $\frac{1}{4}$ x9". Wt., 5 lbs.  
70 DX 492C. NET . . . . . 8.23

### NEW LOW-COST WALL-MOUNTED Baffles

Economical wall baffles constructed of wood. Have attractive wood-grain pyroxylin covering; can be painted. With hardware. Specify blonde or walnut finish when ordering.

Stock No.	Model	Size	Spkr. Size	Lbs.	EACH
70 D 493C	WB 4/5C	6x6x4"	4-5"	1 $\frac{1}{2}$	2.74
70 D 499C	WB 6C	8 $\frac{1}{2}$ x7 $\frac{1}{2}$ x5"	6"	2	3.33
70 D 494C	WB 8C	10 $\frac{1}{2}$ x9 $\frac{1}{2}$ x6 $\frac{1}{2}$ "	8"	3	3.97
70 DX 495C	WB-10C	12 $\frac{1}{4}$ x10 $\frac{1}{2}$ x7 $\frac{3}{4}$ "	10"	4	4.70
70 DX 496C	WB-12C	14 $\frac{1}{4}$ x13 $\frac{1}{4}$ x9"	12"	5	5.44

### NEW STRAIGHT FRONT BASS REFLEX CORNER Baffles

**DELUXE SERIES.** Fully enclosed baffles for corner installations. With hardware. Specify blonde or walnut when ordering.

MODEL CB-8C. For 8" speaker. 14x12 $\frac{1}{2}$ x6 $\frac{1}{2}$ ". Wt., 4 $\frac{1}{2}$  lbs.  
70 DX 489C. NET . . . . . 7.26

MODEL CB-12C. For 12" speaker. 20x18x9". Wt., 9 lbs.  
70 DU 490C. NET . . . . . 10.29

**ECONOMY SERIES.** As above, but with open back. Available in choice of blonde or walnut—specify when ordering.

MODEL KB-8. For 8" speaker. 9 $\frac{3}{4}$ x10 $\frac{1}{2}$ x6 $\frac{1}{2}$ ". Wt., 3 $\frac{1}{2}$  lbs.  
70 DX 483C. NET . . . . . 4.85

MODEL KB-12. For 12" speaker. 14 $\frac{3}{4}$ x19 $\frac{1}{2}$ x10 $\frac{1}{4}$ ". Wt., 8 lbs.  
70 DU 484C. NET . . . . . 7.35

## Wall and Corner Baffles



FWB; LCWB



Easily  
Installed



FWCB;  
LCCB

## WELLCOR

## All-Purpose Baffles

Series  
APB



**FINISHED WOOD WALL Baffles.** For paging and music distribution use. Lock corner construction;  $\frac{1}{2}$ " plywood; matching grille cloth. With hardware. Type no. indicates speaker size. \*Mahogany. †Blonde.

Stock No.	Mfr's Type	Size, HWD	Wt. Lbs.	NET EACH
93 DX 750	FWB-8M*	11x9 $\frac{1}{2}$ x6 $\frac{1}{2}$ "	3 $\frac{3}{4}$	6.15
93 DX 776	FWB-8B†	11x9 $\frac{1}{2}$ x6 $\frac{1}{2}$ "	3 $\frac{3}{4}$	6.60
93 DX 751	FWB-12M*	16 $\frac{1}{2}$ x13 $\frac{1}{2}$ x9"	5 $\frac{1}{2}$	8.40
93 DX 777	FWB-12B†	16 $\frac{1}{2}$ x13 $\frac{1}{2}$ x9"	5 $\frac{1}{2}$	9.30

**LEATHERETTE-COVERED WALL Baffles.** As above, but covered with embossed, scuff-resistant pyroxylin coated leatherette fabric. With hardware. Type no. indicates speaker size. \*Mahogany. †Blonde.

Stock No.	Type	Size	Lbs.	NET
93 DX 778	LCWB-8M*	11x9 $\frac{1}{2}$ x6 $\frac{1}{2}$ "	3 $\frac{3}{4}$	4.08
93 DX 752	LCWB-8B†	11x9 $\frac{1}{2}$ x6 $\frac{1}{2}$ "	3 $\frac{3}{4}$	4.08
93 DX 779	LCWB-12M*	16 $\frac{1}{2}$ x13 $\frac{1}{2}$ x9"	5 $\frac{1}{2}$	5.61
93 DX 753	LCWB-12B†	16 $\frac{1}{2}$ x13 $\frac{1}{2}$ x9"	5 $\frac{1}{2}$	5.61

**FINISHED WOOD BASS REFLEX CORNER Baffles.** Have bass reflex ports; closed back and top. Tilt-down design, fiberglass padding. With hardware. Type number indicates speaker size. \*Mahogany. †Blonde.

Stock No.	Mfr's Type	Size, HWD	Wt., Lbs.	NET EACH
91 DX 800	FWCB-8M*	18x16x11"	7	11.70
91 DX 802	FWCB-8B†	18x16x11"	7	13.20
91 DU 801	FWCB-12M*	22x22 $\frac{1}{2}$ x16"	12	16.95
91 DU 803	FWCB-12B†	22x22 $\frac{1}{2}$ x16"	12	18.60

**LEATHERETTE-COVERED BASS REFLEX CORNER Baffles.** As above, but covered with embossed, scuff-resistant pyroxylin coated leatherette fabric. Type number indicates speaker size. \*Mahogany. †Blonde.

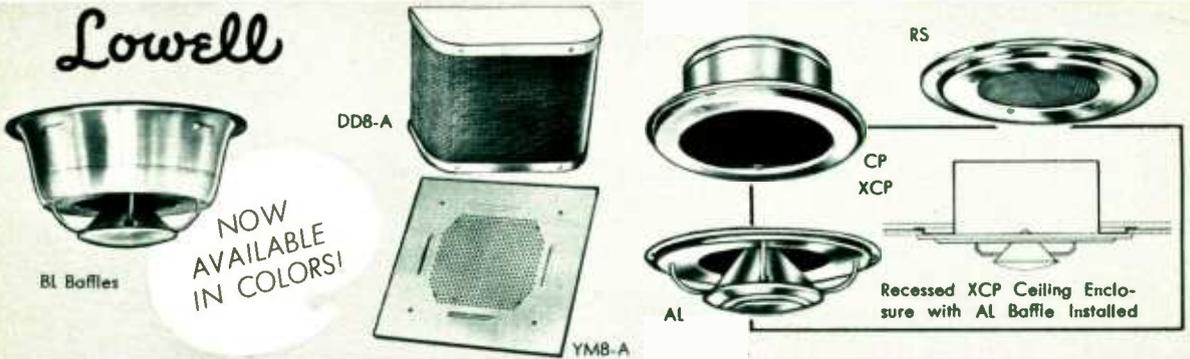
Stock No.	Type	Size	Lbs.	NET
91 DX 804	LCCB-8M*	18x16x11"	4	7.50
91 DX 806	LCCB-8B†	18x16x11"	4	7.50
91 DU 805	LCCB-12M*	22x22 $\frac{1}{2}$ x16"	9	10.50
91 DU 807	LCCB-12B†	22x22 $\frac{1}{2}$ x16"	9	10.50

Low cost, multi-purpose speaker baffles. Ideal for installation in walls or ceilings—perfect for use as economical wall baffles in budget sparring sound distribution systems. Feature **RIBBED**, all-wood lock-corner construction—provide excellent protection for your speaker when flush-mounted in walls or ceilings. Have acoustically tested, attractive grille cloth to harmonize with any decorative scheme. Available in two popular sizes to accommodate either 8" or 12" speakers. Easy to install. With hardware.

MODEL APB-8. Baffle for use with 8" speaker. 11 $\frac{1}{4}$ x13 $\frac{1}{4}$ x5 $\frac{1}{2}$ ". Shpg. wt., 2 lbs.  
70 DX 445. NET . . . . . 2.65

MODEL APB-12. Baffle for use with 12" speaker. 15 $\frac{3}{4}$ x15 $\frac{3}{4}$ x7 $\frac{3}{4}$ ". Shpg. wt., 2 lbs.  
70 DX 452. NET . . . . . 3.37

# SURFACE AND FLUSH-MOUNTED WALL AND CEILING BAFFLES



BL, AL, RS and DD baffles are available in smart anodized decorator colors—Gold, Copper, Pink, Blue and Black. When ordering, use the word "Special" in place of Stock No. and specify color. For BL baffles, add \$3.00 per unit; for RS, baffles add \$1.50 per unit; for AL and DD, add \$2.25 per unit.

### SURFACE-MOUNTING BAFFLES

**BL SERIES**—AVAILABLE IN HANDSOME COLORS. BL baffles are designed to enclose and conceal the speaker without the necessity for cutting holes in the ceiling. Constructed of spun aluminum, they're ideal for use in hotels, restaurants, department stores, lounges, wired music installations or any normal height ceiling area. Provide 360° sound coverage—quickly and easily installed flush to the ceiling with 4 toggle bolts. Housing has pressure-relief vents and is internally lined with 3/4" jute to eliminate resonance. Note colors above.

Stock No.	Type	Description	Lbs.	NET
95 DX 223	BL6-A	For 6" speakers. 6 1/2" x 12 1/4" dia.	3 3/4	7.64
95 DX 224	BL8-A	For 8" speakers. 7 1/2" x 14 1/4" dia.	4	12.94
95 DU 225	BL12-A	For 12" speakers. 9 1/2" x 18 3/4" dia.	6 1/2	15.88

**MODEL DD8-A CONTEMPORARY METALLIC WALL-TYPE BAFFLE.** An ultra-modernistic, aluminum wall baffle. Light in weight and easily installed, it's specially designed and highly recommended for use in new homes and apartments, offices with modern decorative motif, etc. (The DD8-A is also available in 5 smart, anodized decorator colors—gold, copper, pink, blue and black. See box, listed above.) Features a 3/8" expanded aluminum grille, over attractive, neutral plastic grille cloth backing. Interior of the baffle is completely lined with jute to prevent metallic resonance, and is steel-reinforced for added structural strength. Speaker adapter permits quick and easy speaker installation. For 8" speakers only. Includes mounting hardware and instructions. 9 1/2" x 13 1/4" x 5 1/4". Shpg. wt., 4 lbs.  
89 DX 970. NET 13.87

### FLUSH-MOUNTED SPEAKER BAFFLES

**MODEL YMB-A BAFFLE.** Low-priced ceiling baffle for use with any 8" speaker. Requires no adapter; speaker mounts directly on baffle. Has 3/8" flange to keep surface flush with ceiling—fits perfectly in space of single, standard-sized acoustic tile. Durable .040" aluminum construction. Handsome satin chrome finish. Size, 12x12x3 1/8". Less speaker. Shpg. wt., 1 lb.  
89 DX 977. NET 3.67

**CP & XCP SERIES FLUSH-MOUNTING BAFFLE ENCLOSURES.** For mounting AL and RS baffles, below. CP types for new construction; have steel can and plaster ring. All have sound deadening material. Shpg. wt.: CP6 and XCP6, 3 1/4 lbs. each; CP8 and XCP8, 4 1/4 lbs. each; CP1012 and XCP1012, 7 1/4 lbs. each.

Stock No.	Type	Description	NET
95 DX 235	CP6	For AL6A, RS6A. 7" I.D. x 4 1/2" x 1 1/4" O.D.	4.28
95 DX 236	CP8	For AL8A, RS8A. 8 1/2" I.D. x 4 1/2" x 1 3/8" O.D.	5.29
95 DX 237	CP1012	For AL12A, RS12A. 12 1/2" I.D. x 7" x 1 7/8" O.D.	7.25
95 DX 232	XCP6	For AL6A, RS6A. 7" dia. x 4" deep.	3.77
95 DX 233	XCP8	For AL8A, RS8A. 8 1/2" dia. x 4 1/4" deep.	4.73
95 DX 234	XCP1012	For AL12A, RS12A. 12 1/2" dia. x 7" deep.	6.39

**RS & AL WALL AND CEILING BAFFLES.** Aluminum with 1/2" mtg. flange. Have satin finish. RS types for recessed wall mounting; AL for recessed ceiling mounting. Both require baffle enclosures, above.

Stock No.	Type	Description	Lbs.	NET
95 DX 240	RS6-A	For 6" speakers. 10 1/4" x 7 1/8"	1	2.94
95 DX 238	RS8-A	For 8" speakers. 12 1/2" x 7 1/8"	1	3.26
95 DX 239	RS12-A	For 12" speakers. 16 1/2" x 7 1/8"	1 1/2	4.47
95 DX 226	AL6-A	For 6" speakers. 10 1/2" dia.	1 1/2	4.41
95 DX 227	AL8-A	For 8" speakers. 12 1/2" dia.	1 1/2	7.14
95 DX 228	AL12-A	For 12" speakers. 16 1/2" dia.	3 1/4	9.00



### FLUSH-MOUNTING BAFFLES

**MODEL 67-8 LOUVERED BAFFLE.** Similar to air diffusers in appearance. Welded construction; carefully checked for vibration and rattle. For 8" speakers only. O.D., 12". Hole size required in ceiling, 10 1/4". Use with 95-8 enclosure, at right. Shpg. wt., 1 1/2 lbs.  
89 DX 971. 5 to 19, EACH 4.29 1 to 4, EACH 4.77

**MODEL 68-8 LOW-CEILING BAFFLE.** Attractive modern styling. Features a brushed aluminum sound diffractor for elimination of beaming in low-ceiling installations. Satin brushed aluminum. For 8" speakers only. O.D., 12 1/4". Hole size required in ceiling, 8 1/2". Use with 95-8 enclosure, at right. Shpg. wt., 2 lbs.  
89 DX 972. 5 to 19, EACH 6.56 1 to 4, EACH 7.29

**SERIES 61 TRIM RING BAFFLES.** Highly polished, 20-gauge steel trim ring baffles. Offer attractive flush appearance when installed; will not buckle or "give" when bolts are driven in place. Less speaker. Hole size required in ceiling: 61-8, 8 1/2"; 61-12, 12 1/2".

Stock No.	Model	Speaker	Enclosure	O.D.	Lbs.	1-4, EA.	5-19, EA.
89 DX 973	61-8	8"	95-8	12 1/4"	1	3.11	2.80
89 DX 974	61-12	12"	95-12	17"	1	4.25	3.82



### SERIES 95 PROTECTIVE ENCLOSURES

For installation in existing ceilings, enclosures are mounted through 4 holes in flange. For new construction, 4 straps allow use in any thickness of plaster. Undercoated and jute lined. Less speaker.

Stock No.	Model	For Use With:	O.D.	Depth	Lbs.	1-4, EA.	5-19, EA.
89 DX 975	95-8	61-8, 67-8, 68-8	9 1/2"	4 1/4"	7	5.12	4.61
89 DX 976	95-12	61-12	14 1/4"	7"	8	7.38	6.64

### SERIES 210 SURFACE-MOUNTING BAFFLES

Excellent baffles featuring bass inverter action for clean, rich sound. Jute lined to prevent resonance. May be mounted by four toggle bolts or to 4" outlet box. Satin aluminum finish. Less speaker.

Stock No.	Model	Speaker	O.D.	Depth	Lbs.	1-4, EA.	5-19, EA.
93 DX 271	210-8	8"	14 1/4"	4 1/4"	4	12.94	11.65
93 DX 272	210-12	12"	18 1/4"	6 1/4"	7	15.88	14.29

### INDUSTRIAL USERS—SAVE ON LARGE ORDERS

You pocket big savings when you buy in quantities from 5 to 19—and you can get in an even greater savings if your requirements exceed this number. Write to Allied for special quotations on quantities of 20 or more.



### Weatherproof Speakers

**MODEL BLC.** Full-range, weatherproof coaxial speaker. Delivers excellent voice and music reproduction; high intelligibility; wide dispersion. For bandshells, stadiums, and other indoor or outdoor applications. Special woofer speaker cone is built into an infinite rear baffle chamber—provides clean, highly efficient bass response. Frequency response, 70-15,000 cps. 2000-cycle cross-over. Dispersion, 120°. Capacity, 25 watts. Imp., 8 ohms. 22½x9", 21 lbs.

95 DU 186. List, \$89.50. NET 52.63

**MODEL WLC.** Larger version of above. 50 to 15,000 cps. Dispersion, 90°. Capacity, 30 watts. Imp., 8 ohms. 33½x20", 72 lbs.

95 DZ 181. List, \$250.00. NET 147.00

**MODEL MLC.** Similar to BLC, above, but for medium power applications. 150-15,000 cps. Dispersion, 120°. Capacity, 15 watts. Imp., 8 ohms. 12¾x9¾x10¾", 10 lbs.

93 DX 378. List, \$57.50. NET 33.81

### NEW Underwater Speakers

- Perfect for Water Ballet Use
- Deliver Crisp, Clear Response
- Added Luxury for Your Guests
- Guaranteed for One Full Year

Excellent speakers for underwater use. Especially suited for background music and instructions in water ballets. Can also be used in experiments dealing with underwater transmission of sound and underwater paging. Distinctly reproduce voice, music, and special sound-effects. Frequency response: 350-10,000 cps. Power capacity, 25 watts. Dispersion, 150°. Guaranteed for one year. With 20" cable. Shpg. wt., 6½ lbs.

**MODEL MM2-FUW.** Has flange for flush mounting. O.D., 7¼"; Depth, 3¾".

70 D 426. List, \$67.50. NET 39.69

**MODEL MM2-UW.** Has bracket for pipe mounting. O.D., 6"; depth, 5".

70 D 427. List, \$67.50. NET 39.69

### NEW! SMOOTH VOICE AND MUSIC REPRODUCTION



### Model WT-6 P.A. Speaker

- For Indoor and Outdoor Use
- Features 2 Drivers; 2 Horns
- Wide Range Music Reproduction
- Has Built-in Crossover Network

Weatherproof speaker featuring two drivers and two horns. Response: 140-15,000 cps. Rated 15 watts. Dispersion, 120°. Cross-over, 1000 cps. Metal construction; beige finish, 8 ohms. Mouth, 15". Depth, 12". With "U" bracket. Shpg. wt., 14 lbs.

70 DX 428. List, \$57.50. NET 33.81

**MODEL SS-4 LOUDSPEAKER STAND.** Adjustable stand for use with speakers of medium size and weight. Extends to 6 ft. Chrome upright; gun metal base. Wt., 20 lbs.

70 DU 429. List, \$21.00. NET 12.35

### Quam Heavy-Duty P.A. Speakers

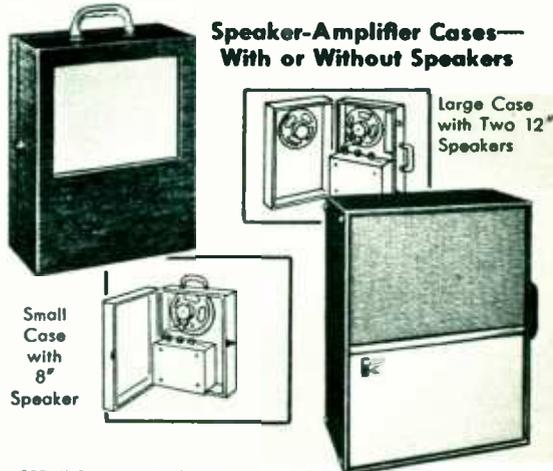


- Specially Designed for P.A. Applications
- Adjust-A-Cone Design For Maximum Dependability
- One-inch Voice Coils for Fine Electrical Performance
- Heavy-Gauge Steel Basket for Dependable Service

Quam heavy-duty permanent magnet speakers are specifically designed to deliver highly dependable service in general P.A. use. These speakers feature two exclusive engineering developments. One is the U-shaped field coil pot feature which provides an unbroken flux path of sufficient cross section to carry the full energy of the magnetic field. The second feature is Quam's Adjust-A-Cone suspension consisting of a clamping ring securely fastening the spider to the basket by means of two machine screws rather than cement, as in other speakers. This assures precision centering of the voice coil. Also use high-quality Amico V magnets. Pot material is selected for low carbon content and high magnetic properties. Basket in durable baked aluminum enamel. With bracket for mounting of matching transformer. \*Ring-type magnet structure instead of U-shaped pot. All have 8-ohm voice coils.

Stock No.	Mfr's Type	Size	Max. Watts	Magnet Wt., Oz.	Wt., Lbs.	NET EACH
81 D 061	8A21PA	8"	8	2.15	1½	4.82
81 D 062	8A31PA	8"	10	3.16	2½	5.41
81 D 335	8A4PA	8"	12	4.64	2¾	6.00
81 D 336	8A6PA	8"	12	6.8	3½	7.11
81 D 063	10A31PA	10"	12	3.16	2¾	6.32
81 D 394	10A4PA	10"	14	4.64	3½	6.88
81 D 395	10A6PA	10"	14	6.8	3½	8.00
81 D 064	12A10PA*	10"	20	10.0	3½	10.58
81 D X 065	12A31PA	12"	12	3.16	3¾	6.82
81 D X 337	12A4PA	12"	15	4.64	4	7.44
81 D X 338	12A6PA	12"	15	6.8	4½	8.53
81 D X 340	12A10PA*	12"	25	10.0	4¾	11.17

### Speaker-Amplifier Cases—With or Without Speakers



**P.A. SPEAKER-AMPLIFIER CARRYING CASES.** Rigidly-built combination speaker-amplifier cases. Expressly designed for Knight 8, 16 or 32-watt amplifiers. Interiors have cable windup brackets and pocket for mike. Durable fabric covering; contrasting grille.

**SMALL CASE.** For system using Knight 8-watt amplifier and one 8" speaker. Molded plastic handle for easy portability. Size (HWD): 16x12x5¼". Shpg. wt., 9 lbs.

93 DX 768. NET 11.95

**LARGE CASE.** For system using Knight 16 or 32-watt amplifier and two 12" speakers. (Clips for mike stand. Two-piece leather handle. HWD): 23¾x18½x11¾". Shpg. wt., 20 lbs.

93 DU 767. \$2.00 Down. NET 19.95

#### ABOVE CASE WITH SPEAKERS INSTALLED

**SMALL CASE WITH 8" SPEAKER.** Small case, above, with heavy-duty 8" speaker installed. 30' cable. Wt., 12 lbs.

20 SA 157. \$2.00 Down. NET 19.95

**LARGE CASE WITH 2-12" SPEAKERS.** Large case, above, with two 12" speakers installed. Speakers have screw terminals for easy connection. Shpg. wt., 29 lbs.

20 SA 158. \$2.00 Down. NET 38.50

# UNIVERSITY PUBLIC ADDRESS SPEAKERS



IB-A8  
MIL-A8



Highly Efficient Sound  
For Industrial  
P.A.—Paging



2WP



IBR



CIB  
CMIL

## MODEL IB-A8 GENERAL-PURPOSE SPEAKER

Compact, highly efficient, economy-priced reflex-type with built-in 15-watt driver unit. Offers maximum speech intelligibility in high noise areas—even be mounted on heavy machinery where sound source must be brought close to personnel. 90° dispersion angle. Frequency range, 300-13,000 cps. Input impedance, 8 ohms. 8½" bell diameter, 9" long. Supplied complete with mounting bracket. Shpg. wt., 4 lbs. *Only \$2.00 Down*  
70 DX 270. List, \$34.50. NET **20.29**

**MODEL MIL-A8 LOW-POWER SPEAKER.** Similar to IB-A8 above. For low power systems. Reflex-type 5-watt driver. Range 400-13,000 cps. Dispersion, 120°. Imp., 8 ohms. 7x6½" dia. Shpg. wt., 3¼ lb.—70, D 271. List, \$27.00. NET **15.88**

## 2WP 2-WAY CORRIDOR SPEAKER

Dual horns, 180° opposed for economical coverage of two oppositely located areas. Excellent for use in school or hospital corridors, rail road stations, loading ramps, etc. Use with single MA-25, SA-1HF, SA-30 or PA-1HF driver. Dispersion, 120° each horn. Power and impedance ratings depend on type of driver used. With adjustable bracket, 20½x8" dia. Shpg. wt., 4 lbs.  
81 DX 860. List, \$28.00. NET **16.46**

## MODEL CIB WIDE-ANGLE SPEAKER

Perfect for paging, announcing, etc. Has reinforced fiberglass bell. Capacity, 15 watts, 300 to 13,000 cps. Horizontal dispersion, 120° vertical, 60°. Imp., 8 ohms. 7½x14x12". With mtg. bracket. Shpg. wt., 5½ lbs. *Only \$2.00 Down*  
95 DX 199. List, \$42.00. NET **24.70**

**MODEL CMIL.** As above, but 5-watt capacity; 400 to 13,000 cps. Size 6½x9½x8¾". Shpg. wt., 4 lb.—95 D 149. List, \$29.75. NET **17.50**

## MODEL IBR RADIAL HORN

Exceptionally compact P.A. speaker with built-in driver for installations requiring a minimum number of speakers. Delivers uniform 360° sound dispersion in areas where speakers can be suspended from ceiling. 15 watts, 300-10,000 cps, 8 ohms, 10½x13" diameter. With ceiling ring. Shpg. wt., 5¼ lbs. *Only \$2.00 Down*  
81 DX 576. List, \$46.50. NET **27.34**

## Heavy-Duty Trumpets for Larger Area Coverage



Directional



Wide-Angle  
Reflex



Wide-Angle



Radial

**DIRECTIONAL TRUMPETS.** Model GH has 85-cps cutoff for music. Models LH and PH have higher cutoff for general use. Model SMH for voice only. With "U" mtg. bracket, less driver.

Stock No.	Type	Dia.	Length	Low Cutoff	Lbs.	List	EACH
95 DZ 158	G11	30¾"	27¾"	85 cps	22	\$72.00	42.34
95 DZ 155	L11	25½"	19"	120 cps	16½	44.50	26.17
95 DZ 156	PH	20¼"	15¼"	150 cps	11¼	32.50	19.11
95 DX 157	SMH	16½"	12"	200 cps	8	27.50	16.17

**COBREFLEX-2 WIDE-ANGLE REFLEX TRUMPET.** Provides 120° horizontal sound pattern. 200-cps cutoff. For voice only. With swivel-joint bracket, 9¼x18½x10¼". Less driver, 10¼ lbs.  
95 DX 184. List, \$38.33. NET **22.54**

**MODEL CLH WIDE-ANGLE TRUMPET.** Features 4½-ft. air column. 120-cps cutoff. 21¼x11¼x20¼" dia. Less driver, 15 lbs.  
93 DU 376. List, \$46.50. NET **27.34**

**MODEL RPH RADIAL TRUMPET.** For ceiling use; 360° coverage. 140 cps cutoff. 4-ft. air column. 25¾" dia. Less driver, 19 lb.—95 DZ 162. List, \$47.00. NET **27.64**

**MODEL RLH.** As above, but with 5 ft. air column, 25 lbs.—95 DZ 042. List, \$59.00. NET **34.69**

## USEFUL ACCESSORIES

**CTR TRANSFORMER HOUSING.** For transformers 2¼x2¼x2¼" max., and mtg. ctrs. 1½ to 2¼". Weatherproof aluminum. 2 lbs.—93 D 379. List, \$8.00. NET **4.70**

**PB-1 TRANSFORMER HOUSING.** For transformers with 2" mtg. ctrs., not over 1½x1½x1½". Size, 3¼" high, 2½" dia. 1 lb.—93 D 385. List, \$3.75. NET **2.20**

**PMA PIPE ADAPTER.** For mounting trumpets on ½" pipes. ¾ lb.—95 D 160. List, \$2.00. NET **1.18**

**2YC "Y" CONNECTOR.** Connects 2 drivers to one trumpet. 1 lb.—95 D 159. List, \$12.00. NET **7.06**

## Drivers For Heavy-Duty Trumpets



Wide-range response, breakdown-proof drivers for any trumpet listed above. All are PM type, hermetically sealed to assure the ultimate in efficiency. These drivers provide that extra punch needed to cut through heavy noise; give clearer, more intelligible

P.A. Use either indoors or out, in any climate, under any environmental conditions—SA-30 and PA-50 have built-in multi-impedance line transformers with power taps. All have 16 ohm voice coil impedance. \*In brackets wattage of taps for 70.7 v. systems.

Stock No.	Type	Range, Cps	Pri. Ohms	*Watt Taps	Watts	Lbs.	List	NET EACH
81 D 573	MA-25	85-6500		25	3¼		\$28.50	16.76
81 D 571	SA-1HF	80-10,000		30	4½		36.00	21.17
81 D 079	PA-1HF	70-10,000		50	5¼		47.50	27.93
93 D 377	PA-50	70-10,000	16, 100, 165, 250, 50, 30, 20, 10, 5, 2.5	50	6¼		57.50	33.81
81 D 582	SA-30	80-10,000	45, 165, 250, 500, 30, 20, 10, 1K, 2K	30	5¼		47.50	27.93

# ELECTRO-VOICE PUBLIC ADDRESS SPEAKERS



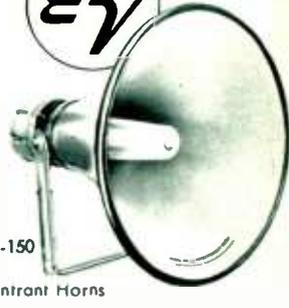
FC-100



AC-100



FR-150



AR-150  
Re-entrant Horns

## Compound Horns

Dual horn assemblies offering the widest frequency response with the least distortion. Really two horns in one—a large horn for broad bass response encloses a small specialized unit for the high frequencies. Recommended for music as well as speech reproduction.

- FC100 RECTANGULAR HORN.** Two diffraction horns. 100 cps cutoff. 90x120° dispersion. 10½x20½". Tan fiberglass. 12¼ lbs.  
70 DU 437. List. \$47.50. \$2.00 Down. NET **27.93**
- 848 CDP PROJECTOR.** Consists of FC100 above and DC30A driver listed below. Response 150 to 10,000 cps. Capacity, 30 watts. Impedance, 16 ohms. Mesa Tan, weatherproof fiberglass. 17 lbs.  
81 DU 490. List. \$75.00. \$2.00 Down. NET **44.10**
- AC100 ROUND HORN.** Low frequency dispersion, 80°, high, 30°. Crossover at 1,000 cps. 21" diameter, 16" depth, 13½ lbs.  
70 DU 438. List. \$44.50. \$2.00 Down. NET **26.17**

## Re-entrant Horns

Popularly-priced horns that effectively reproduce the low frequencies. Employ single horn for best response throughout the voice range. Precision die-cast re-entrant tubes. Select round horns for deep, narrow angle penetration, rectangular for wide angle needs.

- FR150 RECTANGULAR HORN.** Wide angle horn for broad coverage at low cost. Mounts on walls, ceilings, cat tops, etc. Adjustable mounting angle. Low frequency cutoff, 150 cps. 70x100° distribution. Fiberglass construction. 10½x20½". 21" deep. 12 lbs.  
70 DU 439. List. \$37.00. \$2.00 Down. NET **21.76**
- AR150 ROUND HORN.** Provides deep penetration within a narrow angle. Exponential design gives smoother response curve, natural voice quality. Cutoff at 150 cps. Distribution, 85°. Diameter, 21", depth, 17". Accepts standard driver with 1½-18 thread. 8 lbs.  
70 DU 440. List. \$31.00. NET **18.23**

## Convertible Drivers for Above Units

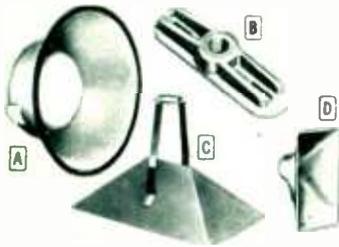
High efficiency drivers that can be used interchangeably in both compound and re-entrant horns. Double power Indox ice-ramet magnets used in low loss magnetic circuits. Edge wound ribbon voice coils

for 18% additional energy from the amplifier than conventional designs. T in Type No. indicates with transformer. All have 16 ohm voice coil impedance. \*Indicates watt age of taps for use in 70.7 volt systems.

Stock No.	Type	Range, Cps	Pri. Ohms	*Watt Taps	Watts	Lbs.	List	NET
70 D 441	DC30A	150-10,000		30	4¼	30	\$27.50	16.17
70 D 442	DC30T	150-10,000	167, 333, 1K, 2K	30, 15, 5, 2.5	30	5¾	37.00	21.76
70 D 443	DC40	140-11,000		40	6¾	40	36.00	21.17
70 D 444	DC40T	140-11,000	125, 250, 500, 1K	40, 20, 10, 5	40	8¾	46.50	27.34
70 D 430	DC50	110-11,000		50	8	50	47.00	27.64
70 D 431	DC50T	110-11,000	100, 143, 200, 500	50, 35, 25, 10	50	9¼	57.50	33.81



## EV Accessories



- A HC1000 CONCENTRATING HORN.** Converts FC100 above to concentrated (30°) coverage above 1000 cps. 4 lbs.  
82 D 923. List. \$10.00. NET **5.88**
- B AP-1 PIPE STAND ADAPTER.** Adapts FC100 to ½" pipe. 1 lb.  
70 D 433. List. \$2.00. NET **1.18**
- C RA-1 RADIAL ADAPTER.** Adapts FC100 or 848 to "radial" applications. 1 lb.  
70 D 434. List. \$5.00. NET **2.94**
- D HD1000 DIFFRACTION HORN.** Converts AC100 to wide angle coverage (60x120°) above 1000 cps. 1½ lbs.  
70 D 432. List. \$6.00. NET **3.53**
- 879 JOINING KIT.** Joins Model 848 projectors in multiple arrays. One kit required for each additional projector. 1 lb.  
81 D 495. List. \$2.75. NET **1.62**
- RE-35 TWEETER.** Mounts in FC100 or 848 CDP above. Response, 3500-18,000 cps. 16 ohms. Shpg. wt., 1½ lbs.  
82 D 924. List. \$40.00. NET **23.52**

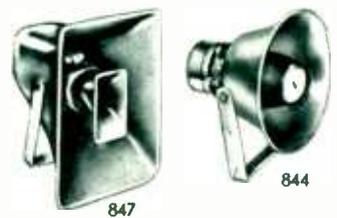
## Outdoor Musicaster



Enjoy  
Hi Fi  
Outdoors

- Unique one-piece, weatherproof speaker system. Employs a die-cast aluminum, back loaded folded horn as an integral part of its structure—extends bass response to 60 cps. Compact and lightweight, the "Musicaster" provides remarkably clean and highly realistic reproduction of voice and music. An excellent choice for the home, too. Set up in patio or garden for warm weather outdoor hi fi. Die-cast feet allow placement on any flat surface during portable use. Response, 60 to 13,000 cps. Impedance, 8 ohms. Dispersion, 120°. Capacity, 30 watts. HWD, 21½x21½x8½". 34 lbs.  
82 DU 922. List. \$80.00. NET **47.04**
- MUSICASTER II.** Same fine unit as above plus VHF tweeter. Smooth response from 60 to 18,000 cps. With crossover, 36 lbs.  
70 DU 435. List. \$115.00. NET **67.62**
- MODEL MB-1 MOUNTING BRACKET.** Allows mounting of "Musicaster" flat against wall for neat, unobtrusive installation. Replaces standard "T" bracket. 1 lb.  
70 D 436. List. \$4.50. NET **2.65**

## Paging Units



847

844

- MODEL 844 COMPLETE PAGING UNIT.** General-purpose speaker system at an economical price. Consists of a die-cast re-entrant horn, detachable 30 watt driver and universal mounting bracket. Ideal for mounting on police and fire vehicles, etc., as well as for use in paging systems. Tropicalized and weatherproofed. Response, 250 to 13,000 cps. Capacity, 30 watts. Impedance, 8 ohms. Dispersion, 90°. Dia., 9¾". 8¾" deep. 8½ lbs. \$2.00 Down  
82 DX 921. List. \$34.50. NET **20.28**
- MODEL 847 CDP 25-WATT PROJECTOR.** Smaller version of 848 above. Has two coaxially mounted diffraction horns for 120° distribution at all frequencies from 250 to 13,000 cps. Capacity, 25 watts. Impedance, 16 ohms. 1500 cps crossover. Finished in Mesa Tan. Size, 11¼x7¼" mouth; 10½" deep. Shpg. wt., 10 lbs. \$2.00 Down  
81 DX 851. List. \$46.33. NET **27.24**
- For superior fidelity in your P. A. installation, see Electro-Voice Wolverine Speakers in the Hi-Fi section of this Catalog.

# WHEELER SOUND-POWERED TELEPHONES & SYSTEMS



Mining



Construction



Disaster Areas

Sound-powered telephones for dependable outdoor use, or maintenance-free operation in plant or home—ideal for use where AC power is not available. Voice generates current for transmission—batteries are not required, even for the bell. Provide undistorted communication to 20 miles.

## INDIVIDUAL HANDSETS AND HOLDERS

**A** SPT-102 HANDSET. Self-contained sound-powered handset. Up to 12 of these can be connected in parallel. Supplied with 3 ft. neoprene cord and insulated clips. Less interconnecting cable (below)—uses 2-cond., twisted pair type. Shpg. wt. 1½ lbs.  
59 R 350. List. \$13.75. NET EACH ..... 11.69

**A** SPT-123 HI-LEVEL HANDSET. As above, but has special mouthpiece for use in high noise-level areas. Has a 4-ft. retracting cord. Supplied less clips.  
59 R 360. List. \$15.40. NET ..... 13.09

SPT-150. Same as SPT-123 above, but with insulated clips.  
59 R 361. List. \$16.00. NET ..... 13.60

**B** F-5308 HANDSET HOLDER. Wall-mount handset holder with switch hook and terminal board designed for the above handsets. For use in installations where separate ringing systems are to be used. 2½x5½x3" 1½ lbs.  
59 R 355. List. \$14.00. NET ..... 10.50

F-4182 HANDSET HOLDER WITH BELL. Same as F-5308 above, but includes bell. Up to 3 can be used in a common ringing system. 1½ lbs.  
59 R 356. List. \$19.48. NET EACH ..... 14.61

B-5446 HANDSET HOOK. Not illus. Fastens to wall or side of desk. 3 oz.  
59 R 420. List. \$1.50. NET ..... 1.13

## RECOMMENDED PHONE CABLES

Ideal cable for both indoor and outdoor use with Wheeler telephones.

Stock No	Cond.	Lbs., 100'	PER FT.	PER 100'
48 W 826	2	3	4c	3.38
48 W 825	3	4	5½c	5.08
48 W 892	6	3½	5c	3.82
48 W 893	12	6	7c	5.88

## MULTIPLE INSTALLATIONS

**C** ALL-MASTER SYSTEM. Consists of up to 12 SPS-205-MI masters. Any can ring and communicate with any other master, or up to 6 can be used in conference. *Cable requirements* (cable listed at left, below): measure from 1st station to 2nd, 2nd to 3rd, etc.; conductors equal to number of stations plus 2.

**C** MASTER-SUB SYSTEM. Consists of 1 SPS-205-MI master and up to 11 SPS-205-SI subs. Master can ring and communicate with any sub; subs can ring and communicate with master directly and reach other subs by having master ring desired sub. Up to 6 stations can be used on conference basis. *Cable:* 3 more conductors than number of subs; measure from 1st station to 2nd, 2nd to 3rd, etc.

Shpg. wt., each station. 5 lbs.

Stock No.	Mfr's Type	List	NET
59 R 353	SPS-205-MI (Master)	61.60	46.20
59 R 354	SPS-205-SI (Sub)	52.25	39.19

## 2- & 3-PHONE SYSTEMS

**D** Basic intercom systems consisting of either 2 or 3 phones on a common (code) ringing, common-talking circuit. The 3-phone system is limited to short distances (500 ft.), while the 2-phone system can be used up to 20 miles. Use 2-conductor cable listed at left, below; measure from phone 1 to 2, and from 2 to 3.

SPS-205, 2-phone system. 7 lbs.  
59 R 351. List. \$73.15. NET ..... 54.86

SPS-205-3, 3-phone system. 10 lbs.  
59 RX 352. List. \$109.72. NET ..... 82.29

SPS-205-H. Same as SPS-205, but provides higher voice transmission level and reduction of interference in areas with high background noise levels.  
59 R 362. List. \$86.00. NET ..... 64.50

# BATTERY-POWERED PORTABLE P.A. SYSTEMS

Compact, portable P.A. units designed for speaking to large or scattered groups—ideal for stadium ushers, coaches, tour guides, crew foremen, police and fire captains.

## HOLMIN "VOICE GUN"

Easily-held, compact Holmin "Voice Gun" employs powerful 3-transistor amplifier and 8 standard penlight batteries to provide amazingly loud and clear voice "throw." No warm-up is necessary—thermistor allows instant indoor or outdoor use in temperatures from -20° F to 120° F. Batteries fit into clip inside handle. Entire unit, with batteries, weighs only 3¼ lbs.! Spun aluminum horn and housing; red plastic handle. Supplied complete with batteries. Shpg. wt. 5¼ lbs.  
93 SX 004. List. \$119.95. NET 89.96

## UNIVERSITY "POWRPAGE"

MODEL PP-2. Lightweight, battery-powered P.A. system—has range of up to ¼ mile. Weighs only 3½ lbs. with batteries (not included, see below). Batteries fit into handle—employs 6 penlight type. Push-to-talk switch. Has jack to permit use with external 6-volt or 12-volt DC source, such as truck or car battery. Horn is 8" in diameter. Shpg. wt., 5¼ lbs.  
93 SX 780. NET ..... 44.10  
PENLIGHT BATTERY FOR ABOVE. 6 required. Shpg. wt., each. 2 oz.  
53 J 031. NET EACH ..... 9c

## RADIONIC "ULTRASONIC"

MODEL 2400. Heavy-duty, self-contained portable P.A. system. Easily transmits ¼ mile. Instant operation. Av. battery life, 6-12 months. With case, speaker, mike, 8-ft. coiled cord and plug, 4 6-volt batteries. Has carryme handle and adjustable shoulder strap.

Weather and rust-proof steel case; gray hammerhead finish. Case, 10½x6x¼". Shpg. wt., 15 lbs.  
93 SX 886. List. \$99.50. NET 66.33  
REPLACEMENT BATTERIES, 1½ lb. each.  
53 J 011. NET EACH ..... 1.14



## LOW-COST INTERCOM SYSTEMS



**knight-kit**

Easy Assembly—Top Savings

### knight-kit 2-Way Intercom Kit

ONLY  
**\$14.95**

- Economical—and Anyone Can Build It
- Excellent Clarity—High Sensitivity
- Handsome Two-Tone Metal Cabinets

Complete 2-station intercom kit, consisting of Master and Remote, at remarkably low cost. Hundreds of uses in home, office, and shop. Saves steps between house and garage, or to back yard or basement. Can be placed in a baby's room—picks up the slightest sound.

Master unit has a "press-to-talk" switch; Remote unit has a "talk-listen" switch. Switch on Remote can be left in "talk" position to permit continuous listening-in. Master can communicate with Remote regardless of position of switch on Remote unit and can handle up to three Remote units in parallel. Extra Remotes can communicate with one another. Master has combination volume control and on-off switch, and pilot light. Only Master needs power connection; Remotes can be located anywhere. Kit has high-gain, 2-stage amplifier and 4" PM speakers. Audio amplifier uses 2-tube circuit plus a 35W4 rectifier.

Cabinets are attractively finished in ivory and brown. Kit includes all parts necessary to build a Master and a Remote; tubes, 50-ft. cable, solder and instructions. Each unit, 4 1/4 x 6 1/2 x 4 3/4". For 110-125 v., 50-60 cycle AC, or DC. Shpg. wt., 8 lbs.

83 Y 297. ONLY **14.95**

EXTRA REMOTE STATION KIT. Less cable. Wt., 3 lbs. **3.95**

83 Y 298. NET. **3.95**

EXTRA CABLE. Shpg. wt., 100 ft., 2 1/2 lbs. **3C**

49 Y 604. NET PER FOOT. **3C**

## Challenger

CHM6, CHM12

CHR



- Low Cost
- Streamlined Styling
- Printed Circuitry
- Compact Design

### CHALLENGER "FUTURA" INTERCOM

**ALL-MASTER SYSTEM.** A top value intercom system using up to 6 CHM6 or up to 12 CHM12 Masters. Any master can call any other, and, in a CHM6 system, all simultaneously. Masters have volume control, press-to-talk button and selector switch that includes "mute" position, 2 tubes, 1 selenium rectifier; printed circuitry. Size, 5 1/4 x 10 1/2 x 4 3/4". Less cable (see below)—use cable with one more conductor than the number of stations; measure from station 1 to 2, 2 to 3, etc. For 110-120 v., 50-60 cycle AC, or DC.

**MASTER-REMOTE SYSTEM.** Consists of one CHM6 Master and up to 5 CHR Remotes, or one CHM12 Master and up to 11 Remotes. (Masters are described above.) Master can call any Remote, and in a CHM6 system, all simultaneously. Remotes have press-to-talk bar, but can also be used for non-private operation (controlled by jumper). "Mute" position on Master silences background noise from Remotes. Remotes can still originate calls to Master. Size of Remotes, 3 1/2 x 5 3/8 x 3 3/8". Less cable (see below)—use 3-cond. cable between Master and each Remote.

92 R 694. CHM6 Master. Shpg. wt., 5 lbs. List, \$45.95. NET 27.57

92 R 696. CHR Remote. Shpg. wt., 1 1/2 lbs. List, \$12.95. NET 7.77

92 R 695. CHM12 Master. Shpg. wt., 5 lbs. List, \$49.95. NET 29.97

47W 686. 1203S. 3-Cond. Cable (100'). 2 lbs. NET 4.95

47W 687. 1207S. 7-Cond. Cable (100'). 4 1/2 lbs. NET 10.20

47W 688. 1220S. 2-Cond. Cable (100'). 8 lbs. NET 21.00

## BOGEN TELEPHONE SYSTEMS AND P.A. ADAPTER

### SERIES TQ TELEPHONES

Deluxe Bogen telephone units for versatile, efficient systems in plant, home or office. Keeps your outside telephone free for calls, provides time-saving, private replies. Phones have selective ringing with a common talk line—permits conference calls, but only one conversation at a time. To make a call, simply lift receiver and press buttons to ring stations to which you wish to speak. Phone system is powered by a single PRS-1 supply (right). TRA Phone-Page adapter listed below permits paging through your P.A. system from any phone.

Phones may be used on desk, or can be wall mounted. Handsets have 4-ft. retractile cord. Supplied less cable and power supply (see listings below). Num-

ber of conductors in cable between phones is 3 more than number of phones in system—measure from station 1 to 2, 2 to 3, etc. Size, 9 1/2 x 3 1/4 x 3 1/4".

**TQ-6 PHONE.** For use in systems of up to 7 stations. Wt., 5 lbs.

92 R 643. List, \$27.95. NET 20.95

**TQ-12 PHONE.** For use in systems of up to 13 stations. Wt., 5 lbs.

92 R 644. List, \$29.95. NET 22.45

**TQ-1 PHONES.** Pair of phones for a 2-station installation. Wt., 9 lbs.

92 R 642. List, \$49.95. PER PAIR 37.45

**PRS-1 SUPPLY.** For Bogen phone systems—use one to a system, 4x6x1 1/2". For 110-120 v., 60 cycle AC, 4 lbs.

93 R 259. List, \$30.00. NET 22.50

### MODEL TRA PHONE-PAGE ADAPTER

Adapts Bogen phone systems for convenient, push-button paging through your P.A. system. Easily connected between phone system and P.A. system (use 3-cond. cable listed below between adapter and phone system). To page, merely press station button reserved for page. Music program equipment can be

connected to TRA adapter to feed into P.A. system—music automatically stops during paging. Volume control permits different levels for paging and music. Powered by PRS-1 power supply (listed above) in phone system. Size (HWD), 4x4x2". Shpg. wt., 3 lbs.

93 R 221. List, \$40.00. NET 24.00

### RECOMMENDED POWER AND PHONE CABLE

Cable for use in Bogen phone systems described above. 3-conductor cable is for connecting power supply to system (connected at any junction box in the

system). Cable listed for between-phone use (vinyl-covered) gives optimum operation over distances to 500 feet between power supply and the farthest phone.

Stock No.	Use With	Cond.	Lbs. per 100'	PER FT.	PER 100'
48 W 825	PRS-1 supply	3	4	5 1/2c	5.08
48 W 892	TQ-1 system	6	6	5c	3.82
48 W 893	TQ-6 system	12	6	7c	5.88
48 W 894	TQ-12 system	18	6 1/2	9 1/2c	7.94

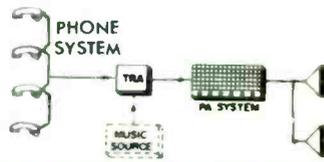


Model TQ-6

### PAGE FROM ANY PHONE WITH THE TRA ADAPTER



FEEDS MESSAGES, MUSIC INTO P.A.





**NEW!**

# TALK-A-PHONE "CHIEF" TRANSISTORIZED ALL-PURPOSE INTERCOM SYSTEMS



T.C.-4912 Master



T.C.-42 Staff

## MAXIMUM CONVENIENCE AND UTILITY

- Charcoal Gray—Satin Chrome Sides
- Busy Signal—Priority Break-In
- Operation of External Devices
- Staff Stations Can Originate Calls
- Light and Chime Call Signals
- Extra-Power Units Available

### "Chief" All-Transistor Master Stations

Deluxe, all-transistor universal Master stations—feature maximum convenience, top versatility and superb styling. Can be used in either all-Master or Master(s)-Staff(s) systems. Systems can be made having a capacity of 6, 12, 20, or 30 stations (40, 50 and 60-station Masters with only 14 pushbuttons, are available—write for prices). Masters can talk with Staffs and other Masters; Staffs can talk to Masters, but not to other Staffs. Pushbutton selector on Masters permits conference calls with any number of stations. Masters can be set for private or non-private operation.

Built-in signal indicates whether a selected line is busy—executive priority calls can override a busy line. Masters have two incoming call signals—a light and a chime. Includes pushbutton selector, push-to-talk bar, dictation control, and volume control. Masters with cradle phones available—write for prices.

Stations may be placed several thousand feet apart. Relays to operate devices such as sirens or lights can be put in a system—each relay takes the place of a station, any Master can operate relays. Each Master has junction box with power supply, 6-ft. cable. Steel cases finished in leather-texture gray vinyl. 3 1/4 x 14 x 8 3/4". For 110-120 v., 50-60 cycle AC (up to 30% of Masters in a system can be operated without external power).

Stock No.	Type	Capacity	Lbs.	List	NET
92 RX 680	T-C-4906	6 stations	13	\$136.00	79.50
92 RX 681	T-C-4912	12 stations	14	154.00	89.80
92 RX 682	T-C-4920	20 stations	14	184.00	107.40
92 RX 683	T-C-4930	30 stations	16	214.00	125.00

### "Chief" Staff Stations

Staff stations for use in mixed systems with Masters listed at left. Staffs can originate calls to the 1 or 2 Masters to which they are connected, and can answer any Master in the system, whether connected to it or not. Any Staff can speak to a Master it has called, or any Master that has called it, but cannot speak to other Staffs. Can be set for either private or non-private operation—in private operation the Staff must press Talk-Listen switch in order to be heard by calling Master; in non-private operation, the Staff can answer calls from a distance without using any controls. Any Staff can be private with respect to one or more Masters and non-private to the other Masters in the system.

Staffs have a light to signal that another station is calling. Built-in busy signal indicates whether a selected Master is busy. Staffs require no connection to an electrical outlet and consume no power. High-power stations to provide greater volume for noisy areas are listed at left, below.

Units with the letter "M" in the type number have a painted gray finish; others have leather-texture gray vinyl finish. Metal case size, 3 1/4 x 7 1/2 x 8 3/4".

Stock No.	Mfr's Type	No. Masters To Which Staff Can Originate Calls	Wt. Lbs.	List	NET EACH
92 RX 688	T-C-41	one	5	\$36.50	21.50
92 RX 689	T-C-41M	one	3	29.95	17.50
92 RX 690	T-C-42	two	5	45.00	26.50
92 RX 691	T-C-42M	two	3	38.50	22.50

### "Chief" Extra-Power Master Stations

Use "Redi-Power" Masters in any "Chief" system where extra power is needed for many stations or for overcoming noise. Ideal for use in warehouses, light assembly plants, docks, outdoor areas. Return speech from called stations is received at normal

volume. Built-in amplifier provides 20 watts which may be divided among stations, or concentrated on one station—the extra power is available at flick of a switch. High-power paging units below. Features same finish as Masters above. For 110-120 v., 50-60 cycle AC.

Stock No.	Mfr's Type	Capacity	Shpg. Wt.	List	NET EACH
92 RU 685	T-CRP-5912	12 Stations	17	\$235.00	138.00
92 RU 686	T-CRP-5920	20 Stations	17	265.00	155.00

### High-Power Stations and Origination Switches

HIGH-POWER STATIONS. Can answer Master, and with origination switches listed below, can originate calls. Use with any "Chief" system.

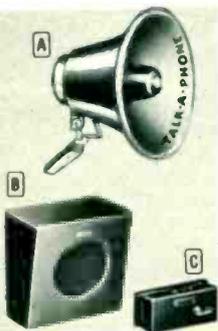
**A** T-C-20 TRUMPET TYPE. 9", weatherproof re-entrant horn. Power-handling capacity, 15 watts. Trumpet is finished in charcoal gray. Shpg. wt., 5 lbs. \$2.00 Down. 26.50  
92 RX 679. List, \$44.95. NET

**B** T-HP-3 INDOOR TYPE. 8" speaker in charcoal-gray metal baffle. Power-handling capacity, 5 watts. Baffle size, 12x12x8". Shpg. wt., 9 lbs.  
92 RX 678. List, \$28.00. NET 16.50

**C** ORIGINATION SWITCHES. Make T-C-20 or T-HP-3 operationally equivalent to T-C-41 or T-C-42. With incoming call and busy lights. Shpg. wt., 2 lbs.

TYPE T-S-101. Calls 1 Master.  
92 R 692. List, \$11.95. NET 6.95

TYPE T-S-102. Calls 2 Masters.  
92 R 693. List, \$19.95. NET 11.70



### CABLE FOR CHIEF SYSTEMS

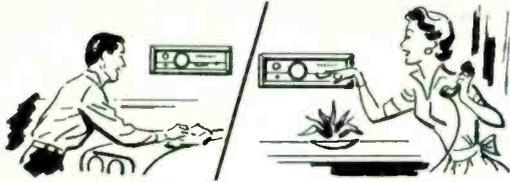
For connecting Master to Master, in either an all-Master or a Master(s)-Staff(s) "Chief" system, measure from the first Master to the second Master only, from the second Master to the third Master only, etc.; then add all of the measurements together. Order this total length of 6214 cable if your system is using 6-station Masters, 6226 if system is using 12-station Masters. If your system uses 20-station Masters, use 6226 cable, but double the total measured length (two equal lengths of cable run parallel to each other between Masters). Similarly if your system uses 30-station Masters, but triple the total length.

Use a single length of Type 6206 cable for connecting T-C-41, T-C-41M, T-C-42, T-C-42M Staffs to the Master(s) to which they are to originate calls (Staffs are not connected to each other, or to any other Master). Just as in connection of Staffs, connect high-power stations to each Master to which they are to originate calls with Type 6206 cable—if the origination feature is being used. If high-power units are not being used to originate calls, merely connect each one to the nearest Master with a single length of Type 6902 cable.

TALK-A-PHONE INTERCOM CABLE. For indoor or outdoor use. Last two digits in Type no. give number of conductors.

No.	Type	Lbs./100'	PER FT.
49 W 616	6214	5	14¢
49 W 615	6226	9	28¢
49 W 622	6206	2 1/2	8 1/2¢
49 W 613	6902	2	2¢

# THE TALK-A-PHONE ALL-TRANSISTOR COMPLETE HOME INTERCOM AND MUSIC SYSTEM



Step-Saving and Time Saving



HI-9R with HI-SM

## System Outline—Central Master and Staff Units

Up to 8 stations can be accommodated in the deluxe Talk-A-Phone all-transistor home radio-intercom system. Each system must include a Central Master unit and either a 4F6H1 battery or an HI-PS AC power supply. Besides the Central Master, the other stations in the system can be any combination of Staff units and Indoor and Outdoor Sub units.

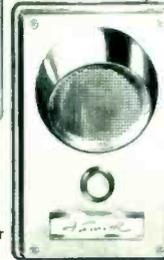
Staffs, and Central Master(s), can originate calls to and converse with any other station. Subs can converse with any other station except another Sub, but cannot originate calls. All station units other than Outdoor Subs can be switched for either private or non-private operation. Set for private operation, a station must depress switch in order to be heard by other stations. In non-private operation, a station can be listened to without its operating any controls—a valuable feature for nursery or sick-room. Outdoor Subs, for use at doors, are always non-private. If an HI-9R Central Master is used, any station except an Outdoor Sub can listen to AM radio programs by flicking a switch.

Front panels in gold and satin-silver. Flush mounting. Central Master, Staff supplied with approx. 4 3/4 x 14 1/4 x 3 1/2" plaster rings. U.I. Approved.

HI-9 CENTRAL MASTER. 3 audio stages; p-p output. 7 lbs.	
93 RX 241. List. \$99.50. \$5.00 Down. NET.	58.00
HI-9R CENTRAL MASTER. As above, but with radio. 8 lbs.	
93 RX 242. List. \$154.00. \$5.00 Down. NET.	89.50
93 RX 244. HI-8 Staff. 7 lbs. List. \$54.00. \$2.00 Down. NET.	31.50



HI-2 Indoor Sub



HI-1 Outdoor Sub



CHOSEN FOR EXHIBITION AT THE U. S. PAVILION, BRUSSELS WORLD'S FAIR

## Sub-Stations, System Accessories and Cable

Outdoor Sub has illuminated name-plate and pushbutton for connection to doorbell system. Subs do not require plaster ring for mounting—mount in 2" square x 2" deep wall opening. Housing Assembly permits Central Master or Staff unit to be placed on table top, or mounted on wall or cabinet. AC supply, if used, is the only unit in the intercom system that requires connection to an AC outlet. Use of junction box explained at right.

No.	Type	Description	Size	Wt.	List	NET
93 R 245	HI-1	Outdoor Sub	5 1/4 x 3 3/4"	1 1/2 lbs.	\$27.50	15.95
93 R 246	HI-2	Indoor Sub	5 1/4 x 3 3/4"	1 1/2 lbs.	27.50	15.95
93 R 247	HI-SM	Housing Assembly	6 x 15 1/4 x 4"	2 1/2 lbs.	19.00	11.00
93 R 248	HI-JB	Junction Box	1 1/4 x 2 1/4 x 8 3/4"	1 lb.	7.00	4.00
93 R 249	HI-PS	AC Power Supply	3 x 5 x 2"	5 lbs.	27.50	15.95
53 J 0334	F6H	9 v. Burgess Battery	8 1/2 x 4 1/2 x 5 1/2"	9 lbs.	7.50	5.03

**CABLE REQUIREMENTS.** Central Master and Staffs: Connect with 6226 cable using one of two methods. 1) Measure from 1st unit to 2nd, 2nd to 3rd, etc. (but not from last back to first), and total. 2) Use one junction box, which may be placed anywhere, and measure from each station to the junction box. Subs: Connect to nearest Staff or Central Master. Use 6206 cable for Indoor Sub, 6202 cable for Outdoor Sub. Battery or Power Supply: Connect to Central Master only with 6202 cable.

TYPE 6226 CABLE. Shpg. wt., per 100 ft., 12 lbs.	
49W 615. NET PER FT.	28c
TYPE 6202 CABLE. Shpg. wt., per 100 ft., 4 lbs.	
49W 621. NET PER FT.	3 1/2c
TYPE 6206 CABLE. Shpg. wt., per 100 ft., 3 lbs.	
49W 622. NET PER FT.	8 1/2c

## NEW T-LC-2 2-Station Intercom

NET **\$36.00**

- Highly Attractive, Modern Styling
- Built to Provide Long, Dependable Service
- Stations Can Be Up to 2000 Feet Apart
- Only a Fraction of a Cent a Day to Operate

Only \$2.00 Down

Ruggedly constructed, gracefully styled 2-station intercom system—deluxe combination provides everything necessary for 2-way communication. Gives dependable service in office, home, farm, or factory. Complete system includes one Master unit, one Sub unit, and 50 feet of interconnecting cable (more can be added, up to 2000 feet). Both Master and Sub can originate calls to each other and carry on a 2-way conversation. Sub unit can be set for either private or non-private operation. When Sub is set for private operation, Master cannot listen-in to Sub station; when non-private, persons at Sub station can answer calls at a distance without operating controls. Only Master need be connected to an AC outlet—system costs only a fraction of a cent per day to operate.

Master has volume control, pilot light. Rigid steel case of Master finished in charcoal gray vinyl, with side panels in brushed chrome—designed to resist corrosive industrial atmospheres. Sub is of same color, but has a highly attractive baked enamel finish. Unit sizes: Sub, 3 1/4 x 7 1/4 x 8 1/4"; Master, 3 1/2 x 10 1/4 x 8 3/4". Underwriters' Laboratories Approved. For operation from 110-120 volts, 50-60 cycle AC or DC. Shpg. wt., 13 lbs.

92 RX 665. List. \$62.00. \$2.00 Down. NET 36.00

TYPE 5303 EXTRA CABLE FOR ABOVE. Up to 2000 ft. can be added to Model T-LC-2 listed above. Shpg. wt., per 100 ft., 3 lbs. 49W 604. NET PER FT. 3c

## RUGGED, PRECISION CONSTRUCTION



Sub Unit



Master Unit



# TALK-A-PHONE MASTER SELECTIVE SYSTEM

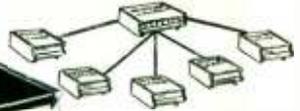
All Calls To or From Central Location



T-1M-5 Master



T-1R-3 Sub



## STANDARD-POWER MASTERS AND SUBS

For use in a Master Selective system. System, consisting of 1 Master (only) and from 1 to 10 Subs, provides convenient, low-cost communication for plant, farm, home, or office. Master can call and listen to any one Sub, several Subs or all Subs simultaneously. Any Sub can call the Master and converse with it, but cannot communicate with other Subs. Only the Master requires outlet connection.

Subs can be set for either private or non-private operation. When a Sub is set private, Master cannot listen-in to it, but can still originate calls to the Sub. In non-private operation, Master is able to listen-in to the Sub, allowing persons at the Sub station to reply to calls and converse at a distance without using any controls. Subs can originate calls in either mode of operation.

Masters have press-to-talk switch, volume control, slide switches for station selection. Rigid steel Master cases styled with gray, leather-texture vinyl finish and brushed chrome—resist corrosive industrial atmospheres. Case size is 3 1/4 x 10 1/2 x 8 3/4". T-1R-3 Sub has same finish as Masters. T-1R-3M has case of same color, but finish is grained, baked enamel. Sub cases are 3 1/4 x 7 1/2 x 8 3/4". System is for 110-120 v., 50-60 cycle AC, or DC. U.L. Approved.

T-1M-5 MASTER. Use with up to 5 Subs. 8 lbs.	
92 RX 670. List. \$59.95. \$2.00 Down. NET.	34.95
T-1M-10 MASTER. Use with up to 10 Subs. 8 lbs.	
92 RX 671. List. \$75.00. \$2.00 Down. NET.	44.00
T-1R-3 SUB. Shpg. wt., 6 lbs.	
92 RX 664. List. \$27.50. NET.	15.95
T-1R-3M SUB. Shpg. wt., 6 lbs.	
92 RX 674. List. \$21.00. NET.	11.95

## HIGH-POWER MASTERS

For paging, or use in large or noisy areas—use with either Standard or High-Power Subs. Incorporate all features of the Standard-Power Masters at left, but operate with 10 times the volume output. For 110-120 v., 50-60 cycle AC. U.L. Approved.

T-AC-5406. Use with up to 5 Subs. 8 lbs.	
92 RX 672. List. \$75.00. \$2.00 Down. NET.	44.00
T-AC-5411. Use with up to 10 Subs. 8 lbs.	
92 RX 673. List. \$89.95. \$5.00 Down. NET.	52.50

## HIGH-POWER SUBS AND ORIGATION SWITCH

HIGH-POWER SUBS. Can answer Master and with origination switch below, can originate calls to the Master. Recommended for use in large or noisy areas, or for general paging use. Can be intermixed in a system with standard Subs.

T-C-20 TRUMPET TYPE. 9", weatherproof re-entrant horn. 15 watts. Charcoal gray. Shpg. wt., 5 lbs.	
92 RX 679. List. \$44.95. \$2.00 Down. NET.	26.50
T-HP-3 INDOOR TYPE. 8" speaker in charcoal gray metal baffle. 5 watts. Baffle, 12x12x8". Shpg. wt., 9 lbs.	
92 RX 678. List. \$28.00. NET.	16.50
T-S-100 ORIGATION SWITCH. Shpg. wt., 2 lbs.	
92 R 645. List. \$6.00. NET.	3.50

## CABLE REQUIREMENTS

Total the distances from each Sub to the Master.	
TYPE 5303 CABLE. Shpg. wt. per 100', 3 lbs.	
49 W 604. NET PER FOOT.	3c



T-1S-5 Master

## SUPER SELECTIVE STATION UNITS

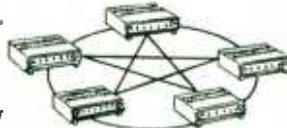
The Super Selective is a highly versatile, low-cost intercom system consisting entirely of Master units. Any station in the system can originate a call to any other station or stations and converse with them—several separate conversations can be carried on simultaneously without interference to each other. Conversations can be either two-way or conference for maximum convenience. System is ideal for use on farms, in factories, homes and offices. Saves steps, saves time, and takes the load off of your switchboard. You can begin a Super Selective system with as few as two stations—wiring arrangement permits easy installation of additional stations as they are needed.

Super Selective Masters have a translucent indicator which is lighted when the unit is in operation. Units have an individual slide switch for each station in the system, a spring-return press-to-talk lever, and a volume control to permit adjustment of the incoming voice level.

Compact case with its clean, modern design blends with any surroundings—employs rigid steel construction to withstand abuse. Units can be placed anywhere—occupy about as much desk space as a telephone. Beautifully finished with bonded, leather-texture, gray vinyl and brushed chrome. Resists corrosive industrial liquids and atmospheres. Cases have slotted holes for ample ventilation, four rubber feet to protect desk top.

# SUPER SELECTIVE SYSTEM

- Up to 5 Simultaneous Private Conversations
- Slide Switch Station Selector for Conference Calls
- Designed for Dependable, Continuous Operation



EVERY STATION  
CAN CALL EVERY  
OTHER STATION

Stations in the Super Selective system can be placed over 1000 feet apart. Units are supplied less interconnecting cable (listed below). System is designed to stand up under continuous day and night operation—power consumed costs only a fraction of a cent per day. Size of cases is 3 1/4 x 10 1/2 x 8 3/4". For operation from 110-120 v., 50-60 cycle AC, or DC. U.L. Approved. Shpg. wt., 7 lbs.

MODEL T-1S-5 SUPER SELECTIVE MASTER UNIT. For use in a system consisting of up to 5 stations.	
92 RX 666. List. \$59.95. \$2.00 Down. NET.	34.95
MODEL T-1S-10 SUPER SELECTIVE MASTER UNIT. For use in a system consisting of up to 10 stations.	
92 RX 667. List. \$75.00. \$2.00 Down. NET.	44.00

## CABLE REQUIREMENTS

For systems with T-1S-5 Masters, use Type 5506 interconnecting cable. For systems with T-1S-10 Masters, use Type 9911 cable. Measure from 1st Master to 2nd only, 2nd to 3rd only, etc., and total. It is not necessary to connect last Master to the first.

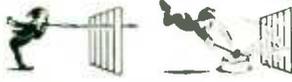
TYPE 5506 CABLE. 6-cond. Wt., 100', 4 lbs.	
49 W 605. NET PER FT.	7 1/2c
TYPE 9911 CABLE. 11-cond. Wt., 100', 12 lbs.	
49 W 603. NET PER FT.	14c

# TALK-A-PHONE INTERCOM SYSTEMS

Place Anywhere—  
No Cables Necessary

**WIRELESS!**

Featuring the "SONIC GATE"



Your voice goes through—noise and hum are screened out. Full 30 db suppression.



Just Plug in . . . . . then Talk

## 2-STATION WIRELESS SYSTEM

**NET \$79.90**  
\$5.00 Down

T-1C-33. Quality carrier-current type intercom system for reliable communications where permanently wired installations may not be practical. Just plug each station into any wall outlet and you have instant 2-way communication. Voice reproduction is clear and distinct—units feature the "Sonic Gate" noise and hum suppression circuit. More stations can be added as they are needed—all stations in the system will receive any message transmitted from any point. Since the electric power line is the transmitting cable, stations must receive power from the same electric-company line transformer.

"Uni-Trans" switch-lock for continuous transmission to other station—permits dictating, or listening-in. Units have volume controls. Both stations are in rigid steel cases styled in leather-texture gray vinyl and brushed chrome—designed to resist corrosive industrial atmospheres. 3 1/4 x 10 1/2 x 8 3/4", each unit. For 110-120 v., 50-60 cycle AC, or DC. Shpg. wt., 16 lbs.  
**92 RX 668. List. \$138.00. NET PER PAIR . . . . . 79.90**

T-1C-17 ADDITIONAL STATION. 8 lbs.  
**92 RX 669. List. \$69.00. NET. . . . . 39.95**

## Selective Wireless Systems

### ALL-MASTER SYSTEM

All-Master system—any Master can selectively call any of 5 other Masters. If more than six Masters are used in the system, several Masters will hear the same message. As many as three separate conversations can be held simultaneously. Push-button selector permits conference calls. Merely plug into electrical outlets. All outlets must be on the same electric-company line transformer.

Masters employ the "Sonic Gate" circuit to suppress hum and line noise. Steel cases are handsomely styled in leather-texture gray vinyl and brushed chrome. 3 1/4 x 14 x 8 3/4". For 110-120 v., 50-60 cycle AC, or DC. 13 lbs. **Only \$5.00 Down.**

**MODEL T-LCM-8806 MASTER.**  
**93 RX 071. List. \$136.00. NET. . . . . 79.50**

### MASTER-AUXILIARY SYSTEM

Consists of one or more T-LCM-8806 Masters and as many Auxiliaries as desired. Masters can originate calls on any of 6 channels—all stations on channel selected will hear the call (Auxiliaries are on fixed channel. Masters can be on any channel). Auxiliaries can reply, but not originate calls. Auxiliaries have "Sonic Gate," same cases as Master (but 3 1/4 x 10 1/2 x 8 3/4"). Auxiliaries on channel given by last digit in type no. Two Auxiliaries of same channel can be used as 2-way system, without a Master. 7 lbs.

**93 RX 072. T-LCS-801. . . . . List Each,**  
**93 RX 073. T-LCS-802. . . . . \$77.00,**  
**93 RX 074. T-LCS-803. . . . . NET EACH,**  
**93 RX 075. T-LCS-804. . . . . 45.00**  
**93 RX 076. T-LCS-805.**  
**93 RX 077. T-LCS-806.**

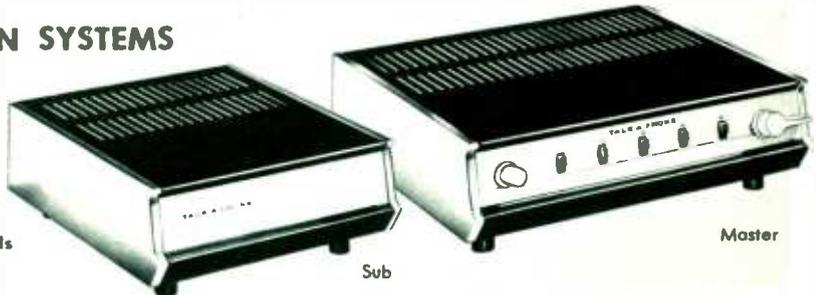
### SELECTIVE AREA PAGING

A wireless Master-Auxiliary intercom system provides selective area paging for commercial and industrial operations—without installation costs that usually run well into four figures. Several Channel 1 Auxiliaries could be placed in the sales room, several Channel 2 units in the stock area, several Channel 3 Auxiliaries in the service department, etc. Master station could then page any desired area.

## COMBINATION SYSTEMS



Masters Can Call Any Station  
Subs Reply—Do Not Originate Calls



### MASTERS AND STANDARD SUBS

High-flexibility combination Systems—Masters and Subs can be intermixed as desired. Masters can originate calls to each other and to any Sub in the system selectively. One or more Subs can be exclusive to only one Master if desired (see operation diagram above). Subs cannot originate calls.

Switch permits either private or non-private operation of Masters—other stations cannot listen-in to a private Master, but Master is able to receive calls, and originate them by using the press-to-talk switch. In the non-private mode, Masters can reply to calls at a distance, without operating any controls—Subs always operate this way. Calls can be answered up to 40 feet from non-private station. Subs require no connection to an electrical outlet.

Master units have sturdy steel cases, finished in leather-texture gray vinyl and brushed chrome. Model T-LR-2 Sub case has same finish as Masters. Model T-LR-2M is of same color, but finish is grained, baked enamel. Sizes: Masters. 3 1/4 x 10 1/2 x 8 3/4"; Subs. 2 1/4 x 7 1/2 x 8 3/4". For 110-120 v., 50-60 cycle AC, or DC. U.L. Approved.

**T-CL-5 MASTER.** For up to 5-station systems. 7 lbs.  
**92 RX 675. List, \$72.00. \$2.00 Down. NET. . . . . 42.00**  
**T-CL-10 MASTER.** For up to 10-station systems. 8 1/2 lbs.  
**92 RX 676. List, \$87.00. \$5.00 Down. NET. . . . . 51.00**  
**92 RX 663. T-LR-2 Sub. 5 lbs. List, \$27.50. NET. . . . . 15.95**  
**92 RX 677. T-LR-2M Sub. 5 lbs. List, \$21.00. NET. . . . . 11.95**

### HIGH-POWER SUBS

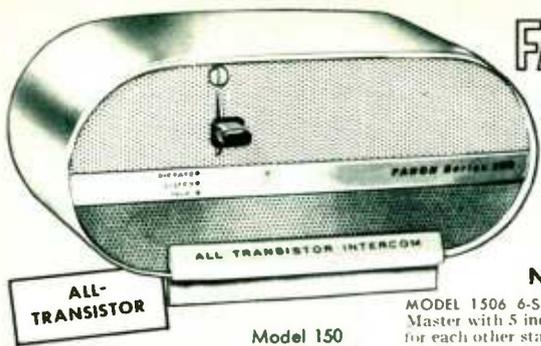
Designed for paging, or communication in noisy areas. Use in a Combination System with Masters at left (can be intermixed with standard Subs if desired). Illustrated on preceding page.

**MODEL T-C-20.** Nine-inch weather-proof re-entrant horn. Power capacity, 15 watts. Charcoal gray. 5 lbs.  
**92 RX 679. List, \$44.95. \$2.00 Down. NET. . . . . 26.50**  
**MODEL T-HP-3.** Eight-inch speaker in charcoal gray baffle. For indoor use. 5 watts. 12x12x8", 9 lbs.  
**92 RX 678. List, \$28.00. NET. . . . . 16.50**

### CABLE FOR COMBINATION SYSTEMS

Use 6210 5-pair cable for interconnecting T-CL-5 Masters. 6226 13-pair cable for T-CL-10 Masters. Measure from 1st Master to 2nd, 2nd to 3rd, etc. (but not from last back to first). Add measurements and order this total length. Connect Sub to the nearest Master only with 6902 2-cond. cable, whether Sub is to be exclusive to one Master or common to the whole system.

**49 W 617. 6210 Cable. 6 lbs. per 100'. NET PER FT. . . . . 14c**  
**49 W 615. 6226 Cable. 12 lbs. per 100'. NET PER FT. . . . . 28c**  
**49 W 613. 6902 Cable. 2 lbs. per 100'. NET PER FT. . . . . 2c**



# FANON Quality Intercoms

New Fanon all-transistor intercoms for maximum convenience and versatility. Can be operated with batteries if AC is not available—incorporate special features to insure low drain. Four-transistor, 1.5-watt push-pull amplifier with negative feedback assures distortion-free reproduction.

## New Series 1500 All-Transistor Intercoms

**MODEL 1506 6-STATION MASTER.** Versatile Master with 5 individual slide switches, one for each other station. 4-transistor amplifier eliminates heat and hum, has a 70-db power gain, employs thermal compensation for dependability. Has volume control and standby listen-talk switch. Negative feedback affords easy transistor interchangeability. Compact case handsomely styled in gray. Less cable, power supply, battery. Cable and power supply listed at right (one required for every 4 Masters in system); use RCA VS306 instead of supply for battery operation.  $4\frac{1}{2} \times 8 \times 4\frac{1}{2}$ ". 3 lbs. \$2.00 Down.  
**92 R 633.** List, \$59.95. NET **35.95**

**MODEL 1512 12-STATION MASTER.** As above, but can be used with up to 11 other stations. 12 pos. rotary selector switch. \$2.00 Down.  
**92 R 634.** List, \$64.95. NET **38.95**

**156 REMOTE.** For intermix systems with up to 6 Masters: selective. Private or non-private operation. Dictates-talk listen switch. Less cable.  $4\frac{1}{2} \times 8 \times 4\frac{1}{2}$ ". 2 lbs.  
**92 R 635.** List, \$22.75. NET **13.65**

**150 REMOTE.** As above, but non selective. Connect any number to one Master.  
**92 R 636.** List, \$15.95. NET **9.60**

**55 CABLE.** 5 cond. (1 shielded). Measure from any Master in the system to all other stations. Shpg. wt., 100', 3 lbs.  
**47 W 685.** NET PER 100' **14.10**

**PSA SUPPLY.**  $2\frac{3}{4} \times 7 \times 3\frac{3}{4}$ ". Less cable (below). For 110-120 v., 50-60 cycle AC.  $3\frac{3}{4}$  lbs.  
**92 R 637.** List, \$29.95. NET **17.95**

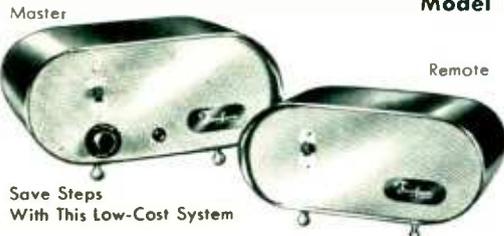
**BPA POWER CABLE.** Connects PSA supply to a Master.  $\frac{1}{4}$  lb.  
**92 R 639.** List, \$1.50. NET... **90c**

### 3 System Modes

- 1. ALL MASTER.** Conference calls or up to 3 simultaneous conversations with 1506's; up to 6 conversations with 1512's.
- 2. SINGLE MASTER.** One Master with up to as many Remotes as switches will accommodate.
- 3. INTERMIX.** Any combination of Masters and Remotes.

Model 150

## Model Twin FX-2 Two-Station Intercom System



Here's the height of convenience in a 2-station intercom. Combines outstanding performance and decorator styling—all at an unusually low price. Provides intercommunication between any two points—even serves as a baby sitter! Includes Master, Remote, and 50 ft. of 3 cond. cable (more can be added, see "Manager" listing at left, below). Remote needs no power—can be placed anywhere. If desired, Remote can answer calls from a distance, without operating Talk-Listen switch. System has extremely low hum and noise level. U.L. Approved. For 110-120 v., 50-60 cycle AC or DC. Size, each unit,  $8 \times 4 \times 4$ ". Finished in gray and white. Shpg. wt., 6 lbs.  
**95 RX 914.** List, \$29.95. NET **18.75**

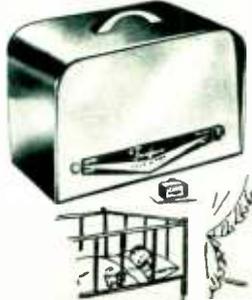
**FS EXTRA REMOTE.** Use 3-cond. cable (below) to Master, 2 lbs.  
**94 R 923.** List, \$12.50. NET **7.50**

## "Manager" Series Intercoms



Versatile, low-cost intercom systems. All units are U.L. Approved

## WIRELESS Intercom Units



Quick, Easy Communication

Just Plug In—Needs No Wiring

**ALL-MASTER SYSTEM.** Consists of up to 6 FX 6 (or 12 FX-12) Masters—up to 3 (or 6) private conversations can be carried on simultaneously. Individual slide switches on FX-6 permit conference calls. A Master can be called even if its power is off; stations can be placed up to 2,000 feet apart. Use 7 cond. cable from 1st FX 6 to 2nd, 2nd to 3rd, etc.; use 18 cond. cable between FX 12's.

**MASTER-REMOTE SYSTEM.** Consists of an FX 6 Master and up to 5 Remotes, or an FX 12 and up to 11 Remotes. Use 3 conductor cable from Master to each Remote.

**FX-6 MASTER.** Has 5 individual slide switches. Gray and white. Less cable.  $4 \times 8 \times 4$ ". For 110-120 v., 50-60 cycle AC.  $3\frac{3}{4}$  lbs.  
**93 R 425.** List, \$34.95. NET **20.95**

**FX-12 MASTER.** Similar to above, but has 12 position rotary switch.  
**93 R 426.** List, \$37.50. NET **22.50**

**93 R 427. FC REMOTE.**  $2\frac{1}{4}$  lbs. List, \$13.25. NET **7.97**

**RB-1 "BABY-COM."** Low-cost, 1-station wireless intercom for nursery or sickroom use. Provides round-the-clock protection for children, and aged or handicapped persons. Picks up the slightest sound and transmits it to any AM radio, including car radios and battery-operated portables. Operates over distances of up to 250 feet. Intercom is exceptionally easy to use—simply plug into any AC outlet—no wiring required. Frequency is adjustable. Metal case is blue, with white panel. Size,  $4\frac{1}{2} \times 6 \times 4\frac{1}{2}$ ". U.L. Approved. For 110-120 v., 50-60 cycle AC. Wt., 4 lbs.  
**94 R 970.** List, \$19.95. NET... **14.95**

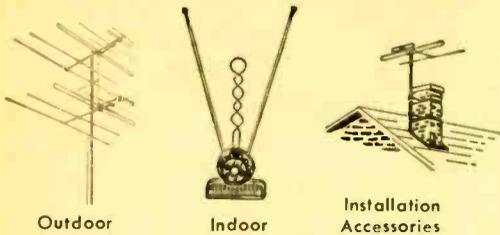
**FW-50 2-STATION SYSTEM.** A complete, convenient 2 station intercom system that requires no installation—just plug each station into a wall outlet. Perfect for home or office. One unit can even be placed in a baby's room and the other carried with you to a neighbor's house—operates between adjacent buildings on the same electric-company line transformer. Features a power-line noise silencing control, 3 tubes plus rectifier and germanium diode detector. Has Talk Listen-Dictate switch. Size, each unit,  $4\frac{1}{2} \times 8 \times 4\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 9 lbs. Only \$5.00 Down.  
**92 RX 640.** List, \$89.50. NET **53.70**  
**92 R 641.** FW-51, Extra station, 5 lbs. List, \$44.75. NET... **26.85**

No.	Cond.	Lbs.	100'	100'	No.	Cond.	Lbs.	100'	100'
47 W 362	3	2	2.43		48 W 894	18	6 $\frac{1}{2}$		7.94
47 W 322	7	4 $\frac{1}{2}$	6.03						

# Select Your TV Antenna From Allied's Complete Top-Quality Lines

Enjoy sharper, clearer TV pictures with an Allied-recommended antenna for your set. Allied carries the world's largest stock of antennas and accessories—the kind your set needs to give crystal-clear, trouble-free reception. Depend on Allied for a complete, value-packed selection of highest quality antennas—offering the latest engineering features—for metropolitan, suburban or fringe areas.

## How to Select Your TV Antenna



Outdoor

Indoor

Installation Accessories

Most VHF TV broadcasts (channels 2 thru 13) can be received over distances up to 200 miles when the proper antenna is used. To assist you in selecting an antenna for your particular location, the antennas on this page and the following pages have been identified with 1, 2, 3 or 4 stars to indicate range as given below. When in doubt, select an antenna in the next higher group.

★ Metropolitan-Suburban (up to 35 miles).

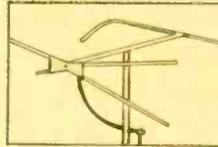
★★ Semi-Fringe (up to 50 miles).

★★★ Fringe (up to 75 miles).

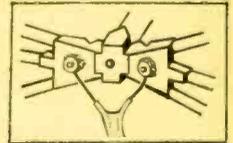
★★★★ Deep-Fringe (up to 125 miles).

Stacking two of the same type antennas gives up to 50% more signal. Stacking is recommended in installations located over 125 miles from the TV station or where obstructions such as hills or tall buildings weaken TV signals.

## A Weather-Worn Antenna Can Spoil Your TV Enjoyment



Bent, Broken, Weather-Worn Elements



Corrosion Around Connectors

ENJOY THE BEST PICTURE QUALITY your set can deliver. "Ghosts," "snow" and other interference can be caused by a weather-worn antenna system. Slow weathering of the antenna can cause gradual, unnoticed decrease of picture quality. So before you blame your TV set, check your antenna. A new Allied antenna of latest design can quickly restore your picture to its full brightness and detail.

YOU CAN DEPEND ON ALLIED for your antenna needs. Whether your location requires a simple indoor type or an elaborate fringe-area array, Allied has the antenna you need. Our stocks include the latest designs in antennas, and a full selection of installation accessories. Use our consultation service for prompt recommendations on all of your antenna needs. See the following pages for complete listings.

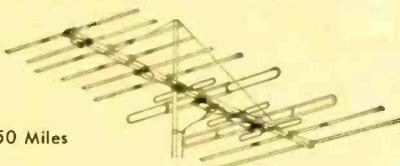
## ALLIED'S OWN KNIGHT FRINGE-AREA ANTENNAS

Replace Your Weather-Worn Antenna with an Outstanding, Low-Cost, Knight Hi-Gain Antenna For Better Pictures

### ★★★★ DEEP-FRINGE CORODIZED ANTENNA

ONLY  
**\$19<sup>95</sup>**

Up to 150 Miles



- Gold Corodized Finish Resists Corrosion
- 24 Elements Provide High Sensitivity
- For Color As Well As Black and White

New, high-gain, twin-driven VHF antenna equals or surpasses performance of many higher-priced arrays. Offers extremely high sensitivity on channels 2 to 13. All-aluminum construction with gold corodized finish resists corrosion, keeping antenna working at top efficiency. Sag-proof construction features a heavy-duty square boom suspended from sturdy braces. "Snap-out" assembly for easy installation. Less mast and 300-ohm twin lead. 8½ lbs. *By express or truck.*  
91 CZ 331. List \$34.70. NET.....19.95

### ★★★★ DEEP-FRINGE NON-CORODIZED ANTENNA

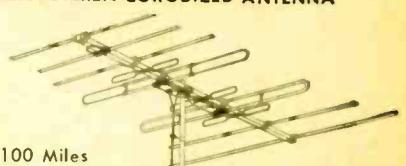
Same as above, but not corodized. Wt., 8½ lbs.  
91 CZ 332. List \$30.55. NET.....17.95

GOLD CORODIZED STACKING KIT. For stacking two 3-star or two 4-star antennas for greater gain. ½ lb.  
91 CX 335. List \$2.50. NET.....1.47

### ★★★ FRINGE-AREA CORODIZED ANTENNA

ONLY  
**\$14<sup>95</sup>**

Up to 100 Miles



- 17 Elements Provide High Signal Gain
- Designed For Color and Black and White

Superior fringe-area reception is obtained from this twin-driven, high-gain VHF antenna. Equals or surpasses many higher-priced antennas in performance. Multiple directors and dual reflectors for high front-to-back ratio. Gold corodized finish prevents corrosion and maintains top antenna efficiency. "Suspension" type boom support prevents sagging. Simple, "snap-out" assembly. Less mast and 300-ohm twin line. Shpg. wt., 7 lbs. *By express or truck.*  
91 CU 333. List \$24.95. NET.....14.95

### ★★★ FRINGE-AREA NON-CORODIZED ANTENNA

Same as above, but not corodized. Wt., 7 lbs.  
91 CU 334. List \$22.92. NET.....12.95

NON-CORODIZED STACKING KIT. For stacking two 3-star or two 4-star antennas for greater gain. Wt., ½ lb.  
91 CX 336. List \$2.00. NET.....1.18

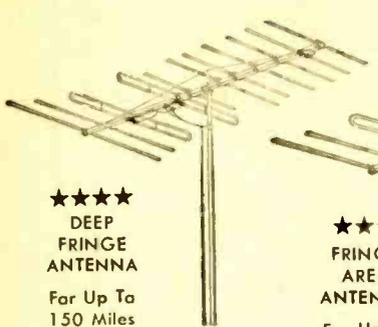
# Allied's Knight Fringe-Area Antenna Kits

Complete with Mast and All Installation Accessories  
For Color and Black-and-White TV Reception

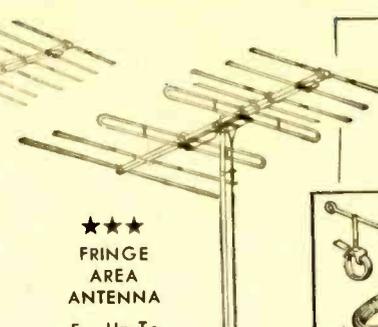
COMPLETELY PACKAGED—Ready for Quick and Easy Installation

- Available with 20, 30 or 40-ft. Mast
- Rotator for Antenna Direction Control
- Complete with All Hardware
- Choice of 2 Powerful Antennas
- Detailed Installation Instructions
- Top Quality Throughout

## KNIGHT 4-STAR AND 3-STAR ANTENNA KITS



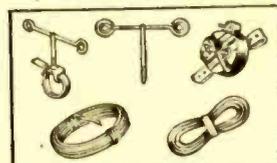
★★★★  
**DEEP FRINGE ANTENNA**  
For Up To 150 Miles



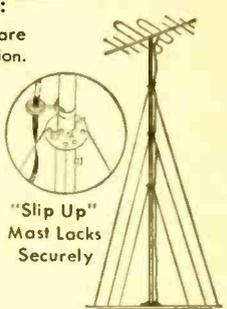
★★★  
**FRINGE AREA ANTENNA**  
For Up To 100 Miles

**Each kit includes:**  
All wire and hardware for a complete installation.

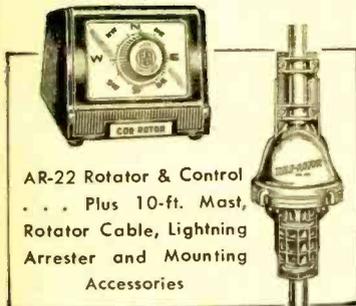
**INSTALLATION ACCESSORIES**



**"Slip Up" Mast Locks Securely**



### OPTIONAL ROTATOR PACKAGE



AR-22 Rotator & Control  
... Plus 10-ft. Mast,  
Rotator Cable, Lightning  
Arrester and Mounting  
Accessories

Fully Automatic Rotator and Rotator  
Control For Pinpoint Tuning Accuracy

These deluxe, value-packed kits have been selected by Allied's antenna experts to meet practically any TV antenna requirement. Complete in every detail—there's nothing else to buy—and the package prices are actually less than the total cost of the components purchased individually. Provide outstanding fringe-area reception for color and black-and-white receivers.

**CHOICE OF PACKAGES.** Kits for "Semi-Fringe," "Fringe," and "Deep-Fringe" areas are listed with a choice of 20, 30 or 40-foot masts. The distance to TV stations determines which antenna to use, and local terrain (hills, trees, tall buildings, etc.) determines mast height. Rotator permits pointing antenna in any direction for excellent reception of any station.

All kits are complete with rugged, weather-resistant antenna; telescoping mast of heavy, galvanized steel; all-angle mast mount; guy wire; 100 ft. of twin line; 50 ft. of ground wire; ground rod; twin-line lightning arrester; guy wire hook-eyes; mast standoff insulators; woodscrew standoff insulators (plus 6 turnbuckles in 40-ft. antenna kits). Kits with rotator also include 10-ft. antenna mast; 100 ft. of rotator cable; and rotator cable lightning arrester. Complete instructions with each kit. Rotators are for 110-120 v., 60 cycle AC. Shipped by express or truck only.

### ★★★★DEEP-FRINGE ANTENNA KITS

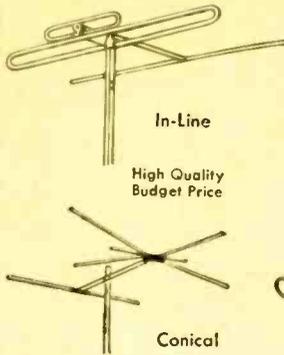
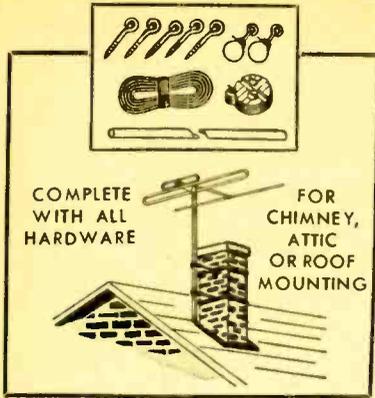
- KIT C-20.** Complete deep-fringe antenna kit with all installation accessories. Kit includes: Knight 4-Star gold-corodized antenna for clear, snow-free pictures on channels 2 to 13, even in the most difficult deep-fringe areas; two-section, 20-ft. heavy-gauge steel, telescoping mast; heavy-duty, fully-automatic CDR Model AR-22 rotator (for mast, tower or platform mounting); and all installation accessories. Shpg. wt., 55 lbs.  
91 CZ 383. Only \$5.00 Down. NET..... 69.86
- KIT C-20-L.** As above, less rotator package. 31 lbs.  
91 CZ 384. Only \$2.00 Down. NET..... 31.00
- KIT C-30.** Same as Kit C-20, but with 30-foot mast. Shpg. wt., 71 lbs.  
91 CZ 385. Only \$5.00 Down. NET..... 72.61
- KIT C-30-L.** As above, less rotator package. 47 lbs.  
91 CZ 386. Only \$2.00 Down. NET..... 34.60
- KIT C-40.** Same as Kit C-20, but with 40-foot mast. Shpg. wt., 82 lbs.  
91 CZ 387. Only \$5.00 Down. NET..... 79.31
- KIT C-40-L.** As above, less rotator package. 58 lbs.  
91 CZ 388. Only \$2.00 Down. NET..... 39.97

### ★★★FRINGE ANTENNA KITS

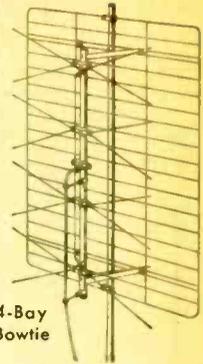
- KIT B-20.** Complete fringe area antenna kit with all installation accessories. Kit includes: Knight 3-Star gold-corodized antenna for outstanding performance and peak reception of pictures and sound on channels 2 to 13, even in difficult fringe areas; two-section, 20-foot telescoping mast of rugged steel; heavy-duty, fully-automatic CDR Model AR-22 rotator; and all installation accessories. Shpg. wt., 50 lbs.  
91 CZ 389. Only \$5.00 Down. NET..... 64.86
- KIT B-20-L.** As above, less rotator package. 26 lbs.  
91 CZ 390. Only \$2.00 Down. NET..... 26.00
- KIT B-30.** Same as Kit B-20, but with 30-foot mast. Shpg. wt., 66 lbs.  
91 CZ 391. Only \$5.00 Down. NET..... 67.61
- KIT B-30-L.** As above, less rotator package. 42 lbs.  
91 CZ 392. Only \$2.00 Down. NET..... 29.60
- KIT B-40.** Same as Kit B-20, but with 40-foot mast. Shpg. wt., 77 lbs.  
91 CZ 393. Only \$5.00 Down. NET..... 74.31
- KIT B-40-L.** As above, less rotator package. 53 lbs.  
91 CZ 394. Only \$2.00 Down. NET..... 34.97

# Knight Quality TV Antenna Kits

COMPLETE AND READY TO INSTALL—MOUNTING HARDWARE INCLUDED



Time-Saving "Quick-Rig" Design  
Swing Elements in Place and Tighten!



## FAMOUS KNIGHT COMPLETE TV ANTENNA KITS

### ★ IN-LINE ANTENNA KIT WITH CHIMNEY MOUNT

**NET \$8.62** A complete VHF antenna kit with chimney mount and accessories. Ready for quick, easy installation. Includes: time-proven, in-line antenna; sturdy 5-ft. mast; 75-ft. of 300-ohm line; U.L. Approved lightning arrester; 5 screw-in standoff insulators; 2 mast standoff insulators; and rugged chimney mount. Elements are 1/2" seamless aluminum tubing. Shpg. wt., 10 lbs.  
92 CX 045. NET..... 8.62

### ★ IN-LINE ANTENNA KIT WITH ROOF MOUNT

As above, but with roof mount for flat or peaked roofs, or attic installation. Shpg. wt., 9 lbs.  
92 CX 041. NET..... 8.23

### ★ IN-LINE ANTENNA ONLY

Above antenna; less accessories. 5 lbs.  
92 CX 042. NET..... 4.86

### ★ HIGH-LOW ANTENNA KIT WITH CHIMNEY MOUNT

**NET \$8.16** Two-section antenna with separate directional adjustments for top performance on high and low VHF bands. Includes: 5-ft. mast; 5 screw-in standoff insulators; 2 mast standoff insulators; 75-ft. of 300-ohm line; U.L. Approved lightning arrester; and antenna. Elements are 1/2" aluminum tubing. Shpg. wt., 10 lbs.  
92 CX 048. NET..... 8.16

### ★ HIGH-LOW ANTENNA KIT WITH ROOF MOUNT

As above, but with roof mount for flat or peaked roofs, or attic installation. Shpg. wt., 9 lbs.  
92 CX 047. NET..... 7.18

### ★ HIGH-LOW ANTENNA ONLY

Above antenna; less accessories. 5 lbs.  
92 CX 016. NET..... 4.82

### ★ UHF 4-BAY BOWTIE KIT WITH CHIMNEY MOUNT

**NET \$9.28** Easily-installed 4-bay bowtie antenna kit. Includes: 2—3-ft. masts; 3 wood-screw standoff insulators; 2 mast standoff insulators; 50-ft. of 300-ohm twin line; U.L. Approved lightning arrester; and antenna. Elements are 1/2" aluminum tubing. Shpg. wt., 12 1/2 lbs.  
91 CU 833. NET..... 9.28

### ★ SINGLE-BAY CONICAL KIT WITH CHIMNEY MOUNT

**NET \$6.81** Value-packed antenna kit for excellent reception on all VHF TV channels. Kit includes: conical antenna; sturdy 5-ft. mast; 50-ft. of twin line; 2 mast standoff insulators; 4 screw-in standoff insulators; U.L. Approved lightning arrester; chimney mount. Everything needed for complete, first-class TV antenna installation is included at one low price. Shpg. wt., 7 lbs.  
92 CX 174. NET..... 6.81

### ★ SINGLE-BAY CONICAL KIT WITH ROOF MOUNT

Same antenna and accessories as above, but with all-angle roof mount for flat or sloping roofs; or for attic installations. Shpg. wt., 6 lbs.  
92 CX 135. NET..... 6.25

### ★★ TWO-BAY CONICAL KIT WITH CHIMNEY MOUNT

Same as above, but with 2-bay conical antenna to give added gain and sensitivity required for excellent near-fringe VHF reception. With 10-ft. mast and sturdy chimney mount. Shpg. wt., 10 lbs.  
92 CX 173. NET..... 10.46

### ★★ TWO-BAY CONICAL KIT WITH ROOF MOUNT

As above, but with roof mount. Permits installations on all roofs and in attics. Shpg. wt., 9 lbs.  
92 CX 133. NET..... 10.06

### ★ SINGLE-BAY ANTENNA ONLY

Same antenna as above; less accessories. 3 lbs.  
92 CX 136. NET..... 3.20

**STACKING KIT.** For stacking two single-bay conicals to make a two-bay array. Shpg. wt., 8 oz.  
97 CX 389. NET..... 64c

**STACKING KIT.** For stacking two 2-bay conicals to make a four-bay array. Shpg. wt., 1 1/4 lbs.  
97 CX 387. NET..... 1.70

### ★ UHF 4-BAY BOWTIE KIT WITH ROOF MOUNT

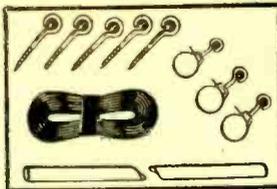
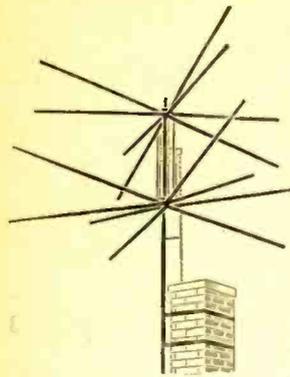
Same as kit on left, but with roof mount.  
91 CU 834. NET..... 7.76

### ★ 4-BAY UHF BOWTIE ANTENNA ONLY

Antenna at left; less accessories. Wt., 5 1/2 lbs.  
91 CU 835. NET..... 4.81

# Famous-Name TV Antennas

## ALL-CHANNEL "REMBRANDT" ANTENNA KITS



12-Position Switch  
—selects proper antenna elements to get clearest picture from any direction —without rotator.

Accessories Supplied with "Riviera" Antenna Kit

- Time-Saving Flip-out Elements Speed Installation
- Convenient 12-Position Rotating Directional Switch
- High-Quality Installation Accessories Included

### ★★★★ "RIVIERA" VHF KIT

NET  
**\$31<sup>32</sup>**  
\$2.00 Down  
All-directional, 2-bay antenna with installation accessories. 16—60" elements for excellent deep fringe reception. Unique 12-position switch mounts at TV receiver—selects proper elements for best reception from any direction, without a motor-driven rotator. Durable aluminum construction with 4—45" stacking bars. Elements are preassembled—simply fold out for quick and easy antenna installation. Accessories include 2—5-foot masts; 100 feet of 4-conductor, lead-in line; 3 mast insulators; 5 wall insulators; and chimney mount. ½"-dia. diamond-embossed elements. Shpg. wt., 15 lbs.  
92 CU 137. \$2.00 Down. NET.... 31.32

"RIVIERA" ANTENNA AND SWITCH. As above, but less installation accessories. 10 lbs.  
98 CU 495. \$2.00 Down. NET..... 19.85

WIRE FOR "RIVIERA." 4-conductor lead-in wire. Shpg. wt. 100 ft., 2 lbs.  
47 TX 589. 100-ft. Coil. NET..... 8.90  
47 W 599. Over 100 ft., PER 100 FT., 8.90

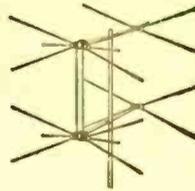
### ★★★ DOUBLE-BAY "ATLAS" KIT

NET  
**\$22<sup>45</sup>**  
\$2.00 Down  
"Atlas" near-fringe antenna with eight 45" flip-out elements (preassembled) in each of two bays, four 45" stacking bars. Uses same 12-position selector switch as "Riviera" described at left. Has ½"-dia. elements; diamond-embossed to provide extremely efficient signal pickup. Accessories include 70 feet of flat transmission line lugged and wired to antenna, two 5-foot mast sections, 4 standoff insulators, and 4" wall-mount brackets. Shpg. wt., 14 lbs.  
91 CU 337. \$2.00 Down. NET.... 22.45

### ★★ SINGLE-BAY "ATLAS" KIT

NET  
**\$14<sup>95</sup>**  
TV antenna for metropolitan and suburban areas. Same as above, but single 8-element array. Complete with 12-position selector switch, 70 feet of lead-in, 4 standoffs, mast, 4" wall-mount brackets. Prewired, preassembled. Shpg. wt., 8½ lbs.  
71 CU 672. NET..... 14.95

## WALSCO "IMPERIAL" VHF TV ANTENNAS



Barrier Disc Insulator

★★★ MODEL 4062-F. Extremely popular "Imperial" 2-bay VHF conical antenna for all TV channels. Advanced design provides very high gain on all channels in fringe and high signal strength areas under all kinds of weather conditions. Has excellent directivity and sensitivity—provides unusually clear picture reception. Employs weather-proofed terminal structure.

The "Imperial" can be used in sea coast or heavy industrial areas. Features a barrier disc type insulator with 2" of air space between the terminals. Salt, moisture, soot, corrosion, etc., will not affect the gain or picture quality. Contact surfaces and terminals will never rust or oxidize. Stainless steel, front-end hardware prevents signal losses through corrosion.

Front-end elements are pre-assembled to holding plates which fasten to insulator with one wing nut. Just fold elements in place and fasten wing nut. Less twin line and mast. Shpg. wt., 8 lbs.  
98 CU 404. List. \$22.25. NET..... 13.08

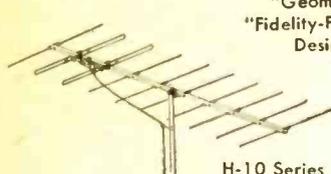
★ TYPE 4060-F. Same antenna as above, but single bay. Shpg. wt., 4 lbs.  
98 CX 405. List, \$10.95. NET..... 6.44

STACKING KITS. For stacking 4060-F single-bay antennas. Av shpg. wt., 1 lb.

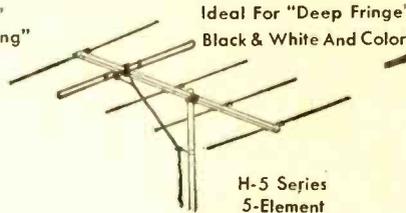
Stock No.	Model No.	Description	NET EACH
98 CX 406	4060A-1	For 2-bay	.88
98 CX 407	4005-5A	For 4-bay	3.29

## FINNEY "GEOMATIC" FRINGE AREA TV ANTENNAS

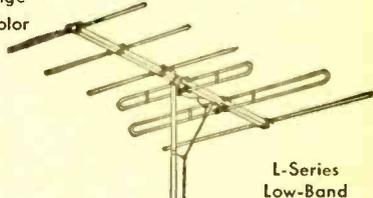
"Geomatic"  
"Fidelity-Phasing"  
Design



H-10 Series  
10-Element



H-5 Series  
5-Element



L-Series  
Low-Band

### H-10 SINGLE-CHANNEL ANTENNAS

★★★★ Customized 10-element yagi "Geomatic" VHF TV antennas. Provide maximum gain, sharp directivity, and high front-to-back ratio in deep fringe areas. Has solid-rod construction for up to 300% greater wind and ice-load resistance. Pre-assembled; "box girder" brackets; heavy, square aluminum boom; solid aluminum elements, and saddle brackets. Less mast and 300-ohm line. Av. shpg. wt., 4½ lbs.

Stock No.	Model	For
92 CU 552	H-10-7	Channel 7
92 CU 553	H-10-8	Channel 8
92 CU 554	H-10-9	Channel 9
92 CU 555	H-10-10	Channel 10
92 CU 556	H-10-11	Channel 11
92 CU 557	H-10-12	Channel 12
92 CU 558	H-10-13	Channel 13

List, \$9.95. NET EACH..... 5.85

★★★★ MODEL H-10-713. Similar to above, but covers channels 7-13. 4½ lbs.  
92 CU 559. List, \$12.95. NET..... 7.61

### H-5 SINGLE-CHANNEL ANTENNAS

★★★★ Popular, 5-element, high-band VHF antennas. Have famous "Geomatic" design for high gain and clean directivity. Same superior construction as Series H-10; feature solid-rod aluminum construction. Less mast and twin line. Av. shpg. wt., 2½ lbs.

Stock No.	Model	For
92 CX 560	H-5-7	Channel 7
92 CX 561	H-5-8	Channel 8
92 CX 562	H-5-9	Channel 9
92 CX 563	H-5-10	Channel 10
92 CX 564	H-5-11	Channel 11
92 CX 565	H-5-12	Channel 12
92 CX 566	H-5-13	Channel 13

List, \$6.65. NET EACH..... 3.91

★★★★ MODEL H-6-713. Twin-driven 6-element yagi. Similar to above, but covers channels 7-13. 2¾ lbs.  
92 CX 567. List, \$8.75. NET..... 5.14

MODEL A STACKING KIT. For all Finney Series H antennas above. Wt., 8 oz.  
92 CX 086. List, \$2.10. NET..... 1.23

### "GEOMATIC" LOW-BAND ANTENNAS

★★★★ "Customized" Series L "Geomatic" television antennas for outstanding "deep fringe" reception on the low-band channels. Model L-26 covers the entire low band; all others cover specific portions.

Have high gain, sharp directivity plus high front-to-back ratio. Pre-assembled.

May be stacked to achieve higher gain—see Model C Stacking Kit. Less mast and 300-ohm twin line. Av. shpg. wt., 8½ lbs.

Stock No.	Type	Channels
92 CZ 283	L-26	2-6
92 CZ 284	L-25	2-5
92 CZ 285	L-24	2-4
92 CZ 286	L-36	3-6
92 CZ 287	L-35	3-5
92 CZ 288	L-46	4-6
92 CZ 289	L-45	4 and 5

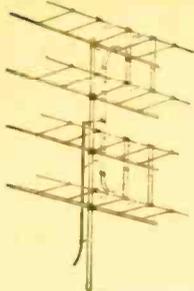
List, \$24.90. NET EACH..... 14.64

MODEL C STACKING KIT. For Finney Series L antennas above. Shpg. wt., 1 lb.  
92 CX 087. List, \$3.10. NET..... 1.82

# Finney Fringe-Area TV Antennas

## CO-LATERAL UHF-VHF ANTENNAS

One  
Antenna  
For All  
Channels



High  
Gain

Preassembled

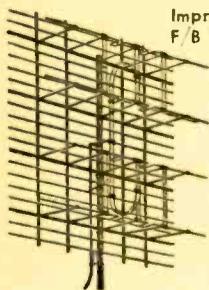
### MODEL 400-A ANTENNA

★★★★ This highly efficient deep-fringe double-co-lateral antenna provides outstanding reception on all UHF and VHF channels. It features 32 driven elements which achieve remarkably high gain, extremely sharp directivity, and superior signal-to-noise ratio. Permits excellent reception on VHF channels at distances of 125 miles and more under average receiving conditions. Antenna's lightweight construction simplifies installation on high towers and masts—weighs only 8 lbs. Extremely rugged and weather resistant. All element brackets have aluminum "Box Girder" construction; self-locking and self-aligning to prevent bent, twisted, out-of-position elements. Also features oversize, extra heavy gauge aluminum boom. Has high resistance to wind and ice load damage. Ideal for use with a rotator in fringe areas. Only one lead-in required for both UHF and VHF reception (tubular type recommended). All-aluminum construction with stainless steel hardware for rust-free durability. Preassembled for convenient installation. Requires 10-ft. (minimum) mast. Less mast and 300-ohm twin line. Shpg. wt., 12 lbs. *Express or truck.*

92 CZ 104. List. \$43.65. NET. . . . 25.67

MODEL 14-S "FRO-BAC" SCREEN REFLECTOR KIT. For use with Model 400 or Model 400-A antennas to provide increased gain and front to back ratio. Includes the "Fro-Bac" screen (see 400-SA, below) and stainless steel hardware for simple, convenient conversion. 80 sq. ft. of reflector surface. 5 lbs.

98 CU 389. List. \$15.60. NET. . . . 9.17



Improved  
F/B Ratio

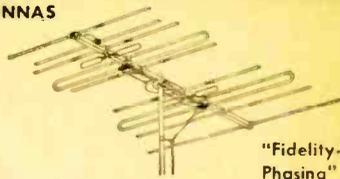
### MODEL 400-SA ANTENNA

★★★★ This antenna is the same as Model 400-A described above, but supplied with "Fro-Bac" full dimensional screen reflector. This special screen results in maximum signal gain plus extremely high front-to-back ratio. Eliminates unwanted rear signal interference and ghosting in fringe areas. Antenna and "Fro-Bac" dimensional screen are both preassembled as one unit ready for quick and easy installation. Reflector screen elements are full length—80 sq. ft. of highest efficiency reflector surface. Designed for minimum wind resistance and maximum strength. Requires 10 ft. mast. Less mast and 300-ohm twin line. Shpg. wt., 16½ lbs. *Express or truck.*

98 CZ 388. List. \$56.65. NET. . . . 33.31

## TWIN-DRIVEN "GEOMATIC" VHF ANTENNAS

- High Front-to-Back Ratio From 2-13
- Preassembled for Easy Installation
- High Gain—Sharp Directivity



"Fidelity-Phasing"

★★★★ MODEL GB-8. Gold-corodized, deluxe twin-driven "Geomatic" antenna—provides topnotch performance in deep-fringe areas. Special gold-anodizing process renders surface more resistant to weather and corrosion—effectively lengthens useful life of antenna. Features 3 directors and 2 reflectors for maximum front-to-back ratio and extremely high directivity. Very effective in eliminating co-channel interference and ghosts. Ideally suited for color TV reception—has extremely flat response; less than 1 db variation across any channel. All "Geomatic" antennas have twin-driven elements and exclusive "Fidelity Phasing"; self-locking and self-aligning construction. Oversize, extra-heavy-gauge aluminum boom plus "lock-tite, no-tilt" saddle bracket assure fast installation and high strength. "Box girder" element brackets prevent bent, twisted, out-of-position elements. Less mast and twin line. Shpg. wt., 10 lbs. *Shipped by express or truck only.*

92 CZ 594. List. \$43.25. NET. . . . 25.43

★★★★ MODEL B-8. Same as above, without gold corodizing. 10 lbs. *Express or truck.*

92 CZ 085. List. \$39.00. NET. . . . 22.93

★★★★ MODEL B-7. Has same features as Model B-8 above, but with 1 reflector. Shpg. wt., 6½ lbs. *Shipped by express or truck only.*

92 CZ 093. List. \$25.90. NET. . . . 15.23

★★★ MODEL B-6. Has same features as Model B-8 above, but has 1 reflector and 1 director. Shpg. wt., 5½ lbs. *Shipped by express or truck only.*

92 CU 094. List. \$19.65. NET. . . . 11.55

## SINGLE-DRIVEN "GEOMATICS"

All of the antennas listed below incorporate "fidelity-phasing" for extreme efficiency on both high and low VHF bands. Ruggedly constructed and completely preassembled. *Not available: shipped by express or truck only.*

★★★★ MODEL B-5. Highly efficient super fringe antenna. Shpg. wt., 9½ lbs.

92 CZ 074. List. \$33.25. NET. . . . 19.55

★★★ MODEL B-4. Ideal for fringe areas. High gain; sharp directivity. 6 lbs.

92 CU 076. List. \$18.20. NET. . . . 10.70

★★★ MODEL B-3. For suburban-fringe areas. A top performer. Wt., 5 lbs.

92 CU 078. List. \$14.00. NET. . . . 8.23

★ MODEL B-2. Metropolitan, suburban or semi-fringe areas. Shpg. wt., 3½ lbs.

92 CU 082. List. \$7.65. NET. . . . 4.50

## STACKING KITS

MODEL A. For stacking all Series B antennas above and at left. Gives increased gain on Chs. 4, 6-12 with Model B-4; Chs. 4-6, 8-13 with Model B-5; Chs. 3, 7-13 with Models B-6, B-7; Channels 7 through 13 on all other models. Shpg. wt., 8 oz.

92 C 086. List. \$2.10. NET. . . . 1.23

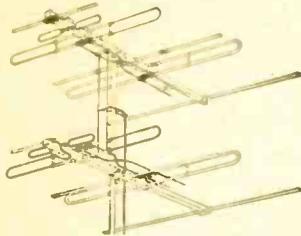
MODEL B. Stacks Models B-2, B-3, B-4, B-5. Boosts Chs. 2-6 with Model B-2; Chs. 2-6, 13 with Model B-3; Chs. 2-6, 12, 13 with Model B-4; Chs. 3-8, 13 with Model B-5. Shpg. wt., 12 oz.

92 CX 075. List. \$2.60. NET. . . . 1.53

MODEL C. For stacking GB-8, B-8, B-7, or B-6 antennas. Gives increased gain on Chs. 2-6 with Model B-6; Chs. 2-6, 11-13 with Model B-7; Chs. 2-6, 10-13 with Models B-8 and GB-8. Shpg. wt., 1 lb.

92 CX 087. List. \$3.10. NET. . . . 1.82

## "GEOMATIC" TWIN-DRIVEN 2-BAY VHF ANTENNAS



★★★★ MODEL B-66-A. Deep fringe antenna featuring very great front-to-back ratio and high gain on all channels. This is achieved through the use of Finney's famous "Fidelity Phasing" and coaxially dual-tuned folded dipoles. Incorporates coaxial capacities which causes dipole to operate as one length on low-band signals and as electrically different length on high-band signals—provides peak performance on both bands. "Fidelity Phasing" efficiently combines the low-band folded dipole operation and high-band 3-element colinear operation without complicated phasing harnesses. Low-band reflector, high-band colinear reflector and combination director further increase gain and sharpness of directivity. Completely preassembled. Less mast and twin line. Wt., 10 lbs. *Express or truck.*

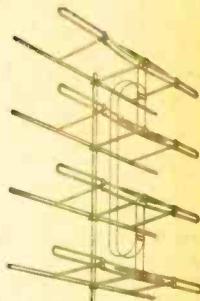
92 CU 568. List. \$41.40. NET. . . . 24.34

MODEL B-66-C. For maximum F/B ratio on channels 2 and 3, and maximum gain on 2-6. Wt., 10 lbs. *Express or truck.*

92 CU 569. List. \$42.40. NET. . . . 24.93

## SUPER-FRINGER ANTENNA

Model F-4  
"Fidelity  
Phasing"  
Design  
  
Highly  
Sensitive



★★★★ MODEL F4. A super-fringe VHF antenna with exclusive "Fidelity-Phasing." This antenna engineering discovery produces superior combined performance on all VHF channels from 2 through 13. Excellent reception even at locations extremely distant from TV stations. Highly suitable for color-TV reception—has very flat frequency response; less than 1 db variation in frequency response on any channel. 4 driven low-band, in-phase folded dipoles, plus 12 driven high-band, in-phase, folded dipoles form a highly effective colinear array.

Fidelity phasing accomplishes both low-band dipole and high-band colinear operation without complicated phasing harnesses. Extremely high sensitivity and directivity. Rugged, lightweight, aluminum construction. Preassembled for quick, simplified installation. Less mast, 300-ohm twin line. Wt., 13 lbs. *Express or truck.*

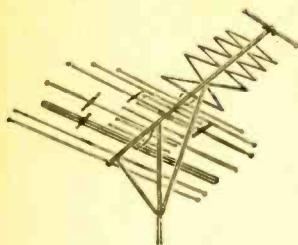
92 CZ 072. List. \$47.85. NET. . . . 28.14

# JFD TV Antennas

## EASY-TO-INSTALL TV ANTENNAS CONSTRUCTED OF ALCOA ALUMINUM

### ★★★★MODEL VX1111 "SATELLITE HELIX"

- For up to 150 Miles!
- 28-Element Design

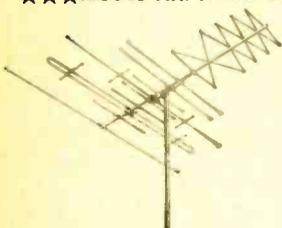


Deluxe antenna for superior VHF TV reception in deep-fringe areas—shrinks the miles. Features sharp directivity, very high gain and wide vertical beamwidth. Extremely rugged construction minimizes the effects of high winds, storms and heavy icing. Super-sensitive 28-element array employs a special helical highband section, plus, "balanced sleeve dipole" design. Gain is essentially flat, averaging 10 db on high bands and 6 db on low bands. Sharp directivity contributes to better ghost interference rejection—front-to-back ratio is from 15 to 25:1 on low bands and from 16 to 25:1 on high bands. Wide vertical beamwidth assures maintenance of gain in mountainous terrain. All long elements are reinforced with aluminum dowels. Heavy-duty tandem U-bolt assembly locks boom to mast—boom has two 1" tubular braces for extreme rigidity. Antenna is pre-assembled—just flip elements into locking brackets. Less mast; 300-ohm twin line. Wt., 15 lbs. *Only \$2.00 Down.*

91 CZ 821. List, \$47.50. NET..... 27.93

### ★★★MODEL AX711 GOLD-ANODIZED "STAR HELIX"

- Narrow Beam Width
- Good High-Band Gain



Provides an extremely high front-to-back ratio for excellent rejection of undesired signals. Delivers top performance on all VHF channels in semi-fringe areas—can also be used in strong-signal UHF areas. Has a hard gold-anodized surface for resistance to tarnish and corrosion. Long elements are reinforced with aluminum dowels—heavy-gauge boom is full 1" square. Designed for reduced wind resistance and ice loading. Antenna is completely pre-assembled—just flip elements into grip-locking brackets. Constructed of rugged, solid-drawn aluminum. Less mast and 300-ohm twin line. Shpg. wt., 8 lbs.

91 CZ 822. List, \$32.50. NET..... 19.11

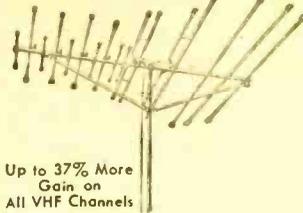
MODEL SX711. Same as AX711, but without gold anodizing.  
92 CZ 113. List, \$27.50. NET..... 16.17

★★★ MODEL AX711S. Same as AX711, but two bays for higher gain. Requires 10-ft. mast. Shpg. wt., 16 lbs. *\$2.00 Down.*  
91 CZ 823. List, \$68.50. NET..... 40.28

MODEL SX711S. As above, without anodizing. *\$2.00 Down.*  
92 CZ 112. List, \$57.50. NET..... 33.81

### ★★★★MODEL ANS300 "SUPER BLITZ BANSHEE"

- New, 15-Element Design
- 1" Sq., Rigid Crossarm



Up to 37% More Gain on All VHF Channels

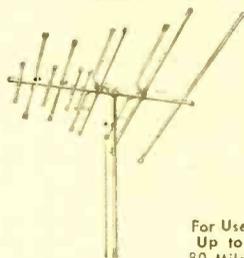
A new, high-performance antenna that employs 15 elements for extra-powerful performance. The gold-anodized, "Super Blitz Banshee," is a twin-driven, super-sensitive broad band array for use up to 125 miles. Easy to install, its "super-pak" sections slip conveniently into front and rear end of crossarm to make a strong, single-unit array. One-inch tubing brace solidly supports entire length of crossarm from end to end—provides a strain-free rigidity that easily withstands high wind velocities.

Employs hypersensitive, Yagi-engineered, 15-element design—averages 37% higher gain on high band, and 31% higher gain on low band, for unprecedented picture quality in black-and-white or color TV reception. Features dual band parasites; 1/2-wave directors on low band (foreshortened by use of new type delay line at center). At high band frequencies, delay lines cause element to operate as two full-wave directors. Driven elements are made of husky, 1" round seamless tubing—capped ends prevent wind whistle. Less mast; 300-ohm twin line. Shpg. wt., 9 lbs. *Only \$2.00 Down.*

91 CZ 352. List, \$36.15. NET..... 21.26

### ★★★MODEL AN300 "BLITZ BANSHEE"

- Twin-Drive, 9-Elements
- Non-Corrosive, Gold Anodized



For Use Up to 80 Miles

Engineered for picture-perfect reception, the new AN300 "Blitz Banshee" employs a multi-element, twin-driven Yagi-type configuration, with precision-spaced directors and reflectors—to extend the response of Yagi over the entire VHF band. Has many of the excellent features of the ANS300 described above, but with fewer elements. High front-to-back voltage ratios reject noise and unwanted signals from rear. Result is better ghost rejection and less co-channel and adjacent channel interference. Broad vertical response picks up long-distance signals in uneven terrain; narrow horizontal forward response decreases "ghosting." Non-corrosive aluminum harness network, made of rigidized busbar. Aluminum screw and nut take-offs insure permanent, maximum signal transfer.

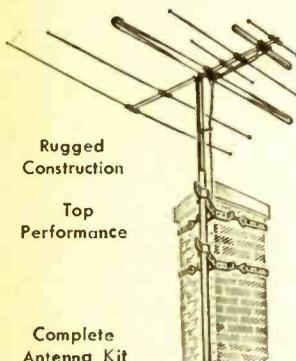
Driven elements made of 1" round, seamless tubing with capped ends. Heavy-wall, 1" square crossarm of aluminum for added rigidity—all aluminum elements are gold anodized. Less mast, twin line, Shpg. wt., 7 lbs.

91 CZ 351. List, \$22.00. NET..... 12.94

## SERIES 500 "FIREBALL" GOLD ANODIZED ANTENNAS AND ANTENNA KITS

### ★★★MODEL AB500 ANTENNA

- Extremely Rigid Construction
- Minimum Ghost and Noise Pickup



Rugged Construction

Top Performance

Complete Antenna Kit

Expertly engineered broadband array for superior semi-fringe VHF and local UHF coverage. Offers extremely high gain on both low and high VHF TV bands. Separate folded dipoles for low and high bands with individual reflectors and directors give high directivity and excellent front-to-back ratio. Tough gold-anodized surface provides high tarnish and corrosion resistance. Lightweight construction simplifies installation on high towers. Aluminum phasing harness prevents weather breakdown. Has 15" aluminum dowels in the center of every element over 36" long to minimize the effects of icing and high winds. Completely pre-assembled along a rugged 1"-square boom—just flip elements into place. Large brackets grip elements securely. Less mast and 300-ohm twin line. Shpg. wt., 5 1/2 lbs.

91 CU 828. List, \$19.50. NET..... 11.47

★★★MODEL AB500S. Same as AB500 above, except two bays for higher gain. Requires 10-ft. mast, 11 lbs. *Only \$2.00 Down.*  
91 CU 829. List, \$43.50. NET..... 25.58

MODEL FB500. Same as AB500, less anodizing.  
92 CU 122. List, \$15.30. NET..... 9.00

MODEL FB500S. Same as AB500S, less anodizing.  
92 CU 123. List, \$32.95. NET..... 19.37

### ★★★MODEL AB500CH ANTENNA KIT

- A Complete Kit—Nothing Else To Buy
- Quick, Easy Installation

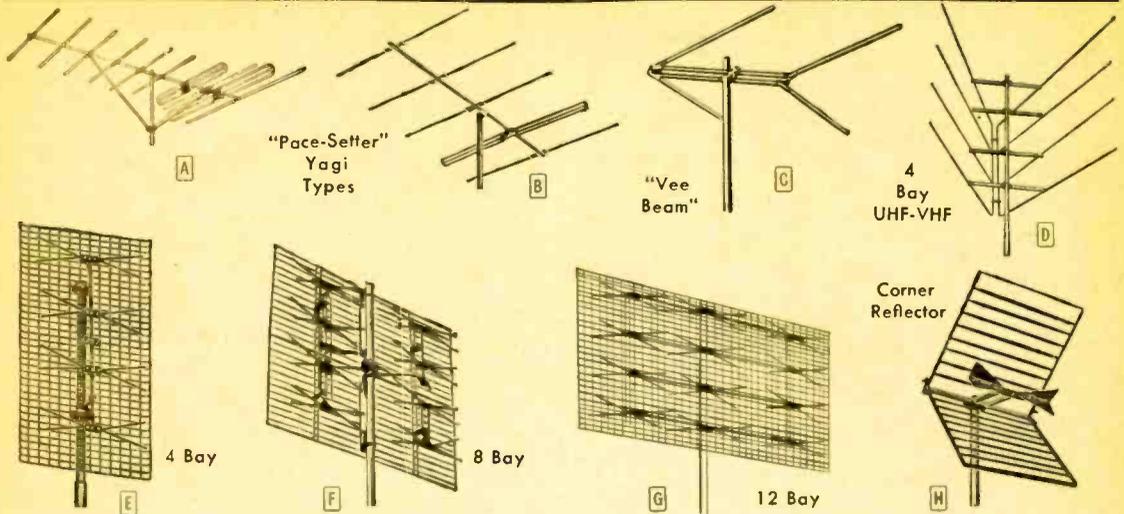
Here's an economical, convenient kit with everything you need for a complete "Fireball" TV antenna installation. Quickly and easily installed to provide long, trouble-free performance. Includes the outstanding AB500 gold-anodized "Fireball" antenna described at left, a rugged gold-anodized mast, a corrosion-resistant steel chimney mount, 50 feet of polyethylene twin line and a set of stand-off insulators.

Mast is 4 ft. long and 1 3/8" O.D.—made of heavy-gauge aluminum for extreme rigidity. Has hard gold-anodized surface that assures dependability under severe conditions of dirt, salt spray, etc. Completely pre-assembled "snap fit" chimney mount is made of durable galvanized steel with stainless steel straps. Mounting bracket has no hardware—mast quickly snaps into heavy mounting jaws. Each of the two mounting straps is 144 3/4" long by .015" thick. Mount fits chimneys with perimeters of up to 10 ft. Includes four 3 1/2" wood-screw stand-offs; one 7" wood-screw stand-off; two mast stand-offs. Wt., 10 lbs. *Only \$2.00 Down.*

91 CU 830. List, \$34.95. NET..... 20.55

FB500CH. Complete "Fireball" antenna kit as above, but less gold anodizing.  
91 CU 831. List, \$29.95. NET..... 17.61

# JFD VHF-UHF TV Antennas



## "PACE-SETTER" YAGI ANTENNAS

Yagi type antennas offer extremely high gain characteristics and exceptionally sharp directivity for maximum signal reception in deep fringe areas. Antennas listed below are completely pre-assembled for quick, easy installation. All feature rust-proof, seamless aluminum crossarms with 1" O.D. "Pace-Setter" antennas have preassembled elements for quick installation. Any of these Yagi type antennas may be stacked for even greater signal gain by using specified harnesses, listed below. Less mast and 300-ohm twin line.

**A** ★★★★★ SINGLE CHANNEL 10-ELEMENT TYPES. Will provide 52% more signal gain than conventional 5-element type yagis. Very sharp directivity. Y-type boom brace supplied with low band antennas (for channels 2 to 6) for additional support. Av. shpg. wt., 9 lbs.

No.	Type	Chan.	List	EACH
98 CZ 231	1022	2	\$21.62	12.47
98 CZ 232	1023	3	21.12	12.42
98 CZ 233	1024	4	19.73	11.60
98 CZ 234	1025	5	19.46	11.45
98 CZ 235	1026	6	18.62	10.95
98 CZ 236	1027	7		
98 CZ 237	1028	8		
98 CZ 238	1029	9		
98 CZ 239	10210	10	8.75	5.14
98 CZ 240	10211	11		
98 CZ 241	10212	12		
98 CZ 242	10213	13		

**B** ★★★★★ SINGLE CHANNEL 5-ELEMENT TYPES. High-gain, single-driven-element yagis. Consists of 3 directors, 1 reflector and 1 folded dipole. Av. shpg. wt., 5 lbs.

No.	Model	Chan.	List	EACH
98 CZ 322	522	2	\$11.80	6.94
98 CZ 323	523	3	11.70	6.88
98 CZ 324	524	4	11.12	6.54
98 CZ 326	525	5	10.15	5.97
98 CZ 327	526	6	9.85	5.79
98 CZ 328	527	7		
98 CZ 329	528	8		
98 CZ 331	529	9		
98 CZ 332	5210	10	5.28	3.11
98 CZ 333	5211	11		
98 CZ 334	5212	12		
98 CZ 335	5213	13		

## QUALITY "VEE-BEAM" VHF ANTENNAS

**C** ★ MODEL Q800. Vee-Beam antenna—covers channels from 2 to 13. Engineered for increased gain, especially on high band. "Quick-Rig" pre-assembled design for rapid, easy installation—entire array slides out of package readily for flip-assembly; elements automatically lock in place. Simply slip each section of the antenna in place; mechanical grooves and locks secure them permanently. Features corrosion-proof, aircraft aluminum construction throughout. Supplied with 1/2" boom. Includes built-in lightning arrester. Less mast and 300-ohm twin line. Shpg. wt., 3 1/2 lbs. 98 CU 166. List. \$6.25. NET..... 3.67

★ ★ MODEL Q801. Stacked Vee-Beam—two bays provide additional 3 db gain. Includes half wavelength, mast-supported jumper harness for 300 ohm impedance match. Gives excellent reception in metropolitan-suburban areas and in near-fringe localities. Its high sensitivity and sharp directivity delivers clear, steady pictures. Less mast and 300-ohm twin line. Shpg. wt., 7 lbs. 98 CZ 167. List. \$12.40. NET..... 7.29

CASCADE MULTI-CHANNEL TWIN-DRIVEN TYPES. Offer high-gain coverage of all low-band or all high-band channels with a single antenna. Yagi-type construction assures high forward directivity and good front-to-back ratio. Model 10Y26 has Y-type boom braces for additional support.

**A** ★ ★ ★ MODEL 10Y26. 10-element "Pace-Setter" for channels 2-6. 11 lbs. 98 CZ 455. List. \$31.95. NET..... 18.79

**A** ★ ★ ★ MODEL 10Y713. 10-element "Pace-Setter" for channels 7-13. 9 lbs. 98 CZ 459. List. \$15.25. NET..... 8.97

## "PACE-SETTER" STACKING HARNESSSES

Matching harnesses for stacking any of 5 and 10-element yagi antennas (above and left) for extra gain. Type J175 stacking harness is for use with the Model 10Y26 antenna; Type J178 stacking harness is for use with the Model 10Y713 antenna. Av. shpg. wt., 1/2 lb.

No.	Type	For Ch.	EACH
92 CX 253	YT2	2	
92 CX 254	YT3	3	
92 CX 255	YT4	4	1.03
92 CX 256	YT5	5	
92 CX 257	YT6	6	
92 C 258	YT7	7	
92 C 259	YT8	8	
92 C 260	YT9	9	.73
92 C 261	YT10	10	
92 C 262	YT11	11	
92 C 263	YT12	12	.73
92 C 264	YT13	13	.73
92 CX 265	J175	2-6	1.76
92 C 266	J178	7-13	.88

## UHF AND VHF-UHF ANTENNAS

**D** ★ ★ UN105. UHF-VHF antenna for channels 2 to 83. 4-bay for extra gain and signal sensitivity for semi-fringe areas. Features Redwood crossarms. Pre-assembled. Simply swing sections open and tighten. Has anti-rust, anti-corrosion, all-aluminum elements. Less 300-ohm line and mast. Wt., 5 1/2 lbs. 92 CU 107. List. \$10.70. NET..... 6.29

**E** ★ MODEL UHF202. 4 bay, UHF bowtie antenna for suburban areas. Reflector for high gain on all channels and reduction of snow and troublesome reflections. Features "Custom-Channel" calibrator—permits peaking individual channels for optimum response. Precision spaced elements and phasing harness for maximum gain. Galvanized grid wire screen with 1/4" O.D. solid aluminum rods. Pre-assembled for fast installation. Less mast and twin line. Shpg. wt., 6 lbs. 92 CU 151. List. \$9.70. NET..... 5.70

**F** ★ ★ MODEL UHF208. 8-bay, UHF bowtie antenna for semi-fringe area reception. Utilizes wire mesh reflector and matched elements to provide optimum gain on all channels. Rigidly constructed; solid aluminum rods and galvanized screen. Pre-assembled for simplified, rapid installation. Less mast and 300-ohm twin line. Shpg. wt., 8 lbs. 92 CU 550. List. \$25.95. NET..... 15.26

**G** ★ ★ ★ MODEL UHF212. 12 bay, UHF bowtie antenna for fringe area reception. Designed to provide extremely high gain over all channels. Screen is engineered for efficient shielding of conical sections. Provides sharp directivity; greatly reduces interference. Pre-assembled for quick, easy installation. Less mast and 300-ohm twin line. Shpg. wt., 10 lbs. 92 CU 551. List. \$33.50. NET..... 19.70

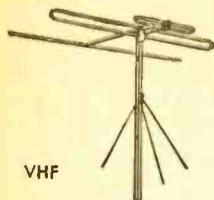
**H** ★ MODEL UHF410. UHF corner reflector—provides excellent suburban reception. The high front-to-back and front-to-side ratio minimizes co-channel and adjacent channel interference and ends "ghosts."

The twin-angled multi-grid reflectors trap maximum signal strength and reflect it back onto the bowtie dipole with greatly increased intensity. Features extremely sharp directivity. The bowtie dipole provides optimum beam width for maximum gain. Rigidly constructed of solid, lightweight, rust and corrosion resistant aluminum.

Flips open like a book for quick, easy installation. Less mast and 300-ohm twin line. Shpg. wt., 6 lbs. 92 CX 152. List. \$8.50. NET..... 4.99

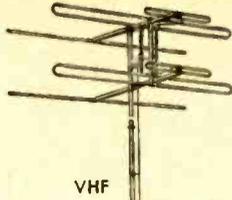
# Amphenol, Taco, Davis, Finney Antennas

## HIGHLY EFFICIENT VHF & UHF AMPHENOL TV ANTENNAS



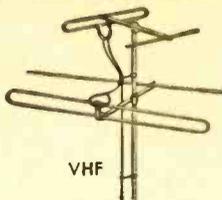
VHF

114-005



VHF

114-314



VHF

114-026

### ★ INLINE VHF ANTENNA

MODEL 114-005. Covers all VHF channels. Ideal for metropolitan and suburban use. Unusually broad frequency response. Uni-directional pattern and excellent impedance match on high and low-bands reduces stray reflections and "ghosts." Antenna elements constructed of sturdy aluminum tubing. Mast is heavy-gauge steel. Includes one 5"x3/4" mast, guy ring, mounting bracket, hardware, stand-off insulators. 75 feet of high-quality 300-ohm twin line. Shpg. wt., 7 lbs. *Express or truck only.*  
97 CU 438. List, \$19.50. NET.....11.47

Model 114-009. Same antenna as 114-005 above but less 300-ohm twin line. Shpg. wt., 6 lbs. *Express or truck only.*  
97 CU 439. List, \$17.00. NET.....10.00

Model 114-040. Same as 114-005 above, but less mast, twin line and stand-off insulators. Shpg. wt., 5 lbs. *Express or truck.*  
97 CU 492. List, \$13.95. NET.....8.20

### ★★ INLINE STACKED ARRAY

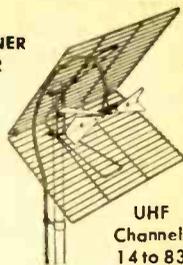
MODEL 114-314. Properly phased for all VHF channels. Each bay consists of 2 folded dipoles and low-band reflector element. Low-band folded dipole of each bay acts as reflector for high-band dipole. Less 300-ohm twin line and 10-ft. mast. Shpg. wt., 12 lbs. *Express or truck.*  
97 CU 454. List, \$29.00. NET.....17.05

### ★ "PIGGY-BACK" VHF ANTENNA

MODEL 114-026. Amphenol's extremely popular "Piggy-Back" VHF antenna—a particularly fine choice for locations where high and low-band TV signals are received from different directions. Eliminates the need for compromising low-band reception in order to obtain good high-band reception, and vice-versa. Consists of individual, 2-element high-band and low-band antenna sections to permit separate directional adjustments for peak performance and minimum "ghosts" on channels 2-6 (low band) and 7-13 (high band). Includes: 5-ft. mast, clamps, guy ring, harness, mounting support, stand-off insulators, 75 feet of 300-ohm twin line and complete, easy-to-follow installation instructions. Shpg. wt., 10 lbs. *Shipped by express or truck.*  
97 CU 360. List, \$19.50. NET.....11.47

### ★ UHF CORNER REFLECTOR

- Provides Strong Reception
- Reduces "Ghost" Interference
- Resists Effects of Weather
- Complete with all Hardware

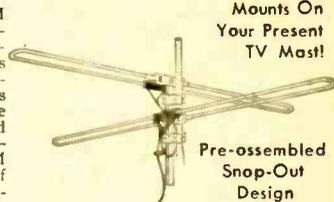


UHF Channels 14 to 83

MODEL 114-058. Engineered for high gain over channels 14 through 83. UHF corner reflector design has proven most efficient antenna for both strong and weak signal areas. Excellent horizontal and vertical characteristics reduce "ghosts" as well as interference due to simultaneous telecasting on the same or adjacent channels. Spacing and dimensions of the elements and reflectors assure maximum broadband reception. Ascending signal gain of 8 to 13 db across the entire UHF range. Impedance matches 300-ohm twin line. Electro-galvanized steel reflectors designed to resist corrosion. Fits masts up to 1 1/2" O.D. Unit comes complete with all necessary mounting hardware and easy-to-follow installation instructions. Less mast and 300-ohm twin line. Shpg. wt., 8 lbs. *Shipped express or truck.*  
97 CU 263. List, \$12.50. NET.....7.35

## NEW FINNEY FMT-A FM ANTENNA KIT

Enjoy the finest FM reception your tuner or FM radio can deliver with this all-directional antenna kit. Features a ruggedly constructed, pre-assembled turnstile-type antenna that requires no rotation. You simply mount it on your present TV mast with the bracket supplied—there's no need for an additional mast installation. The two antenna elements are accurately matched for efficient, all-directional signal pickup—provides strong reception over the entire FM band. Kit includes an FM antenna, 50-ft. of twin line, two mast insulators, 3 screw-in insulators, plus mounting bracket, 6 lbs.

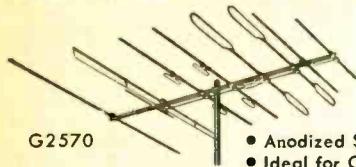


Mounts On Your Present TV Mast!

Pre-assembled Snap-Out Design

91 CX 330. List, \$14.50. NET.....8.53

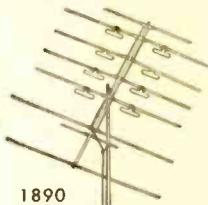
## TACO BROAD-BAND VHF TV ANTENNAS



G2570

- Anodized Surface
- Ideal for Color TV

Has Five Driven Elements



1890

### GOLDEN TOPLINER ANTENNAS

★★★★ MODEL G2570. Gold-anodized high-gain antenna for peak reception in deep-fringe areas. Features "power-pack" feed circuit and new "paddle" dipoles. 5 driven elements operate with equal efficiency on all VHF channels; minimizes ghosts and interference. 15-dlp anodizing of aluminum elements reduces effects of salt air, soot, etc. Elements snap into place without tools. Less mast and 300-ohm twin line. 10 lbs. *By express or truck.*  
71 CZ 681. List, \$43.95. NET.....25.84

★★★★ MODEL 2570. Similar to above, less gold anodizing.  
92 CZ 296. List, \$36.75. NET.....21.61

STACKING KITS. For providing extra high-band gain or extra low-band gain. Each kit stacks two G2570 or 2570.

Stock No.	Type	Description	Wt.	NET
92 CX 297	2502	hi-band gain	1/2 lb.	.88
92 CX 298	2503	lo-band gain	1 lb.	1.76

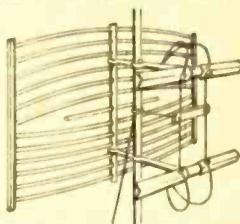
### MODEL 1890 "SUPER-TRAPPER"

★★★★ Unique, multi-driven antenna for outstanding performance in deep-fringe areas. Provides high uniform gain on all channels. Features 5 driven elements operating with equal efficiency on both high and low bands. Signal energy of all 5 drivers is always combined in phase regardless of channel being received on TV set. Extremely high front-to-back ratio effectively minimizes co-channel interference. Has tough aluminum alloy construction and sturdy 1 1/4" diameter crossarm for long life. Low-loss fiberglass insulators. Easy to install—elements snap into place without tools. Less mast and 300-ohm twin line. Shpg. wt., 9 lbs.  
92 CZ 030. List, \$34.50. NET.....20.29

STACKING KITS. For providing extra high-band gain or extra low-band gain. Each kit stacks two 1890 antennas.

Stock No.	Type	Description	Wt.	NET
92 CX 031	1892	hi-band gain	1/4 lb.	.88
92 CX 032	1893	lo-band gain	7 oz.	2.20

## DAVIS UHF-VHF TV ANTENNA

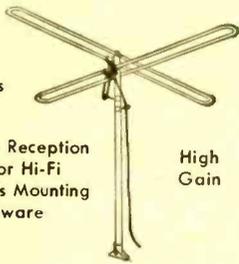


★★★★ MODEL SV-ZR-1 "ZIG-RIG." Extremely popular, UHF-VHF TV antenna. Provides excellent deep-fringe area VHF reception, even at distances to 200 miles from the transmitter. In addition, it provides excellent UHF reception in metropolitan and suburban signal areas. Delivers 12 db or more average gain on high channels. Features electronic dipole separators. Antenna is equipped with 2 impedance matching harnesses—permits peaking antenna on weakest channel and still maintain excellent all-channel coverage. Shipped preassembled for quick and easy installation—just flip the elements in place. Ruggedly constructed to withstand icing and high winds. Less mast and 300-ohm line. Shpg. wt., 12 lbs. *By express or truck only.*  
92 CZ 210. List, \$29.95. NET.....17.61

MODEL 5K-1 STACKING KIT. For horizontal or vertical stacking of 2—SV-ZR-1 (listed above). Shpg. wt., 1 1/2 lbs.  
51 CX 054. List, \$3.25. NET.....1.91

## KNIGHT ALL-DIRECTION FM ANTENNA KIT

Uniform Gain From All Directions



- Superb Reception
- Ideal for Hi-Fi
- Includes Mounting Hardware

High Gain

A top-quality FM antenna kit at a money-saving price. Two folded dipoles mounted at right angles to each other provide uniform gain from all directions. Eliminates need for rotator. Excellent response across the entire FM band. Elements constructed of heavy walled, extruded aluminum for maximum weather resistance.

Complete kit includes: rugged 5-ft. mast; 50 feet of 300-ohm twin line; sturdy, universal mounting base; 1 mast stand-off insulator; and other necessary hardware—at one low price. Instructions included for easy assembly. Shpg. wt., 7½ lbs. 92 CU 583. NET.....7.95

## TACO FM ANTENNAS



### MODEL 644B 6-ELEMENT FM ANTENNA

Single-bay, 6-element yagi antenna for top FM performance in weak signal areas. Uni-directional design. High F/B ratio. Up to 9 db gain. Completely assembled. Elements swing out—lock in place. Less mast, 300-ohm twin line. Shpg. wt., 7 lbs. 92 CZ 546. List, \$20.20. NET.....11.88

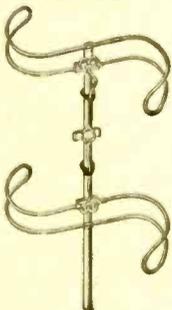
### MODEL 610 10-ELEMENT FM ANTENNA

Single-bay, 10-element yagi antenna for outstanding long-distance FM reception. 8 to 10 db gain. Sharp directivity—extremely high F/B ratio. Completely assembled. Arms swing out—lock in place. Less mast, 300-ohm twin line. Wt., 10½ lbs. 92 CZ 547. List, \$29.25. NET.....17.20

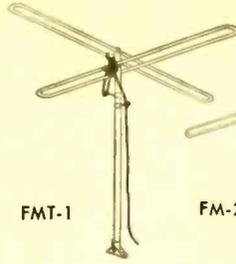
MODEL 646 STACKING KIT. Phasing line, insulators, hardware. Permits stacking two 644B or 610 antennas. Wt., 1 lb. 92 CX 548. List, \$2.65. NET.....1.56

### MODEL 624STL FM ANTENNA

An excellent value in a unique, stacked FM antenna—combines an all-directional pickup pattern with high gain. Consists of two S-type, stacked, folded dipoles connected with a phasing network for optimum efficiency. Reception characteristics are particularly suited to locations where stations must be received from several different directions. Stacked-element design provides unusually good gain across the entire FM band. Sturdy, all-aluminum construction. Antenna is supplied with heavy-duty, 10-ft. aluminum mast. Less 300-ohm twin line. Shpg. wt., 7½ lbs. 92 CU 039. List, \$14.95. NET.....8.79



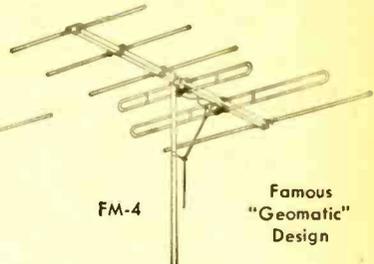
## FINNEY FM ANTENNAS



FMT-1



FM-2



FM-4

Famous "Geomatic" Design

### MODEL FMT-1 ANTENNA KIT

All-direction FM antenna kit. Provides unusually fine reception over the entire FM band, 88 to 108 mc. Incorporates two sturdy, well designed folded dipoles mounted at right angles to each other for complete 360° coverage without rotation. Dipoles are matched with a special quarter wave phasing stub for optimum match to 300-ohm line. Simplified installation. Each folded dipole attaches easily to pre-drilled 5-foot mast. Universal base will mount on any surface from horizontal flat roof to vertical side wall and allow mast to be adjusted to vertical position. Kit includes 50-ft. 300-ohm transmission line; heavy-duty 5-ft. antenna mast; universal mounting base; 2 mast stand-off insulators; and 3 screw-eye stand-off insulators. Shpg. wt., 6 lbs. 92 CU 278. List, \$14.50. NET.....8.53

### MODEL FM-2 ANTENNA KIT

A particularly fine choice for use where all signals are received from approximately the same direction. Employs an efficient FM dipole plus a reflector element to achieve high signal gain and good directivity. Gain is 3.5 db. Features rugged, weather-resistant construction throughout. All-aluminum boom and elements are completely pre-assembled with "snap-out," self-aligning aluminum brackets—designed for quick, simplified installation. Universal base will mount on any surface. Kit is supplied with 5-ft. antenna mast, heavy-duty mounting base, 50-ft. 300-ohm twin line, 2 mast-type stand-off insulators, and 3 screw-eye stand-off insulators. Shpg. wt., 6½ lbs. 92 CU 279. List, \$14.50. NET.....8.53

FMS STACKING KIT. For stacking two FM-2, FM-3, FM-4 or FM-5 antennas. 1 lb. 92 CX 597. List, \$3.35. NET.....1.97

### MODEL FM-3 ANTENNA

(Not illustrated.) An extremely effective broad band fringe-area FM antenna at a very moderate cost. Features a highly directive 4-element yagi design for outstanding gain on the FM band, 88 to 108 mc. All-aluminum construction with square boom. Folded dipole driven element for closer impedance matching and maximum energy transfer. Double wall reinforced elements have snap-out brackets. Elements lock in open position. Less mast and 300-ohm twin lead. Shpg. wt., 5 lbs. 92 CU 281. List, \$13.00. NET.....7.64

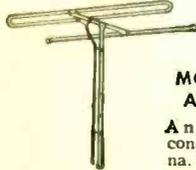
### MODEL FM-4 ANTENNA

6-element, high-gain antenna—provides superior fringe-area FM reception. Twin drive allows maximum gain over the full 88 to 108 mc band. 3 extra wide spaced parasitic director elements, plus the wide spaced parasitic reflector, also contribute substantially to the gain and broad-band features. All of the parasitic elements lock into open position by "snap lock" brackets. On the twin-drive dipoles loosen nuts, swing into open position until brackets snap closed and retighten nuts. Equipped with rugged square aluminum boom and "Lock-Tite-No-Tilt" saddle mounting. Less mast, twin lead. Shpg. wt., 6½ lbs. 92 CZ 280. List, \$24.90. NET.....14.64

### MODEL FM-5 ANTENNA

New, super-sensitive, 10-element deluxe antenna. Twin drive elements. Maximum gain over full FM band. Wt., 8½ lbs. 91 CZ 329. List, \$36.35. NET.....21.37

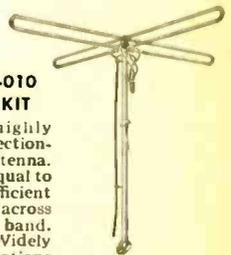
## AMPHENOL FM ANTENNAS



### MODEL 114-008 ANTENNA KIT

An efficient, sturdily constructed FM antenna. Easily installed unit employs: folded dipole plus a reflector element. Use of folded dipole as driven element provides excellent impedance match with 300-ohm lead in line. Has extremely good gain and directional characteristics across the entire 88 to 108 mc FM band. A very dependable performer for use in areas where most FM stations are received from approximately the same direction. Made of lightweight, durable, ¾" O.D. aluminum tubing—withstands very severe weather conditions. Swivel bracket allows mast to be installed vertically on any type of roof or side of house.

Supplied complete with a full set of high-quality accessories plus easy-to-follow assembly and installation instructions. Accessories consist of: 5 ft. x ¾" O.D. steel mast, 75 feet of 300-ohm twin line, low-loss stand-off insulators, swivel and U-bolt mounts and hardware. Shpg. wt., 7 lbs. 97 CU 433. List, \$16.25. NET.....9.55



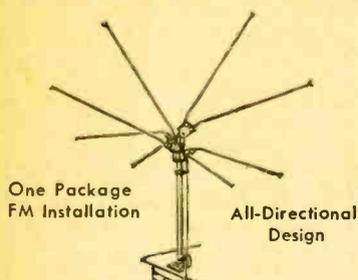
### MODEL 114-010 ANTENNA KIT

Amphenol's highly popular, all-directional FM dipole antenna. Provides gain equal to that of an efficient folded dipole across the entire FM band, 88 to 108 mc. Widely used where stations are received from many different directions. Elements are of ¾" O.D. aluminum tubing—antenna is ruggedly constructed to withstand high winds and icing. Employs 2 folded dipoles mounted at right angles to achieve an essentially circular pickup pattern. Quarter wave phasing stub precisely matches both elements to 300-ohm twin line.

Supplied complete with full set of accessories for easy, time-saving installation. Includes convenient, hinged base plate for simplified mounting of antenna on either a flat or sloping roof, 75 feet of quality 300-ohm twin line, all hardware, and sturdy 5-ft. x ¾" O.D. mast. Shpg. wt., 7 lbs. 97 CU 434. List, \$16.25. NET.....9.55

# FM and Indoor TV Antennas

## JFD MODEL AFM-100 FM TURNSTILE ANTENNA KIT



One Package  
FM Installation

All-Directional  
Design

- Top-Value Antenna and Accessories
- Gold-Anodized Mast and Elements
- Pre-assembled For Quick Installation

NET

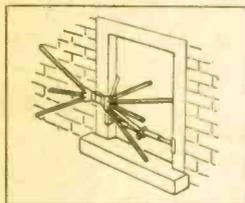
**\$938**

A sensitive, all directional FM antenna complete with roof mount and all installation accessories—at an

exceptionally low price. Ideal for use in locations where FM reception is available from more than one direction. Turnstile design insures that antenna elements are always correctly oriented to pick up optimum signal strength from the station desired. Gold-anodized all-aluminum weather-resistant construction. Preassembled for quick, easy assembly. Elements fold out and snap securely into place. Kit includes everything necessary for complete installation; one antenna, 5' aluminum mast, galvanized steel guy ring, universal base mount for wall or roof installation, 4 wood-screw stand-offs, and 50 feet of 300-ohm twin line. With easy-to-follow instructions. Shpg. wt., 5½ lbs.

91 CX 987. List, \$15.95. NET. **9.38**

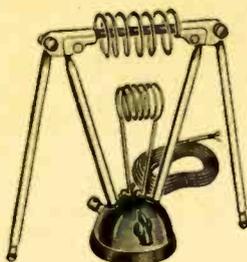
## JFD WINDOW TV ANTENNA



MODEL C119. Low-cost, all-aluminum conical window antenna for strong-signal areas. Ideal for apartment buildings, hotels, etc., or wherever roof-top installations are not practical, but where the signal gathering power of an outdoor antenna is desired. Easily fits on the outer frames of most windows—adjustable from 32" to 42" in width. Antenna can be adjusted to proper position for best reception. Comes complete with mounting hardware—ready for quick, convenient installation. Less 300-ohm twin line for connection to TV set. Shpg. wt., 7 lbs.

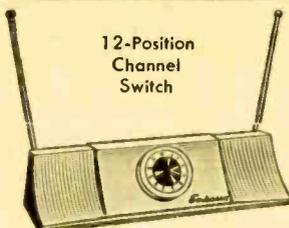
97 CX 084. NET. **5.26**

## K-G DELTA-BEAM ANTENNA



An efficient all-channel indoor antenna providing excellent reception on VHF channels 2-13 and UHF channels 14-83. Six-position switch matches line impedance, tuning antenna to match receiver input. Also has highly effective "ghost" chasing switch. Dipoles are easily adjusted to length and angle which provides best picture. Has tip-proof brown bakelite base. Size 9" high; each arm extends to 15". With 6 feet of twin line. Shpg. wt., 2½ lbs.

92 C 013. 1-5, NET EACH. **5.85**  
6 or More, EACH. **5.26**



12-Position  
Channel  
Switch

## ALL-CHANNEL ANTENNAS

- 12-Position Switch
- 4-Section Brass Arms
- Increased Signal Gain
- Beautiful Finishes



"Radar Loop"  
Design

## EMBASSY SERIES VHF ANTENNAS

Extremely popular indoor TV antenna. Features a patented internal circuit for increased gain, and provides excellent reception in metropolitan areas. Exclusive 12-position switch assures sharp, clear pictures on all channels from 2 to 13 with a minimum of annoying ghosts and interference. Four-section, all-brass telescoping arms provide the increased signal gain required for reception in unfavorable locations. Complete with 6 feet of 300-ohm twin line. Size, 14x4x3½". Shpg. wt., 2½ lbs.

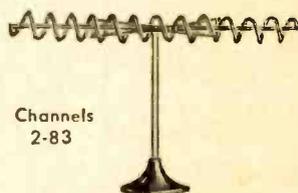
92 CX 066. Mahogany finish.  
92 CX 574. Maple Walnut finish.  
92 CX 067. Ebony finish.  
92 CX 068. Ivory finish.  
List Each, \$19.95. NET EACH. **9.95**

## REMBRANDT UHF-VHF SERIES

Indoor antenna featuring "radar loop" design plus all-angle telescoping dipoles. Delivers clear all-channel reception. Convenient 12-position switch permits adjustment of antenna for maximum efficiency—highly effective in eliminating ghosts and interference. "Radar" loops are inductively coupled to the telescoping dipoles. Dipoles and loops can easily be adjusted to provide best reception. Has luminous numerals which are easily visible in darkened room. Wide rectangular base prevents tipping. Complete with twin lead. Shpg. wt., 3½ lbs.

92 CX 062. Mahogany finish.  
92 CX 064. Ebony finish.  
92 CX 065. Ivory finish.  
List Each, \$16.95. NET EACH. **9.95**

## HI-LO ANTENNAS



Channels  
2-83

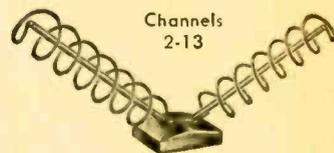
## UHF-VHF "SPIRAL-TENNA"

MODEL 202. Popular indoor antenna. Excellent gain over entire UHF-VHF bands. Minimizes "ghosts" and interference. Gold finish. Tip-proof base. Height 14"; width (span), 32". With 6' of twin lead. 2 lbs.

98 CX 449. 1-5, NET EACH. **5.85**  
6 or More, EACH. **5.26**

MODEL 101 VHF. Similar to Model 202 but VHF only.

97 CX 391. 1-5, NET EACH. **5.58**  
6 or More, EACH. **5.02**



Channels  
2-13

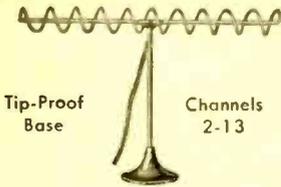
## VHF "V" ANTENNA KIT

MODEL 606. Indoor TV antenna for outstanding performance on all VHF channels. Features "Spiral-Tenna" helical element design. Engineered for picture clarity and a minimum of interference. Rotate for optimum reception—requires no other adjustment. Tip-proof base has rubber feet. Supplied knocked-down and ready for quick assembly. With 6 ft. of twin-lead. Base, 4x6x1½". Shpg. wt., 2 lbs.

92 CX 596. NET. **4.77**

# Indoor TV Antennas

## TRICRAFT VHF ANTENNA KIT



Highly efficient VHF indoor antenna for bringing in sharp, clear pictures in metropolitan areas. Carefully engineered helix coil, rigidly mounted on sturdy, mahogany plastic base. For all channels from 2-13. Minimizes "snow," "ghosts," and interference. Requires no adjustment. Tip-proof base. Height, 14"; width (span), 32". Easy to assemble. Complete with 6-ft. length of 300-ohm twin-line, tipped with spade lugs, for quick, easy installation. Shpg. wt., 2 lbs.  
92 CX 126. NET ..... 4.41

## "HIDE-A-WAY" VHF ANTENNA

Compact, plastic-cased "Hide-A-Way" antenna. Provides excellent all-channel metropolitan-area reception. Telescoping elements are made of durable, nickel-plated brass tubing. Elements are mounted on ball-joint swivels; rotate 360° for excellent signal pickup from any direction. Case is completely concealed behind TV set—all you see are the elements. 5-section elements telescope to 37". Retract out of sight when not in use. With spade-lug-tipped 300-ohm twin line. Shpg. wt., 1 lb.  
92 C 029. NET ..... 1.88

## KNIGHT VHF ANTENNA

Here's a popular indoor television antenna at unusually low cost. Features efficient, time-proven "rabbit ear" design. For use on VHF channels from 2 to 13—quickly and easily adjusted for clear picture with a minimum of ghosts and interference. Also excellent for FM reception. Uses sturdy, 3-section, brass-plated telescoping elements for convenient adjustment to desired length. Bakelite base is weighted to prevent tipping. Felt padding on base protects TV set. With 3 ft. of 300-ohm twin-line. Shpg. wt., 2 lbs.  
92 CX 025. NET ..... 1.44

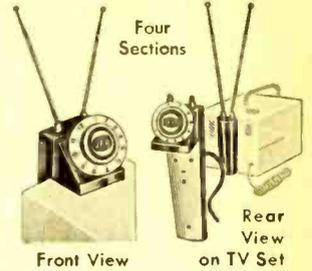


## QUALITY JFD ANTENNAS

### "MERLIN" UHF-VHF ANTENNA

- Convenient Back-of-Set Mounting
- 12-Position Rotary Selector Switch
- Elements Have Ball-Swivel Bases

Highly-efficient, fully-adjustable indoor antenna—provides excellent reception on both UHF and VHF channels in strong-signal areas. Features up-to-the-minute back-of-set design—mounts with only the rotary selector switch and elements in view. Employs smooth-working, 4-section elements that adjust for best picture; each element is mounted on a ball-swivel to permit positioning for angle of optimum reception. 38" elements telescope conveniently out of sight when not in use. Large, easy-to-read dial has twelve positions to provide extra-sharp pictures and clear sound. Lustrous plastic construction blends well with the styling of any TV set. Attaches easily and securely to back of set with screws supplied. Includes 300-ohm twin line with spade lugs attached and easy installation instructions. Shpg. wt., 1 lb.  
92 C 572. Model L20. Mahogany. NET  
92 C 573. Model L10. Ivory. EACH ..... 4.95

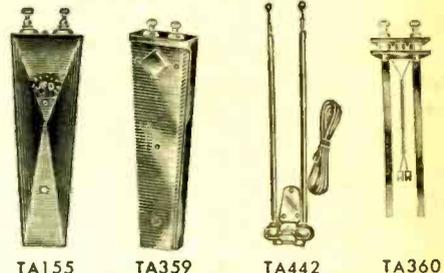


### HIDE-AWAY PERISCOPE ANTENNAS

Exact Replacements For Portable TV Antennas

- 360° Ball-Action Swivel
- Telescope Out of Sight When Not in Use

Top-quality, exact replacement antennas for popular, portable TV sets. Bent and loose antenna sections spoil reception. Install a new antenna for best picture quality. Type TA155 replaces all Admiral dual-rod antennas; all Westinghouse 1956 models; all Zeniths 1956-9; and G.E. 1956 17" model. TA359 fits all RCA 1957-8; all Magnavox 1956-8; all Motorola 1956-7. TA360 fits all Westinghouse 1957; all G.E. 1957-8. TA442 fits G.E. 1956 14" model; all Emerson 1956-8 except Model 1452. \*TA155 and TA359 in ivory cases only. Each element extends to 38".



No.	Type	Replace (see above)	Shpg. Wt., Lbs.	EACH
91 C 374	TA155*	Admiral, G.E., Westinghouse, Zenith	1/2	2.53
91 C 375	TA359*	RCA, Motorola, Magnavox	1/2	2.60
91 C 376	TA360	G.E., Westinghouse	1/2	4.49
91 C 377	TA442	Emerson, G.E.	3/8	2.16

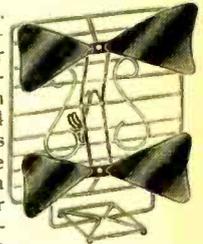
### MODEL TA-147 UHF-VHF ANTENNA

Famous indoor antenna featuring smart styling and outstanding performance. Has high signal gain; minimizes interference and ghosts. Employs 6-position impedance matching switch; permits adjustment for maximum efficiency on channel being received. Adjustable, 3-section brass dipoles easily positioned for clearest picture. Base is weighted to prevent tipping. Has felt pad; will not mar finish. Includes 5 ft. of 300-ohm twin line and spade lug terminals for quick attachment to TV set. Shpg. wt., 2 lbs.  
92 CX 124. NET ..... 3.24



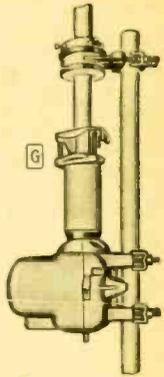
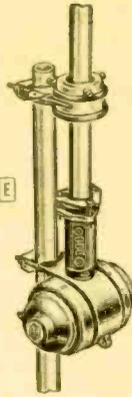
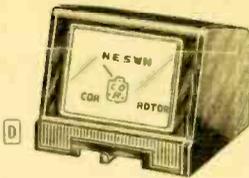
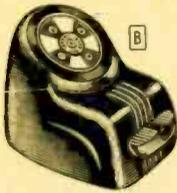
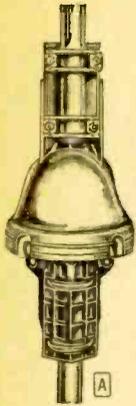
### "SONATA" UHF INDOOR ANTENNA

Model TA-149. Carefully constructed indoor antenna for excellent reception on channels 14 to 83—combines twin-bowtie dipoles and a screen reflector for superior picture clarity. Can be used in any strong-signal area. Interesting design accents the decorative mode of any room. Attractively finished in gold anodizing and jet-black satin enamel. Has tip-proof base with four extremely short legs. Supplied complete with 300-ohm twin lead, tipped with spade lugs for quick connection to TV set. Overall size (HWD) is 12x12x6". Shpg. wt., 2 lbs.  
92 CX 598. NET ..... 3.02



# TV Rotators, Antenna Traps, Televerter

CORNELL-DUBILIER-RADIART TELEVISION ANTENNA ROTATORS



## MODEL AR-22 ROTATOR WITH AUTOMATIC-TYPE CONTROL UNIT

**A C** Popular, fully automatic rotor for TV antennas up to 150 lbs. For mast, tower or platform mounting. Heavy-duty precision gears hold even large TV arrays steady in high winds. Rotor unit employs 12 large ball-bearings in two  $6\frac{1}{4}$  races. Motor reverses instantly—does not drag or coast. Overshoot of desired direction is prevented by magnetic brake. Streamlined bell-shaped housing is die-cast and heavily reinforced. Weather-sealed and factory lubricated for life. Reversible clamps on rotor unit take masts from  $\frac{3}{4}$ " to 2" O.D.

Control unit dial is marked in compass points: N, S, E, W, NW, NE, SW, and SE. Operation is extremely simple: Set control unit pointer to desired direction, and antenna then automatically rotates to this position and stops. Eliminates necessity of watching control unit dial until antenna has rotated to desired direction. Control unit is housed in attractive brown plastic cabinet which is equipped with rubber feet to protect TV set finish. Complete with rotor, control unit, and full set of instructions. Requires 4-wire cable (see listing below). For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 14 lbs. 92 TX 150, List, \$55.74. NET. 32.77

## MODEL TR-4 ROTATOR WITH METER-TYPE CONTROL UNIT

**A D** Heavy-duty antenna rotor; same as above except with meter-type control unit. Dial calibrated N, E, S, W, and N. Lever at front of control box permits forward or reverse movement of antenna. Dial pointer begins to turn as soon as starter lever is actuated, and can be stopped at any desired direction. Mahogany plastic cabinet. For 110-120 v., 50-60 cycle AC. Uses cable below. Wt., 16 lbs. 98 TX 393, List, \$53.64. NET. 31.54

4-Conductor Cable. For use with the AR-22 or the TR-4 rotators. Shpg. wt., 100 ft., 3 lbs. 97 T 365, 100-ft. coil. NET. 2.78

47 W 576, Over 100', PER 100'. 2.78

## MODEL TR-2 ROTATOR WITH ILLUMINATED-COMPASS CONTROL UNIT

**A B** Heavy-duty rotor, same as the two above but uses illuminated control box with compass-type dial. As antenna rotates, letters N, E, S, W, light up—clearly indicating direction. Bar lever at front permits start, stop or reversing action. Less cable. Uses 8-wire cable listed below. For operation from 110-120 v., 50-60 cycle AC. With handsome plastic control cabinet. Shpg. wt., 16 lbs. 97 TX 463, List, \$49.43. NET. 29.07

8-Conductor Cable. For TR-2 rotor above. Handles current for rotor and illumination circuits. Shpg. wt., 100 ft., 5 lbs. 47 T 586, 100-ft. coil. NET. 4.20

47 W 593, Over 100', PER 100'. 4.20

## MODEL AR-2 ROTATOR WITH AUTOMATIC-TYPE CONTROL UNIT

**E C** Automatic antenna rotor for precise antenna orientation with utmost convenience. Operation is simplicity itself. Control unit dial is calibrated in compass points: N, NE, E, SE, S, SW, W, NW. To change antenna direction, simply set control unit knob to desired compass point or any intermediate point and release knob—that's all. Rotor will automatically turn on and rotate antenna to selected direction, and shut itself off. No need to hold knob and wait while watching a moving indicator. For added convenience in semi-darkened rooms, control dial lights up as soon as knob is moved—provides illumination for accurately selecting desired direction.

Rotor unit is housed in a weather-sealed, factory-lubricated, die-cast aluminum case. Features precision cut gears for smooth operation, plus a separate thrust bearing with six precision roller bearings to relieve lateral strains on rotor mechanism. Self-centering, supporting-mast clamps accept masts up to 2" in diameter and antenna-mast collet accept masts up to  $1\frac{1}{2}$ " in diameter. Antenna can be rotated 360° in either direction—makes one complete rotation in 45 seconds. Mechanical brake, released magnetically, prevents overshoot and drift in high winds. Control unit has attractive plastic case. Requires 4-conductor cable (see below). For 110-120 v., 50-60 cycle AC. Wt.,  $13\frac{1}{2}$  lbs. 98 TX 414, List, \$53.64. NET. 31.54

## MODEL TR-16 ROTATOR WITH METER-TYPE CONTROL UNIT

**G F** Latest model in the famous C-D line of rotators. Rotor unit is similar to the one in the Model AR-2 rotor above, but has a new modern style housing. Also has a newly designed meter-type control unit. Has same husky thrust bearing; instant locking—non-drift features. Mechanical brake—releases magnetically. Instantly reversible. Makes complete revolution in 45 seconds. Rugged, precision made gears. New, modern design control unit featuring meter-type dial and "piano key" control bar. Pressing one end of "key" starts rotator—pressing the other end reverses the direction. Cabinet has been restyled for modern appearance. Slanted front panel allows dial to be more easily read. Rotor unit is easily installed—no loose parts to assemble. Quick mounting antenna mast collet. Completely weather sealed. Self-centering sawtooth mast clamps grip antenna mast securely. Fits all standard towers. For use with masts up to  $1\frac{1}{2}$ " O.D. Complete with thrust bearing and attractive, mahogany finish plastic control cabinet. Less cable. Uses 4-conductor cable listed below. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 13 lbs. 92 TX 591, List, \$47.32. NET. 27.82

4-CONDUCTOR CABLE. For use with the AR-2 and TR-16 antenna rotators. Cable is flat, with four parallel conductors of seven-strand copper wire. One conductor tinned for identification. Highly-flexible, polyethylene insulation is resistant to damage from heat, humidity and corrosive atmospheric gases. Shpg. wt., 100 ft., 3 lbs. 97 T 365, 100-ft. coil. NET. 2.78

47 W 576, Over 100', PER 100'. 2.78

## REGENCY MODEL RC-103 FM TELEVERTER



- For FM Reception From TV Sets
- Efficient Transistorized Circuit
- Simple, Screw-Type Connections

NET \$14.96

The ideal way to obtain FM programming at lowest cost. Regency converter for quality FM reception through your television set. Full FM coverage from 88-108 mc at a fraction of the cost of an FM radio! Install in a matter of minutes—simply connect between antenna input and antenna lead-in of your TV set. Select entertainment to suit your mood—change from TV to FM at the flip of a switch.

The RC-103 is a completely transistorized unit that operates on three tiny "penlight" cells for extreme stability, convenience and reliability. Battery life approaches shelf life—drains of only 300 microamps. Size,  $4\frac{1}{2} \times 6 \times 4\frac{1}{2}$ ". Less batteries (below). Shpg. wt.,  $1\frac{1}{2}$  lbs. 92 T 349, List, \$19.95. ONLY. 14.96

53 J 031, Battery, 3 required, 3 oz. EACH. 9c

## JERROLD "TRAP-EASE" TV ANTENNA TRAPS



NET \$11.97

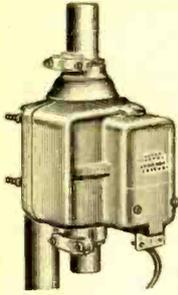
- Eliminates Adjacent Channel TV Interference
- Improves Reception of Distant Stations
- For Use With Any TV Receiver and Antenna

Tuneable interference trap for elimination of adjacent-channel television interference. Provides up to 50 db attenuation of the interfering signal. Removes the "beat" or "herringbone" pattern frequently caused by nearby sound or video carriers—permits reception of weak, distant stations that are usually blocked out by adjacent-channel stations having greater signal strength. Provides excellent results with any TV receiver and antenna that would normally bring in pictures from the distant stations if the interfering adjacent signal were not on the air. Does not affect reception of local stations. 300-ohm input and output impedance. Attaches quickly to TV set and antenna lead with convenient screw terminals. Easy to adjust; simply turn end-cap until interference disappears. Size,  $7\frac{1}{2} \times 3\frac{1}{2}$ " dia. In choice of two models; for interference on channels 2-6 or -13. Shpg. wt., 2 lbs. 98 T 828, Model HQ-91. For channels 2-6. List. NET. 98 T 829, Model HQ-92. For channels 7-13. List. NET. 11.97

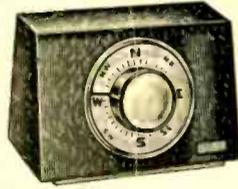
# TV Rotators and UHF Converters

## ALLIANCE TELEVISION ANTENNA ROTATORS

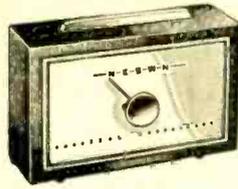
Choice of Three Handsome Control Units



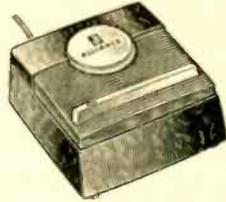
A



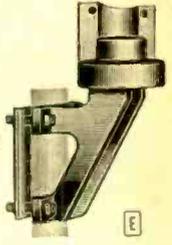
B



C



D



E

### MODEL U-98 ROTATOR FEATURING AUTOMATIC-TYPE CONTROL UNIT

- Smooth, Efficient, Weather-Proofed Rotor Unit
- Automatic Control Unit for Maximum Convenience

**A B** Exceptionally rugged unit used to point antenna in any direction for maximum signal strength. Simply set dial of smartly styled control box—antenna stops automatically when desired position is reached. Compact rotor unit measures  $7\frac{1}{2} \times 5\frac{1}{2} \times 8\frac{1}{2}$ ". Weather-sealed and factory-lubricated for life. Has magnetic brake to prevent overshoot and drifting. 1-rpm motor is instantly reversible for clockwise or counter-clockwise rotation. Control unit measures  $7 \times 4\frac{1}{2} \times 4\frac{1}{2}$ ". Sloping front panel with easy-to-read dial calibrated N, NE, E, SE, S, SW, W, and NW. Complete with rotor and mahogany plastic control unit. Requires 4-wire cable (listed right). For operation from 110-120 v., 50-60 cycle AC. Less 4-wire cable (listed at right). Shpg. wt., 12 lbs.

92 T X 299, List, \$48.68. NET 28.63  
92 T X 336, With ivory case, List, \$50.88. NET 29.92  
92 T X 337, With green case, List, \$50.88. NET 29.92

### MODEL T-12 ROTATOR FEATURING METER-TYPE CONTROL UNIT

- Clean Straight-lined Styling of Control Unit
- Fingertip Direction of Antenna by Touch-bar

**A C** Heavy-duty antenna rotator, same as at left, but with meter-type control box. Control panel has clean straight modern styling with dial calibrated, N, E, S, W and N. Touch-bar on top of control unit permits instant forward or reverse action. Depressing right end of bar rotates the antenna clockwise—left end, counter-clockwise. Meter pointer begins to move as soon as touch-bar is pressed. Simply release pressure on bar to stop at any desired position for best reception. Control unit in attractive mahogany plastic case measures  $4\frac{1}{2} \times 4\frac{1}{2} \times 4\frac{1}{2}$ " high,  $6\frac{1}{2} \times 4\frac{1}{2}$ " wide, and  $2\frac{1}{2}$ " deep. Complete with rotor, control unit and instructions. Less 4-wire cable (listed below). For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

92 T 339, List, \$37.68. NET 24.92  
92 T 340, With ivory case, List, \$39.88. NET 26.38  
92 T 341, With green case, List, \$39.88. NET 26.38

### MODEL K-22 ROTATOR

**A D** Heavy-duty rotator; same as above but employs touch-bar-operated control unit. Permits clock-wise or counter-clockwise antenna rotation—simply requires light pressure on right or left side of tilting touch-bar. Lever is held down until best picture is obtained. Releasing down-pressure on bar stops antenna instantly—remains fixed without drifting. Center dial on control unit lights up when limit of antenna travel is reached. With rotor, mahogany plastic control unit and instructions. Less 4-wire cable (listed at right). For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

92 T 338, List, \$26.95. NET 19.82

### MODEL TBB2 THRUST BEARING BRACKET

**E** Minimizes strain on rotators by relieving them of entire antenna weight. An ideal accessory when using large multi-element and multi-bay antennas. Increases rotator's weight-load capacity and protects gear mechanism against severe lateral strain. Shpg. wt., 3 lbs.

97 T 479, List, \$4.95. NET 2.91

4-Wire Cable. For use with all Alliance rotators listed. Four—No. 20 gauge conductors. Shpg. wt., 100 ft., 3 lbs. 2.78  
97 T 365, 100-ft. coil. NET 2.78  
47 W 576, Over 100', PER 100' 2.78

## BLONDER-TONGUE UHF TV CONVERTERS

### MODEL 99R CONVERTER

- Covers All UHF Channels
- Clear Reception—No Drift
- Easy to Install & Operate

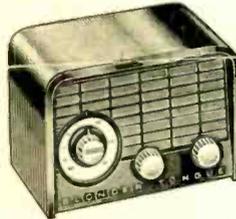


Compact, handsomely styled, low-noise UHF converter designed for use in metropolitan signal areas. One-knob tuning. Choice of Channel 5 or 6 as the IF output to TV set. Extremely sharp input and oscillator tuning for every UHF channel—eliminates multiple images and troublesome interference. Input circuit is tracked with oscillator to reject spurious signals and suppress oscillator radiation. Oscillator is thermally compensated to assure minimum drift. Precise input impedance match assures maximum signal conversion; no line ghosts or picture smear. In "Off" position, VHF signals are passed directly to TV set to permit regular VHF reception. Uses 6AF4A oscillator, crystal diode mixer and selenium rectifier. Exact 300 ohm input and output impedance match assures maximum signal power. Simple to install and operate. Meets the FCC radiation specs. Housed in mahogany-finished plastic cabinet. U.L. Approved. Size,  $6\frac{1}{2} \times 4\frac{1}{2} \times 4\frac{1}{2}$ ". For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.

98 T 586, List, \$22.95. NET 15.63

### MODEL BTU-2R CONVERTER

- Deluxe Hi-Gain Conversion
- Clean Steady Reception
- Sharp All Channel Tuning



High-gain, low noise UHF converter. Quickly and easily installed between antenna and TV set. Adds all the new UHF stations to any TV set quickly and easily. High signal-to-noise ratio guarantees clear, steady pictures, even in weak-signal locations. Fully shielded tuner has 3 stages of variable-speed channel selector for precise, continuous tuning. Terminals for VHF or UHF transmission lines. Exact 300-ohm impedance match at input and output plus highly efficient triode amplification gives maximum usable signal power. Oscillator drift is minimized by thermal compensation. Highly selective, double-tuned RF pre-selector stage provides maximum gain and image rejection. Full UHF range on channel 5 to 6 of set. Instant changeover from UHF to VHF. With 6AFA and 6BA, crystal diode and selenium rectifier. Meets FCC radiation specs. Attractively styled plastic cabinet. Size,  $6\frac{1}{2} \times 4\frac{1}{2} \times 4\frac{1}{2}$ ". Underwriters' Laboratories Approved. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 5 lbs.

98 T 099, List, \$39.95. NET 26.95

## JERROLD "ULTRACON" UHF CONVERTERS

### TCU ECONOMY MODEL

- Continuous Coaxial Tuning
- Low Noise, High Stability
- Wide-View, Slide-Rule Dial



An economical, advanced design converter for optimum UHF coverage with any TV set in normal signal areas. Delivers a stable, high-quality output signal on channel 5 or 6 with a minimum of noise. Features for top performance include continuous coaxial tuning with no moving contacts; slide rule dial coupled to vernier tuning for easy, positive station identification; coaxial tuning for no contact noise, quiet operation; highly stable oscillator circuit; low-noise crystal diode mixer; trimmer-slug tuning combination that holds alignment even under shock and vibration. Excellent impedance match assures absence of smear. Straight-through switch for VHF. 300-ohm input and output. 6AF4A oscillator tube; 1N72 mixer diode. Dark maroon cabinet measures only  $6\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$ ". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt.,  $1\frac{1}{2}$  lbs.

93 T 084, List, \$22.95. NET 15.95

### FTC DELUXE MODEL

- Dual-Cavity Coaxial Tuner
- UHF Antenna for Local Use
- Easy-to-Read Slide-Rule Dial



Deluxe converter for superior UHF reception with any VHF TV set even in weak signal and deep fringe areas. Low-loss, expertly designed circuit provides an exceptionally high standard of reception. Clean, stable output on channel 5 or 6. Features include a sealed dual-cavity coaxial tuner for maximum tuning stability; oscillator tube; low-noise crystal mixer; slide-rule dial coupled to a smooth, vernier tuning mechanism for easy station selection; trimmer-slug tuning alignment. Complete with a self-contained antenna which eliminates an outdoor antenna in primary signal areas. Drift is only 0.25 mc with 95-120 volt line change. 12 db gain at 500 mc, 5 db gain at 800 mc. Low VSWR (3:1) assures absence of smear. Straight-through switch for VHF. 6AF4A oscillator, 6CB6 1F, 1N72 mixer diode, 300 ohm input and output. Meets FCC radiation standards for tuners. Housed in a handsomely styled, contemporary cabinet measuring  $7\frac{1}{2} \times 5\frac{1}{2} \times 5\frac{1}{2}$ ". Underwriters' Laboratories Approved. For operation from 105-120 v., 60 cycle AC. Shpg. wt., 4 lbs.

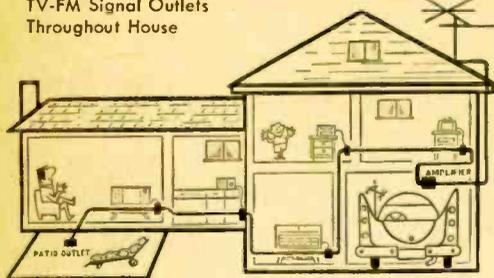
93 T 085, Mahogany, List \$39.95. NET 27.50

93 T 086, Blonde, List \$39.95. NET 27.50

# Jerrold TV-FM Accessories

## LOW-COST TV-FM DISTRIBUTION SYSTEM

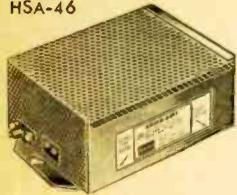
TV-FM Signal Outlets  
Throughout House



- Quality TV-FM Reception In Every Room
- Simple Screwdriver Installation

Here's a complete, low-cost TV-FM signal distribution system for the home. Provides high-quality TV and FM signals at convenient outlets in each room. Electrical isolation eliminates interference between sets. Installation is quick and easy—all you need is a screwdriver. Employs a minimum of wiring—standard twin lead is used throughout. Systems carefully matched for clear, sharp pictures.

HSA-46



### MODEL HSA-46 HOME AMPLIFIER

Low-noise, high-output, printed-circuit amplifier for distributing VHF TV and FM signals from a single antenna over standard twin lead. Permits clear, undistorted reception in both fringe and metropolitan areas—may be used with inputs as high as 30,000 microvolts. Response is flat within  $\pm 1$  db. Employs silicon rectifiers for trouble-free continuous service. Has 2—6BK7A diode triodes. Provides over 15 db gain, presents 1.8:1 output VSWR. 300-ohm input and output.  $9\frac{1}{4} \times 5\frac{1}{2} \times 3\frac{1}{2}$ " U.L. Approved. For 110-120 v., 50-60 cycle AC. Shpg. wt., 3 lbs.

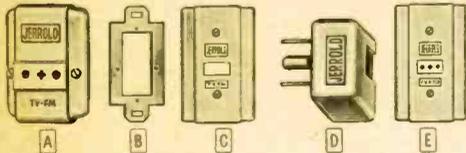
93 T 087. List, \$49.95. \$2.00 Down. NET ..... 33.30

### MODEL HSK-300 TV-FM DISTRIBUTION SYSTEM KIT

Contains all items necessary for a complete, economy-priced signal distribution system installation. Consists of the highly efficient HSA-46 Home Amplifier, five HS-140 flush-mounting

outlets, twelve HS-36 strap Insulators and 100-foot coil of 300 ohm twin-lead transmission line. Shpg. wt., 6 lbs.  
93 TX 094. List, \$67.75. NET ..... 43.98

### DISTRIBUTION SYSTEM TAPS AND ACCESSORIES

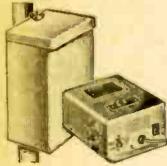


- A 93 T 088. HS-21. Surface-mounting tap. 2 oz. NET ..... 87c  
 B 93 T 089. HS-22. Ring to flush-mount HS-21 in outlet box. 2 oz. NET ..... 18c  
 C 93 T 090. HS-23. Ivory cover plate in standard outlet size. 3 oz. NET ..... 30c

Taps and accessories for installation along twin-line. Surface-mounting basic tap (HS-21) provides 10 db receiver-line isolation, except 6 db when used as a termination unit. HS-140 tap, which mounts in a wall aperture or standard plastic outlet box, consists of an HS-21 basic tap, HS-22 mounting ring and HS-23 cover plate, and includes an HS-24 plug.

- D 93 T 091. HS-24. Twin-line plug. Attaches without stripping. 1 oz. NET ..... 30c  
 E 93 T 092. HS-140. Flush-mounting outlet (described above). 2 oz. NET ..... 1.65  
 93 T 093. HS-36. Strap insulator for installing twin lead indoors. 1 oz. Pkg. of 24 ..... 1.08

### ANTENNA-MOUNTED TV BOOSTERS



MODEL DSA-132. Antenna mounting booster for increasing TV signal without stepping up "snow". Power supply delivers 24 v. to booster through same line that brings in signal. Covers channels 2-13, or high or low band only. 72 or 300-ohm impedances. 25 db gain. Turned on and off by TV set. Booster.  $5\frac{1}{2} \times 10\frac{1}{4}$ ". Power supply,  $2\frac{1}{2} \times 5\frac{1}{2} \times 7\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 $\frac{3}{4}$  lbs.

92 TX 095. List, \$109.50. \$5.00 Down. NET ..... 65.70  
 MODEL DSA-62. As above, but for channels 2-6 only. Shpg. wt., 8 $\frac{1}{2}$  lbs.  
 92 T 533. List, \$90.00. \$5.00 Down. NET ..... 54.00

### AMPLIFIER OUTPUT SPLITTERS



MODEL 1562. A two-way splitter for branching distribution amplifier outputs into two or more trunks with minimum loss, no overload, and no distortion. Only 3 db forward loss in each leg. Isolation between outputs is 15-20 db. Coax bushings do not need cable connectors. Highly efficient and simple to use.  $3\frac{1}{2} \times 3\frac{1}{4}$ ". Shpg. wt., 8 oz.  
 93 T 079. List, \$7.50. NET ..... 4.50



MODEL 1514. A four-way reactive splitter with only 6 db forward loss at each output. Isolation between outputs is 12 db. Complete with five F-59 cable connectors. (Unused outputs must be terminated with TR-72F terminating resistors.) See table at right. Easily installed.  $3\frac{1}{2} \times 3\frac{1}{4}$ ". Shpg. wt., 8 oz.  
 93 T 083. List, \$14.50. NET ..... 8.70

### MATCHING TRANSFORMERS



MODEL TO-374. Antenna matching transformer for outdoor mast mounting. Matches 300-ohm antennas to 72-ohm line. Highly efficient performance across the VHF TV band. 6 db voltage gain between 72 and 300-ohm lines. VSWR is 1.26:1. Supplied with mounting strap and F-59 coaxial cable connectors. Size,  $2\frac{1}{2} \times 2\frac{1}{4} \times 1$ ". Shpg. wt., 8 oz.  
 71 C 831. List, \$10.00. NET ..... 6.00



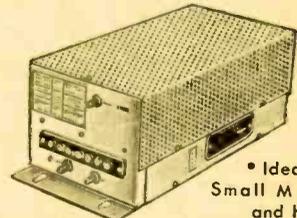
MODEL T-375. Matching transformer designed for indoor use. Matches 72-ohm line to 300-ohm line. Also isolates antenna when used with AC-DC television sets. Has crimp-on coax bushing.  $2\frac{1}{4} \times 2\frac{1}{4} \times 1$ ". Shpg. wt., 4 oz.  
 71 C 832. List, \$4.85. NET ..... 2.91

## NEW TV DISTRIBUTION AMPLIFIERS FOR MULTIPLE TV INSTALLATIONS

Model 2300



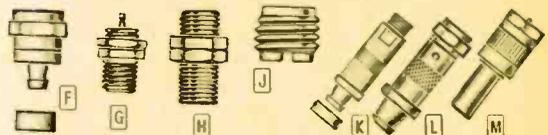
- Ideal For Hotels and Apartments
  - 38 db Minimum Gain—0.3 v. Output
- Deluxe VHF TV signal distribution unit. Amplifies signal from master antenna and feeds it to branching system. See Model 1562 and 1514 splitters below. Ideal for large systems—hotels, motels, and apartment buildings. Provides undistorted reproduction of signals over long distances of coaxial cable in community cable systems. Designed for continuous 24-hour operation. Simple installation. 300-ohm or 72-ohm input; 72-ohm output. 38 db gain. Maximum input: 26,000  $\mu$ v. Output: 0.3 volts. No need for external line equalizers. Flat response for color operation. Ground clamp for lightning protection. Size,  $11\frac{1}{2} \times 5\frac{1}{4} \times 5\frac{1}{4}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 10 lbs.  
 93 T 095. List, \$164.00. NET ..... 98.40



• Ideal for Small Motels and Hotels

- 25 db Minimum Gain—0.3V Output
- MODEL ABD-1. Low cost TV signal amplifier for use with master antenna systems. Ideal for dealer display rooms, small hotels, and garden courts. Latest cascode circuitry—top mechanical design. Delivers strong, snow-free pictures. Covers entire VHF TV band. Minimum gain 25 db. Undistorted output of 0.1 v. Input either 72 or 300 ohms. Maximum input: 5500  $\mu$ v. Separate high and low band antennas may be used. Output is 72 ohms. Screw terminals. For multiple trunk line applications output is divided with Model 1562 or 1514 splitters. Units may be cascaded. Has self-contained power supply. Size,  $11\frac{1}{2} \times 5\frac{1}{4} \times 5\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 7 $\frac{1}{2}$  lbs.  
 93 T 096. List, \$99.50. NET ..... 59.70
- MODEL ABD-8. Same circuitry as ABD-1 except output 15 db gain at each of eight F-61 output terminals. Size,  $11\frac{1}{2} \times 5\frac{1}{4} \times 5\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 7 $\frac{1}{2}$  lbs.  
 93 T 097. List, \$99.50. NET ..... 59.70

### SOLDERLESS COAXIAL CABLE CONNECTORS



Carefully machined brass solderless connectors. Can be permanently bonded to coaxial cable with simple crimping tool. All "F" series units accurately matched to 72-ohm impedances and can be wrench tightened. VSWR is less than 1.05:1 up to 200 mc. All exposed surfaces heavily silver-plated. \*With cable ferrules. Av. wt., 3 oz.

No.	Type	Fig.	Description	NET
71 C 833	*F-59	F	Male conn. For RG-59/U. cable. Mates with F-81, F-61 & A-61.	.48
71 C 834	F-61	G	Female chassis fitting. Mates with F-59, AF-101, TR-72F. $\frac{1}{4}$ " mtg. hole.	.55
71 C 835	F-81	H	Female feed thru. Mates with F-59, AF-101, TR-72F. $\frac{1}{4}$ " mtg. hole.	.75
71 C 836	A-61	J	Adapter. Allows F-59, AF-101 or TR-72F to mate with C-61 female.	.05
71 C 837	*F-101-59	K	Adapter. RG-11/U cables to plug end of F-59, AF-101 or TR-72F.	1.46
71 C 838	*AF-101	L	Male conn. For RG-11/U. Mates with F-61, F-81, F-101-59, A-61.	1.26
71 C 839	TR-72F	M	72-ohm terminating resistor. Mates with F-61, F-81, A-61, F-101-59.	.90

Type PL-602 Crimping Tool. For use on types F-59, F-101-59, and AF-101 above. No impedance mismatch or cable distortion. 1 lb.  
 71 C 840. List, \$8.17. NET ..... 4.90

# Blonder-Tongue TV Equipment

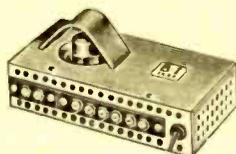
## TV BOOSTERS AND DISTRIBUTION SYSTEMS



A



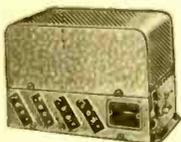
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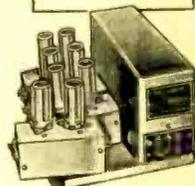
Use Allied's free consulting service for friendly, individual aid in solving your TV and booster problems at home, office or industrial plant.



F



G



H

### VHF AMPLIFIER

**A** Model HAB. High gain VHF television and FM amplifier. Provides more than 20 db gain on all channels from 2 to 13, and on the FM band. Ideal as a preamplifier for home or small master TV antenna systems. Permits brighter, sharper pictures and increases number of TV stations set can pick up. Uses one 6DJ8 and two 6CB6 tubes to provide highest possible signal-to-noise ratio with maximum reliability and long life.

Features "no strip" 300-ohm terminals and 75-ohm solderless coax connectors for input and output—can use 300-ohm twin line or 72-ohm coaxial cable.

In compact, sturdy ventilated metal cabinet. 6x5½x4¼". For 110-120 v., 60 cycle AC. Shpg. wt., 6 lbs.  
93 T 078. List. \$64.50. NET..... 40.18

### MLA VHF TV SIGNAL AMPLIFIER

**B** The "Masterline" VHF TV signal amplifier. Provides an effective signal boost of not less than 33 db. Assures a maximum output of 1.25 volts rms on each band—flat within 2 db. It is excellent where very long transmission lines weaken signal. May be installed in coax line going to single TV set, or used with antenna distribution system such as the DA8-B at right in installations feeding 2 or more TV sets from 1 antenna. Several "Masterlines" may be placed in cascade when extremely long transmission lines offers are used.

Offers maximum fidelity for color TV as well as black-and-white sets. Gain is adjustable on high and low bands. Response flat within ± 5 db over any 6 inc channel. Unit is self-powered and employs seven tubes.

Cascade amplifying circuits assure minimum noise level. 75 ohm coax input and output connectors. Overall size, 9x6x5" deep. In perforated gray metal cabinet. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 9 lbs.  
92 T 090. List. \$142.50. NET.... 83.79

### B24 TV BOOSTER-COUPLER

**C** Highly efficient booster-coupler unit. Permits using a single TV antenna with two TV sets. Provides excellent isolation between sets to assure minimum interaction. Boosts signal strength of VHF stations (channels 2-13) up to 10 db when using one or two TV sets on a single antenna. Wide frequency response assures excellent performance when used with black-and-white and color TV sets as well as FM receivers.

Has low noise broadband circuit—requires no tuning. Quickly, easily installed—simply attach to antenna terminals. Extremely compact chassis; may be installed out-of-sight at rear of one of sets, or may be placed in any other convenient location. Input and output impedance, 300 ohms. Size, 3½x 6¼x2¼". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 1½ lbs.  
92 T 342. List. \$24.95. NET..... 15.63

### VHF DISTRIBUTION SYSTEM

**D** Model DA8-B. Combination booster and isolation-distribution system for use with up to 8 TV sets. Features exclusive low-noise all-triode circuitry. Requires no tuning, matching devices or preamplifiers. Ideal for use in small apartment buildings, hotels, motels, and other small master TV systems. Permits operating up to 8 TV sets from a single antenna. 22 db minimum isolation between output circuits prevents interaction between TV receivers. Provides 10 db gain to each TV set to assure full-strength signals. System overload is prevented through a 10-1 gain control range. Has inputs for 75- or 300-ohm line. Eight outputs accommodate 75- or 300-ohm line; one of these outputs may be used to feed another DA8-B to permit hook-up of additional TV sets. Unit includes power supply, terminating resistors and grounding clamp. Screw terminals permit fast installation. Designed for long life, continuous duty operation. Overall size, 5¾x9x5½". For 105-125 v., 60 cycle AC. Shpg. wt., 7 lbs.  
98 T 220. List. \$94.50. NET..... 57.33

### MODEL AB-2 VHF BOOSTER

**E** Antenna mounting booster amplifies all VHF stations (channels 2-13) up to 12 db. Weatherproof amplifier may be located up to 500 feet from remote control at TV receiver. Installation at antenna permits amplification of TV signal with no increase in line noise picked up on lead in. Operating power is delivered to booster by the same line that carries TV signal from antenna to TV set—no separate line is required. Uses 6DJ8 tube to provide highest possible signal-to-noise ratio with maximum reliability. Operation is automatic—booster turns on and off with TV set. Has 300-ohm input and output; has stripless 300-ohm terminals for all connections. Extremely easy to install.

Amplifier unit is fully enclosed in a sturdy, metal weatherproof housing. Amplifier size, 6¾x3¾x4½". Remote control size, 5x2¾x 3¾". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 7 lbs.  
92 T 545. List. \$53.95. NET..... 31.75

### CONNECTORS, COUPLER & TAPOFFS

**F** Model P-59S Male Connector. For use on "Masterline" Model MLA signal amplifier. Provides correct 75-ohm impedance match. P-59S is for RG-59/U coax cable. Shpg. wt., 3 oz.  
51 C 113. List. \$1.55. NET EACH..... 93c

Model P-115 Connector. As above, but for RG-11/U coax cable.  
51 C 114. List. \$1.55. NET EACH..... 93c

**G** Model MTO-11 Outdoor Cable Tapoff. Spliceless, weatherproof, RG-11/U cable tap. Uniform 17 db isolation, lowest shunt capacity and positive electrical protection through blocking capacitor. Less than ½ db line loss. Wt., 6 oz.  
51 C 118. List. \$7.75. NET EACH. 4.56

### MODEL MA4-1 MIXER-AMPLIFIER

**H** TV signal mixer, for up to five antennas. Amplifies and mixes up to five input signals into a common output. For either individual or master antenna systems. Permits the use of four separate high-gain Yagi antennas and one broadband antenna. Requires no rotators or boosters. Provides maximum ghost-free reception because each antenna can be individually oriented to the particular TV station desired when installed. Employs channel strips listed below. Any VHF and UHF antennas can be accommodated at any time with plug-in VHF strips and plug-in UHF converter strips. One input is broadband for signals requiring no preamplification. Remaining 4 single-channel inputs use separate plug-in strip assemblies with gain in excess of 17 db. Impedance: 75- and 300-ohms at all terminals. Ventilated gray case. Chassis, 4x6x8¾". For operation from 105-125 volts, 60 cycle AC. Less plug-in strips (listed below). Shpg. wt., 7 lbs.  
98 T 305. List. \$78.75. NET..... 46.30

### STRIPS & CONVERTERS FOR ABOVE

Model CS-1 VHF Channel Strips. Plug-in strips. For use with Model MA4-1 mixer-amplifier above. One strip used for each channel, for gain exceeding 17 db. Each plug-in channel strip has its own 75- and 300-ohm input terminals. Carefully designed and rigidly constructed in fully enclosed plated steel chassis. Polarized four-prong plug at one end for positive contact. Hake-lite terminal strip at other end with binder-head screw terminals for antenna connections. Tubes fully shielded for reduction of noise pickup. Complete with tubes and two tinned spade lugs for low-resistance antenna connection. Tubes are 1-6AB4 and 1-6CB6. Shpg. wt., 1 lb.

Stock No.	For Channel	Stock No.	For Channel
98 T 306	2	98 T 312	8
98 T 307	3	98 T 313	9
98 T 308	4	98 T 314	10
98 T 309	5	98 T 315	11
98 T 310	6	98 T 316	12
98 T 311	7	98 T 317	13

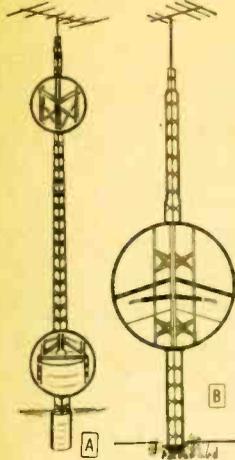
List. \$37.50. NET EACH..... 22.07

Model UC-1 UHF Converter Units. Three-tube, high-gain, plug-in converter units with 17 db gain. Unusually stable and sensitive. For UHF reception on VHF receivers using MA4-1 mixer-amplifier, above. Converts UHF signals to VHF. Uses 2 input sockets to permit use of 3 additional antennas. 300-ohm input. Employs 6AF4, 6BK7A, 6CB6 tubes; 1N72 germanium crystal diode. Shpg. wt., 1½ lbs.

NOTE: Available on special order; when ordering, specify UHF channel and unused VHF channel to be used as IF.  
List. \$125.00. NET EACH..... 73.50

# TV Towers and Accessories

## SPAULDING SELF-SUPPORTING TV TOWERS



- Base Requires No Guying or Support
- No Concrete Foundation Required
- Preassembled Sections for Quick Installation
- Top Section Designed to Fit Any Rotator

### XCB SERIES TOWERS

**A** Expertly engineered high-strength antenna towers featuring special "culvert base" for quick, one-man installation without concrete. Self-supporting—require no additional guying or support of any kind! Ideal towers for fringe-area reception locations or areas where added height of antenna is necessary for stronger signal.

Towers listed contain "most-wanted" features: All-riveted construction for rigid support of any television antenna; 100% galvanized steel; special design insures easy installation of any rotator in top section.

Every unit is specially constructed to minimize the effects of strong winds, yet light enough for easy handling and quick installation. Each tower package includes heavy-duty culvert-type base with adjustable hinge feet, eight feet of mast, listed quantity of 8-ft. tower sections—all necessary parts and clearly written, easy-to-follow instructions. All sections are factory assembled.

Stock No.	Mfr's Type	Antenna Height	Sections	Wt., lbs.	NET EACH
92 CZ 294	X28CB	23'	2	89	36.63
92 CZ 295	X36CB	31'	3	120	55.78
92 CZ 058	X44CB	39'	4	155	63.76
92 CZ 059	X52CB	47'	5	200	77.59
91 CZ 832	X60CB	55'	6	272	90.33

### EP ECONOMY SERIES TOWERS

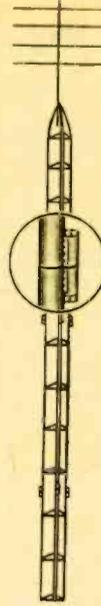
**B** "Economy Packs" for ground or guyed roof towers feature 8' to 48' heights at remarkable savings. Each pack has one or more 8' tower sections, a ground plate, and an 8' mast. Tower sections are rugged zinc-plated steel with com-

pletely riveted construction for maximum strength. Can be bracketed to building if ground plate is used. Require guying every 16' for roof-mounting. House bracket and roof mounting base, below, are extras.

Stock No.	Type	Ht.	Sections	Lbs.	NET	Stock No.	Type	Ht.	Sections	Lbs.	NET
92 CZ 534	EP-5	40'	5	88	42.20	92 CZ 542	EP-1	8'	1	25	14.15
92 CZ 535	EP-4	32'	4	72	34.89	92 CZ 543	EP-R1	Roof	Base	1	2.88
92 CZ 540	EP-3	24'	3	56	27.59	92 CZ 544	EP-H1	House	Bracket	1	3.67
92 CZ 541	EP-2	16'	2	41	21.76						

Shipped F.O.B. Frankfort, Indiana. No C.O.D. shipments—Please send full remittance to Allied with your order. Shipping charges will be collected on delivery.

## KTV ANTENNA TOWERS



Complete "free-standing" tower assemblies in 20 to 50-foot heights. May be ground mounted without guy wires or added support—safe in gales up to 80 mph. Designed for easy installation on roof or ground. Have "controlled sway" lateral loading bearing joints. Sections secured by bolts in welded-on, load-bearing sleeves (see illustration). These relieve joints of load and eliminate holes in tubing. Vertical sections are 16-gauge steel tubing, zinc electroplated to resist corrosion. Heavy steel one-piece cross ties are welded to outside of vertical tubing. Top section takes masts up to 1 1/2" O.D. 4' of bottom section mounts in concrete for "free-standing" installations up to 50 feet.

720-K, 20' tower, 10' top; 1-10' section, 58 lbs.	91 CZ 368, NET	37.00
730-K, 30' tower, 10' top; 10' sections, 92 lbs.	91 CZ 369, NET	55.50
740-K, 40' tower, 10' top; 10' sections, 126 lbs.	91 CZ 370, NET	74.00
750-K, 50' tower, 10' top; 10' sections, 164 lbs.	91 CZ 371, NET	92.50
863-H, Roof mount for above. Adjustable, flat-45°, 8 lbs.	91 CZ 372, NET	9.00
862-H, Tower base, 3 1/2' high. Cement mtg. 12 lbs.	91 CZ 373, NET	8.95

Shipped F.O.B. Shelbyville, Ill. No C.O.D. Shipping charges collected on delivery.

## TELESCOPING TV MASTS



50-Ft. Mast. Heavy-duty telescoping mast of high-carbon steel. Ideal for any television array. Designed for exceptionally easy installation. Husky bolts and cotter pins lock each section in place. 18-20 gauge high-carbon steel tubing with 1 1/4-oz. per in. zinc plating inside and out. Consists of 5 10-ft. sections; O.D.: #1 (1 1/4"), #2 (1 1/2"), #3 (1 3/4"), #4 (2"), #5 (2 1/4"). Floating guy-ring design permits rotating mast to orient antenna for best reception. With all hardware and installation instructions. Shpg. wt., 39 lbs.

92 CZ 103, NET 13.62

40-Ft. Mast. Consists of 4 rugged sections (see sizes listed above): Nos. 1, 2, 3, and 4. Maximum height, 40 feet. Shpg. wt., 29 lbs.

92 CZ 102, NET 9.98

30-Ft. Mast. Consists of 3 rugged sections: Nos. 1, 2, and 3 described above. Maximum height, 30 feet. Shpg. wt., 21 lbs.

92 CZ 101, NET 7.15

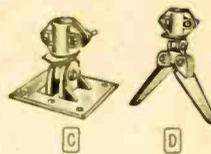
20-Ft. Mast. Consists of 2 sections: Nos. 1 and 2 described above. Height, 20 feet. Shpg. wt., 14 lbs.

92 CZ 100, NET 4.40

Universal and Roof Mount. Heavy-duty swivel base mount for above telescoping masts. One type that meets the requirements for almost any mast installation. For any surface—flat, slanted, or peaked. Wt., 2 1/2 lbs.

92 CZ 536, NET 1.07

## PENN TV MAST MOUNTS



TV mast mounts for flat and sloping roofs and side walls. Permit one-man installation of tall, fringe area antennas. Lock in any position. Made of aluminum alloy.

**C** Universal roof mount. Will swivel into any position. Locked securely by special bearing. Adjustable top supports masts from 1" to 2" O.D. Shpg. wt., 2 lbs.

97 CZ 176, NET 3.06

**C** Similar to above but for use with masts from 1" to 1 1/2" O.D. Wt., 1 lb.

97 CZ 175, NET 2.41

**D** Universal peak roof mount with patented bearings for adjustment and locking at any angle. "Pennalloy" body. Adjustable top for masts from 1" to 2" O.D. Wt., 2 lbs.

97 CZ 177, NET 3.56

## PENN FLOATING GUY RINGS



GRA-140. Cast aluminum, floating guy ring and collar. Fastens to mast with steel set screw. Permits rotating antenna after guy wires are installed. Lubricated to assure smooth rotation.

For 3-guy or 4-guy installations. For masts to 1 1/4". Shpg. wt. 8 oz.

97 CZ 178, NET 1.15

GRA-141. Same as GRA-140 but for masts up to 1 1/2" O.D. Shpg. wt., 9 oz.

97 CZ 179, NET 1.21

GRA-142. Same as GRA-140 but for masts up to 2" O.D. Shpg. wt., 10 oz.

97 CZ 180, NET 1.59

## GROUND RODS



An excellent selection of new, low-cost ground rods. Constructed of moisture-resistant copper-plated steel. Special raised lip keeps ground lead connector permanently anchored on rod. With bolt for easy connection.

Size, 4"x 1/4". Shpg. wt., 1 1/2 lbs.

92 CZ 537, NET 45c

Size, 6"x 3/8". Shpg. wt., 2 3/4 lbs.

92 CZ 538, NET 57c

Size, 8"x 1/2". Shpg. wt., 5 lbs.

92 CZ 539, NET 1.32

## GROUND & GUY WIRE

Aluminum Ground Wire. No. 8 solid aluminum wire. For all grounding applications.

Stock No.	Coil Length	Wt., Lbs.	NET
49 T 653	50-ft.	1 1/2	.65
49 T 650	100-ft.	2 1/2	1.25
49 T 652	1000-ft.	26	11.98

No. 20 Galvanized Guy Wire. Six-strand, No. 20 steel wire. Available in 100-ft. or 1000-ft. rolls. Shpg. wt., 100-ft. roll, 2 lbs.

58 T 312, 100-Ft. Roll, NET 54c

71 TU 513, 1000-Ft. Roll, NET 5.35

No. 18 Galvanized Guy Wire. Same as above, but for heavier-duty applications. In 100-ft. or 1000-ft. rolls. Wt., 100-ft., 2 lbs.

51 T 319, 100-Ft. Roll, NET 90c

71 TU 545, 1000-Ft. Roll, NET 8.84

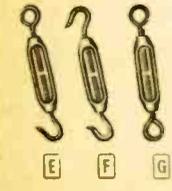
## ANTENNA MAST SECTIONS



Ends are swaged for simplified installation. Made of heavy-wall steel with electro-galvanized finish. "Seamless" type; others are seamed. All are 1 1/2" O.D.

Stock No.	Ht.	Wall	Shpg. Wt.	NET EACH
97 CZ 137	5 ft.	.035"	3 lbs.	.69
98 CZ 366	5 ft.	.051"	4 lbs.	.98
97 CZ 138	10 ft.	.035"	7 lbs.	1.77
98 CZ 367	10 ft.	.051"	7 lbs.	1.99

## GUY WIRE TURNBUCKLES



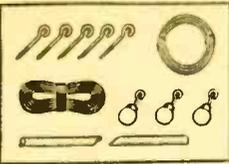
A wide selection of turnbuckles. Provide convenient adjustment of guy-wire tension. Made of heavy, die-cast aluminum. Fig. G has closed loops at each end for use where quick removal is not required. Other types can be easily disconnected. Av. wt., 8 oz.

Stock No.	Fig.	Closed	Open	NET EA.	10 up, EACH
44 C 790	E	5 1/2"	7 3/8"	12c	11c
44 C 791	E	6 3/8"	9 1/4"	20c	18c
44 C 792	E	7 1/2"	10 1/2"	30c	27c
44 C 793	F	5 1/2"	7 3/8"	12c	11c
44 C 796	G	5 1/2"	7 3/8"	12c	11c
44 C 797	G	6 3/8"	9 1/4"	20c	18c
44 C 798	G	7 1/2"	10 1/2"	30c	27c

# TV Mounts and Accessories

## KNIGHT TV ANTENNA INSTALLATION KIT

Accessories for Quick, Easy Installation of any TV Antenna



Extremely useful TV antenna installation kit at a money-saving price. Ideal for making new TV antenna installations or for repair of existing installations. Top-quality components for years of reliable service. Kit includes: 3-3-foot mast sections of heavy-wall, galvanized steel, 100 feet of 300-ohm twin-line; U.L. Approved lightning arrester; 5 screw-type stand-off insulators; 2 mast-type stand-off insulators; 20 feet of No. 8 gauge, solid aluminum ground wire. Shpg. wt. 7 3/4 lbs. **71 CX 687. NET 3.06**

## TV POWER CORDS AND CONNECTORS



**A** TV Power Cord and Connector. Identical to original equipment on most TV sets. No. 18 conductor; rubber-covered; 6 feet long. U.L. Approved. Shpg. wt., 8 oz. **49 T 237. NET 21c**

9-Ft. Cord. As above, but 9' long. 12 oz. **49 T 234. NET 26c**

TV Power Cord and Connector. (Not illustrated.) Identical to original equipment on Zenith television sets. No. 18 conductor; rubber-covered cord. 6 feet long. Rubber plug. U.L. Approved. Shpg. wt., 10 oz. **49 T 239. NET 36c**

**B** Male Connector. Flush mounting; used on most TV sets. Shpg. wt., 2 oz. **49 T 238. NET 9c**

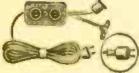
## SENCO TV JUMPER CORD

Model JC2. Universal jumper cord which extends power from back of TV set—provides serviceman with AC for soldering iron, instruments, etc. Eliminates furniture moving and bulky extensions to get AC for service equipment. Has switch for controlling TV set power from rear. Wt. 1/2 lb. **49 T 247. NET 1.91**



## ALL-PURPOSE SERVICE CORD

Female Type. One cord to service most TV sets. Plug one end in wall outlet; other end has AC outlets for service equipment, plus connectors for TV chassis. Shpg. wt., 1 lb. **52 T 665. NET 1.10**



## TELCO LEAD-IN TUBES



**Type 8641.** Combination plastic lead-in tube and lightning arrester. Fits walls to 1 1/2" in thickness. Has lightning arrester on outside end; wall plug on inside. Simple installation—lead-in wire is fastened under teeth of lightning arrester and contact is made to inside. Requires 3/4" mounting hole. Shpg. wt., 1 lb. **51 C 100. List, \$2.95. NET 1.73**

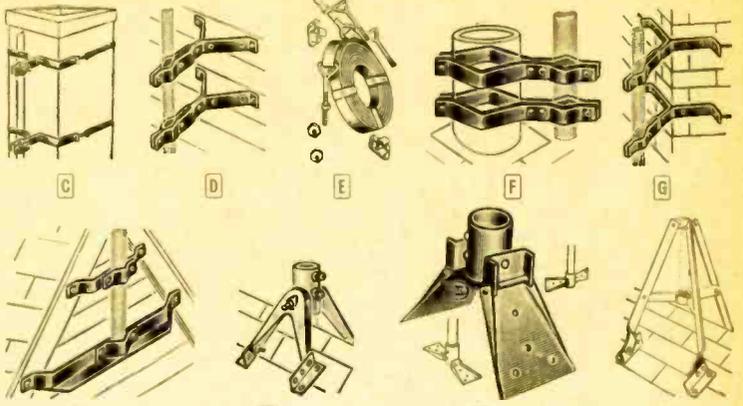
**Type 8958.** As above, less arrester and plug. Tube takes all types of lines. Wt., 1/2 lb. **71 C 559. List, \$2.35. NET 1.38**

## COLOR TV DE-GAUSSING COIL

A valuable aid for every TV serviceman. Extremely effective de-gaussing coil designed especially for color TV alignment. Electro-magnetic field neutralizer eliminates stray magnetic fields to allow accurate purity adjustments. With 9-ft. cord. For 110-120 volts. 50-60 cycles AC. Shpg. wt., 5 1/2 lbs. **71 CX 666. List, \$19.95. NET 11.95**



## TELCO TV ANTENNA MOUNTS



### LOW-COST CHIMNEY MOUNT

**C** Type 8005. Sturdy chimney bracket. An excellent choice for economy antenna systems. Can be installed in a few minutes. Only one piece to handle with a minimum of loose parts. Made of extra heavy gauge steel. Zinc-plated and dichromate-dipped for long life. Brackets securely support antenna mast—even under high wind conditions. Easily adjusted to provide snug, firm grip. Will support masts up to 1 1/2" diameter. Two 1/2" straps and hardware included. Shpg. wt., 4 lbs. **97 C 065. List, \$2.65. NET 1.56**

### SNAP-IN WALL MOUNT

**D** Type 8306. Husky brackets for firmly mounting antenna mast to any flat vertical surface. Perfect for buildings with overhanging eaves. Mast snaps in place until nuts can be tightened. Permits one-man antenna installation. Constructed of heavy-gauge steel. Plated for resistance to moisture and harmful fumes. Holds mast 6" from wall. For masts up to 1 1/4" in diameter. Supplied complete with plated mounting screws. Shpg. wt., 2 1/2 lbs. **98 C 481. List, \$2.40. NET 1.41**

**Type 8308.** Same as above, but holds mast 8" from wall. Shpg. wt., 4 lbs. **98 C 482. List, \$3.90. NET 2.29**

### DELUXE SNAP-IN MOUNT

**D** Type 8312. Heavy-duty wall brackets. Supports mast from side of building. Legs of brackets are spaced 16" apart to match studs of homes. Side sway prevented by sturdy mounting legs. Vertical support (not shown) eliminates sag. Provides 12" wall clearance. Made of heavy gauge steel. Doubly protected—zinc plated and dichromate dipped for long life. Holds masts up to 1 1/4" in diameter. Shpg. wt., 5 lbs. **98 C 483. List, \$4.20. NET 2.47**

**Type 8318.** Same as above, but provides 18" wall clearance. Shpg. wt., 7 lbs. **98 C 484. List, \$5.40. NET 3.18**

**Type 8324.** Same as Model 8312, but provides 24" wall clearance. Shpg. wt., 10 lbs. **98 CX 485. List, \$7.30. NET 4.29**

### CHIMNEY MOUNT REPAIR KIT

**E** Type 8932. Stainless Steel. Stainless steel strapping with eye bolts, nuts and strap clamps. Replaces rusted or broken strapping on all types of chimney mounts. Heavy-gauge strapping for secure support. Stainless steel will resist effects of weather, salt air and smoke fumes. Shpg. wt., 2 lbs. **71 C 558. List, \$3.55. NET 2.09**

**Type 8931.** Galvanized Steel. As above, but strapping is galvanized steel. With bolts, nuts and clamps. 2 lbs. **71 C 556. List, \$1.80. NET 1.06**

### VENT PIPE MOUNT

**F** Type 8803. Handy vent pipe mount that will clamp on any pipe or vent from 4" to 6" in diameter. Perfect for antenna installations on roofs where chimney is inaccessible. Simple and easy to use. Made of extra heavy gauge steel for long life. Will support a variety of installations. Handles all masts up to 1 1/4" in diameter. Securely supports antenna mast. Zinc-plated and dichromate-dipped for double protection against rusting; provides exceptionally long life. Shpg. wt., 3 lbs. **98 C 480. List, \$2.70. NET 1.59**

### SNAP-IN CHIMNEY MOUNT

**G** Type 8930. With Stainless Steel Strapping. Excellent mount for quick, dependable installation. Extra-heavy construction. Simply snap mast into bracket and tighten bolts. Fits masts up to 1 1/4" diameter. Brackets of heavy-gauge steel, zinc-plated and dichromate-dipped for protection against rusting. With two 12-ft. lengths of stainless steel strapping. Shpg. wt., 4 lbs. **97 C 027. List, \$4.70. NET 2.76**

**Type 8610.** With Galvanized Steel. As above but has galvanized steel strapping. **97 C 028. List, \$3.30. NET 1.94**

### EAVE MOUNT

**H** Type 8933. For mounting antenna mast on eaves of buildings. Lower bracket is 48" long to straddle side of building; angle-iron construction provides high strength. Upper bracket mounts close to peak of roof. Weather-proof—zinc plated and dichromate dipped. For masts to 1 1/4" dia. Shpg. wt., 7 lbs. **98 CX 486. List, \$7.15. NET 4.20**

### "NO-GUY" ROOF MOUNT

**J** Type 9060. Steel and cast-iron base for mounting over ridge of peaked roof or on a flat roof. Legs adjustable to angle of roof. Will support average antenna on up to 10 ft. mast without guy wires. For masts up to 1 1/4" dia. Shpg. wt., 5 lbs. **98 C 493. List, \$4.75. NET 2.79**

### HINGED-TYPE RIDGE MOUNT

**K** Type 9021. Highly versatile antenna mast support for mounting on peaked roofs, flat roofs or walls. Hinged type brackets adjustable for easy installation on any angle roof. Extra heavy gauge steel using heavy pipe supports. Fits masts up to 1 1/2". Zinc plated and gold dichromate dipped for double protection against rust. Shpg. wt., 3 lbs. **91 C 381. List, \$2.35. NET 1.38**

### ANTENNA BASE

**L** Type 9063. Sturdy antenna base. For masts of 10 feet or more and up to 1 1/2" O.D. Eliminates guy wires in the average installation. Set screws anchor mast and permit orientation. Electro-galvanized; dichromated. 2-ft. high. Shpg. wt., 6 1/2 lbs. **92 CX 040. List, \$7.15. NET 4.20**

**Type 9144.** As above, but 3 feet high and constructed from 1" electro-galvanized steel tubing. Shpg. wt., 8 1/2 lbs. **92 CX 043. List, \$8.30. NET 4.88**

**Type 9143.** Same as Model 9144 but 5 feet high. Shpg. wt., 15 lbs. **92 CU 044. List, \$15.90. NET 9.35**

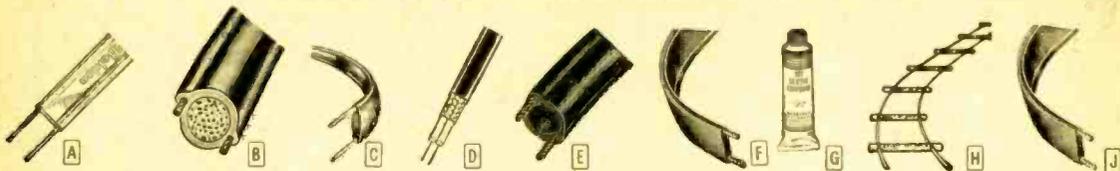
### LOW COST ANTENNA MOUNT

**Type 8800-U.** Low cost antenna mast mount designed to provide extra secure support for masts up to 1 1/2-inch outside diameter. Heavy 1 1/2" bolt and clamp with dual serrated jaws hold mast securely in position. "Extra leg" and reinforcing ribs give added strength. Doubly zinc plated and dichromate dipped for all weather protection. Shpg. wt., 1 lb. **91 C 482. List, 60c. NET 39c**



# TV Twin Line and Accessories

BELDEN, AMPHENOL AND KNIGHT TWIN LINE



## BELDEN TWIN LINE

**A** Type 8225. Flat 300-ohm twin line. Finest quality 7-28 stranded copper conductors. High-quality polyethylene jacket has 58 mil web thickness. Shpg. wt., 100 ft., 1 1/4 lbs.  
 49 T 385. 50' Coil. NET ..... 1.14  
 49 T 386. 75' Coil. NET ..... 1.53  
 49 T 389. 100' Coil. NET ..... 1.88  
 49 W 384. Over 100', Per 100' ..... 1.88

**A** Type 8230. Weldohm 300-ohm twin-line. 70-mil web thickness. Conductor of 7-28 stranded copper-coated steel wire. Copper coating provides high conductivity; steel core for high strength. Wt. per 100 ft., 2 lbs.  
 49 T 387. 50' Coil. NET ..... 1.21  
 49 T 388. 75' Coil. NET ..... 1.57  
 49 T 394. 100' Coil. NET ..... 2.09  
 49 W 383. Over 100', Per 100' ..... 2.09

**B** Type 8275. 300-ohm UHF-VHF CELLULINE. Has cellular polyethylene core, inert gas-filled. Brown polyethylene jacket. 7-28 copper-coated steel conductors. Shpg. wt., per 100 ft., 3 1/2 lbs.  
 49 T 396. 50' Coil. NET ..... 2.35  
 49 T 397. 75' Coil. NET ..... 3.17  
 49 T 395. 100' Coil. NET ..... 4.19  
 49 W 398. Over 100', Per 100' ..... 4.19

**C** Type 8235. 300-ohm, oval twin-line. Very low loss; for UHF-VHF use. Copper-coated, 7-28 steel wire conductors. Extremely tough 185-mil web thickness. Flexible and strong. 100-ft. minimum. Shpg. wt., per 100 ft., 4 1/2 lbs.  
 49 T 393. 100' Spool. NET ..... 4.70  
 49 W 399. Over 100', Per 100' ..... 4.70

**Shielded 300-Ohm Line.** High-quality brown polyethylene jacket. .075x.128" diam. 100-ft. minimum. Shpg. wt., per 100 ft., 1 1/4 lbs.  
 49 T 392. 100' Spool. NET ..... 2.01  
 49 W 379. Over 100', Per 100' ..... 2.01

## SHIELDED TWIN LINE

**D** Shielded 300-Ohm Line. Excellent for use in high-interference areas. Wt., 100 ft., 8 1/2 lbs.  
 49 W 498. Per Foot ..... 13c  
 100 ft. or more. Per 100 ft. .... 11.55

## AMPHENOL TWIN LINE

**E** Type 214-271. Tubular 300-ohm twin line. Air-core spacing for extremely high efficiency—ideal for UHF or VHF installations. 7-28 copper conductors. 100-ft. minimum. Shpg. wt., per 100 ft., 3 lbs.  
 49 T 444. 100' Coil. NET ..... 3.44  
 49 W 447. Over 100', Per 100' ..... 3.44

**Type 214-298. Four-Conductor Rotator Cable.** Extruded brown polyethylene. 7-28 stranded conductors. Wt., 100 ft., 3 lbs.  
 49 T 423. 50' Coil. NET ..... 1.76  
 49 T 424. 75' Coil. NET ..... 2.44  
 49 T 415. 100' Coil. NET ..... 3.15  
 49 W 425. Over 100', Per 100' ..... 3.15

**E** Type 214-076. Heavy-duty, extremely durable 300-ohm tubular twin line. May also be used by Amateurs—rated at 1 kw RF. Low-loss air-core spacing for high efficiency and extra durability. 7-26 bare copper conductors of high quality. 100-ft. minimum length. Shpg. wt., 100 ft., 3 1/2 lbs.  
 49 TX 416. 100' Coil. NET ..... 6.23  
 49 W 409. Over 100', Per 100' ..... 6.23

**F** Type 214-056. Flat 300-ohm polyethylene twin line for FM and TV antennas. 56-mil web thickness. 7-28 stranded conductors. Wt. per 100 ft., 2 lbs.  
 49 T 434. 25' Coil. NET ..... 81c  
 49 T 437. 50' Coil. NET ..... 1.28  
 49 T 439. 75' Coil. NET ..... 1.73  
 49 T 441. 100' Coil. NET ..... 2.18  
 49 W 436. Over 100', Per 100' ..... 2.18

**F** Type 214-100. Flat 300-ohm polyethylene twin line. 100-mil web thickness. 7-28 stranded copper conductors. Shpg. wt., per 100 ft., 2 1/2 lbs.  
 49 T 417. 25' Coil. NET ..... 1.47  
 49 T 418. 75' Coil. NET ..... 2.05  
 49 T 413. 100' Coil. NET ..... 2.65  
 49 W 419. Over 100', Per 100' ..... 2.65

**F** Type 214-185. Flat, heavy-duty, 300-ohm twin line. Thick jacket provides extra strength for long life. 185-mil web thickness. Brown polyethylene dielectric. 7-26 stranded copper conductors. 100-ft. minimum. Shpg. wt. per 100 ft., 5 lbs.  
 49 T 414. 100' Coil. NET ..... 5.29  
 49 W 426. Over 100', Per 100' ..... 5.29

## AMPHENOL TWIN LINE

**F** Type 214-318. Flat, 300-ohm twin line for indoor installation only. 60-mil web clear polyethylene dielectric. Flexible to permit easy installation around baseboards, etc. Extremely low loss and constant impedance provide maximum transfer of signal. Shpg. wt. per 100 ft., 5 lbs.  
 49 T 481. 50-ft. Coil. NET ..... 1.35  
 49 T 482. 75-ft. Coil. NET ..... 1.85  
 49 T 483. 100-ft. Coil. NET ..... 2.32  
 49 W 484. Over 100', Per 100' ..... 2.32

**F** Type 214-569. "Steelcore" high strength twin line for a durable, long-lasting installation. Particularly useful wherever long runs, adverse weather and high winds are encountered. 7-28 copper-welded conductors, heavy-duty 72-mil virgin polyethylene. Shpg. wt. per 100 ft., 2 lbs.  
 49 T 456. 50-ft. Coil. NET ..... 1.38  
 49 T 457. 75-ft. Coil. NET ..... 1.87  
 49 T 458. 100-ft. Coil. NET ..... 2.35  
 49 W 459. Over 100', Per 100' ..... 2.35

## AMPHENOL SILICONE COMPOUND

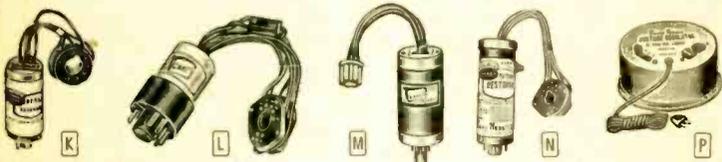
**G** Type 53-307. For water-proofing TV twin line. Maintains a constant impedance in line whether wet or dry. Covers hundreds of feet of standard 300 ohm twin line. Non-corrosive; effective up to 400° F. Insures minimum signal loss under adverse weather conditions. 1-oz. tube. Shpg. wt., 4 oz.  
 43 N 135. List, \$2.00. NET ..... 1.18

## KNIGHT TWIN LINE

**H** UHF-VHF Open Line. 300-ohm. Designed to meet the more critical requirements of UHF installations. Loss 0.5 db per 100 ft. at 200 mc. In coil lengths below Wt. per 100 ft., 2 1/4 lbs.  
 47 T 578. 100' Coil. NET ..... 2.17  
 47 TX 579. 250' Coil. NET ..... 4.89

**J** 300-Ohm VHF-TV Twin Line. High-quality twin line. Provides excellent service at moderate cost. 72-mil web thickness. Low-loss polyethylene jacket. No. 20 stranded conductors. 100-ft. minimum length. Shpg. wt., 100 ft., 2 lbs.  
 49 T 448. 100' Coil. NET ..... 1.58  
 49 W 435. Over 100', Per 100' ..... 1.58

## PERMA-POWER TUBE "BRITENERS"



**K** Model C-301 Isolation Type. Versatile brightener with 7.8 v. position, plus normal 6.3 v. position. Simple switch allows quick selection. For use in TV sets with either series or parallel-wired tube filaments. Relieves cathode-filament shorts. 10 oz.  
 80 G 184. List, \$4.45. NET ..... 2.62

**L** Model C-201 Autoformer Type. Ideal for use in sets having series- or parallel-wired filaments. Can be installed on any black-and-white picture tube—8" or larger. 7.8 v. booster tap. Gold-anodized aluminum housing. Does not relieve cathode-filament shorts. Shpg. wt., 8 oz.  
 80 G 181. List, \$2.49. NET ..... 1.46

**Model C-401 Autoformer Type.** Exceptionally low-cost TV tube brightener. Gives 7.8 volts output. Works on black-and-white electrostatic or electromagnetic focus picture tubes. 8" or larger. Does not relieve cathode-filament shorts. For use in television receivers having parallel-wired filaments only. Shpg. wt., 8 oz.  
 80 G 183. List, \$1.49. NET ..... 87c

**Model C-402. Autoformer Type.** Same as above, but for use in sets having series-wired filaments only.  
 80 G 188. List, \$1.49. NET ..... 87c

**M** Model C-211 110° Autoformer Type. Versatile dual-purpose tube brightener for use with 110° picture tubes. Boosts output to 7.8 volts. Has switch for adapting to parallel or series-wired filaments. With button base (RCA type). Shpg. wt., 8 oz.  
 80 G 168. List, \$3.75. NET ..... 2.20

**Model C-221 110° Autoformer Type.** Same as above, but with shell base. (Sylvania-Dumont type). Shpg. wt., 8 oz.  
 80 G 169. List, \$3.75. NET ..... 2.20

## TV TUBE RESTORER

**N** Model K-101. Versatile TV picture tube restorer. Corrects open cathodes, heater-cathode shorts, open control grids, control grid-cathode shorts, low emission, etc. For either parallel or series-wired sets. 1 lb.  
 80 G 189. List, \$6.65. NET ..... 3.90

## LINE VOLTAGE REGULATOR

**P** Model D101. Restores correct height and width to TV in locations where low line voltage causes picture shrinkage. Regulator plugs into AC outlet; TV set plugs into regulator. 3-position selector switch for boosting or lowering voltage. 300-watt rating. 4 3/4 x 4 1/4 x 2 1/4". Wt., 2 1/4 lbs.  
 80 G 186. List, \$6.95. NET ..... 4.09

## STANCOR TV TUBE BOOSTER



Model P8192. Self-contained unit adds life to aging picture tubes when dimness is due to low cathode emission. For all electro-magnetic pix tubes with parallel-connected filaments. Easily installed; mounts anywhere in set without soldering. Hi-Lo switch for two levels of tube brilliance. Connector plug of booster attached to picture tube. Size, 3 1/2 x 1 1/2". Shpg. wt., 8 oz.  
 80 G 182. List, \$5.44. NET ..... 3.20

## EBY CRT EXTENSION HARNESS KIT



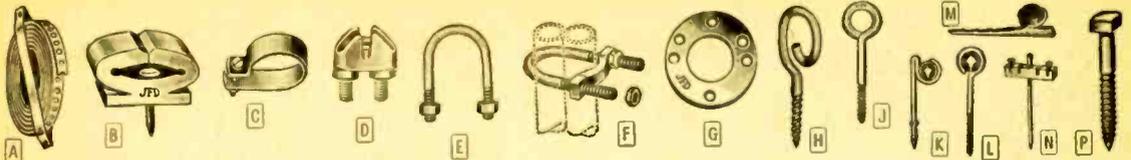
Model K302. Consists of 3-ft. anode extension harness; 4-ft. CRT socket harness for both electrostatic and magnetic tubes; 3-ft. yoke extension harness for sets using octal plug; and socket. In rugged, heavy-duty plastic case. Shpg. wt., 10 oz.  
 41 H 348. List, \$5.40. NET ..... 3.18

## EBY COLOR & 110° CRT ADAPTER



Model AD-67. Universal CRT adapter. Adapts any commercial CRT checker or rejuvenator for 110° or color TV picture tubes. Individually checks each gun of color tube. Handy, three-position selector switch quickly selects correct color gun. Shpg. wt., 1 lb.  
 41 H 346. NET ..... 7.79

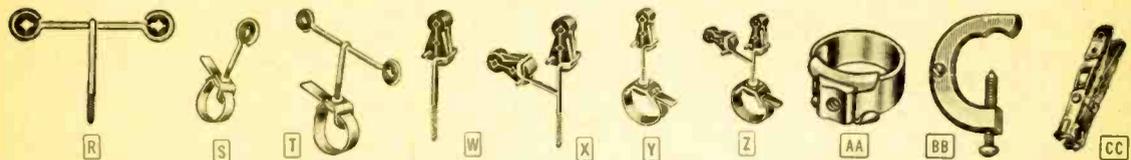
# TV Antenna Accessories



- A Hanger Strap.** For mounting masts to odd-shaped objects. Made of heavy  $\frac{1}{4}$ " galvanized steel strapping. 71 C 400, 12' coil Wt., 1 lb. NET ..... 24c  
71 C 401, 100' coil. Wt., 5 lbs. NET ..... 2.00
- B Wall Stand-Off Insulator.** For securing twin-lead to baseboards, etc. Tack-in type. Wt., per pkg., 10 oz. 10 per pkg. 71 C 608, PER PKG. .... 45c
- C Ring Clamp.** Supports guy wire ring, etc. Corrosion-resistant steel. Fits same diameters (O.D.) shown below. Shpg. wt., per pkg., 3 oz. 5 per pkg. 71 C 609, 1" PER PKG. .... 25c  
71 C 610, 1- $\frac{1}{4}$ " PER PKG. .... 25c
- D Cable Clamp.** Provides a non-slip grip on antenna and tower guy-wires. Eliminates need for splicing or soldering cable loops. Fits cables up to  $\frac{1}{4}$ " dia. Solid steel U-bolt has  $\frac{1}{4}$ "x24 thread. Hex nuts for easy tightening. Galvanized collar has tapered slots—increases cable grip with each turn of wrench. Size,  $\frac{3}{8}$ "x $\frac{1}{4}$ ". Shpg. wt., 4 oz. 71 C 686, NET EACH ..... 13c
- E U-Bolt.** Galvanized steel. With nuts and washers. Fits up to 1 $\frac{1}{2}$ " (O.D.) masts. Shpg. wt., per pkg., 4 oz. 2 per pkg. 71 C 611, PER PKG. .... 19c

- F Mast Clamp.** Has serrated yoke for tight, non-slip grip on masts. For 2 masts with max. O.D. of 1 $\frac{1}{2}$ " each. Made of galvanized steel. Shpg. wt., per pkg., 4 oz. 2 per pkg. 71 C 612, PER PKG. .... 34c
- G Universal Guy Ring.** Designed to rest unanchored on ring clamp. For 1 $\frac{1}{4}$ " O.D. masts. Shpg. wt., per pkg., 10 oz. 5 per pkg. 71 C 615, PER PKG. .... 34c
- H Open Guy Wire Hook Eye.** Designed to anchor guy wires firmly and securely. Screws into wood. Made of galvanized steel. Shpg. wt., per pkg., 10 oz. 5 per pkg. 71 C 619, PER PKG. .... 20c
- J Closed Hook Eye.** Provides anchor point for guy wires. Screws into wood. 3" long. Shpg. wt., per pkg., 8 oz. 5 per pkg. 71 C 620, PER PKG. .... 21c
- K Closed Hook Eye.** Anchors guy wires. 5" long. Shpg. wt., per pkg., 10 oz. 5 per pkg. 71 C 621, PER PKG. .... 22c
- K Drive-In Stand-Off Insulators.** Universal standoff. For use with flat, oval, tubular and coaxial TV lead-ins. For driving into wood, brick, masonry or other surfaces. 3 $\frac{1}{2}$ " long. Shpg. wt., per pkg., 5 oz. 5 per pkg. 71 C 626, PER PKG. .... 17c

- L Universal Stand-Off Insulators.** For use with flat, oval or tubular twin-lead, and coaxial TV lead-in. Polyethylene insulation. Fasten securely by screwing into wood. Av. shpg. wt., per pkg., 10 oz. 5 per pkg. 71 C 622, 3 $\frac{1}{4}$ " PER PKG. .... 13c  
71 C 623, 1 $\frac{1}{2}$ " PER PKG. .... 20c  
71 C 624, 7 $\frac{1}{2}$ " PER PKG. .... 24c
- M Universal Hot Nail Stand-Off Insulators.** For flat, oval, tubular, and coaxial TV lead-in line. Holds securely when driven into wood, mortar, or brick. Length, 3 $\frac{1}{2}$ ". Shpg. wt. per pkg., 4 oz. 5 per pkg. 71 C 627, PER PKG. .... 33c
- N Open Line Stand-Off Insulator.** Has slots for 300, 450 or 600 ohm lines. 5 $\frac{1}{2}$ " tall. Av. shpg. wt., per pkg., 5 oz. 5 per pkg. 71 C 670, PER PKG. .... 59c
- O Heavy-Duty Lag Bolts.** For rigidly securing mast mounts, tower bases, etc., to wood, brick, masonry or other surfaces. Made of rust-resistant, heavy cadmium-plated steel. Bolts have a  $\frac{1}{4}$ " diameter shank. Tighten with wrench or pliers. Av. shpg. wt., per pkg., 5 oz. 10 per pkg. 71 C 605, 1 $\frac{1}{4}$ " PER PKG. .... 38c  
71 C 606, 2" PER PKG. .... 42c



- R Double Stand-Off Insulators.** Wood-screw type insulator. Can be used for flat, oval, tubular and coaxial lead-ins. Available in lengths listed below. Average shpg. wt., per pkg., 10 oz. 5 per pkg. 71 C 628, 3 $\frac{1}{2}$ " PER PKG. .... 47c  
71 C 629, 5 $\frac{1}{2}$ " PER PKG. .... 52c  
71 C 630, 7 $\frac{1}{2}$ " PER PKG. .... 54c
- S Strap-Type Single Stand-Off Insulators.** Mount on mast. For flat, oval, tubular and coaxial lead-in. In lengths listed below. Shpg. wt., per pkg., 6 oz. 3 per pkg. 71 C 654, 3 $\frac{1}{4}$ " PER PKG. .... 24c  
71 C 655, 5 $\frac{1}{2}$ " PER PKG. .... 25c  
71 C 656, 7 $\frac{1}{2}$ " PER PKG. .... 28c
- T Strap-Type Double Stand-Off Insulators.** Universal type for use on flat, oval, tubular, and round lead-in or coaxial lines. Holds two transmission lines—can be used when two antennas are mounted on a common mast, such as in a VHF-UHF installation. Keeps lines well separated, preventing cross-talk and interaction. Has universal strap-type mount for clamping to any mast. In lengths listed below. Average shpg. wt., per pkg., 8 oz. 3 per pkg. 71 C 633, 3 $\frac{1}{4}$ " PER PKG. .... 30c  
71 C 634, 7 $\frac{1}{2}$ " PER PKG. .... 43c

- W Single Screw-Type Stand-Off Insulators.** For any lead-in. Insulator swings out for insertion of lead-in. Snaps shut with finger pressure. Design assures isolation of lead-in from metal holder. Av. wt., per pkg., 9 oz. 5 per pkg. 71 C 639, 3 $\frac{1}{4}$ " PER PKG. .... 19c  
71 C 640, 5 $\frac{1}{2}$ " PER PKG. .... 24c  
71 C 641, 7 $\frac{1}{2}$ " PER PKG. .... 30c
- X Double Screw-Type Stand-Off Insulators.** As above, but with two insulators for securely supporting two transmission lines. Polyethylene insulation. Keeps lines well separated. Holds securely without crimping. Wt., per pkg., 11 oz. 5 per pkg. 71 C 643, 7 $\frac{1}{2}$ " PER PKG. .... 55c
- Y Single Strap-Type Stand-Off Insulators.** Quick mount stand-off insulators for masts. Easy installation; no loose parts. With polyethylene low-loss insulator design, electro-galvanized steel strap, and heavy gauge steel buckle. Bronzidite plating for maximum protection from corrosion. Installs quickly; no threading required. Av. shpg. wt., per pkg., 11 oz. 3 per pkg. 71 C 649, 3 $\frac{1}{4}$ " PER PKG. .... 27c  
71 C 650, 5 $\frac{1}{2}$ " PER PKG. .... 28c  
71 C 651, 7 $\frac{1}{2}$ " PER PKG. .... 32c

- Z Dual Strap-Type Stand-Off Insulators.** With two polyethylene pivot-action lock insulators. Electro-galvanized steel strap. Will hold two lead-in lines or lead-in plus rotator cable. Length, 7 $\frac{1}{2}$ ". Shpg. wt., per pkg., 13 oz. 3 per pkg. 71 C 653, PER PKG. .... 48c
- AA Mast Insulator Clamps.** Consist of metal strap and nut block for 10-32 machine-screw type stand-off insulators. No need to drill hole in mast. Wt., per pkg., 5 oz. 3 per pkg. 71 C 822, For 1 $\frac{1}{2}$ " masts. 71 C 823, For 1 $\frac{1}{4}$ " masts. 71 C 824, For 1 $\frac{1}{2}$ " masts. 10 or more pkgs., PER PKG. .... 14c  
12c
- BB Ground Clamp.** For secure ground connection to water pipes up to 1 $\frac{1}{2}$ " diameter. Pointed screw tip for positive "bite"; screw terminal for ground wire. Shpg. wt., 4 oz. 51 C 310, EACH ..... 20c  
10 or more, EACH ..... 18c
- CC Antenna Clip.** A very handy accessory for servicemen. Clips standard 300-ohm lead-in to antenna terminals of TV sets. Low-loss plastic clip with screw terminals for transmission line. 3 $\frac{1}{4}$ " long. Shpg. wt., 2 oz. 41 C 132, NET ..... 7c

## JFD SET & ANTENNA COUPLERS AND ANTENNA SWITCHES

**Model AC Set Couplers.** Offered in a choice of 3 quality models to permit connecting 2, 3 or 4 TV sets to one antenna. With U-bolt to permit convenient mounting on antenna mast, if desired. Input and output impedance. 300 ohms. Shpg. wt., 8 oz.

Stock No	Type	Description	NET
71 C 661	AC40	2 TV sets to 1 antenna	2.06
71 C 662	AC60	3 TV sets to 1 antenna	2.35
71 C 663	AC70	4 TV sets to 1 antenna	2.85

**Model AC4 Antenna Couplers.** Designed for connecting 2 separate TV antennas to single twin-line. Eliminates need for running separate twin lines through the house. Supplied with hardware. Shpg. wt.,  $\frac{1}{4}$  lbs.

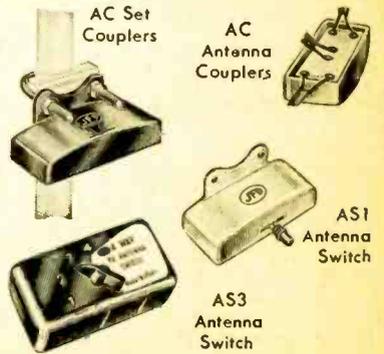
**Model AC10.** Couples 2 antennas; high-band and low-band VHF. 51 C 269, List, \$3.50. NET ..... 2.06

**Model AC20.** Couples 2 antennas. Permits connecting separate UHF and VHF antenna to a single length of twin line. 51 C 266, List, \$3.75. NET ..... 2.20

**Model AC30.** Couples 3 antennas; low-band and high-band VHF, and UHF. 51 C 267, List, \$4.85. NET ..... 2.85

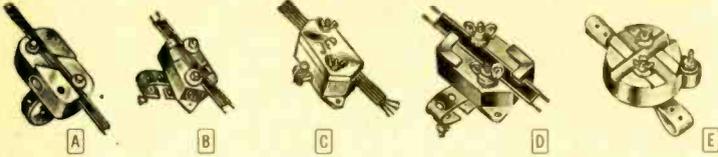
**AS1 Antenna Switch.** A smooth-operating Bat-Handle 3-way antenna switch which allows instantaneous selection of any one of 3 antennas. Has low insertion loss. Excellent for multi-Yagi installations and in those areas where separate antennas mounted on a common mast and oriented to individual stations must be used. Enclosed in sturdy, compact plastic housing. Shpg. wt., 2 lbs. 71 C 539, List, \$3.75. NET ..... 2.20

**AS3 Multiple Antenna Switch.** Specially designed to permit instant switching to any antenna in a multiple Yagi installation. Used with up to 3 antennas. Employs smooth-working constant-impedance rotary switch with low-resistance silver-to-silver contacts. Housed in sturdy plastic case. Size, 1 $\frac{1}{4}$ "x2 $\frac{1}{2}$ ". Convenient screw terminals for quick, simplified hook-up. Shpg. wt., 2 lbs. 71 C 540, List, \$4.95. NET ..... 2.91



# TV Antenna Accessories

## JFD LIGHTNING ARRESTERS, COUPLERS, WAVE TRAPS



**A AT102 Regular Flat-Line Lightning Arrester.** Designed to accommodate all ribbon type twin lead. Has special retaining flange to positively prevent twin-lead from working loose. Water-proof porcelain body. Underwriters' Laboratories Approved. Complete with stainless steel hanger strap, 4-ft. aluminum ground wire and mounting hardware. Shpg. wt., 15 oz.  
71 C 479. List, \$2.25. NET ..... 1.32

**B AT106S Universal Arrester.** Can be mounted on mast or pipe. Connections are made by saw-toothed screw terminals. For flat, tubular and open wire lead. Supplied with stainless steel hanger strap. U. L. Approved. Shpg. wt., 13 oz.  
71 C 530. List, \$1.50. NET ..... 88c

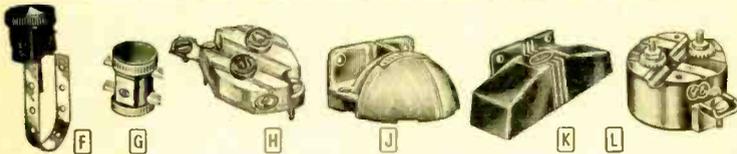
**C AT104 Lightning Arrester.** For antenna rotator installations. Handles 4-wire lead-ins. 8 precision-spaced teeth make positive contact with conductors. U. L. Approved. With ground lug. Shpg. wt., 15 oz.  
71 C 519. List, \$1.50. NET ..... 88c

**D AT110 Lightning Arrester.** For flat or open-type transmission lines. Strain-relief lip for protecting both types of lead-in. Mounts on outside wall or window sill. With ground-lug. U. L. Approved. Shpg. wt., 15 oz.  
71 C 531. List, \$1.50. NET ..... 88c

**E AT131 Lightning Arrester.** For flat, tubular, oval or open-wire transmission lines. Saw-tooth washers assure positive contact without cutting or stripping of wire. Constructed of low-loss material for full signal strength. With wood screw and strap. U. L. Approved. Shpg. wt., 10 oz.  
71 C 537. List, 75c. NET ..... 44c

**Model RA-2 Two-Set TV Antenna Coupler.** Operates two TV receivers from same antenna. Delivers full signal strength on all VHF and UHF channels. Maintains constant 300-ohm impedance. Attaches with single screw. 6 oz.  
71 C 660. NET ..... 97c

## POPULAR LIGHTNING ARRESTERS AND COUPLERS



**F Type 235A1 Arrester.** Expertly designed low-loss UHF-VHF lightning arrester—no splicing, stripping, or soldering of antenna line necessary. Screw cap type—forces antenna line against staple contacts which pierce insulation and make positive contact with conductors. Underwriters' Laboratories Approved. Strap type mounting permits quick and easy installations. Can be mounted on mast or water pipe. Shpg. wt., 8 oz.  
51 C 229. NET ..... 82c

**G Type 240A1 Coupler.** Set Coupler. For operating two or more TV sets from one antenna having a 300-ohm transmission line. Save cost of additional antenna for that second set. Utilizes resistance elements only—does not affect impedance characteristics of transmission line. Designed to provide necessary isolation between TV receivers to reduce interference caused by interaction of their oscillators. Easily installed. Shpg. wt., 6 oz.  
51 C 246. NET ..... 1.15

## AMPHENOL ARRESTERS & COUPLERS

**H Type 114-328 Arrester.** An efficient universal lightning arrester. For flat, tubular, or open line. No stripping, cutting, or splicing of line necessary. Knife-edge contacts, cut through insulation to make positive contact. Low loss, phenolic body. With screws for mounting. Underwriters' Laboratories Approved. Shpg. wt., 5 oz.  
51 C 247. List, \$1.50. NET ..... 88c  
Type 114-329. As above, with strap mount.  
51 C 289. List, \$1.75. NET ..... 1.03

**J Color Couplers.** Highly efficient, low-loss couplers for connecting two, three or four TV sets to one antenna. Provide effective isolation of sets and low signal loss through proper impedance matching. Work equally well with either color TV sets or black and white. Excellent also for matching FM radios to a single antenna. Have attractive appearance as well as weather-proofing and durability—suitable for either indoor or outdoor installation. Have built-in strain relief (flanged mount) for antenna lead-in. 2-screw mounting. Wt. 1/4 lb.  
Type 114-097. 2 sets to 1 antenna.  
91 C 841. NET ..... 1.73  
Type 114-098. 3 sets to 1 antenna  
91 C 842. NET ..... 2.32  
Type 114-099. 4 sets to 1 antenna.  
91 C 843. NET ..... 2.91

## TELCO LIGHTNING ARRESTER

**L Type 8642.** Extremely versatile, low-cost lightning arrester for protection of TV sets. For use with round, oval, flat, or open lines. Requires no stripping, cutting, or splicing of insulation for positive contact of arrester. Toothed circular contacts make firm contact. Constructed of low-loss material for full signal strength. Model 8642 is Underwriters' Laboratories Approved. Mounts on walls easily and quickly. Shpg. wt., 6 oz.  
51 C 242. List, \$1.25. NET ..... 73c

## PORCELAIN ARRESTER

A low-cost, general purpose lightning arrester. Designed for series insertion in single-wire lead-in lines of radio receivers. Ruggedly constructed of high-quality, moisture-proof, glazed porcelain. Has high barrier between terminals for extended leakage path. Sturdy hex nut terminals assure solid, permanent connections. U. L. Approved. Shpg. wt., 6 oz.  
51 C 280. NET ..... 25c

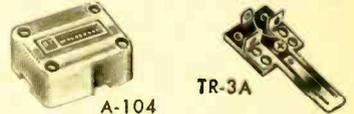
## JERROLD TV COUPLERS



**Isolating Couplers.** High quality, exceptionally low-loss couplers. Models for use in either fringe or metropolitan areas. Permit the operation of 2, 3, or 4 receivers on the same antenna. Feature AC isolation between AC-DC TV sets and antenna. Effectively suppress oscillator interaction and interference in receivers. 300-ohm impedance matching is maintained for full signal strength to all sets. Sturdy case is universal mounting type. Fully conceals and protects all connecting lead-terminals. Types MF-2 and MF-4 are designed for fringe area reception. They feature highly efficient, transformer-type impedance matching and offer extremely low-forward losses. Ideal for undistorted passage of color TV signals. Type M-2 is for coupling in strong signal areas. Type M-2 is also recommended for use on UHF TV channels. Weatherproof polystyrene cases measure 4 1/4" long, 1 3/4" wide, and 1 1/4" deep. Shpg. wt., 6 oz.

Stock No.	Mfrs Type	Description	NET EACH
71 C 841	M-2	For 2-sets. Blue-Gray.	2.10
71 C 842	MF-2	For 2-sets. Ivory.	2.70
71 C 843	MF-4	For 3 or 4-sets. Ivory.	3.45

## BLONDER-TONGUE LINE SPLITTER



**Model A-104.** Provides low-cost means of dividing 300-ohm twin-line into four brazeable from one input. Enables signal to be distributed to four TV sets. Maintains 300-ohm impedance match. Excellent for multiple installations such as in apartments. Size, 1 1/4 x 2 1/4 x 2 1/4". Shpg. wt., 8 oz.  
51 C 211. List, \$4.50. NET ..... 2.35

## BLONDER-TONGUE THERMO RELAY

**Model TR-3A.** Replacement relay used in boosters and converters which automatically turn on and off with TV set. Silver contacts adjustable for time delay of .1 to .4 seconds; will handle up to 5 amp @ 117 v. or 1/4 amp @ 220 v. AC. Uniform operation over current range of 1-3 amps. 2 1/4 x 1 3/4". Wt. 2 oz.  
51 C 210. List, \$2.00. NET ..... 1.27

## TACO SELECTIVE ATTENUATOR

**Model 835.** 300-ohm variable attenuator switch for TV and FM receivers. Cuts down strong incoming signals. Reduces sound and picture distortion caused by overdriving receivers. Positions: 0 db for no attenuation (normal reception); 15 db for minimum; 30 db for maximum. Size, 4 1/2 x 2 1/2". Shpg. wt., 5 oz.  
92 C 046. List, \$4.45. NET ..... 2.62

## MILLER ANTENNA TRANSFORMERS

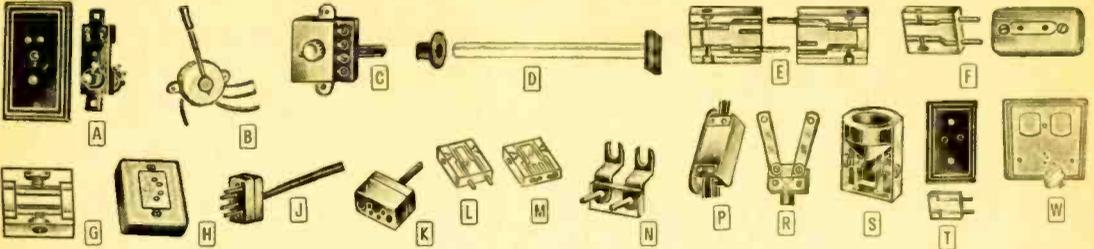
Permits use of low-loss 52 or 72-ohm coaxial cable on 300-ohm receiver inputs. 2 required: one at antenna, and one at receiver. Excellent where long 300-ohm line gives poor picture. May be used outdoors. Size, 1 1/4 x 1/4 x 1/4". Shpg. wt., 2 oz.  
77 C 516. Type 6161. 52 ohms.  
77 C 517. Type 6162. 72 ohms.  
NET EACH ..... 1.76

## AMPHENOL MATCHING TRANSFORMER

Stub-type transformer for matching 72-ohm and 300-ohm impedances. It matches 72-ohm line to 300-ohm antenna or receiver inputs; it also matches 300-ohm line to 72-ohm antenna or receiver inputs. Spade lugs on each end for quick and easy connection to screw-type terminals. Shpg. wt., 14 oz.  
51 C 292. NET ..... 71c

# Television Accessories

## MOSLEY TWIN-LINE ACCESSORIES



**A** Type F-10 3-Way Switch and Lead-in Socket. Switch and single twin-line socket in one unit. Selects any of 3 antennas. With face-plate. Shpg. wt., 12 oz.  
40 C 336. With brown plate. NET  
40 C 335. With ivory plate. NET EACH..... 2.31

**B** Type F-20 3-Way Antenna Switch. Selects any of 3 antennas. Constant impedance in all positions. Mounts on back of TV set. Shpg. wt., 12 oz.  
40 C 338. Brown plastic case. NET  
40 C 423. Ivory plastic case. EACH..... 2.31

**C** Type F-40 2-Way Antenna Switch. Same as above, but for 2 antennas. Wt. 8 oz.  
40 C 425. Brown plastic case.  
40 C 426. Ivory plastic case. NET EACH..... 1.21

**D** Type 625 Wall-Thru Insulator. For twin line or RG-59/U coax. Fits any wall up to 1 1/2" thick. Includes polystyrene tube 14" long, inside plate and outside cap. If desired, universal TV socket, 343-PK (listed below) may be installed directly on inside plate. Select matching color. Shpg. wt., 1 lb.  
40 C 430. Brown plastic ends.  
40 C 440. Ivory plastic ends. NET EACH..... 1.21

**E** Type 625PK. Same as Type 625 above, but with universal TV lead-in socket for inside wall plate. Ivory. Shpg. wt., 1 lb.  
40 C 441. NET..... 1.85

**F** Type 321 Polarized Connector. Efficient twin-line connector consisting of 2 polystyrene plugs, each with one male and one female. Assures proper polarization. 1 1/2" long. Shpg. wt., 2 oz.  
72 C 711. PER PAIR..... 37c

**G** Type 343-PK Transmission Line Sockets with Plug. Can be mounted on inside plate of 625 Wall-Thru. With solderless twin line plug and mtg. screws. Shpg. wt., 2 oz.  
40 C 413. Brown plastic case.  
40 C 412. Ivory plastic case. NET EACH..... 66c

**G** Type 27-S Flat-Line Polystyrene Splicer. Strip wires, insert, and tighten set screws for positive electrical contact. Size, 3/4 x 1/4". Shpg. wt., 2 oz.  
72 C 706. NET EACH..... 11c

**H** Solderless Base Sockets. Precision molded polarized multi-wire connectors for 4 and 8 wire flat or round cable. Use with line plugs listed below. Shpg. wt., 2 oz.

Stock No.	Type	Description	NET
40 C 437	354	For 4-wire cable	.84
40 C 439	358	For 8-wire cable	1.08

**J** Line Plugs. Solderless; for 2, 4 and 8 wire; take flat or round cable. Shpg. wt., 2 oz.

Stock No.	Type	Description	NET
40 C 429	303	For 2-wire cable	19c
40 C 431	374	For 4-wire cable	46c
40 C 433	378	For 8-wire cable	62c

**K** Line Sockets. Take plugs, above. Polystyrene; for connecting or terminating multi-wire cable. Shpg. wt., 2 oz.

Stock No.	Type	Description	NET
40 C 434	364	For 4-wire cable	60c
40 C 436	368	For 8-wire cable	77c

**L** Type 301 Plug. Ideal for connecting TV antenna lead-in to set or booster. Made of polystyrene. 1/2" pin spacing (fits socket below). Shpg. wt., 2 oz.  
72 C 705. NET..... 19c

**M** Type 311 Socket. For use with twin-line plug above. Standard 1/4" spacing. Polystyrene insulation. Shpg. wt., 2 oz.  
72 C 709. NET..... 19c

**N** Type 304 Mosley Antenna Connector. For connection of lead-in to TV antenna terminal. Fits Type 311 socket, above. Shpg. wt., 2 oz.  
40 C 339. NET..... 19c

**P** Type 902 Dual-Match TV Coupler. Operates 2 TV sets from 1 antenna. For 300-ohm line. Shpg. wt., 3 oz.  
40 C 424. NET..... 1.82

**Q** Type 904. Four-Set Coupler As 902 above, but accommodates up to 4 sets.  
40 C 445. NET..... 3.86

**R** Type 263S. "V-TV" for connecting all types of transmission lines to TV antenna elements. Solderless, screw connections 4" max. width. Wt., 6 oz.  
40 C 443. NET..... 40c

**S** Type 29-S Tubular To Flat-Line Splicer. For joining tubular or oval 300-ohm lines to standard flat lines. Clear polystyrene. Shpg. wt., 3 oz.  
40 C 442. NET..... 13c

**T** Type F-1PK Flush Socket and Wall Plate. For 300-ohm twin-line. Fits standard outlet box. Plastic plate. With plug and mtg. bracket. Shpg. wt., 6 oz.  
40 C 419. Brown. NET  
40 C 418. Ivory. EACH..... 1.21

**U** Type F-11PK Dual Flush Socket and Wall Plate. Similar to above, but for 2 twin-line connections, with plug. Shpg. wt., 6 oz.  
40 C 417. Brown. NET  
40 C 416. Ivory. EACH..... 1.66

**V** Type F-111PK Triple Flush Socket and Wall Plate. Similar to above, but for 3 twin-line connections. With plug. 6 oz.  
40 C 427. Brown. NET  
40 C 428. Ivory. EACH..... 1.66

**W** Type F-14PK Combination Flush Socket and Wall Plate. Similar to above, but for 300-ohm twin-line and 4-wire rotor cable. Plastic plate, with plugs. Shpg. wt., 6 oz.  
40 C 415. Brown. NET  
40 C 414. Ivory. EACH..... 2.17

**X** Type F-114PK Combination Flush Socket and Wall Plate. As above, but for 2 twin-line and 4-wire rotor cable. With plug. 8 oz.  
40 C 448. Brown plastic. NET  
40 C 449. Ivory plastic. EACH..... 2.17

**Y** AC-TV WALL PLATE SOCKETS. Available in 3 types. Av. shpg. wt., 6 oz.  
AC-1PK. For 2 AC sockets and 300-ohm twin-line.  
40 C 407. NET..... 1.16

AC-14PK. As above, plus 4-wire rotor.  
40 C 408. NET..... 2.05

AC-18PK. Same as Type AC-1PK, plus 8-wire rotor.  
40 C 409. NET..... 2.28

### CINCH-JONES WALL PLATE

For terminating TV lead-in and rotor cables in standard wall outlet. Wall plates are chrome-plated. S-302 for antenna lead-in. S-302-4 for lead-in plus 4 rotor wires; S-302-8 for lead-in and 8 rotor wires. Shpg. wt., 7 oz.



**WPC Style TV Wall Plates**  
41 C 646. S-302. NET..... 1.22  
41 C 647. S-302-4. NET..... 1.49  
41 C 648. S-302-8. NET..... 1.63

### CCT Style Plugs for Above

40 H 802. P-302. Antenna plug. NET... 43c  
40 H 804. P-304 4-wire rotor plug. NET. 51c  
40 H 808. P-308 8-wire rotor plug. NET. 62c

### "CLEAR-PIX" TELEVISION INTERFERENCE FILTERS

Minimize or eliminate common TV interference. Effective against 21 mc amateur transmitters, diathermy machines, strong FM stations, ignition, and other high frequency sources, 300 ohms. Screwdriver adjustment. Shpg. wt., 5 oz.



Stock No.	Mfr's Type	Interference Used For	NET EACH
51 C 043	CPH	21 mc amateur	1.17
51 C 044	CPD	Diathermy machine	
51 C 046	CPF	Strong FM station	
51 C 045	CPI	Ignition or similar	

### TV INTERFERENCE FILTERS



#### REGENCY HIGH-PASS FILTER

**X** Model HP-45. Attenuates signal frequencies below 55 mc. Provides effective aid in elimination of TVI. Has "K" type filter with cut-off frequency of 45 mc in a 300-ohm line. Approximately 20 db attenuation at 29 mc; 40 db or more at frequencies of 14 mc and below. Signals above 55 mc are passed through filter without loss. With mtg. bracket. 1 1/2 x 3/4". Shpg. wt., 2 oz.  
77 C 569. List. \$1.65. NET..... 97c

#### AMPHENOL HIGH-PASS FILTER

**Z** Model 114-330. Excellent high-pass filter for reducing TV interference caused by transmitters, diathermy, ignition, etc. Quickly and easily installed. Provides almost 60 db attenuation of interference below 50 mc. 300 ohms. 1 1/4 x 3/4 x 3/8". Shpg. wt., 6 oz.  
51 C 279. List. \$6.95. NET..... 4.09

#### R. L. DRAKE TVI FILTER

**AA** Model TV-300-HP. High-pass interference filter for any TV set with 300-ohm antenna input and 20 or 44-mc IF's. Attenuates interference from 0 to 52 mc more than 40 db; highly effective on 6-meter interference. Fully shielded. 2 1/2 x 2 1/2 x 1 1/2". 1/2 lb.  
77 C 567. NET..... 3.50

#### J. W. MILLER HIGH-PASS FILTER

**BB** Model 6168. For use at TV set. Reduces interference from medical and industrial equipment, transmitters, etc. Cuts off below 40 mc. 300 ohms. Size, 1 1/2 x 1 1/2 x 3/8". Shpg. wt., 1/2 lb.  
70 G 191. NET..... 3.67

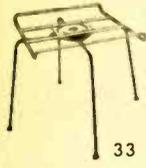
#### JFD INTERFERENCE FILTERS

**Y** Model WT26. Reduces cross-channel and other interference caused by diathermy machines, amateur transmitters, TV set oscillators and other signal sources. Simply attaches to the back of any TV set—no brackets or special installation necessary. For channels 2-6. With screws and instructions. Overall size, 5 x 2 1/2 x 3/4". Shpg. wt., 8 oz.  
77 C 680. List. \$4.50. NET..... 2.65

Model WT713. As above, but for channels 7-13.  
77 C 681. List \$4.50. NET..... 2.65

# TV Components and Accessories

## "COMFORT LINE" TV TABLES



33



81



537



567

All "Comfort Line" TV tables employ a tubular steel frame and offset legs for extra rigidity. Shipped unassembled—set up in a jiffy.

**Model 33 TV Table.** Swivel-top table for 17" to 21" table-model TV sets. Arms extend from 17" to 30". TV set is easily turned to desired direction. Stands 19½" high. Plastic glides on legs. Satin black. Shpg. wt., 10 lbs. **98 CX 966. NET 4.63**

**Model 71 Phono-TV Table.** Not illustrated. Table top is 1-piece sheet steel. Holds any size portable or table-model TV set, phonograph, etc. Arms extend from 17½" to 32". Stands 23½" high. 2" casters. Satin black. Has shelf for storage of records. Shpg. wt., 12 lbs. **99 CX 149. NET 6.63**

**Model 77.** As above, but brass-plated arms, legs, shelf and record holder; satin black table top. **99 CX 159. NET 8.63**

**Model 81 TV Table With Shelf.** Handsomely styled, solid-top television table. Fits any table-model TV set—arms extend from 17½" to 32". Stands 18" high; 3" lucite casters. Satin black finish. Has shelf for storing books, records, etc. Shpg. wt., 10 lbs. **99 CX 131. NET 5.97**

**Model 87.** As above, but bronze-plated top. **99 CX 132. NET 7.96**

**Model 537 Portable TV Table.** For all portable TV sets. Includes storage shelf. Arms extend from 13" to 21". 24" high; 2" lucite casters. Brass plated. Shpg. wt., 9 lbs. **99 CX 240. NET 7.30**

**Model 567. Heavy-Duty TV Table.** Has strong tubular steel frame top to hold the heavier, bigger TV sets with screens 21" or larger. Sets too heavy for easy lifting and carrying may be conveniently wheeled to different house locations as desired. Arms extend from 18½" closed to 35" open. Has wire shelf for storage of record albums, books, magazines, etc. Stands 18½" high; 3" lucite casters. Handsome brass plating. Shpg. wt., 13 lbs. **99 CX 439. NET 9.30**



**Model 517 TV Table Cart.** Here's an exceptionally handy, dual-purpose unit that doubles as a roll-about TV table-stand for small television sets or phonograph players—or as an ultra-smart serving cart. The curved, tubular steel frame lines are sturdily constructed for

long, dependable service. Arm extends from 17" to 22", quickly and easily. Has a metal shelf for the convenient storage of records, books, etc. Stands 24" high. Smooth action. 3" lucite casters permit effortless movement to any desired location—even through rooms covered by carpeting! The cart has a gleaming brass-plated finish with a handsomely contrasted brown top. Shpg. wt., 13 lbs. **99 CX 449. NET 9.30**

## NEW G-C TUBE-SAVER

- Extends Tube Life for Year-Round Savings
- "Thermal Cushion" Limits Surge Voltages
- Plugs in Easily—No Soldering Required



**Model 6303.** A highly effective device for extending the tube life of television sets, high-fidelity music systems, radios and other electronic equipment. Completely safe, the tube-saver plugs in quickly and easily to provide constant protection of tubes against sudden surges of voltage—actually triples tube life for year-round savings. Features "Thermal cushioning" action to prevent damage to tubes when set is turned on—minimizes servicing and replacement costs. Plugs into wall outlet; set plugs into tube-saver. 2½" x 2½" x 1¼". For 100-275 watt sets. **80 G 146. List, \$4.95. NET 2.91**

For operation from 110-120 volts, 50-60 cycle AC-DC. Shpg. wt., 7 oz.

**Model 5304.** For color TV sets; 250-400 watts. Shpg. wt., 12 oz. **80 G 149. List, \$5.95. NET 3.50**

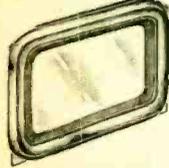
## TV TUBE DELUXE PLASTIC MASKS



Solid, optically clear, ½" thick plastic safety masks for rectangular picture tubes. Prevents tube breakage and guards against "implosion" and "shattering". Gold metal luster finish border. Easy to install. Shpg. wt., 1½ lbs.

Stock No.	For Tube	Size	NET
97 CX 923	17" Rect.	13½" x 16¾"	5.35
97 CX 913	21" Rect.	15½" x 21½"	8.00

## WALDOM TV MASK ASSEMBLIES



Ideal for use with 21" cylindrical-face, rectangular tubes in custom TV installations—also for converting small screen TV receivers to a larger picture tube. Has metallic gold-finished escutcheon green-sprayed aluminum mask, and heavy protective glass. U.I. Approved. Has 3½" tilt to eliminate glare and reflections. 17½" x 21½". With mounting hardware and instructions. Shpg. wt., 7 lbs. **97 CX 914. NET 18.43**

374

## "NU-LIFE" CATHODE-RAY TUBE RESTORER



Remarkably versatile unit. Corrects many kinds of shorts and opens in magnetic-focus and electro-static-focus picture tubes. Permanently eliminates such defects as: open cathode, shorted cathode to filament, shorted control grid to open control grid; or any combination of these. For use with either series or parallel-wired sets. Ingenious terminal board arrangement with plug-in leads allows undamaged elements to take the place of the damaged elements. Simple instructions come with unit. Also provides an easy and inexpensive method of restoring picture tube brightness. Built-in potentiometer allows adjustment to correct for low filament emission and slow heating. Shpg. wt., 12 oz.

**80 G 145. NET 4.95**

## RCA TV RECEIVER SERVICE PARTS

Exact duplicate replacement parts for RCA TV receivers with part numbers as given in RCA servicing and replacement manuals. Shpg. wt., 1½ lbs., except \*15 lbs., †3 lbs.

Stock No.	Mfr's Type	Component	NET EACH
77 G 188	74950	Vert. Deflection Output Transf.	4.59
77 G 263	74952†	Deflection Yoke	5.76
77 G 92	75508*	Power Transformers	14.11
77 G 193	75519	Horiz. Output & HV Transf.	4.41
77 G 197	76501	Horiz. Output & HV Transf.	4.23
77 G 255	76533†	Deflection Yoke	6.53
77 G 256	76797†	Deflection Yoke	6.85

## RCA COLOR TV SERVICING AIDS

A "must" for service kits. Types 222X1 and 223X1 are for RCA color TV 1956 sets. Types 220X1 and 221X1 are for 1956 and 1957 sets. Types 224X1, 225X1 and 226X1 are for 1957 color television receivers.

Stock No.	Mfr's Type	Component	Wt. Oz.	NET EACH
77 G 310	220X1	CRT Socket Ext. Cable	9	7.25
77 G 311	221X1	Reflecting Yoke Ext. Cable	7	3.43
77 G 312	222X1	Converging-Magnet Assembly Ext. Cable	6	3.33
77 G 313	223X1	Horiz. Ext. Cable	2	1.32
77 G 314	206PF	Hi-Volt Interlock Plug	2	.41
77 G 315	224X1	Converging-Magnet Ext. Cable	2	2.62
77 G 316	225X1	Hi-Volt Ext. Cable	6	1.32
77 G 317	226X1	Grid Shunt	9	4.70

## QUAM FOCALIZER UNIT



**Type QF-4.** For quick, accurate focusing and centering of raster. Fits all picture tubes regardless of size or anode voltage. Size, 1½" x 3¼" x 5¼". Shpg. wt., 1 lb.

**41 H 133. NET 2.50**

## MILLER ADJUSTABLE ION TRAP



**Model 6295.** Universal single-magnet ion trap. Screw adjustment allows magnetic field to be varied between 32-55 gaussess. Replaces any single-magnet trap within this gauss range. Greatly reduces your inventory. Extension spring permits easy installation. Shpg. wt., 6 oz.

**60 H 796. List, \$1.25. NET 73c**

## CLAROSTAT REGULATORS



**Type TVA.** Protects TV sets from line voltage surges. Reduces surge of 140 v., down to 110 v. Plug-in type. For sets using 200-300 watts. Shpg. wt., 5 oz. **31 E 085. NET 2.06**

**Type TVB.** For sets having a power consumption of 300 to 375 watts. Diameter, 1½"; length, 3¼". Shpg. wt., 5 oz. **31 E 086. NET 2.35**



## TELEVISION FILTER

Scientifically tinted (gray) to protect eyes. Effectively minimizes glare and improves picture contrast of picture tube. Usable on TV receivers. **41 H 133. NET 2.50**

with any type of picture tube. Has square corners and may easily be cut as required. Size: 16x21". Shpg. wt., 1 lb. **71 CX 820. NET 2.79**

## VIDAIRE "KINE TEST"



Tester for checking electro-magnetic picture tubes by substitution method. No need to remove picture tube or chassis from cabinet. Just plug tester into picture tube socket. Electron-ray tube dynamically checks filament, bias, and 1st anode voltages, video signal, etc. Compact—easily fits in tool chest. Complete with instructions. Size, 4½" x 1½". Shpg. wt., 6 oz.

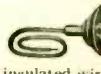
**84 C 017. List, \$4.90. NET 2.88**

## PERMA-POWER HORIZONTAL BAR GENERATOR



**Type B101.** Provides series of horizontal lines for accurate checking of picture linearity. Also used for setting of deflection yoke and focus coil or magnet. Plugs into all duo-decal-type picture tube sockets. With instructions. Size: 1½" x 1½". Shpg. wt., 5 oz. **51 C 212. NET 1.72**

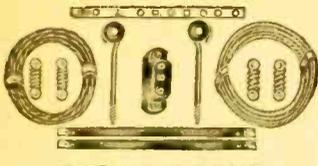
## CRT HI-VOLTAGE CONNECTOR



**Second-anode connector.** Silver plated, snap-button plug; makes perfect contact with picture tube. Insulated by 1½" diameter rubber cap; 18" insulated wire lead. Shpg. wt., 4 oz. **41 H 347. NET 29c**

# AM Antennas, Antenna Kits, TV Tuner

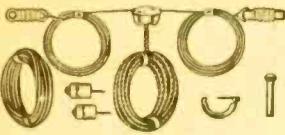
## CONSOLIDATED ANTENNAS



**MODEL 615 LONG WAVE, SHORT WAVE & BC ANTENNA KIT**

An excellent antenna kit for short-wave reception. Will also perform well on the long-wave and broadcast bands. Contains all wire and parts for any one of the following antennas: balanced doublet; double doublet; or inverted-L. Includes: 100 ft. of bare antenna wire; 50 ft. of insulated transmission line; 4 insulators; 2 bakelite screw eyes; doublet lightning arrester; lead-in strip; and ground clamp. With instructions. Shpg. wt., 3/4 lbs. **4.26**  
51 C 263. NET

**MODEL 635 DOUBLET ANTENNA**



A highly efficient doublet antenna. Provides excellent short-wave, long-wave, and broadcast band reception. Doublet sections are tuned to provide uniform response throughout the 16-49 meter short-wave band. Kit contains: 2-30 ft. coils of 7/24 bare copper wire; 50 ft. of twisted and braided transmission wire; 10 ft. of ground wire; 3-3/8" glass insulator; ground clamp; porcelain lead-in tube; 2 porcelain nail-knobs; and easy-to-follow installation instructions. Shpg. wt., 3/4 lbs. **3.72**  
51 C 264. NET

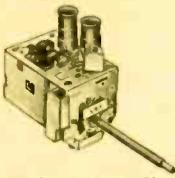
## COPPERWELD ANTENNA WIRE

High-quality, copperweld antenna wire. Features copper outer conductor and steel core. May also be used for guying antenna towers and masts.

Stock No.	Gauge	Feet	Wt., Lbs.	EACH
49 T 133	12	100	2	2.69
49 T 134	12	250	5	6.30
49 T 140	14	100	1 1/2	2.37
49 T 141	14	250	3	5.12
58 T 318	18	250	2	1.63
58 T 317	18	500	3	2.94
58 T 315	18	3000	18	14.48

## STANDARD COIL TUNER

Model GG-2220 Neutrode Replacement Tuner. Replaces TAA-050, 21-mc pentode and TCA-050, 21-mc cascode tuners. Features neutralized-triode circuit to provide substantial improvements in gain, signal-to-noise ratio, and general performance. Delivers excellent pictures even in fringe areas. Uses 6BN4 RF amplifier and 6CQ8 coconverter. Printed circuit board. Has improved filter circuits and shielding; greatly reduced oscillator drift and radiation. IF frequency is pre-adjusted at factory to approx. 23.5 mc; can be adjusted over a wide range to suit specific installation requirements. Requires 125-150 v. D.C. plus heater voltage. With full instructions. Shpg. wt., 3 lbs. **21.07**  
60 G 229. NET



## TYPE 31M-213 TV TUNER STRIPS

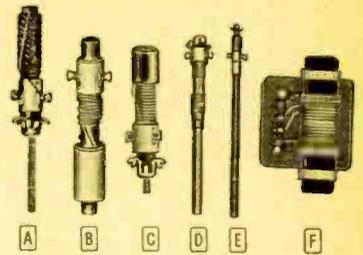
Replace original Standard Coil strips. Set includes antenna and oscillator strip for VHF (channels 2-13 only). Specify channel number required and tuner series letter stamped on original strips. 4 oz.

Stock No.	For Series	Stock No.	For Series
60 GG 322	F	60 GG 325	Q
60 GG 323	H	60 GG 326	R
60 GG 324	K	60 GG 328	U

NET EACH **2.19**

## SUPEREX HIGH-GAIN LOOPSTICK ANTENNAS

A complete selection of low-cost, high-efficiency, ferrite-core antennas. Ideal for replacing old-fashioned loop antennas. Feature extremely high gain and uniform response. Will greatly improve signal to noise ratio, and pull in many hard-to-get stations that can't be heard with ordinary loops. Troublesome orientation or moving of receivers is not required, since reception is equally sensitive from all directions. Extremely compact size and stable performance. Easily mounted. Tune 540 to 1600 kc (AM broadcast band) with 365 or 410 mmf tuning capacitor.



**A VLT-240 Transistor Vari-Loopstick.** Has impedance tap; convenient micrometer adjustment. Easily adjusted for peak efficiency. Simplified, one-hole snap-in mounting. For use with 365 mmf or 410 mmf variable tuning capacitor. Size, 7/8x2". Shpg. wt., 4 oz. **73c**  
51 C 029. NET

**B Ferri-Loopstick.** Excellent, low-cost, replacement antenna for AM broadcast receivers. Needs no orientation. Has "Q" of 240-275 for clear, powerful reception. Supplied with clamp for convenient single-hole snap-in mounting. Size, 7/8x2" long. Shpg. wt., 4 oz. **44c**  
51 C 036. NET

**C Vari-Loopstick.** For AM broadcast receivers, including the smallest portables. Has "Q" of 250. Adjustable ferrite core permits peaking for any portion of tuning range. Single-pole snap-in mounting. Size, 7/8x2 1/2". Shpg. wt., 4 oz. **59c**  
51 C 034. NET

**C Vari-Tenna.** For use with older radio sets equipped with built-in antenna. Features high sensitivity and excellent signal-to-noise ratio. Boosts gain up to 25 times. Single-hole mounting. 1/2x2 1/2". Wt., 4 oz. **73c**  
51 C 032. NET

**D "Energized" Ferri-Loopstick.** This 5" loopstick has a "Q" of up to 350. Extremely high gain brings in weak, distant stations. Adjustable coil with self-locking vinyl collar permits peaking antenna for optimum results. Convenient single-hole mounting. Size: 1/4x5". Shpg. wt., 6 oz. **88c**  
51 C 038. NET

**E 7" Loopstick.** Same as "energized" loopstick described above, but 7" long for even greater sensitivity. Has "Q" of up to 425. Shpg. wt., 6 oz. **1.32**  
51 C 039. NET

**F High "Q" Transistor Loopsticks.** Ideal universal replacement for most transistor sets. Feature extremely high "Q" core. Have movable turns and multiple impedance taps; provide complete adjustability for maximum gain. Flat design provides excellent pick-up. All tune 540 to 1600 kc with standard 365 or 410 mmf tuning capacitor. Complete with installation instructions.

Stock No.	Mfr's Type	μH	Size	Shpg. Wt.	NET EACH
51 C 025	2FT-240	200-265	2 1/4"	4 oz.	1.62
51 C 026	3FT-240	200-265	3 3/4"	4 oz.	1.62
51 C 027	5FT-240	175-265	5 1/4"	4 oz.	1.62
51 C 028	7FT-240	170-265	7"	4 oz.	1.76

## REPLACEMENT ANTENNA LOOP

Wound on rigid fiberboard form. Has lug terminals. Replaces antenna coil in battery and midget sets or portables. Turns may be removed to match loop being replaced. Overall size, 6x8 1/4". Shpg. wt., 8 oz. **53c**  
51 C 040. 1 to 9, NET EACH  
10 or more, EACH **48c**

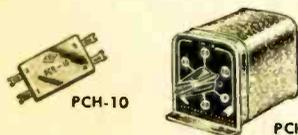
## MINIATURE ANTENNA LOOP

For use where space is limited. Covers standard broadcast band with midget variable capacitors. 9x38 Litz wire for low loss. 214 microhenries; high "Q" of over 230. Two 4" leads. Overall size, 3 1/8x5 1/4". Shpg. wt., 8 oz. **40c**  
51 C 035. 1 to 9, NET EACH  
10 or more, EACH **36c**

## WINDOW LEAD-IN

Made of soft drawn flexible copper, covered with heavy black cotton braid. Thoroughly weatherproofed with multiple coats of Duco lacquer. For use with broadcast band and short wave antennas having single-wire lead-in. Fits under window. Has Fishnestock clip on each end, 12" long by 1/2" wide. 2 oz. **19c**  
51 C 050. NET

## CENTRALAB TV H-PADS



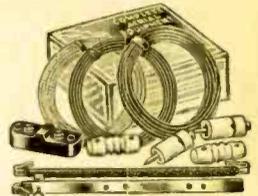
For use in strong signal areas where TV signal requires attenuation to obtain optimum performance. H-pad has 4 terminals. Installed in series with 300-ohm antenna lead-in. Size: 1 1/4x1 1/8x3/8". Shpg. wt., 1 oz.

No.	Type	Attenuation	EACH
11 L 190	PCH-10	10 db	<b>88c</b>
11 L 191	PCH-20	20 db	
11 L 192	PCH-30	30 db	
11 L 193	PCH-40	40 db	

**PCH-100.** Set of 4 H-pads, one each of above, in plastic box. Shpg. wt., 2 oz. **3.53**  
11 L 194. NET

**PCH-4.** Switch with H-Pads above. With mounting bracket. 2 1/2x2 1/2x2 1/4". 8 oz. **5.88**  
11 L 454. NET

## DELUXE BC-SW ANTENNA KIT



Handy antenna kit for broadcast and short wave reception. Increases "pulling power" of any set. Includes 100 ft., 7x26 bare copper antenna wire; 40 ft. rubber covered lead-in; 25 ft. rubber covered ground wire; 2 porcelain insulators; 1 window lead-in; 1 lightning arrester; 2 porcelain nail knobs; 1 ground clamp and full instructions. Shpg. wt., 2 1/2 lbs. **2.04**  
83 C 101. NET

**Standard BC-SW Antenna Kit.** 50 ft., 7x26 bare copper wire; 25 ft. lead-in; 2 antenna insulators; 2 nail knob insulators; 1 window lead-in and 1 ground clamp. Shpg. wt., 1 1/2 lbs. **1.03**  
83 C 100. NET

## SERVICE INSTRUMENTS CO.

### "UP-DOWN" VOLTAGE REGULATORS

**Type LB2.** An extremely handy, multi-purpose voltage regulator for the servicing bench. Designed to increase low line voltage, or decrease high line voltage. Raises or lowers line voltage 10 volts by simple flick of a switch. Can be used with any television receiver or appliance which has a power consumption of 300 watts or less. Restores proper picture width and height, increases brightness, remedies oscillator drift and poor sync, and helps extend tube life. Size: 2 1/2x3 1/2x3 1/4". Rated, 300 watts. For operation from 115 volts, 60 cycles A.C. Shpg. wt., 3 lbs. **5.85**  
63 G 985. NET

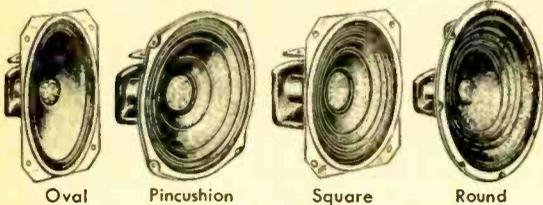


**Type LB2 (N).** Same as Type LB2 described above, but has neon indicator which operates when output voltage is too high—Indicates when regulator should be turned off. Indicator light goes on when output voltage of regulator reaches 126 volts. **7.03**  
63 G 987. NET

# Quam and Jensen Speakers

## FAMOUS QUAM SPEAKERS FOR REPLACEMENT AND NEW EQUIPMENT USE

### ADJUST-A-CONE SPEAKERS



High-quality PM speakers for replacement and original-equipment applications in radios, phonographs, TV sets, etc. All except 25A07, 3A07 and 4A06 have "Adjust-A-Cone" which consists of a clamping ring securely fastening the spider to the basket by means of two machine screws rather than cementing. This assures precision centering of the voice coil. All 3 1/2" to 6 1/2" speakers, except 4A06, are supplied with universal mounting bracket. Magnets are Alnico-V. \*Indicates very shallow frame. Voice coil impedance, 3.2 ohms except fpeakers for transistor application; voice coil impedance indicated by digits following Z in Type number.

Stock No.	Mfr's Type	Shape	Size	Max. Watts	Magnet Weight	Wt., Lbs.	NET EACH
81 P 073	22A06Z8	Round*	2 1/4"	.25	.62 oz.	1/8	2.79
81 P 074	22A06Z100	Round*	2 1/4"	.25	.62 oz.	1/8	3.09
81 P 066	25A07	Square	2 1/2"	2.0	.65 oz.	1/8	2.35
81 P 076	27A06Z12	Round*	2 1/2"	.25	.62 oz.	1/8	2.76
81 P 346	3A07	Square*	3 1/2"	2.5	.65 oz.	1/8	2.35
81 P 309	4A06	Square*	4"	2.5	.62 oz.	1/8	1.73
81 P 320	4A07	Square*	4"	3.0	.65 oz.	1/8	2.50
81 P 321	4A1	Square	4"	3.0	1.0 oz.	1/8	2.50
81 P 322	4A15	Square	4"	3.0	1.47 oz.	1/8	2.76
81 P 347	46A07	Oval*	4x6"	3.5	.65 oz.	1/8	2.62
81 P 371	46A1	Oval	4x6"	3.5	1.0 oz.	1	2.79
81 P 372	46A15	Oval	4x6"	3.5	1.47 oz.	1	3.03
81 P 077	48A2	Oval*	4x8"	4.5	1.4 oz.	1	4.09
81 P 323	5A07	Pincushion*	5"	3.5	.65 oz.	1/8	2.47
81 P 324	5A1	Pincushion*	5"	3.5	1.0 oz.	1	2.62
81 P 325	5A15	Pincushion	5"	3.5	1.47 oz.	1	2.85
81 P 803	5ZA1	Pincushion	5 1/2"	4.0	1.0 oz.	1	2.73
81 P 317	5ZA21	Pincushion	5 1/2"	4.0	2.15 oz.	1 1/4	3.35
81 P 348	57A1	Oval	5x7"	5.0	1.0 oz.	1	3.17
81 P 334	57A15	Oval	5x7"	5.0	1.47 oz.	1	3.41
81 P 339	57A21	Oval	5x7"	5.0	2.15 oz.	1 1/4	3.79
81 P 326	6A1	Pincushion	6 1/2"	5.0	1.0 oz.	1	2.82
81 P 327	6A15	Pincushion	6 1/2"	5.0	1.47 oz.	1	3.06
81 P 328	6A21	Pincushion	6 1/2"	5.0	2.15 oz.	1 1/4	3.44
81 P 332	6A31	Pincushion	6 1/2"	6.0	3.16 oz.	1 1/2	3.97
81 P 373	69A2	Oval*	6x9"	8.0	3.4 oz.	1 1/2	4.41
81 P 374	69A3	Oval*	6x9"	10.0	3.2 oz.	1 1/2	5.26
81 P 378	69A1	Oval*	6x9"	6.0	1.2 oz.	1	3.50
81 P 331	7A21	Pincushion*	7"	6.0	1.47 oz.	1 1/2	4.26
81 P 387	7A31	Pincushion*	7"	9.0	3.16 oz.	2	5.00
81 P 329	8A21	Pincushion	8"	7.0	2.15 oz.	1 1/4	4.23
81 P 330	8A31	Pincushion	8"	9.0	3.16 oz.	2 1/4	5.00
81 P 388	10A31	Round	10"	9.0	3.16 oz.	2 1/4	6.17
81 P 804	10A4A	Round	10"	10.0	4.64 oz.	3 1/4	6.88
81 P 805	10A6A	Round	10"	12.0	6.8 oz.	3 1/2	8.00
81 PX 333	12A31	Round	12"	10.0	3.16 oz.	3 1/4	6.67
81 PX 806	12A4A	Round	12"	12.0	4.64 oz.	4	7.44
81 PX 807	12A6A	Round	12"	14.0	6.8 oz.	4 1/2	8.53

### "HUMI-GARD" OUTDOOR SPEAKERS

Quam speakers with the exclusive "Humi-Gard" cone of plastic impregnated fiber fabric. Specially designed to outlast ordinary moisture-proofed cones, yet provide the response of an untreated paper cone. Resists sand and dirt abrasion. Voice coil impedance, 3.2 ohms. You can save by buying in large quantities. Write for quotations.

Stock No.	Mfr's Type	Size	Shape	Max. Watts	Magnet	Wt., Lbs.	NET EACH
81 P 308	3A07OT	3 1/2"	Square	2.5	.65 oz.	1/8	2.35
81 P 393	4A10T	4"	Square	3	1.0 oz.	1	2.50
81 P 306	5A15OT	5"	Pincushion	3.5	1.47 oz.	1	2.85
82 P 260	6A15OT	6"	Pincushion	5	1.47 oz.	1 1/4	3.06

### ELECTRO-DYNAMIC SPEAKERS

Field coil type speakers for new equipment or replacement use. Voice coil impedance, 3.2 ohms. Wattage ratings are conservative. All have universal mounting brackets and heavy gauge metal baskets, baked aluminum enamel finishes. Standard mounting centers. †Have hum-bucking coil.

Stock No.	Mfr's Type	Size	Shape	Field Ohms	Max. Watts	Wt., Lbs.	NET EACH
81 P 350	4E45	4"	Square	450†	3.0	1	3.09
81 P 352	5E45	5"	Pincushion	450†	3.5	1	3.23
81 P 353	5E10	5"	Pincushion	1000	3.5	1	3.23
81 P 357	6E10	6 1/2"	Pincushion	1000	5.0	1 1/2	3.82

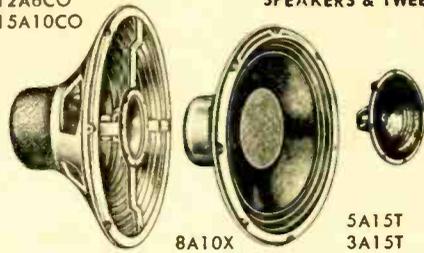
### HIGH-IMPEDANCE INTERCOM SPEAKERS

PM speakers designed for replacement in intercommunications systems. Voice coil impedance is 45 ohms.

Stock No.	Type	Size	Shape	Magnet	Shpg. Wt.	NET
81 P 808	3A07Z45	3 1/2"	Square	65 oz.	1/8 lb.	2.50
81 P 809	4A1Z45	4"	Square	1.0 oz.	1/8 lb.	2.65
81 P 810	5A1Z45	5"	Pincushion	1.0 oz.	1 lb.	2.76

8A4CO  
12A6CO  
15A10CO

### EXTENDED RANGE SPEAKERS & TWEETERS



Economy Models for Home Hi-Fi Systems.

MODEL 8A10X 8" SPEAKER. Extended-range speaker, ideal for remote speaker in home music systems. Frequency response is  $\pm 5$  db. 50-12,000 cps. Power handling capacity, 10 watts. 1" voice coil diameter. For 7" baffie opening. Depth, 4". 10-oz. Alnico V magnet. Impedance, 8 ohms. Wt., 3 1/4 lbs.

81 P 343. NET 11.76

MODEL 3A15T 3 1/2" TWEETER. Response, 2000-12,000 cps,  $\pm 6$  db. Impedance, 14 ohms. 1.47-oz. Alnico V magnet. Power capacity, 10 watts. Frame is 3 1/2" square; depth 2 1/4". Shpg. wt., 3/4 lbs.

81 P 341. NET 3.38

MODEL 5A15T 5" TWEETER. Used in Model 15A10CO speaker (listed below). Frequency response, 2000-12,000 cps,  $\pm 6$  db. Voice coil impedance, 14 ohms. 10 watts power handling capacity. 1.47-oz. Alnico V magnet. 3 1/2" deep; 4 1/4" mtg. ctrs. Wt., 1 lb.

81 P 342. NET 3.82

MODEL 8A4CO 8" COAXIAL SPEAKER. 8" cone has 4.64-oz. magnet, 2 1/2" tweeter with .65-oz. magnet. Rated at 10 watts. Range: 50-15,000 cycles,  $\pm 5$  db. Impedance, 8 ohms. Wt., 2 3/4 lbs.

81 P 038. NET 13.49

MODEL 12A6CO 12" COAXIAL SPEAKER. 12" woofer has 6.8-oz. magnet, 3 1/2" tweeter with 1.47-oz. magnet. Power capacity, 14 watts. Response, 50 to 15,000 cps,  $\pm 5$  db. Imp., 8 ohms. 6 1/2 lbs.

81 PX 318. NET 17.64

MODEL 15A10CO 15" COAXIAL SPEAKER. 15" woofer has 10-oz. magnet; 5" tweeter with 1.47-oz. magnet. Power capacity, 20 watts. Response, 25-15,000 cps,  $\pm 5$  db. Imp., 8 ohms. Wt., 9 lbs.

81 PX 319. Only \$2.00 Down. NET 27.93

### QUAM REAR-DECK KITS



MODEL AS-3. Complete rear-deck speaker kit featuring a 5x7" "Adjust-A-Cone" speaker specially designed for automobile use. Has 3/4" precision-centered voice coil and efficient 1.47-oz. Alnico V magnet. Fader control for exact adjustment of balance between radio-mounted speaker and rear-deck speaker. Complete with 18 ft. of cable pre-wired to fader control, flocked grille, baffle plate, hardware and instructions. Shpg. wt., 2 1/4 lbs.

81 P 140. NET 7.03

MODEL AS-2. Deluxe kit with heavy-duty 6x9" "Adjust-A-Cone" speaker. Ample capacity for largest auto sets. Has 2.15-oz. Alnico V magnet and 1" voice coil. Includes fader control, 18 feet of cable, flocked screen grille, baffle plate, sponge rubber gasket, mounting hardware and instructions. Shpg. wt., 3 1/2 lbs.

81 P 390. NET 8.20

### JENSEN "CONCERT SERIES" SPEAKERS

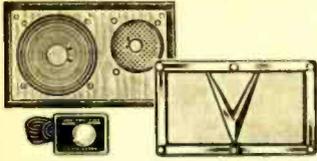


Jensen's highly popular "Concert Series" PM speakers. DP-Alnico V magnets for exceptionally high efficiency and distinct reproduction. Cones are selected for maximum frequency response characteristics. Rigid frame maintains proper alignment of voice coil and magnet structure. All speakers listed below have 3.2-ohm voice coil impedance, except Type P275-Y which is 16 ohms (for transistor radios). All except P275-Y and P4-W have bracket for mounting matching transformer.

Stock No.	Mfr's Type	Size	Shape	Magnet Weight	Watts	Wt., Lbs.	NET EACH
82 P 171	P275-Y	2 1/2"	Round	0.65 oz.	0.15	1/8	3.67
82 P 271	P4-W	4"	Square	1.0 oz.	4.5	1 1/2	2.47
82 P 272	P5-W	5"	Square	1.0 oz.	5.0	1 1/2	2.68
82 P 176	P5-V	5"	Square	1.47 oz.	5.5	1 1/4	2.85
82 P 273	P6-W	6"	Square	1.0 oz.	6.0	2	2.85
82 P 179	P6-V	6"	Square	1.47 oz.	6.5	2	3.12
82 P 181	P6-T	6"	Square	3.16 oz.	7.5	2	4.59
82 P 195	P69-V	6 1/2"	Oval	1.47 oz.	7.5	2 1/2	4.41
82 P 183	P8-U	8"	Square	1.73 oz.	9.0	2 1/2	4.50
82 P 184	P8-T	8"	Square	2.5 oz.	10.0	2 1/2	5.23
82 P 187	P10-T	10"	Round	2.5 oz.	11.0	5	6.32
82 PX 190	P12-T	12"	Round	2.5 oz.	12.0	5	6.94
82 P 270	P314-T	14x3"	Oval	3.16 oz.	7.5	2	7.50

# Knight Top-Value Speakers and Grilles

## REAR-DECK AUTO RADIO SPEAKER KITS



### DELUXE DUAL-SPEAKER KIT

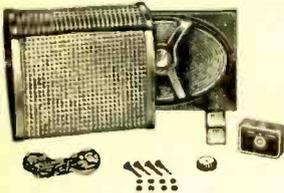
**\$1172**

One of the finest rear deck speaker kits available, this distinctively styled unit features two separate speakers.

Provides unusually rich and thrilling auto radio sound; makes it possible for all passengers in car to enjoy enhanced musical reproduction. Consists of a 4" speaker and a 6" speaker, mounted side-by-side on a baffle board. 4" speaker serves as an efficient tweeter for reproducing treble notes. 6" speaker is used as a woofer for bass response. A highly efficient, built-in high-pass filter, mounted on the baffle board, distributes highs and lows to the proper speaker. The smartly styled grille, in a choice of two attractive finishes, adds a distinctive touch to any car interior. Easy to install, the kit includes a dash-mounted, three-way switch for instant selection of radio-mounted speaker only, rear-deck dual speakers only, or all speakers together. Grille size, 7x11 1/2". Supplied complete with switch, wire, all hardware and easy-to-follow instructions—everything needed for a quick, simple installation. Shpg. wt., 3 lbs.

81 P 130. Chrome Grille.  
81 P 131. Gray Grille.  
NET EACH.....11.72

### DELUXE SPEAKER KIT FOR STATION WAGONS

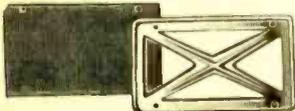


**\$938**

Smartly styled speaker kit for installation in station wagons. Mounts on roof, adjacent to rear window. Kit features high-quality 6x9" Alnico V oval speaker enclosed in gold finished, metal-mesh basket. Has modern, contoured appearance to match interior of any station wagon. Delivers rich, full-toned sound. Dash-mounted 3-way switch permits use of front speaker only, rear speaker only, or both together. Eliminates need for unpleasantly loud radio volume to enable all passengers to hear programs clearly. Kit includes mounting brackets to fit any station wagon, pre-wired switch, hardware, and installation instructions. Shpg. wt., 2 1/2 lbs.

81 P 195. NET.....9.38

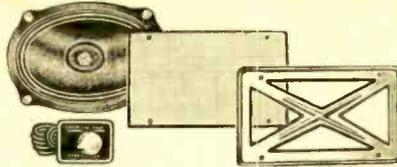
### KNIGHT SPEAKER GRILLES ONLY



Distinctive, chrome finish speaker grilles for either 5x7" or 6x9" rear deck speakers. Attractive and durable chrome finish stays bright after years of wear. Include all mounting hardware. Av. shpg. wt., 1 lb.

FOR 6x9" SPEAKER.  
82 P 251. NET.....1.13

FOR 5x7" SPEAKER.  
82 P 252. NET.....1.08



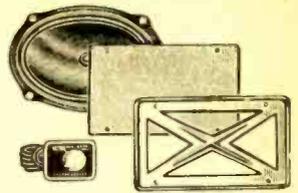
### EXTENDED-RANGE SPEAKER KIT

As Low As  
**\$571**

High-quality extended-range speaker kit for rear deck mounting. Has duo-type speaker with specially designed, high-frequency cone mounted at its center; provides balanced reproduction of a richer bass and treble. The duo-speaker employs the natural baffle of the automobile body to deliver pleasingly smooth reproduction throughout the audio range. Handsome grille in choice of two finishes.

A dash-mounted, 3-way switch, permits playing the radio-mounted speaker only, duo-speaker only, or all speakers simultaneously. Allows all passengers to hear radio broadcasts at a comfortable listening level—eliminates need for turning up front-seat volume. Kit includes switch, wire, all hardware and complete instructions.

Stock No.	Size	Grille	Lbs.	EACH
81 P 132	5x7"	Gray	2	5.71
81 P 133	5x7"	Chrome	2	5.88
81 P 135	6x9"	Gray	2 1/2	6.40
81 P 134	6x9"	Chrome	2 1/2	6.54



### STANDARD REAR-DECK SPEAKER KITS

As Low As  
**\$375**

A value-packed luxury item at remarkably low cost. These economically priced, rear-deck speaker kits are ready for quick, trouble-free installation in any car. Assure excellent tonal quality and greatly improved sound distribution.

Dash-mounted, 3-way control switch permits operation of front speaker only, rear speaker only, or both speakers together. Speakers are top-quality, Alnico V PM type with handsome, protective grille. Kits are available in two popular speaker sizes. Contain everything needed for a neat, custom installation. Your choice of two attractive finishes. Kits include: grille, pre-wired 3-way switch, all wires and hardware, mounting template and complete instructions—nothing else to buy.

Stock No.	Size	Grille	Lbs.	EACH
81 P 558	5x7"	Gray	2	3.75
81 P 559	5x7"	Chrome	2	3.92
81 P 501	6x9"	Gray	2 1/2	4.50
81 P 502	6x9"	Chrome	2 1/2	4.65

## TOP BUYS IN COAXIAL SPEAKERS

AS LOW AS

**\$620**

Outstanding coax speaker values for economy-minded music lovers. Ideal for use in economy hi-fi systems, as extension speakers in recreation room and den, and for improving the tone of radios and phonographs. Unusually good high-frequency response and faithful bass reproduction. Have 6-8 ohm impedance and "Alnico V" magnets. Built-in crossover networks.

8" Coaxial Speaker. 8" cone; has 2.15 oz. magnet. 2 3/4" tweeter with .68 oz. magnet. Rated at 8 watts. Range: 70-12,000 cycles. Crossover: 3000 cycles. Shpg. wt., 3 lbs.  
81 P 607. NET.....6.20

12" Coaxial Speaker. 12" cone; has 6.8 oz. magnet. 5" tweeter with 1 oz. magnet. Rated at 15 watts. Range: 55-12,000 cycles. Crossover: 2000 cycles. Shpg. wt., 8 lbs.  
81 PX 638. NET.....9.58

15" Coaxial Speaker. 15" cone; has 6.8 oz. magnet. 5" tweeter with 1.47 oz. magnet. Rated at 20 watts. Range: 45-12,000 cycles. Crossover frequency: 1800 cycles. Shpg. wt., 11 lbs.  
81 PX 608. NET.....14.91

## REPLACEMENT SPEAKER VALUES

AS LOW AS

**\$133**

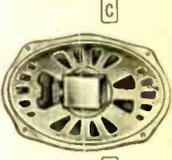
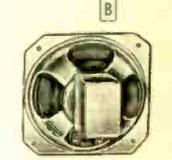
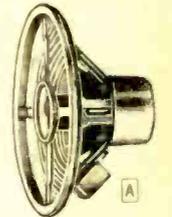
Excellent quality permanent magnet speakers at very low prices. Actually cost less than the price of a re-coning job. Designed for universal replacement use—also recommended for installation in original equipment. They're real money savers for radio and TV servicemen. Amateurs and "do-it-yourself" fans. All speakers are built to EIA standard dimensions—rugged construction throughout. Rigid frame construction assures permanent alignment of integral parts. Magnet and voice coil are precision centered. 4" and 5" speakers have four holes in pot for easy mounting; furnished with universal mounting bracket. Fully dustproof. Impedance, 3.2 ohms. \*Extended-range type for wider response.

Stock No.	Fig.	Size	Magnet Weight	Max. Watts	Wt. Lbs.	NET EACH	
						1 to 5	6 or More
81 P 616	C	4" sq.	.68 oz.	3.0	1/2	1.33	1.20
81 P 617	B	5"	.68 oz.	3.5	3/4	1.60	1.44
81 P 536	D	5x7"	1.0 oz.	5.0	1	1.93	1.74
81 P 534	D	6x9"	1.47 oz.	8.0	1 1/4	2.56	2.30
82 P 250*	D	6x9"	1.47 oz.	8.0	1 1/4	2.70	2.43
81 P 507	B	8"	2.15 oz.	9.0	1 1/2	2.88	2.59
81 PX 508	B	12"	3.16 oz.	10.0	3/4	4.50	4.05

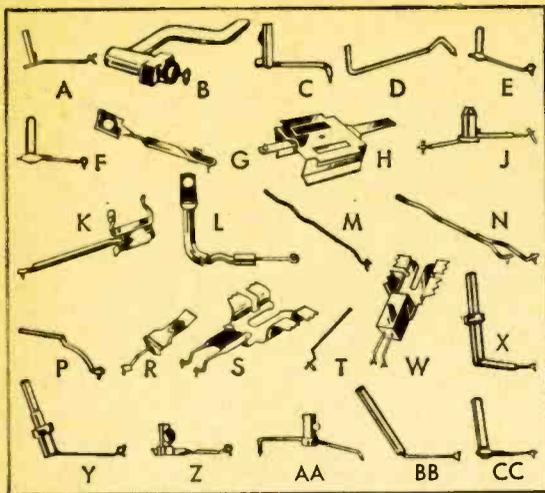
## TOP-VALUE DANISH 12" SPEAKER

An outstanding value in an imported 12" twin-cone speaker. Ideal for use in limited budget music systems and for improving the tonal quality of TV sets, radios, and phonos. Has two carefully coordinated cones driven by the same voice coil. The smaller auxiliary radiator cone helps attain a wider frequency range than a single-cone speaker of the same size. Provides rich, full-toned reproduction of low, mid-range, and high frequencies. Employs highly efficient Alnico V magnet. Voice coil impedance, 6 ohms. Shpg. wt., 5 lbs.

81 PX 068. NET.....7.95



# Knight Monophonic Phonograph Needles



## EXACT REPLACEMENT NEEDLES

A wide selection of popular, finest quality replacement needles at lowest cost. All are precision made from carefully selected materials according to rigid Knight specifications. All have sapphire tips, except \*osmium. Letters or numbers following the word "Series" in the listings cover all cartridges whose type numbers begin with these letters or numbers. Av. wt., 2 oz.

### FOR ASTATIC CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 362	A-67	A	94-TB, 405, 406,	Std.	1.27
68 R 363	A-67LP	A	Series: 62, 64, 66, 68	MG	1.27
68 R 364	A-672	A		All	1.27
68 R 365	A-68	B	Series: 57-T	Twin	1.89
68 R 366	A-71	B	Series: 55-T, GCD, 409	Twin	1.89
68 R 367	A-70*	C		Std.	.79
68 R 368	A-70LP*	C	Series: 14L3, 15L3	MG	.79
68 R 369	A-702*	C		All	.79
68 R 370	A-73	BB		Std.	1.27
68 R 371	A-73LP	BB	LT-3D, LT-4, LT-4D, LT-4D1, LT-AG	MG	1.27
68 R 372	A-732	BB		All	1.27
68 R 373	A-74	D		Std.	1.27
68 R 374	A-74LP	D	Series: 402, 51, 53, 59, GC, MG	MG	1.27
68 R 375	A-742	D		All	1.27
68 R 376	A-75	E		Std.	1.27
68 R 377	A-75LP	E	10L3, 11L3, Series AC, ACD, 40, 41, 42, 90	MG	1.27
68 R 378	A-752	E		All	1.27
68 R 379	A-81	F	Series: CAC, CQ, LQD, QT	Std.	1.27
68 R 380	A-81LP	F	36, 38, 44, 46, 48, 403J;	MG	1.27
68 R 381	A-812	F	Magnavox 560052	All	1.27
68 R 382	CRA-55LP	G	Series: 310, 312, 414, 420, 422, 424	MG	1.27
68 R 383	CRA-55	G	Series: 310, 312, 420, 422, 424	Std.	1.27

### FOR RONETTE CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 383	CRA-55	G	Studio O, Studio P, RA-284,	Std.	1.27
68 R 382	CRA-55LP	G	TO-284 Series TO-222, TO-400, 7447, DT-60, RA-395	MG	1.27
68 R 715	CRA-56	H		Std.	1.27
68 R 716	CRA-56LP	H	TX-88A	MG	1.27

### FOR MAGNAVOX CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 388	M-50	J	560133, 560133-4, 560151-5, 560151-6, 560158-1	Twin	1.89

### FOR SONOTONE CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 343	S-60LP	K	Series 3P	MG	1.76
68 R 344	S-61	K	Series 3T	Twin	2.35
68 R 345	S-63LP	L		MG	1.47
68 R 346	S-632	K	Series 1P	All	1.47
68 R 347	S-66	L	Series 2T, 7T; W-9980; Magnavox 560161-I, RCA78748	Twin	2.06

### FOR ELECTRO-VOICE CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 384	E-90	M	10, 12, 14, 30, 32, 33, 34, 36, 40, 42,	Std.	1.27
68 R 385	E-90LP	M	43, 44, 46, 80, 82, 84, 86, 96,	MG	1.27
68 R 386	E-902	M	Admiral 409A13-1	All	1.27
68 R 387	E-91	N	16TT, 22TT	Twin	1.89



**QUALITY  
DIAMOND  
NEEDLES**



Valuable diamond needles precision-polished for greatest record protection and best long-run economy. Retain their shape for up to 1000 playing hours! Needles listed fit same cartridges as sapphire equivalents listed in tables below. Any needle with sapphire tip can also be supplied with diamond tip. Shpg. wt., 2 oz.

Stock No.	Type No.	Fig.	For	Equivalent in Table Below	NET EACH
68 R 733	A-67LPD	A	Astatic	A-67LP	3.49
68 R 700	A-68SD	B	Astatic	A-68	
68 R 734	A-74LPD	D	Astatic	A-74LP	
68 R 701	A-75LPD	E	Astatic	A-75LP	
68 R 702	A-81LPD	F	Astatic	A-81LP	
68 R 703	E-90LPD	J	E-V	E-90LP	3.49
68 R 704	M-50SD	J	Magnavox	M-50	
68 R 737	PH-13SD	AA	Philco	PH-13	
68 R 705	CRA-55LPD	G	Ronette	CRA-55LP	
68 R 735	CRA-56LPD	H	Ronette	CRA-56LP	
68 R 706	JPS-30LP	P	Shure	JPS-30LP	3.49
68 R 736	JPS-35SD	S	Shure	JPS-35	
68 R 707	JPS-36SD	S	Shure	JPS-36	
68 R 708	M-70LPD	X	RCA	M-70LP	
68 R 709	M-74LPD	Y	RCA	M-74LP	
68 R 710	S-60LPD	K	Sonotone	S-60LP	3.49
68 R 711	S-61SD	L	Sonotone	S-61	
68 R 712	S-66SD	L	Sonotone	S-66	
68 R 718	W-15D	CC	Web. Elec.	W-15	

## HOW TO ORDER

Allied stocks exact replacement needles for any domestic or foreign-made cartridge. Both single and dual-tip needles are available. If you do not find a specific replacement listed, specify cartridge and/or needle number. Designate tip radius: standard, .003" for 78 rpm; microgroove, .001" for 33 1/3 and 45 rpm; all-purpose, .002" for all records; twin-tips are .003" and .001". Prices: single sapphire, \$1.27; dual-sapphire, \$1.89; single diamond, \$3.49; dual-diamond, \$6.95; Sapphire-diamond, \$3.49. Shpg. wt., 2 oz.

### FOR SHURE CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 397	JPS-30	P	P30, P37, P57, P70, P71, P72, P72V, P73, P76, P76V, P77, P79, P81, P81AD, P85, P88, 89, P94 PN30, PC41V, PC42;	Std.	1.27
68 R 398	JPS-30LP	P	Philco 35-2671; Series W21, W22, W23, W26, W60, W61, W65, W65B, W66, W68, WC22; Admiral 409A11 and 409A13	MG	1.27
68 R 399	JPS-312	P		All	1.27
68 R 320	JPS-32	R	W31AR, W36B, WC24,	Std.	1.27
68 R 321	JPS-32LP	R	WC31AR, WC33B, WC36B,	MG	1.27
68 R 322	JPS-322	R	PC9, PC10, PC11, PC40	All	1.27
68 R 739	JPS-34	T	PC42AD, W-72	Std.	1.27
68 R 740	JPS-34LP	T	Admiral 409B19-8,	MG	1.27
68 R 741	JPS-39	W	WC-6, PC-6, PC-7	Twin	2.54
68 R 323	JPS-35	S	PC2, PC-3, P7, P8, P9, W9, WC10	Twin	1.89
68 R 324	JPS-36	S	PC4, PC5, ML-44	Twin	2.54

### FOR RCA CARTRIDGES

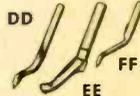
Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 337	M-70	X	9890, 38598, 39550, 39851,	Std.	1.27
68 R 339	M-70LP	X	39919, 70332, 70338, 70339, 72551, 74067	MG	1.27
68 R 341	M-74	Y	74625, 75475, 75575,	Std.	1.27
68 R 342	M-74LP	Y	76318, 77779	MG	1.27

### FOR PHILCO CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 389	M-60LP	Z	45-1609, 45-1612	MG	1.27
68 R 742	PH-13	AA	76-4649; 425-0009, 425-0014	Twin	1.89

### FOR WEBSTER-ELECTRIC CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
68 R 333	W-14	CC	A1, A2, A3, A4, A5, A6, A7, A8, A10, A12, AB, AX (O10)	Std.	1.27
68 R 334	W-15	CC		MG	1.27
68 R 397	JPS-30	P	F10, F11, F11-1	Std.	1.27
68 R 398	JPS-30LP	P		MG	1.27



### CONVENTIONAL SHANK PHONO NEEDLES

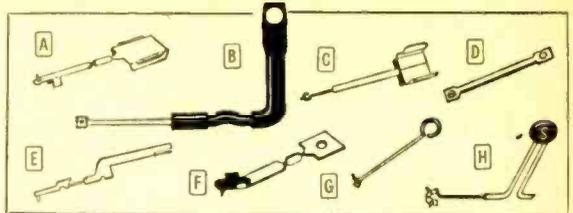
Designed to fit cartridges with screw-type chuck. Needles have "flat side" on shank for proper positioning. \*Nylon needles—have flexible nylon material from tip to shank to reduce pickup of record scratch. Shpg. wt., 2 oz.

Stock No.	Type No.	Fig.	Tip material	Tip size	NET
68 R 391	NY-253*	EE	Sapphire	Standard	1.27
68 R 392	J-10	DD	Osmium	Standard	.59
68 R 393	NY-252*	EE	Sapphire	All-purpose	1.27
68 R 394	NY-152*	EE	Osmium	All-purpose	.79
68 R 395	J-152	FF	Osmium	All-purpose	.79
68 R 396	NY-251*	EE	Sapphire	Microgroove	1.27
68 R 743	J-252	FF	Sapphire	All-purpose	1.27

# Stereo Phono Needles & Cartridges

## QUALITY KNIGHT STEREO NEEDLES

A wide selection of precision made, finest quality stereo replacement needles at lowest cost. Precision made to assure perfect fit. All are expertly milled to a .0007" radius for best performance. \*Sapphire, †diamond. Av. shpg. wt., 2 oz.

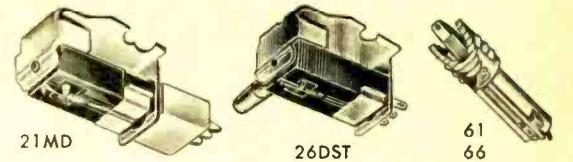


Stock No.	Mfr's Type	Fig.	For Cartridge Number	NET
68 R 749	*CRA-57X	A	Ronette BF-40	1.27
68 R 750	†CRA-57XD	A	Ronette BF-40	3.49
68 R 754	*S-69X	B	Sonotone 8T4	2.35
68 R 755	†S-69XSD	B	Sonotone 8T4	3.49
68 R 752	*E-98X	C	E-V 26DST, 21-D	1.27
68 R 753	†E-98XD	C	E-V 26DST, 21-D	3.49
68 R 758	*M-76X	D	RCA 106770, 106771	1.27
68 R 759	†M-76XD	D	RCA 106770, 106771	3.49
68 R 760	†CS-1XD	E	Columbia	3.49
68 R 756	*CRA-55X	F	BSR TC-8S/TC-8SH	1.27

Stock No.	Mfr's Type	Fig.	For Cartridge Number	NET
68 R 757	†CRA-55XD	F	BSR TC-8S/TC-8SH	3.49
68 R 761	†W59-XD	F	Webster Electric	3.49
68 R 762	†W60-XSD	G	Webster Electric	3.49
68 R 763	†W61-XSD	H	Webster Electric	3.49

## ELECTRO-VOICE STEREO-MONOPHONIC CARTRIDGES

Series 20 Cartridges (below). For stereo or monophonic reproduction. Feature low distortion, excellent response, high channel separation. Not affected by temperature or humidity. Exclusive design for rumble suppression of 15 db or better permits use in any changer or turntable. Range response: 20 to 16,000 cps; channel separation: 20 db; distortion: less than 2%; tracking force: 6 grams. Vertical and lateral compliance: 2. Mount on standard 1/8" to 1/2" centers. S in styli column indicates sapphire needle; D, diamond needle. †Turnover type of styli. Av. shpg. wt., 3 oz.



Series 60 Power Point Cartridges (right). Cartridges for both stereo and monophonic records. Combined cartridge and needle give widest range with lowest distortion and minimum record wear. Response: 20-15,000 cps; tracking force: 5 to 8 grams. .0007" plays both stereo and monophonic; .003" monophonic only. All have ceramic elements with I volt output. S in styli column indicates sapphire needle; D, diamond needle. 1/4" dia., 3/4" long. Require plug in mounts, listed at right. Av. shpg. wt., 4 oz.

Stock No.	Type	Styli	Input	Output	List	NET
68 R 784	21S	.0007S	Ceramic	500 mv	9.50	5.59
72 RC 867	21D	.0007(D)	Ceramic	500 mv	15.00	8.82
68 R 783	21MS	.0007S	Magnetic	20 mv	12.50	7.35
72 RC 794	21MD	.0007D	Magnetic	20 mv	18.00	10.58
68 R 782	26ST †	.0007S/.003S	Ceramic	500 mv	10.50	6.17
72 RC 799	26DST †	.0007D/.003D	Ceramic	500 mv	16.50	9.70
68 R 781	26MST †	.0007S/.003S	Magnetic	20 mv	13.50	7.94
72 RC 745	26MDST †	.0007D/.003S	Magnetic	20 mv	19.50	11.57

Stock No.	Mfr's Type	Styli	Mount	List	NET EACH
68 R 727	61	.0007S/.0007S	PFT-3	5.95	3.50
68 RC 728	61DS	.0007D/.0007S	PFT-3	12.95	7.61
68 R 729	66	.0007S/.003S	PT-3	5.95	3.50
68 RC 730	66DS	.0007D/.003S	PT-3	12.95	7.61

## SERIES 60 POWER POINTS

Series 11 Stereo Plug-In Cartridge Assemblies. Ceramic element-styli assemblies for stereo conversion and replacement use. 25 db channel separation; 0.5 volt output; 20-15,000 cps response. Series 13 Assemblies are same as Series 11 but second styli is for 78's. Brackets fit 1/8" to 1/2" mounting. Av. shpg. wt., 3 oz.

Stock No.	Type	Description	List	NET
68 R 794	11T7	Two .0007" sapphires; less bracket	6.95	4.09
68 R 218	11T7B	Two .0007" sapphires; with bracket	7.95	4.67
68 R 226	13T	.0007", .003" sapphires; less brkt.	6.95	4.09
68 R 219	13TB	.0007", .003" sapphire tips; with brkt.	7.95	4.67
68 R 227	13TBX	.0007" diamond, .003" sapphire; with brkt.	13.95	8.20
68 R 228	13TX	.0007" diamond, .003" sapphire; less brkt.	12.95	7.61

PLUG-IN CARTRIDGE MOUNTS  
Mounts for Electro-Voice Power Point cartridges. Required only when converting to Power Points. Fit standard 1/2" to 3/8" mounting centers. All have 3 terminals to permit use with either stereo or monophonic Power Points. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Use With Cartridge	List	NET EACH
68 R 732	PFT-3	51-1, 52-2, 53-3, 61, 61DS	1.00	.59
68 R 731	PT-3	56, 56DS, 66, 66DS	1.00	.59
68 R 780	PFT-4	41-1, 42-2, 43-3	1.00	.59
68 R 779	PT-4	46	1.00	.59

## ASTATIC STEREO-MONOPHONIC CARTRIDGES

Series 11 Stereo Plug-In Cartridge Assemblies. Ceramic element-styli assemblies for stereo conversion and replacement use. 25 db channel separation; 0.5 volt output; 20-15,000 cps response. Series 13 Assemblies are same as Series 11 but second styli is for 78's. Brackets fit 1/8" to 1/2" mounting. Av. shpg. wt., 3 oz.



Stock No.	Type	Description	List	NET
68 R 794	11T7	Two .0007" sapphires; less bracket	6.95	4.09
68 R 218	11T7B	Two .0007" sapphires; with bracket	7.95	4.67
68 R 226	13T	.0007", .003" sapphires; less brkt.	6.95	4.09
68 R 219	13TB	.0007", .003" sapphire tips; with brkt.	7.95	4.67
68 R 227	13TBX	.0007" diamond, .003" sapphire; with brkt.	13.95	8.20
68 R 228	13TX	.0007" diamond, .003" sapphire; less brkt.	12.95	7.61

Series 70 Stereo Conversion Cartridges. All have .0007" and .003" sapphire styli; 18 db separation; 2 volt output; 50-10,000 cps response. \*With mounting brackets. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Replacement For	List	NET
68 R 793	70TS	K	Astatic 120TS, VM 7447A	7.25	4.26
68 R 792	74TS	K	Astatic 314TS	7.25	4.26
68 R 791	*76TS-TB	L	Ronette T1, Ronette OV1	7.95	4.67

## SONOTONE STEREO-MONOPHONIC CARTRIDGES

Turnover type, ceramic cartridges for stereo conversions and stereo-monophonic use. Provide flat response over entire recording range. True stereo reproduction with broad channel isolation, superior compliance, turntable rumble suppression. Fit 1/8" to 1/2" mounting centers. Av. shpg. wt., 4 oz. 8TA Series features: frequency range 20-15,000 cycles; 20 db. channel separation; 0.3 volts output; 3.0x10<sup>-6</sup> cm/dyne compliance; tracking pressure 4-6 grams, 3-5 grams for professional arms. 10T Series features: plug-in type cartridge-styli construction; range 20-15,000 cycles; 18 db. channel separation; 0.5 volt output; 1.5x10<sup>-6</sup> cm/dyne; tracking pressure 5-7 grams. Supplied with mounting brackets.



Stock No.	Type	Styli	List	NET
68 RC 764	8TA4-S	.0007" and .003" sapphires	14.50	8.54
68 RC 795	8TA4-S77	Two .0007" sapphires	14.50	8.54
89 RC 211	8TA4-SD	.0007" diamond and .003" sapphire	19.50	11.47
68 RC 796	8TA4-D	.0007" and .003" diamonds	29.50	17.35

Stock No.	Type	Styli	List	NET
68 R 356	10T2-S	.0007" and .003" sapphires	6.45	3.79
68 RC 358	10T2-SD	.0007" diamond and .003" sapphire	16.50	9.70
68 R 357	10T2-S77	Two .0007" sapphires	6.45	3.79
68 RC 359	10T2-SD77	.0007" diamond and .0007" sapphire	16.50	9.70

## MONOPHONIC NEEDLES FOR ZENITH "COBRA ARMS"

Duo-tone direct replacement plug-in type needles for Zenith "Cobra Arm" models. Cartridge-type assemblies are unitized construction which couples styli directly to inductive element. A completely new cartridge whenever needle is replaced. High compliance and light tracking force minimizes needle talk and record wear. Unaffected by temperature or humidity. Plays 3 record speeds—33 1/3, 45 and 78. Av. shpg. wt., 4 oz.

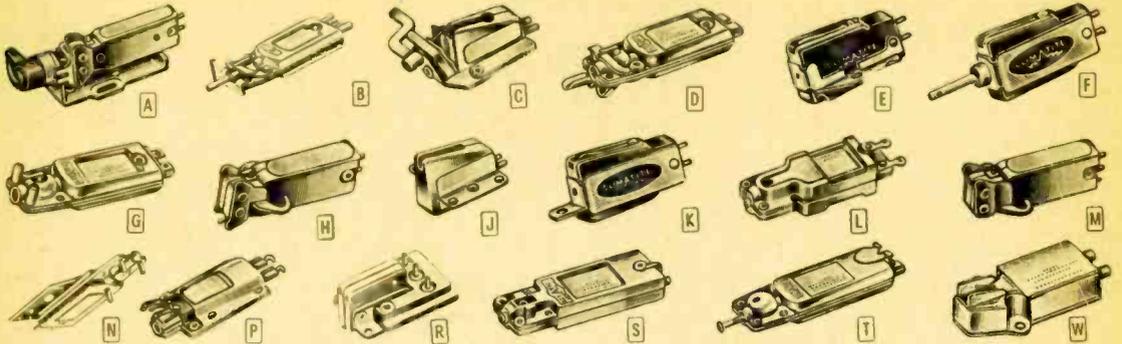


Stock No.	Mfr's Type	Stylus	NET EACH
68 R 229	S-15780	Sapphire	2.55
68 R 230	S-15780	Diamond	9.00
68 R 231	S-15222	Sapphire	2.55
68 R 232	S-15222	Diamond	9.00
68 R 233	142-72	Sapphire	3.67

Stock No.	Mfr's Type	Stylus	NET EACH
68 R 234	142-72	Diamond	9.00
68 R 235	142-71, 142-74	Sapphire	3.67
68 R 236	142-71, 142-74	Diamond	9.00
68 R 237	142-76, 142-77	Sapphire	5.52
68 R 238	142-76, 142-77	Diamond	11.00

# Astatic Replacement Cartridges

## CRYSTAL AND CERAMIC CARTRIDGES



### TURNOVER CARTRIDGES

High quality dual-needle cartridges for 78, 45, 33 $\frac{1}{3}$  and 16 $\frac{2}{3}$  rpm records. Crystals are specially treated to resist heat and humidity. All have sapphire needles; .001" for microgroove records and .003" tip for standard records. \*Ceramic type—all others are Rochelle-salt crystal. Needle pressure 16 grams; 18 grams; 10 grams. #Subminiature. \*\*Less bracket. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Astatic Models	Output Volts	Response CPS	List	NET EACH
65 R 240	40-TB†	A	ACD-1 series ACD-2 series, 11L3	1.0	50-6000	\$8.45	4.97
68 R 766	64-TS**‡	B	64-T(M)S	3.0	50-5000	6.95	4.09
65 R 576	57-T**‡	C	57-TJ series	0.7	30-15,000	9.50	5.59
65 R 236	62-TY†	D	L0D-1 series	3.0	50-7000	7.95	4.67
65 R 013	66-TS**‡	D	66-T(M)S, 68-TS	3.0	50-5000	7.25	4.26
65 R 577	66-TY**‡	D	LT-4D1, 14L3-DM, 15L3-DH, 6-T(M)Y, 68-T(M)Y	3.0	50-5000	6.50	3.82
61 R 300	310-T**‡	E		3.0	30-11,000	6.45	3.20
61 R 302	312-TS†	F		0.75	30-13,000	5.45	3.79
61 R 303	420-TS**‡	F		3.0	30-11,000	5.45	3.20
61 R 304	422-TS**‡	F		0.75	30-13,000	5.95	3.50
61 R 305	424-TS**‡	F		3.0	30-11,000	6.50	3.82
61 R 313	41-TB†	A	ACD-C-1 series, ACD-C-2 series GCD series	0.6	50-5000	10.00	5.88
61 R 314	55-T†	C		0.7	30-15,000	7.95	4.77
61 R 310	118-TS†	F		0.75	30-13,000	6.45	3.79
61 R 311	120-TS†	F		3.0	30-11,000	6.45	3.79
61 R 312	124-TS†	F		3.0	30-11,000	6.45	3.79
68 R 767	314-TS**‡	C		3.0	30-11,000	5.45	3.20
68 R 768	405**‡	F		3.0	30-5000	7.95	4.67
68 R 769	406**‡	D	F-21 (Webster)	3.0	30-5000	7.95	4.67
68 R 770	409**‡	C	F-22 (Webster)	3.0	30-5000	7.95	4.67
68 R 771	426-TS**‡	F	A-204 (Webster)	0.7	30-15,000	9.50	5.59
68 R 771	426-TS**‡	F	A-204 (Webster)	3.0	30-11,000	7.50	4.41

### ALL-GROOVE CARTRIDGES

All have .002" sapphire needle, except ††.002" osmium. Less needle—have screw-type chuck for conventional needle. \*Ceramic element, all others Rochelle-salt crystal. Needle pressure 10 grams, except 16 grams; 18 grams; #12 grams. Av. shpg. wt., 4 oz.

Stock No.	Model	Fig.	Replaces Astatic	Volts	CPS	List	NET
68 R 773	414-2†	E	(Ronette)	3.0	30-11,000	\$4.45	2.62
68 R 774	416-2†	E	(Ronette)	0.75	30-13,000	5.45	3.20
65 R 559	16†	G	16L3, 17L3	3.5	50-5000	3.95	2.32
65 R 229	22†	G	L-29, L-92-33, 18L3	3.5	50-5000	3.95	2.32
61 R 316	28†	L	M-22, M-23	3.5	50-5000	3.95	2.32
65 R 242	40-2†	M	AC-AG series	1.0	50-10,000	6.50	3.82
65 R 571	51-2†	J	GC-AG series	0.7	30-10,000	7.40	4.35
68 R 772	106†	N	(Webster)	3.5	50-5000	4.95	2.91
65 R 097	66-2†	G	LT-2M, LT-5AG, 68-2	3.0	50-5000	4.95	2.91
61 R 306	310-2†	K	14L-AGM, 15L3-AGM	3.0	30-11,000	4.95	2.91

### MICROGROOVE CARTRIDGES

A wide selection of carefully-constructed microgroove cartridges for dependable performance and very clean reproduction in record changers and players. All are crystal type, except \*ceramic type, unaffected by heat and humidity. With .001" sapphire needle for 45 and 33 $\frac{1}{3}$  rpm long-playing records. Model 51-1 fits RCA 45-rpm changer arms. Model 44-1 equalized for Columbia 33 $\frac{1}{3}$  rpm records; has adapter for RCA 45-rpm changer arms. 40-1 fits most popular players. Model 62-1 used in RCA and V-M Corp. players. Model 414-1, high output cartridge, used in RCA players. Has specially treated crystal to resist heat and moisture. Needle pressure, 10 grams, except 18 grams, 16 grams. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Astatic Models	Output Volts	Response CPS	List	NET EACH
65 R 241	40-1†	H	AC series	1.0	50-10,000	\$6.50	3.82
65 R 245	44-1	W	CAC, 441, QT-33, CQ series	1.0	30-15,000	7.50	4.41
65 R 234	51-1*	J	GC series	0.7	30-15,000	7.40	4.35
61 R 325	62-1	P	62-1-M	3.0	50-50,000	4.95	2.91
61 R 307	414-1‡	E		3.0	30-11,000	4.45	2.62

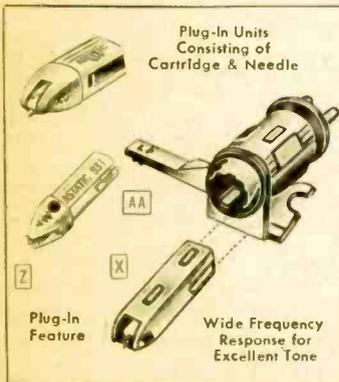
### STANDARD-GROOVE CARTRIDGES

Popular Rochelle-salt crystal and ceramic cartridges, designed for use with 78-rpm changers and players. All are high-output crystal types, except \*ceramic type—unaffected by heat or moisture—excellent for use in tropical climates. All models use .003" needles. ‡With osmium needle. All others are supplied less needle; have screw-type chuck for conventional needle. A complete listing of quality needles is listed elsewhere in this section.

Model 12-U used in Admiral, RCA, and Webster phonographs; 12 in Webster; 402 in Admiral. †Output with capacitor (supplied); delivers 4.0 volts when capacitor is not used. Needle pressure: Models 2 and 4—2 $\frac{3}{4}$  oz.; Models 6, 24 and 26—1 $\frac{1}{4}$  oz.; Models 12 and 12-U—1 oz. Model 32—1 $\frac{1}{2}$  oz.; Model 402—12 grams; Model 66-3—10 grams. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Astatic Models	Output Volts	Response CPS	List	NET EACH
68 R 765	66-3	S	Series R30	3.0	50-5000	\$4.95	2.91
65 R 156	4	S	L-22A, L-26A, L-27A	1.4	50-4500	4.45	2.62
65 R 153	6	S	L-40A, L-41A	0.6	50-4500	4.45	2.62
65 R 226	12	T	L-10, L-12	4.0	50-5000	4.45	2.62
65 R 227	12-U	T	L-12U	1.25†	50-5000	4.95	2.91
65 R 163	24	S	L-25A, series L-70, L-71, L-75, L-76	1.0	50-4000	4.95	2.91
65 R 165	26	S	L-46A, L-50A, L-72A	3.5	50-4000	4.95	2.91
65 R 231	32	S	L-24A, L-36A, L-82A, L-92, L-92A, 34	3.5	50-5000	4.45	2.62
65 R 149	402*‡	R	402-A	0.7	50-10,000	7.95	4.67

### "SOUND-FLO" CARTRIDGE-NEEDLE COMBINATIONS



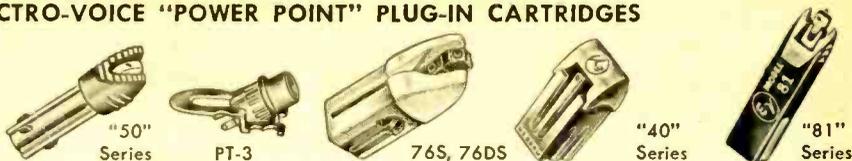
Astatic "Soundflo" cartridges. Utilize highly sensitive ceramic element to provide clear, wide-range audio reproduction. Movement is precision engineered for high compliance; permits accurate tracking of wide lateral groove variations. Assures excellent transient response and low distortion. Frequency response extends from 30 to 15,000 cps. Tracking force is 6 grams; assures long needle and record life. Cylindrical shaped housing accommodates "plug-in" replacement cartridge-needle combination. Greatly simplifies changing of styli. Flip-over mounting bracket allows quick change to proper stylus. .001" stylus for 45 and 33 $\frac{1}{3}$  rpm, long-play records and .003" stylus for 78 rpm standard records. "S" indicates sapphire tip; "D"—diamond tip. \*Indicates complete with mounting bracket and turnover holder. Av. shpg. wt., 4 oz.

Stock No.	Type	Fig.	Replaces	Tip	Volts	List	NET
61 R 308	81TB*	Z&AA		S-.001*, S-.003*	1.0	\$4.95	2.91
61 R 309	81T	Z		S-.001*, S-.003*	1.0	3.95	2.32
61 RC 317	81TX	Z		D-.001*, S-.003*	1.0	9.95	5.85
61 RC 318	81TBX*	Z&AA		D-.001*, S-.003*	1.0	10.95	6.44
61 R 319	83-1	Z		S-.001*	1.0	3.50	2.06
61 RC 320	83-1X	Z		D-.001*	1.0	12.00	7.06
61 R 321	89-T	Z		S-.001*, S-.003*	1.3	4.95	2.91
61 RC 322	89TB*	Z&AA		S-.001*, S-.003*	1.3	5.95	3.50
61 RC 323	89TX	Z		D-.001*, S-.003*	1.3	10.95	6.44
61 RC 324	89TBX*	Z&AA		D-.001*, S-.003*	1.3	11.95	7.03
68 R 775	91T	X	Webster V8-1D, Webster A1919, E-V 76S	S-.001*, S-.003*	1.0	4.25	2.50
68 R 776	91TX	X	Webster V8-2D, Webster A-1920; E-V 76DS	D-.001*, S-.003*	1.0	12.50	7.35
68 R 777	93T	Y	E-V 56S, Webster V8-1, Zenith 142-80	S-.001*, S-.003*	1.0	3.95	2.32
68 R 778	93TX	Y	E-V 56DS, Webster V8-1D, Zenith 142-83	D-.001*, S-.003*	1.0	12.50	7.35

# Replacement Phono Cartridges

## ELECTRO-VOICE "POWER POINT" PLUG-IN CARTRIDGES

Famous E-V Power Points are used as original equipment by many leading phonograph manufacturers. One-piece stylus-element construction makes replacement a simple procedure. Available with either ceramic or crystal elements.



Popularly-priced replacement cartridges for monophonic playing only. Installation is relatively simple. Replace cartridges with easy slip-out, slip-in operation. No soldering, wiring, etc. Cartridge and needle are both part of integral one-piece assembly that gives widest range with minimum record wear. Unique design affords high compliance—results in excellent tracking ability. All have sapphire or diamond tips connected directly to a ceramic or crystal element—eliminating distortion and annoying "needle-talk."

### SERIES 50 POWER POINT TRANSDUCERS

Miniaturized ceramic cartridges with low tracking force and high output. Each has two needle tips—integral parts of the cartridge. Provide excellent frequency response from 20-12,000 cps. Needle-talk and record wear are minimized. Completely unaffected by climatic conditions—excellent for use in hot, humid areas. Non-inductive—will not pick up hum from motors and stray fields. Model 51-1 for 45 and 33 1/2 rpm only. Series 52-2, 56 and 56DS for record players with three speeds—33, 45, and 78. 53-3 for 78's only. 1 volt output. Require 5-8 gram tracking force. S—Sapphire needle. D—Diamond needle. Av. slipp. wt., 3 oz.

Stock No.	Mfr's Type	Color Code	Styll	List Price	NET EACH
65 R 518	51-1	Red	(2) S-.001*	\$3.95	2.32
65 R 444	52-2	Green	(2) S-.002*	3.95	2.32
65 R 448	53-3	Black	(2) S-.003*	3.95	2.32
65 R 509	56	Blue	S-.001*, S-.003*	3.95	2.32
65 RC 464	56DS	Orange	D-.001*, S-.003*	9.95	5.85

### SERIES 76S POWER POINT TRANSDUCERS

Direct replacement ceramic cartridges for Webcor phono. Flipover type with separate tips for LP's and 78's. Deliver wide monophonic response with minimum distortion. Extremely light tracking, very little record wear. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Color Code	Styll	List Price	NET EACH
65 R 598	76S	White	S-.001*, S-.003*	\$3.95	2.32
65 RC 599	76DS	Pink	D-.001*, S-.003*	9.95	5.85

### SERIES 40 MONOPHONIC CRYSTAL CARTRIDGES

New, high output, crystal Power Points for all around application, including "kiddie-type" record players. Frequency response out to 10,000 cps. Each has two sapphire tips, and is for monophonic reproduction only. Type 41-1 is for 16 2/3, 33 1/2 and 45 rpm speeds only. Type 42-2 is for phonographs that play 16 2/3, 33 1/2, 45, and 78 rpm records. Type 46 is for use with LP or 78 rpm records. Precision-made, their long life makes these series 40 cartridges a very economical investment. Output, 3 volts. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Color Code	Styll	List Price	NET EACH
68 R 787	41-1	Red Dot	(2) S-.001*	\$5.95	3.57
68 R 786	42-2	Blue Dot	(2) S-.002*		
68 R 785	46	Green Dot	S-.001*, S-.003*		

### SERIES 81 MONOPHONIC CERAMIC CARTRIDGES

Ceramic plug-in type cartridges that are direct replacements for Astatic plug-in types. No mounts are needed for installation—E-V units plug into present mountings. High compliance and light tracking force minimizes needle talk and record wear. Unaffected by temperature or humidity. Recommended tracking force, 5-8 grams. Output, 1 volt. Shpg. wt., 3 oz.

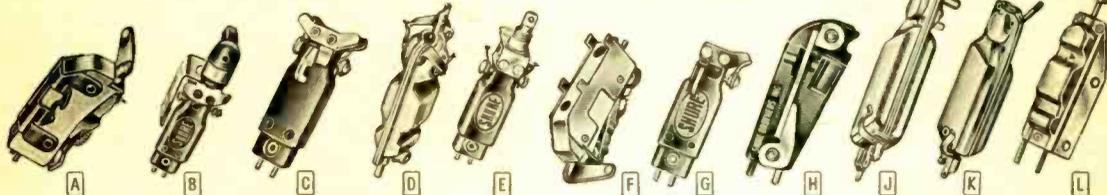
Stock No.	Mfr's Type	Color Code	Styll	List Price	NET EACH
68 R 790	81	Black	S-.001*, S-.003*	\$3.95	2.32
68 R 789	81DS	Orange	D-.001*, S-.003*	9.95	5.85
68 R 788	83-1	Ivory	(2) S-.001*	3.95	2.32

### HOLDING MECHANISM

Fixed and lever-action mounting mechanisms that accommodate Power Point cartridges. Have 1/8", 1/4" and 3/8" mounting hole centers. Equipped complete with all mounting hardware for fast, easy installation. Holding mechanisms must be installed just once—afterward cartridges are slipped in and out for replacement. 1/2 oz.

Stock No.	Mfr's Type	For Models	List Price	NET EACH
65 R 612	PT-3	51-1, 52-2, 53-3, 56	\$1.00	.59
68 R 780	PT-4	41-1, 42-2, 46	1.00	.59

## SHURE REPLACEMENT CARTRIDGES



### CRYSTAL CARTRIDGES

High-quality replacement cartridges for most record changers and players. All have sapphire .001" needle for LP and .003" needle for 78-rpm. W22T, W22 and W72 are turnover cartridges. W9 uses the newly designed "Twin Lever" needle shift system—flipping the needle lever puts proper needle into playing position—cartridge remains stationary. W9 and W72 are supplied with a "slip-on" capacitor which permits convenient reduction of output voltage to half of that shown. \*W72 replaces Webster-Electric Type FX and Series F14, F15, F16, F18, F19, F20, and F21 cartridges. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Shure Models	Output Volts	Response, CPS	List	NET EACH
65 R 904	W9	A	Series P7, P8 & P9	3.5	50-10,000	\$9.50	5.59
65 R 338	W22T	B	P76, P77, P79, PC2, PC4, PC40, PC41	1.2	50-10,000	10.00	5.88
65 R 342	W22	C	Series P72, P76, P77, P79; W22AB	1.2	50-10,000	9.50	5.59
65 R 911	W72*	D		3.0	50-5000	8.50	5.00

### CERAMIC CARTRIDGES

Excellent replacement cartridges. All except Type WC25 feature "Twin Lever" needle shift system—flipping the needle lever puts proper needle into playing position—cartridge remains stationary. WC25 is turnover type cartridge. Ideal cartridges for use in areas where temperature and humidity are high. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Shure Models	Output Volts	Response, CPS	List	NET EACH
68 R 725	WC6	A	Series PC6	0.5	30-15,000	\$14.50	8.53
68 R 724	WC6-TM	F	PC6SAM & PC6SEM	0.5	30-15,000	14.50	8.53
65 R 313	WC10	A	Series P71, P72	0.8	35-12,000	9.50	5.59
65 R 902	WC25	E	Series PC42	0.7	50-7000	9.50	5.59

### ALL-GROOVE CARTRIDGES

Single-needle cartridges for playing both standard and microgroove records. All have .002" osmium needles, except Model W26 which has .002" sapphire needle. Needle pressure, 8-9 grams, except W26—4 1/2 grams. Shpg. wt., 4 oz.

No.	Model	Fig.	Replaces Shure	Volts	CPS	List	NET
65 R 340	W26	G	W26A, W26B	0.9	50-8000	\$6.50	3.82
65 R 319	WC38	H	PC10, PC13, WC36B	0.9	50-10,000	7.50	4.41
65 R 348	W66B	J	Series P37	2.0	50-4500	7.00	4.12

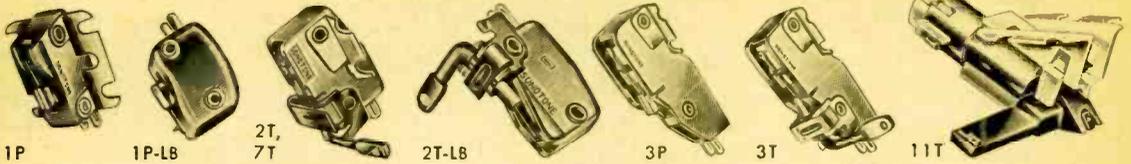
### STANDARD GROOVE CARTRIDGES

Ruggedly-built Rochelle-salt crystal cartridges. Model W78 can be used to increase the volume of many 78 rpm phonographs; supplied with "slip-on" capacitor which permits convenient reduction of output voltage to half of that shown. W68 and W78 are supplied with an extra weight-slug to permit increasing the needle pressure if necessary. All cartridges require 28.5 grams needle pressure, except Model W70 which requires 10-15 grams. W56N is used in Wilcox-Gay disc recorders; supplied with stellite .003" cutting needle and .003" osmium playback needle. Models W68 and W70 are equipped with osmium needles. \*Less needle; uses conventional shank type. W70 replaces Webster-Electric Type CX and the entire C series. Shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Shure Models	Output Volts	Response, CPS	List	NET EACH
65 R 349	W56N	K	P66R, W56R, W65R, Series P89	4.3	50-10,000	\$10.00	5.88
65 R 591	W68	J	PP30W, W68B, Series P30, W60, W61	1.6	50-4500	7.50	4.41
65 R 592	W70	L	(see above)	3.8	50-5000	4.95	2.91
65 R 590	W78*	K	Series P95, P87, P88, P90, P92, P93, W42, W56, W58, 99, 100, 90-131	4.0	50-6000	5.55	3.26

# Sonotone, RCA, Ronette Cartridges

## SONOTONE CERAMIC PHONO CARTRIDGES



### SINGLE-NEEDLE CARTRIDGES

For exact replacement in many popular phonos. Require neither preamplification nor equalization. Ceramic construction provides protection against heat and moisture, and prevents pickup of annoying hum from nearby magnetic fields. Cartridges have high compliance for precision tracking. All have sapphire needles, except 1P-1D and 1P-LB-1D which have diamond needles. .001" is microgroove, .002" all-purpose (microgroove and standard). 1P-1S, 1P-2S, and 1P-1D have bracket for 1/2" or 3/4" mtg. centers. 1P-LB-1S, 1P-LB-2S, and 1P-LB-1D less-bracket for narrow pickup arms. Response: ±3 db. 30-15,000 cps. Output, 1 v. Needle pressure 8-10 grams. Shpg. wt., 3 oz.

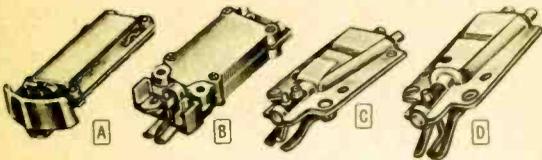
Stock No.	Type	Styli	List	NET
65 R 615	1P-1S	.001"	\$7.50	4.41
65 R 523	1P-2S	.002"	7.50	4.41
61 RC 350	1P-1D	.001"	16.50	9.70
61 R 351	1P-LB-1S	.001"	7.50	4.41
65 R 843	1P-LB-2S	.002"	7.50	4.41
61 RC 352	1P-LB-1D	.001"	16.50	9.70

### "2T" SERIES TURNOVER CARTRIDGES

Ceramic cartridges used as original equipment in many modern phonographs—improve sound quality when used in older players. Ceramic structure is unaffected by humidity or temperature. Comparatively high cartridge output (1 v.) eliminates the need of a preamplifier. Needle pressure is only 8-10 grams. High compliance of needle reduces record wear and resultant distortion. Response: ±3 db. 30-15,000 cps. Cartridges are easily installed; require no cut-out for turnover mechanism. Models 2T-S and 2T-SD have bracket for 1/2" or 3/4" mtg. centers; 2T-LB-S and 2T-LB-SD less bracket for narrow pickup arms. "D" is diamond tip; "S," sapphire. Shpg. wt., 3 oz.

Stock No.	Type	Styli	List	NET
65 R 533	2T-S	S-.001", S-.003"	\$8.50	5.00
65 RC 844	2T-SD	D-.001", S-.003"	17.50	10.29
65 R 528	2T-LB-S	S-.001", S-.003"	8.50	5.00
61 RC 353	2T-LB-SD	D-.001", S-.003"	17.50	10.29

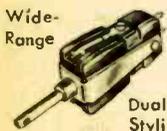
### RCA REPLACEMENT CARTRIDGES



Rochelle-salt crystal type, except\*ceramic. With needles—sapphire; †standard; †microgroove. ‡standard and microgroove; §sodium microgroove; ¶sodium standard and sapph. microgroove. 5 oz.

No.	Type	Fig.	Used in RCA Models	List	NET
65 R 269	9890†	A	60U, 70V5, 0-50, R60, R93F, R100, R103S, QU56C, U8, U9, U10, V421, V100, V101, V105, Radiola 550P	\$8.58	5.05
65 R 270	70338-A†	B	6J, 6JM, 55A4, 62-1, 63E, 63EM, 65A4, 65A4U1, 65U, 65U1, 67A1, 67V1, 75ZU, 77V1, 77V2	7.25	4.26
65 R 253	74067†	D	9EY3, 9EY35, 9EY36, 9EYM3, 9YJ, 9YJM, 9TW333, 9TW390, 9W101, 9W102, 9W103, 9W105, 9Y7, 9Y51, 45EY, 45EY15, 45J, 45J2	4.45	2.62
65 R 254	75575††	D	2T81, 4T141, 6T84, 6T86, 7T132, 9T89, 9T147, 9Y510, A82, A101	6.40	3.76
65 R 917	75976†	A	58AV, 58V, 59AV1, 59V1, 66E, 610V1, 610V2, 641TV, 711V1, 711V2, 711V3, Q6E1, Q6E2, QU72, QU72A, 4513	7.50	4.41
65 R 215	76257§	‡		6.50	3.82
65 R 255	77779§	C	2E53, 2E531, 2E538, 2J51, 2S7, 2S1Q, 2T81, 2U5T, 3U55, 4T141, 6T84, 6T86, 6T97, 7T143, 9T89, 9T147, 15E, 21D346, 21D395, 21T242, 21T342	7.50	4.41
65 R 913	100653*†	‡	4E531Q, 4E538Q, 3J51Q, 6E54Q, 6E55, 6HF3, 6HF4, 6HF4Q, 6HF5, 6HF5Q, 6JS1Q, 6JS2Q, 7HFPIQ, 7HFPIQ	8.50	5.00

### JENSEN REPLACEMENT CARTRIDGES



Each has turnover .001"-.003" sapphire stylus. Type 1 is high output—1.8 v., LP; 3 v., 78 rpm. Type 2 is low output—0.5 v., LP; 0.9 v., 78 rpm. Type 3 is medium output—0.9 v., LP; 1.5 v., 78 rpm. Cartridges can be used to replace Ronette units. fit present Ronette holding or mounting mechanisms. Av. shpg. wt., 4 oz.

No.	Type	List	NET	No.	Type	List	NET
68 R 721	1	\$6.95	4.09	68 R 723	3	\$6.95	4.09
68 R 722	2	6.95	4.09				

### "7T" SERIES TURNOVER CARTRIDGES

Ceramic cartridges with unique fluid damping compound for high compliance and low distortion. 20-12,000 cps response. ±2 db. 0.6 v. output at needle pressure of 7-9 grams makes preamp unnecessary. Mount on 3/8" to 1/2" mtg. centers. 7T-LB types ideal for narrow tone arms. "S" in table is sapphire. "D" diamond. 3 oz.

Stock No.	Type	Styli	List	NET
61 R 355	7T-S	S-.001", S-.003"	\$9.00	5.29
61 RC 356	7T-SD	D-.001", S-.003"	18.00	10.58
61 RC 357	7T-D	D-.001", D-.003"	28.50	16.76
61 R 358	7T-LB-S	S-.001", S-.003"	9.00	5.29
61 RC 359	7T-LB-SD	D-.001", S-.003"	18.00	10.58
61 RC 360	7T-LB-D	D-.001", D-.003"	28.50	16.76

### "3"-SERIES WIDE-RANGE CARTRIDGES

Deluxe ceramic cartridges—response is ±1.5 db. 20-15,000 cps, with gradual roll-off to 20,000 cps. 6 grams tracking; 0.5 v. output—requires no preamp. 1/2" and 3/4" mtg. centers. 3T-S and 3T-SD are turnover. "S" is sapphire. "D" diamond. Shpg. wt., 3 oz.

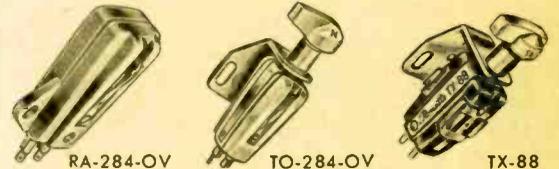
Stock No.	Type	Styli	List	NET
65 R 857	3P-1S	S-.001"	\$10.50	6.17
65 RC 928	3P-1D	D-.001"	17.50	10.29
65 R 929	3T-S	S-.001", S-.003"	12.50	7.35
65 RC 948	3T-SD	D-.001", S-.003"	18.50	10.88

### NEW 11T UNITIZED CARTRIDGES

Low-cost unitized ceramic turnover cartridges—needle and cartridge are manufactured as a single high-quality pickup unit. Response: 20-15,000 cps, with smooth roll-off to 20,000 cps; 0.8 v. output. Includes prewired terminal plug; employs gold-plated contacts. All cartridge-needle units use the same mounting bracket. Bracket mounts on 1/8" to 3/4" centers. "S" in table means sapphire. "D" means diamond. Av. shpg. wt., 3 oz.

Stock No.	Type	Styli	List	NET
68 R 797	11T2-S	S-.001", S-.003"	\$5.45	3.20
68 R 798	11T2 S1	S-.001", S-.001"	5.45	3.20
68 RC 799	11T2-SD	D-.001", S-.003"	14.50	8.53

### RONETTE "FONOFLUID" CARTRIDGES



#### SINGLE-STYLUS CARTRIDGES

RA-284-OV. Single-stylus crystal cartridge. Replacement for most 45 and 33 1/3 rpm player cartridges. "Fonofluid" construction for smooth response, 50-11,000 cps. 0.7 volts output, 4 to 6 grams tracking force. With hardware and .001" sapphire stylus. 3/8" mounting centers. Shpg. wt., 4 oz.

65 R 015. List, \$7.25. NET 4.26

RA-395. As above, but for use with 1 or 2-tube amplifiers. 5 v. output. Direct replacement for RCA-type cartridges in 45 and 33 1/3 rpm players. 50-9000 cps response, 4-10 grams tracking force. 3/8" mtg. centers. With hardware. .001" sapphire stylus. 4 oz.

65 R 079. List, \$7.25. NET 4.26

#### DUAL-STYLUS CARTRIDGES

TO-284-OV. Dual-stylus turnover crystal cartridge with .001" and .0025" sapphire tips. "Fonofluid" construction. Response, 50-11,000 cps. Stylus force, 4-6 grams. 0.7 v. output. With hardware. 1/2" mtg. centers. Shpg. wt., 2 oz.

65 R 016. List, \$9.00. NET 5.29

TO-400-OV. As above, but front mtg. for automatic changers with narrow pickup arms using bar-type knob. 4 oz.

68 R 360. List, \$9.00. NET 5.29

TO-222. Similar to TO-284-OV above, but 5 v. output. 4 oz.

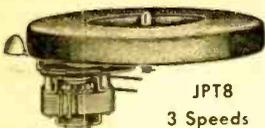
65 R 968. List, \$9.00. NET 5.29

TX-88. "Superfluid" turnover crystal cartridge with 30-24,000 cps response. 0.4 v. output, 2-4 grams tracking in manual arms, 7-12 in changer arms. RIAA self-equalized. Two separate stylus units: .001" and .0025" sapphire. 1/2" mtg. ctrs. 3 oz.

68 R 361. List, \$12.50. NET 7.35

# Phono Replacement Accessories

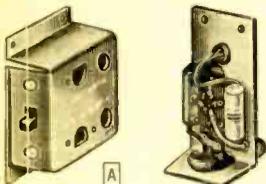
## ALLIANCE PHONO MOTORS



JPT8  
3 Speeds

MODEL JPT8. 3-speed phono motor with 8" turntable. Constant-speed, 2-pole motor. Plays 33 1/3, 45, and 78 rpm records. Speed selector moves idler to position for desired speed. Rubber shock-mounted motor. With 45-rpm record adapter. Mounts in 4 3/8 x 5 1/4" cutout. Requires 2 1/2" below base plate. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 3 1/2 lbs.  
85 R 440. List. \$10.95. NET..... 6.44  
MODEL JPQ8. As above, but 4 speeds: 78, 45, 33 1/3, and 16 2/3 rpm.  
85 R 442. List. \$13.50. NET..... 7.94

## RCA PHONO SWITCHES



**A** Type 202W1 Record Player Selector Switch. For using either of two record players or changers with one radio or amplifier. Slide switch controls both audio output and motor power. Excellent for radio-phonograph combinations to which an external 45-rpm player has been added. Back-of-cabinet mounting. Complete with plugs and instructions. Shpg. wt., 6 oz.  
69 R 506. List. \$5.65. NET..... 3.33  
**B** Type 240X1 Radio-Phono Switch. For operation of record players through radios that do not have a phono input. Slide switch permits instant change-over from radio to phonograph. Unit is connected between detector and first audio stage in radio. Panel has mounting holes for neat, back-of-the-cabinet installation. With shielded cable, phono plug and complete instructions. Shpg. wt., 6 oz.  
69 R 505. List. \$2.50. NET..... 1.47

## POPULAR ASTATIC PICKUP

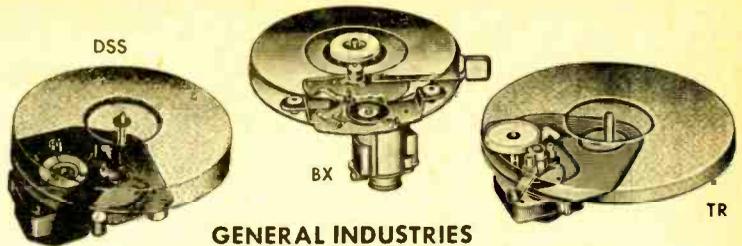


MODEL KR314-T. Lightweight, balanced pickup arm, supplied complete with high output crystal and turnover cartridge. Ideal for replacement in manual record players. Turnover mechanism permits instant selection of either .003" standard or .001" micro-groove sapphire needles. Ivory finish. 8 1/2" long. Shpg. wt., 1 lb.  
61 R 326. NET..... 4.09

## SONOTONE REPLACEMENT NEEDLES

S—Sapphire; D—Diamond. Interchangeable types: 7T-S, 7T-SD, 7T-D; 3P-1S, 3P-1D; 3T-S, 3T-SD; 2T-S, 2T-SD; 1P-1S, 1P-1D. 1P-2S, \*stereo. 2 oz.

Stock No.	For	Tip	NET
68 R 319	N1P-1S	S-.001"	1.47
61 RC 354	N1P-1D	D-.001"	5.88
65 R 519	N1P-2S	S-.002"	1.47
65 R 534	N2T-S	S-.001", S-.003"	2.06
65 RC 529	N2T-SD	D-.001", S-.003"	6.76
68 R 317	N3P-1S	S-.001"	1.76
68 RC 316	N3P-1D	D-.001"	6.47
68 R 318	N3T-S	S-.001", S-.003"	2.06
68 RC 315	N3T-SD	D-.001", S-.003"	7.06
61 R 361	N7T-S	S-.001", S-.003"	2.06
61 RC 362	N7T-SD	D-.001", S-.003"	6.76
61 RC 363	N7T-D	D-.001", D-.003"	10.58
68 R 217	N8T-S*	S-.007", S-.003"	2.06
68 RC 209	N8T-SD*	D-.007", S-.003"	7.35



## GENERAL INDUSTRIES

### 3- AND 4-SPEED PHONOGRAPH MOTORS

MODEL DSS. Three-speed phonograph motor with 10" turntable—features a 4-pole, shaded-pole motor, oilless motor and turntable bearings, and a dynamically balanced rotor. Plays 33 1/3, 45 and 78 rpm records. Turntable is rim-driven by idler wheel—placing speed selector in "off" position automatically disengages idler and turns off motor. Constant speed; with 45-rpm record adapter and "On-Off" switch. Size, 4 3/8 x 6 5/8 x 6 1/8". Requires 2 1/2" below mtg. plate. For 110-120 volts, 60 cycle AC. 6 1/2 lbs.  
85 R 275. List. \$25.75. NET..... 15.45  
MODEL SS. (Not illus.) Phono motor with 8" turntable. Induction-type, 2-pole motor features oilless bearings and balanced rotor. 33 1/3, 45 and 78 rpm. With speed indicator dial, 45 rpm adapter, 3 1/8 x 4 1/2 x 4 3/4" without turntable, 2 1/2" below mtg. plate. For 110-120 v., 60 cycle AC. 4 lbs.  
85 R 276. List. \$10.95. NET..... 6.57  
85 R 277. SS-4. As above, but has 4th speed (16 2/3 rpm). List. \$11.75. NET..... 7.05

MODEL TR. 3-speed phono motor with 9" turntable. Has constant-speed, 2-pole motor. Speeds of 33 1/3, 45 and 78 rpm from separate pulleys, which disengage from motor in "off" position. Includes speed indicator, 45-rpm record adapter, 3 1/8 x 5 3/4 x 5 1/4". Requires 1 3/4" below mtg. plate. For 110-120 v., 60 cycle AC. Shpg. wt., 4 lbs.  
96 R 367. List. \$12.45. NET..... 7.47

BATTERY-OPERATED PHONO MOTORS. Perform on 4 flashlight cells (below). 2-pole enclosed motor has self-lubricating bearings. BX has neutral "off"—shift lever can be placed on either side of table, 6 1/4 x 4 1/2 x 2 3/4". Require 2" below mtg. surface. 1 lb.

No.	Type	Speeds	NET
85 R 203	BX	45, 33 1/3, 16 2/3 rpm	10.20
85 R 204	BX-45	45 rpm	8.85

TYPE 2 BURGESS BATTERY. For use with above (4 required). Wt., 6 oz.  
53 J 009. NET EACH..... 14c

## WALSCO PHONO REPLACEMENT PARTS

To select parts, check the Walasco numbers obtained from the reference list with the descriptive table. When ordering, give Stock No., Walasco number and description. 3 oz.



### REFERENCE LIST

Mfr.'s. and Models Walasco Type No.  
**Admiral** (Idler wheel Part No. G400A57) (For Models RC150, -160, -160A, -161, -161A, -170, -170A) 1434  
 (For idler with Part No. G400A59) RC150, -160, -160A, -161, -161A, -200, -210, -211, -212, -220, -221, -222, -320, -321, -322, -500, -550, -600. 1414  
**Collaro** RC54, -440, -456, TC340, -540, 3RC531, -532. 1449  
**Garrard** RC80 1415, 1444  
 T-FA 1445  
 RC88, -98, Mark II, -121, T. 1479  
**G. E.** P6 1432  
 (Idler wheel Part No. RMW-056) For Models P8, -10, -11, -12, -13, -14, -15, -16, -17. 1438  
 (Idler wheel Part No. RMV-053) For Models P8, -10, -17. 1437  
 P12, -13. 1433  
 P14, -15, -16. 1432, 1460, 1461, 1462  
 P15. 1414, 1415  
 P17. 1463, 1464, 1465  
**Motorola** VM3RC. 1432, 1460, 1461, 1462  
 W4RC, -10, -14, -16, -17, 1438  
 (Replaces idlers with Part Nos. 49R484327 and 49R484328) 1432  
 SSRC 1432  
 (Replaces idlers with Part No. 49R484329) 1434  
 SSRC 1434  
**Philco** M7, -8. 1434  
 M9C, -12C. 1432  
 M12C, -20, -24A, -26, -28. 1415  
 M22, -24A, -26, -28. 1435  
**RCA** (For Idler with Part No. 76750) 15E, 15L1, RP197 and RP198 series 1432, 1460, 1461, 1462  
 (Idler wheel Part No. 78508) RP168 and RP190 Series. 1447  
 CRP190A1. 1432  
 RP205 '107 motor. 1466  
 RP205 '190 series motors. 1490-01, 1495-01, 6EMPI, -2. 1433  
**Silvertone** (Idler wheel Part No. K-3481) For Models 101.211, -212, 488.216. 1434  
 (Idler wheel Part No. K-3352) For Models 101.211, -212, 488.216. 1487  
 (Idler wheel Part No. R-46350 or R-49655) For 101.211, -212, -761.2, -761.3, -762, -762.2, -762.3, -763, 488.216, -218, -1432  
 (Idler wheel Part No. R-49662) 101.762, -763. 1434

Mfr.'s. and Models Walasco Type No.  
**Silvertone (cont'd)**  
 488.218..... 1452, 1460, 1461, 1462  
 488.219..... 1414, 1432

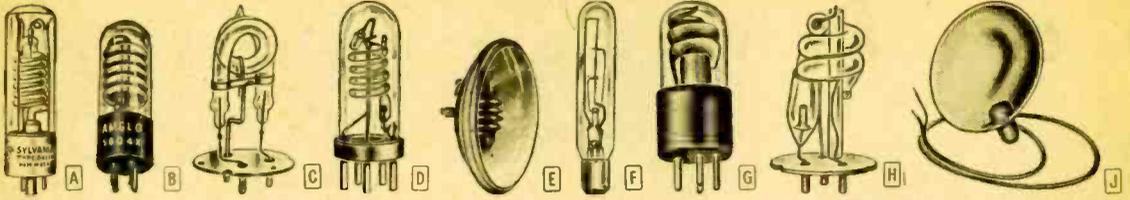
VM 100A, 105, 150, 406, 407, 802. 1414  
 155, 556, 560, 565, 1200, 1225, 1250, 1275, 1285. 1463  
 400D, 402D, 404, 405, 800D. 1433  
 625. 1447  
 406, 407, 920, 990. 1460, 1461, 1462  
 (Replaces idler with Part No. 2772) 406, 407, 802, 910, 935, 936, 950, 951. 1432  
 (Replaces idler with Part No. 3481) 950, 951. 1434  
 920, 990. 1452  
 (For units with 45-rpm pulley with Part No. 3140) 950, 951. 1460, 1461, 1462  
 (For units with 45-rpm pulley with Part No. 3483) 950, 951. 1466, 1467, 1468

Webcor 7, 18, 50, 56, 70, 78, 79, 80, 81, 100, 101, 106, 109, 110, 133, 146, 148, 156, 178, 180, 181, 246, 256, 288, 346, 356. 1437  
 100, 101, 106, 109, 110, 346, 356. 1463, 1464, 1465  
 114, 121, 122, 123, 124, 125, 126, 127, 129, 134, 150, 246, 256, 333, 1024, 1121, 1122, 1123, 1124, 1126, 1127, 1133, 1137, 1138, 1139, 1150. 1438

Stock No.	Walsco Type	Description	NET EACH
43 N 401	1414	Belt (small)	(Pr.) .17
43 N 402	1415	Belt (large; tire in some units)	(Pr.) .15
43 N 406	1432	Idler Wheel	.59
43 N 388	1433	Idler Wheel	.65
43 N 389	1434	Idler Wheel	.71
43 N 390	1435	Idler Wheel	.65
43 N 408	1437	Idler Wheel; 78	1.03
43 N 409	1438	Idler Wheel; 33 1/3	1.03
43 N 412	1447	Idler Wheel	.73
43 N 434	1449	Idler Wheel	1.18
43 N 435	1452	Idler Wheel	.59
43 N 391	1479	Idler Wheel	1.32
43 N 392	1487	Idler Wheel	.82
43 N 393	1490-01	Idler Wheel	.65
43 N 432	1444	Inter Wheel	1.62
43 N 433	1445	Inter Wheel	1.62
43 N 394	1453	Idler Pulley	1.79
43 N 415	1462	33 1/3 rpm Pulley	.73
43 N 418	1465	33 1/3 rpm Pulley	1.47
43 N 421	1468	33 1/3 rpm Pulley	.79
43 N 395	1495-01	33 1/3 rpm Pulley	.73
43 N 414	1461	45 rpm Pulley	.73
43 N 417	1464	45 rpm Pulley	1.47
43 N 420	1467	45 rpm Pulley	.79
43 N 413	1460	78 rpm Pulley	.76
43 N 416	1463	78 rpm Pulley	1.47
43 N 419	1466	78 rpm Pulley	.79

# Photoflash and Stroboscope Components

## ELECTRONIC FLASH TUBES AND REFLECTORS



### SYLVANIA R4330

**A** Flash tube for high-speed photo equipment. High-voltage discharge type 100 watt-seconds; 2250 volts; flash duration, 1/5000 second. Over 30,000 flashes. Wt., 1 lb. E3-R4330. NET 29.10

### AMGLO FLASH TUBES

**B** For high-speed photo and strobe units. Flash durations from 1/500-1/10,000 sec. Specially engineered for long life. May be used for color work without filter. Color temperature, 6500° K. Relva. \*Relay type; all others are trigger type. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	W-S	Operating Voltage	Cap., Mfd	NET EACH
78 E 655	78R9D	200	2000-2500	15-80	14.70
78 E 652	54R4X	200	2250-2850	15-80	14.70
78 E 653	55J27	150	450-900	300-1400	12.74
78 E 658	5804X	110	2250-2850	15-32	13.72
78 E 662	HDX-2	200	300-2000	1500	8.82
78 E 663	U-35	200	400-600	1-4	5.88

### G.E. FLASH TUBES

Used in amateur and professional photography, and solving research and industrial problems. Provide flashes of exceedingly high intensity for a short duration, ranging from 1/1,000 to 1/1,000,000 second. Same tube can be flashed repeatedly—tens of thousands of times. Standard equipment in many units and popular for the home kit builder and experimenter. Tubes are helix-coiled, xenon-filled, \*60 watt incandescent modeling lamp to fit inside type FT-403. †Similar to Fig. D, but has 3-pin base. Av. shpg. wt., 1 lb.

Stock No.	Type	Fig.	W-S	Volts	Mfd	NET
52 E 368	FT-218	C	200	1000	400	9.10
52 E 375	FT-118	C	125	500	1000	7.90
52 E 364	FT-214	D	200	2000	100	21.50
52 E 376	FT-220	E	200	2000	100	23.00
52 E 359	FT-403	F	480	2000	240	24.50
52 E 363	60T6½/1*	†		120		2.10
73 H 998	122-275		Socket for FT-214			1.90

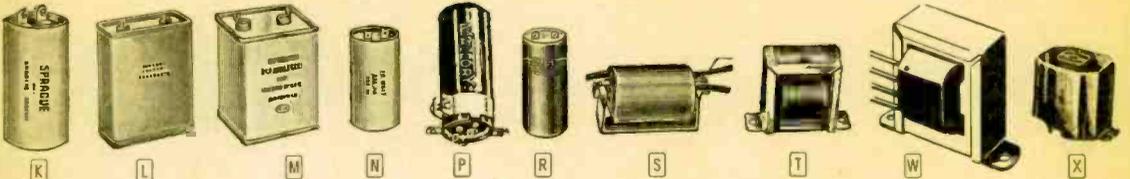
### SPRAGUE & KEMLITE COMPONENTS

For use in two low-cost, portable, dry-cell powered photoflash units. Schematics, parts listings and instructions in Sprague Booklet C-703 below. Two models—one using Kemlite DX flash tube (same as FA-100), and one using Kemlite DW-2 flash tube (same as FA-104). For synchro shutters or solenoid synchronization.

Uses two 450 volt capacitors (listed below) and five 90 v. Burgess N60 batteries (see battery listing). Flashes faster than 1/1000 sec. Light output of 100 w.s. Flash tubes are Kemlite; reflectors and adapter are Sprague. All other parts available from Allied. Write for free parts list. Av. shpg. wt., 1 lb.

Stock No.	Type	Fig.	Descr.	W-S	V.	NET
78 E 700	DX	G	Flash Tube	100	450	9.55
78 E 710	H	H	Flash Tube	150	500	5.73
78 E 703	FA-101	J	Reflector for DX			2.69
78 E 704	FA-105	J	Reflector for DW-2			3.43
78 E 702	FA-102	J	Adapt. for Ed. bases			2.55

## BUILD YOUR OWN HIGH-SPEED PHOTOFLASH UNITS WITH THESE ESSENTIALS



### CAPACITORS

#### SPRAGUE

**K** Type FF-1 525 Mfd. Capacitor. 450 volts DC working. Low-leakage electrolytic for dry battery photoflash service. Nominal rating 53 w.s. Shpg. wt., 1½ lbs. 15 L 725. NET EACH 13.23

**L** Type PQ Capacitors. Combine maximum dependability with very compact size. Rated, 2500 v., except Type 425 (4000 v.).

Stock No.	Type	Mfd	W-S	Lbs.	NET
15 L 730	2510	10	31	1½	10.00
15 L 732	2525	25	78	4½	15.58
15 L 733	2535	35	109	6	19.11
15 L 729	425	25	200	7½	24.99

**M** Type 2TM-S5 Molded Tubular Capacitor. 200 v. at 05 mfd. ¾x1¼. Shpg. wt., 8 oz. 15 L 121. NET 15c

### CORNELL-DUBILIER

**M** Type GKG7 High-Voltage Oil-Filled. High dielectric photoflash capacitors. Impregnated and filled with Dykanol "G".

No.	Type	Mfd	W-S	DCWV	Lbs.	NET
14 L 480	1A01	25	50	2000	4½	22.05
14 L 481	1A02	15	50	2500	4½	15.14
14 L 483	10A	32	100	2500	6	27.34

**N** Low-Voltage Types. \*aluminum can with cardboard sleeve; †bakelite case. Solder terminals except † has screw terminals.

No.	Type	Mfd	Volts	W-S	Lbs.	NET
14 L 841	FB10063*	200	450	20	1½	4.03
14 L 842	FW10005†	200	500	25	1½	6.17
14 L 348	FWSN10001†	525	450	53	1½	13.29

### MALLORY LOW-VOLTAGE TYPE

**P** Type HC 45003. An excellent low-voltage electrolytic for use in photoflash units. Capacity, 300 mfd at 450 volts working. Size, 2 ¼x4¾. Shpg. wt., 1 lb. 17 L 820. NET 8.24

### ILLINOIS UMC

**R** Highly efficient, dependable capacitors. All units have very low leakage current. Av. shpg. wt., 1½ lbs.

Stock No.	Type	Mfd	W-S	Volts	NET
10 L 579	52545A	525	53	450	13.23
10 L 578	100030A	1000	45	300	17.64

### TRANSFORMERS

#### THORDARSON

**S** Type 22 R44. Ignition transformer. For high-pressure 3-electrode tubes. Pri., 200 volt DC discharge from 25 to 5 mfd. condenser. Sec., 15,000 v. peak. Size, 2½x1½x1½. Shpg. wt., 8 oz. 63 G 722. NET 5.88

**S** Type 22 R41. Pri., 4 volts from vib. at 115 cyc. or higher. Sec., 450 volts DC or 900 volts DC at 15 ma. Mtg. ctrs., 2¾". 2½x2½x2½. Shpg. wt., 1½ lbs. 63 G 723. NET 5.29

**T** 22 R42. Open frame type with leads. Pri.: 117 v., 60 cycle, AC. Sec. for supply delivering 2250 volts DC at 1.5 ma.; sec. No. 2, 2½ volts AC at 1.75 amps. Size, 4x2½x2½; 3½" mtg. centers. Shpg. wt., 2 lbs. 63 G 720. NET 7.06

**T** 22 R43. Pri.: 117 volts, 60 cycle, AC or 4-volt vibrator. Sec., 1100 volts AC at 1.5 ma. Delivers 2250 volts in voltage doubler circuit. Size, 2½x3½x2½"; 2½" mtg. centers. Shpg. wt., 1½ lbs. 63 G 721. NET 9.35

#### STANCOR

**W** Model P-6425. Power transformer for AC electronic photoflash units. Low output voltage for greater safety factor. Has 105/115/125 volt 60-cycle primary. Charges 1050 mfd. capacitor to 450 volts DC, through a half-wave selenium rectifier. 2 ½x2 ½x2 ½". Mtg. centers, 2½". Shpg. wt., 1½ lbs. 64 G 445. NET 3.43

**Type P-6426.** Trigger coil for P-6425 transformer. ¾" long, ¾" diameter. Replaces G. E. 86 G 41 trigger coil. Shpg. wt., 3 oz. 64 G 144. NET 1.64

#### UTC

**X** Type PF-1. Primary for 115 v., 50-60 cycles. Secondary supplies 2200 v. DC when used with proper rectifier, and condenses up to 100 mfd. Transformer is compound-sealed in 2½x2½x2½" case. Shpg. wt., 2½ lbs. 62 G 230. NET 8.23

**Type PF-3.** Trigger transformer for electronically fired circuit 15 kv rating. Size: 3" long, ¾" diameter. Shpg. wt., 6 oz. 62 G 232. NET 5.88

### COMPONENTS

#### RECTIFIER, VIBRATOR, RELAY

**Type 1013 IT&T—Federal Tel. & Radio Rectifier.** Half-wave selenium rectifier designed for use in photo-flash storage battery chargers. Can also be used in low voltage filtered or unfiltered DC power supplies. In half-wave applications with resistive load max. input voltage is 18, max. DC current is 450 ma. Size, 1½x1½x1½". Shpg. wt., 4 oz. 4 A 604. NET 66c

**Type W1601/W859 Mallory Vibrator.** Interrupter type designed for photoflash applications. 4-prong base. 4-volt rating. Replaces type W659. Tubular can: 1½" diameter, 2¾" long. Shpg. wt., 8 oz. 56 P 118. NET 2.88

**Type FA-103, Sprague Delay Relay.** Provides 5 to 25 millisecond delay. Miniature relay to use in very latest low voltage circuit for building an electronic photoflash unit. Designed for operation with 3 to 4½-volt battery flashgun. Shpg. wt., 8 oz. 78 E 701. NET 3.43

### PHOTOFLASH HANDBOOKS

**Illinois Electronic Flash Handbook.** Handbook and construction manual. Covers 3 photoflash units: low-voltage battery-operated, low-voltage AC-battery and standard 450 v. AC-battery. Each construction article includes circuit diagram and parts list; latter two also have interior and exterior views of completed units. 8 pages. Size, 8½x11". 37 K 191. Postpaid in U.S.A. 50c

**Sprague C703 Electronic Flash Handbook.** A popular handbook containing details on the assembly of two battery-operated, high-speed electronic flash units, as well as a flash unit for AC operation. Includes photographs showing parts placement, and easy-to-follow instructions. Excellent for the amateur or professional photographer. 15 pages. Size, 8½x11". 37 K 078. Postpaid in U.S.A. 35c

**Thordarson Booklet "Universal Power Pack for High-Speed Electronic Photoflash Tubes"** Shows how to build your own reliable high-speed photoflash tube power pack. For amateur and professional photographers. Versatile—may be operated from 117 v. A.C. or from self-contained batteries. Booklet includes complete circuit diagram and detailed parts list. 8 pages. Size, 7x9". 37 K 028. Postpaid in U.S.A. 15c

# There's More for the Amateur at ALLIED

**GIANT TRADE-INS.** Now's the time to trade in your old gear and modernize your station. Write today—describe your trade-in—you'll get a terrific deal from Allied.

**EASY PAY PLAN.** Allied's new plan—the most liberal in Amateur radio—lets you own the most deluxe equipment for only \$10.00 down! See back section of catalog for complete details.

**15-DAY TRIAL.** Try new equipment under your own conditions. If in 15 days you're not completely satisfied, return it for full purchase price, less only transportation cost.

## How To Select A Receiver

Communications receivers are classified in two groups—(1) the *General-Coverage* type which tunes all frequencies from the broadcast band through short-wave, including Amateur bands; (2) the *Amateur* type which cover the Amateur bands only. In the following pages General-Coverage receivers are identified with two dots •• and Amateur receivers with one dot •

## Collins DELUXE AMATEUR GEAR



### 32S-1 SSB TRANSMITTER

Ultra-compact SSB-CW transmitter. Input is 175 watts PEP on SSB; 160 watts on CW. The 32S-1 offers exceptional operating convenience and superior all-around performance. An Ideal companion for the 75S-1.

Outstanding features include: mechanical filter-type SSB generator, permeability-tuned VFO, upper or lower sideband operation, RF inverse feedback, 10 db audio compression (ALC) and VOX. 2—6146 final. Frequency control system consists of VFO functioning with crystal oscillator that accommodates 13 heterodyne crystals—this permits coverage of any 13—200-kc ranges from 3.4-30 mc. 11 crystals supplied provide complete coverage of 80, 40, 20 and 15 meters, and 28.5-28.7 mc. (Note that there are 2 open crystal positions that can be used to cover 2 more ranges on 10 meters.)

Overall frequency stability after warm-up is within 100 cps. Provides 10 db audio compression and 50 db suppression of carrier, unwanted sideband, and oscillator feed-through and mixer products. Has 600-ohm phone-patch input. Output impedance is 50 ohms.  $6\frac{1}{2} \times 14\frac{1}{2} \times 11\frac{1}{2}$ ". Less power supply (below). Shpg. wt., 17 lbs.

94 SU 865. \$10.00 Down. NET. . . . 590.00

516F-2 POWER SUPPLY. Supplies all necessary voltages for operation of 32S-1. With cables. For 110-120 volts, 50-60 cycle AC. Size,  $6\frac{1}{2} \times 7\frac{1}{2} \times 10$ ". Shpg. wt., 27 lbs.

94 SU 866. \$5.00 Down. NET. . . . 105.00

516E-1 POWER SUPPLY. For mobile or portable operation of the 32S-1 and 75S-1. For 12 VDC input. Uses 6 power transistors as switching elements at 600 cps. With cables. Size,  $4\frac{1}{2} \times 5 \times 9$ ". Shpg. wt., 18 lbs.

94 SU 878. \$10.00 Down. NET. . . . 283.25

### 75S-1 SSB RECEIVER

Advanced-design receiver for SSB, AM and CW. Use alone, or with the 32S-1 transmitter to make a compact, efficient station. Receiver VFO can be used to control both units for transceiver operation. Tuning system consists of VFO with crystal oscillator that accommodates 14 heterodyne crystals—for coverage of any 14—200-kc ranges from 3.4-30 mc. 12 crystals supplied provide coverage of 80, 40, 20 and 15 meters, WWV and 28.5-28.7 mc. (Note there are 2 open crystal positions to cover 2 more ranges on 10 meters.)

Features dual conversion with crystal-controlled 1st beating oscillator, bandpass 1st IF, permeability-tuned VFO (stable within 100 cps), mechanical filter for high selectivity and sideband selection, 100 kc callibrator and product detector. Other important design characteristics include use of only 150 volts on tube plates and choice of 3 degrees of selectivity—.21 or 0.5 kc with mechanical filter, or IF transformers for AM.

Signal-plus-noise-to-noise ratio is 10 db for 1  $\mu$ V CW input. IF rejection is better than 70 db, image rejection is better than 60 db. Internal power supply may be disabled when using 75S-1 with 32S-1 transmitter and 516E-1 supply. Less speaker and filter (below).  $6\frac{1}{2} \times 14\frac{1}{2} \times 11\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. 21 lbs.

92 SU 383. \$10.00 Down. NET. . . . 495.00

MATCHING SPEAKER.  $7\frac{1}{2} \times 10 \times 8$ ". Wt., 4 lbs.

92 SX 394. \$2.00 Down. NET. . . . 27.50

312B-4 SPEAKER CONSOLE. Integrates 32S-1 and 75S-1. Houses speaker, RF directional wattmeter, phone patch and function controls.  $7\frac{1}{2} \times 8 \times 12\frac{1}{2}$ ". Wt., 10 lbs.

92 SU 395. \$5.00 Down. NET. . . . 185.00

## OTHER COLLINS ACCESSORIES

MODEL 189A-2 PHONE PATCH. For use with 75S-1 and 32S-1 or any receiver with 500-ohm output and transmitter with 600-ohm patch input.  $5 \times 4\frac{1}{2} \times 3\frac{1}{2}$ ". 3 lbs.

94 S 860. \$5.00 Down. NET. . . . 60.00

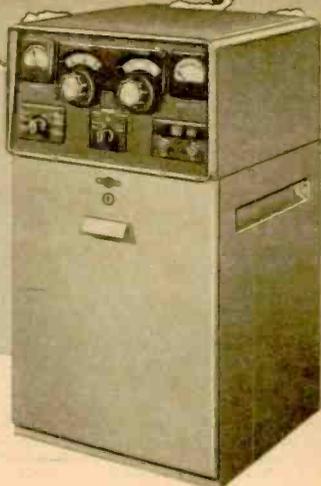
MODEL F455Q-5 CW MECHANICAL FILTER. A 500-cps mechanical filter for added selectivity and sharper CW reception with the 75S-1 receiver. Shpg. wt., 2 lbs.

77 S 730. \$2.00 Down. NET. . . . 50.00

THE WORLD'S LARGEST

HAM RADIO SUPPLIER

39 Years of Ham-to-Ham Service



### NEW 30S-1 LINEAR AMPLIFIER

Highly efficient, single tube, grounded grid linear amplifier—the perfect companion for the 32S-1 or any other transmitter or exciter delivering 70 to 100 watts of driving power. Provides the full legal power input for SSB (1 kw average) or 1 kw input for CW. Has front panel bandswitching; frequency ranges are: 3.5-4.0 mc, 7.0-7.3 mc, 14.0-14.4 mc, 21.0-21.45 mc, 28.0-29.7 mc. Can cover entire spectrum from 3.5 to 30 mc by retuning cathode circuit.

Power amplifier tube is an Elmac 4CX-1000A. Correct tuning and loading are indicated by a meter with its zero at 20% of full scale. Loading control is simply adjusted for zero meter reading, while the PA tuning control is operated in the usual manner to obtain minimum plate current. At any power level, any deviation of the loading indicator from zero provides immediate warning of malfunction. Inverse feedback is incorporated for better linearity. Automatic load control voltage from amplifier is fed back to 32S-1 transmitter.

The 30S-1 Linear Amplifier is completely self-contained in a handsomely styled floor-mounted cabinet. Power supply for unit, housed in lower portion of cabinet, provides cathode bias voltage and 3000 volts for the 4CX1000A plate. Space is also provided for mounting the 516F-2 power supply of the 32S-1 transmitter. The air blower for the PA tube is extremely silent in operation—barely audible in a quiet room.

Controls: Band Change, Multimeter, Filament, HV, Bias Control, Tuning, Loading. Size:  $30\frac{1}{2} \times 17 \times 16\frac{1}{2}$ ". For 115 or 230 v., 50-60 cycle AC. Wt., 160 lbs.

83 SZ 896. \$10.00 Down. NET 1470.00

For Tops in Trades—Order Your Collins Gear From Allied



hallicrafters

NEW  
S-107



SX-62A

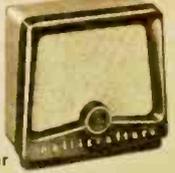


SX-110

NEW  
S-108



R-47  
Speaker



## HALLICRAFTERS General-Coverage Receivers

### •• SX-110 RECEIVER

NEW

- Electrical Bandsread
- Crystal Filter
- Signal Strength Meter

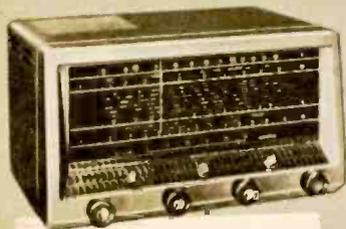
An outstanding value in a medium-priced communications receiver, the SX-110 represents the latest improved version of the highly popular SX-99. Newly styled in a rugged, steel cabinet with handsome chrome-plated trim, this top-quality unit will prove itself a real "DX-getter." Features excellent circuitry and high-quality components to assure peak performance.

**FREQUENCY COVERAGE.** Full coverage of all frequencies from 540 kc to 34 mc in 4 ranges: the standard AM broadcast band plus 3 short-wave ranges. Provides thrilling reception of Amateurs, foreign broadcasts, etc. from all over the world.

**FEATURES:** Bandsread dial calibrated for 80-75, 40, 20, 15 and 10 meters—provides increased separation of stations; "S" meter calibrated in units of 6 db to S9 and in db above S9 for accurate signal reports; crystal filter for razor-sharp selectivity; RF stage and two IF stages for very high sensitivity; terminals for 3.2-ohm or 500-ohm speaker. Separate BFO with pitch control; automatic noise limiter and 3-position tone control. 7 tubes; plus rectifier. Overall size: 8½x18½x11". Less speaker (see R-47 below, and R-48 on opposite page). U. L. Approved. For 105-125 v., 50-60 cycle AC. Shpg. wt., 36 lbs.  
77 SX 784. \$5.00 Down. NET...159.95

### •• FAMOUS LOW-COST S-38E RECEIVER

for Amateurs  
And SWL's



- 540 kc-32 mc in 4 Ranges
- Calibrated Electrical Bandsread
- Powerful Built-in Speaker
- Recessed Dial Scale

**NEW S-108 RECEIVER**  
New S-108 general-coverage receiver. Supersedes the renowned S-85 series. Completely restyled for improved operating ease and greater tuning accuracy. Puts worldwide communications at your finger tips—Tunes from 540 kc to 34 mc continuously in 4 ranges.

**FEATURES:** Bandsread dial calibrated for 80, 40, 20, 15, 11 and 10 meters; RF amplifier; 2—IF amplifiers; BFO with variable pitch control; automatic noise limiter; 3-position tone control; built-in 5" PM speaker; 4 tuning ranges—standard broadcast plus 3 shortwave. Temperature-compensated oscillator. Slide-rule dial.

**TUBES USED:** 6SG7 RF amplifier, 6SA7 converter, 2—6SK7 IF amplifiers, 6SC7 BFO and audio amplifier, 6K6GT audio output. 6H6 ANL-AVC-detector; rectifier is 5Y3GT.

**FRONT PANEL CONTROLS:** Sensitivity, band selector switch, volume, main tuning, bandsread, AVC on-off, noise limiter on-off, AM-CW, tone (high-medium-low) and AC on-off, pitch control, standby-recv. Panel jack for headphones. Steel cabinet finished in gray with silver trim. Size, 8½x18½x10". U. L. Approved. For 105-125 v., 50-60 cycle AC. Shpg. wt., 36 lbs.  
77 SX 787. \$5.00 Down. NET...129.95

**MODEL S-109.** Same as S-108 in design and appearance, but for 105-125 v., DC or 50-60 cycle AC. Shpg. wt., 32 lbs.  
77 SX 788. \$5.00 Down. NET...129.95

Latest version of the famous S-38 series receivers. Covers 540 kc to 32 mc in 4 ranges. Separate electrical bandsread is calibrated 0-100. Provides sensitive coverage of both shortwave and local AM broadcasts.

Features include: built-in 5" PM speaker for excellent tonal quality; tip jacks for headphones to permit private listening; large, slide-rule type dial with 4 separate scales; latest, highly efficient superhet circuit employing 4 tubes plus power rectifier. Controls: Bandsread; Receive/Standby switch; On-Off-Volume; Band Selector; Tuning. Switch on rear panel for speaker or headphones. Gray steel cabinet with silver trim. 12½x7x9¼". For 105-125 v. DC, or 50-60 cycle AC. (See 220-v. adapter cord below.) Shpg. wt., 14 lbs.  
94 SX 814. \$5.00 Down. NET...59.95

### S-38E in Furniture Finishes

The S-38E in metal cabinets with lustrous, simulated wood grain finishes. Shpg. wt., 14 lbs. Only \$5.00 Down.

91SX 995. S-38EM. Mahogany } NET  
91SX 996. S-38EB. Blonde. } EA. 59.95

220-VOLT ADAPTER CORD. Permits 220 v. AC-DC operation of S-38E receivers listed above. Shpg. wt., 5 oz.  
49 T 580. NET...1.32

**NEW S-107 RECEIVER**  
An outstanding value in a new, handsomely styled general-coverage receiver. Five ranges cover standard AM broadcasts from 540 kc to 1630 kc, standard shortwave from 2.5 to 31 mc, and from 48 to 54.5 mc. Also has separate electrical bandsread with 0-100 logging scale.

Deluxe features include: an extra-large slide rule dial for maximum readability, built-in noise limiter to suppress annoying auto-ignition and atmospheric interference, convenient phono-input jack, etc. Accommodates antennas from 50 to 300 ohms impedance—balanced or unbalanced. Has tip jacks with universal output impedance for headphones. Powerful built-in 5" PM speaker provides excellent tonal quality.

**Tube complement:** 6C4 oscillator; 6BA6 mixer; 2—6BA6 IF amplifiers; 6H6 detector/AVC/ANL; 6SC7 BFO and audio amplifier; 6K6GT output; and 5Y3GT rectifier. Tuning ranges: 540-1630 kc; 2.5 to 6.3 mc; 6.3 to 16 mc; 14 to 31 mc; and 48 to 54.5 mc. Bandsread tuning is calibrated for 48-54.5 mc. Gray hammertone steel cabinet with chrome trim. 7x13½x8½". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 18½ lbs.  
77 SU 785. \$5.00 Down. NET...94.95

### •• SX-62A ALL-WAVE RECEIVER

Beautifully styled, the SX-62A offers peak performance on AM broadcast, short wave, and hi-fi FM. Precision built to exacting standards—incorporates every modern refinement in receiver engineering. Six ranges: 540-1620 kc; 1620 kc-4.9 mc; 4.9-15 mc; 15-32 mc; 27-56 mc (AM-FM); 54-109 mc (AM-FM). Features push-pull 6V6 output for 10 watts of full-frequency audio. 4-position tone control; phono jack.

Has wide-vision slide-rule dial; 60-to-1 ratio tuning knob; 500-ke calibrating crystal; BFO. Controls: Dial Pointer Reset; Band Selector; Receive/Standby; Calibration Crystal; Noise Limiter; Tuning; Off-On-Volume; Reception; Selectivity; Tone; Sensitivity.

3—IF and 2—RF stages for high sensitivity. Crystal filter provides 6-step selectivity. Separate RF and AF gain controls; AVC; BFO; ANL; temperature-compensated, voltage-regulated oscillator. 300-ohm antenna input. 3.2, 8, 500-ohm outputs. 14 tubes plus VR and rectifier. Black steel cabinet with gray panel and silver trim. 10½x20x16". Less speaker. (See R-47 below, and R-48 on opposite page.) For 105-125 v., 50-60 cycle AC. 66 lbs.  
97 SZ 540. \$10.00 Down. NET...375.00

### R-47 MATCHING SPEAKER

Designed specifically for speech and CW reproduction—extremely effective on SSB. For use with receivers above and on facing page. Impedance: 3.2 ohms. 5½x5¼x3½". Shpg. wt., 2½ lbs.  
92 S 392. NET...12.95



## POPULAR TOP-QUALITY SSB EQUIPMENT

SX-100



HT-32A



# hallicrafters



R-48



HT-33A



SX-101A

## HALLICRAFTERS SSB And VHF Gear

### HT-33A LINEAR AMPLIFIER

The perfect companion to the HT-32A; identical in size and styling. Provides the maximum legal input on SSB and CW—up to a full kw on AM linear. Employs a PL-172 high-efficiency pentode operating in Class AB1, grid-driven across a non-inductive resistor for maximum stability. Offers everything needed for a clean signal with tremendous "punch." *FCDA Item Nos. T-32, T-32SSB, T-32CW.*

**FEATURES:** 1-knob bandswitching 80 through 10 meters; 3rd and 5th order distortion products down in excess of 30 db; passive grid circuit—50 to 75-ohm input; built-in RF output meter for fast, easy tune-up; pi-network output; variable output loading, 30-80 ohms; metered circuits; built-in high-voltage circuit breaker; all leads and circuits RF-filtered for TVI suppression. **Front Panel Controls:** Meter Selector (Cathode, Grid, Screen, RF, Plate Volts); Filament Off-On; High-Voltage Off-On; Circuit Breaker; Bias Adjustment; Band Selector; Plate Tuning; Plate Load. **Rear Chassis:** Coax Input; Coax Output; Filament and Bias Fuse; Cut-Off Bias Relay Terminals. **Tubes:** PL-172 high-power pentode; 2-3B28 rectifiers; 4-OA2 screen regulators. 10 1/2 x 20 x 17". For 105-125 v., 50-60 cycle AC. Shpg. wt., 130 lbs.

92 SZ 348. \$10.00 Down. NET. 795.00

### • • SX-100 SELECTABLE SSB RECEIVER

The popular SX-100 communications receiver offers an array of outstanding features. In addition to selectable sideband and double conversion, it has adjustable 50.5 kc 2nd IF with 4 hi-Q permeability tuned circuits for a high degree of selectivity. *FCDA Item No. R16.*

This top-quality unit offers coverage from 538 to 1530 kc and 1720 kc to 34 mc in 4 ranges. Among the many other superb features are a 100-kc crystal calibrator, gear drive on the main and band-spread tuning, and crystal controlled 2nd conversion oscillator. **Controls:** Antenna Trimmer, Notch Frequency, Notch Depth, Calibrator Off-On, Sensitivity, Band Selector, Volume, Tuning, AVC Off-On, Noise Limiter Off-On, Band-spread, Selectivity, Pitch, Receive-Standby.

**Ranges:** 538 to 1530 kc; 1.72 to 4.9 mc; 4.6 to 13 mc; 12 to 34 mc. **Uses:** 6AU6 crystal calibrator; 6CB6 RF; 6AU6 1st mixer; 6C4 1st conv. osc.; 12AT7 2nd conv. osc.; 6BA6 2nd mixer; 2-6BA6 1F's; 6BJ7 detector-ANL-AVC; 6SC7 AF-BFO; 6K6GT output; OA2 VR; 5Y3GT rectifier. **Outputs:** 3.2 ohm, 500 ohm; headphones. Black with chrome trim. 8 1/2 x 18 1/2 x 10 1/2". For 105-125 v., 50-60 cycle AC. Less speaker. (See R-48 listed below, and R-47 on opposite page.) Shpg. wt., 43 lbs.

98 SU 769. \$10.00 Down. NET. 295.00

### R-48 MATCHING SPEAKER

Has switch for full fidelity or voice response. For receivers above and on facing page. 3.2 ohms. 6 1/2 x 13 1/2 x 8 1/2". 9 lbs.

77 SX 789. \$2.00 Down. NET. 19.95

### HT-32A TRANSMITTER

High-efficiency transmitter-exciter for SSB-AM, or CW operation. Used alone, the HT-32A with 144 watts P.E.P. input, is an excellent, completely self-contained transmitter for the 80, 40, 20, 15 and 10 meter Amateur bands. As an exciter, the HT-32A is ideal for use with the HT-33A (left). *FCDA Item Nos. T-32, T-32SSB, T-32CW.*

Incorporates an exceptionally high-quality piezo-electric sideband filter for greatly increased suppression of unwanted sideband. An extremely stable bridged-tee modulator develops almost perfect sideband modulation. Precision gear-driven VFO reads directly in kilocycles. Distortion products down 30 db; carrier suppressed 50 db; VOX and push-to-talk; break-in keying; separate RTTY and phone patch inputs. 52-ohm pi-network output for harmonic suppression. **Uses** 2-6146 outputs; 6CB6 VFO; 12BY7 RF driver; 3-6AH6 1st, 2nd, and 3rd mixers; 6AB4 crystal osc.; 12AX7, 12AT7, and 6AL5 voice controls; 12AX7 audio amp.; 12AU7 audio amp. and carrier osc.; 12AU7 diode modulator; 12AT7 sideband osc.; 6AH6 4.95-mc amp.; 6AU6 9.0-mc amp.; 5R4GY and 5V4G rect.; OA2 VR.

**Controls:** Operation (Power Off, Standby, MOX, Cal. VOX-PTT); Audio Level; RF Level; Final Tuning; Function (Upper Sideband, Lower Sideband, DSB, CW); Meter Compression; Calibration Level; Driver Tuning; Band Selector; VFO. Steel cabinet in gray and black with chrome trim. Size, 10 1/2 x 20 x 17". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 86 lbs.

94 SZ 807. \$10.00 Down. NET. 695.00

### • COMPACT SR-34 TRANSMITTER-RECEIVER

Here is a complete AM-CW 2 and 6-meter Amateur station in one compact unit. Exceptionally stable and highly sensitive, it combines all the functions of both receiver and transmitter. Perfect for fixed, portable or mobile applications.

Operates from either 115 v. AC, or 6 or 12-v. storage battery through its efficient, dual-transistor power supply. Receiver is dual-conversion type with crystal controlled 2nd oscillator. Separate RF and oscillator sections for each band. Has "S" meter, BFO, ANL, squelch. Sensitivity averages under 1 µv for 10 db S/N ratio on 2 and 6 meters. *FCDA Item Nos. U-68, U-70.*

Transmitter is crystal controlled—up to 4 crystals may be switch-selected. May be used for "crossbanding"—transmitter may be tuned to 6 and receiver to 2, or the opposite. Output: 6-7 1/2 watts on 2 meters; 7-10 watts on 6 meters. Collapsible antenna; built-in speaker. 8 1/2 x 14 1/2 x 13 1/2". Less crystals and inike. Shpg. wt., 33 lbs.

92 SU 396. \$10.00 Down. NET. 495.00

**MODEL SR-34—AC ONLY.** Includes all features of Model SR-34 described above, less cabinet cover and antenna, and is for operation from 110-120 volts, 50-60 cycle AC only. Shpg. wt., 32 lbs.

92 SU 397. \$10.00 Down. NET. 395.00

### • SX-101A SSB RECEIVER

NEW

- Covers 80-10 Meters
- Dual-Conversion
- Selectable Sideband

A deluxe communications receiver incorporating every essential for first-class coverage of the Amateur bands. Offers a high degree of mechanical and electrical stability. Has 1-µv sensitivity on all bands and 5 steps of selectivity from 500 to 5000 cps. 5 bands cover: 3.5-4.0 mc; 7.0 to 7.3 mc; 14.0 to 14.4 mc; 21.0-21.5 mc; 28.0-29.7 mc—all Amateur bands from 80-10 meters. Dial calibrated for 6 and 2-meter bands. (Use 6 or 2 meter converter with 30-34 mc output.) 10-mc position for zero-beating crystal calibrator with WWV.

Features crystal-controlled 2nd conversion oscillators; Tee-notch filter; gear drive tuning—50:1 ratio; 100-kc crystal calibrator; dual-scale S-meter with zero point independent of sensitivity control—functions with AVC off or on; direct-coupled series noise limiter; product detector for SSB.

**Controls:** Tuning; Pointer Reset; Antenna Trimmer; Tee-Notch Frequency; Tee-Notch Depth; Sensitivity; Band Selector; AC Off-On/Volume; Selectivity; BFO Pitch; Response (Upper or Lower-Sideband and Tone); AVC Off-On; ANL Off-On; Marker (crystal calibrator) Off-On; Standby-Receive. **Uses** 14 tubes plus VR and rectifier. *FCDA Item No. R16.* 10 1/2 x 20 x 17". Less speaker. (See R-48 below, and R-47 on opposite page.) For 105-125 v., 50-60 cycle AC. Shpg. wt., 85 lbs.

94 SZ 802 \$10.00 Down. NET. 399.50

## A Complete 2 and 6 Meter Station!

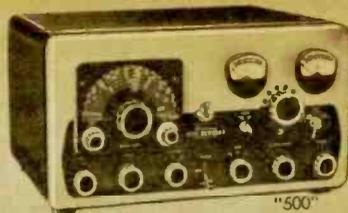


SR-34

PHONE AND CW OPERATION



"Pacemaker"



"500"



2000  
WATTS  
P. E. P.

"Thunderbolt"



"Courier"

500  
WATTS  
P. E. P.

## Famous JOHNSON SSB Equipment

### VIKING "THUNDERBOLT"

- SSB, AM, CW Operation
- 800 Watts On AM Linear
- Covers 3.5 To 30 Mc

MODEL 240-353-2. Compact, bandswitching linear amplifier—provides 2000 watts P.E.P. on SSB to smash through the QRM. Gives maximum "talk power" on all amateur bands from 3.5 to 30 mc. Has a full kw input on CW, 800 watts on AM linear. Completely self-contained—a highly efficient, flexible, table-top unit.

Drive requirements are 10 watts in class AB2 linear and 20 watts CW. Makes a perfect companion for any of the Viking low-power transmitters or other similar units. May also be used with medium-power transmitters such as the "Valiant" when power reducer (below) is inserted.

Features complete TVI suppression: All outgoing leads have complete shielding and double "L" section filters. Cabinet is electrically sealed with monel braid; cup-type shields seal the meters; all harness leads and filaments are by-passed.

Output circuit employs two 4-400A tetrodes in parallel, bridge neutralized. Pi-network matches 40 to 600-ohm loads. Two built-in fans cool filament and plate seals for extended tube life. Meters provide a constant check of every important phase of operation. Power supply section includes four VR tubes for screen voltage regulation. Meets FCDA spec. T-32-SSB when used with Pacemaker and KW Matchbox. 11 $\frac{1}{2}$ "x21" x14 $\frac{1}{2}$ ". For 115 or 230 v., 50-60 cycle AC. Shpg. wt., 140 lbs.

94 SZ 863, \$10.00 Down, NET 589.50

MODEL 240-353-1. As above, but in kit form.

83 SZ 894, \$10.00 Down, NET 524.50

250-29 POWER REDUCER. Permits using medium-power transmitters to drive Viking amplifiers. 3 $\frac{1}{2}$ "x2 $\frac{1}{2}$ " dia. 1 lb.

99 S 015, NET 13.95

### VIKING "PACEMAKER"

MODEL 240-301-2. Self-contained AM-CW-SSB transmitter of 90 watts input—packs a real on-the-air signal or drives any amplifier. Bandswitched, 80 through 10 meters. VFO controlled, with VFO always in the 3-4 mc range for maximum stability on all bands. Five crystals provide heterodyning frequencies to reach desired bands. SSB is generated by phasing method, with upper sideband or lower sideband at the flick of a switch. Final is a 6146 with pi-network tank for loading flexibility and harmonic suppression. Break-in keying with excellent waveform makes for tops in CW operating. Panel meter for grid and plate current, also modulation and carrier balance. Adjustable voice-control and anti-trip circuits. TVI suppressed. With crystals: less mike and key. 11 $\frac{1}{2}$ "x21" x14 $\frac{1}{2}$ ". For 110-120 volts, 50-60 cycle AC. 73 lbs.

94 SZ 850, \$10.00 Down, NET 495.00

### VIKING "COURIER"

MODEL 240-352-2. High-efficiency linear amplifier—delivers a solid half-kilowatt P.E.P. SSB or CW, 200 watts AM linear. Provides continuous, bandswitched coverage of 3.5 to 30 mc. Completely self-contained.

Drive requirements are 5 to 35 watts, depending on mode and frequency of operation. Ideal mate for low-power transmitters such as the Viking "Ranger", or may be used with medium-power units by inserting power reducer at left.

Features include: single control for tank coil and plate tuning capacitor, pi-network output to match 40-600 ohm loads, full TVI suppression, exceptional stability. Two 811A's in final. Meets FCDA spec. T-32 when used with Pacemaker and KW Matchbox. 9 $\frac{3}{4}$ "x15 $\frac{1}{2}$ "x14". For 110-120 v., 50-60 cycle AC. 68 lbs.

94 SZ 861, \$10.00 Down, NET 289.50

MODEL 240-352-1. As above, but in kit form.

83 SZ 893, \$10.00 Down, NET 244.50

### VIKING "500" TRANSMITTER

MODEL 240-500-2. A flexible all-band rig. Perfect for SSB—500 watts P.E.P. with 3-watt auxiliary SSB exciter. Has 500-watt AM input, 600-watt CW input. Transmitter is in 2 units. All controls in RF section, receiver-size for convenience. Power supply and modulators in second cabinet. All exciter stages gang-tuned to stable VFO. Has voltage failure protection and time delay. Pi-L network for excellent harmonic suppression. Two meters provide monitoring of all transmitter functions. Audio system includes phone patch and low-level clipping. Complete TVI suppression. Time-sequence keying for fast CW break-in. Meets FCDA spec. T-32. RF unit, 11 $\frac{1}{2}$ "x21" x14 $\frac{1}{2}$ ". Power unit, 10 $\frac{1}{2}$ "x20 $\frac{1}{2}$ " x15 $\frac{1}{2}$ ". Less mike, key, crystals. For 115 or 230 v., 50-60 cycle AC. Shpg. wt., 200 lbs. \$10.00 Down.

94 SZ 854-2, NET 949.50

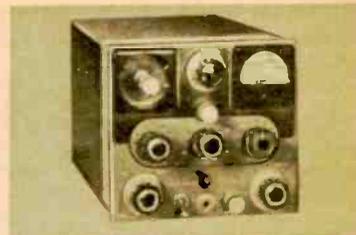
MODEL 240-500-1. As above, in kit form.

83 SZ 846, \$10.00 Down, NET 749.50

### VIKING II-CDC TRANSMITTER

MODEL 240-102-16. Not illus. Continuous coverage from 1.7-30 mc. 135 watts phone, 180 watts CW. Crystal or external VFO operation. Meets FCDA spec. T-32. Size, 20"x10 $\frac{1}{2}$ "x13". Less crystal, key and mike. For 105-125 volts, 50-60 cycle AC. Wt., 78 lbs.

94 SZ 852, \$10.00 Down, NET 430.00



VIKING "MOBILE" KIT

MODEL 240-141-1. Up to 60 watts input, 75 through 10 meters. Band switching; all stages ganged to one control. PA trimmer allows wide frequency shift without antenna loading coil adjustment. 52-ohm output. Requires 300-600 VDC at 200-240 ma and 6 or 12 v. for heaters. Less tubes, mike. 7 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "x10 $\frac{1}{2}$ ". Wt., 16 lbs.

98 S 056, \$5.00 Down, NET 107.00

MOBILE VFO KIT, MODEL 240-152-1. For above. With tubes. 4x4 $\frac{1}{4}$ "x5", 4 lbs.

99 S 018, \$2.00 Down, NET 33.95

240-152-2 VFO. As above, but wired.

99 S 019, \$5.00 Down, NET 52.50

### JOHNSON HIGH-STABILITY VIKING VFO (KITS OR WIRED)

MODEL 240-133-1 "6N2". 6 and 2 meter VFO kit. Replaces 8.9 mc crystals in multiplying 6 and 2 meter transmitters, including overtone oscillator types. Has 6BH6 series-tuned oscillator and OA2 voltage regulator. Output range is 7.995 to 9.010 mc. 10:1 vernier tuning. Requires 250-300 v. DC at 10 ma and 6.3 v. at 0.3 amp. Two controls—Bandswitch and Tuning. With cables and instructions. 4x4 $\frac{1}{2}$ "x5". 3 lbs.

83 S 899, \$2.00 Down, NET 34.95

MODEL 240-133-2. As above, but wired.

83 S 869, \$5.00 Down, NET 54.95

MODEL 240-122-1. Extremely stable VFO kit. Designed for Viking I and II. For 160-10 meters: output on 160 and 40 meters, and 6 mc. OA2 VR. Requires 250-300 VDC at 15 ma. 6.3 v. at 0.3 amp. With cables. 7x6 $\frac{1}{2}$ "x6 $\frac{1}{2}$ ". Shpg. wt., 7 lbs.

99 S 013, \$2.00 Down, NET 45.50

99 SX 014, Model 240-122-2. Wired, NET 69.75



"6N2"  
VFO



240-122  
VFO

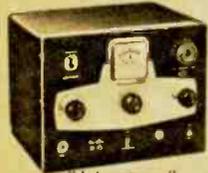


"Valiant"



"Navigator"

"Ranger"



"Adventurer"



Amplifier Modulator



"6N2"



**JOHNSON AM-CW Amateur Gear**

**VIKING "VALIANT"**

MODEL 240-104-2. A husky and compact all-band transmitter. 200 watts input on AM phone, 275 watts CW. Bandswitching from 160 through 10 meters. Can be used with auxiliary SSB exciter for 275 watts SSB power. Retains the famous Johnson features—extra-stable VFO, TVI suppression, time-sequence keying. In addition, audio clipping and filtering provide maximum "punch" through QRM. Can easily be used as driver for kilowatt amplifier, or power source for VHF transmitters. Final amplifier operates into very efficient pi-network antenna output designed to match 50-600 ohm loads; tunes out large amounts of reactance. VFO and modulator screens are voltage regulated. Tubes: 6AU6 VFO, 6CL6 crystal oscillator, VFO isolator, 5763 RF driver, 3—6146 final amplifier, 12AU7 keyer, 6AQ5 clamper, 12AX7 speech amplifier, 6AL5 audio clipper, 6C4 audio amplifier, 12AU7 audio driver, 2—6146 modulators, 2—866A high-voltage rectifiers, 5V4G low-voltage rectifier, 6BY5GA bias rectifier, 2—VR105 modulator screen voltage regulators, and OA2 VFO voltage regulator. 11 $\frac{1}{2}$ "x21x14 $\frac{1}{2}$ ". Less crystal, key and mike. For 105-125 v., 50-60 cycle AC. Wt., 85 lbs.

94 SZ 853, \$10.00 Down, NET. 439.50  
Wired model above meets FCDA spec. T-32 for crystal controlled operation.

MODEL 240-104-1. As above, but kit form. 83 SZ 845, \$10.00 Down, NET. 349.50

**VIKING "ADVENTURER" KIT**

MODEL 240-181-1. Low-cost CW transmitter. 50 watts input to 807 final amplifier. Features: bandswitching on 80, 40, 20, 15, and 10 meters; grid and plate metering; TVI shielding and filtering. Wide range pi-network output permits use of simplest antennas. Oscillator and final are keyed simultaneously for a crisp, clean signal. Has receptacle (450 v. DC at 150 ma and 6.3 v. at 2 amps)—for accessories. Less key and crystal. 7 $\frac{1}{2}$ "x10 $\frac{3}{8}$ "x8 $\frac{1}{4}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 16 lbs.

99 SU 024, \$5.00 Down, NET. 54.95

MODEL 250-40. AMPLIFIER-MODULATOR. Provides phone operation for "Adventurer." Screen modulation. Plugs in. High gain for crystal or dynamic mike. 4 $\frac{3}{4}$ "x4 $\frac{1}{2}$ "x4". Less mike. Shpg. wt., 1 lb.

92 S 366, NET. 12.25

**VIKING "NAVIGATOR"**

MODEL 240-126-2. High-performance transmitter-exciter for the Amateur who desires a flexible, low-power CW rig. 40 watts input. Bandswitching coverage of the 160, 80, 40, 20, 15 and 10 meter bands. Built-in, highly stable VFO has excellent keying characteristics; features tuned-sequence keying for chirp-free, clean, crisp signals. Transmitter may be crystal-controlled—has front-panel provision for 2 crystals. TVI suppression includes filtering and by-passing; aluminum cabinet effectively shields unit. Wide-range pi-network output circuit matches transmission line impedances from 40-600 ohms. Meter on front panel reads final grid and plate currents. 13 $\frac{1}{4}$ "x9 $\frac{1}{4}$ "x10 $\frac{1}{4}$ ". With tubes; less crystal and key. For 110-120 v., 50-60 cycle AC. 27 lbs. \$5.00 Down.

94 SZ 857, NET. 199.50

83 SZ 892, Model 240-126-1. Kit, 149.50

**VIKING "6N2"**

MODEL 240-201-2. Efficient, compact VHF transmitter offering bandswitching coverage of 6 and 2 meters. Makes use of the existing power supply and modulator of the Amateur's low-frequency transmitter. Requires 6.3 v. at 3.5 amps. 300 v. DC at 70 ma and 300-750 v. DC at 200 ma, plus 30 or more watts of audio. Input power at full voltage: 150 watts CW or FM, 100 watts AM. Has silver-plated tank circuit, parallel lines for 2 meters. Link output, 5894 final, TVI suppressed. For 8-mc. input. 13 $\frac{1}{4}$ "x8 $\frac{3}{8}$ "x8 $\frac{1}{2}$ ". Less crystal, key, mike. Shpg. wt., 14 lbs. \$5.00 Down.

94 SU 851, NET. 169.50

Wired model 240-201-2 above meets FCDA specs. T-34 and T-36 when used with Viking II-DC or Viking Ranger.

MODEL 240-201-1. As above, but in kit form. 83 SU 844, \$5.00 Down, NET. 129.50

**NEW VIKING "CHALLENGER" KIT—120 WATTS CW, 70 WATTS PHONE**

MODEL 240-182-1. Ideal for fixed or portable use, the "Challenger" features 70 watts phone input on 80-6 meters; 120 watts CW input on 80-10 meters—85 watts CW input on 6 meters. 6DQ6A buffer drives two 6DQ6A bridge neutralized tetrodes in final amplifier. Wide range pi-network output for 40-600 ohm antennas, tunes out large amounts of capacitive or inductive reactance. Plate circuit capacitor switching provides best combination of variable and padding capacity for easy tuning and proper loading. Straight through final amplifier operation provides high efficiency. Socket for crystal or VFO. Less mike, key and crystal. 15 $\frac{1}{2}$ "x13 $\frac{1}{2}$ "x12 $\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 31 lbs.

77 SZ 772, \$5.00 Down, NET. 114.75

MODEL 240-182-2. As above but wired. 77 SZ 757, \$5.00 Down, NET. 154.75

**VIKING "RANGER"**

- Excellent TVI Suppression
- Covers 160 to 10 Meters
- Full Meter Switching
- Highly Stable, Built-in VFO

MODEL 240-161-2. The latest model of this popular, phone CW transmitter. Highly effective TVI suppression. Input to final is 75 watts on CW; 65 watts on AM phone. Offers single-knob bandswitching on 160, 80-75, 40, 20, 15, and 10 meters. Frequency selection with built-in VFO, or crystals. Pi-network output matches 50-500 ohm loads; tunes out large amounts of reactance. Time-sequence (grid-block) keying provides excellent keying characteristic and allows quick, clean break-in operation. The built-in VFO is temperature-compensated for high stability. Separate, accurately calibrated, VFO bandspread, scales for each band—9" of dial scale on 10 meters. A 6-to-1 planetary drive mechanism allows accurate tuning with velvet smooth control. 100% AM modulation; response limited to 250-3000 cycles for maximum communication effectiveness. Full meter switching for accurate tune-up.

Tubes: 6AU6 VFO, 6CL6 crystal oscillator, 6CL6 buffer, 6146 final, 6AQ5 clamper, 12AU7 keyer, 12AX7 speech amplifier, 12AU7 audio driver, 2—1614 modulators; OA2 voltage regulator, 5R4GY high-voltage rectifier, 6AX5GT low-voltage rectifier and 6AL5 bias rectifier. Takes any high impedance microphone. Less crystal, key and mike. Overall size, 15x11 $\frac{1}{2}$ "x9". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 54 lbs. \$10.00 Down.

99 SZ 036, NET. 329.50

Wired model above meets FCDA specification T-32 for crystal controlled operation.

MODEL 240-161-1. As above, in kit form. 99 SZ 037, \$10.00 Down, NET. 229.50



- 80 Through 6 Meters
- AM Phone and CW

**WANT A KING SIZE TRADE?**  
For a terrific deal, write to our Ham Shack—tell us what you want and what you have to trade.



HAMMARLUND

NEW  
HQ-145C  
SSB-AM-CW



HQ-170C



HQ-110C

HQ-100C

- Covers 6, 10, 15, 20, 40, 80, 160 Meters
- 17 Tube Triple Conversion Circuit
- Excellent For SSB

## HAMMARLUND Communications Receivers

### • HAMMARLUND HQ-170C RECEIVER

Deluxe, triple-conversion, Amateur-band receiver—combines the advantages of the HQ-110C and the HC-10 with many "plus" features. Expert design is highlighted by a razor-sharp slot filter; separate linear product detector;  $\pm 3$ -kc vernier tuning for SSB; 7 positions of selectivity and choice of 3 AVC delay speeds.

Additional outstanding features include automatic audio passband control, sideband selector, 100-ke calibrator, dial reset and automatic clock-timer. Notch filter is adjustable  $\pm 5$ -kc for over 40 db attenuation, depth control provides up to 20 db additional—notch is 1.5 kc wide at 6 db. Triple conversion (IF's at 3055, 455, 60 kc) from 6-40 meters, dual-conversion on 80 and 160 meter bands. Signal strength readings and "on-the-point" tuning indications are provided on all types of signals by a high-response "S" meter circuit.

Compensator permits adjusting for loading effects of various antenna types or balanced transmission lines. 15 tubes plus rectifier and VR. FCDA No. R-16. Size,  $10\frac{1}{2} \times 19 \times 13$ ". Less speaker (below). For 110-120 volts, 50-60 cycle AC. 45 lbs.

92 SU 347. \$10.00 Down. NET. 369.00  
HQ-170. As above, less clock-timer.  
92 SU 477. \$10.00 Down. NET. 359.00  
83 SX 599. S-200. Matching speaker, 11x12x9". Shpg. wt., 9 $\frac{1}{2}$  lbs. NET. 19.95

### •• HAMMARLUND HQ-145C RECEIVER

The ideal receiver for the Amateur desiring general coverage, or the short-wave listener who insists on commercial-quality performance. This 11-tube superhet receiver features an improved noise limiter and covers 540 kc to 30 mc in four bands. Has dual conversion from 10-30 mc for superlative image rejection; crystal filter with 6-position switch for added selectivity; calibrated electrical bandspread on 80-10 meter Ham bands.

Excellent selectivity provides 10:1 signal-to-noise ratio with 1.75  $\mu$ v AM signal or 0.5  $\mu$ v CW signal. Adjustable slot filter provides up to 60 db attenuation for elimination of adjacent channel interference. Slot is adjustable over a range of  $\pm 5$ -kc from center frequency of the 455 kc IF. 8:1 vernier control permits easy adjustment. Accurate "S" meter assures accuracy of tuning and relative signal strength read-out.

Careful design and temperature compensation hold frequency drift to less than 0.01% after warm-up. Automatic response system adjusts passband to best suit the signal. Has Telechron clock timer. Regulated power supply. Size,  $10\frac{1}{2} \times 19 \times 13$ ". For 105-125 volts, 50-60 cycle AC. 42 lbs.

77 SU 775. \$10.00 Down. NET. 279.00  
HQ-145. As above, less clock-timer.  
77 SU 776. \$10.00 Down. NET. 269.00  
83 SX 599. Model S-200. Matching speaker, 6x9". Shpg. wt., 9 $\frac{1}{2}$  lbs. NET. 19.95

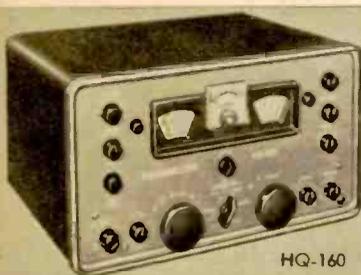
### • HAMMARLUND HQ-110C RECEIVER

A handsome, ruggedly constructed, dual-conversion receiver designed specifically for the Amateur. Provides an exceptionally high standard of reception on SSB, CW and AM—full dial coverage of 160, 80, 40, 20, 15, 10 and 6 meters. Has electrical bandspread tuning with direct dial calibration on all 7 Amateur bands. Outstanding features include "Q" multiplier for high selectivity, built-in 100-ke crystal calibrator, separate linear detector for SSB and CW and automatic clock-timer.

Includes the Hammarlund "Auto-Response" feature—varies the audio passband with signal strength for optimum reception. Dial-scale reset allows precise calibration of tuning dials. Separate BFO is stabilized for SSB and CW reception. Has 9 tuned circuits in IF strip, antenna trimmer and voltage-regulated, temperature-compensated oscillator. Dual conversion, 6 to 40 meters. Automatic noise limiter.

Frequency drift less than 0.01% after warm-up. Sensitivity: 1.5  $\mu$ v for a 10 db signal-to-noise ratio. 10 tubes plus rectifier and VR. FCDA No. R-16. Size,  $9\frac{1}{2} \times 9\frac{1}{2} \times 16\frac{1}{2}$ ". Less speaker (listed below). For 110-120 v., 50-60 cycle AC. Shpg. wt., 31 lbs.  
94 SU 822. \$10.00 Down. NET. 259.00  
94 SU 821. HQ-110. Above less clock-timer. NET. 249.00  
94 SX 828. S-100 Matching 6x9" Speaker. Wt., 10 lbs. NET. 14.95

### •• HAMMARLUND HQ-160 RECEIVER



HQ-160

Extremely sensitive and selective general coverage receiver. Covers 540 kc to 31 mc continuously, in 6 bands. Offers dual-conversion with crystal-controlled 2nd conversion oscillator, separate linear detector for SSB and CW, separate stabilized BFO, "Q" multiplier and notch filter. Automatic noise limiter minimizes static, ignition, etc.

Other outstanding features include "Auto-Response" automatic audio passband control, 100-ke calibrator, voltage-regulated and temperature-compensated oscillator, dial reset, IF output jack, electrical bandspread on the Amateur bands, and "S" meter. Also includes electrical bandspread tuning with calibration of 80, 40, 20, 15 and 10 meter bands.

14 tuned IF circuits for excellent skirt selectivity. Dual-conversion on 10, 15 and 20 meters. Adjustable notch filter gives up to 60 db attenuation,  $\pm 5$  kc. Low-loss coil forms and rugged construction for high stability. 11 tubes; plus rectifier and VR.  $10\frac{1}{2} \times 19 \times 13$ ". For 110-120 v., 50-60 cycle AC. Less speaker (below). Wt., 47 lbs.  
94 SU 816. \$10.00 Down. NET. 379.00

83 SX 599. S-200 6x9" Matching Speaker. Shpg. wt., 9 $\frac{1}{2}$  lbs. NET. 19.95

### •• HAMMARLUND HQ-100C RECEIVER

A highly popular communications receiver offering Hammarlund quality at a moderate cost. Covers 540 kc to 30 mc in 4 bands. Features include: "Auto-Response" circuit to adjust audio bandwidth automatically to fit receiving conditions; "Q" multiplier for selectivity variable from 100 cps to 3 kc; high sensitivity—less than 2  $\mu$ v for 10 db signal-to-noise ratio; voltage regulated, temperature compensated high-frequency oscillator for extra stability; calibrated electrical bandspread; built-in clock-timer; and accurate "S" meter.

Tube lineup: 6BZ6 RF amplifier, 6BE6 mixer, 6C4 HF oscillator, 2-6BA6 IF's, 6AL5 detector/automatic noise limiter, 12AX7 audio amplifier/Q multiplier/BFO, 6AQ5 output; 5V3 rect., OB2 VR.

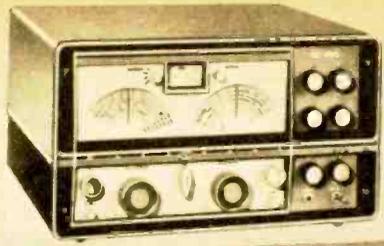
Attractive die-cast aluminum front panel. Entire cabinet is perforated for excellent ventilation. FCDA No. R-16. Size  $9\frac{1}{2} \times 16\frac{1}{2} \times 9\frac{1}{2}$ ". Less speaker (above). For 105-125 v., 50-60 cycle AC. Wt., 31 lbs.  
94 SU 829. \$5.00 Down. NET. 199.00  
HQ-100. As above, but less clock.  
94 SU 827. \$5.00 Down. NET. 189.00  
HAMMARLUND XC-455 CRYSTAL-CONTROLLED BFO. For single-signal CW reception. 1 lb.  
94 S 824. NET. 15.95

- Separate Linear Detector For Reception of SSB and CW
- 13 Tube Circuit—Dual Conversion—"Q" Multiplier
- Tunes From 540 kc to 31 mc



NC-303

**NEW**  
NC-400  
DELUXE



HRO-60



NC-188



NC-109

## NATIONAL Communications Receivers

### • NATIONAL NC-303 RECEIVER

Deluxe version of NC-300 Amateur-band receiver. Covers 160-10 meters; 160-1½ meters and WWV with units below. Dual-conversion with 5 positions of selectivity—sharp to 400 cycles at 6 db. "Q" multiplier provides 60-db notch. 11½x19½x15". For 110-120 v. 50-60 cycle AC. 64 lbs.

92 SZ 384. \$10.00 Down. NET. 449.00

Units below for NC-300, 303. \*NC-303 only.

CONVERTERS. For above. Shpg. wt., 2 lbs.

Stock No.	Type No.	Band	NET
83 S 870	NC-300C6A	6 meters	41.95
83 S 871	NC-300C2	2 meters	43.95
83 S 872	NC-300C1	1½ meters	45.95

100-KC CRYSTAL CALIBRATOR. Wt., 1 lb.

83 S 873. \$2.00 Down. NET. 23.95

\*CRYSTAL/WWV CALIBRATOR. 1½ lbs.

83 S 898. \$2.00 Down. NET. 34.95

NTS-2 MATCHING SPEAKER. Shpg. wt., 12 lbs.

83 SX 897. \$2.00 Down. NET. 21.95

### •• NATIONAL HRO-60 RECEIVER

Superb sensitivity, remarkable selectivity and extreme stability. Covers 50 kc to 54 mc with suitable coils. Dual conversion above 7 mc. Has 2 RF stages, 4 IF stages, 12 permeability-tuned IF circuits and a 6-step crystal filter. Selectivity variable from 80 cps to 3.5 kc at 6 db points. Plug-in coils supplied provide general coverage from 1.7-30 mc or bandsread on 80, 40, 20 and 10-11 meters. 15 tubes plus rectifier and regulators. FCDA No. R-12/R-14. 19½x10½x17". For 115/230 v., 50-60 cycle AC. Less speaker. Shpg. wt., 84 lbs.

97 SZ 722. \$10.00 Down. NET. 645.00

### •• NATIONAL NC-188 RECEIVER

Low-cost, general-coverage receiver. Continuous coverage from 540 kc to 40 mc; SSB, AM, or CW. Calibrated bandsread for 10, 15, 20, 40 and 80 meter Amateur bands. Has high sensitivity, plus excellent stability and selectivity.

Features: 11-inch slide-rule dial with combination edge and back lighting; temperature-compensated high-frequency oscillator for increased stability; series-type automatic noise limiter; "S" meter; two IF amplifiers and separate front-panel antenna trimmer. Two-stage audio amplifier provides 1.5 watts audio output at less than 10% distortion. Sensitivity is under 2.5 microvolts for a 10-to-1 signal-to-noise ratio. Selectivity: 6 db down for 5.2 kc; 60 db down for 22 kc.

Antenna input: 50-300 ohms, balanced or unbalanced. Two-tone gray wrinkle finish. 10" H, 16½" W, and 10½" D. Less speaker (NTS-1 above, right). For 110-120 v., 50-60 cycle AC. Shpg. wt., 35 lbs.

94 SU 833. \$5.00 Down. NET. 139.95

### •• NATIONAL NC-400 RECEIVER

- Has Two RF Stages
- Extremely High Stability
- Covers 540 kc to 31 mc—7 Ranges

A magnificent new communications receiver. Extremely sensitive and selective. Has exceptional stability—only .002% long-term drift after warm-up. Covers 540 kc to 31 mc in 7 bands. Has two RF stages; "S" meter. High frequency oscillator may be tuned manually, crystal controlled or fed from an external oscillator. Separate detectors are provided for AM or CW and SSB. AGC voltage is continuously fed to four stages of RF and IF amplification. Automatic noise limiter on AM reception. For CW and SSB a double-ended manual noise limiter is provided. 16 tubes plus rectifier and regulator. Less speaker. 11½x19½x17". For 110-120 v., 50-60 cycle AC. 72 lbs.

77 SX 800. \$10.00 Down. NET. 895.00

NTS-2 MATCHING SPEAKER. 12 lbs.

83 SX 897. \$2.00 Down. NET. 21.95

### •• NATIONAL NC-109 RECEIVER

- Covers 540 kc Through 40 mc
- Receives SSB, AM and CW
- Excellent Stability

Top-value, general coverage receiver for SSB, AM or CW. Deluxe features at moderate cost. Separate product detector and excellent stability assure outstanding SSB reception. Has the exclusive "Microtome" crystal filter, which provides five degrees of selectivity. Sharp phasing notch over 60 db deep effectively rejects interference.

Covers 540 kc to 40 mc in four bands. Calibrated electrical bandsread for Amateur 10, 15, 20, 40 and 80 meter bands. Indirectly illuminated lucite dial. Amateur and shortwave bands are clearly marked. "S" meter on front panel for signal strength indication and more accurate tuning. Gang-tuned RF amplifier stage, plus two IF and two AF stages. Stability is increased by separate HF oscillator tube; ceramic oscillator coil forms and temperature compensation further improve stability. Separate RF and AF gain controls. Has nine tubes, plus rectifier and voltage regulator. 1-2 microvolt sensitivity for 10 db signal-to-noise ratio.

Controls: Main tuning; bandsread tuning; antenna trimmer; band selector switch; RF gain; AC Off-On and AF gain control; stand-by switch; mode selector switch (ANL, AM, CW, SSB and ACC); tone control; BFO pitch; selectivity; phasing. 10x16½x10½" deep. Less speaker. For 110-120 volts, 50-60 cycle AC. 35 lbs.

94 SU 834. \$5.00 Down. NET. 169.95

94 SX 835. NTS-1. 8" Speaker. Matches NC-109 and NC-188. 10 lbs. NET. 17.50

### •• NATIONAL NC-60 "SPECIAL" RECEIVER

A modern, ultra-compact communications receiver at low cost. Completely restyled and redesigned version of the popular SW-54—features greatly increased sensitivity and full electrical bandsread for precision tuning. Provides continuous coverage of broadcast, Amateur and world-wide short-wave bands—540 kc to 31 mc.

Has a large slide-rule dial with marine, aircraft, Amateur and foreign short-wave frequencies clearly marked. Includes front-panel headphone jack for late listening, built-in speaker. Selectivity: 6 db for 5 kc, 60 db for 70 kc. Controls: tuning, bandsread, off/on-volume, band selector, AM/CW switch, standby/receive switch.

Antenna input: 50-300 ohms. Tubes: 12BE6 converter, 12BA6 CW osc/IF amp, 12AV6 2nd detector/AVC/1st audio, 50C5 audio output, 35W4 rectifier, 7½x13½x8½". For operation from 110-120 v., AC or DC. Shpg. wt., 15 lbs.

92 SU 385. \$5.00 Down. NET. 59.95



*Ideal For Novices and Short-Wave Listeners*

- Tunes From 540 kc to 31 mc
- Built-In Speaker
- Budget-Priced

• Indicates Ham Bands Only, •• General Coverage, Ham and SWL



G-28

**GONSET MODEL G SERIES  
FIXED STATION COMMUNICATORS**

- Complete 10-Meter Station in A Single Compact Package
- 6146 Final—50 Watts Input

**MODEL G-28.** A complete 10-meter station—transmitter, receiver, power supply—in one neat, compact package. Just connect a mike, antenna and AC power, and you're on the air! Transmitter provides 50 watts AM input on 10 meters—dual-conversion receiver gives sensitive, selective coverage of 28-29.7 mc. Utilizes rugged quality construction throughout for outstanding performance.

**TRANSMITTER.** Multiplier stages are ganged and tracked with highly stable, calibrated VFO. Includes front-panel socket for optional crystal control and VFO spotting switch. Integral speech clipping prevents modulation in excess of 100%. Panel meter can be switched to read RF amplifier plate or grid current, or modulator plate current. 6146 final has pi-network output for 50-75 ohm unbalanced loads; built-in low-pass filter permits TVI-free operation.

**RECEIVER.** Features dual-conversion, adjustable squelch, highly effective noise limiter and "S" meter. Includes a panel-mounted loudspeaker. Full-vision dial has planetary vernier drive for smooth, easy tuning.

12 tubes plus 5U4GB rectifier. Size, only 7 $\frac{1}{2}$ x13x12 $\frac{1}{2}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 35 lbs.  
83 SU 587. \$10.00 Down. NET. 299.50

**MODEL G-50.** Same as above, but for 6-meter operation.  
77 SZ 725. \$10.00 Down. NET. 319.50

**GENERAL COVERAGE RECEIVERS**

G-33

**• • G-33 RECEIVER**

Beautifully styled new 4-band receiver featuring high sensitivity and selectivity. Uses printed circuitry for improved stability. Peak reception over a wide frequency range. 4 bands cover 54-1.6 mc, 1.8-6 mcs, 6-13 mcs and 13-34 mcs. Drum-type dial with calibrated bandsread. Bandsread dial provides logging scale and calibrated scales for Amateur bands. 1650 kc IF and 3 double-tuned hi-Q transformers provide greatly improved image rejection and excellent sensitivity. Controls include: Main tuning, Bandsread tuning, Bandsread, Volume, Antenna trimmer, Sensitivity, and Function selector. 5 tubes and rectifier. Built-in 4" speaker plus jack permit use of either external speaker or headphones. 16 $\frac{1}{2}$ x8x10". For 110-120 v., 50-60 cycle AC. 23 lbs.  
77 SU 720. \$5.00 Down. NET. 89.95



GSB-101



VFO

**GSB-101 LINEAR AMPLIFIER**

Highly efficient, grounded-grid linear amplifier of advanced design. Simple to operate—a minimum of controls. Rated for 1000 watts P.E.P. input, unit can be used with the GSB-100 SSB transmitter or any exciter delivering 60-70 watts of RF drive into a nominal 50-ohm load impedance. Grounded-grid circuit conserves drive power—operates at up to 65% efficiency, allowing more drive power to appear at the output of the final. Front panel bandswitching covers 80 thru 10 meters.

Has flexible pi-network output for easy loading. Single, front panel switch changes both inductance and capacitance of the pi-network to match a wide range of load impedance—matches 30-200 ohms. Built-in DC-operated antenna relay assures quiet operation. Output impedance is 50 ohms.

Contains built-in power and bias supplies. Primary power switches are connected so that it is impossible to apply plate voltage to the rectifier tubes before applying filament voltage. Unit is also designed to make it impossible to remove filament voltage before removing plate voltage.

**Controls:** Final Tuning, Final Loading, Band Switch, Plate Switch, Power Switch, Meter Switch. **Tubes:** 4—811A and 2—866A rectifiers. Size, 11 $\frac{1}{2}$ x19 $\frac{1}{2}$ x14 $\frac{1}{2}$ ". For operation from 105 to 125 v., 50-60 cycle AC. Shpg. wt., 94 lbs.  
77 SZ 774. \$10.00 Down. NET. 439.50

**A POWER-PACKED SSB  
PAIR!**

GSB-100

Phone  
Patch**NEW!****GONSET Fixed-Station Equipment****GSB-100 SSB TRANSMITTER/EXCITER**

Advanced design, ready-to-operate SSB unit. Can be used either as a complete transmitter or an ideal exciter for a higher powered linear amplifier. Provides outstanding selectable SSB, phase modulated, CW and AM linear operation. Permits 100 watts P.E.P. input on 80 through 10 meters—each band covered in 600-kc ranges.

Stability of built-in VFO is better than 250 cycles in two hours from a cold start—tuning mechanism has 100:1 gear ratio. Provides choice of sidebands—either upper or lower. Offers excellent suppression figures: unwanted sideband suppression, 45 db; carrier suppression, 60 db minimum; spurious suppression, 50 db minimum. Special phasing-filtering system, with quartz crystal band-elimination filter. Is used—no critical carrier balancing is involved and voice transmissions sound natural.

When used on AM, both sidebands are transmitted. This allows 100% modulation without the distortion normally present when carrier and one sideband at high modulation are received on the conventional AM receiver. On CW operation, unit provides excellent keying characteristics.

Unit has adjustable VOX and anti-trip, phone-patch provision. Also includes 100 volt final blocking bias for cut-off of external linear amplifier when receiving. Pi-network output matches 30-200 ohms. Has heavy-duty built-in power supply. All crystals supplied, except those for the CW portion of 10 meters. Size, 10 $\frac{1}{2}$ x19 $\frac{1}{2}$ x18". For 110-120 v., 50-60 cycle AC operation. Shpg. wt., 120 lbs.  
91 SZ 998. \$10.00 Down. NET. 479.50

**MODEL 3226 2 AND 6-METER VFO**

Compact, highly stable VFO for frequency control of either the 2 or 6-meter Communicator III transceivers. Both 2 and 6-meter bands are spread across an illuminated slide-rule dial for effortless frequency settings. Front-panel knob provides choice of band; spotting switch allows "zeroing-in" on stations for easy "break-in" operation. Switching of transceiver to transmit position automatically actuates VFO. Cabinet is finished in Alpine White enamel to match standard Communicator III units. Tube complement is: 2—6BJ6 and 1—OB2 voltage regulator. Size, 6x4 $\frac{1}{2}$ x8". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 10 lbs.  
83 S 597. \$5.00 Down. NET. 69.50

**GPP-1 HYBRID PHONE PATCH**

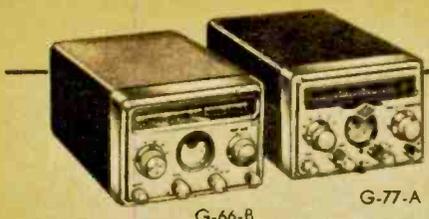
New, advanced design phone patch for use with all popular equipment. Has VU meter for monitoring phone line levels—eliminates cross-talk and interference so often experienced from overdriving the phone line. Eliminates need for manual switching when used with voice control (VOX) on SSB equipment. Completely shielded and RF by-passed. In chrome-styled, wrinkle cabinet. Size, 4x6 $\frac{1}{2}$ x7 $\frac{1}{2}$ ". For 105 to 125 v., 50-60 cycle AC. Shpg. wt., 5 lbs.  
77 S 773. \$2.00 Down. NET. 44.50



G-43

**• • G-43 RECEIVER**

Outstanding 6-band receiver using printed circuitry and featuring remarkable stability and ease of tuning. Bands are 54-1.6 mc, 1.8-5.7 mcs, 5.7-13 mcs, 13-20 mcs, 20-25 mcs and 25-30 mcs. Drum-type bandsread dial is calibrated for Amateur bands; also includes logging scale. Calibrations on band 6 provide for use of VHF converters. IF section has 6 double tuned hi-Q transformers for excellent selectivity—6 kc at 6 db down, 24 kc at 60 db. Controls: Main tuning, Bandsread, Bandsread, Volume, Sensitivity, Antenna trimmer, ANL on-off, Xtal Calibr., Phone-CW, Standby-Receive. 7 tubes and rectifier. Built-in 4" speaker with jack for external speaker or headphones. 16 $\frac{1}{2}$ x8x10 $\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. 27 lbs.  
77 SU 721. \$5.00 Down. NET. 159.50



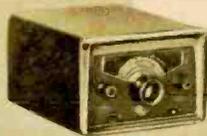
G-66-B

G-77-A

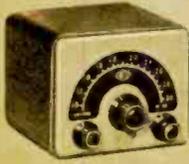


Complete "Mobile Team"

"Super-12" Mobile Converter



6-Meter Converter



Mobile Marine Converter



**COMMUNICATOR TRANSCEIVERS**

- Complete Station in One Case
- Mobile, Portable or Fixed Operation
- Ruggedly Constructed

**MODEL 3136 COMMUNICATOR III.** Complete 6-meter station in one portable case. Operates from 110-120 v., 50-60 cycle AC, or 12 v. DC; easily modified for 6 v. DC by changing jumper. Provides complete coverage of the 6 meter band. Highly selective receiver includes low-noise cascode RF stage, AVC, noise clipper, calibrated slide-rule dial, and 4" speaker. 2E26 in transmitter delivers 6-8 watts output, heavily AM modulated by 6L6GB. Gang-tuned circuits with adjustment knobs for all tunable circuits. Meter measures exciter and final output, and receiver signal level. Uses 8-mc crystals (1/2") or VFO. Less crystals, whip and mike. 10 1/2 x 11 3/4 x 7 1/4". Wt., 23 lbs.

92 SU 304. \$10.00 Down. NET. 289.50

**MODEL 3133 COMMUNICATOR III.** As above, but for 2 meters. With whip.

92 SU 305. \$10.00 Down. NET. 289.50

**MODEL 3212 LINEAR AMPLIFIER.** For use with Model 3136 above. Provides power output of 50-60 watts. 10x10 3/4 x 11". For 110-120 v., 50-60 cycle AC only. 30 lbs.

92 SU 306. \$5.00 Down. NET. 169.50

**MODEL 3211 LINEAR AMPLIFIER.** As above, but for use with Model 3133.

92 SU 307. \$5.00 Down. NET. 169.50

**CIVIL DEFENSE MODELS.** Approved CD versions of the above units are available on special order. Allow 4 weeks for delivery.

**GONSET Mobile and Portable Equipment**

**G-66-B MOBILE RECEIVER**

Deluxe, 6-band, dual conversion mobile receiver—covers 160 thru 10 meter Amateur bands as well as the broadcast band. Ranges: 54-2.0 mc; 3.5-4.0 mc; 7.0-7.3 mc; 14.0-14.35 mc; 21.0-21.45 mc; 28.0-29.7 mc. Provides top-notch SSB, AM and CW reception. Highly stable HF and BF oscillators and a crystal-controlled 2nd conversion oscillator give drift-free performance. Steep skirt selectivity is obtained with 265 kc 2nd IF with 8 tuned circuits. Slide-rule dial exposes only the band in use.

Other features include: noise limiter, antenna trimmer, "S" meter and 40:1 tuning ratio. 4 1/2 x 6 1/2 x 9". Requires power supply (see below) for operation from 6 and 12 v. DC and 115 v. AC. Shpg. wt., 9 lbs.  
83 S 831. \$10.00 Down. NET. 209.50

**G-77-A MOBILE TRANSMITTER**

Latest model of this compact, bandswitching mobile transmitter, complete with built-in high-stability VFO and separate power supply (not illus.). Covers 80 through 10 meters. Input to 60 watts on AM or CW.

Drum-type VFO dial with 40:1 tuning ratio exposes only band in use. Driver-multiplier stages are ganged with oscillator for single-knob exciter control. Press-to-talk system with built-in antenna relay. 6146 final has pi-network output.

Heavy-duty vibrator power supply operates from 6 or 12 v. DC, or 115 v., 50-60 cycle AC. Size (HWD): transmitter, 4 1/2 x 6 1/2 x 9"; power supply, 7 1/4 x 7 1/2 x 9". Less microphone. Shpg. wt., 32 lbs.  
83 SU 895. \$10.00 Down. NET. 299.00

**MOBILE ACCESSORIES**

**MODEL 3069 POWER SUPPLY AND SPEAKER.** For G-66 series. 4 1/2 x 6 1/2 x 4 1/4". For 6 and 12 v. DC or 115 v., 60 cycle AC. 8 1/2 lbs.  
83 S 832. \$2.00 Down. NET. 49.50

**MODEL 3098 "THIN PACK" 12 VDC SUPPLY.** For G-66 series. Shpg. wt., 6 lbs.  
83 S 596. \$2.00 Down. NET. 29.50

**MODEL 3001 NOISE CLIPPER.** Easily installed on any receiver with conventional diode 2nd detector. 2x4x1 1/2". 2 lbs.  
60 S 596. NET. 9.95

**TYPE 3006 STEERING-POST BRACKET.** Mounts Gonset converters or tuners. 1 lb.  
84 S 994. NET. 4.50

**MOBILE MARINE CONVERTER**

**MODEL 3163.** This easy-to-install converter allows you to monitor the 1.6 to 3.0 mc range with any 12 v. car radio. Perfect for listening to ship-to-ship and ship-to-shore communications; police broadcasts; and marine weather broadcasts. Requires only 12 v. DC—no internal connections to car radio required. Extremely simple to install—just connect output cable of converter to auto radio, connect broadcast-band antenna to converter input and clip power lead to ignition or accessory terminal. With cables. 3 1/2 x 4 1/4 x 1 1/4". 5 lbs.  
77 S 688. \$2.00 Down. NET. 29.50

**6-METER CONVERTER**

**MODEL 3275.** Highly stable mobile converter. Provides excellent 6-meter reception when operated with auto broadcast receiver. Has sensitive RF stage and built-in noise limiter. Triple conversion (including mixer in auto radio) gives maximum image rejection. Auto receiver is set on one frequency and converter is tuned for full band coverage. 49 to 54 mc range permits checking commercial stations as a means of spotting band openings. Operates from 12 v. car system—no high voltage necessary. 5 1/4 x 3 1/2 x 5 1/4". 5 lbs.  
77 S 768. \$5.00 Down. NET. 69.50

**"SUPER-12" MOBILE CONVERTER**

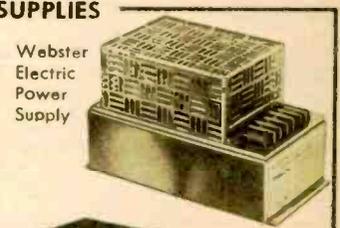
**MODEL 3261.** Compact, highly sensitive converter covering 75, 40, 20, 15 and 10 meters, plus the 19 and 49-meter shortwave bands. Easy to install—requires no high-voltage B+ or internal connections to auto radio. Operates directly from 12 v. DC (at 12 amps). Has low drift, noise factor and image response. Utilizes low-noise RF stage with front-panel antenna trimmer, low-noise triode mixer and modified Clapp oscillator. Hi-impedance antenna switch for 40 and 75 meters. Output, 1430 kc. With all necessary cables. Gray case is 5 1/4 x 3 1/2 x 5 1/4". Shpg. wt., 5 lbs.  
83 S 594. \$5.00 Down. NET. 69.50

**EFFICIENT MOBILE TRANSISTORIZED POWER SUPPLIES**

**WEBSTER ELECTRIC POWER SUPPLIES**

**MODEL 2D11.** Compact power supply for transmitters up to 100 watts. Input: 12.6 v. DC @ 15 amps. Output: 500 v. DC @ 200 ma and 250 v. DC @ 100 ma. Continuous duty operation from -22° F. to 104° F. Regulation, less than 10% at full load; ripple, less than 0.1%. Size, 5 1/16 x 8 x 4". Shpg. wt., 3 1/2 lbs.  
83 S 554. \$5.00 Down. NET. 68.50

**MODEL 2D12.** Extremely compact and light in weight. For receivers and low-power transmitters. Input: 12.6 v. DC @ 3 amps. Output: 250 v. DC @ 100 ma continuous operation from -22° F. to 122° F. Regulation, less than 10% variation at full load; ripple, less than 0.1%. Size, 2 1/16 x 4 1/2 x 2 3/4". Shpg. wt., 12 oz.  
83 S 586. \$2.00 Down. NET. 44.95



**KUPFRIAN POWER SUPPLIES**

For converting low-voltage, battery-supply DC to high-voltage DC. Ideal for Amateur mobile rigs. Resistant to shock, moisture and vibration. Provide steady, filtered DC with ripple less than 0.4%. Excellent voltage regulation and wide ambient temperature range—from -67° F. to 140° F. Compact; provide high power handling capabilities for their size and weight. Efficiency often exceeds 80%; greatly conserve battery power. 3 3/4 x 4 1/4 x 2 1/2". Wt., 2 lbs.

ities for their size and weight. Efficiency often exceeds 80%; greatly conserve battery power. 3 3/4 x 4 1/4 x 2 1/2". Wt., 2 lbs.

Stock No.	Mfr's Type	DC Voltage		Power Watts	NET EACH
		Input	Output		
77 S 782	CA-0631-05	6	300 & 150	50	45.00
77 S 781	CA-1231-10	12	300 & 150	100	49.50
77 S 780	CA-1252-10	12	500 & 250	100	54.00

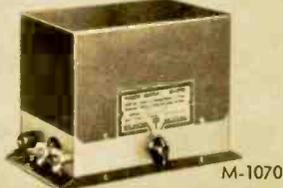
# MULTI-ELMAC



AF-67



PMR-7



M-1070

## MULTI-ELMAC Amateur Equipment

### AF-67 "TRANS-CITER"

Highly versatile, precision-built, band-switching transmitter/exciter for mobile or fixed-station operation. 60 watts input on AM, CW or NBFM, 160 through 10 meters. Has a built-in, temperature-compensated VFO. Switch allows choice of VFO or crystal operation; socket holds 2 crystals. Complete 5-position metering. Includes full complement of controls. 6146 final with pi-network output. Requires 475 v. DC at 170 ma, 225 v. DC at 60 ma, and 6 or 12 v. for filaments. Takes high or low-impedance microphone; less mike. FCDA Item No. T-32. Size, 7x11½x11¼". 20 lbs.

98 SU 091. \$5.00 Down. NET.....177.00

PS-2V 115V. AC POWER SUPPLY. For above. 7x11½x8½". Shpg. wt., 30 lbs.

98 SU 760. \$2.00 Down. NET.....49.50

CFS-1 CONNECTING CABLE. Connects PS-2V and AF-67. Shpg. wt., 8 oz.

98 S 761. NET.....4.75

Mounting rack available for AF-67—see listing in column at right.

### NEW M-1070 MOBILE POWER SUPPLY

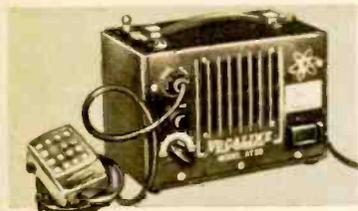
Provides 500 v. DC at 250 ma, 250 v. DC at 75 ma, and 105 v. DC regulated. For 6 or 12 v.. DC. 8x5x6". 15 lbs.

77 S 806. \$5.00 Down. NET.....69.50

MODEL M-1071. As above, but in kit form:

77 S 807. \$2.00 Down. NET.....49.50

## VOCALINE



### AT-30 TRANSCEIVERS

Highly compact, low-cost portable transceiver. Features continuous coverage from 421 to 449 mc. Provides 0.3 watts AM RF output. Supplied complete with sensitive ceramic-type microphone. Convenient push-to-talk switch for transmitter is built into mike. Transmitter is transmission line oscillator type—all elements silver plated. RF output impedance, 50 ohms.

Receiver is improved, non-critical, super-regenerative type, 2 watts output to built-in speaker. Has headphone jack. Tubes: 6AF4A, 6AV6, 6A5S. Size: 6¾" high, 9" wide, 6" deep. For 110-120 volt, 50-60 cycle AC or 6 volt DC. Shpg. wt., 4½ lbs.

92 SU 376. \$5.00 Down. NET.....92.00

MODEL AT-30. As above, but for 110-120 v., 50-60 cycle AC or 12 v. DC.

92 SU 377. \$5.00 Down. NET.....92.00

### • PMR-7 RECEIVER

Double-conversion superhet designed for outstanding mobile reception. Sensitivity exceeds that of many fixed-station receivers. Covers 160, 80, 40, 20, 15, 10 meters and 540-1650 kc. Illuminated slide-rule dial has scales for each band.

1st IF is 2238 kc. 2nd IF is 262 kc. 2nd osc. is crystal controlled for maximum stability. Adjustable squelch operates on ½ µv. Variable beat frequency injection for SSB. Includes noise limiter, variable BFO, RF gain control, delayed AVC and individually shielded coils. Ten tubes—filaments for operation from 6 or 12 v. FCDA Item No. R-16. Audio output matches 3 to 6 ohm impedance speaker. 4½x7x9½". Less power supply (Model PSR-612, below), and speaker. Shpg. wt., 11 lbs.

83 S 842. \$5.00 Down. NET.....159.00

MODEL PSR-612 POWER SUPPLY. For above. 6 or 12 v. DC input. Size, 4½x4½x9½". Shpg. wt., 10 lbs.

83 S 843. \$2.00 Down. NET.....34.00

### UNDER-DASH MOUNTING RACKS

For mounting models AF-67 and PMR-7 above under auto dashboard. Equipment slides in and out easily—rests on rubber. No bolts or screws are required to hold gear in place. Supplied with hardware and strap. Shpg. wt., 2 lbs.

83 S 592. For PMR-7. NET.....6.95

83 S 593. For AF-67. EACH.....6.95

## HARVEY-WELLS



### BANDMASTER T-90 TRANSMITTER

Bandswitching, TVI-suppressed transmitter for mobile or fixed operation. Covers 80 to 10 meters—75 watts on AM, 90 watts on CW. Built-in VFO uses voltage-regulated and temperature-compensated circuits for high stability. Provision for break-in keying and push-to-talk operation. Switch for tuning at reduced power, selector for 3 different excitation levels. Pi-network output matches wide range of antenna impedances. Takes carbon, crystal, or dynamic mike. Size: 6¾" high, 12¾" wide, 10½" deep. Less power supply and mike. Shpg. wt., 18 lbs.

99 SU 041. \$5.00 Down. NET.....179.50

APS-90 115 VAC POWER SUPPLY. For T-90 above. 6¾x12¾x10½". Shpg. wt., 35 lbs.

99 SU 043. \$5.00 Down. NET.....79.50

VPS/T-91 MOBILE SUPPLY. For above. 6 or 12 VDC. 6¾x11x6¾". Shpg. wt., 21 lbs.

77 SU 824. \$5.00 Down. NET.....107.15

# Regency



ONLY 6½" HIGH!

## REGENCY "Tiny Team"

ATC-1 AMATEUR-BAND CONVERTER. Unique, transistorized ham-band converter! Entirely self-contained and self-powered, this tiny converter provides amazing performance on SSB, AM and CW in the 80 to 10-meter bands. Operates with any radio; connects instantly to TCR-2A matching receiver. Includes modified Q multiplier and BFO with variable injection. Has drum-type slide rule dial, break-in jack, high Q permeability-tuned coils. Less penlight cells. 3½x4¼x4¼". Shpg. wt., 2½ lbs.

99 S 167. \$5.00 Down. NET.....79.50

BATTERIES FOR ATC-1. Takes 3. Wt. ea., 2 oz. 53 J 031. NET EACH.....9c

TCR-2B ALL-TRANSISTOR RECEIVER. Ultra-compact—provides complete broadcast-band coverage with a 7-transistor circuit and built-in speaker for full-toned output. Can be taken anywhere. Provides optimum coupling to the ATC-1 for reception of the 80-10 meter Amateur bands, 200 hours on single battery. 3½x4¼x4¼". Less battery. Shpg. wt., 3½ lbs.

99 S 174. \$2.00 Down. NET.....39.95

TYPE 2Z3 BATTERY. For above. 5 oz.

53 J 096. NET.....1.22

## NATIONAL



NC-66 With DF-66 Mounted

### •• NC-66 RECEIVER

A versatile, highly popular, 3-way portable receiver. Use it anywhere—operates on AC, DC, or self-contained batteries. Tunes 150 kc to 400 kc and .50 to 23 mc, in 5 ranges. Covers long-wave, short wave, and standard broadcast bands. Has built-in 5" PM speaker; ferrite loop for broadcast band; whip antenna for short wave. Ideal for small craft—fully salt-spray tested! 9½x12½x10". For 110-120 v., 50-60 cycle AC, DC, or battery. Less battery and direction finder, below. Shpg. wt., 16 lbs.

94 SX 832. \$5.00 Down. NET.....129.95

BATTERY FOR NC-66. Shpg. wt., 6½ lbs.

80 J 616. NET.....5.08

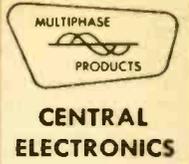
### RFDF-66 DIRECTION-FINDER

Radio direction finder for use with NC-66 portable receiver above. Provides accurate aid to navigation for pleasure craft, etc. Built-in meter; one-null indication. 7x8x10". Powered by NC-66. Wt., 8 lbs.

94 SX 836. \$2.00 Down. NET.....39.95

# CENTRAL ELECTRONICS Equipment

## For Top-Notch SSB Performance



### MODEL 20-A SSB EXCITER

Bandswitching, voice-controlled exciter for SSB, AM, PM, and CW. Covers 160-10 meters. Choice of sideband—over 40 db suppression of unwanted sideband. Carrier adjustable from full output to -60 db. Provides blocking bias. Has 9-mc heterodyne oscillator—requires external VFO or crystal. Magic eye RF indicator shows carrier balance and maximum peak output. Separate control inserts any amount of carrier without disturbing carrier suppression adjustments. 14 1/4 x 10 x 8 3/4". For 110-120 v., 50-60 cycle AC. Shpg. wt., 34 lbs.

- 83 SU 811. \$10.00 Down. NET. 279.50
- 83 SU 810. MODEL 20-A EXCITER KIT. As above, in kit form. \$10.00 Down. NET 219.50
- 83 S 815. 458-K. For converting BC-458 to VFO for 20-A. 2 lbs. NET. 17.50
- 83 S 812. QT-1 ANTI-TRIP UNIT. Plugs into 20-A to prevent loud signals from tripping break-in circuits. 2 lbs. NET. 12.50

### MODEL GC-1 AUDIO AMPLIFIER

Gated-compression amplifier eliminates continual adjustment of receiver gain to boost weak signals or cut down strong signals. For CW, AM, and SSB. Change in output is less than 3 db for signal variations up to 40 db. Insert in speaker line. 4 tubes plus rectifier. 9 1/2 x 6 1/2 x 14 1/2". For 110-120 v., 50-60 cycle AC. Shpg. wt., 17 lbs.

- 83 SX 865. \$5.00 Down. NET. 59.50
- MODEL GC-1 AMPLIFIER KIT. Above, in kit form. Shpg. wt., 17 lbs.
- 83 SX 866. \$2.00 Down. NET. 49.50

### MODEL B SIDEBAND SLICER

Converts receivers with 450-500 kc IF's for outstanding SSB reception. Selects either sideband. Built-in Q-multiplier. 40 db attenuation of unwanted sideband. 5 1/2 x 8 3/4 x 13". For 110-120 v., 60 cycle AC. 17 lbs.

- 83 SX 817. \$5.00 Down. NET. 99.50

## P&H Linear Amplifier

MODEL LA-400B. Here's an excellent grounded-grid linear amplifier for high power at minimum cost. Employs clean, straightforward design, with high-quality components throughout. Just connect a suitable exciter, tune up, and you're on the air with 500 watts input on SSB, CW or FM—250 watts input on AM or PM.

Rotary inductor allows continuous coverage from 80 through 10 meters. Features a low-impedance, 50 to 70 ohm untuned-type input circuit for maximum operating convenience. Requires only 200 watts drive to provide performance at full rated output.

## PIERSON Mobile Equipment

MODEL KE-93 RECEIVER. Compact, dual-conversion mobile receiver—7 bands, turret selected cover 160-10 meter Ham bands plus standard broadcast. Offers extremely high sensitivity and remarkable stability. Provides "solid as a rock" jitter-free mobile reception, even with severe bumps and jolts. Tunes AM, CW, and SSB. Sensitivity is better than 1 uv (3 db noise to noise) on all bands except broadcast. 1st IF is on 2.2 mc; 2nd IF is 265 kc; images are virtually non-existent. 3-kc selectivity, adjustable squelch, vernier tuning, BFO pitch control, etc. Less speaker and power supply. 5 1/2 x 6 1/2 x 9". Shpg. wt., 12 lbs.

- 77 S 777. \$10.00 Down. NET. 249.00

### MODEL MM-2 RF ANALYZER

Extremely useful RF analyzer—consists of a compact 3" oscilloscope with built-in low-distortion audio oscillator. Has five function positions (manual, sine and speech envelopes, and AF and RF trapezoids)—permits convenient, accurate analysis of SSB and AM transmitting systems. Displays IF envelope patterns of received signals when used with plug-in adapters (below). 1000-cycle audio oscillator has less than 0.5% distortion. Furnishes audio test signal at two output levels—15 millivolts and 1.5 volts. For use with transmitters up to 5 kw on 1 to 55 mc. Input for coaxial cable, 25 to 100 ohms. Size: 9 1/4" high, 6 1/4" wide, 14 1/2" deep. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 19 lbs.

- 94 SU 842. \$5.00 Down. NET. 129.50
- 83 SU 868. MM-2 RF ANALYZER KIT. As above, in kit form. \$5.00 Down. NET 99.50
- 94 S 818. RM-455 ADAPTER. For receivers with 450-500 kc IF's. 1 lb. NET. 9.95
- 94 S 819. RM-50 ADAPTER. For receivers with 50 kc IF's. 1 lb. NET. 9.95
- 94 S 837. RM-80 ADAPTER. For receivers with 80 kc IF's. 1 lb. NET. 9.95

### MODEL 600-L LINEAR AMPLIFIER

Broadband linear amplifier for SSB, CW, PM and AM linear. Delivers 400 watts P.E.P. on SSB, 300 watts on CW and PM, 100 watts on AM. Bandswitching, 160-10 meters. Has single 813 in Class AB<sub>1</sub>. Only 8 watts required to drive amplifier to full output. Has broadbanded input and output; requires no tuning. Automatic load mismatch protection. Meter reads power input, RF current, reflected power and grid current. TVI suppressed. 52-ohm output. Built-in power supply. Size: 8 1/2 x 18 x 15". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 117 lbs.

- 83 SZ 816. \$10.00 Down. NET. 495.00

Popular pi-network output matches 50 to 300 ohm antenna loads at maximum efficiency. Built-in meter measures RF voltage input, plate current, and RF output current. Unit also incorporates provision for applying blocking bias from exciter. Power supply is built into compact amplifier case. Size: 10 1/2 x 14 1/2 x 8 3/4". For operation from 105-125 volts, 50-60 cycle AC. 52 lbs.

- 91 SZ 992. \$10.00 Down. NET. 219.95

MODEL LA-400C. Same as Model LA-400B above, but in kit form. Supplied complete with all necessary parts and instructions.

- 91 SZ 993. \$5.00 Down. NET. 164.95

HI-FI CAR SPEAKER. 6x9" oval. Ideal for use with KE-93 at left. Audio curve matches receiver output. Shpg. wt., 3 lbs.

- 77 S 783. NET. 10.00

6-12 VDC POWER SUPPLY. For mobile operation of KE-93 receiver. Includes cables, plugs, etc. 5 1/2 x 6 1/2 x 5 1/2". Shpg. wt., 10 lbs.

- 77 S 778. \$2.00 Down. NET. 49.50

110-120 VAC POWER SUPPLY COMBINATION FOR KE-93. Includes built-in "S" meter and speaker in matching cabinet; cables and plugs. 5 1/2 x 6 1/2 x 9". Shpg. wt., 13 lbs.

- 77 S 779. \$2.00 Down. NET. 45.00

### MODEL 100V EXCITER/TRANSMITTER

Deluxe, highly flexible exciter/transmitter for SSB, DSB, AM linear, PM, CW and FSK. Bandswitching coverage of 80 through 10 meters with overlap for MARS, CAP, etc. Features single-control operation on each band—only the VFO is tuned, all other circuits are broad-banded. 170 watts P.E.P. SSB input; 170 watts CW, PM, FSK; 100 watts AM linear.

Permeability-tuned heterodyne VFO provides high stability; less than 25 cps drift in any 10-minute interval after 5-minute warm-up. Direct-reading dial is calibrated in 1-kc steps—two tuning ratios for maximum convenience. Phasing-type SSB generator gives output with over 50 db suppression of carrier and unwanted sideband. Choice of upper, lower, or double sideband on SSB and AM. "Non-ringing" filter limits audio response to 200-3500 cps.

Built-in 2" scope monitors RF linearity. Specially designed audio limiter makes it impossible to overmodulate the balanced modulator. Meter reads power input, RF output, degree of carrier suppression and line voltage. Seldom-used controls such as Voice-Control Trip Level and FSK Deviation are concealed behind front-panel magnetic doors. RF output adjustable down to 10 watts. Fully TVI suppressed; incorporates two 6550's in final.

Frequency ranges include: 3.5-4.5 mc, 6.5-7.5 mc, 13.5-14.5 mc, 20.5-21.5 mc, 27.7-29.7 mc. Spare switch position provided for 160 meters. Supplied complete with heterodyne crystals. Handsomely styled in gray case, 8 3/4" high, 18" wide, 15" deep. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 87 lbs.

- 94 SZ 892. \$10.00 Down. NET. 695.00



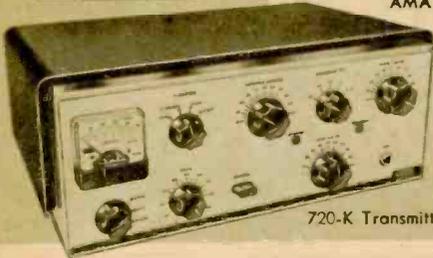
### 12-TUBES—DUAL-CONVERSION



# TOP-QUALITY AMATEUR EQUIPMENT



IDEAL CW RIG FOR THE BEGINNING AMATEUR



720-K Transmitter Kit

## EICO 720-K 90-WATT TRANSMITTER KIT

A handsomely styled, 90-watt CW transmitter in easy-to-build kit form. Covers 80-75, 40, 20, 15 and 10 meters with convenient band-switching. Conservatively rated components are used throughout to assure highly dependable operation. Complete sealing of the cabinet, as well as careful bypassing and filtering of all input and output leads assure extremely effective TVI suppression. Makes a fine 650-watt plate-modulated AM phone rig when used with Model 730-K accessory modulator kit, listed below.

Employs crystal-controlled 6CL6 oscillator, 6AQ5 buffer-multiplier and 6146 final amplifier which is protected by a 6AQ5 clamper tube. Rectifier is GZ34. Oscillator keying permits fast break-in. Efficient pi-network antenna output matches any desired antenna load from 50 to 1000 ohms. Meter reads final grid and plate current. Size, 6x15x9". With all parts, tubes, and instructions. For 110-120 volts, 60 cycle AC. Shpg. wt., 27 lbs.

83 SU 056. Only \$5.00 Down. NET..... 79.95

77 SU 706. Model 720. Factory wired. \$5.00 Down. NET..... 119.95

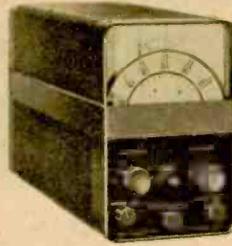
**MODEL 730-K MODULATOR KIT.** Ideal accessory for transmitter above. Delivers a full 50 watts of undistorted audio. Multi-impedance output. Inputs for crystal or dynamic microphone and phone patch. Tubes: ECC83/12AX7 speech amp., 6AL5 clipper, 6AN8 driver, 2—EL34/6CA7 output; EM84 mod. indicator and GZ34 rectifier. Less cover. below. Size, 6x14x8". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 21 lbs.

83 SU 057. Only \$2.00 Down. NET..... 49.95

77 SU 707. Model 730. Factory wired. \$5.00 Down. NET..... 79.95

77 S 708. Cover for 730 or 730-K. Shpg. wt., 5 lbs. NET..... 4.50

## • DRAKE 1-A SSB Receiver



Crystal-controlled triple-conversion receiver for SSB, CW and AM. Seven 600-ke ranges—80, 40, 20, 15, and three 10-meter ranges. New VFO circuit provides extreme stability—less than 300 cps drift after 15 minutes. 2.5-ke filter tunes through both sidebands. Product detector for distortion-free reception. Has 100-ke crystal calibrator. Receives AM by exalted-carrier method. IF frequencies of 2900-3500, 1100 and 50 ke. Selectivity of 2.5 ke at 6 db, 8.1 ke at 60 db. Sensitivity, better than 1  $\mu$ v for 20 db signal-to-noise ratio. 12 tubes plus

rectifier. Built-in speaker. Size: 11" high, 6 3/4" wide, 15" deep. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 20 lbs.  
92 SU 312, \$10.00 Down. NET..... 299.00

## •• TMC Ham Equipment

### GPR-90 RECEIVER

General-coverage receiver of superb quality. Covers 540 kc to 31 mc. Dual-conversion above 5.4 mc. 6-step selectivity from 200 cps to 5 kc. Variable bandwidth audio filter; crystal calibrator; ANL; crystal filter; fast-acting AVC; etc. Sensitivity: better than 1  $\mu$ v above 1500 kc at 10 db SNR. 13 tubes

plus rectifier. VR. 10x20x15". Less speaker. For 105-125 v., 50-60 cycle AC. Wt., 63 lbs.

94 SZ 895, \$10.00 Down. NET..... 495.00

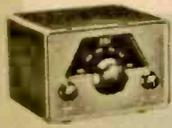
83 SX 891. Matching speaker for above. 11 lbs. NET..... 16.50

### TMC MODEL GSB-1 SSB ADAPTER

Filter-type slicer for easy SSB tuning with any receiver having 455-ke IF. Also for AM and CW. Has AVC, noise limiter, built-in audio amplifier, etc. Has IF dial calibrated in cycles. Covers 452-458 kc; choice of sidebands. Outputs for 6, 8, 16, 600 ohms or phones. 10x12x15". For 110-120 v., 50-60 cycle AC. Shpg. wt., 31 lbs.

91 SU 997. Only \$5.00 Down. NET..... 149.50

RME



DB-23 Preselector



4350A Receiver

## • RME 4350A RECEIVER

Dual-conversion receiver designed specifically for Amateur-band coverage. Offers many deluxe features usually found only in higher-priced units. Has extremely high selectivity and exceptional ease of tuning. Covers 160 through 10 meters.

Features include 4 positions of selectivity (3 crystal; 1 non-crystal); up to 35 db of notch rejection with crystal filter; drift of only 0.01% for first 20 min. with negligible drift after warm-up. 8 1/2" dial has differential tuning mechanism with choice of 75:1 or 1:1 ratio. Has "S" meter; 100-Kc marker crystal; automatic noise limiter; etc.

Controls: tuning, AF gain, BFO pitch, BFO injection, antenna trimmer, calibration adjust, band selector, RF gain-AC off/on function switch (MGC-BFO, AGC-AM, AGC-SSB, MGC-SSB), stand-by with switch, crystal selectivity, crystal phasing/rejector, ANL switch. 10x16 1/2x10". For 110-120 v., 50-60 cycle AC. Wt., 36 lbs.  
94 SZ 889, \$10.00 Down. NET..... 249.00

99 SX 049. Model 4302 Speaker. 10x8 1/2x5 1/2". 6 lbs. NET..... 17.50

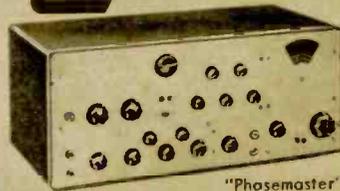
## RME DB 23 PRESELECTOR

A high-performance broadband preselector to boost the gain and signal-to-noise ratio of Amateur receivers. Covers 80 through 10 meters. Has average gain of 25 db; improves s/n ratio better than 7.5 db. Requires no tuning. 3—6J6's plus rectifier. 5x7 1/2x6". For 110-120 v., 50-60 cycle AC. Shpg. wt., 6 1/2 lbs.

98 S 751, \$2.00 Down. NET..... 49.50

Lakeshore

"Tone Master"



"Phasemaster"

"Bandhopper"



## "PHASEMASTER" II-B TRANSMITTER/EXCITER

Deluxe transmitter/exciter for SSB, DSB, PM, and CW. 65 watts P.E.P. output. Bandswitching, 160-10 meters. Includes built-in VFO (100-cps stability), temperature-compensated 9-mc osc., VOX, 50-600 ohm pi-network output, speech filter, TVI suppression, 6146 final. 9 1/2x10 1/2x11 1/2". For 110-120 v., 50-60 cycle AC. Wt., 58 lbs.  
94 SZ 881. Only \$10.00 Down. NET..... 459.00

PHASEMASTER II-A. As above, less VFO. Shpg. wt., 37 lbs.

94 SZ 843. Only \$10.00 Down. NET..... 329.50

## "TONE-MASTER"

An ultra-compact transistorized audio sine wave generator. An ideal unit for two-tone SSB testing purposes, etc. Less batteries. 4 1/2x2 3/4x2 3/4". Shpg. wt., 2 lbs.

83 S 861. NET..... 12.95

78 J 243. Penlight Batteries For Above. Takes 2. 2 oz. EACH..... 9c

## "BANDHOPPER" VFO

A deluxe VFO of outstanding quality. Ideal for use with phasing-type exciters employing 9-mc SSB generation. Calibrated for 160 to 10 meters Amateur bands. Features exceptionally high stability. Size, 9 1/2x7 1/2x11 1/2". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 22 lbs.

94 SU 897, \$5.00 Down. NET..... 139.50

# NEW... From *knight-kit*

Versatile T-400  
CW, AM and SSB  
Transmitter



## knight-kit

EQUIPMENT FOR  
THE AMATEUR



A REAL DX GETTER!

### New Knight-Kit T-400, 400 Watt Transmitter Kit

CW TRANSMITTER  
ONLY

**\$395.00**

\$10.00 Down

New, versatile transmitter kit offers an array of thrilling features. Unique modular design permits inclusion of three different modes of operation in one unit—CW, AM and SSB. Basic unit consists of a complete 400 watt CW transmitter into which an AM modulator and a SSB generator can be added.

On AM operation, power input is 400 watts; on SSB power input is 600 watts P.E.P. Provides efficient coverage of 80 through 10 meter Amateur bands. In addition, provision is made for easy conversion of the 15 meter band to 6 meter operation. Built-in heterodyne type VFO assures exceptionally stable frequency control. Has provision for front panel installation of an optional 3" modulation monitoring scope. With silicon rectifier power supply for cool, dependable operation. Size, 12x24x20". With all necessary crystals. For 115 or 220 v., 50-60 cycle AC. Shpg. wt., 140 lbs.

83 YZ 716. \$10.00 Down. ONLY..... 395.00

For Complete Description See the Knight-Kit Section of This Catalog

*Here's The Rig You've  
Been Waiting For!*

**AM** Employs controlled carrier, gated-screen modulation. Speech amplifier has variable compression for maintaining high average modulation levels.

**CW** Uses screen-clamp keying. VFO is keyed to permit break-in type of operation. 400 watts of clean CW power, punches right thru the QRM—allows you to work those hard-to-get DX stations.

**SSB** Employs the phasing method of SSB generation. Has convenient front panel VOX and anti-trip controls.

### The World's Most Famous Amateur Receiver Kit!

#### Knight-Kit R-100 Communications Receiver



EASY TO ASSEMBLE!



SHOWN WITH  
OPTIONAL  
SPEAKER KIT

#### CHECK THESE SUPERB FEATURES

- 1.5  $\mu$ v Sensitivity on All Amateur Bands, 80-10 Meters
- Printed Circuit Bandswitch
- Printed Circuitry Throughout
- Built-in Q-Multiplier
- 300 cps to 4.5 kc Selectivity
- Constant Running VFO for "No-Drift" Performance

ONLY

**\$104.50**

Only \$5.00 Down

The finest Amateur communications receiver kit available—has remarkable sensitivity and selectivity plus an array of deluxe features. Employs two printed circuit boards and the exclusive Knight-Kit printed circuit bandswitch to greatly simplify assembly and assure outstanding, professional performance. Covers 540 kc to 30 mc; electrical bandspread on all Amateur bands from 80 through 10 meters. Selectivity is variable from 300 cps to 4.5 kc at 6 db down. Q-multiplier peaks desired signal or nulls interference. Other features: slug-tuned hi-Q coils; delayed AVC; noise limiter; antenna trimmer; etc. 10x10 $\frac{3}{4}$ x16". With tubes, all parts, wire, solder. Less speaker and S-meter. For 110-125 v., 50-60 cycle AC. Shpg. wt., 30 lbs.

83 YU 726. \$5.00 Down. ONLY..... 104.50

For More Details See the Knight-Kit Section of This Catalog

Knight-Kits Are Available on Allied's Easy Payment Plan

# TOP VALUES FOR BEGINNERS IN AMATEUR RADIO



## LET ALLIED HELP YOU GET STARTED

Beginners in Amateur Radio—for best service, best selection and lowest prices, make Allied your supply headquarters. You can choose from the world's finest array of equipment, and receive friendly, personal service from our staff of 35 experienced Amateurs. Our selected listings of beginner's items will make the road to your Amateur license short and smooth.

### BIG TRADE-INS—EASY TERMS

Allied is making bigger and better trade-in deals on used Ham equipment. We're able to give you a giant trade-in allowance and you can also take advantage of our Easy Pay Plan. Of course, you're always fully protected by our 15-day trial and money-back guarantee.



Allied Code Courses

It's Easy to Learn the Code!



Ameco Code Courses

### ALLIED CODE COURSES

**COMPLETE 10-LESSON CODE COURSE ON SINGLE 12", 33 1/2-RPM RECORD.** Learn to send and receive well enough to pass novice or general class code examinations—with this single record. 5 lessons per side—takes you from start to 15 wpm. Back of record jacket contains International Morse Code table. Includes 20-page Allied instruction book. Shpg. wt., 1 lb.  
77 S 684. NET..... 4.49

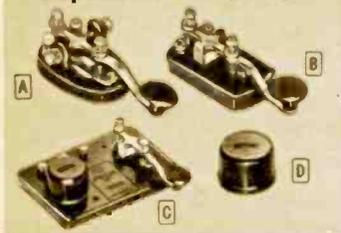
**ALLIED'S 5-RECORD CODE COURSE.** "Eye-Ear" method of learning code at home—eye follows the letters as the ear hears the sounds. Five 10", 78 rpm records recorded on each side. From 2 to 15 wpm in 10 lessons. Includes album and instruction book. Shpg. wt., 6 lbs.  
77 S 643. NET..... 5.95

### AMECO CODE COURSES.

**Junior Course:** five 45 or 78-rpm records or one 33 1/2-rpm LP; from start to 7 1/2 wpm. **Advanced:** six 45 or 78-rpm records or one 33 1/2 LP; 8 1/2 to 18 wpm. **Senior:** eleven 45 or 78-rpm records or two 33 1/2-rpm LP's; from start to 18 wpm. All courses include a 28-page manual with FCC-type exams.

Stock No.	Course	Record Speed	Shpg. Wt.	NET EACH
77 S 616	Junior	78 rpm	4 lbs.	6.95
77 S 647	Junior	45 rpm	1 1/2 lbs.	5.95
76 S 075	Junior	33 1/2 rpm	1 lb.	4.95
77 S 619	Advanced	78 rpm	4 lbs.	5.95
77 S 648	Advanced	45 rpm	1 1/2 lbs.	4.95
76 S 076	Advanced	33 1/2 rpm	1 lb.	4.95
77 S 617	Senior	78 rpm	7 lbs.	11.50
77 S 649	Senior	45 rpm	4 lbs.	10.50
76 S 077	Senior	33 1/2 rpm	2 lbs.	9.50

### Popular Learning Keys



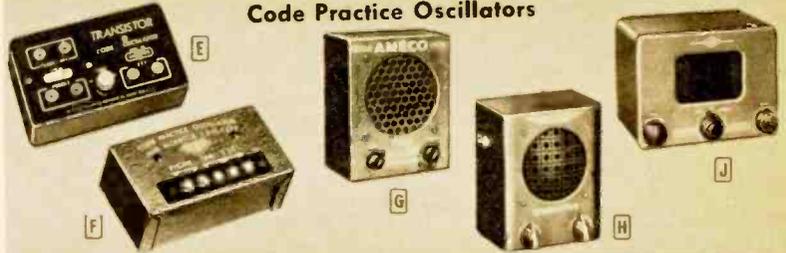
**A JOHNSON MODEL 114-310 STANDARD KEY.** Precision-built, moderately priced key. Excellent for code practice and transmitting. "Cushion contact" design for smooth action. Heavy die-cast base is finished in black wrinkle enamel; mechanical parts are nickel-plated. 1/2" silver contacts. Adjustable tension and contact spacing; adjustable bearings. Provision for plugging in semi-automatic keys. Shpg. wt., 2 lbs.  
76 S 055. NET..... 3.10

**B JOHNSON MODEL 114-300 PRACTICE KEY.** A well-built, low-cost general purpose key. Ideal as a code practice key for the beginner. Brown molded phenolic base and knob. Adjustable key arm, spring and smooth-action bearings—easily adjusted tension and contact spacing. 1/2" silver contacts. With beginners code card. Shpg. wt., 8 oz.  
76 S 053. NET..... 2.25

**C JOHNSON MODEL 114-450 BUZZER CODE PRACTICE SET.** Consists of key and constant high-frequency buzzer mounted on brown bakelite base. Screw adjustment provides variable tone. Key has silver contacts. Can be used individually or in pairs for code practice. Requires 3 v. DC (2—1 1/2 v. batteries). Shpg. wt., 2 lbs.  
76 S 059. NET..... 4.90

**D JOHNSON MODEL 114-400 HIGH-FREQUENCY BUZZER.** Buzzer only (as used on set above). Use with hand key for code practice. A very effective low-cost unit. Ample volume for several listeners. Screw adjustment provides variable tone. Requires 3 v. battery combination. Shpg. wt., 5 oz.  
76 S 060. NET..... 1.85

### Code Practice Oscillators



**E JACKSON 562 CODE PRACTICE OSCILLATOR.** Low-cost transistor code oscillator for self-practice, teaching or monitoring. For use with external magnetic phones and key. With tone adjustment. Less battery, below. 6 1/4 x 3 1/4 x 2". 2 lbs.  
77 S 640. NET..... 7.79  
BATTERY FOR ABOVE. 1 1/2 v. Wt., 3 oz.  
53 J 009. NET..... 14c

**F NEW BUD MODEL CPO-155T TRANSISTORIZED CODE PRACTICE OSCILLATOR AND MONITOR.** Low-cost unit for use with headphones. Lightweight and compact in size—only 1 1/2 x 4 1/4 x 2 1/4". Requires 2 penlight batteries, below. 2 lbs.  
77 S 728. NET..... 5.76  
BATTERIES FOR ABOVE. Wt., 2 oz.  
78 J 243. NET EACH..... 9c

**G AMECO CPS-WT CODE PRACTICE OSCILLATOR.** A deluxe practice oscillator with a built-in 4" PM speaker. Produces a loud and clear tone with ample volume for group use. Click filter provides clickless and chirp-free operation. Easily converted to excellent keying monitor. 6 1/2 x 5 x 3 1/4". For 110-120 v., AC or DC. 3 lbs.  
77 S 629. NET..... 14.95

**H BUD CPO-128B CODEMASTER.** High-quality code practice oscillator with built-in 4" PM speaker. Earphones and keys may be paralleled for group instruction. Volume and pitch controls. External speaker may be plugged into headphone jack; both headphone and key jacks take phone plug listed below. 6 1/2 x 5 1/4 x 3 1/4". For 110-120 v., AC or DC. Shpg. wt., 5 lbs.  
73 S 044. NET..... 18.75

**STANDARD PHONE PLUG.** For attaching keys and headphones to CPO-128B described above. Shpg. wt., 3 oz.  
41 H 641. NET..... 44c

**CABLE.** Extension cord for keys. 2 oz.  
48 W 805. NET PER FOOT..... 2 1/2c

**J GONSET 3022 "MONITONE" MONITOR AND CODE PRACTICE OSCILLATOR.** Combination code practice oscillator and phone or CW monitor. Transformer-type power supply. Has built-in speaker and provision for headphones. Separate tone and volume controls. Uses RF pickup link to monitor transmitter keying. Case size is 5 1/2 x 6 1/4 x 4". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 4 lbs.  
83 S 829. Only \$2.00 Down. NET 29.50

### Allied's Own American Bell Quality Headphones

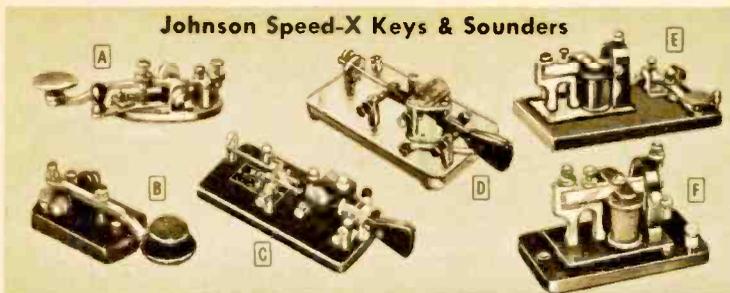


**STANDARD DUAL HEADPHONES.** Moderately priced, lightweight headphones. Adjustable headbands. Employ flux Alnico magnets and solenoid coils. Molded bakelite cap and case. With 4 1/2-ft. cord; standard phone tip terminals. 2000 ohms. 1 1/4 lbs.  
59 J 110. NET..... 2.00

**SINGLE HEADPHONE.** Not illustrated. Dependable, economy-priced unit. 2000 ohms. Shpg. wt., 8 oz.  
59 J 113. NET..... 1.15

# AMATEUR KEYS, BEGINNER'S BOOKS, AND CONELRAD GEAR

## Johnson Speed-X Keys & Sounders



**A** MODEL 114-100 DELUXE HAND KEY. A new precision-made hand key of exceptionally high quality. Carefully tempered spring, and hardened and polished fine-point pivots provide lively action for smooth, easy sending. An excellent key for the beginner and old-timer alike. Spring tension, contact spacing and bearing pressure are easily adjustable. Base and binding posts have instrument lacquer coating to protect the highly attractive satin-brass finish of key. Contacts are made of platinum—a special, extremely durable, pit-resistant alloy. Contact dia., .072". Less shorting switch. Shpg. wt., 2 lbs.  
77-S 735. NET ..... 5.95

MODEL 114-100-3 KEY. Same as above, but with shorting switch.  
77-S 736. NET ..... 6.85

**B** MODEL 114-320 HEAVY-DUTY KEY. Deluxe key built to very rigid specifications for smooth, comfortable sending. Large, chrome-plated key arm suspended from hardened steel bearings. Large, 1/4" coin-silver contacts. Improved Navy-type knob. Adjustable spacing and tension. Heavy brass connector concealed under base. Black diecast base. Shpg. wt., 2 lbs.  
76 S 058. NET ..... 4.70

**C** MODEL 114-520 SEMI-AUTOMATIC KEY. A semi-automatic key for smooth, effortless radiotelegraph sending. Contact spacing and sliding weight easily adjustable to desired sending speed. Has circuit closing switch. Ruggedly constructed for long dependable use. Has 1/4" coin-silver contacts. Hardware and vibrator are heavily chrome plated. Die-cast base finished in black wrinkle enamel. Rubber feet prevent marring finished surfaces and keep "bug" stationary. Shpg. wt., 4 lbs.  
76 S 065. NET ..... 13.95

**D** MODEL 114-500 DELUXE SEMI-AUTOMATIC KEY. A smooth operating key with 1/4" contacts. Vibrator arm, posts, circuit closing switch and all machine parts are heavily chrome-plated. Adjustable from lowest to highest speeds. Has five adjustments with lock nuts—molded plastic paddles adjust separately to best height. Mounted on black-wrinkle steel base with rubber feet to prevent slippage. Size, 6 1/4 x 3 1/2 x 1 1/2". Shpg. wt., 5 lbs.  
76 S 068. NET ..... 17.95

MODEL 114-501 KEY. As above, but with 1/4" contacts and handsome polished chrome base. Shpg. wt., 5 lbs.  
76 S 069. \$2.00 Down. NET ..... 20.65

**E** MODEL 114-110 SOUNDER/KEY. Moderately priced telegraph sounder with smooth operating key. An excellent unit specially designed for Morse-code sending and receiving practice. Rugged, dependable construction throughout. Provides clear easy-to-read signal. Has steel sounder plate. Brass sounding bar. Bridge has black enamel finish. Handsome polystyrene base. Brass binding posts. Sounder resistance is 4 ohms. Shpg. wt., 2 lbs.  
76 S 066. NET ..... 14.95

**F** MODEL 114-112 TELEGRAPH SOUNDER. Designed for instant response. Brass sounder provides strong, clear signal. Steel bar frame with black enamel finish. Brass bridge and adjustment screws with lacquer finish. Black lacquered steel sounder plate. On mahogany finished wood base. Non-slip rubber mounting feet; won't mar tabletop. Sounder has 4 ohms resistance. Brass binding posts for convenient connection. Shpg. wt., 3 lbs.  
76 S 067. NET ..... 9.95

## Vibroplex Semi-Automatic Keys



**G** "ORIGINAL". A semi-automatic key for all speeds, the renowned "Original" has won fame for its clarity, precision workmanship and ease of manipulation. Preferred and used by veteran operators, it can be slowed down to 10 words per minute or less, and geared to as high a rate of speed as desired. Maintains the same quality signal at any speed—a smooth and easy working "bug". Chrome-plated mechanism; gray cast iron base with rubber feet. Less cord and wedge. below. Shpg. wt., 5 lbs.  
76 S 035. \$2.00 Down. NET ..... 19.95

DELUXE "ORIGINAL". As above, but with jeweled bearings and fully chrome-plated base. Shpg. wt., 5 lbs.  
76 S 038. NET ..... 23.95

**H** "CHAMPION". Inexpensive, semi-automatic key. Carefully designed for smooth, easy operation. Mechanism is chrome plated; base is gray crackle finish. Less cord and wedge. Shpg. wt., 4 lbs.  
76 S 036. NET ..... 15.95

**J** STANDARD "BLUE RACER". Small and lightweight. Precision construction throughout for extremely smooth operation. Chrome-plated mechanism. Gray base. Less cord and wedge. Shpg. wt., 4 lbs.  
76 S 045. \$2.00 Down. NET ..... 19.95

DELUXE "BLUE RACER". As above, but jeweled bearings, chrome base. 4 lbs.  
76 S 046. \$2.00 Down. NET ..... 23.95

CARRYING CASE. Not illustrated. Fits all Vibroplex keys except "Blue Racer". Cloth-lined; protects keys from dust and moisture. Has lock and key; carrying handle. Styled in handsome, simulated black morocco. Shpg. wt., 2 lbs.  
76 S 037. NET ..... 6.75

CORD AND WEDGE SET. Shpg. wt., 3 oz.  
76 S 156. NET ..... 1.75

## Books for the Beginning Amateur

GATEWAY TO AMATEUR RADIO. Four A.R. R.L. books for the Novice. *How to Become a Radio Amateur*. How to get on the air, obtain a license, etc. 148 pages. *Learning the Radio-Telegraph Code*. Covers sending and receiving. 48 pages. *License Manual*. FCC exams, answers to probable exam questions, etc. 111 pages. *Operating an Amateur Radio Station*. Correct operating procedures, etc. 16 pages. Size, 6 1/2 x 8 1/2".  
37 K 369. Postpaid in U.S.A. .... 1.50

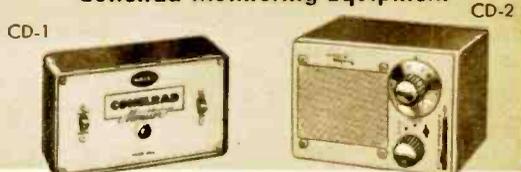


RADIO AMATEUR'S LICENSE MANUAL. Standard reference for the radio enthusiast preparing for his Amateur license. Covers FCC exams for all Amateur licenses: Novice, Technician, Conditional, etc. Contains up-to-date government regulations, answers to probable license exam questions, and other valuable information. 6 1/2 x 9 1/2". 111 pages.  
37 K 555. Postpaid in U.S.A. .... 50c

A COURSE IN RADIO FUNDAMENTALS. A study guide, examination book, and laboratory manual with text based on the latest edition of the Radio Amateur's Handbook. Contains 36 study assignments in radio theory. Assignments are arranged in logical order to give the reader a practical course in electronic and radio fundamentals. Each chapter is followed by questions and answers. Chapters: Electricity and Magnetism; Ohm's Law; Resonant Circuits; Vacuum-Tube Fundamentals; Modulation; etc. 103 pages. 6 1/2 x 9 1/2".  
37 K 564. Postpaid in U.S.A. .... 1.00

LEARNING THE RADIOTELEGRAPH CODE. Trains students to handle code skillfully and with accuracy, both in sending and receiving. Chapters: High-Speed Operation; Operating on the Air; Code Practice; Class Instruction, etc. 48 pages. Size, 6 1/2 x 9 1/2".  
37 K 562. Postpaid in U.S.A. .... 50c

## Conelrad Monitoring Equipment



Conelrad units are being used for emergency weather warning as well as Civil Defense. U.S. Weather Bureaus warn local radio stations of impending storms. Stations then send signals to Conelrad sets which trip speakers, lights or alarms to call attention to warnings about to be broadcast.

AMECO MODEL CD-1. Low-cost Conelrad monitor. Converts any radio having AVC into effective alarm system. Loss of broadcast station carrier removes AVC from trigger-tube causing warning tone. No broadcast signal is heard during monitoring periods. Function switch mutes radio for monitoring. 6 1/2 x 3 1/2 x 2". For 110-120 v., 50-60 cycle A.C. Shpg. wt., 2 1/2 lbs.  
94 S 888. NET ..... 14.95

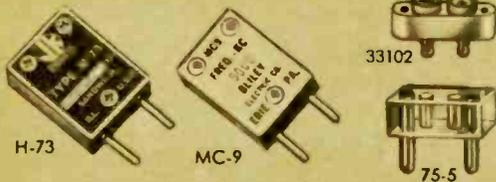
REGENCY TRANSISTORIZED MODEL CD-2. Battery-powered Conelrad and broadcast receiver. 3-transistor TRF circuit provides over 500 hours of operation in C-D monitoring position. 3" speaker is muted in C-D position; audio note is produced only when carrier is interrupted. Less batteries; below. 4 3/4 x 3 1/2 x 4 1/2". 2 3/4 lbs.  
99 S 164. Only \$2.00 Down. NET ..... 29.50

53 J 031. Burgess Z cell. 1 required. 3 oz. NET ..... 9c

80 J 684. Burgess 2N6. 1 required. 5 oz. NET ..... 1.30

# CRYSTALS AND AMATEUR ACCESSORIES

## Transmitting Crystals



### JAMES KNIGHTS "STABILIZED CRYSTALS"

TYPE H-73 AMATEUR CRYSTALS. In black phenolic holder. Pin spacing .486". Pin dia., .093". Tolerance,  $\pm .03\%$ . Size,  $1\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{8}$ ". Specify frequency. Supplied  $\pm 5$  kc (except  $\pm 30$  kc) of frequency specified. †The H-73 crystals listed under Stock No. 99 S 257 are cut to the exact frequency you specify. Allow 30 days for delivery. Wt., 3 oz.

Stock No.	Frequency (mc)	Stock No.	Frequency (mc)	EACH
99 S 266	3.5-3.7 & 3.75-4.0	99 S 255	13.48-13.63*	2.95
99 S 254	6.25-6.8	99 S 268	14.0-14.8*	
99 S 267	7.0-7.15 & 7.2-7.5	99 S 294	3.7-3.75	
99 S 259	8.0-8.23	99 S 295	7.15-7.2	
99 S 296	8.34-9.0	99 S 253	1.8-2.0	
99 S 257	1.8-20.0 mc†				4.80

TYPE H-173 AMATEUR CRYSTALS. For oscillators with low crystal current. Pin spacing, .486". Pin dia., .050".  $\frac{3}{4} \times \frac{3}{4} \times \frac{1}{8}$ ". Special order only. Allow 30 days for delivery. Specify frequency. Shpg. wt., 3 oz.

Stock No.	Frequency	Supplied Within	EACH
99 S 263	21-40 mc	$\pm 15$ kc	4.95
99 S 264	40-54 mc	$\pm 25$ kc	5.95

TYPE H-93 FREQUENCY-STANDARD CRYSTALS. Black phenolic base; anodized aluminum can. Silver-plated crystal. Pin spacing, .486". Pin dia., .093". Tolerance,  $\pm .005\%$ , 2" long;  $1\frac{1}{2}$ " dia. 3 oz. 99 S 284, 100 kc. 99 S 287, 1000 kc. NET EACH. 6.95

SPECIAL-APPLICATION CRYSTALS. Size,  $\frac{3}{4} \times \frac{3}{4} \times \frac{1}{8}$ ". Pin spacing, .486". Pin dia., .093". \*3rd overtone type. Av. shpg. wt., 3 oz.

Stock No.	Type	Frequency	Tolerance	Application	EACH
99 S 286	H-17L	4.5 mc	$\pm .005\%$	TV alignment	4.80
99 S 258	H-17L	27.25 mc	$\pm .03\%$	Radio control	4.95

INDUSTRIAL CRYSTALS. Case size: Type H-17,  $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{8}$ "; H-17T,  $1\frac{1}{2} \times \frac{1}{2} \times \frac{1}{8}$ ". Pin spacing, .086". Pin diameter, .050". Special order only. Allow 30 days for delivery. Specify Type No. and frequency. Av. shpg. wt., 3 oz.

Stock No.	Type	Frequency	Tolerance	EACH
99 S 915	H-17T (HC-13/U)	16 kc-200 kc	$\pm .01\%$	19.95
99 S 916	H-17 (HC-6/U)	200 kc-50 mc	$\pm .005\%$	14.95
99 S 917	H-17 (HC-6/U)	50 mc-150 mc	$\pm .005\%$	19.95

### BULEY SPECIALIZED SERVICE CRYSTALS

TYPE MC-9 ALIGNMENT CRYSTALS. For use as marker in sweep generators or for calibration purposes. Phenolic holder,  $1\frac{1}{4} \times 1\frac{1}{2} \times \frac{1}{8}$ ". Tol.,  $\pm .02\%$ . Pin spacing, .486" ( $\frac{1}{2}$ "); dia., .093". 3 oz. 99 S 143, 5.0 mc. 99 S 145, 10.7 mc. NET EACH. 3.95

TYPE MC-7 SHIP-TO-SHORE CRYSTALS. Available from 2.0 to 3.5 mc. Tol.,  $\pm .02\%$ . Holder is  $1\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{8}$ ". Pin spacing is .750". Pin dia., .125" ( $\frac{1}{8}$ "). Specify frequency or location of shore station. On special order only. Allow 30 days for delivery. 3 oz. 99 S 165. NET. 7.50

### MILLEN LOW-LOSS STEATITE CRYSTAL SOCKETS

Phosphor-bronze contacts; tinned lugs. Av. shpg. wt., 2 oz.

Stock No.	Type	Pin Spacing	Pin Diameter	NET EACH
72 M 035	33102	.486"	.094"	36¢
72 M 075	33302	.486"	.050"	24¢
72 M 029	33002	$\frac{3}{4}$ "	.125"	36¢

### MOSLEY ADAPTERS

TYPE 75-5 ADAPTER. Adapts  $\frac{3}{4}$ "-spaced holders to .486" sockets. 72 C 707. NET. 36¢

TYPE 5-75 ADAPTER. Adapts .486"-spaced holders to  $\frac{3}{4}$ " sockets. 72 C 708. NET. 36¢

## Citizens Band Crystals

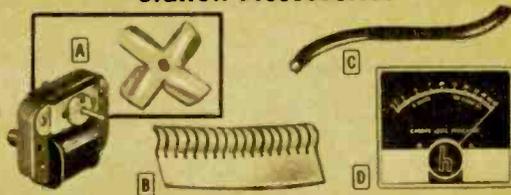
TYPE HC-6/U. For Class "D" Citizens Band use; match most equipment in use today. Hermetically sealed.  $\frac{3}{4} \times \frac{3}{4} \times \frac{1}{10}$ ". Pin spacing, .486"; pin dia., .050". Specify: Stock No. and frequency desired—Make and Model No.—receiving or transmitting circuit. Special Order only—allow two weeks for delivery. Av. shpg. wt., 3 oz.

CHOOSE FROM THESE FREQUENCIES:

26.965	27.015	27.065	27.115	27.175
26.975	27.025	27.075	27.125	27.185
26.985	27.035	27.085	27.135	27.205
27.005	27.045	27.095	27.145	27.215
27.015	27.055	27.105	27.155	27.225

Frequencies listed in megacycles.  
99 S 918. Specify frequency, make and use. NET. 1.99

## Station Accessories



A TUBE COOLING MOTOR AND FAN. Extends tube life by keeping envelope and seals cool. Permits more complete shielding of RF amplifiers, etc., without depending on convection cooling. Shaded-pole induction motor, 2400 rpm,  $2\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$ ". 4-blade fan, dia.,  $2\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Wt.,  $1\frac{1}{4}$  lbs. 72 P 715. NET. 2.99

B EIMAC CONTACT FINGER STOCK. Silver-plated alloy stripping. Makes excellent contact; prevents RF leakage through cabinet doors. Secured mechanically or by soldering. 12 oz. 42 P 086, 3' long;  $1\frac{1}{2}$ " wide. NET. 4.95  
42 P 087, 3' long;  $1\frac{1}{2}$ " wide. NET. 5.40  
42 P 088, 3' long;  $1\frac{1}{2}$ " wide. NET. 6.00

C AMPHENOL TYPE 214-076 TRANSMITTING TWIN-LINE. 300-ohm air-core tubular. 7/26 copper conductors. Rated 1 kw RF. Shpg. wt., 100 ft.,  $3\frac{1}{2}$  lbs. 100 ft. minimum. 49 TX 416, 100-ft. coil. NET. 6.23  
49 W 409, Over 100 ft. Per 100 ft. 6.23  
AMPHENOL 214-023 TRANSMITTING TWIN-LINE. 75 ohm. Handles up to 1 kw RF power. Propagation factor, 71%. Attenuation: 1.40 db per 100 ft. at 28 mc. Shpg. wt., 100 ft., 4 lbs. 49 W 495. NET PER FOOT. 7¢

D HALICRAFTERS "S" METER KIT. An easily installed "S" meter for panel mounting. For use with Hallicrafters S-40B, S-20R, S-40A, SX-62, S-77, S-77A, S-85, S-107, S-108, etc., as well as other receivers. Can be installed in any RF or IF stage with AVC action.  $3\frac{1}{4} \times 2\frac{1}{4}$ " meter has black dial with white markings. Two scales; has microvolt scale calibrated from 0-1000K; "S" unit scale is calibrated to 80 db over S9. Requires  $2\frac{1}{2}$ "-diameter round hole for meter barrel and four  $\frac{1}{4}$ " holes for mounting studs. Can be separately mounted in individual meter case (see index). Kit consists of a 5.0 milliampere meter, 500-ohm potentiometer for electrical zero-set, one 82-ohm  $\frac{1}{2}$ -watt 10% resistor, one 330-ohm  $\frac{1}{2}$ -watt 10% resistor, and instructions. Shpg. wt., 1 lb. 97 S 740. NET. 12.00

## Frequency Meters And Calibrators



BUD FCC-90B FREQUENCY CALIBRATOR. Consists of 100-kc crystal oscillator, trimmers, built-in power supply. Produces 100-kc signals across all amateur bands through 30 mc. An invaluable station accessory—marks band edges. Output lead attaches to antenna post of receiver. Size,  $5\frac{1}{2}$ " high, 3" wide,  $2\frac{1}{4}$ " deep. For operation from 105-125 volts, 50-60 cycle AC or DC. Shpg. wt., 2 lbs. 73 S 043. \$2.00 Down. NET. 20.07

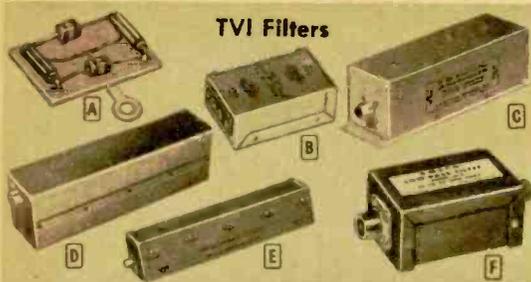
BUD GX-79 "GIMIX". A multi-purpose instrument requiring no batteries or power supply. Highly versatile, it can be used as a wave meter, a monitor, field strength indicator, carrier shift indicator, neutralizing instrument, etc. Calibrated for use on 10, 15, 20, 40, and 80 meter bands.  $6\frac{1}{4} \times 2\frac{1}{4}$ ". Shpg. wt., 1 lb. 77 S 737. NET. 9.29

TRIPLET 3256 FREQUENCY METER. Bandswitching type—covers 80, 40, 20, 15, and 10 meters. Checks fundamental frequency of oscillating circuits, parasitics, harmonics, neutralization, spurious RF, and AM modulation. Includes germanium crystal and DC milliammeter. Direct panel calibration. Has gray enamel finish. Case size:  $7\frac{1}{2}$ " high,  $2\frac{1}{2}$ " wide,  $2\frac{1}{4}$ " deep. Shpg. wt., 1 lb. 66 F 005. NET. 19.11

## RME DX COMPUTER

A handy Ham "DX" guide. Provides DX information about all officially-recognized countries. Includes all call letter prefixes; continent, zone, and country; great circle bearings for beam headings; international postage rates; addresses of all QSL Bureaus. Simply set "slide-rule" to call prefix and read information.  $13\frac{1}{2} \times 4\frac{3}{4}$ ". Wt., 4 oz. 77 S 682. NET. 98¢

## VHF GEAR—SELECTED AMATEUR ACCESSORIES



**A** AMECO HP-45 HIGH-PASS FILTER. Attenuates all signals below 45 mc. Reduces TV interference, 40 db attenuation at 14 mc and below; 20 db at 10 meters. 300-ohms.  $1\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ ". 3 oz. 77 S 673. NET. 95c

**B** NEW AMECO HPX-45 HIGH-PASS FILTER. Not illus. Deluxe, 2-section version of above. Cutoff frequency, 45 mc. Negligible insertion loss. 80 db attenuation at 14 mc and below; 40 db attenuation at 10 meters. For use with 300-ohm twin line.  $2\frac{1}{2} \times 2 \times 1\frac{1}{2}$ ". Wt., 5 oz. 77 S 686. NET. 2.25

**B** BUD HF-600 HIGH-PASS FILTER. High-pass filter for TV set. Rejects signals below 42 mc. Reduces interference from low-frequency sources. For 300-ohm line.  $3\frac{1}{2} \times 2\frac{1}{2} \times \frac{1}{2}$ ". 6 oz. 73 S 046. NET. 4.85

**C** DRAKE LOW-PASS FILTERS. For 52-ohm coax cable. 77 S 743. TV-1000-LP. Rated 1-kw RF. 2 lbs. NET. 14.95  
77 S 744. TV-100-LP. Rated 100 watts RF. 1 lb. NET. 5.95

**D** B & W 425 LOW-PASS FILTER. 52 ohms. 1 kw RF, 2 "M"-derived end sections; 4 constant-K center sections. 85 db attenuation on TV channels.  $11 \times 3 \times 2$ ".  $1\frac{1}{2}$  lbs. 77 S 613. NET. 17.10

MODEL 426. As above, but for 72-ohm lines. 77 S 614. NET. 17.10

**E** BUD LF-601A LOW-PASS FILTER. For 52 or 72-ohm lines. Handles 1 kw of RF. Cutoff: 42 mc. Minimum attenuation of 85 db, above 54 mc, 93 db above 70 mc.  $12 \times 2\frac{1}{2} \times \frac{1}{2}$ ". Wt.,  $2\frac{1}{2}$  lbs. 73 S 047. NET. 16.90

**F** AMECO LN-2 LOW-PASS FILTER. Handles up to 200 watts RF. For 52 to 72-ohm coaxial cable. Has 2—SO-239 connectors, bracket, etc. Aluminum case.  $4\frac{1}{2} \times 2\frac{1}{2} \times \frac{1}{2}$ ". Wt., 1 lb. 77 S 675. NET. 3.75

LN-1 LOW-PASS FILTER. As above, but has RCA-type phono jacks. 77 S 674. NET. 2.25

### B & W COMPONENTS AND ACCESSORIES

2Q4 AUDIO PHASE-SHIFT NETWORK. Splits signals from 300-3000 cps into two equal components 90° out of phase. Octal base. 1 lb. 99 S 122. NET. 4.65

FILAMENT CHOKES. For GG amplifiers.  
73 S 066. FC-30. 30 amps.  $2 \times 2\frac{1}{2} \times 5\frac{1}{2}$ ". Wt.,  $2\frac{1}{2}$  lbs. NET. 9.90  
73 S 067. FC-15. 15 amps.  $1\frac{1}{2} \times 1\frac{1}{2} \times 4\frac{1}{2}$ ". Wt.,  $1\frac{1}{2}$  lbs. NET. 7.50

## HAMMARLUND HC-10 Converter

- For SSB, AM, and CW Reception
- Sensitive Linear Detector
- Highly Efficient Slot Filter



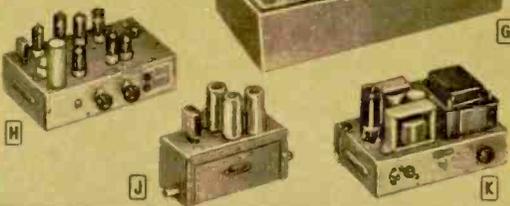
A complete, self-powered IF and audio system. Designed for use with any superheterodyne receiver having a 450-500-kc IF. Provides SSB, AM, and CW reception of outstanding quality. Extremely easy to install. Features razor-sharp slot filter adjustable  $\pm 5$ -kc over passband for better than 40 db attenuation of unwanted signal. Also incorporates linear product detector for CW and SSB; 3-speed AVC control; vernier-type passband tuning control  $\pm 3$ -kc for ease of SSB reception; etc. 7 selectivity positions. 9 tubes plus rectifier. Size:  $9\frac{1}{2} \times 9\frac{1}{2} \times 7\frac{1}{2}$ ". Less speaker. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 17 lbs. 94 SX 823. Only \$5.00 Down. NET. 149.00

## NATIONAL 6 & 2 Meter VFO

Deluxe, self-powered VFO designed for extreme stability, convenience and versatility. Use with transmitters having 8-mc oscillator circuits for complete coverage of 6 and 2 meters. Frequency stability better than 0.005% after warm-up. Can be used with 1 mc crystal as a crystal calibrator. Rugged modern gray case,  $5\frac{1}{2} \times 6\frac{1}{2} \times 5\frac{1}{2}$ ". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 6 lbs. 92 S 386. \$5.00 Down. NET. 69.95



## TECRAFT VHF Equipment



**M** TR-20/50 TRANSMITTER. 20-25 watt transmitter for the 6-meter band. Uses 8-mc crystals in Pierce oscillator—eliminates tricky overtone circuits. No frequency multiplication in final stage—reduces radiated harmonics. Has 6A U6 oscillator, 5763 buffer-doubler, 6360 amplifier, 12AX7 speech, 2—6AQ5 modulators. Requires 6.3 v. @ 3.89 amp and 250 v. DC @  $\frac{1}{4}$  amp. Matches 52 or 72-ohm coaxial lines.  $9\frac{1}{2} \times 5\frac{1}{2} \times 5\frac{1}{2}$ ". With crystals. Shpg. wt., 5 lbs. 83 S 856. \$5.00 Down. NET. 59.95

TR-20/144 TRANSMITTER. Same as above, but for 2 meters—has additional 5763 buffer-multiplier. 83 S 854. \$5.00 Down. NET. 59.95

**J** M-6 6-METER CONVERTER. The "Mini-Verter" for 6 meters. A natural for mobile use. Chassis is only  $2\frac{1}{2} \times 5 \times 2\frac{1}{4}$ ", excluding tubes and crystal. Uses wide-band circuit to achieve 1-mc. coverage of the 6-meter band. Tune broadcast receiver from 550 kc to 1550 kc to cover 50-51 mc. Crystal-controlled oscillator. Requires 6.3 v. @  $\frac{1}{4}$  amp and 100 v. DC @ 8 ma. Shpg. wt., 3 lbs. 83 S 852. \$2.00 Down. NET. 25.95

CC-50 DELUXE 6-METER CONVERTER. Not illustrated. 36 db gain sensitivity; 1/10 uv for 6 db SNR. Noise figure: 4 db. Has 4-mc passband. down 6 db at 6 mc. IF output frequency: 14-18 mc. crystal controlled. Requires 6.3 v. @ 2 amps and 150-250 v. DC @ 43 ma. 50-54 mc coverage. With tubes and crystal.  $9\frac{1}{2} \times 3 \times 4\frac{1}{2}$ ". Wt., 5 lbs. 83 S 858. \$2.00 Down. NET. 44.95

CC-144 2-METER CONVERTER. As above, but 2 meters. (144-148 mc). 83 S 857. \$2.00 Down. NET. 44.95

**G** CC-220  $1\frac{1}{2}$ -METER CONVERTER. Covers 220-225 mc. 30 db gain; 1/10 uv for 6 db SNR. Noise: 4 db. Passband: 4 mc, down 6 db at 6 mc. IF output: 14-18 mc. Requires 6.3 v. @ 2 amps and 150-250 v. DC at 43 ma. With tubes and crystal.  $9\frac{1}{2} \times 3 \times 4\frac{1}{2}$ ". 5 lbs. 77 S 738. \$2.00 Down. NET. 44.95

CC-108 108-MC DELUXE CONVERTER. Satellite-tracking converter for use with general-coverage receivers. IF output frequency: 14 mc. (Other specs same as CC-50). 83 S 859. \$2.00 Down. NET. 44.95

P-1 POWER SUPPLY. Not illus. For Tecraft converters above. Delivers 6.3 v. AC @ 3 amps and 200 v. DC @ 50 ma. Size,  $5\frac{1}{2} \times 9\frac{1}{2} \times 5\frac{1}{2}$ ". For 110-120 v., 50-60 cycle AC. Shpg. wt., 6 lbs. 83 S 853. \$2.00 Down. NET. 19.95

**K** PTR-2 POWER SUPPLY. For above transmitters, and the Tecraft converters. Delivers 6.3 volts @ 6 amps, 6.3 volts @ 4 amps, and 250 volts DC @  $\frac{1}{4}$  amp. Has send-receive switch.  $5\frac{1}{2} \times 9\frac{1}{2} \times 6\frac{1}{2}$ ". For 110-120 v., 60 cycle AC. Shpg. wt., 17 lbs. 83 S 855. \$2.00 Down. NET. 39.95

## 24-Hour Station Clocks

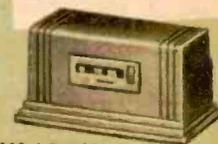
### MASTERCRAFTER'S WORLD CLOCK

Top-value in an economy-priced 24-hour wall clock that's ideal for use by amateurs and short wave listeners. South polar map projection of the world on inner dial indicates time anywhere in the world at a glance. Rugged, all-metal construction, chrome-plated case, 8" overall diameter. For 110-120 volts, 60 cycle AC. Shpg. wt.,  $1\frac{1}{2}$  lbs. Price includes F.E.T. 78 S 354. NET. 8.47

### 24-HOUR WORLD CLOCK



THE IDEAL GIFT FOR A HAM OR SHORT-WAVE LISTENER



100-J-24H/4

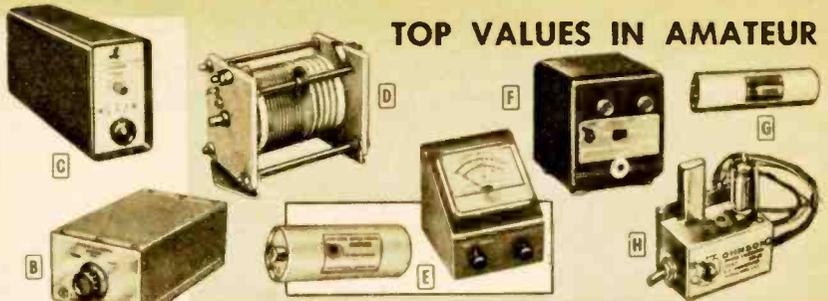
### PENNWOOD

#### DIRECT-READING CLOCK

MODEL 100-24H/4. Numeral type, 24-hour clock for Amateurs, commercial stations, etc. Shows time at a glance. Ebony plastic case.  $4 \times 7\frac{1}{2} \times 4\frac{1}{4}$ ". For 110-120 v., 60 cycle AC. Wt., 3 lbs. Price includes F.E.T. 78 B 340. NET. 14.85

MODEL 100-24V. As above, but in ivory case. 78 B 341. NET. Ind. F.E.T. 15.84

# NEW Johnson Equipment



# TOP VALUES IN AMATEUR

## JOHNSON Amateur Accessories

**A** MODEL 250-23-3 "MATCHBOX" ANTENNA COUPLER. For 80-10. Matches balanced antennas from 25 to 1250 ohms and unbalanced or single wire antennas from 25 to 3000 ohms. Features built-in directional coupler indicator. Continuously monitors either incident or reflected (SWR) transmission line power. Permits quick tuning for maximum input to antenna. Coax input, 52-ohm imp.; rated 275 watts. Transmit-receive relay. 13 lbs. 7x9<sup>1</sup>/<sub>4</sub>x10<sup>1</sup>/<sub>2</sub>".  
77 SX 770. \$5.00 Down. NET..... 86.50

MODEL 250-30-3. Similar, but for loads to 1 KW. Matches balanced antennas from 50-1500 ohms, unbalanced from 50-2000 ohms. 10<sup>1</sup>/<sub>4</sub>x17<sup>1</sup>/<sub>4</sub>x12<sup>1</sup>/<sub>4</sub>". Wt., 28 lbs.  
77 SX 771. \$5.00 Down. NET..... 149.50

MODEL 250-23. Same as 250-23-3, but less directional coupler and indicator. 7x9<sup>1</sup>/<sub>4</sub>x10<sup>1</sup>/<sub>2</sub>". Shpg. wt., 11 lbs.  
99 SX 026. \$5.00 Down. NET..... 54.95

MODEL 250-30. Same as Model 250-30-3, but less coupler and indicator. 27 lbs.  
99 SX 016. \$5.00 Down. NET..... 124.50

**B** MODEL 250-42-1 ATTENUATOR. 6 db T-pad. Max. dissipation, 45 watts (120 with 75-watt bulb); input, 60 watts. 350-ohm SO-239 sockets. 3<sup>1</sup>/<sub>4</sub>x4<sup>1</sup>/<sub>2</sub>x9<sup>1</sup>/<sub>4</sub>". 2 lbs.  
77 S 802. \$2.00 Down. NET..... 21.50

MODEL 250-42-3. Similar, but handles 70 watt input. 50-ohm impedance. 2 lbs.  
77 S 803. \$2.00 Down. NET..... 21.50

**C** VIKING 6N2 CONVERTER. Permit excellent 6 and 2 meter reception with any communications receiver. Crystal-controlled broadband type—simply tune receiver to cover 6 or 2-meter bands. \*Cover 50-52 and 144-146 mc; others provide full-band coverage. Uses 6ES8 dual-triode RF amplifier in a neutralized cascade circuit, for maximum sensitivity and low noise. Manual RF gain control plus mixer grid-leak self-regulating action, prevents overloading. Doubled-tuned interstage circuits provide maximum image and IF rejection. 5x2<sup>3</sup>/<sub>4</sub>x12". For 110-120 v., 50-60 cycle AC. 5 lbs.

MODELS IN KIT FORM			
Stock No.	Model No.	For Receivers Covering:	NET EACH
77 S 765	250-43-1	26 to 30 Mc.	59.95
77 S 766	250-43-2	28 to 30 Mc.	
77 S 767	250-43-3	14 to 18 Mc.	

MODELS IN WIRED FORM			
Stock No.	Model No.	For Receivers Covering:	NET EACH
77 S 717	250-43-12	26 to 30 Mc.	89.95
77 S 718	250-43-22	28 to 30 Mc.	
77 S 719	250-43-32	14 to 18 Mc.	

**D** ROTARY INDUCTORS. For multi-band tank circuits. 1<sup>1</sup>/<sub>2</sub> lbs.

No.	Type	Size	Max. r/h	NET EACH
60 H 372	229-201	4 <sup>3</sup> / <sub>8</sub> x 2 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> "	10	9.50
60 H 373	229-202	5 <sup>1</sup> / <sub>8</sub> x 2 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> "	18	10.50
60 H 374	229-203	7 <sup>1</sup> / <sub>8</sub> x 2 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> "	28	11.50

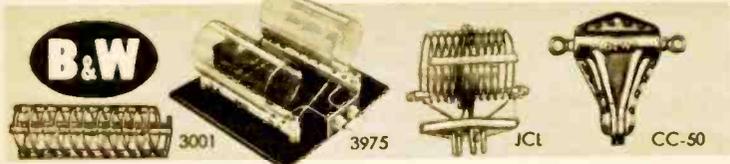
**E** MODEL 250-37 DIRECTIONAL COUPLER. Monitors SWR and relative power in 52-ohm lines. 1 kw, 1.7-150 mc. Use with multimeter, or indicator below. 2<sup>1</sup>/<sub>4</sub>x6<sup>1</sup>/<sub>4</sub>". Shpg. wt., 2 lbs.  
92 S 380. NET..... 11.75

250-38 INDICATOR. 4<sup>3</sup>/<sub>8</sub>x4x4<sup>1</sup>/<sub>2</sub>". 4 lbs.  
92 S 379. \$2.00 Down. NET..... 25.00

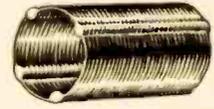
**F** MODEL 250-25 SIGNAL SENTRY. For monitoring phone or CW on all bands. Requires no tuning. Also useful as code practice oscillator. Plug provided fits phone jack of receiver; headphones plug into Signal Sentry. RF probe coupled loosely to transmitter provides signal. Mutes receiver; ideal for break-in CW. Requires 250 v. DC at 5 ma., 6.3 v. @ 0.6 amp. 3<sup>7</sup>/<sub>8</sub>x3<sup>3</sup>/<sub>8</sub>x3<sup>3</sup>/<sub>8</sub>". With cables, connectors. 3 lbs.  
99 S 017. \$2.00 Down. NET..... 22.00

**G** MODEL 250-20 LOW-PASS FILTER. TVI filter; 4 shielded sections. Handles 1 kw 100% modulated. 75 db attenuation of harmonic and spurious frequencies above 54 mc—insertion loss less than 1/4 db. 52 ohm coax connectors. 9x2<sup>3</sup>/<sub>4</sub>" dia. 3 lbs.  
98 S 055. NET..... 14.95

**H** MODEL 250-28 CRYSTAL CALIBRATOR 100-kc crystal standard. Produces 100-kc check points up to 55 mc. With tube, crystal, cable and extension leads. 3<sup>3</sup>/<sub>8</sub>x2<sup>1</sup>/<sub>2</sub>x1<sup>1</sup>/<sub>2</sub>". Requires 6.3 v. @ .15 amp and 150-300 v. DC. @ 2 ma. 1 lb.  
99 S 039. NET..... 17.95



## Illumitronic Coil Stock



## B & W Coils And Coil Stock

75 WATT JUNIOR COILS. Tune with 15-100 mmf. In fixed-end (JEL), fixed-center (JCL) or variable-center (JVL) link-types. Fit std. 5-prong sockets. 3<sup>1</sup>/<sub>4</sub>x1<sup>1</sup>/<sub>2</sub>". 5 oz.

Band	JEL	JCL	JVL	EACH
160	75 H 320	75 H 330	75 H 340	1.86
80	75 H 321	75 H 331	75 H 341	
40	75 H 322	75 H 332	75 H 342	
20	75 H 323	75 H 333	75 H 343	1.86
15	75 H 349	75 H 354	75 H 355	
10	75 H 324	75 H 334	75 H 344	
6	75 H 444	75 H 445	75 H 446	

25-WATT BABY PLUG-IN COILS. Only 1<sup>1</sup>/<sub>4</sub>x1<sup>1</sup>/<sub>2</sub>". MEL—end link. MCL—ctr. link. Tune with 50 mmf (except 100 mmf for 160M). Fit standard 5-prong sockets. Av. shpg. wt., 3 oz.

Band	MEL	MCL	EACH
160	75 H 300	75 H 310	1.47
80	75 H 301	75 H 311	
40	75 H 302	75 H 312	
20	75 H 303	75 H 313	1.47
15	75 H 357	75 H 356	
10	75 H 304	75 H 314	

CC-50 CONNECTOR. Weatherproof coaxial connector-insulator for doublet antennas. Internal solder connections. With sealing cement, all hardware. 1 lb.  
75 H 593. NET..... 5.85

MINIDUCTOR COIL STOCK—1/2" TO 1" DIA. Easily cut, air-wound coils. 1" dia. coils are 3" long, others, 2". 5 oz.

4 Turns Per Inch				8 Turns Per Inch			
Dia.	No.	Type	NET	No.	Type	NET	NET
1/2"	75 H 305	3001	45¢	75 H 306	3002	45¢	1.86
3/8"	75 H 309	3005	54¢	75 H 316	3006	54¢	
3/4"	75 H 319	3009	63¢	75 H 325	3010	63¢	
1"	75 H 328	3013	69¢	75 H 329	3014	69¢	
16 Turns Per Inch				32 Turns Per Inch			
1/2"	75 H 307	3003	45¢	75 H 308	3004	45¢	1.86
3/8"	75 H 317	3007	54¢	75 H 318	3008	54¢	
3/4"	75 H 326	3011	63¢	75 H 327	3012	63¢	
1"	75 H 335	3015	69¢	75 H 336	3016	69¢	

MINIDUCTOR COIL STOCK—2" & 2 1/2" DIA. All are 10" long. Easily cut to desired length. \*Turns per inch.

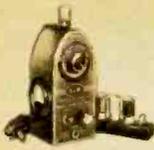
No.	Type	Dia.	Wire	*TPI	Oz.	EACH
75 H 406	3900	2"	#14	8	9	1.86
75 H 407	3905	1 2/4"	#12	6	13	1.95
75 H 408	3906	1 2/4"	#14	8	12	1.86
75 H 409	3907	1 2/4"	#16	10	8	1.86

TYPE 3975 BALUN COILS. Match 75-ohm unbalanced output to 75 or 300-ohm balanced transmission lines. Cover 80 through 10; no switching or tuning. Rated 250 watts input. Less base. 12 oz. Two required.  
75 H 594. NET EACH..... 3.15

High-quality air-wound coil stock. Offered in an excellent selection of diameters and wire sizes to cover a wide variety of circuit applications. Ideal for use in tuned circuits of transmitters, receivers, VFO's, converters, TV interference filters, and other types of RF equipment. Each coil comes in a convenient 10" length. May be tapped or easily cut to any length to provide the exact inductance required. All coils are constructed of finest quality tinned copper wire to assure easy soldering and highly efficient performance. Turns are supported by polystyrene strips which provide strength and rigidity—excellent physical stability for critical frequency determining circuits. \*indicates turns per inch.

No.	Type	Dia.	*TPI	Wire	Oz.	EACH
72 H 312	1006T	1 1/4"	6	14	5	1.65
72 H 313	1008T	1 1/4"	8	16	5	1.65
72 H 314	1010T	1 1/4"	10	18	5	1.65
72 H 315	1206T	1 1/2"	6	14	5	1.80
72 H 316	1208T	1 1/2"	8	16	5	1.80
72 H 317	1210T	1 1/2"	10	18	5	1.80
72 H 318	1406T	1 3/4"	6	14	5	1.90
72 H 319	1408T	1 3/4"	8	14	5	1.90
72 H 326	1410T	1 3/4"	10	10	5	1.90
72 H 327	1606T	2"	6	14	9	1.95
72 H 328	1608T	2"	8	14	9	1.95
72 H 329	1610T	2"	10	16	9	1.95
72 H 330	2006T	2 1/4"	6	12	13	2.25
72 H 331	2008T	2 1/4"	8	14	13	2.25
72 H 332	2010T	2 1/4"	10	16	13	2.25
72 H 333	2406T	3"	6	12	17	3.40
72 H 334	2408T	3"	8	14	17	3.40
72 H 337	2410T	3"	10	14	17	3.40

# EQUIPMENT AND ACCESSORIES



600 Grid-Dip Meter



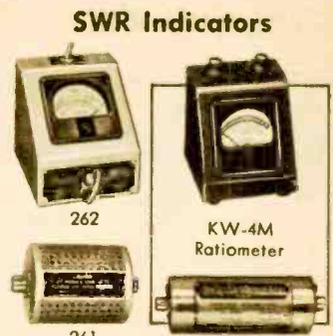
CM-15C Microphone



90672 Antenna Bridge



Z-Match Antenna Coupler



## SWR Indicators

## B & W, Bell, Millen, Harvey-Wells Ham Gear

**B & W MODEL 600 GRID DIP METER.** A valuable instrument in any Ham shack or laboratory. Covers 1.75 to 260 mc in 5 overlapping ranges. Sturdy plug-in coils are color-coded. Has sensitive 500 microampere meter with adjustable control. Useful as an RF signal monitor, auxiliary signal generator and absorption wave meter. Wedge shape permits access to hard-to-get-at places. Circuit consists of a highly sensitive oscillator using a type 955 acorn tube. With the B+ disabling switch in the "off" position, the Model 600 becomes a diode detector for use as a monitor for audible observation of RF signals with respect to hum level, audio quality and other elements concerning the audio characteristics of a radiated signal. Has rust-proofed steel chassis and a sturdy aluminum case. Gray finish. Size, 7x3x3". For 110-120 v., 50-60 cycle AC. 3 lbs.

84 S 487. \$2.00 Down. NET..... 45.72

**BELL MODEL CM-15C MICROPHONE.** Deluxe, hand-held carbon mike. 200-4000 cps. Single-button carbon with 85-ohm resistance. DPST push-to-talk switch for mike circuit and external relay. Black plastic case and 4-ft. cord. With mtg. bracket. Shpg. wt., 1 1/2 lbs.

94 S 898. NET..... 7.79

**MODEL CM-1CC. WITH RETRACTABLE CORD.** Same as above, but with 5-ft. coiled cord.

94 S 899. NET..... 9.75

**MILLEN MODEL 90672 ANTENNA BRIDGE.** Accurate, sensitive. Measures 5 to 500-ohm unbalanced impedances, and 20 to 2000-ohm balanced impedances with coils below. Use with RF inputs to 150 mc. Differential capacitor provides high accuracy. 3 1/4 x 3 1/4 x 5 1/2". Shpg. wt., 2 1/2 lbs.

83 S 834. \$2.00 Down. NET..... 45.00

**BALUNS.** For coupling antenna bridge to balanced impedance, or for coupling transmitter with unbalanced output to balanced line. 4:1 ± 5%. 80-meter coil rated 150 w. CW, others 420 w. CW (300-ohm line). 3 1/4 x 2" max. dia. Av. shpg. wt., 1/2 lb.

No.	Type	Band	EACH
83 S 695	46672-10	10-11 M	7.50
83 S 696	46672-15	15 M	
83 S 697	46672-20	20 M	
83 S 698	46672-40	40 M	
83 S 699	46672-80	80-75 M	

**HARVEY-WELLS ANTENNA COUPLER.** A highly versatile, efficient antenna coupling and measuring device—combines an antenna matching network, 50-ohm dummy load and a meter to measure forward and reflected power. Covers 3.5 to 30 mc. Designed to match a 50-ohm input to reactive or non-reactive loads, 10 to 2500 ohms. 500-watt maximum transmitter input. 6 1/4 x 12 1/4 x 1 1/2". Shpg. wt., 16 1/2 lbs.

99 SU 050. Only \$5.00 Down. NET. 89.00

**M. C. JONES MODEL 261 "MICROMATCH" ANTENNA COUPLER.** For use with Model 262 indicator for measuring RF power and VSWR. Rated for 1 kw at 1:1 VSWR. 52-ohm, coaxial UHF type connectors. Range: 0.5-225 mc. Less than 0.1 db power loss. 3x 4 3/4". Shpg. wt., 1 lb.

99 S 117. \$2.00 Down. NET..... 22.50

**MODEL 262 INDICATOR.** Measures VSWR and relative power, forward or reflected; 0-10-100-1000 watts. 4 1/4 x 4 1/4 x 4 3/8". 2 lbs.

99 S 118. NET..... 14.50

**MODEL 263 COUPLER-INDICATOR.** Coupler with N type connectors plus indicator exactly calibrated in watts. Has 3 scales, 0-100-1000 watts. Reads VSWR, and incident or reflected power. Same specs. as Model 261. 3x3x5". Wt., 3 lbs.

77 S 713. \$5.00 Down. NET.... 85.00

**UNIVERSAL SERVICE MODEL KW-4M 52-OHM COAX RATIOMETER.** New SWR indicator that shows you SWR at all times. Can be permanently installed in line to any coax antenna or antenna tuner. Frequency range: 2 to 200 mc. Power range: 10 to 1000 watts. Shpg. wt., 5 lbs.

94 S 885. \$2.00 Down. NET..... 45.00

94 S 886. As above, but 72-ohm. NET. 45.00

## Phone Patches



Raypar Model TE-1



Drake Model 584-A

**RAYPAR MODEL TE-1.** Permits easy phone patching with all popular equipment—includes balanced hybrid system for automatic control of VOX system. Built-in mike connectors allow press-to-talk operation with transmitters having this feature. Size, 2 1/2 x 6 1/4 x 4 1/4". Shpg. wt., 3 1/2 lbs.

77 S 755. \$2.00 Down. NET..... 32.50

**MODEL TE-1A.** Similar to unit above but for use with transmitters not equipped for press-to-talk operation.

77 S 756. \$2.00 Down. NET..... 32.50

**DRAKE MODEL 584-A.** Hybrid phone patch for use with voice-operated transmit-receive system. Allows nulling receiver output more than 20 db below telephone at transmitter input. Takes crystal mike, 4-ohm rec. input, high-imped. transmitter output. With phone plug and mike connector. 4 3/8 x 5 1/2". Shpg. wt., 4 lbs.

77 S 652. \$2.00 Down. NET..... 34.95

**MODEL 584-C.** As above, but for Collins KWS-1, 75A-4, KWM-1, 32S-1, 75S-1.

77 S 653. \$2.00 Down. NET..... 34.95

## T-R Switches



B & W Model 381

Johnson T-R Switch



Dow-Key DKC-TR

**B & W MODEL 381.** Provides automatic switching of antenna from receiver to transmitter. Handles full legal power limit on AM-CW-SSB and DSB, 80 through 10 meters. Special band switching circuitry provides high selectivity and signal-to-noise ratio for clean-cut easily read signals. Presents no signal loss—substantial gain is realized throughout usable range. "Fail-safe" device protects transmitter if switch fails or is set on wrong band. Matches 52-75 ohm coaxial lines. 4 1/4 x 4 x 5 1/4". For 110-120 v., 50-60 cycle AC. Shpg. wt., 5 lbs.

77 S 714. \$5.00 Down. NET..... 60.00

**JOHNSON MODEL 250-39.** Switches antenna from receiver to transmitter. Rated at 4000 watts peak power. Broadband circuit requires no tuning. Coax fittings. 4 1/4 x 4 1/4 x 5 1/4". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 5 lbs.

94 S 858. \$2.00 Down. NET..... 27.75

**DOW-KEY ANTENNA SWITCHES.** For fixed station or mobile use. 6 or 12 volt operation. Rated at 1 KW. Require 125-150 v. DC at 5 ma. Av. shpg. wt., 10 oz.

77 S 760 DKC-TRM-1. 1.5-60 mc. NET 12.50

77 S 749. DKC-TR2-A. 144-148 mc. NET 12.50

## B & W Coax Switches

**550-A COAXIAL SWITCH.** For instant selection of any one of 5 transmitters, antennas, exciters, receivers or other RF device using 52 or 72-ohm lines. Handles up to 1 kw of modulated power. Maximum cross-talk at 30 mc is -45 db. Shpg. wt., 2 lbs.

97 S 608. NET..... 8.25

**551-A COAXIAL SWITCH.** Similar to above but has 2 positions. Wt., 2 lbs.

97 S 591. NET..... 7.95



## Dow-Key Preamp

**MODEL DKC-RFB.** Broadband preamp for less sensitive receivers. Increases gain 6 to 36 db from 1.5-30 mc. Requires 125-175 v. DC at 7 ma and 6.3 v. at 0.3 amperes. Size, 1 1/4 x 2". Shpg. wt., 8 oz.

77 S 703. NET..... 10.75

**DOW-KEY COAX FITTINGS** DKF-2 is double male. DKC-P is panel mount female. Av. shpg. wt., 4 oz.

77 S 758. DKF-2. NET..... 1.45

77 S 759. DKC-P. NET..... 70c



If You Are a Licensed Ham, Please Include Call Letters on Your Order

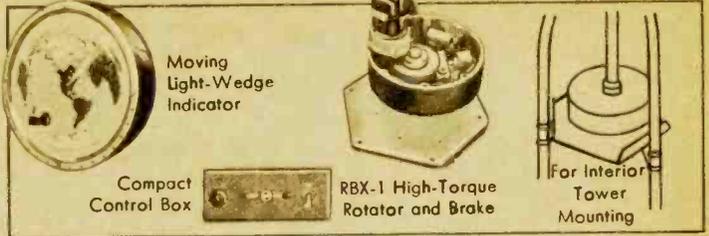
# ROTATORS, ANTENNAS, AND TOWERS

## CDR HAM-M Rotator



- Controls Large Antennas
- Load Rating Over 1000 Lbs.

Heavy-duty rotator system for control of large antennas in high winds. Features rugged brake and motor with stainless steel gears and 98 ball bearings. Has end-of-rotation power cut-off. Vertical load rating over 1000 lbs.—heavy plates distribute stresses. Indicator can be read without starting motor. Meter calibrated with compass points, and in 3° increments. Provides 365 inch-lbs. rotating torque; 3500 inch-lbs. braking. Accommodates 3/4 to 2" O.D. masts. Less cable (below). For 115 v., 60 cycle AC. 23 lbs. 92 SX 357. \$5.00 Down. NET ..... 117.11  
47 T 330. 100-Ft. Coil Belden 8448 8-Conductor Cable. For above. 4 1/2 lbs. NET ..... 6.27



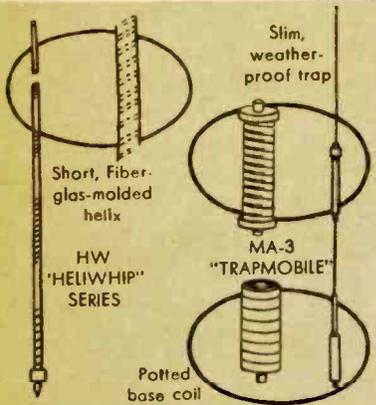
## Hy-Gain Rotator-Indicator System

RBX-1 "ROTO-BRAKE". Rugged, heavy-duty, precision-made rotator-brake. Twin motor unit with stainless steel gears develops 780 inch-lbs. torque—brake provides 10,000 inch-lbs. braking torque—sufficient to withstand forces of high velocity winds on large arrays. Rated to 1000 lbs. downthrust. Mounts in towers with 10-18" between uprights. Height: 9". Less cable (right). For 115-120 v., 50-60 cycle AC. Side-mounting kits available—write for prices. Shpg. wt., 35 lbs. "Roto-Brake" is shipped by express or truck only. 83 SU 691. \$5.00 Down. NET. 119.95

CONTROL SYSTEM. Consists of a translucent great-circle world map indicator and control box. Countries are outlined and marked with their respective call letters. Selsya-controlled wedge of light rotates with beam. Use only with RBX-1. With wall mounting bracket, 3 1/2"x18" dia. Wt., 3 lbs. Express or truck. 83 SU 692. \$5.00 Down. NET. 60.00  
83 SU 693. For E. Coast. NET 60.00  
83 SU 694. For W. Coast. NET 60.00  
49 W 474. 9-Cond. Cable. For above. 4 lbs. per 100'. NET PER FT. .... 9c

## Mark "Heliwhip" and Mosley "Trapmobile" Antennas

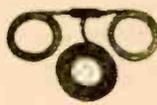
## Amphenol Folded Dipoles



MARK HW "HELIIWHIP" SERIES. Fiberglass-molded, continuously loaded miniature whips. Resemble standard auto antennas. Employ variable pitch spiral conductor winding along a Fiberglass rod. For mtg. on fender, trunk lid, etc. \*Band-width for 2:1 VSWR. †Not illus. Fit standard mounts or HWM-1 flat surface mount (below).

Stock No.	Type	Band	*Kc	Ft.	Lbs.	EACH
92 SX 322	HW-10	10 M	1000	4	1/4	9.95
92 SX 323	HW-15	15 M	500	4	1/4	9.95
92 CX 324	HW-20	20 M	250	6	1	10.95
92 CX 325	HW-40	40 M	100	6	1	10.95
92 CX 326	HW-80	80 M	60	6	1	10.95
92 CX 333	†HW-3	10-15-20M	6	3	1	19.50
92 S 327	HWM-1	Molded base mount	1/2	1/2	7.50	

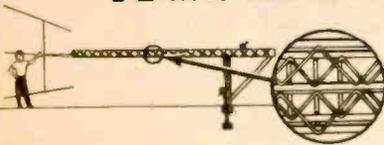
MOSLEY MA-3 "TRAPMOBILE". 3-band whip—no switching or retuning to change bands. Top radiation efficiency and low SWR over full width of each band. Base coil and center trap cover 10, 15 and 20 meters. Use with standard base loading coils for 40 and 80. Stainless steel whip section. Fits std. mounts. 92 1/2". 6 lbs. 92 CX 332. \$2.00 Down. NET ..... 19.95



Folded-dipole antennas cut for most popular Amateur bands. Have excellent broadband characteristics. Antenna sections use high-strength 300-ohm twin-line with copper-clad steel conductors. May be cut for short-wave, FM or other bands. (Use 20-meter dipole for cutting to 15-meter length. 40-meter dipole for the 9 or 12-mc SW band.) Supplied complete with T-bolt assembly and 75 feet of 300-ohm twin-lead transmission line

No.	Type	Band	Feet	Lbs.	EACH
98 S 318	139-010	10	18	2	5.23
98 SX 319	139-020	20	35	3	5.88
98 SX 320	139-040	40	70	4	7.64
98 SX 321	139-080	80	135	5	11.02

## E-Z WAY Tiltover Antenna Tower



These towers go way up to snag DX, but can easily be cranked down for work on the antenna. Makes antenna installations safe and convenient. When used with Ground Post mounting kit (below), tower mounts in a 5-ft. hole—does not require a concrete base or external guying for its support. Used with Building Attached kit (below), tower is anchored to side of an adjoining structure for support. Specially designed construction, using heavy-wall structural steel tubing, solid steel rod and continuous diagonal bracing, withstands winds of extremely high velocity. Will easily support a full-sized beam in winds of 60-mph or higher—when cranked down, winds of 125-mph can be

withstood. Thrust bearing relieves rotor of all weight. Hot-dipped galvanized surfaces, except "dip-painted" surface. Accepts CDR Ham-M rotor head. Other rotor heads available on special order. Specify rotor to be used when ordering. Express or truck F.O.B. Tampa, Fla., or Chicago, Ill., whichever is nearer. Send full remittance on cash orders—no C.O.D. Available on our Easy Pay Plan.

Stock No.	Model No.	Description	Ft.	Lbs.	NET EACH
77 CZ 860	RBS-40P*	Std. duty 2 sec.	41	235	155.00
77 CZ 861	RBS-40G	Std. duty 2 sec.	41	235	195.00
77 CZ 862	RBS-50G	Std. duty 2 sec.	51	290	260.00
77 CZ 863	RBX-60-3G	Heavy duty 3 sec.	60	430	375.00

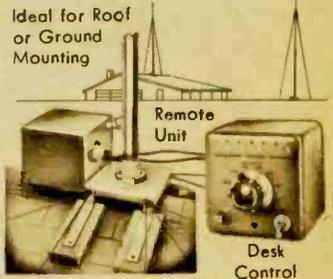
## E-Z WAY GROUND POST AND SIDE MOUNTING KITS

Stock No.	Model No.	Use With	Wt.-Lbs.	NET EACH
77 CZ 864	BAK-S40	RBS-40P or G	10	10.50
77 CZ 865	GPK-S40	RBS-40P or G	150	70.00
77 CZ 866	GPK-S50	RBS-50G	195	87.50
77 CZ 867	GPK-X60-3	RBX-60-3G	245	110.00

Ground Post kits (GPK types) contain all necessary equipment for mounting towers in the ground, without concrete base or guying. Building Attached kit (BAK-S40) is for mounting tower alongside a building.

## Johnson "Matchstick"

### Bandswitching Vertical



High-efficiency, vertical antenna for 80-75, 40, 20, 15 and 10 meters. Features motor-driven, remote-controlled switch for matching antenna length to band selected. Pre-adjusted at factory. Low SWR on all bands—less than 2:1. Impedance is 52 ohms. For transmitter inputs up to 1 kw. With base, base insulator, matching unit, control box and Dacron guy line. Less control cable and radials. Control box size, 3 1/2"x3 1/2"x3 1/2". For 110-120 volts, 60 cycle AC. Shpg. wt., 47 lbs. Express or truck only. 92 CZ 234. \$5.00 Down. NET ..... 129.50

CONTROL CABLE FOR "MATCHSTICK" Belden #8742. Shpg. wt., 3 1/2 lbs. per 100'. 48 W 892. PER FT. 5c PER 100 FT. .... 3.82

# AMATEUR BEAMS AND VERTICAL ANTENNAS

## HY-GAIN TRI-BAND BEAMS

Cover 10, 15 and 20 meters—employ aluminum-alloy elements, galvanized steel booms and compact, sealed traps. Match 52-ohm line. Full-size "Trap-Tribanders" (group 152TG) feature a special triaxial gamma-match system for 1:1 SWR, with low SWR over each band. \*8.3 db gain, 15-25 F/B; †5.8 db gain, 12-20 db F/B. "Mini-Tribanders" (group 152MT) present better than 2:1 SWR and have superior gain and F/B's. L is boom length. R turn. rad. 1-kw types take 2 kw P.E.P. Express or truck only.

Stock No.	Type	Elements	Watts	L	R	Lbs.	NET
92 CZ 492-2	152TG-3†	3	1000	18'	18'3 1/2"	63	99.75
92 CZ 491-2	152TG-2†	2	1000	7'	15'	43	69.50
92 CZ 498-2	152MT-3	3	1000	12'	14'4"	57	69.95
92 CZ 499-2	152MT-2	2	1000	6'	13'4"	34	49.95

## HY-GAIN MULTI-BAND AND GROUND PLANE VERTICALS

**MULTI-BAND VERTICALS.** Pre-tuned verticals for operating on up to 5 bands without switching. Weatherproof traps, adjustable for phone or CW operation, isolate various sections of the vertical—develop quarter-wave resonance on all bands antenna is designed to serve. Match 52-ohm transmission lines, providing less than 2:1 SWR. Will handle up to 1 kw AM or CW; 2 kw P.E.P. Includes base insulator and mast mount. \*With "capacity hat." †Side-mounting "AD-ON" kit for working 6 meter band with any Hy-Gain vertical antenna.

Stock No.	Type	Bands (Meters)	Height	Shpg. Wt.	NET EACH
77 CZ 877	18-HT	10, 15, 20, 40, 80	50 ft.	125 lbs.	129.50
92 CX 488	14-AV*	10, 15, 20, 40	21 ft.	12 lbs.	27.95
92 CX 486	12-AV	10, 15, 20	12 ft.	9 lbs.	19.95
92 SX 517	6-MK1	6 (AD-ON kit)	5 ft.	2 lbs.	4.95

**GROUND PLANE VERTICALS.** High quality, variable tuned, ground plane antennas. Three models (see below) cover all Amateur, commercial and citizens band frequencies from 25 through 500 mc. Each model can be peaked for a specific frequency in its range—then by adding decoupling stub "Add-On" kit, as many as 4 other frequencies within antenna's own range, or a higher range, can be used. Has 50-ohm impedance. \*Add-On stub kit. Fit masts up to 1 1/4" O.D.

Stock No.	Model	Frequency Range	Height	Shpg. Wt.	NET
77 CZ 878	GP-1	25-50 mc	9 ft.	11 lbs.	29.95
77 SX 879	GP-2	50-88 mc	4 1/2 ft.	6 lbs.	16.95
77 SX 880	GP-3	108-500 mc	1 1/2 ft.	5 lbs.	12.95
77 S 881	2AK*	50-88 mc	.....	2 1/2 lbs.	7.50
77 S 882	3AK*	108-500 mc	.....	1 1/2 lbs.	4.50

## HY-GAIN SINGLE-BAND BEAM ANTENNAS

Those for 20 through 6 meters feature triaxial Gamma-match and reactance-cancelling capacitor for 1:1 SWR. Match 52-ohm coaxial line. 2-meter type matches 52 to 450-ohm line. 10, 15 and 20-meter beams have hot-dipped, galvanized steel booms. L is boom length. R is turning radius. Antennas with "Z" in Stock No. are shipped by express or truck only.

Stock No.	Type	Band	Elements	Db Gain	F/B Ratio	R	L	Wt.	NET
92 CZ 484	203G	20M	3	8.5	24	19'2 1/2"	17' 8"	50 lbs.	59.95
92 CZ 483	153G	15M	3	8.5	24	13'6"	11'10"	32 lbs.	34.95
92 CZ 482	103G	10M	3	8.5	24	11'	8' 8"	21 lbs.	24.95
92 CX 481	65G	6M	5	10.5	26	7'1"	8' 8"	10 lbs.	15.95
92 CX 480	210	2M	10	12	30	5'5"	9' 4"	7 lbs.	12.95

92 CX 493. Stacking Bars. For 2—210 beams. Shpg. wt., 2 lbs. NET. 3.95

## TRELEX BEAM ANTENNAS

**TBS-416 "CHALLENGER" "TRI-BAND" ARRAY.** New, 3-in-1 beam antenna covers 10, 15 and 20 meter bands with a single array. Uses single 50-ohm transmission line—provides better than 1:1:1 VSWR on all bands covered. Handles over 1 kw power input. Provides gain of 8.3 db on 10 meters, 8.4 db on 15 meters and 8.0 db on 20 meters. F/B ratio: 28 db on 10 meters, 26 db on 15 and 28 db on 20. Rugged 2" O.D. boom is 16 ft. long—antenna has turning radius of 17 ft. Has heavy-duty cadmium-plated steel gusset plate mounting and boom coupler. Supplied complete with all necessary mounting hardware. Less coaxial transmission line. Shpg. wt., 67 lbs.

99 CU 959. NET ..... 159.50

## MOSLEY ANTENNAS

**TA-33.** High-gain, broadbanded, 3-element beam—provides top performance on 10, 15 and 20 meters. Up to 8 db gain with 25 db, or better, F/B. Streamlined, weatherproof traps easily take 1 kw. 14' aluminum boom has full 1/2" wall thickness. Matches 52-ohm line, less than 1:1:1 SWR at resonance. Fits masts up to 1 1/2". Turning radius, 15 1/2 ft. Wt., 53 lbs. Express or truck only.

92 CZ 360. \$5.00 Down. NET ..... 97.75

92 CZ 478. TA-33 "Jr." 3-el. 300-watt beam. Up to 8 db gain, 25 db F/B. 12' boom. 14 1/4" t.r. Express or truck. 28 lbs. NET ..... 68.11

V-4-6. Cover 10 to 40 meters with this verti-

**SINGLE-BAND BEAMS.** All-aluminum beams for 10, 6 and 2 meters—designed to withstand high winds and icing. Precision-tuned. Employ coaxial half-wave baluns to match 52-ohm line. First numeral in type number indicates frequency band, second numeral, number of elements. F/B ratio and gain are given in db. L indicates boom length in feet. R is turning radius in feet. Shipped express or truck only.

No.	Type	F/B	Gain	L	R	Lbs.	NET
92 CZ 272	20M-316	28	8.7	18'	19' 43"	130.00	
91 CZ 994	10M-309	26	8.5	9'	8' 14"	39.50	
92 CZ 250	6M-310	26	8.8	6'	6' 7"	16.25	
77 CZ 890	6M-624B	24	15	24'	12 1/2' 25'	39.95	
92 CZ 219	2M-3C	18	9.4	2 3/4'	2 1/4'	5.95	
92 CZ 273	2M-6C	22	12.7	8 1/2'	5 1/2'	12.50	

cal—no bandswitching. Low SWR with flat response. Employs weatherproof traps and base-loading coil. Rated 1 kw. Aluminum tubing telescopes to 20 ft. With mtg. plate, hardware, nylon guy rope. 12 lbs.

92 CZ 363. \$2.00 Down. NET ..... 27.39

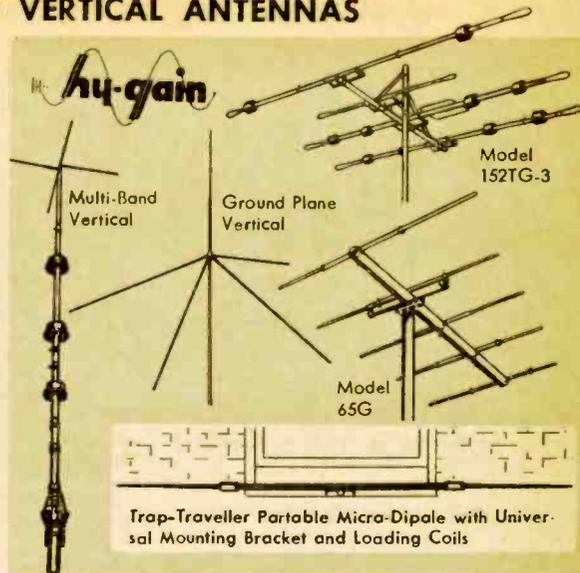
76 S 073. D-48C. 80-75 meter base loading coil for above. 3 lbs. NET ..... 14.65

V-3. 3 band vertical antenna provides automatic bandswitching on 10, 15 and 20 meters. Rated 1 kw. Weatherproof traps. 11 1/2" high. With guy ropes, mtg. base. 8 lbs.

77 CZ 891. \$2.00 Down. NET ..... 22.49

V-3-JR. As above, but 300 watts. 6 lbs.

92 CZ 473. NET ..... 17.59



## HY-GAIN TRAP-TRAVELLER "MICRO-DIPOLE" ANTENNA

**MODEL TDK.** Portable dipole for 10, 15 and 20. 3-ft. long for easy carrying—16-ft. extended. Use with UB bracket. 52 ohms. Less 2 T-3 loading coils (below). Shpg. wt., 5 lbs.

77 SX 883. NET ..... 9.95

77 S 884. Model UB Universal Mounting Bracket. 4 lbs. NET ..... 9.75

77 S 885. Model T-3 3-Band Coil. 3 lbs. NET ..... 14.95

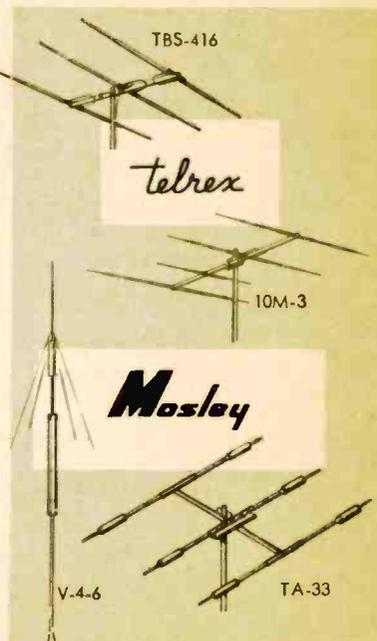
77 SX 886. Model TBW Mobile Whip with Telescoping Coil. Center loaded mobile whip and base. Requires 1—T-3 loading coil. above. Shpg. wt., 5 lbs. NET ..... 15.00

## HY-GAIN MULTI-BAND DOUBLET ANTENNA

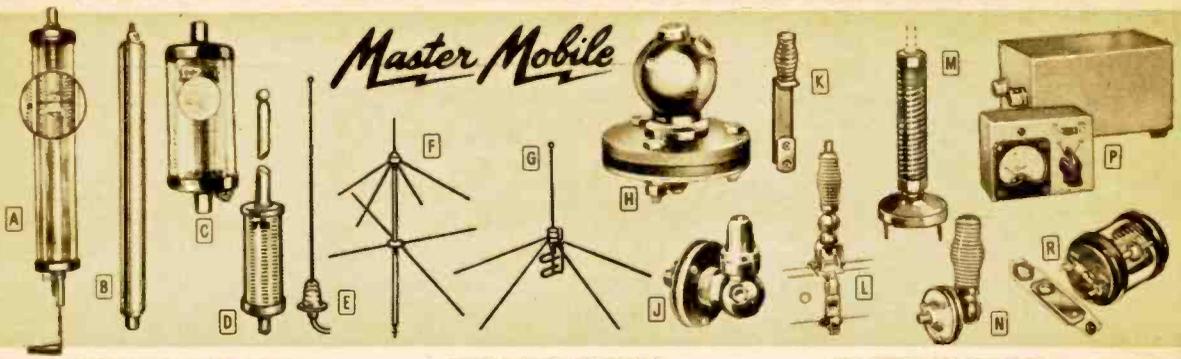
New multi-band doublet antennas. Unique construction uses copper-clad steel wire covered by 1/4" dia. polyethylene extrusion. Molded plastic end and center insulators. Uses stub decoupling to perform multi-banding. SWR less than 2:1. Less RG8/U coaxial line.



Stock No.	Model	Bands	Ft.	Lbs.	NET
77 SX 887	6BD	6-80	120	7	37.50
77 SX 888	5BD	6-40	60	5	24.50
77 SX 889	4BD	6-20	30	4	19.95



# MOBILE-VHF-CITIZENS BAND ANTENNAS AND ACCESSORIES



## ANTENNA LOADING COILS

**A** 666 "ALL BANDER". Continuously variable loading coil. Covers 10 to 75 meters. Silver-plated roller with stay-cut contact assures precise tuning. Selects any pair of adjacent turns.  $2\frac{1}{2} \times 1\frac{3}{4}$ ". Shpg. wt., 1 1/2 lbs. 97 S 167. NET **14.65**

**750 "DELUXE ALL BANDER"**. Similar to above, but has eccentric cam contact. Selects any spot on any turn. Automatic lock prevents damage to coil. Shpg. wt., 2 1/2 lbs. 92 S 516. NET **14.65**

**B** B-1080 "SLIM-JIM". All-band base-loading coil. Covers 10 through 80 meters, continuously. Use with 96" whip—slide in or out of coil to loading point and lock in place.  $1\frac{1}{2} \times 1\frac{1}{2}$ "  $\frac{1}{2}$ " dia. stud.  $4\frac{1}{2}$  lbs. 83 SX 590. NET **17.59**

**C** 900 "ARISTOCRAT". Loading coil tapped for 10, 15, 20, 40 and 75 meters. Plug at base connects antenna to desired tap. Use with 88-60 whip (below) or similar units.  $3\frac{1}{2}$ " dia. Shpg. wt., 1 1/2 lbs. 83 S 588. NET **14.65**

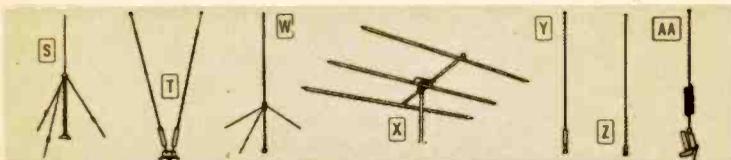
**D** "ULTRA-HI-Q" COILS. Newly developed loading coils for top single-band performance. Feature a "Q" of well over 515! Use with 88-60 whip (below) or similar units. Shpg. wt., 1 lb.

Stock No.	Band	Size	NET EACH
92 S 352	80	$2\frac{1}{2} \times 8"$	5.14
92 S 353	40	$2\frac{1}{2} \times 5"$	
92 S 354	20	$2\frac{1}{2} \times 3"$	

## MODEL 88-60 2-SECTION WHIP

**MODEL 88-60 WHIP.** (Not illustrated). An extremely popular, highly versatile antenna. Supplied in two sections (36" and 60"). Designed to come apart for insertion of coils. Serves as a 10 meter whip when used without coils.  $\frac{1}{4}$ " dia. mounting stud. Less mount. Shpg. wt., 6 lbs. 98 SX 359. NET **9.70**

## Citizens Band Fixed And Mobile Antennas



### FOR FIXED INSTALLATION

**S** 91 CZ 479. Master Mobile GP-27-11. Ground plane antenna for 27 mc band. Whip and support are aluminum; radials, copper. VSWR under 1.5:1 at resonance. With mtg. hdwr., 50-ft. RG58/U. 14 lbs. NET **34.50**

**T** 77 SX 856. Hy-Gain CD. Rabbit ears for 27 mc band. Extended, 45" telescoped, 15". Suction cup base. With 6-ft. RG58/U coax and connector. 2 lbs. NET **12.95**

**W** 77 CZ 857. Hy-Gain CGP. Ground plane kit for 27 mc.  $\frac{1}{4}$ " to  $\frac{1}{2}$ " O.D. telescoping aluminum radiator. With 3-ft.,  $1\frac{1}{2}$ " O.D. mast, hdwr. and roof mount. Less line. 10 lbs. NET **16.95**

**X** 77 CZ 858. Hy-Gain 113-G. 3-element citizens band beam. 27 mc. 8.5 db gain. Aluminum elements;  $1\frac{1}{2}$ " O.D. 8-ft. steel boom. 52 ohms. Wt., 25 lbs. NET **29.95**

77 S 855. Hy-Gain CC-25 Kit. 25-ft. RG58/U coax. PL259 connectors.  $\frac{3}{4}$  lb. NET **4.95**  
77 S 859. Hy-Gain CC-60 Kit. As above, but 50-ft.  $1\frac{1}{2}$  lbs. NET **6.95**

## SINGLE-SECTION WHIPS

(Not illustrated). High-quality—moderately priced. \*Indicates stainless steel. †Cadmium plated. ‡Shipped express or truck only.  $\frac{1}{4}$ " diameter. Less mounts.

Stock No.	Mfr's Type	Length	Lbs.	NET EACH
97 CU 155	100-96S*	96"	2	5.14
97 SX 166	100-60S*	60"	2	4.85
98 CU 302	9-96T†‡	96"	3	3.67

## VHF MOBILE ANTENNAS

**E** 113 VHF ANTENNA. For 140-165 mc.  $\frac{3}{8}$ " hole. 10' coax cable. Wt., 1 lb. 97 SX 148. NET **3.88**

**92 SX 355, 613 VHF ANTENNA.** As above, but with locking antenna base connector. NET **4.85**

**114 COAXIAL ANTENNA.** For 140-165 mc. Provides an extremely low radiation angle from a closed or open vehicle, or a fixed location. Supplied with 10' coax cable.  $\frac{1}{4}$ " dia. stud. Shpg. wt., 5 lbs. 97 SX 149. NET **9.75**

## VHF GROUND-PLANE ANTENNAS

**G** GP-4 GROUND-PLANE. For 2 meters. 4 droop-type radials. Coax fitting. 52 ohms. Shpg. wt., 1 lb. 98 SX 356. NET **5.83**

**F** 300 "MASTER-PLANE". A highly effective 2-meter antenna. Features 4 drooping and 4 adjustable straight radials. With 3-ft. mast, coax fitting, 52-ohm imp. 3 lbs. 98 SX 357. NET **12.69**

## "MASTER-FLEX-R" SPRING

**M** MODEL 711. Heavy-duty strain-relief spring. Prevents damage to loading coil. Mounts directly above coil; supports whip. Size,  $\frac{1}{4} \times \frac{1}{4}$ ". Shpg. wt., 1 lb. 92 S 222. NET **1.91**

## MOUNTS AND SPRINGS

Mounts are for whips with  $\frac{1}{8}$ " diameter threaded stud. \*Double-tapered spring; coax fitting. †Chain mounting. Av. wt., 3 lbs.

No.	Type	Fir.	Description	NET
97 S 151	232C*	N	Swivel-base body mount	8.57
97 S 157	232XC	N	Heavy-duty version 232C.	9.65
98 S 304	232XSSC	N	Stainless steel version of Model 232C.	14.65
98 S 300	132JC	N	Economy version 232C.	5.07
92 S 224	321	J	Model 232C less spring.	7.79
98 S 301	140J	K	Economy bumper mount	4.09
97 S 160	140X	K	Heavy-duty version 140J.	7.79
92 S 361	444†	L	Heavy-duty bumper mount with spring, swivel-base.	17.44
92 S 362	445	N	Model 444 less spring and swivel.	7.79
77 S 875	446†	N	Bumper mount—heavy-duty spring.	13.18
77 S 871	MMW-7SS	N	Stainless steel spring.	8.77
77 S 872	MMW-7	N	Cadmium plated spring.	4.41
77 S 873	MMW-JAE	H	Ebony base mount.	6.81
77 S 874	MMW-3APS	H	Polished mount with stainless steel hardware.	9.06

## ACCESSORIES

**10-H "TENNAHOLD"**. Ties down end of whip to clear garage roofs, etc. 3 oz. 92 S 223. NET **98c**

**295 "E-Z-OFF"**. Allows easy removal of whips or coils. Fits between mount (or coil) and whip or coil.  $\frac{1}{8}$ " dia. stud.  $\frac{1}{2}$  lb. 83 S 591. NET **2.89**

**P** MODEL 2495-6 "MASTER-MATCHER". Remote tuner for loaded whip from 160-10. Dashboard control of loading inductance for peaking antenna to any frequency in an amateur band. Field-strength meter on dash unit. Inductor box,  $6\frac{1}{2} \times 4\frac{1}{2} \times 4\frac{1}{2}$ ". Dash unit,  $4\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$ ". For 6 v. DC. 2 lbs. 92 S 220. NET **24.45**

**MODEL 2495-12.** As above, but 12 v. DC. 92 S 221. NET **24.45**

**R** MODEL 825 "MICRO-Z-MATCH". Variable inductor for matching any coaxial cable to any mobile antenna. Mounts on standard coax fitting (requires Amphenol 83-1 T-adapter). 2 lbs. 92 S 225. NET **7.79**

## NEW HY-GAIN "HALO"

### 6 AND 2 METER ANTENNAS



**Model HH-6 Halo.** Mobile antenna for 6 meters. Offers high mechanical stability and minimum wind resistance. 1" dia. tubing. Weather-sealed. Matches 52 and 72-ohm coax. Fits any standard mobile mount. Less mast. Wt., 5 lbs. 77 CU 868. NET **12.95**

**Model HH-2 Halo.** Similar to above antenna, but for 2 meters. Only 14" dia.  $\frac{1}{2}$ " aluminum tubing. Less mast. Shpg. wt.,  $1\frac{1}{2}$  lbs. 77 CU 869. NET **5.95**

**Model HM Mast.** 8-ft. aluminum mast takes 6 and 2-meter Halos singly or together. Fits std. m.  $6\frac{1}{2}$  lbs. 77 CU 870. NET **4.95**

# CITIZENS BAND COMMUNICATIONS EQUIPMENT



**VOCALINE JRC-400 TRANSCEIVER**

Low-cost, highly reliable 2-way communication is yours with these Vocaline transceiver units! Ruggedly built, compact and lightweight, simply plug the transceiver into any 115 v. AC outlet or 6 or 12-volt DC power source. Press the convenient push-to-talk switch and speak into the hand-held microphone. Your message is clearly received over the built-in speaker of other Vocaline units. Button is released to receive reply. No tuning necessary—no adjustments.

Transceivers operate on 465 mc (Citizens Radio Band) to provide highly satisfactory communication over limited ranges. Simple application form (included with each unit), is filled out and mailed to the FCC. Station permit for this equipment is readily granted to any U.S. citizen over 18 years of age.

Offer hundreds of applications to the industrial and private user—on farms, on boats, in warehouses or docks, storage yards, construction fields, etc. **Power Output:** 1/2 watt. **Tubes:** 6AV6, 6AF4A, 6AS5. Has volume control. Each unit is 9x6x5".

With plastic-case mike, AC and DC line cords, plug-in antenna. Wt., 3 1/4 lbs.  
**83 SU 881. For 115VAC/6 VDC. 59.80**  
**83 SU 883. For 115 VAC/12 VDC. 59.80**  
 \$5.00 Down. NET EACH.

**MODEL JRC-425 SPECIAL.** Same as the Model JRC-400, but has push-to-talk switch on stainless steel microphone and jack for headphones. Less headphones.  
**83 SU 884. 115 VAC/6 VDC. 83.80**  
**83 SU 885. 115 VAC/12 VDC. 83.80**  
 \$5.00 Down. NET EACH.

**MODEL CUB-1/MT-1.** Remote controlled transceiver similar to Model JRC-425, but for base station operation. Built-in antenna on remote transceiver unit. MT-1 eliminates signal losses from transmission lines—MT-1 can be mounted as high (up to 500') as possible for maximum performance. Control unit CUB-1 has same features as Model JRC-425 with additional variable squelch control and squelch Off-On. Size: MT-1, 7x4 1/2x2 1/2"; CUB-1, 9x6x5 1/2". With 1 mile, 100-ft. control cable. For 110-120 v., 50-60 cycle AC, 12 lbs.  
**83 SU 887. \$5.00 Down. NET 143.60**

**GP4-10 GROUND PLANE.** For interior-to-exterior communication. Has 10-ft. RG58U cable. Supplied with hardware to allow fastening to mast—less mast. Shpg. wt., 1 lb.  
**83 S 882. NET 6.36**

**AD-3 DIRECTIONAL ANTENNA.** Employs corner-reflector design. Improves range in difficult locations. Up to 40 miles in point-to-point communication when well-elevated. Less cable and mast. Shpg. wt., 7 lbs.  
**92 CU 369. \$2.00 Down. NET 19.96**

**MOBILE WHIP-TYPE ANTENNA.** For greater range and fewer dead spots—provide a 4-db power gain. Have phasing coils and compact ground-radial unit. 181-509-A has greater length below radial unit—use with bumper mount listed.  
**77 CU 813. 181-509. Overall length: 39.75**  
**77 S Shpg. wt., 3 lbs. NET**  
**77 CU 814. 181-509-A. Overall length: 75"**  
**77 S Shpg. wt., 3 lbs. NET 44.75**

**229-509 COWL MOUNT.** Wt., 1 lb. **14.95**  
**77 S 808. NET**  
**204-509 BUMPER CHAIN MOUNT.** 3 lbs. **11.95**  
**77 S 809. NET**

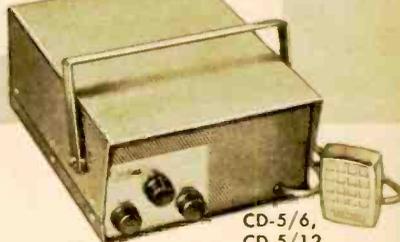
The citizens band units below, designed for local area communication, are perfect for use on boats, aircraft, tractors, in construction work, on estates and ranches. Any U.S. citizen 18 years old or over can readily obtain a station permit by application to the FCC.



**GONSET G-11 TRANSCEIVER**

Compact, heavy-duty transceiver unit for use in the 26.96-27.23 mc citizens band. Ideal for two-way communication from boats, fork-lifts, at conventions and races, in forestry, dispatching and construction. Low operation frequency provides greater range and reliability. Crystal-control ensures stable, drift-free operation. Incorporates adjustable squelch for muted standby operation; press-to-talk feature permits keeping one hand free. FCC readily grants station permit to any U.S. citizen 18 years of age or older—permit application is included with transceiver.

Transmitter is rated at 5 watts power input (maximum allowable by FCC for Class D service). AM modulated. Supplied with press-to-talk microphone and transmitter/receiver crystals for one channel. Less antenna—see the antenna listings in this catalog. Case size, 5 1/4" x 6 1/2" x 6 1/2". Shpg. wt., 10 lbs.  
**3303. For 115 v., 60 cycle AC. 124.50**  
**77 SX 726. \$5.00 Down. NET 124.50**  
**3304. For operation from 12 v. DC. 124.50**  
**77 SX 727. \$5.00 Down. NET 124.50**



**MULTI-PRODUCTS "CITI-FONE"**

Here's a highly versatile transceiver that can be taken anywhere. Operates on the 26.96-27.23 mc citizens band for dependable communication with minimum line-of-sight limitation. Perfect for camping, boating, surveying, construction work, club activities. Five crystal channels can be selected with front-panel control. Both models operate on 110 v. AC, CD-5/6 also on 6 v. DC, CD-5/12 also on 12 v. DC.

Station permit is easily obtained from FCC by any U.S. citizen 18 years old or over—just fill out application included with transceiver. Younger persons are able to use station under supervision of permit holder.

The "Citi-fone" has a power input of 5 watts; employs adjustable squelch. Both models are furnished with a convenient cigarette-lighter plug. Supplied with ceramic microphone, crystals for one channel and power cords. Less antenna—see antenna listings. Case size, 4 1/2" x 11". Shpg. wt., 15 lbs. **\$5.00 Down.**  
**77 S 810. Model CD-5/6. NET 124.50**  
**77 S 729. Model CD-5/12. EACH 124.50**

## FM RECEIVERS



MR-10



PR-35



S-94

### MONITORADIO FM RECEIVERS

**MODEL MR-10.** Deluxe FM receiver for full coverage of 152-174 mc. Designed for emergency, commercial or industrial communications. Features adjustable squelch for absolute quieting; fully tuned RF stage for good image rejection; transformer power supply for high efficiency. Has illuminated slide-rule dial and built-in 5" PM speaker. 4  $\mu$ v sensitivity. Provision for external speaker. 7 tubes plus rectifier. Size, 7 1/4" x 11 1/4" x 6 1/2". U.L. Approved. For 105-125 v., 60 cycle AC, 18 lbs.  
**99 SU 002. \$5.00 Down. NET 64.50**

**MODEL MR-33.** As above, but for 30-50 mc.  
**99 SU 003. \$5.00 Down. NET 64.50**

**MODEL PR-35.** Moderately priced FM receiver for 30-50 mc. Completely restyled version of the popular Model PR-31. Has temperature-compensated superbet circuit for high stability. Ratio detector minimizes noise under "no signal" conditions. Sensitivity is 10  $\mu$ v for  $\pm$  5 kc deviation; 100 kc selectivity. Has built-in 4" PM speaker; 5 tubes plus rectifier. Antenna impedance, 50-72 ohms. Plastic case, 6x9 1/2" x 5 1/2". For 110-120 v., 50-60 cycle AC, or DC. Shpg. wt., 6 lbs.  
**77 S 811. \$2.00 Down. NET 49.95**

**MODEL PR-155.** As above, but for 152-174 mc and includes 14" indoor antenna.  
**77 S 812. \$2.00 Down. NET 49.95**

**A-30 WHIP ANTENNA.** For 30-50 mc. Bracketed to whip—angularly adjustable. 3 chrome-plated sections; extends to 86". Less cable. Uses 72-ohm coax. 1 lb.  
**99 SU 001. NET 7.50**

### HALLICRAFTERS FM RECEIVERS

**"CIVIC PATROL" RECEIVERS.** Here are two compact, easy-to-operate FM receivers for superior reception of commercial or public service frequencies. Model S-94 covers the frequencies from 30 to 50 mc. Model S-95 covers 152 to 173 mc. May be used for reception of police, fire, taxicab, inter-city bus, railroad, private telephone, and other industrial and emergency-service communications.

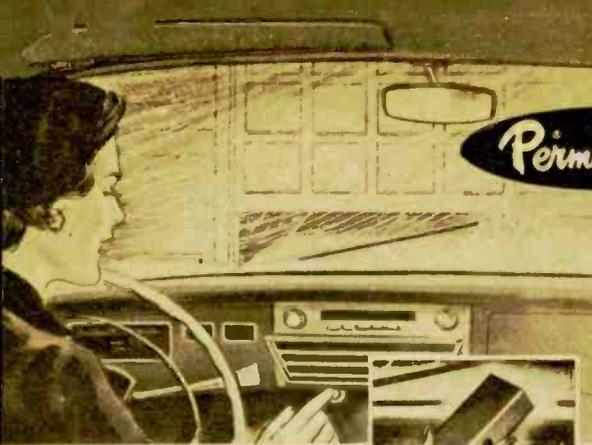
Advanced circuit design assures minimum drift, high signal-to-noise ratio and exceptional sensitivity. Receivers have wide-range antenna input impedance for excellent results with any type of antenna. Employ a low-noise, grounded-grid amplifier. Carefully designed for minimum oscillator radiation. Adjustable, built-in relay-type squelch system silences entire audio system until signal is received—permits quiet standby operation.

Receivers have a built-in 5" PM speaker, deliver 1.5 watts audio output. Phone tap jacks for headphone operation—switch permits selection of speaker or headphone output. Have terminals for single-wire or twin-leads antenna input (an external antenna is supplied). Include a 0-100 logging scale, 8 tubes plus selenium rectifier. Case size, 7 1/2" x 11 1/4". For operation from 110-120 v., 50-60 cycle AC, or DC. Shpg. wt., 12 1/2 lbs.

**MODEL S-94.** Covers 30-50 mc FM.  
**98 SU 708. \$5.00 Down. NET 64.95**

**MODEL S-95.** Covers 152-173 mc FM.  
**98 SU 721. \$5.00 Down. NET 64.95**

Allied offers a complete line of Citizens Band and communications crystals.



# Perma-Power



## ELECTRONIC GARAGE DOOR OPENER

### Transistorized or Standard Remote Control

NET  
**\$139<sup>90</sup>**  
 \$5.00 Down

- Simple Push-Button Operation
- Handy Time-Delay Light Shutoff
- Fully Automatic Safety Devices
- Installed Without Special Tools

Just touch a button—your garage door opens and the light goes on! Press button again, or use the wall-mounted pushbutton, to close and lock the door securely—light remains on for several minutes after the door is closed. Power shuts off automatically if obstruction blocks path of door travel. Door can be operated manually in event of power failure.

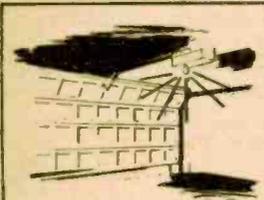
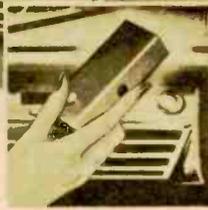
Choice of two transmitters—an extremely compact transistorized unit, or a small, standard, under-the-hood transmitter with dashboard pushbutton. Transistor transmitter is self-contained, portable and lightweight—you can carry it with you, store it in the glove compartment, or snap it onto the sun-visor. Dashboard-controlled unit operates on 6 or 12 v. DC. Transmitters are crystal-controlled on FCC-authorized frequency of 27.255 mc.

Easily installed system fits overhead, residential garage doors up to 18 ft. wide and 8 ft. high using a horizontal or curved roller track. Requires only 2 1/4" clearance between high-arc of door and ceiling. Opening mechanism and receiver operate from 110-120 v., 50-60 cycle AC. Includes motor mechanism, transmitter, receiver, antennas, manual pushbutton, wire, hardware, and instructions.

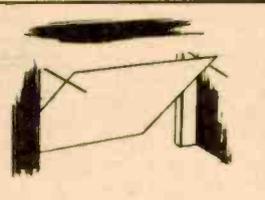
- G-520 SYSTEM. With transistor transmitter. 89 lbs.  
 77 SU 761. List. \$199.95. *Only \$5.00 Down.* NET..... 139.90
- G-500 SYSTEM. With standard transmitter. 95 lbs.  
 77 SZ 290. List. \$199.95. *Only \$5.00 Down.* NET..... 139.90
- 77 S 291. Key Switch. With 2 keys. Shpg. wt., 9 oz. NET..... 4.20

### New Transistorized Control

Place this lightweight control anywhere in the car—or carry it with you in your pocket or purse. Operates over 50 feet from the garage door.



Overhead light stays on several minutes after door locks.



1/4-hp mechanism operates all residential overhead doors.

### TRANSISTOR UNITS

- G-325 EXTRA TRANSMITTER. For 2-car families. Permits operation of system from either car. With antenna, mounting hardware, installation instructions, etc. Shpg. wt., 12 oz.  
 77 SX 762. List. \$34.50. *Only \$2.00 Down.* NET..... 24.50
- G-520 ALTERNATE SYSTEM. Same as G-520 system above, but operates on another channel. Use if a neighbor already has a radio-controlled opener. Shpg. wt., 89 lbs.  
 77 SU 763. List. \$199.95. *Only \$5.00 Down.* NET..... 139.90
- G-325 ALTERNATE EXTRA TRANSMITTER. Same as the G-325 above, but for use with the G-520 alternate system.  
 77 SX 764. List. \$34.50. *Only \$2.00 Down.* NET..... 24.50

### STANDARD UNITS

- G-315 EXTRA TRANSMITTER. Permits operation of door-opening system from a second car. Includes antenna, hardware, installation instructions, etc. Shpg. wt., 7 lbs.  
 77 SX 272. List. \$34.50. *Only \$2.00 Down.* NET..... 24.50
- G-500 ALTERNATE SYSTEM. Same as G-500 system above, but operates on another channel. Use if neighbor has radio-controlled door opener. Shpg. wt., 95 lbs.  
 77 SZ 295. List. \$199.95. *Only \$5.00 Down.* NET..... 139.90
- G-315 ALTERNATE EXTRA TRANSMITTER. Same as G-315 above, but for use with the G-500 alternate system.  
 77 SX 296. List. \$34.50. *Only \$2.00 Down.* NET..... 24.50



### VOCALINE "COMMAIRE"

MODEL ED-27. Compact, rugged transceiver for 11-meter Citizens Band. Features transistorized power supply and noise-immune adjustable squelch. Employs a crystal-controlled double-conversion tunable super-het receiver with 1/10  $\mu$ v sensitivity. Selectivity  $\pm 5$  ke at points 6 db down; receiver provides 4.5 watts audio output. Transmitter output is 3 watts. With AC and DC line cords, push-to-talk mike, short-range antenna, mobile mounting brackets, crystals for 27.105 mc. 5x9x7 1/2". 13 lbs.  
 77 S 819. 110 VAC/6 VDC. NET 143.60  
 77 S 820. 110 VAC/12 VDC. NET 143.60

ALTERNATE CRYSTALS. Only transmitter crystal need be changed—receiver is tunable. Specify frequency. Special order—30 day delivery. Shpg. wt., 3 oz.  
 77 S 821. NET..... 3.60

### Photoelectric Equipment For The Home



Operates With Daylight

### FISHER-PIERCE "NIGHTLIGHTER"

Unusually economical, smooth-operating photo-electric switch. Turns electric lights on or off, depending on amount of daylight striking photocell. Simple installation—just plug into outlet and plug lights into control unit. Perfect for store windows, porch lights, outdoor signs, etc. Turns lights on as darkness approaches, turns them off at dawn. Excellent for burglary protection during vacation periods. Not a time switch—responds to light alone. Completely automatic—no need to set or reset. Light control is housed in attractive sturdy brown bakelite case. Has convenient bracket for flat surface mounting if desired. Capacity, 300 watts. Complete with 6-ft. cord set with adapter plug. For interior use only. Size: 3 1/2 x 4 1/2 x 3 1/2". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 3 lbs.  
 77 P 235. List. \$15.95. NET..... 10.94



ANNOUNCER

### WORNER "FOTOLECTRIC" ANNOUNCER

MODEL 61. Chime announces people or vehicles when light beam is intercepted. Consists of "Fotolectric" unit, mirror and chime. Unit has exciter lamp and sensitive photo-cell. Projects beam across passage and receives reflected beam from mirror; may be placed 3 to 10 feet from mirror. Perfect for stores, service shops, etc. Size, 8 1/4 x 6 1/2 x 2 1/4". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 8 lbs.  
 77 P 028. \$2.00 Down. NET..... 35.28

REPLACEMENT BULB. 32-candlepower. 2000-hour 6-volt bulb. For Models 33 and 61 (above). Shpg. wt., 5 oz.  
 77 P 023. NET..... 65c

REPLACEMENT CHIME. For Model 61. May also be used with any other 6-volt AC power supply. Shpg. wt., 2 lbs.  
 77 P 035. NET..... 4.70

# American Bell & Cannon Headphones

## C. F. CANNON HEADPHONES AND ACCESSORIES

BRANDES BS-2 "SUPERIOR" PHONES. A high-quality, ruggedly-built, 2000-ohm headset which has been a favorite for years. Outside terminal type; metal cases, bakelite caps. Diaphragm diameter is 2 1/4". Has double coils, one in each receiver. Flexible metal headband. Easily adjustable for maximum comfort. 4 1/2-foot cord. Shpg. wt. 1 1/4 lbs.



59 J 130. NET ..... 2.44  
 BRANDES "ADMIRAL" PHONES. Similar to above but with inside terminals.  
 59 J 135. BA-2. 2000 ohms. NET ..... 2.44  
 59 J 136. BA-3. 3000 ohms. NET ..... 2.73  
 59 J 137. BA-5. 5000 ohms. NET ..... 3.53  
 REPLACEMENT CAPS AND DIAPHRAGMS. For "Superior" and "Admiral" phones, above.  
 59 J 138. Caps. Wt. 2 oz. EACH ..... 21c  
 59 J 140. Diaphragms. 2 oz. Pkg. of 2. 13c

CANNON-BALL "MASTER" PHONES. High-quality headset for communications and general-purpose applications. Cases are metal, with bakelite caps. Terminals are inside of case for maximum safety from tampering. Chrome steel magnets produce strong field, and resist corrosion. With cord. Wt., 1 1/4 lbs.



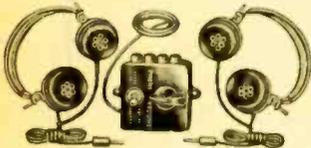
59 J 215. MC-2. 2000 ohms. NET ..... 2.44  
 59 J 125. MC-3. 3000 ohms. NET ..... 2.65  
 59 J 126. MC-5. 5000 ohms. NET ..... 3.38

CANNON-BALL CC-2 "CHIEF" PHONES. Sensitive and practical headset for all general use. Inside terminal connections. 2 1/2" diaphragms; bakelite case and cap. Vinyl plastic covered headband. 2000 ohms. With 4 1/2-ft. cord. Shpg. wt., 1 1/4 lbs.



59 J 172. NET ..... 2.35  
 REPLACEMENT CAPS AND DIAPHRAGMS. For "Master" and "Chief" phones, above.  
 59 J 127. Caps. Wt. 2 oz. EACH ..... 21c  
 59 J 129. Diaphragms. 2 oz. Pkg. of 2. 13c

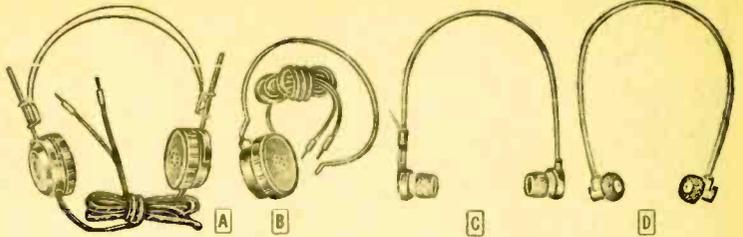
### CANNON TV HEADPHONE KIT



High-quality listening device to aid hard-of-hearing, or provide private, "silent" listening when others might be disturbed by loud-speaker operation. Volume control and Speaker-Phones switch on control box. Supplied with 15-ft. cord, and two pairs of headphones. Shpg. wt., 3 lbs.

59 J 175. NET ..... 8.82  
 SINGLE HEADSET KIT. Same kit as above, but with only one pair of phones. 2 lbs.  
 59 J 176. NET ..... 6.61  
 CONTROL BOX ONLY. Shpg. wt., 9 oz.  
 59 J 177. NET ..... 4.41  
 11-OHM DUAL HEADSET. Shpg. wt., 1 1/4 lbs.  
 59 J 173. NET ..... 2.23

## ALLIED'S OWN AMERICAN BELL HEADPHONES



Have adjustable flexible headbands, hy-flux Alnico magnets. Internal terminal connections. Cap and case are molded bakelite. All headphones with 4 1/2-ft. cord of mercerized cotton-covered tinsel, standard phone tip terminals. Choice of single or dual types; low-impedance models may be inserted in audio circuits directly at loudspeaker tap.

### STANDARD DUAL HEADPHONES

**A** Have double headband with firmly gripping, easily adjustable yokes. 1 7/8" diaphragm. Cords are cotton-covered tinsel. Shpg. wt., 1 1/4 lbs.  
 59 J 110. 2000 Ohms. NET ..... 2.00  
 59 J 111. 3000 Ohms. NET ..... 2.08  
 59 J 149. 4000 Ohms. NET ..... 2.15  
 59 J 141. 11 Ohms. NET ..... 2.00

### INSTITUTIONAL DUAL HEADPHONES

(Not illus.) Designed for schools, hospitals and other institutions where dependable, lightweight headphones are needed. Every feature for institutional use has been incorporated: Durable bakelite cases and caps which are easily cleaned; inside terminal connections, to prevent tampering; diaphragm is 1 7/8" in diameter; Hyflux Alnico permanent magnets assure excellent sensitivity. Provide crisp, clear reproduction of voice and music. 4 1/2-ft. braided cord. Comfortable, vinyl-plastic headband is easily adjustable. Shpg. wt., 1 1/4 lbs.  
 59 J 100. 2000 Ohms. NET ..... 2.12  
 59 J 101. 3000 Ohms. NET ..... 2.20

### SINGLE HEADPHONES

**B** Dependable, economy-priced single phones. Suitable for hard-of-hearing installations, receivers, crystal sets, Geiger counters, etc. Diaphragm is 1 7/8" in diameter. Has spring-metal headband which is permanently attached to back of case. Equipped with 4 1/2-ft. cotton covered cord. Shpg. wt., 8 oz.  
 59 J 112. 1000 Ohms. NET ..... 1.08  
 59 J 113. 1500 Ohms. NET ..... 1.15

### AMERICAN BELL TRANSISTOR HEAD EARPIECES

Quality, lightweight earpieces; ideal for use with portable equipment. Replace earpieces used in popular transistor radios indicated in table below. Supplied in individual plastic box, complete with 3-ft. cord and plug. Wt., 5 oz.



Stock No.	For Use With
59 J 147	Motorola (except those listed with 59 J 193), RCA except T-1 and T-2, Philco except T-5, Zenith except 500, Regency, Admiral, Roland, Gambles, Trav-Ler, Air-line, Western Auto, Arvin, Emerson, most Japanese imports
59 J 193	Motorola 6X28, 7X25, 8X26, X12, L12, L13, L14; RCA T-1, T-2; Philco T-5; Zenith 500
59 J 109	Westinghouse, Magnavox, Bulova, Sonora, Sylvania, Sparton, Air-line 1108, Hoffman Solar
59 J 145	All General Electric
NET EACH	1.97

### NEW LIGHTWEIGHT HEADSETS

**C** STEREO HEADSET. Complete "under-the-chin type." 500-ohm headset with dual 5-ft. cords and std. phone plugs. 1 1/4 lbs.  
 59 J 315. NET ..... 11.66

**D** STEREO EARPIECE BAND. Support only. Select earpieces (2 required), of desired impedance from earpiece and plug listing below. Shpg. wt., 8 oz.  
 59 J 316. NET ..... 1.83

**C** MONOPHONIC HEADSET. Complete 500-ohm headset with single earpiece, (hollow band pipes sound to other ear). 5-ft. cord and std. phone plug. Shpg. wt., 1 1/4 lbs.  
 59 J 317. NET ..... 10.00

**D** MONOPHONIC EARPIECE BAND. Support only. Select earpiece (1 required), of desired impedance from earpiece and plug listing below. Shpg. wt., 8 oz.  
 59 J 318. NET ..... 1.83

FOAM RUBBER TIPS. For stereo or monophonic earpiece bands, above. 2 oz.  
 59 J 319. Pkg. of 2, NET ..... 23c

### HEADPHONE REPLACEMENT PARTS

Replacement parts for the American Bell headphones listed on this page.

Stock No.	Description	Wt., Oz.	EACH NET
59 J 104	Diaphragm, Pkg. of 2	2	13c
59 J 106	Bakelite cap	2	13c
59 J 174	Headband with yokes	9	63c

SEPARATE EARPIECE. Receiver and comfortable earpiece. Equipped with cord but less plug. Impedance, 8000 ohms. Excellent tonal quality. Shpg. wt., 4 oz.  
 59 J 119. NET ..... 2.16

### EARPIECES FOR TV

For private listening to all TV sets except Emerson and Motorola. Gives crisp, clear reproduction. May be worn for hours without fatigue. Alligator clips connect to voice coil. Shpg. wt., 8 oz.  
 59 J 192. NET ..... 3.75

### EARPIECES WITH PHONE PLUGS

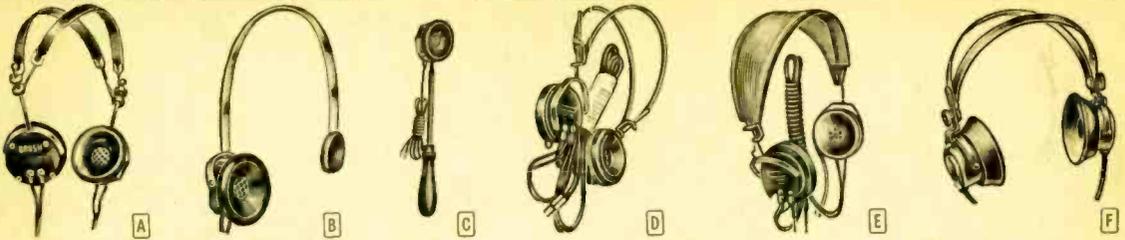
For communications use, short wave listening, code practice or class use. With standard phone plug attached. Also for use with stereo and monophonic earpiece bands above. 5-ft. cord included. Shpg. wt., 5 oz.  
 59 J 166. 15 ohms 59 J 134. 2000 ohms  
 59 J 124. 120 ohms 59 J 167. 8000 ohms  
 NET EACH ..... 2.76

### CANNON-BALL RADIO HEARING AID

Popular, low-priced hearing aid for any radio or TV set. Specially-constructed low-impedance headphone matches the output of radio or TV set. Built-in selector control switch permits listening with speaker only, headphone only, or both speaker and headphone simultaneously. Complete with control box, connecting cables for attachment to speaker and attachment of headphone to control box, instructions and diagram. Shpg. wt., 1 lb.  
 59 J 118. NET ..... 3.38



# Headphones and Accessories



## CLEVITE "BRUSH" HEADPHONES

**A** BA-200 Headphones. Very sensitive headphones with high impedance (45,000 ohms at 1000 cps.). Frequency response, 100 to 8000 cps. Cone type diaphragm. Molded plastic case shaped for maximum comfort. Require small DC blocking condenser for DC circuits. With 5-ft. cord and headband. Wt., 2 lbs.  
59 J 151. NET ..... 14.70

Model BA-200B Headphones. Like BA-200 above; but equipped with cord wired for binaural use. Impedance, 90,000 ohms (at 1000 cps). Shpg. wt., 2 lbs.  
59 J 152. NET ..... 16.02

**B** BA-201 Headphone. Similar to model BA-200 but, single headphone. 90,000 ohms (1000 cps). Shpg. wt., 1 lb.  
59 J 156. NET ..... 9.75

**C** Lorgnette BA-202 Phone. For group hearing aid systems. Extends to 17". 90,000 ohms. With 5-ft. cord. Shpg. wt., 1 lb.  
59 J 157. NET ..... 12.25

Hi-Fi Headsets. Double headphone sets that feature uniform frequency response, low distortion, and excellent bass response. Lightweight for maximum comfort. Impedance indicated is at 1000 cps. \*For binaural use. Average shpg. wt., 3 lbs.

Stock No.	Type	Impedance	Response	NET
59 J 158	BA-205	75,000 ohms	100-10,000 cps	22.05
59 J 153	*BA-205B	150,000 ohms	100-10,000 cps	23.37
59 J 163	BA-206	50,000 ohms	60-8000 cps	24.25
59 J 154	*BA-206B	100,000 ohms	60-8000 cps	25.63

## MYTRON HEADPHONES

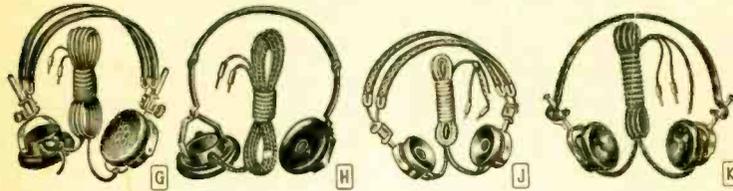
**D** N-98 Headphones. Designed for general laboratory use where high impedance and sensitivity are necessary. Have a frequency response of from 100 to 10,000 cps. Impedance at 1000 cps is in excess of 50,000 ohms. Phones employ crystal elements for high sensitivity. Blocking capacitor required in presence of DC. With 4½-ft. flexible cord attached. Shpg. wt., 1 lb.  
59 J 186. NET ..... 9.26

**E** N-130 Headphones. Extended frequency. Crystal-type headphones, similar to model N-98 above; designed for high fidelity listening. Have remarkably wide response of from 60 to 13,000 cps. Impedance is 50,000 ohms at 1000 cps. Have cushioned headband for maximum comfort. Blocking capacitor required in presence of DC. With 4½-ft. cord. Shpg. wt., 1 lb.  
59 J 187. NET ..... 10.20

## S. G. BROWN BINAURAL HEADPHONES

**F** Professional-type, high-fidelity dynamic headphones for broadcast use, monitoring, etc. Can be connected to any sound system, amplifier, radio, phonograph, recorder, or similar equipment. Headphones are actually 2 miniature high-fidelity loudspeakers—remarkable tonal fidelity and sensitivity. Uses moving-coil type armature assemblies for maximum response and fidelity; bakelized conical diaphragm; flux density, 6000 lines. Headbands and receiver cases are constructed of highly-polished dural for long life. Headbands are adjustable. Response: 50-10,000 cps. Rubber ear cushions; 6½-ft. cord. 52 ohms. Made in England. Shpg. wt., 1½ lbs.  
59 J 337. NET ..... 28.95  
600-OHM HI-FI HEADPHONES. As above, but 600 ohms.  
59 J 338. NET ..... 34.50

## TRIMM HEADPHONES AND ACCESSORIES



**G** "Military" Type. Constructed to meet military headphone specifications. Impedance, 20,000 ohms; DC resistance, 2,000 ohms. Metal shell with bakelite cap. 6 ft. cord. Inside terminals. Rubber-covered headband. Shpg. wt., 1½ lbs.  
59 J 040. NET ..... 11.76

**H** "Featherweight" Type. Weigh less than 5 ounces. Black bakelite caps and shells. Forged magnets; pole pieces of permalloy. Impregnated coils. Supplied with flexible 6-ft. moisture-proof cord. Shpg. wt., 9 oz.  
59 J 000. Standard. 4000 ohms.  
59 J 001. Special. 24,000 ohms.  
NET EACH ..... 6.47

59 J 042. Diaphragms. For either of above headphones. Wt., 2 oz. EACH. 15c  
59 J 013. Replacement Caps. For "Featherweight" phones. 2 oz. EACH. 47c

### LORGNETTE TYPE EARPHONE

Hand-held type hearing aid. Same construction as "Featherweight" phones above. Excellent for use in churches, and small theaters. Earphone size, 2½" dia. x ¾" thick. Handle extends to 14". Impedance, 4500 ohms; DC resistance, 1000 ohms. Supplied with flexible, braided 6-ft. cord with phone tips. Shpg. wt., 10 oz.  
59 J 036. NET ..... 5.35



**J** "Professional" Type. Magnetic headphones for general use. Bakelite caps and shells. Forged magnets of chrome steel, impregnated coils. 5-ft. cord. Inside terminals. Have plastic-covered headband. Shpg. wt., 1¼ lbs.  
59 J 020. 3000 ohms. NET  
59 J 021. 4000 ohms. EACH ..... 3.41  
59 J 030. Replacement Caps. EACH ..... 35c  
59 J 031. Extra Diaphragms. EACH ..... 12c

**K** Acme "Deluxe" Type Headphones. Sensitive headphones designed for every use. 2000 ohm impedance. Sturdily constructed for dependable performance under all conditions. 4½-ft. cord. Shpg. wt., 8 oz.  
59 J 070. NET ..... 2.12  
Extra Diaphragms. For above. 2 oz.  
59 J 012. EACH ..... 12c

### INDIVIDUAL VOLUME CONTROL

Consists of phone jack and volume control mounted in compact box. Ideal for group hearing aid systems in theaters, churches, schools, etc. Resistance: 10,000 ohms. Size: 3¼x2½x1¼". Shpg. wt., 1 lb.  
59 J 056. Brown wrinkle.  
59 J 057. Ivory wrinkle.  
NET EACH ..... 3.23



## HEADPHONE CORDS



Wide selection of durable, high-quality headphone cords. Copper inner conductor covered with woven cotton braid. All cords have 2 phone tips at one end; \*refers to terminals at opposite end of cord. Wt., 2 oz.

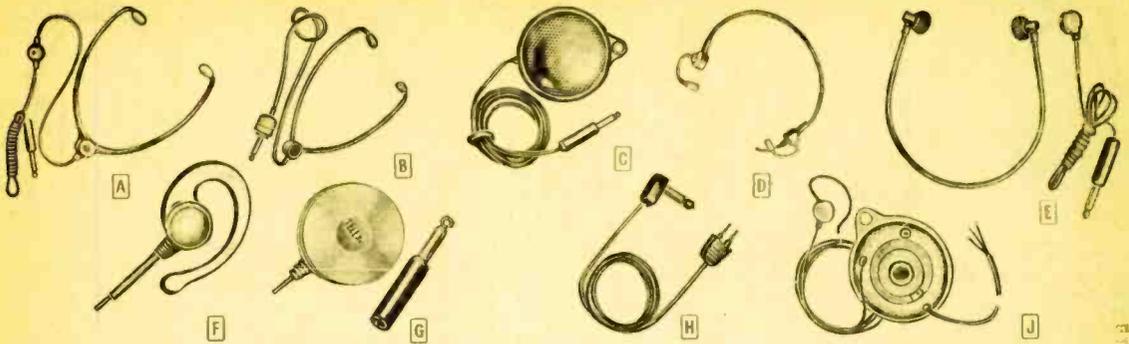
Stock No.	*Terminals	For Use With	NET EACH
59 J 220	Eyelet type. For inside terminals.	59 J 100-101, 110-111, 125, 126-127, 135, 136-137, 215 59 J 130	50c
59 J 205	Eyelet type.	Govt. and military types 59 J 070	50c
59 J 002	Has phone tips on both ends Small blunt tips		
<b>5 Ft. Double Cords</b>			
59 J 006	Large blunt tips	59 J 020-021	54c
59 J 181	Eyelet type	59 J 151, 158, 163	
<b>6 Ft. Double Cords</b>			
59 J 004	Eyelet type	59 J 000, 001	58c
59 J 007	Large blunt tips	59 J 040	
<b>8 Ft. Double Cords</b>			
59 J 221	Eyelet type	Same as type 59 J 220 above	74c
59 J 218	Eyelet type	59 J 130	
59 J 219	Has phone tips on both ends	Govt. and Military type	
<b>Single Cords</b>			
59 J 200	4 ft. cord with eyelet type	59 J 112, 113	33c
59 J 182	6 ft cord with eyelet type	59 J 157	50c

### RUBBER PHONE CUSHION

Molded rubber ear cushions slip over phones. Provide maximum wearing comfort. Wt., 6 oz.  
59 J 168. NET, PAIR. 64c  
10 or More Pairs, PER PAIR ..... 58c



# Telex Headphones and Accessories—Fedtro



Famous, lightweight Telex headsets—used throughout the world on all types of audio equipment requiring private, continuous listening. Telex headsets are manufactured with the finest materials, and incorporate the most recent engineering advances.

Suitable for all applications requiring comfort, sensitivity and durability in a headset; ideal for communications work, offices, hospitals, amateur radio, hard-of-hearing, and other uses. Cords are listed for those headsets supplied without cords.

## METAL MONOSSET

**A** Exceptionally comfortable, lightweight headphones, designed to eliminate fatigue and strain when headphones must be worn continuously for long periods. Total weight is only 1.2 ounces. Magnetic type receiver for crystal clear reproduction and rugged dependability. Light, metal housing with comfortable ear pieces. White plastic ear plugs remove for cleaning. Less cord, use 59 J 253 at right. Shpg. wt., 8 oz. 59 J 281. Model HMY-01. 2000 ohms. 59 J 280. Model HMY-01. 128 ohms. List Each, \$9.00. NET EACH..... 5.40

WITH CORD. Monosets as above, with 5-foot cord and standard plug. Shpg. wt., 12 oz. 59 J 222. Model HMY-2. 2000 ohms. 59 J 223. Model HMY-2. 128 ohms. List Each, \$12.50. NET EACH..... 7.50

## HI-FI DYNASET

**B** Model HUP-01. Under-the-chin dynamic headset of superior quality. Receiver consists of a tiny, 3/8"-diameter 6-ohm loud-speaker built into the plug. Extremely sensitive; frequency response extends from 50 to 8000 cycles at 25 mw. Speaker diaphragm directs sound, through 60-inch flexible tubing, into headset. Attractive light gray finish. Shpg. wt., 6 oz. 59 J 239. List, \$14.75. NET..... 8.85

## DYNAMIC PILLOW SPEAKER

**C** Model SDN-2. An under-the-pillow loud-speaker with great power-handling ability; provides exceptionally clear, natural tone without any disturbance to others who may be sleeping nearby. Ideal for institutional use, or private listening at home to radio or TV set. 3.2 ohm voice coil matches most small radios and portable TV sets. With 5-foot cord and standard phone plug. 3 3/8" dia. 1 1/2" thick. Wt., 6 oz. 59 J 276. List, \$10.19. NET..... 6.11

MODEL SDM-2. As above, but 10,000 ohms. 59 J 277. List, \$12.11. NET..... 7.27

## TWINSET

**D** An important innovation in headset design—nothing touches the ears with the Telex Twinset! Sensitive receivers rest lightly at the temples; tubular "pipes" send sound directly into ears; blocks out background noise. Perfect for long, fatigue-free listening; weighs only 1.6 ounces. \*Approved by the Civil Aeronautics Authority for both airlines and private planes. Supplied with two extra ear tips. Steel head band in Tenite plastic. Less cord, use 59 J 270 cord at right. Shpg. wt., 8 oz. 59 J 285. Model HTX-01\*. 1000 ohms. 59 J 286. Model HTL-01. 64 ohms. List Each, \$17.50. NET EACH..... 10.50

WITH CORD. Twinsets as above, with 5-foot cord and standard plug. Shpg. wt., 12 oz. 59 J 224. Model HTX-2\*. 1000 ohms. 59 J 225. Model HTL-2. 64 ohms. List Each, \$21.00. NET EACH..... 12.60

## TELE-FI HEADSET

**E** New, lightweight headset is ideal for applications where clarity and intelligibility of speech are important. Unique design provides a delay of 1 millisecond between earpieces; resultant sound greatly enhances clarity of speech. Excellent for secretaries, switchboard operators, TV monitors, etc. Receiver may be detached from dual set and mounted on plastic ear bow in seconds, for one-ear use. Weighs only 1/2 ounce. With cord and plug. Shpg. wt., 6 oz. 59 J 214. Model HFR-91. 15 ohms. 59 J 257. Model HFV-91. 128 ohms. 59 J 258. Model HFX-91. 1000 ohms. 59 J 217. Model HFY-91. 2000 ohms. List Each, \$12.35. NET EACH..... 7.41

## MIDGET EARSET

**F** Extremely lightweight individual earsets—weigh only 1/2 ounce! Carefully designed holder is scientifically contoured to fit the ear comfortably. Unit utilizes high-quality receiver which reproduces speech with great clarity and fidelity; frequency response is from 50 to 4000 cycles. Available with metal ear bow also, where extreme ruggedness is desired. 5' cord with standard plug included. Shpg. wt., 6 oz.

Stock No.	Type	Description	Ohms
59 J 202	EPR-2	Plastic ear bow	15
59 J 203	EPV-2	Plastic ear bow	128
59 J 204	EPX-2	Plastic ear bow	1000
59 J 207	EPY-2	Plastic ear bow	2000
59 J 208	EMR-2	Metal ear bow	15
59 J 209	EMV-2	Metal ear bow	128
59 J 211	EMX-2	Metal ear bow	1000
59 J 212	EMY-2	Metal ear bow	2000

List Each, \$9.00. NET EACH..... 5.40

## MAGNETIC PILLOW SPEAKER

**G** Exceptionally small; for radio and TV listening through a pillow without disturbing others. For home or institutional use. Red waterproof plastic. 3/8"x2 1/4" dia. Cord not included. Use 59 J 270 cord at right. Shpg. wt., 6 oz. 59 J 290. Model SMY-01. 2000 ohms. 59 J 291. Model SMV-01. 128 ohms. List Each, \$7.75. NET EACH..... 4.65

WITH CORD. Pillow speakers as above, with 5-foot cord and plug. Shpg. wt., 10 oz. 59 J 226. Model SMY-2. 2000 ohms. 59 J 227. Model SMV-2. 128 ohms. List Each, \$11.25. NET EACH..... 6.75

## CORD AND MINIATURE PLUG

**H** MODEL CMM-92. 5' cord with 90° miniature phone plug on one end and connector on other end which fits twinset and magnetic pillow speaker. Permits using twinset or magnetic pillow speaker with any dictating machines, tape recorders, miniature radios, etc., taking a 3/8" dia. plug. Tenite plug with tip and sleeve of silver-plated brass. Shpg. wt., 5 oz. 59 J 252. List, \$3.14. NET..... 1.88

## USEFUL TV "LISTENER"

**J** Model LCP-90. Use wherever individual listening is desired—ideal for families with children, hard-of-hearing, etc. Can be used by 2 people at the same time. Has volume control for earset; switch on control unit turns TV speaker on or off. 3 1/2"x1". Control unit is equipped with 15' cord; earset, 4' cord. Shpg. wt., 8 oz. 59 J 263. List, \$16.25. NET..... 9.75

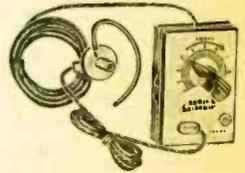
59 J 292. Model ELV-98. Extra earset, cord and plug. 3 oz. List, \$7.50. NET..... 4.50

## CORDS, EXTRA TIPS AND ACCESSORIES

Stock No	Description	For Use With	NET
59 J 270	Type CMM-2 cord w/std. 3/4" plug	59 J 285 59 J 286, 59 J 290, 59 J 291	2.10
59 J 253	Type CMT-2 cord w/std. 3/4" plug	All sets other than above.	2.10
59 J 246	Type VVM-2 cord, w/volume control	59 J 286, 59 J 291, 59 J 225, 59 J 227	7.35
59 J 272	Type VXM-2 cord w/volume control	59 J 224, 59 J 285	7.35
59 J 245	Type VVM-2 cord w/volume control	59 J 226, 59 J 290	7.35
59 J 293	Type VVT-2 cord w/volume control	59 J 280	7.35
59 J 294	Type VYT-2 cord w/volume control	59 J 281	7.35
59 J 269	Type CMM-99 5-ft extension cord	Twinset and mag. pillow speakers	2.10
59 J 297	Type AEF-1 Plastic earframe	All earsets	.48
59 J 242	Type JMP-01 Jack, closed circuit	59 J 243	.24
59 J 243	Type PM-01 Min. phone plug	59 J 242	.36
59 J 254	Type JMP-02 Jack, open circuit	59 J 243	.24
59 J 295	Type ATT-1 White plastic ear tips	All Boomsels & Twinsets	.09
59 J 296	Type ANT-2 Ear tips	Metal Monosets and Dynasets	.09

## FEDTRO "PRIVATE-LEE" RADIO-TV EARPHONE SET

An excellent private-listening outfit, easily connected to any radio or TV. Permits listening without disturbing others; also fine for the hard-of-hearing. For home use, hospitals, institutions, beauty parlors, etc.



Consists of comfortable, lightweight earpiece, plus ivory-plastic control box with volume control and connecting 17-ft. cable. Control box has two jacks for earpiece—one jack automatically shuts off speaker to permit listening on earpiece only; the other jack is used when sound is desired from both the earpiece and speaker. Shpg. wt., 1 lb. 59 J 255. List, \$12.95. NET..... 7.61

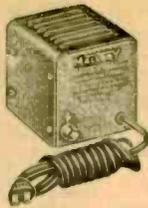


# Power Supplies, Converters & Rectifiers

## MALLORY POWER SUPPLIES

### 6 AND 12-VOLT BATTERY CHARGERS

Highly efficient selenium-rectifier battery chargers. May also be used as power supplies for electroplating, model trains, telegraph systems, vending machines, relays, solenoids, etc. Charging rate decreases as battery becomes charged. Equipped with socket for use with R675 charging cord listed below. All have DC cord with battery clips. Pilot light on all units. Pilot light dims as battery becomes charged and blinks if charger connections are shorted or reversed. For 6 volt batteries except #12 volt. For operation from 105-125 volt 60 cycle AC.



Stock No.	Mfr's Type	DC Amps Max Taper	Max. DC Amps Continuous	Sizes H. W. D.	Wt. Lbs.	List	NET EACH
80 P 093	6SAC6	6 4	5	6 1/2 x 4 1/2 x 4 1/2	6	\$22.99	14.99
80 P 087	12SAC5*	5 3	4	7 1/2 x 5 1/2 x 5 1/2	9	33.55	22.18

**Type R675 Charging Cord with Universal Lighter Plug.** Charges car battery through cigarette lighter. 6-ft. cord. Shpg. wt., 6 oz. **1.47**

## ELECTRO-PRODUCTS POWER SUPPLIES



KPS-2



EFB

**Model KPS-2 DC Power Supply Kit.** A highly efficient, easy-to-build unit. For servicing transistor portables and 6/12 v. auto sets. Two output ranges with separate current meters and output terminals. Delivers 0-20 volts at 75 ma and 0-16 v. at 5 amps. Variable transformer provides smooth voltage adjustment. 0-20 v. range has 75-ma meter and meter. Maximum ripple: 0-20 v. range, 0.15% at 75 ma; 0-16 v. range, 0.5% at 5 amps. Special pi-type filter. Selenium rectifiers have conduction cooling for long life. Includes fused primary. With assembly instructions. Sturdy metal case. 8 1/2 x 8 5/8 x 3 1/2". For 110-120 v. 50-60 cycle AC. Shpg. wt., 15 lbs. **80 PX 038. Only \$2.00 Down. NET 43.50**

**Model PS-2.** Same as above, but factory wired and tested. **80 PX 039. NET 49.95**

**Model EFB DC Power Supply.** Specially designed for exacting requirements of transistor work. Ideal for servicing transistor auto sets, as well as standard 6 and 12-volt vibrator-powered equipment. Continuously variable voltage control. 0-15 volts for current loads up to 8 amps; 0-32 volts for loads up to 4 amps. Current and voltage indicated on panel meters with 2% D'Arsonval movements. Less than 0.1% AC ripple at maximum ratings; less than 0.1% at loads up to 100 ma. Bridge-type selenium rectifiers have conduction-cooling design for long life. Employs pi-type filter with 2 chokes and 2 capacitors. Also has built-in "hash" filter. Fuseholder and 5-way binding posts are conveniently located on top. Blue Hammerloid steel cabinet. 7x12x8 3/4". For 110-120 v. 50-60 cycle AC. Shpg. wt., 35 lbs. **80 PU 024. Only \$5.00 Down. NET 120.00**

## PORTABLE AND MOBILE HIGH-VOLTAGE DC VIBRAPACKS

Mallory vibrapacks provide high-voltage DC from low-voltage storage batteries. Excellent as source of "B" power for portable radios, transmitters and receivers, mobile P.A. systems, etc. Have filter for vibrator hash. All are tube-rectifying types for use in circuits where self-bias is obtained through a resistor or choke between B-negative and ground. Type VP12-260 and VP24-260 can be converted to 200 v. DC output at 60 ma with simple wiring change. All require external filter circuit. Size, 5 1/2 x 3 1/2 x 4 1/2".



Stock No.	Mfr's Type	Input VDC	Output VDC	Max. Ma.	Wt. Lbs.	List	NET EACH
80 P 119	VP12-260	12	260	60	5	\$28.95	17.02
80 P 133	VP24-260	24	260	60	6	30.95	18.20
80 P 116	VP6-325	6	325	100	6	29.95	17.61
80 P 117	VP12-325	12	325	100	6	29.95	17.61
80 P 134	VP24-325	24	325	100	6	32.95	19.37

## 12RS6DF BENCH POWER SUPPLY

Dual-range power supply for servicing car, truck and transistor radios. Range "A" supplies 0-16 v. at 6 amps continuously, or 14 amps intermittently. Range "B" provides 0-8 v. at 10 amps continuously or 20 amps intermittently. 2 1/2" voltmeter and ammeter; ranges: 0-16 v. DC and 0-20 amps DC. Provision for plugging in external ammeter. Includes built-in filter pack similar to Type MA-6—provides filtered output up to 6 amps at less than 0.5% ripple; 6 volts at less than 1 v. rms ripple; 12 volts at less than 0.5 v. rms ripple. With automatic overload protection. Size, 6 1/2 x 10 1/2 x 5 1/2". For 110-120 v. 60 cycle AC. Shpg. wt., 12 1/2 lbs. **80 PX 291. Only \$5.00 Down. NET 58.75**



## 12RS14D "RECTOPOWER" BENCH SUPPLY

Efficient versatile power supply. Provides filtered and continuously adjustable power for electronic equipment operating on 6 or 12 volts. Supplies 6 volts at 25 amps continuous or 40 amps intermittent; 12 volts at 14 amps continuous or 20 amps intermittent. Automatic voltage regulating system maintains constant output under varying load. Includes DC voltmeter and DC ammeter. Overload protection. Has large-capacity electrolytic capacitors that provide power storage for operation of vibrator powered equipment. Uses selenium rectifiers. Output regulation 20% at 6 volts; 8% at 12 volts; no load to full load. Sturdy, well ventilated cabinet provided with 4 rubber feet. Size, 11x10 1/2 x 8 3/4". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 35 lbs. **80 PU 132. Only \$5.00 Down. NET 136.71**



D-612T



NFB

**Model D-612T DC Power Supply.** Deluxe, easy-to-use unit. Designed for servicing transistor auto sets, as well as standard 6 and 12-volt vibrator-powered models—also suitable for transistor portables, aircraft and marine radios, phone circuits, and low voltage DC accessories. Ideal for battery charging and electroplating. Two continuously variable ranges: 0-8 volts and 0-16 volts. 10 amps continuous duty up to 12 volts; up to 20 amps intermittent. Less than 0.5% ripple up to 5 amps; 2% at up to 10 amps. Four bridge-type selenium rectifiers with conduction cooling. Choke-input filter with 10,000 mfd. capacitor. Two panel meters for constant check on voltage and current. 0-8 and 0-16 volt selector switch; convenient panel-mounted fuseholder. Wing nut output terminals with soldering lugs. Rugged steel cabinet with blue Hammerloid finish. Size, 7x12x8 3/4". For operation from 110-120 v. 50-60 cycle AC. Shpg. wt., 22 lbs. **80 PU 283. Only \$2.00 Down. NET 49.95**

**Model NFB Power Supply.** Deluxe unit for continuous heavy-duty operation; ideal for work on aircraft electronic equipment. Output continuously variable, 0-32 volts for loads to 15 amps. D'Arsonval meters. Ripple: Less than 0.75% @ 15 amps. Filter circuit has two chokes and 6000 mfd of capacitance. Regulation: 1.6% no load to full load. Circuit breaker for overload protection. Variable autotransformer for smooth control. 5-way output terminals. Drain: 730 v., with 32-volt, 15 ampere output. Bridge-type germanium rectifiers. Blue Hammerloid steel cabinet. 14 1/2 x 14 1/2 x 9 1/2". For operation from 110-120 v. 50-60 cycle AC. Shpg. wt., 86 lbs. **80 P 282. Only \$10.00 Down. NET 210.00**

**Model NFB-R.** Same as NFB unit above, but for rack mounting. Has steel panel 19x10 1/2". Shpg. wt., 100 lbs. **80 P 290. NET 235.00**

## MALLORY MA-6 FILTER PACK

**Model MA-6 Filter Pack.** Especially designed for use with 12RS6D but may be used in conjunction with other similarly rated bench power supplies where additional filtering is required. Particularly useful when servicing transistor radios or other transistorized electronic equipment. Rated to handle output currents up to 6 amperes. Output ripple is less than 0.5% when used with 12RS6D. Equipped with an accurate-reading ammeter which is placed in the circuit by depressing the automatic spring return switch located on the front panel. Convenient front panel wing-nuts permit quick, easy hook-up. Matches the 12RS6D in appearance. Ventilated for trouble-free, cool running operation. Housed in sturdy, attractive Hammer-tone case. Size, 4 1/2 x 5 1/2 x 6 1/2". Shpg. wt., 5 1/2 lbs. **80 P 292. NET 17.15**



## MALLORY DRY-DISC RECTIFIERS

Magnesium-copper sulphide rectifiers for use in low voltage DC power supplies. Single-phase full-wave bridge type. Operate from -90° to +265° F. Constant output without adjust-

ments. "Self-healing" rectifying film. †At full load. Type of mounting: †Insulated bolt; †grounded foot; †insulated stud. J suffix indicates universal mounting design.

Stock No.	Mfr's Type	Max. ACV Input	DC Volts Output	Cont. Duty Amps	Size H. W. D.	Replacement In Equipment	Wt. Lbs.	List	NET EACH
56 P 174	188R*	3.2	1.7	1.5	3/4 x 2 x 1 1/2	GTC Battery Eliminator	3/4	\$2.90	1.89
56 P 175	188R*	6.4	3.4	1.5	3/4 x 2 x 1 1/2	GTC Battery Eliminator	3/4	3.45	2.25
56 P 176	1812R	9.7	5.2	1.3	3/4 x 2 x 1 1/2	Electric Fence Supplies	3/4	3.95	2.59
56 P 170	1812C1J*	9.8	5.1	3.2	1 1/2 x 1 1/2 x 2 1/2	Mallory 3C, 6AC4 Booster	3/4	7.25	4.74
56 P 177	1S16CB7*	12.8	6.6	6.0	3x2 1/2 x 3 1/2	Mallory 5535B, 6AC6, 1S16CB7M	1 1/2	12.30	8.04
56 P 171	F16C3†	13.0	6.8	3.9	2 1/2 x 1 1/2 x 3	Mallory 5535	1	10.70	6.99
56 P 186	1S24C7J†	19.4	10.1	4	3 1/2 x 2 1/2 x 4 1/2	Mallory 12-AC-5-2	2 1/2	15.45	10.09

## CARTER CONVERTER

**Model B1010CBW4.** Rotary converter designed to operate tape and wire recorders from a 12-volt DC power source. Features cross-stacked armature laminations for minimum eddy current and hysteresis losses. Efficiency, 60%. Single-phase output only, with approximately 20% regulation, no load to full load. Output: 115 v., 60 cycle AC. With plug-in AC receptacle and DC connecting cord. 5x10 1/2 x 4 1/2". Shpg. wt., 18 lbs. **Only \$5.00 Down. 80 P 059. List. \$123.00. NET 90.40**



# Converters, Power Supplies and Batteries

## ATR QUALITY INVERTERS AND POWER SUPPLIES



### DC TO AC UNIVERSAL INVERTERS

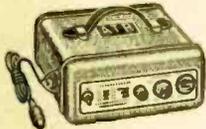
Universal inverters for operating 110-volt, 60 cycle AC equipment from DC voltages in autos, buses, trucks, boats, trains, planes and DC districts. Designed especially for standard 110-volt AC tape recorders, TV sets, radios, PA systems, electric razors, test equipment, etc. Units are carefully engineered and ruggedly constructed to provide long life operation. All feature complete RF interference suppression and exceptional frequency stability. Have operating efficiency in excess of 75%. Four-point voltage regulator corrects output voltage for minimum and maximum loads, and also helps compensate for input voltages lower or higher than normal. Inverters are recommended for use with loads having power factors in excess of 70%. Built-in toggle switch selects most efficient operation for use with TV sets or tape recorders. Inverters are not recommended for use with large motor driven appliances such as refrigerators, washing machines, etc. All have On-Off switches. Housed in attractive gray Hammerloid metal cabinet with convenient leather carrying strap. Sizes: Standard Model RSH, 6 1/2 x 9 1/2 x 5 1/2"; Heavy-Duty Model RHG, 6 3/4 x 11 1/4 x 8 1/2"; Extra-Heavy-Duty Model HSH, 6 1/2 x 12 1/2 x 8 1/2". With battery clips for instant connection to power source. Model with "P" suffix equipped with adapter cord for use in auto cigarette lighter receptacles. \*Recommended for 24-volt battery operation. Before ordering inverter, be sure to check wattage rating of specific equipment with which inverter will be used.

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Stock No.	Mfr's Type	Input DC Volts	Output 60 Cycle	Watts		Wt., Lbs.	List	NET EACH
				Cont.	Inter.			
81 PU 924	6U-RHG	6	110 v.	125	150	27	\$99.50	65.01
81 PU 926	12U-RSF	12	110 v.	100	125	22	75.00	49.00
81 PU 927	12U-RSF-P	12	110 v.	100	125	22	75.00	49.00
81 PU 928	12U-RHG	12	110 v.	100	125	22	90.50	65.01
81 PU 929	12U-HSJ	12	110 v.	200	250	37	125.00	81.67
81 PU 930	28U-RSF*	28	110 v.	100	125	22	89.95	58.77
81 PU 931	28U-RHG*	28	110 v.	150	175	27	119.50	78.08
81 PU 935	32U-HSJ	32	110 v.	225	325	37	145.00	94.74
81 PU 936	50U-RSF	50	110 v.	100	150	22	89.95	58.77
81 PU 937	110U-RSF	110	110 v.	150	250	22	75.00	49.00
81 PU 938	110AU-RHG	110	110 v.	250	325	27	89.95	58.77
81 PU 940	110U-HSJ	110	110 v.	400	600	37	145.00	94.74

### PORTABLE PLUG-IN TYPE INVERTERS

Lightweight inverters for operating 110 v. AC equipment from DC voltage sources. Feature excellent frequency stability and high efficiency. 6 and 12-volt units plug into cigarette lighter receptacle of any vehicle; others are equipped with standard 2-prong plugs. All are designed especially for use with dictating machines; record players, electric razors, test equipment, etc. Not recommended for tape recorders and large motor driven appliances such as refrigerators, washing machines, etc. Gray Hammerloid case with leather carrying strap. Sizes: DME, 5 1/4 x 4 1/2"; RME and RMF, 8 1/2 x 8 3/4". \*Recommended for 4-volt operation. Check wattage rating of equipment before ordering.



Stock No.	Mfr's Type	Input DC Volts	Output 60 Cycle	Watts		Wt., Lbs.	List	NET EACH
				Cont.	Inter.			
80 P 249	6DME	6	110 v.	30	40	5	\$24.95	16.30
80 P 288	6C-DME	6/12	110 v.	30	40	5	28.95	18.91
80 P 247	6-RMF	6	110 v.	60	80	12	49.50	32.34
81 P 941	6C-RMF	6/12	110 v.	60	80	12	54.95	35.91
80 P 249	12-DME	12	110 v.	40	50	5	24.95	16.30
80 P 266	12T-RME	12	110 v.	90	125	12	49.50	32.34
81 P 942	28-RME*	28	110 v.	80	100	12	69.50	45.41
80 PX 218	110-RME	110	110 v.	100	150	12	59.50	38.88

### PERMA-POWER QUALITY PRODUCTS

Versatile Power Supply and Radio Battery Eliminator



A-400

#### TRANSISTOR POWER SUPPLY

Model A-400. Exceptionally precise, versatile power supply for testing, servicing and operating all types of low power transistorized equipment, including radios, phonographs, etc. Continuously variable output uses autotransformer control; two voltage ranges for exact setting of voltage required. Continuous current monitoring of single transistor or entire set. Meters have precision D'Arsonval movement. Input Voltage: 115 v., 50-60 cycles. Output Voltage: 0-15 and 0-30 volts DC. Output Current: 0-15 and 0-60 ma. Ripple less than 0.002%. 10x3 1/2 x 3 3/4". Shpg. wt., 16 lbs.  
80 P 191. NET ..... 63.21

Model A-410. As above, but output current: 0-20 and 0-200 ma. Shpg. wt., 16 lbs.  
80 P 099. NET ..... 73.01

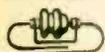
#### RADIO BATTERY ELIMINATOR

Model "A". Converts battery-operated radios and other appliances requiring low power for operation from 110 volts AC house current. Uses efficient selenium rectifiers; output is well-filtered direct current. Maintains rated power under widely varying tube loads. "A" power: 1.35 volts to 1.5 volts DC, depending upon current drain; "B" power: 90 volts DC at 13 milliamperes. Will operate any 4, 5 or 6-tube radio with filaments designed for 1.5-volt battery operation. Fits easily in back of case of battery radios, as well as in battery compartments of most portables. Extremely compact—2 1/8" high, 6 3/4" wide and 4 1/2" deep. Variety of sockets permit use with most portable radios. U.L. Approved. Shpg. wt., 4 lbs.  
80 P 176. NET ..... 12.40



"A"

#### MALLORY BIAS CELL CLIPS



Clips to hold grid bias cells listed at right. 1 1/4" tin-plated leads. Cells easily inserted; removed. 2 oz.

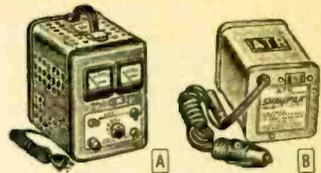
Stock No.	Type	Capacity	List	EACH
9 M 952	GB-15	2-cell	40c	26c
9 M 953	GB-16	4-cell	40c	
9 M 954	GB-17	1-cell	40c	



#### MALLORY GRID BIAS CELLS

For biasing first audio amplifier tubes. No bypass to ground needed. Stock with bias cell clips listed at left. Size, 1/4 x 3/4". Shpg. wt., 2 oz.

Stock No.	Type	Volts	List	EACH
9 M 948	BC-3	1 1/2	60c	40c
9 M 949	BC-5	1 1/2	60c	



### 6-12 V. DC POWER SUPPLIES

A Type 610C-ELIF. Features either 6 volts @ 10 amperes continuous, or 12 volts @ 6 amperes continuous. Has voltmeter and ammeter. Toggle switch selects 6 or 12 volts output. 8-position voltage selector control. For 105-125 v., 50-60 cycle AC. Gray steel case, 6 1/2 x 9 1/2 x 8 1/2". Shpg. wt., 22 lbs.  
80 PU 243. NET ..... 48.95

A Type 620C-ELIT. Heavy-duty model. Used dual rectifiers—full wave assures noiseless operation. Rated output: 6 volts at 20 amperes or 12 volts at 10 amperes. Has voltmeter and ammeter. Gray steel case with handle. 8-position voltage selector control. Size, 6 1/2 x 12 1/2 x 8 1/2". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 33 lbs.  
80 PU 234. NET ..... 65.61

### 6 AND 12 V. SHAV-PAKS

B Miniature inverters that operate standard AC electric shavers from 6 and 12-volt storage batteries in autos, buses, trucks, boats and planes. Plugs into cigarette lighter receptacle. Both 6 and 12-volt models provide 115 volts 60 cycle AC output at 15 watts. Hammerloid steel case. 4 1/2 x 3 1/4". 2 1/2 lbs.

Stock No.	Type	DC Input	List	NET
81 P 944	6-SPB	6 volts	\$11.95	7.81
81 P 945	12-SPB	12 volts	11.95	7.81

### 6-12 V. BATTERY CHARGER



Model 612CA6. Charges 6 or 12-volt storage batteries through cigarette lighter receptacle of any vehicle. 6 amp charge rate tapers to 3 amp. Circuit-breaker eliminates need for fuses. For use in negative and positive-ground vehicles. 8 1/2 x 5 1/2 x 3 3/4". For 110-120 v., 50-60 cycle AC. Shpg. wt., 8 lbs.  
81 P 946. List, \$29.95. NET ..... 22.01

### WILLARD RECHARGEABLE BATTERIES



Type 26-2. Compact, rechargeable battery that's ideal for portable radios. Convenient non-spill construction. Lightweight polystyrene container is immune to corrosion by electrolyte. Fibrite insulation retards plate shedding. Supplies 2 volts for 21 ampere-hours. Has plug-in terminals. Original equipment in GE Portable Radio Models 250, 260. Size (HWD): 6 x 2 1/2 x 2 3/4". Shpg. wt., 3 1/2 lbs.  
98 JU 023. List, \$11.15. NET ..... 8.08

Type ER 6-2B. Handy rechargeable battery as above, but designed for use with photo flash. Supplies 2 volts for 6 ampere-hours. 125 to 250 flashes per cycle of charge. Gives maximum peak current for positive bulb flash and split second shutter synchronization. Plain post terminals. 1 1/2 x 2 1/2 x 4 1/4". Wt., 1 1/2 lbs.  
98 JU 024. List, \$7.55. NET ..... 5.52

Type ER-3A-2. Use in portable radios. Supplies 2 volts for 34 ampere-hours. Has plain posts. Length, 4 1/2", width, 3 1/4"; height 4 3/4". Shpg. wt., 5 1/2 lbs.  
98 JU 025. List, \$14.85. NET ..... 10.78

### NO. 6 EVEREADY BATTERY



Standard, 1 1/2 volt general purpose dry cell battery designed to give thoroughly dependable and efficient performance at all times. Features high current capacity and extremely long life. Ideal for industrial use, annunciator and signal systems, battery operated ignition systems, fan lanterns, etc. Sturdily constructed casing is fully insulated. Size, 6 3/4 x 2 3/4" diameter. Equipped with screw terminals. Shpg. wt., 2 lbs.  
80 J 767. NET EACH ..... 92c  
Lots of 12, EACH ..... 84c

# RCA Batteries

## RCA PORTABLE, TRANSISTOR & INDUSTRIAL BATTERIES

RCA batteries are scientifically designed to give maximum performance. The extensive selection of long-life RCA batteries in the listing below covers types for hundreds of industrial applications and virtually all portable radios in use today. If you cannot determine which batteries you require, give us the make and type number of the original batteries, plus the make and model number of your set. You can always be sure of fresh batteries when you order from Allied (sealed in steel containers). Other voltage taps: 1½, 3, 4½, 6, 9, 10½, 16½.



### PORTABLE "A" BATTERIES

Stock No.	RCA Type	Std. Pkg.	List Price	NET PER BATTERY		Volts	Size	Wt. Per Batt., Lbs.	Replaces			
				Single Lot	Std. Pkg.				Burgess	Eveready	Philco	Zenith
80 J 901	VS004	6	1.65	1.27	1.15	1½	4½x2½x2½	1½	4F	742	P04	Z94
80 J 902	VS009	6	1.50	1.14	1.04	6	2½x2½x4½	1½	F4P1	744	P4F4R	
80 J 947	VS034A	12	.15	.11	.10	1½	9x2	¾	Z	915	P15	Z8
80 J 948	VS035A†	12	.20	.135	.125	1½	1x1½	¾	1	935	P003	Z7
80 J 903	VS036A†	48	.20	.135	.125	1½	1½x2½	1½	2R	950	P012	Z2NL
80 J 962	VS065	12	1.50	1.16	1.05	7½	3½x2½	1½	C5	717	P31	Z750
80 J 963	VS067	6	1.17	.90	.82	4½	4x1½x4½	1	F3	736	P38	Z736
80 J 965	VS068	24	.90	.69	.63	6	1½x1½x2½	¾	Z4	724		
80 J 966	VS069	12	1.00	.76	.69	1½	2½x1½x2½	¾	2D	720		
80 J 967	VS072	12	1.10	.84	.76	4½	3½x1½x2½	1	D3	726		Z450
80 J 904	VS073	48	.125	.09	.08	1½	1x1½	¾	N	W463		N
80 J 897	VS074	12	.125	.09	.08	1½	1½x1½x2½	1	7	912	K	Z912
80 J 214	VS141	6	1.10	.85	.77	1½	2½x1½x4½	2	2F	W353		
80 J 912	VS236†	12	.40	.31	.28	1½	1½x4½	1½	21R	964	P77	Z5
80 J 294	VS315	6	1.50	1.16	1.05	7½	2½x2½x2½	1	D5	707	P26	Z70

### PORTABLE "B" BATTERIES

80 J 905	VS012	6	4.25	3.28	2.98	45	3½x2½x5½	3	B30	484	P305	
80 J 906	VS013	6	3.50	2.70	2.45	45	3½x2½x5½	3	M30	482	P45	Z783
80 J 907	VS014	6	3.55	2.74	2.49	45	3½x2½x4½	1½	A30	W359	P210	Z530
80 J 908	VS015	6	3.95	3.04	2.76	22½-45	3x2½x4½	1½	Z30	738	P104	
80 J 909	VS016	12	3.50	2.70	2.45	67½	2½x1½x3½	1	XX45	467	P67	Z67
80 J 910	VS055	12	2.95	2.29	2.08	45	2½x1x3½	¾	XX30	455	P105	Z455
80 J 889	VS082	12	3.15	2.43	2.21	67½	2½x1½x2½	¾	K45	457		Z457
80 J 913	VS084	12	1.50	1.16	1.05	22½	1½x¾x2"	¾	U15	412	P612	Z12M
80 J 969	VS086	12	2.50	1.93	1.75	45	1½x½x3½	1	U30	415	P150	Z415
80 J 911	VS090	12	4.50	3.47	3.15	90	3½x1½x2½	1	N60	490	P132	Z490
80 J 898	VS215	6	3.50	2.70	2.45	67½	1½x1½x5½	1½	P45M	477	P175	
80 J 968	VS217	12	4.15	3.47	3.15	75	1½x1½x6½	1	XX50	437	P144	Z437
80 J 999	VS218	12	3.10	2.39	2.17	67½	5½x1½x2½	1	P45	477	P149	Z477
80 J 984	VS219	12	3.95	3.05	2.77	90	1½x1½x7½	1	P60	479	P176	Z90
80 J 297	VS316	6	4.50	3.47	3.15	90	1½x1½x7½	1	N60X	495	P190	Z495
80 J 296	VS318	6	2.95	2.28	2.07	67½	1½x6½x3½	1	UX45	416	P217	

### PORTABLE "AB" BATTERIES

80 J 916	VS019	6	7.75	5.98	5.43	7½-9-90	9½x2½x4½	6	F6A60	753	P841A	Z970
80 J 920	VS047	6	8.25	6.36	5.78	9-90	13½x2½x4½	8	G6B60	752	P60B6F6	Z985
80 J 921	VS050	6	6.50	5.01	4.55	6-7½-75	8½x2½x3½	4	TSZ50	755	P350	
80 J 933	VS057W	6	6.95	5.36	4.87	7½-9-90	8½x2½x4½	4	T6Z60	756	P371	
80 J 928	VS058	6	7.25	5.59	5.08	9-90	9½x2½x4½	5	F6A60P	757		Z909
80 J 888	VS059	6	6.85	5.28	4.80	9-90	9½x2½x4½	5	T6Z60P	727		Z962
80 J 896	VS060	6	6.90	5.32	4.83	7½-75	8½x2½x3½	3½	TSZ50P	785		Z775
80 J 929	VS064	6	5.75	4.43	4.03	7½-90	7½x2½x3½	3½	4TZ60	729	P364	

### TRANSISTOR BATTERIES

80 J 014	VS300A	12	1.35	1.05	.95	9	1½x1½	¾	P6M	226		Z226
80 J 991	VS301	12	2.25	1.74	1.58	3, 6, 9	8x1½x2½	1½	D6P1	2506		
80 J 837	VS304	12	1.35	1.05	.95	9, 13½	1½x1½x2½	¾	XX9	239		
80 J 838	VS305	12	1.85	1.43	1.30	9	1½x1½x3½	¾	2N6	246	P178	
80 J 839	VS306	6	1.80	1.39	1.26	9	3½x2½x2½	1	D6	276	P88	Z276
80 J 842	VS309A	12	2.15	1.69	1.53	9	1½x1½x2½	¾				
80 J 845	VS312	12	2.25	1.74	1.58	8	1x1½x1½	¾			E146	P146
80 J 846	VS313	4	.75	.56	.51	1, 4	9x1½	1			E9	
80 J 298	VS321	12	2.75	2.12	1.93	4½	2½x1½x8½	3			2731	
80 J 299	VS322	12	1.50	1.16	1.05	9	1½x2½	¾	M6	266	P1605	
80 J 095	VS336	48	.25	.17	.155	1½	1½x1½x2½	¾	Z30	A-100	P920	Z1NL
80 J 949	VS400	10	2.65	1.98	1.80	4	1½x1½	¾	11233	E233	P696	

### INDUSTRIAL BATTERIES

80 J 870	VS006C	12	1.25	.92	.84	1½	2½x6½	2½		GI.6		
80 J 720	VS006S	12	1.25	.92	.84	1½	2½x6½	2½	61GN	61GN	P6	
80 J 937	VS028	5	1.15	.90	.81	4½	2½x2½x3½	1½	5360	781		
80 J 938	VS029	10	1.95	1.49	1.35	7½	3½x2½x3½	1½	5540	773		
80 J 942	VS039	3	4.98	3.68	3.34	6	10½x2½x7½	11	S461	1461	P64	
80 J 992	VS040C	12	1.19	.87	.79	6	2½x2½x4½	1½	F4H	509	P4F	
80 J 950	VS040S	12	1.10	.87	.79	6	2½x2½x4½	1½	F4BP	510S		
80 J 993	VS070	25	.65	.51	.46	1½	1½x3½	¾	8R	960P		Z1
80 J 890	VS083	12	1.15	.90	.81	15	1½x8½	¾	U10	411		Z11M
80 J 721	VS084	12	1.50	1.16	1.05	22½	1½x¾	¾	U15	412	P612	Z12M
80 J 914	VS085	12	1.75	1.35	1.23	30	2½x1½x1½	1½	U20	413		Z13M
80 J 989	VS093	3	11.00	8.47	7.70	300	2½x2½x3½	1½	U200	493		
80 J 722	VS100	8	1.25	.96	.87	3	2½x1½x4½	1	F2BP	W352		
80 J 986	VS101	8	1.25	.96	.87	1½	2½x1½x4½	1	F2FBP	W354		
80 J 951	VS102	6	2.35	1.77	1.61	22½	3½x2½x2½	1½	4156	763		
80 J 957	VS106	10	1.25	.93	.84	1½	2½x2½x3½	1½	4FH	735		
80 J 952	VS112	5	4.35	3.36	3.05	22½-45	4½x2½x5½	3½	5308	W376		
80 J 988	VS114	5	3.85	2.96	2.69	22½-45	3x1½x5½	2	Z30NX	W350		
80 J 959	VS130	8	1.65	1.29	1.17	1½-3-4½	3½x1½x3½	1	2370ST	761T		
80 J 960	VS131	5	3.65	2.81	2.55	22½	4½x2½x3½	2	5156SC	778		
80 J 987	VS133	5	1.02	.75	.68	4½	2½x2½x3½	1½	532	703		
81 J 056	VS147	4	.45	.33	.30	1½	1½x1½	¾		E630		
81 J 053	VS334	24	.20	.14	.13	1½	9x2	¾	930	1015	P15R	Z8
81 J 054	VS335	12	.25	.17	.155	1½	1x1½	¾	130	635	P903	Z7

# Burgess Portable Radio Batteries

## LATEST LISTINGS FOR PORTABLE RADIO BATTERIES

Power-packed Burgess batteries are carefully manufactured to assure peak performance. The selection below covers types for nearly all portable radio needs, and Allied's extremely rapid stock turnover assures you of fresh batteries. Where type nos. in last four columns are separated by a diagonal mark, either number may be replaced by the Burgess battery shown at left. If you are not able to find the batteries which you require, give the make and type number of the original batteries, make and model no. of your set, and we will supply the Burgess equivalent. \*Mercury cell.



### PORTABLE "A" BATTERIES

Stock No.	Burgess Type	Std. Pkg.	List Price	NET PER BATTERY		Volts	Size	Shpg. Wt., Per Battery, Lbs.	Replaces			
				In Single Lots	In Std. Pkg.				Eveready	RCA	Philco	Zenith
53 J 029	1	12	\$0.20	.14	.13	1 1/2	1 1/2 x 1 1/2 x 1 1/2" dia.	3/4	935	VS035A	P903	Z7
53 J 069	2D	1	1.00	...	.69	1 1/2	2 1/2 x 1 1/2 x 2 1/2"	3/4	720	VS069	.....	.....
53 J 000	2F	1	1.10	...	.70	1 1/2	2 1/2 x 1 1/2 x 2 1/2"	3/4	W353	VS141	.....	.....
53 J 001	2F4	1	3.90	...	2.73	6	4 x 2 1/2 x 5 1/2"	2 1/2	718	VS010	.....	.....
53 J 036	2R	48	.20	.14	.13	1 1/2	2 1/2 x 1 1/2" dia.	3/4	950	VS036	P920	Z2NL
80 J 641	21R	12	.40	.31	.28	1 1/2	4 1/2 x 1 1/2" dia.	1 1/2	964	VS236	P77	Z5
53 J 049	37	1	.98	...	.65	1 1/2	6 1/2 x 1 1/2" dia.	1 1/2	.....	.....	.....	.....
53 J 003	4F	6	1.65	1.27	1.15	1 1/2	2 1/2 x 2 1/2 x 4 1/2"	1 1/2	742	VS004	P94	Z94
53 J 045	5R	12	.20	.14	.13	1 1/2	2 1/2 x 1 1/2" dia.	3/4	.....	.....	.....	.....
80 J 629	6F	1	2.40	...	1.67	1 1/2	4 1/2 x 2 1/2 x 4 1/2"	2 1/2	743	VS007	P96	Z96
53 J 006	8F	1	3.15	...	2.19	1 1/2	3 1/2 x 2 1/2 x 5 1/2"	3	741	VS070	.....	.....
53 J 046	8R	12	.65	.51	.46	1 1/2	3 1/2 x 1 1/2" dia.	3/4	960P	.....	.....	Z1
53 J 047	9R	12	.17	.13	.12	1 1/2	1 1/2 x 1 1/2" dia.	3/4	1015E	.....	.....	.....
53 J 042	B5	1	1.80	...	1.26	7 1/2	3 1/2 x 1 1/2 x 2 1/2"	1 1/2	713	VS129	.....	.....
53 J 043	C5	6	1.50	1.16	1.05	7 1/2	2 1/2 x 1 1/2 x 3 1/2"	3/4	717	VS065	P31	Z750
53 J 070	D3	6	1.10	.84	.76	4 1/2	3 1/2 x 1 1/2 x 2 1/2"	3/4	726	VS072	.....	.....
53 J 044	F3	6	1.17	.90	.82	4 1/2	4 x 1 1/2 x 4 1/2"	1 1/2	736	VS067	P38	Z736
53 J 011	F4PI	6	1.50	1.14	1.04	6	2 1/2 x 2 1/2 x 4 1/2"	1 1/2	744	VS009	P4F4R	.....
53 J 013	G3	6	1.20	.94	.85	4 1/2	4 1/2 x 1 1/2 x 4 1/2"	1 1/2	746	VS002	P100	Z83A
53 J 106	Hg-3*	4	.80	.59	.54	1.345	2 1/2 x 2 1/2" dia.	2 oz.	E3	Equivalent to Mallory RM3R		
53 J 071	T5	3	1.90	1.45	1.32	7 1/2	2 1/2 x 2 1/2 x 3 1/2"	1 1/2	W360	.....	.....	.....
80 J 625	Z4	1	.90	...	.63	6	1 1/2 x 1 1/2 x 2 1/2"	3/4	724	VS068	.....	.....

### PORTABLE "B" BATTERIES

80 J 535	A30	2	3.55	2.74	2.49	45	3 1/2 x 2 1/2 x 4 1/2"	1 1/2	W359	VS014	P210	Z530
80 J 536	B30	2	4.25	3.28	2.98	45	4 1/2 x 2 1/2 x 5 1/2"	2 1/2	484	VS012	P305	.....
80 J 631	K45	6	3.15	2.43	2.21	67 1/2	2 1/2 x 1 1/2 x 2 1/2"	3/4	457	VS082	.....	Z457
80 J 546	M30	1	3.50	...	2.45	45	5 1/2 x 1 1/2 x 3 1/2"	2	482	VS013	P45	Z783
80 J 632	N60	6	4.50	3.47	3.15	90	3 1/2 x 1 1/2 x 3 1/2"	1	490	VS090	P132	Z490
80 J 693	N60X	1	4.50	...	3.15	90	1 1/2 x 1 1/2 x 7 1/2"	1 1/2	495	VS316	P190	Z495
80 J 642	P45	6	3.10	2.39	2.17	67 1/2	1 1/2 x 1 1/2 x 5 1/2"	3/4	477	VS218	P149	Z477
80 J 645	P45M	6	4.00	3.03	2.75	67 1/2	1 1/2 x 1 1/2 x 5 1/2"	3/4	477	VS215	P175	.....
80 J 665	P60	6	3.95	3.05	2.77	90	1 1/2 x 1 1/2 x 7 1/2"	1	479	VS219	P176	Z90
80 J 646	U30	1	2.50	...	1.75	45	1 1/2 x 1 1/2 x 3 1/2"	3/4	415	VS086	P150	Z415
80 J 692	UX45	1	2.95	...	2.07	67 1/2	1 1/2 x 1 1/2 x 3 1/2"	3/4	416	VS318	P217	.....
80 J 539	W30PI	1	3.33	...	2.33	45	2 1/2 x 1 1/2 x 3 1/2"	3/4	733	.....	.....	.....
80 J 545	XX30	6	2.75	2.11	1.92	45	2 1/2 x 1 1/2 x 3 1/2"	3/4	455	VS055	P105	Z455
80 J 544	XX45	1	3.50	...	2.45	67 1/2	2 1/2 x 1 1/2 x 3 1/2"	3/4	467	VS016	P67	Z67
80 J 613	XX50	6	4.50	3.47	3.15	75	1 1/2 x 1 1/2 x 6 1/2"	1 1/2	437	VS217	P144	Z437
80 J 588	XX69	1	6.57	...	4.60	103 1/2	1 1/2 x 1 1/2 x 1 1/2"	1 1/2	W361	.....	.....	.....
80 J 537	Z30	2	3.95	3.04	2.76	45	3 x 2 1/2 x 4 1/2"	1 1/2	738	VS015	P104	.....

### PORTABLE "AB" PACKS

80 J 551	4GA42	1	8.80	...	6.16	1 1/2, 63	9 1/2 x 2 1/2 x 4 1/2"	4	W366	VS053	P41A4FL	.....
80 J 676	4T260	1	5.75	...	4.03	1 1/2, 90	7 1/2 x 2 1/2 x 3 1/2"	4	729	VS064	P364	.....
80 J 555	6TA60	1	7.85	...	5.48	1 1/2, 90	9 1/2 x 2 1/2 x 4 1/2"	4 1/2	W369	VS054	.....	.....
80 J 584	F6A60	1	7.75	...	5.43	7 1/2, 90	9 1/2 x 2 1/2 x 4 1/2"	6	753	VS019	P841A	Z979
80 J 616	F6A60P	1	7.25	...	5.08	9, 90	9 1/2 x 2 1/2 x 4 1/2"	6 1/2	757	VS058	.....	Z909
80 J 570	G6B60	1	8.25	...	5.78	9, 90	13 1/2 x 2 1/2 x 4 1/2"	7	752	VS047	P60B6F6	Z985
80 J 585	G6M60	1	8.50	...	5.95	7 1/2, 90	10 1/2 x 3 1/2 x 4 1/2"	6	754	VS018	.....	.....
80 J 615	TSZ50	1	6.50	...	4.55	6, 7 1/2, 75	8 1/2 x 3 1/2 x 2 1/2"	4	755	VS050	P350	.....
80 J 675	TSZ50P	1	6.90	...	4.83	7 1/2, 75	8 1/2 x 3 1/2 x 2 1/2"	3 1/2	785	VS060	.....	Z775
80 J 614	T6Z60	1	6.95	...	4.87	7 1/2, 90	2 1/2 x 8 1/2 x 3 1/2"	4 1/2	756	VS057W	P371	.....
80 J 643	T6Z60P	1	6.85	...	4.80	9, 90	2 1/2 x 8 1/2 x 3 1/2"	4 1/2	727	VS059	.....	Z962

### PORTABLE BATTERIES FOR TRANSISTOR RADIOS

53 J 089	130	12	.25	.17	.155	1 1/2	1 1/2 x 1 1/2" dia.	3/4	635	VS335	P903	Z7
53 J 684	2N6	1	1.85	...	1.30	9	2 1/2 x 1 1/2 x 1 1/2"	3/4	246	VS305	P178	.....
80 J 664	2U6	1	1.35	...	.95	9	1 1/2 x 1 1/2" dia.	3/4	216	VS312	.....	.....
53 J 096	2Z3	1	1.59	...	1.11	4 1/2	1 1/2 x 1 1/2 x 2 1/2"	3/8	243	VS324	.....	.....
78 J 243	7	12	.125	.09	.08	1 1/2	1 1/2 x 1 1/2" dia.	3/8	912	VS074	K	Z912
53 J 090	230	48	.25	.17	.155	1 1/2	2 1/2 x 1 1/2" dia.	3/8	A100	VS336	P920	Z2NL
53 J 091	930	12	.20	.14	.13	1 1/2	1 1/2 x 1 1/2" dia.	3/10	1015E	VS034	P15	Z8
80 J 690	A4	1	1.00	...	.69	6	2 1/2 x 1 1/2 x 1 1/2"	3/4	.....	.....	.....	.....
80 J 694	C6X	1	1.60	...	1.10	9	2 1/2 x 1 1/2 x 6 1/2"	3/8	2356	.....	.....	.....
53 J 087	D5	1	1.50	...	1.05	7 1/2	2 1/2 x 2 x 2 1/2"	3/8	707	VS315	P26	Z707
80 J 666	D6	1	1.80	...	1.26	9	3 1/2 x 2 x 2 1/2"	1	276	VS306	P88	Z276
80 J 691	D6PI	1	2.25	...	1.58	3, 6, 9	7 1/2 x 1 1/2 x 2 1/2"	1 1/2	2506	VS301	.....	.....
53 J 093	D6S	1	1.50	...	1.05	9	2 1/2 x 1 1/2 x 7 1/2"	1 1/2	2761	.....	.....	.....
53 J 105	H233*	1	2.65	...	1.80	4.035	1 1/2 x 1 1/2" dia.	6 oz.	E233	VS400	P696	.....
53 J 092	M6	1	1.50	...	1.05	9	1 1/2 x 1 1/2 x 2 1/2"	3/8	266	VS322	P1605	.....
80 J 689	NE	48	.125	.09	.08	1 1/2	1 1/2 x 1 1/2" dia.	3/4	.....	.....	.....	.....
53 J 086	P6	1	1.10	...	.77	9	1 1/2 x 1 1/2 x 1 1/2"	3/4	226	.....	.....	.....
53 J 088	P6M	1	1.35	...	.93	9	1 1/2 x 1 1/2 x 1 1/2"	3/8	.....	.....	P91	Z266
80 J 679	XX9	1	1.35	...	.95	9, 13 1/2	1 1/2 x 2 1/2 x 2 1/2"	3/4	239	VS304	.....	.....

# Burgess Batteries



## BATTERIES FOR ALL PURPOSES

Allied's rapid-turnover stock always assures you of factory-freshness. If you do not find the batteries you require, give make and type of batteries, make and model of set, and we will supply the equivalents.



### "FEATHERWEIGHT" "B" BATTERIES—INCLUDING HEARING AID TYPES

Stock No.	Burgess Type	Std. Pkg.	List Price	NET EA. STD. PKG.	Volts	Size	Shpg. Wt. Oz.	Replaces			
								Zenith	Sono- tone	Ever- eady	Acous- ticon
53 J 072	XX15	1	\$1.95	1.37	22½	1 11/16 x 1 1/2 x 3 3/8"	4			425P	22EW
53 J 073	XX22	1	2.45	1.72	33	2 1/2 x 1 1/2 x 3 3/8"	6			433P	33EW
53 J 074	XX30P1	1	3.00	2.10	45	2 1/2 x 1 1/2 x 4 1/8"	12	Z30	230	455P	45EW
53 J 094	K-10	1	1.65	1.16	15	1 3/4 x 3/4 x 1 1/2"	2			417	
53 J 095	K-15	1	1.75	1.23	22½	1 3/4 x 3/4 x 2 1/2"	2			420	
53 J 075	K20	1	2.15	1.51	30	2 1/2 x 1 1/2 x 1 1/2"	3			430	
53 J 076	U10	1	1.15	.81	15	1 x 1/2 x 1 1/2"	2	Z11M	211	411	711G
53 J 077	U15	1	1.50	1.05	22½	1 x 1/2 x 2 1/2"	2	Z12M	212	412	712H
53 J 078	U20	1	1.75	1.23	30	1 x 1/2 x 2 1/2"	2	Z13M	213	413	713G
53 J 080	Y10	1	1.15	.81	15	1 1/2 x 1 1/2 x 1 1/2"	3	Z5M	Z5	504	715G
53 J 081	Y15	1	1.50	1.05	22½	1 1/2 x 1 1/2 x 2 1/2"	3	Z6M	Z6	505	722G
53 J 079	Y20	1	1.85	1.30	30	1 1/2 x 1 1/2 x 2 1/2"	3		Z7	506	
53 J 084	Y20S	1	1.85	1.30	30	1 1/2 x 1 1/2 x 2 1/2"	3			507	

### STANDARD DRY BATTERIES

Suitable for all radio and laboratory requirements. Burgess quality construction and insulators allow use of very active ingredients, providing maximum useful life. Letters following battery type numbers denote terminals: P.—plug-in terminals; S.C.—spring-clip terminals. All others have screw terminals.



### "A" BATTERIES

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH	
						Single	Std. Pkg.
80 J 621	2BBP	1½	1 1/8 x 2 1/2 x 2 1/2"	1/4	6	1.28	1.16
53 J 017	2F2H	3	2 3/8 x 2 3/8 x 4 1/8"	1 1/2	5	1.19	1.08
53 J 037	2F2BP	3	5/8 x 1 1/2 x 4 1/8"	1 1/2	5	.87	.79
53 J 036	2F2BP	1½	2 1/8 x 1 3/4 x 4 1/8"	1 1/2	5	.87	.79
80 J 604	222PI	3	1 1/2 x 1 1/2 x 2 1/2"	1/4	12	.75	.68
53 J 038	4Z2	3	2 1/8 x 4 x 1 1/2"	1/4	10	.63	.57
53 J 035	4Z2	4½	2 1/2 x 1 1/2 x 2 1/2"	1/4	10	.73	.66
53 J 023	44	1½	1 1/8 dia. x 4 1/8"	3/4	1		.95
53 J 085	532	4½	2 1/8 x 1 1/2 x 2 1/2"	1/4	1		.68
80 J 591	B2BP	3	1 1/2 x 1 1/2 x 2 1/2"	1/4	6	1.03	.94
53 J 018	F2BP	3	2 1/8 x 1 1/2 x 4 1/8"	1 1/2	5	.87	.79
53 J 016	F4BP	6	2 3/8 x 2 3/8 x 4 1/8"	1 1/2	1		.79

### "B" BATTERIES

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	Net Each	
						Sgl. Lts.	Std. Pkg.
80 J 504	10308PI	45	8 1/2 x 4 1/2 x 7 1/2"	11 1/2	1	4.84	4.84
80 J 505	10308SC	45	8 1/2 x 4 1/2 x 7 1/2"	11 1/2	1	4.84	4.84
80 J 501	21308SC	45	8 1/2 x 4 1/2 x 7 1/2"	13	1	5.36	5.36
80 J 507	2308SC	45	8 1/2 x 2 1/2 x 7 1/2"	8	1	3.84	3.84
80 J 510	4150	22½	3 1/2 x 2 1/2 x 2 1/2"	1	1	1.61	1.32
80 J 511	5150PI	22½	4 1/2 x 2 1/2 x 2 1/2"	1 1/2	1	2.32	2.32
80 J 512	5150SC	22½	4 1/2 x 2 1/2 x 2 1/2"	3 1/2	1	2.81	2.55
80 J 508	5308	45	4 1/2 x 2 1/2 x 5 1/2"	3 1/2	1	3.05	3.05
80 J 626	U-200	300	2 3/4 x 2 3/4 x 3 1/2"	1	1	2.69	2.70
53 J 097	D30	45	5 1/2 x 2 1/2 x 7 1/2"	4 1/2	1	3.15	3.15
53 J 098	Z30T	45	3 x 2 1/2 x 7 1/2"	1 1/2	1	2.62	2.62
80 J 519	W30BPX	45	3 1/2 x 3 1/2 x 7 1/2"	1 1/2	1	2.49	2.49
80 J 524	Z30NX	45	1 1/2 x 1 1/2 x 4 1/8"	1 1/2	5	2.96	2.96
80 J 634	Z60BP	90	3 3/8 x 2 1/2 x 5 1/2"	2 1/2	1	6.90	6.90

### "C" BATTERIES

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	Net Each	
						Sgl. Lts.	Std. Pkg.
80 J 593	2370	4½	3 1/8 x 1 1/2 x 2 1/2"	3/4	5	1.29	1.17
80 J 513	2370PI	4½	4 1/8 x 1 1/2 x 2 1/2"	1	5	1.52	1.38
80 J 515	5360	4½	2 1/8 x 1 1/2 x 2 1/2"	1/4	10	.89	.81
80 J 514	5540	7½	4 x 1 1/2 x 2 3/4"	1/2	5	1.49	1.35
80 J 523	A9BP	13½	2 1/8 x 2 1/8 x 2 1/8"	1/2	1	2.94	2.94
80 J 516	B5P	7½	4 1/8 x 1 1/2 x 2 1/2"	3/4	1	2.05	2.05
80 J 521	W5BP	7½	2 1/8 x 1 1/2 x 1 3/4"	1/4	6	1.62	1.47

### SPECIAL-PURPOSE BATTERIES

#### TAPE RECORDER BATTERIES

Extremely compact, highly dependable batteries. Designed specifically for use in pocket tape recorders. \*Flat contact. †Snap type.

Stock No.	Type No.	Volts	Size	Wt. Lbs.	NET EACH
53 J 099	2X62X†	1½, 9	2 1/2 x 1 1/2 x 2 1/2"	1/2	1.82
53 J 100	2X7†	4, 10½	2 1/2 x 1 1/2 x 2 1/2"	1/2	1.82
53 J 101	3X7*	10½	1 1/2 x 1 1/2 x 3 3/8"	1/2	2.00

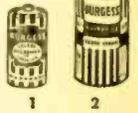
### NEW BURGESS BATTERY ENGINEERING MANUAL

Complete data on dry batteries for the design engineer. Chapters include: Basic Information on Dry Batteries. Explanation of Various Cell Types. Performance on Standard Tests. Curves for Estimating Dry Battery Performance. Terminal Illustrations and Dimensions. Reserve Type Power Units, etc. Illustrated. 97 pages. Size: 6x9 1/2. \$1.00



### FLASHLIGHT BATTERIES

Top-quality cells for all popular sizes of flashlights. Chrome-protected for long service. Type 2 cells are sealed in steel and fully leakproof. All others are also protected against leakage; sealed in plastic and steel. Type 1—for baby tubular flashlights; Type 2—for standard flashlights; Type Z—for standard penlights; Type 7—for slim penlights; Type N—for miniature and novelty lights.



Stock No.	Burgess Type	Size	Wt. Oz.	Std. Pkg.	LIST	NET EACH	
						Sgl. Lts.	Std. Pkg.
53 J 029	1	1 1/8 x 1 1/8 x 3/4"	4	12	.20	.14	.13
53 J 009	2	2 3/8 x 1 1/2"	17	48	.20	.14	.13
78 J 443	7	1 3/8 x 1 1/8"	3	12	.125	.09	.08
53 J 082	N	1 1/8 x 1 1/8"	3	24	.125	.09	.08
53 J 031	Z	1 1/8 x 1 1/8"	3	12	.125	.09	.08

### IGNITION, TELEPHONE AND ALARM BATTERIES

Designed for emergency illumination, portable lighting, alarm systems. Used by railroads, police, fire departments and emergency crews. Dependable, leakproof metal container. Types 4F2H and 4FH recommended for general ignition, telephone and lantern service, etc.

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH	
						Sgl. Lts.	Std. Pkg.
53 J 024	4FH	1½	2 3/8 x 2 3/8 x 4 3/8"	1 1/2	12	.92	1.84
53 J 027	4F2H	3	3 3/8 x 2 1/2 x 5 1/2"	2 1/2	1		.45
53 J 025	4F4H	6	8 1/8 x 2 1/2 x 5 1/2"	6 1/4	1		3.34
80 J 601	4F5H	7½	7 1/8 x 3 1/2 x 5 1/2"	7 1/2	1		4.32
53 J 033	4F6H	9	8 1/2 x 3 1/2 x 5 1/2"	9	1		5.03
80 J 638	6-Ign.	1½	2 1/2 x 0 3/4"	2	12	.92	.84
80 J 639	6-Tel.	1½	2 1/2 x 0 3/4"	2 1/2	12	.92	.84
80 J 644	6-Ind.	1½	2 1/2 x 0 3/4"	2	12	.99	.90
80 J 640	S461	6	10 3/8 x 2 3/8 x 7 1/8"	8 1/2	6	3.67	3.34

### LANTERN BATTERIES

For use with railroad-type lanterns. Type 4F4H has positive coilspring contacts—a favorite of railroadmen. Type TW1S for underwater use.

Stock No.	Burgess Type	Volts	Size	Wt. Lbs.	Std. Pkg.	NET EACH	
						Single	Std. Pkg.
53 J 027	4F2H	3	3 3/8 x 2 1/2 x 5 1/2"	2 1/2	1		1.45
53 J 028	F4H	6	2 3/8 x 2 3/8 x 4 3/8"	1 1/2	12	.87	.79
53 J 016	F4SC	6	2 3/8 x 2 3/8 x 4 3/8"	1 1/2	1		.79
80 J 680	TW1	6	5 1/2 x 2 3/8 x 4 1/8"	1 1/2	1		1.79
53 J 104	TW1S	6	5 3/8 x 2 3/8 x 4 1/8"	3 1/4	1		1.82

### PHOTO-FLASH BATTERIES

Designed for high initial current discharge.

Stock No.	Type	Volts	Size	Std. Pkg.	Shpg. Wt.	NET EACH		Replaces Eversley
						Single	Pkg.	
53 J 040	120S	1½	1 1/8 x 1"	12	4 oz.	.18	.16	835
53 J 039	220S	1½	2 1/8 x 1 1/2"	12	6 oz.	.18	.16	850
53 J 041	920S	1½	1 1/8 x 1 1/2"	22	6 oz.	.14	.13	815
53 J 070	D3	4½	3 3/8 x 1 3/4 x 2 1/2"	6	3/4 lb.	.84	.76	726
80 J 631	M45	67½	2 1/8 x 1 1/2 x 2 1/2"	6	1/2 lb.	2.43	2.21	457
80 J 546	N30	45	3 1/8 x 1 1/2 x 5 1/2"	1	2 lbs.	4.85	4.45	482
80 J 681	N150	225	3 3/8 x 2 1/2 x 4 1/8"	1	1 1/2 lbs.	5.56	5.16	492
80 J 632	N60	90	3 1/8 x 1 1/2 x 3 1/2"	6	1 lb.	3.47	3.15	490
53 J 076	U10	15	1 x 3/4 x 1 1/2"	1	2 oz.		.81	411
53 J 044	U15PF3	22½	3 1/8 x 1 1/2 x 1 1/2"	1	4 oz.		1.05	412
80 J 678	U160	240	2 3/8 x 1 1/2 x 1 1/2"	1	1 1/2 lb.		5.56	491
53 J 078	U20	30	1 3/8 x 1 1/2 x 2 1/2"	1	2 oz.		1.23	413
80 J 626	U200	300	2 3/8 x 2 3/8 x 3 1/2"	1	1 lb.		7.70	493
80 J 682	U320	510	2 1/8 x 1 1/2 x 2 1/2"	1	2 1/2 lbs.		11.16	497
80 J 677	XK150	225	4 x 2 1/2 x 4 1/8"	1	2 1/2 lbs.		6.96	489
80 J 544	XX45	67½	2 3/8 x 1 1/2 x 3 1/2"	1	3/4 lb.	2.70	2.45	467
53 J 080	Y10PF	15	1 1/8 x 1 1/2 x 2 1/2"	1	3 oz.		.81	504
53 J 081	Y15PF	22½	1 1/2 x 1 1/2 x 2 1/2"	1	3 oz.		1.05	505

### FARM RADIO PACKS

Stock No.	Type	Volts	Size	Wt. Lbs.	NET EACH
80 J X 572	17GL60	1½, 90	15 1/8 x 4 3/8 x 7 1/8"	20	7.21
80 J 635	4SD60	1½, 90	10 1/8 x 4 3/8 x 6 1/8"	15	7.21
80 J 636	S6D60	7½, 9, 90	9 3/8 x 4 3/8 x 7 1/8"	17	9.62

# Batteries, Holders & Plugs

## MALLORY MERCURY BATTERIES & CELLS

### MERCURY TRANSISTOR RADIO BATTERIES



Mallory mercury batteries offer characteristics which assure peak performance of portable radios. They feature uniform discharge voltage, exceptionally long storage life, and are unaffected by extremes of temperature and humidity. They are ideal as secondary voltage standards.

and for hundreds of other applications where operating voltage is critical. Directly interchangeable with many conventional types. As new mercury batteries become available from the manufacturer, Allied will stock them. Av. shpg. wt., 2 oz.



Stock No.	Mallory Type	Std. Pkg.	NET PER BATTERY			Volts	Size (Dia. x Ht.)	Replaces				
			Single Lots	Std. Pkg.				Eveready	Burgess	RCA	Philco	Zenith
80 J 727	ZM-9	2	.56	.51	1 1/2	1 1/2 x 1 1/2"	E9		VS-313	P9	Z9	
80 J 749	DM-9N	2	.59	.54	1 1/2	1 1/2 x 1 1/2"	E9N					
80 J 787	TR-145R	2	1.60	1.45	7 1/2	1 1/2 x 1 1/2"			VS-312			
80 J 785	TR-146R	12	1.74	1.58	9	1 1/2 x 1 1/2"	E146					
80 J 849	TR-233R	10	1.98	1.80	4	1 1/2 x 2 1/2"	E233		VS-400	P696		
80 J 784	RM-42R	10	2.48	2.25	1 1/2	1 1/2 x 1 1/2"				P630		
79 J 720	RM-630R	4	.33	.30		1 1/2 x 1 1/2"						

### MERCURY "A" BATTERIES

Extremely long shelf life and uniform discharge voltage. Resistant to humidity. All have voltages of 1.34. T indicates 1/2" tab on negative terminal. T2 indicates two tabs. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Size (Dia. x Ht.)	Std. Pkg.	NET PER BATTERY		
				Single Lots	Std. Pkg.	
80 J 878	RM1R	3/8 x 1 1/2"	4	.42	.38	
79 J 721	RM1RT	3/8 x 1 1/2"	4	.47	.43	
79 J 722	RM1RT2	3/8 x 1 1/2"	4	.53	.48	
80 J 879	RM3R	1 x 1 1/2"	4	.59	.54	
80 J 880	RM4R	1 1/2 x 1 1/2"	4	.76	.69	
80 J 740	RM4RT	1 1/2 x 1 1/2"	4	.81	.74	
79 J 723	RM4ZK	3/8 x 3/8"	2	.64	.58	
80 J 881	RM12R	3/8 x 1 1/2"	2	.90	.82	
79 J 724	RM12RT	3/8 x 1 1/2"	2	.96	.87	
80 J 742	RM42RT	3/8 x 2 3/8"	10	2.53	2.30	
79 J 725	RM42RT2	1 1/2 x 2 3/8"	10	2.59	2.35	
80 J 743	RM400R	1 1/2 x 1 1/2"	6	.28	.25	
80 J 884	RM401R	1 1/2 x 1 1/2"	2	.37	.34	
80 J 744	RM450R	1 1/2 x 1 1/2"	4	.36	.33	
80 J 882	RM502R	3/8 x 2"	2	.68	.62	
80 J 147	RM520R	3/8 x 3/4"	2	1.15	1.15	
80 J 745	RM601R	3/8 x 1 1/2"	2	.56	.51	
80 J 746	RM625R	3/8 x 3/4"	4	.33	.30	
80 J 883	RM625RT	3/8 x 3/4"	4	.39	.35	
79 J 726	RM625RT2	3/8 x 3/4"	4	.44	.40	
80 J 748	RM640R	3/8 x 1 1/2"	4	.35	.32	
80 J 148	RM675R	3/8 x 1 1/2"	6	.29	.26	

### MERCURY TRANSISTOR POWERPAKS

The batteries listed below are ideal for original or replacement use in transistor radios. Resistant to conditions of high humidity, salt air and spray, and corrosive fumes. Self-venting construction relieves any excessive gas which may form. Long shelf life and extended operating life. Mallory Mercury Transistor Powerpaks are widely used by designers and manufacturers of all types of electronic equipment. Their excellent performance has led to their use in geophysical, transceiver, radiation and recording instruments, and in many other electronic applications. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Size	Volts	Std. Pkg.	NET PER BATTERY		
					Single	Std. Pkg.	
80 J 789	TK-113R	2 1/2 x 2 3/2"	4.0	2	1.42	1.29	
80 J 790	TK-114R	2 1/2 x 1"	5.0	2	1.65	1.50	
80 J 728	TK-115R	2 1/2 x 1 3/4"	6.5	2	1.80	1.64	
80 J 729	TK-132R	2 1/2 x 1 3/4"	2.5	2	.92	.84	
80 J 730	TK-133R	2 1/2 x 2"	4.0	2	1.30	1.18	
80 J 731	TK-134R	2 1/2 x 2 3/8"	5.0	2	1.68	1.53	
80 J 732	TK-135R	2 1/2 x 3 1/2"	6.5	2	2.04	1.85	
80 J 733	TK-136R	2 1/2 x 3 3/8"	8.0	2	2.53	2.30	
80 J 734	TK-140R	2 x 1 1/2 x 1 1/4"	1.3	2	1.23	1.12	
80 J 735	TK-152R	1 1/2 x 1 3/4"	2.5	2	.79	.72	
80 J 791	TK-153R	1 1/2 x 1 3/8"	4.0	2	1.01	.92	
80 J 792	TK-162R	2 1/2 x 2 3/8"	2.5	2	.96	.87	
80 J 793	TK-163R	2 1/2 x 1 3/8"	4.0	2	1.21	1.10	
80 J 794	TK-164R	2 1/2 x 1 3/8"	5.0	2	1.49	1.35	
80 J 795	TK-165R	2 1/2 x 2 3/8"	6.5	2	1.80	1.64	

## NEW BURGESS RECHARGEABLE NICKEL-CADMIUM BATTERIES



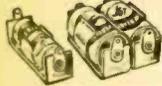
High energy, compact, sealed nickel-cadmium batteries and cells. Long-lasting, economical power—may be recharged many times. Unaffected by idle periods. \*Supplied with solder lug terminals. Others with pressure contacts. †10 hour rate (ma.). Sealed in steel. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Size (Dia. x Ht.)	Volts	Discharge Current	NET EACH	
					†	‡
79 J 727	CD1	1 1/2 x 1 1/2"	1.22	2	1.00	
79 J 728	CD2	1 1/2 x 1 1/2"	1.22	5	.70	
79 J 729	CD3	1 1/2 x 1 1/2"	1.22	15	.78	
79 J 730	CD3L*	1 1/2 x 1 1/2"	1.22	15	.87	
79 J 731	CD4	1 1/2 x 1 1/2"	1.22	22	.83	
79 J 732	CD4L*	1 1/2 x 1 1/2"	1.22	22	.97	
79 J 733	CD5	1 1/2 x 1 1/2"	1.22	45	1.47	
79 J 734	CD6	1 1/2 x 1 1/2"	1.20	45	1.55	
79 J 735	CD6L*	1 1/2 x 1 1/2"	1.20	45	1.93	
79 J 737	CD7	1 1/2 x 2 1/2"	1.20	250	3.50	
79 J 738	CD7L*	1 1/2 x 2 1/2"	1.20	250	3.50	

Stock No.	Mfr's Type	Size (Dia. x Ht.)	Volts	Discharge Current	NET EACH	
					†	‡
79 J 750	CD8	3/4 x 1 3/8"	1.25	10	.75	
79 J 751	CD8L*	3/4 x 1 1/2"	1.25	10	.85	
79 J 752	CD9	3/4 x 3 1/2"	1.25	90	3.25	
79 J 739	CD21	1 1/2 x 1 1/2"	6.1	15	5.00	
79 J 740	CD22	1 1/2 x 1 1/2"	6.1	22	5.25	
79 J 741	CD23	1 1/2 x 1 1/2"	6.1	45	10.15	
79 J 742	CD24	1 1/2 x 2 1/2"	9.7	15	8.15	
79 J 743	CD25	1 1/2 x 3 1/2"	9.7	22	8.50	
79 J 744	CD26	1 1/2 x 2 1/2"	9.7	45	15.85	
79 J 745	CD27	1 1/2 x 2 1/2"	12.2	15	9.80	
79 J 746	CD28	1 1/2 x 3 1/2"	12.2	22	10.65	
79 J 747	CD29	1 1/2 x 3 1/2"	12.2	45	19.50	
79 J 748	CD30	1 1/2 x 1 1/2 x 3 1/2"	6.0	90	18.46	
79 J 749	CD31	3 1/2 x 1 1/2 x 3 1/2"	6.0	150	29.62	

Sencore Transi-Pak PS103. 0.24 v. DC power supply for charging CD1 batteries. 5x4 1/2 x 2 1/2". For 110-120 v., 60 cycle AC. 2 lbs. 17.59

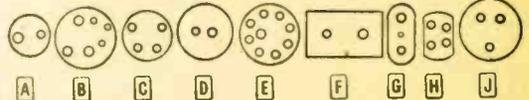
### KEYSTONE BATTERY HOLDERS



Battery holders for transistor assemblies, radios, meters, model airplanes, etc. Feature snap-clips, moisture-proof fibre washers and aluminum-alloy, nickel-plated eyelets. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Holds	Burgess	Mallory	NET EACH		
					Eveready	1-19	20-799
54 J 071	104	1		RM3R	E3	30c	26c
54 J 042	139	1			E-9, E-12, E133, E502, 915, 1015E, 505	23c	21c
54 J 043	140	2	Z, 9R, Y15	RM12R, TR133R, RM502R, ZM-9		38c	34c
54 J 044	171	3				49c	44c
54 J 045	182	4				64c	57c
54 J 046	173	1		TR233R	E233, 635, 935	30c	24c
54 J 047	174	2	1			38c	34c
54 J 048	137	1	7			23c	21c
54 J 049	138	2				38c	34c
54 J 055	154	1	N	TR152R	W468, E401	23c	21c
54 J 056	155	2				38c	34c
54 J 057	132	1		TR132R, TR163R, TR115R	E132	30c	24c
54 J 040	175	1			D-99, A-100	30c	24c
54 J 060	176	2	2, 24	RM42R	724, 950	38c	34c
54 J 058	166	1				30c	24c
54 J 059	167	2	U10			38c	34c
54 J 041	177	1				30c	24c
54 J 061	178	2	U15	RM412R		38c	34c
54 J 062	183	1				30c	24c
54 J 063	184	2	U20			38c	34c
54 J 064	225	1	Y10			23c	21c
54 J 069	226	2				38c	34c

### PLUGS FOR BATTERIES



\*With 3 small prongs only. †5 prongs. ‡Fahnestock clips. †3 prongs. Av. shpg. wt., 1 oz. 2 per pkg.

Stock No.	Fig.	For Burgess Batt.	For RCA Battery	PER PKG.
54 J 021	A*	2F4, F4P1	VS009	6c
54 J 022	B*	XX15, XX22, XX30P1		14c
54 J 023	C	6TA60, 4SD60, 4T260, 17GD60	VS054	8c
54 J 024	D	2F, 4F, 6F, 8F, 2D, 8R	VS004, VS069, VS070, VS141	5c
54 J 026	F	D3, F3, G3	VS067, VS072	10c
54 J 027	G	B-5, C-5, T-5	VS065	7c
54 J 028	H	2T, X-44, 4G, A42	VS053	14c
54 J 031	E	F6A60, G6N160, S01D0, TSZ50, T6260	VS018, VS019, VS050, VS057W	10c
54 J 034	B	A30, B30, M30, W30P1, Z30	VS012, VS013, VS014, VS015	14c
54 J 036	†	S150P1		40c
54 J 035	‡	2370P1	VS030	30c
54 J 067		Male snap-on		5c
54 J 068		Female snap-on		8c
54 J 037		U30	VS086	8c
78 J 269	J	10308P1, 21308P1, 2308P1	VS026	22c

# ALLIED'S RADIO PUBLICATIONS, KNIGHT-KIT INSTRUCTION MANUALS



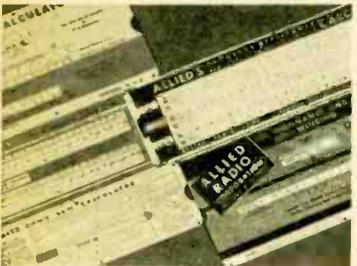
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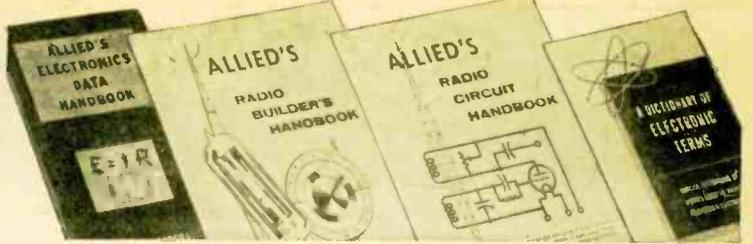
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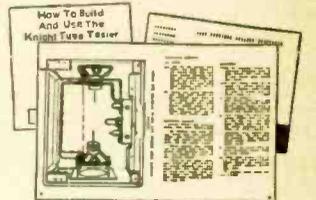
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39 K 016	44	431-440	2/59—4/59	38 K 637	31	301-310	12/55—3/56
38 K 895	43	421-430	11/58—2/59	38 K 630	30	291-300	10/55—12/55
38 K 875	42	411-420	9/58—11/58	38 K 629	29	281-290	6/55—9/55
38 K 873	41	401-410	6/58—8/58	38 K 628	28	271-280	3/55—6/55
38 K 864	40	391-400	3/58—5/58	38 K 627	27	261-270	12/54—3/55
38 K 863	39	381-390	12/57—3/58	38 K 626	26	251-260	9/54—12/54
38 K 862	38	371-380	9/57—12/57	38 K 625	25	241-250	6/54—9/54
38 K 861	37	361-370	6/57—9/57	38 K 624	24	231-240	12/53—5/54
38 K 860	36	351-360	3/57—6/57	38 K 584	23	221-230	8/53—12/53
38 K 859	35	341-350	12/56—3/57	38 K 583	22	211-220	5/53—8/53
38 K 634	34	331-340	9/56—12/56	38 K 575	21	201-210	2/53—5/53
38 K 633	33	321-330	6/56—9/56				

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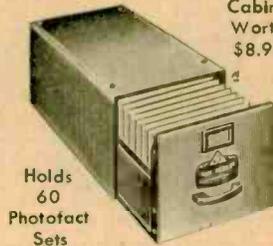
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Speed up repairs by keeping these manuals always on hand. They contain specific service instructions, diagrams, and other helpful data on most popular radio sets. Include service hints and short cuts, alignment data, etc. Cover all types of transistor sets, portables, auto radios, FM sets, record changers, Hi-Fi, etc. Size, 8½x11". Postpaid in U.S.A.

Stock No.	Vol.	Year	Pages	NET EACH
37 K 324	19	1959	192	2.50
37 K 323	18	1958	192	2.50
37 K 322	17	1957	192	2.50
37 K 497	16	1956	192	2.50
37 K 834	15	1955	128	2.00
37 K 939	14	1954	160	2.50
37 K 912	13	1953	192	2.50
37 K 819	12	1952	192	2.50
37 K 818	11	1951	192	2.50
37 K 812	10	1950	192	2.50
37 K 869	9	1949	160	2.50
37 K 849	8	1948	192	2.00
37 K 847	7	1947	192	2.00
37 K 846	6	1946	192	2.00
37 K 839	5	1942	192	2.00
37 K 831	4	1941	192	2.00
37 K 830	3	1940	208	2.00
37 K 828	1	1926-38	240	2.50

**INDEX.** Covers Radio Manuals 1-19 and Television Manuals TV-5 to TV-16. Sets listed by manufacturer, chassis and model number.  
37 K 809, Postpaid in U.S.A. 25c

**TELEVISION SERVICING COURSE.** Compiled by M. Beitman. Practical home-study television training course. Well-illustrated lessons on circuits, adjustments, picture faults, servicing shortcuts, DHP, alignment. 192 pages. Size, 8½x11".  
37 K 927, Postpaid in U.S.A. 3.00

**RADIO MATHEMATICS.** Discusses simple mathematics in connection with meter scales, Ohm's Law, capacity, inductance, etc. Ideal for the beginner. 32 pages, 8½x5½".  
37 K 811, Postpaid in U.S.A. 25c

### TELEVISION SERVICE MANUALS

Complete servicing information on all popular television sets. Contain wave-forms, alignment data, voltage charts, on large, easy-to-follow double-page diagrams, 8½x11". Each service manual has 192 pages. \*Early models. †Additional models. Postpaid in U.S.A.

Stock No.	Vol.	Year	NET EACH
37 K 374	TV-16	1959†	3.00
37 K 372	TV-15	1959*	
37 K 281	TV-14	1958	
37 K 319	TV-13	1957†	
37 K 483	TV-12	1957*	3.00
37 K 496	TV-11	1956	
37 K 507	TV-10	1955†	
37 K 924	TV-9	1955*	
37 K 936	TV-8	1954	3.00
37 K 904	TV-7	1953	
37 K 903	TV-6	1952	
37 K 889	TV-5	1951	

**PRACTICAL RADIO AND ELECTRONICS COURSE.** A three-volume home study course in one book. Consists of 35 lessons including fundamentals of radio, receivers and other equipment. 268 pages, 8½x11".  
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**SIMPLIFIED RADIO SERVICING BY COMPARISON METHOD.** Shows new shortcut technique for locating faults. Utilizes only a voltmeter. Over 1,000 service hints. 26 circuits. 92 pages, 8½x11".  
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**RADIO SERVICING COURSE BOOK.** 22 lessons. Completely revised. Chapters on use of test equipment, signal tracing, alignment, AVC, etc. 192 pages, 8½x11".  
37 K 824, Postpaid in U.S.A. 2.50

## EDITORS AND ENGINEERS

### COMMUNICATIONS BOOKS

**RADIO HANDBOOK.** 15th edition. Complete volume on radio practice. This extremely valuable text on radio technique and theory deserves a place on every reference shelf. An unusually comprehensive handbook for Amateurs, engineers, radiomen and technicians. Tells how to design, construct and operate Amateur transmitting and receiving equipment. Contains valuable reference data. Text is thoroughly supplemented with hundreds of pictures, diagrams and charts.

Covers basic electricity, AC and DC circuits, vacuum tubes and amplifiers, receiver fundamentals; generation of RF, AM and FM, transmitter design and adjustment, radiation and propagation, antennas, high frequency arrays, TVI and BCI, mobile equipment, power supplies, test units and radio math. Covers latest equipment—does not duplicate 14th edition. Includes schematics. Hard cover. 800 pages. Size, 6½x9½".  
37 K 596, Postpaid in U.S.A. 7.50

**RADIO-TELEPHONE LICENSE MANUAL.** Valuable manual that contains all the information necessary to obtain any commercial radio-telephone license. Complete list of questions and answers. Covers: Questions on Basic Law; Basic Operating Practice; Basic Radiotelephone; Advanced Radiotelephone. An unusually complete appendix includes: Formulas and Problems; recommended FCC publications; Laws and Regulations; "Q" Signals; Miscellaneous Abbreviations. Hard-bound. Includes diagrams. 200 pp. 6x9½".  
37 K 375, Postpaid in U.S.A. 5.00

### SURPLUS CONVERSION MANUALS

**VOLUME 1.** By R. C. Evenson and O. R. Beach. Comprised of conversion data on surplus military equipment. Contents: BC-221 Frequency Meter; BC-342, BC-312 and BC-348 Receivers; BC-4 Radar Oscilloscope (Conversion for TV Receiver and Test Scope); BC-645 Transmitter/Receiver (to 420 mc); BC-946B Receiver (Conversion to Auto Receiver); SCR-374N Receiver (Conversion to 10-Meter Receiver); etc. Also includes: Electronic Surplus Index, Cross Index of Army-Navy tubes, Amateur Frequency Allocation Chart, etc. Illustrated. 112 pages, 6½x9½".  
37 K 320, Postpaid in U.S.A. 2.50

**VOLUME 2.** Continuation of above. Table of Contents: BC-454 or ARC-5 Receivers (Conversion to 28 mc); AN/AP5-13 Transmitter/Receiver (Conversion to 420 mc); BC-457 or ARC-5 Transmitter (Conversion to 28 mc); BC-357 Marker Receiver (Conversion to Capacity Relay); BC-946B Receiver (Conversion to High-Fidelity Tuner); BC-375 Transmitter (Conversion for use with External PFO); TA-12B, TA-12C Transmitters; AN/ART-13 Transmitter (Conversion to AC Power and 28 mc); AVT-112A Transmitter for Aircraft. Illustrated. 126 pages. 6½x9½".  
37 K 321, Postpaid in U.S.A. 2.50

## AUDEL'S PUBLICATIONS

**PRACTICAL ELECTRICITY.** 1959 edition (revised). Simplified reference book containing complete practical information on the laws of electricity. An ideal reference book for maintenance engineers, electricians, students. Covers: maintenance, AC-DC motors, electric heating, circuit breakers, wiring requirements for the home, motor protection methods, squirrel cage motors, lightning protective devices, switch-gears, power stations, power wiring, meters, transformers, bells, etc. Profusely illustrated. 1088 pages. Size, 5x6½".  
37 K 487, Postpaid in U.S.A. 4.90

**WIRING DIAGRAMS FOR LIGHT AND POWER.** A comprehensive reference book listing highly informative data and wiring diagrams for all types of electrical apparatus. Provides a valuable guide for maintenance and service personnel in the wiring of houses, relays, motors, switchboards, and other similar applications. Also serves as an excellent reference for experimenters, students, and hobbyists. 304 pages, 4½x7½".  
37 K 625, Postpaid in U.S.A. 1.96

## PRACTICAL BEGINNERS BOOKS

**BOY'S FIRST BOOK OF RADIO AND ELECTRONICS.** By Fred Morgan (Scrubner's Pub.). Unusually fine beginners book. Expertly written; illustrated. Ideal introduction to electronics for young or old. Covers: electricity, radio, tubes, learning code, etc. Hardbound. 229 pages, 5½x8½".  
37 K 278, Postpaid in U.S.A. 2.94

**BOY'S SECOND BOOK OF RADIO AND ELECTRONICS.** Companion to above volume, but complete in itself. Ideal for the advanced student and those who have completed the above book. Contains more advanced radio and electronic theory, as well as practical experiments and building projects. Hard-bound cover. 276 pages, 5½x8½".  
37 K 279, Postpaid in U.S.A. 2.94

**THERE'S ADVENTURE IN ELECTRONICS.** By Julian May (Popular Mechanics Pub.). Written for beginners in a highly interesting narrative style. Relates adventures of a young teenager learning the "Whys" of electronics from his father. Illustrations are masterpieces of simplicity. Chapters: Magic Waves; Randy Builds Crystal Sets; etc. Hard-bound. 170 pages, 5½x8".  
37 K 210, Postpaid in U.S.A. 2.95

## REFERENCE BOOKS

**ELECTRONICS MADE EASY.** By L. Stern. (Popular Mechanics). Reference and guide for the beginner and experimenter. Covers basic electronic theory, hi-fi and transistors. Presents 23 construction projects in detail, including: Crystal set; 1, 3 and 5-tube radio; short wave converter; intercom system; photoelectric eye; test units; etc. 192 pp. 6½x9½".  
38 K 127, Postpaid in U.S.A. 3.50

**HANDBOOK OF CHEMISTRY AND PHYSICS.** By Hodgman. 41st edition. (Chemical Rubber Publishing Co.). Highly comprehensive reference manual containing formulas and tables for literally every technical field. Includes chemical formulas, charts and descriptions of the elements, physical data on hundreds of compounds, mathematical charts, etc. Over 3300 pages, 4½x7".  
37 K 331, Postpaid in U.S.A. 12.00

**RADIO-ELECTRONICS MADE SIMPLE.** By Martin Schwartz. (American Electronics Company publication). Provides reader with basic understanding of elementary radio-electronic principles. Especially useful for beginners. 14 chapters dealing with current, tubes, etc. 101 pages, illustrated, 6x9".  
37 K 245, Postpaid in U.S.A. 1.95

**RADIO-ELECTRONIC MASTER.** (United Catalog Publishers.) New 1960 edition (24th). Official catalog of the radio, television and electronic industry. Large, hard-bound volume lists over 85,000 items produced by major manufacturers. Each item is fully described, with specifications and prices. 1500 pages. Size, 8x11½".  
37 K 204, Postpaid in U.S.A. 3.50

**HOME APPLIANCE SERVICE GUIDE.** By Edwin Anderson. Practical, easy-to-understand guide for electric, gas and mechanical appliance trouble-shooting. Thoroughly covers basic principles, servicing, operation and repair of almost all home appliances. Includes hundreds of large, easy-to-follow illustrations. Tells how to locate appliance troubles and includes complete and detailed disassembly and assembly procedure. Gives up-to-date testing methods. Perfect for home or shop. 864 pages. Size, 5x6½".  
37 K 485, Postpaid in U.S.A. 5.88

**TELEVISION SERVICE MANUAL.** By E. P. Anderson. Practical information on installing, trouble-shooting, and repairing TV sets. Useful for all TV servicemen. 17 chapters include: Placement of Receivers; Adjustment; Interference Traps; Single and Master Antenna Systems; Transmission Lines; TV Broadcasting; Typical Receiver Circuits; Picture Tubes, etc. Covers color TV. Useful tables and data. Contains 225 illustrations and easy-to-follow diagrams. 480 pages, 6½x5".  
37 K 706, Postpaid in U.S.A. 2.94

# Selected Feature Values

## ARGOS TSE-1 "CATALINA" SPEAKER ENCLOSURE



- For Bookshelf, Table Top or Floor
- Takes 8" Speaker and Tweeter
- Ducted Port Reinforces Bass

A top-value in an ultra-compact speaker enclosure designed for use with 8" full-range speakers or 2-way systems. Extremely small space requirements, less than 2 cubic feet, make it ideal for shelf or table top use—can be stood on end in less than 1 square foot of floor space. Ducted-port design provides exceptional bass response. Sturdy wood construction plus acoustic interior lining eliminate reverberation on low frequency tones. Ideal for initial hi-fi installations as well as for housing a second speaker system when converting to stereo. Forward-Front styling with grille section projecting instead of being recessed enhances the appearance of the enclosure. Top, bottom, and two sides are covered with wood-grained leatherette. Size of enclosure is 11x24x10 1/4". Available in mahogany, blonde, or walnut—specify when ordering. Shpg. wt., 17 lbs.

70 DU 2B7C. NET EACH

16.17

## NEW SONOTONE CM-10 CERAMIC MICROPHONE



Extended-range, high-impedance ceramic microphone for use with all types of recording and public address equipment. Offers an exceptional frequency response of  $\pm 2$  db from 50 to 13,000 cps. Gives full fidelity reproduction of voice and music. All-directional pickup pattern. Sensitivity of  $-62$  db is ample to drive practically any amplifier. Ceramic element is impervious to humidity and maintains its characteristic response over a wide range of temperatures. Satin-chrome, one-piece housing is only 5 1/4" long and 1 3/4" in diameter. With 7-ft. cable is standard phone plug. Less stand, below. Shpg. wt., 2 lbs.

93 S 416. List, \$19.50. NET

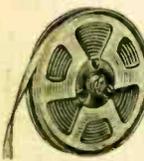
11.47

Model CMS-10 Mike Stand. Desk-type stand for use with above. Has swivel socket for adjusting mike to any angle. Shpg. wt., 2 1/4 lbs.

93 S 417. List, \$5.00. NET

2.94

## WALSCO "KLEEN-TAPE"



Tape recorder head cleaner. For fast, efficient cleaning of tape recorder heads without removing head cover. Consists of a tough tape impregnated with special formula head cleaner. Just put reel on recorder, thread tape through, set recorder to "play" and let tape run through just as any other tape. Fits all tape recorders using standard size tapes. Shpg. wt., 4 oz.

91 R 846. List, \$2.95. NET

1.73

## NEW LONG LIFE TAPE CLEANER KIT



The complete kit for maintaining all tape recorders. Combination package consists of one bottle each of tape head cleaner, tape head lubricant, and tape conditioner. Tape conditioner fluid with tapper applicator conditions the tape automatically as you play it on the machine. Capillary wick applicators dispense cleaner, lubricant or conditioner uniformly and easily right where you want it. Cleaner, lubricant and tape conditioner in plastic, squeeze-feed bottles. An ideal accessory for the tape recording enthusiast. Shpg. wt., 1 lb.

92 R 732. NET

3.98

## MILLER AM TUBELESS TUNER



Model 565. Unique tubeless, high-fidelity AM tuner kit. Provides outstanding broadcast reception at unusually low cost. Covers 550 to 1700 kc. Tuned radio frequency (TRF) type circuit offers a response limited only by the audio system used and the quality of the transmitted signal. Tuner is fundamentally a germanium diode detector employing two tuned circuits. Negative mutual coupling between antenna and RF circuit assures exceptionally high efficiency. Audio output voltage of the tuner is directly proportional to the input signal—ranges from .07 to .7 volts on stations within a 25-mile radius, depending upon the signal strength. Output circuit has volume level control. Ebony bakelite cabinet is 4x7x3 3/4". Shpg. wt., 2 lbs.

98 S 525. NET

17.35

Model 596. Same as above, but factory-wired and tested—a ready-to-use AM tuner. Shpg. wt., 2 lbs.

98 S 529. NET

21.31

## KINEMATIX STEREO BALANCE INDICATOR



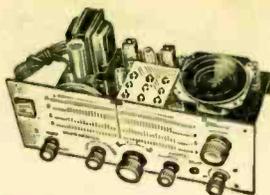
Model SB-1. A precise meter-type balance indicator that provides an accurate visual check of speaker and amplifier balance. Simple to install, it completely eliminates guesswork in balancing any stereo system. Screw terminals for connecting to amplifier outputs. Simply adjust balance or volume control of system until zero deflection is obtained on the stereo balance meter. Attaching balance indicator to your stereo system will not affect sound quality, amplifier damping, etc. Housed in attractive, walnut finished, wood cabinet to complement any de-

cor. HWD, 4 1/2 x 6 1/2 x 3 3/4". Shpg. wt., 1 1/2 lbs.

14.95

89 S 311. NET

## PHILMORE COMMUNICATIONS RECEIVER KIT



CR-5AC in Cabinet

- Covers 550 kc to 30 mc
- 4-Band Superhet Circuit

Model CR-5AC. Here's a low-cost, general coverage communications receiver kit for Amateurs and short wave listeners. Features a highly sensitive, bandswitching, superheterodyne circuit with "S" meter for simplified tuning. Provides continuous coverage of all frequencies from 550 kc to 30 mc in four ranges. Band A covers 550 to 1600 kc, Band B covers 1500 kc to 4 mc, Band C covers 4 to 10 mc and Band D from 10 to 30 mc. 11" slide-rule type dial with calibrated scales for each band. Separate electrical bandspread, calibrated 0 to 100 simplifies tuning of crowded shortwave stations. Built-in, full-tuned 4" speaker. Front panel controls include: RF Gain/AVC On-Off; Bandspread; Main Tuning; Band Selector; Volume/AC Off-On; Phone-CW/Standby-Receive. Front panel jack for plugging in headphones or an external speaker. Variable BFO for adjusting CW pitch. Built-in noise limiter cuts down interference. Tubes used: 6BE6 converter and oscillator, 6AZ8 IF amplifier and 6X5 rectifier. 6AV6 detector and 1st audio, 6AQ5 Audio output; 6X5 rectifier. Chassis size, 6x15x9". With tubes and all parts; less cabinet (below). For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

77 S X 826. \$2.00 Down. NET

39.95

Model CR Cabinet. 6 1/2 x 15 1/2 x 10" steel cabinet. Shpg. wt., 7 lbs.

77 S X 827. NET

7.95

## NEW SONY WIRELESS MICROPHONE



Moderately priced wireless mike designed for broadcast and PA use. Consists of a lightweight transistorized FM transmitter and microphone, and a receiver with outputs for feeding P.A. systems or modulator inputs. Wireless feature eliminates trailing cords from microphone—permits greater

Transmitter and Microphone Receiver

freedom of movement on part of user. Ideal for anyone who must move about when using a mike—for TV and radio stations, stadiums, schools, disaster crews, fire or police depts., parking lots, showrooms and trade show operations, athletic coaching staffs, etc. Non-directional microphone is detachable so it can be hand-held, used as lavalier or concealed. Transmitter is powered by 2 batteries (listed below); has detachable antenna and on-off switch. FM receiver has 8 tubes plus "magic-eye" for selective tuning, detachable telescoping antenna, built-in monitor speaker, and jacks for detector and squelch output. Overall response 50-7000  $\pm 3$  db; less than 3% distortion for 100% modulation. Transmitter, 4" high, 2 1/4" wide, 1" deep; receiver, 4 1/2" high, 9 3/4" wide, 6 1/2" deep; microphone, 1 3/4" dia., 2 3/4" long. Receiver operates from 110-120 volts, 50-60 cycle AC. Shpg. wt., 8 lbs.

93 SC 409. NET

250.00

80 J 785. Battery for Above, 2 required. NET EACH

1.74

## RIDER "SOUND-N-SIGHT" CODE COURSE



- "Reinforced Learning" Method
- Instructor is Always At Your Side
- Teaches Sending and Receiving

An all-new, amazingly easy way to learn code. Based on an advanced teaching concept, "reinforced learning," this new code course by Rider actually puts an imaginary instructor at your side. You advance in steps of one-word-per-minute-per day. Utilizes long-playing records of code signals and instructor's voice, flash identification cards, book.

REC-08 Novice Course. Three 10" LP records, 47 identification cards. Learn to receive up to 8 wpm, how to transmit. Shpg. wt., 2 lbs.

77 S 815. NET

9.50

REC-920 Advanced Course. For General, Amateur Extra or commercial license (9-20 wpm). Three 10" LP records, cards, book. Wt., 2 lbs.

77 S 816. NET

8.95

REC-020 Complete Course. Covers all licenses up to commercial (0-20 wpm). Six 10" LP records, 47 identification cards and book. 6 lbs.

77 S 817. NET

15.95

## KNIGHT CRYSTAL MIKE



Attractive crystal mike for excellent performance at extremely low cost. Quality, shock-mounted crystal element provides response from 60 to 8500 cps assuring realistic, natural tone quality for high standard of performance. Balanced for either hand-held or table-top use without stand or bracket. Ideal for tape recording or Amateur use. Output level:  $-45$  db. Gray plastic case. Size: 2 1/2 x 2 1/2 x 1 1/2. 5-ft. cable. Shpg. wt., 1 lb.

99 S 519. NET

2.95

# Selected Feature Values

## PORTABLE SPEAKER VALUE

- Stand It or Hang It
- Use-It Indoors or Out
- Guaranteed Weatherproof



Truly an outstanding value in a highly versatile, ruggedly-built extension speaker. Clip on connection makes it easy to attach to any radio or TV set. Use it indoors, outdoors—anywhere! No special baffling is required—simply set it up on the handy stand supplied, or hang it from the wall, a nearby tree, etc. Provides rich, full-toned reproduction of amazing quality—just the thing for added enjoyment at outdoor barbecues in the summer as well as skating parties in the winter.

Ideally suited, too, for paging systems where portability is required. Guaranteed weatherproof, these versatile speakers may be left outdoors the year 'round, placed on exposed areas of boats, etc. Beautifully styled to harmonize with any surroundings.

This handy portable unit is supplied complete with 20 feet of extension speaker cable and convenient alligator clips. Attaches quickly and easily to the terminals on the speaker in your radio, TV set, or high-fidelity system. Permits you to take entertainment to the patio, kitchen or utility room, garage, den, etc. Blue with contrasting chrome grille plate and legs. 3" deep; 6" diameter. Shpg. wt., 1 1/4 lbs. **4.95** 81 P 067. NET.

## Values in Polaris TV Picture Tubes

### LOWEST PRICED FACTORY REBUILTS

AS LOW AS

**\$13.25**

Remarkable savings on popular TV picture tubes. All are high-quality tubes that have been factory rebuilt by experts to give bright, clear pictures. Guaranteed for one full year. Take advantage of these low prices and order now. Values like these are really unbeatable. All have magnetic deflection and magnetic focus except magnetic deflection and electrostatic focus. \*Aluminized screens. When ordering Polaris picture tubes—specify Dept. No. and Tube Type No. All tubes costing \$20.00 or more are now available on Easy Payment Plan!



1 Year Guarantee

Dept.	Stock No.	Type	Wt. Lbs.	NET EACH	Dept.	Stock No.	Type	Wt. Lbs.	NET EACH
AU6	12LP4A		17	13.25	AU6	21ATP4A/21ATP4*		33	23.80
AU6	16AP4A		17	19.00	AU6	21AP4		25	29.50
AU6	16G P4B		16	19.00	AU6	21AVP4/AUP4*		33	22.50
AU6	16R4A/KP4A*		21	15.50	AU6	21AVP4B/AUP4B/			
AU6	17AVP4/ATP4†		17	18.85	AU6	AVP4A/AUP4A*		33	25.00
AU6	17BP4A		21	16.00	AU6	21EP4A		36	20.35
AU6	17BP4B*		21	16.50	AU6	21EP4B*		24	22.45
AU6	17CP4		16	22.70	AU6	21EP4A†		36	21.40
AU6	17HP4/RP4†		23	18.00	AU6	21FP4C*†		34	23.60
AU6	17LP4/VP4†		23	17.75	AU6	21WP4		31	22.50
AU6	17QP4		23	17.00	AU6	21YP4†		33	21.90
AU6	19A P4B		24	23.50	AU6	21YP4A*		33	24.50
AU6	20DP4A/CP4A		29	19.30	AU6	21ZP4A		33	21.50
AU6	20DP4C/CP4D*		29	21.45	AU6	21ZP4B*		33	23.85
AU6	21ACP4A/BSP4/AMP4A*		33	21.90	AU6	24ADP4/VP4A/CP4A/TP4*		43	35.75
					AU6	24DP4A/YP4*		43	36.25

## SUPERIOR "DO-IT-YOURSELF" TRANSFORMER

A current transformer and a multiple source of AC voltages in one versatile unit! Ideal for labs, classrooms, home workshops, etc. Consists of a packaged transformer primary with high-impact plastic case molded over toroidal coil. User winds secondary to suit. Output, 150 VA maximum. Input is for 110-120 v., 50-60 cycle AC. When used as a current transformer, the "Flexiformer" serves as a secondary winding. Current carrying conductor passed through center serves as primary. Maximum continuous primary current, 400 amps with a 400:1 pri/sec ratio. Permits ammeter readings of 1% accuracy at 60 cycles of currents as high as 400 amps. Binding posts take banana plugs, clips, or spade lugs; wire may be looped around shaft or pushed through center hole and clamped. For maximum convenience, use with "Dub-L-Plugs," below. With comprehensive reference chart and instructions. Shpg. wt., 5 1/2 lbs. **22.00** 62 G 599. Only \$2.00 Down. NET.



"Flexiformer"

Chrome

Nylon

## SUPERIOR "DUB-L-PLUGS"

Dual-contact plugs for use with "Flexiformer" above. All are encased in insulating Nylon shells except, \*shilded and chrome plated. 3 oz.

Stock No.	Color	EACH	Stock No.	Color	EACH
41 H 205	Chrome*	4.50	41 H 207	White	2.50
41 H 228	Black	2.50	41 H 227	Green	2.50
41 H 209	Yellow	2.50	41 H 208	Blue	2.50
41 H 206	Red	2.50			

## SPEAKER GRILLE CLOTH AND SCREENING

Beautiful patterns in high-quality, durable cloth. Perfect for modernizing old cabinets and for construction of new custom enclosures. Specially designed for acoustic use.

Size	Mahogany	Ivory	Shpg. Wt.	NET
12x12"	43 N 605	43 N 608	2 oz.	.47
13x24"	43 N 606	43 N 609	4 oz.	.79
36x36"	43 N 607	43 N 610	6 oz.	3.70

G-C Fabric Cement. Ideal for grille cloth. 2 oz. bottle. 8 oz. **47c** 43 N 123. NET.

Flack-Coated Wire Grille Screening. Soft, brown color. 86 N 060. 8x11". Shpg. wt., 4 oz. NET **56c** 86 NX 061. 18x24". Shpg. wt., 12 oz. NET **1.88**

## ALLIED SPEAKER REPAIR SERVICE

Hi-Fi Speaker Service. Includes replacing cone, gasket, voice coil, slider and dust cover. Pack speaker carefully and ship to us by insured parcel post or express. Allow 30 days for return delivery. **7.50**

8" Hi-Fi Speaker. Repair Service **11.25**

12" Hi-Fi Speaker. Repair Service **15.00**

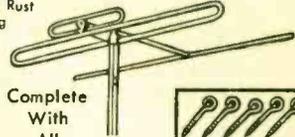
16" Hi-Fi Speaker. Repair Service **15.00**

Standard Speaker Service. Covers rebuilding general purpose radio, TV and phonograph speakers. Additional charges for field coil repair or replacement are as follows: \$1.25 for 4" to 9"; \$2.25 for 10" to 12". Field coils welded into speaker frames cannot be repaired. Ship speaker to us prepaid and send remittance (including postage) with order. Allow 30 to 45 days for return delivery of repaired speaker.

Size	Service	Size	Service	Size	Service
4" to 6"	1.75	14" to 15"	3.85	5"x7" oval	2.55
6 1/2" to 9"	2.55	4"x6" oval	2.00	6"x9" oval	2.75
10"	2.95	11" to 12"	3.25		

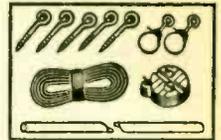
## KNIGHT GOLD-ANODIZED INLINE ANTENNA KITS

- Resist Corrosion and Rust
- 1/2" Aluminum Tubing
- Lasts Twice as Long



QUICK RIG DESIGN

Complete With All Hardware



New, complete VHF antenna kit at a low, money-saving price. Additional long-range savings are yours, too, because of this top-value antenna's rugged, long-lasting construction. Built entirely of 1/2" aluminum tubing, it features gold-anodizing to resist highly corrosive effects of chimney smoke, soot, and weather. Ideal for metropolitan-suburban use. Time-proven design provides sharp, clear pictures on channels 2 through 13. Installs quickly and easily—simply flip elements into place and tighten.

Each kit includes: complete antenna assembly; durable 5-foot steel mast; 75' of indoor-outdoor twin-line; lightning arrester; 5 screw-in stand-offs; 2 mast standoffs; plus your choice of either chimney mount with straps or universal-angle roof mount. At one low price you get everything you need for a top-notch antenna installation.

INLINE ANTENNA KIT WITH CHIMNEY MOUNT. Antenna and hardware described above, plus 2 straps and mast clamps for mounting antenna firmly on chimney corner. Shpg. wt., 10 lbs. **9.93** 91 CX 326. NET EACH

INLINE ANTENNA KIT WITH ROOF MOUNT. Antenna and hardware described above, plus universal-angle roof-top mount. Shpg. wt., 10 lbs. **9.54** 91 CX 327. NET EACH

INLINE ANTENNA ONLY. Less accessories. Shpg. wt., 5 lbs. **6.17** 91 CX 328. NET EACH

## PHILMORE CRYSTAL SET ACCESSORIES

**A** Cat Whiskers. Set of two high-quality cat whiskers for use in crystal sets. Carefully made from top-grade, tested spring steel. Provide proper tension for all detectors. 3 oz. **15c** 52 S 011. NET EACH



**B** Detector Mount Kit. Crystal holder, cat-whisker and hardware. 1 less crystal. Uses No. 52 S 005 or 52 S 006. Shpg. wt., 3 oz. **15c** 52 S 003. NET EACH

Detector Mount Kit on Base. As above, but on fiberboard base. Fahnestock clips. Shpg. wt., 5 oz. **32c** 52 S 004. NET EACH

**C** Fixed Detector. Permanently adjusted, sensitive, meter-tested crystals. In bakelite case. Shpg. wt., 3 oz. **71c** 52 S 001. NET EACH

Meter-Tested Crystal. Laboratory tested and selected to assure excellent performance. (Not illustrated.) Shpg. wt., 3 oz. **15c** 52 S 006. NET EACH

Mounted Economy Crystal. A highly sensitive, general-purpose crystal for dependable performance and sensitive reception in crystal receivers of all types. Genuine Galena crystal—securely mounted in lead housing. Shpg. wt., 2 oz. **7c** 52 S 005. NET EACH





# IT'S EASY TO ORDER FROM ALLIED

## SHIPPING INFORMATION AND HOW TO ESTIMATE CHARGES

**PARCEL POST:** Size and weight limits will vary depending on your postal zone from Chicago and the type of post office area in which you live. Items not mailable are identified by "U" or "Z" in our stock numbers. See explanation in column at left. Please send enough money to cover merchandise, postage and insurance on parcel post orders. Catalog gives approximate shipping weights. If you send too much, we will refund every penny not used. In case of insufficient remittance we ship C.O.D. for balance. To protect you we insure all parcel post with a dependable private insurance company. Allow for insurance:

Up to \$5.00.....5c	\$10.01 to \$25.00.....15c	\$50.01 to \$100.00.....30c
\$5.01 to 10.00.....10c	25.01 to 50.00.....20c	100.01 to 200.00.....35c

### HOW TO ORDER

Use our order blanks or your own purchase order forms or stationery. Please fill in all information requested on our order blank. If you use your own order forms or stationery, show our stock number, quantity, name of item, manufacturer's type number and price. Remit to cover the full amount of the merchandise, plus postage and insurance for parcel post shipments. Don't worry about sending too much. **Every cent extra will be refunded.**

### "U" AND "Z" ITEMS SHIPPED EXPRESS OR TRUCK

The letter "U" or "Z" in our stock numbers (as in 79 DU 258 or 20 DZ 179) identifies items which are fragile or exceed parcel post size or weight limits. Such items are shipped by express, truck or the best low cost method. ("U" items will be shipped by package delivery truck in Chicago and Zones 1 and 2, at Parcel Post rates.)

### HOW TO SEND MONEY

The best way to send money is by post-office or express money order, bank draft or check. Avoid sending coin or currency, but if necessary, be sure to register your letter. Please do not remit in stamps except if necessary on very small orders. For rush handling, telegraph your order and money.

### ABOUT C.O.D. ORDERS

You will save money by sending cash in full with your orders. On parcel post C.O.D. shipments, the Post Office charges a C.O.D. collection fee and also a money order fee for forwarding the C.O.D. amount to us. Similar fees are collected on express and freight C.O.D. shipments. It will pay you to remit in full and save the C.O.D. charges. If a C.O.D. shipment is unavoidable, your order should be for a minimum of \$5.00, with a deposit of at least 20%. Please include full remittance with any orders for less than \$5.00.

### PARCEL POST C.O.D. FEES

\$0.01 to \$5.00	30c	\$50.01 to \$100.00	80c
5.01 to 10.00	40c	100.01 to 150.00	90c
10.01 to 25.00	60c	150.01 to 200.00	1.00
25.01 to 50.00	70c		

### MONEY ORDER FEES

From \$0.01 to \$ 5.00	15c
From 5.01 to 10.00	20c
From 10.01 to 100.00	30c

### HOW TO ESTIMATE PARCEL POST CHARGES

Up to 16 ounces, all zones, allow 3c for first 2 ounces, 1½c for each additional ounce

The post office charges a fraction of a pound as a full pound. For example, if the total weight is 5 pounds and 1 ounce to Zone 4, postage would be for 6 pounds (59c).

WEIGHT IN POUNDS	Zone							
	Chicago	1st Zone, up to 150 mi.	2nd Zone, up to 300 mi.	3rd Zone, up to 450 mi.	4th Zone, up to 600 mi.	5th Zone, up to 900 mi.	6th Zone, up to 1200 mi.	7th Zone, up to 1500 mi.	8th Zone, Over 1800 mi.
1	.18	.23	.23	.24	.26	.28	.30	.32
2	.20	.27	.29	.31	.36	.40	.46	.51
3	.21	.31	.34	.38	.45	.52	.61	.69
4	.23	.35	.39	.45	.54	.64	.76	.87
5	.24	.39	.44	.52	.63	.76	.91	1.05
6	.26	.43	.49	.59	.73	.88	1.06	1.23
7	.27	.47	.54	.66	.82	1.00	1.22	1.41
8	.29	.51	.60	.73	.91	1.12	1.37	1.59
9	.30	.55	.65	.80	1.00	1.24	1.52	1.77
10	.32	.59	.70	.87	1.10	1.36	1.67	1.95
11	.33	.63	.75	.93	1.19	1.48	1.82	2.13
12	.34	.67	.80	1.00	1.28	1.60	1.98	2.31
13	.36	.71	.85	1.07	1.37	1.72	2.13	2.49
14	.37	.75	.90	1.14	1.47	1.84	2.28	2.67
15	.39	.79	.96	1.21	1.56	1.96	2.43	2.85
16	.40	.83	1.01	1.28	1.65	2.08	2.58	3.03
17	.42	.87	1.06	1.35	1.74	2.20	2.74	3.21
18	.43	.91	1.11	1.42	1.84	2.32	2.89	3.39
19	.45	.95	1.16	1.49	1.93	2.44	3.04	3.57
20	.46	.99	1.21	1.56	2.02	2.56	3.19	3.75
For Each Extra Lb.	Add 1½c	Add 4c	Add 5c	Add 7c	Add 9½c	Add 12c	Add 15½c	Add 18c

Rates subject to change by Post Office Department

**EXPRESS:** Please remit full amount for merchandise, but do not send any money for express charges with your order. Shipping charges are collected on delivery at no extra cost to you. All "U" and "Z" items (see column at left) are usually shipped by express or truck. In addition, to assure safe arrival, we ship by express many hi-fi units, transmitting and TV tubes, test units, and other fragile merchandise. Express rates include insurance.

### HOW TO ESTIMATE EXPRESS CHARGES

(Rates are about 10% higher to eastern states.)

Weight In Pounds	Mileage							
	50	150	300	500	750	1000	1500	2250
5	2.26	2.31	2.40	2.48	2.56	2.64	2.80	3.02
10	2.37	2.48	2.64	2.83	2.98	3.14	3.44	3.90
15	2.47	2.64	2.90	3.16	3.38	3.61	4.08	4.78
20	2.58	2.81	3.15	3.49	3.79	4.10	4.74	5.66
25	2.69	2.98	3.38	3.83	4.22	4.61	5.37	6.53
35	2.92	3.31	3.88	4.49	5.03	5.57	6.66	8.29
45	3.14	3.62	4.39	5.16	5.87	6.56	7.96	10.05
55	3.34	3.95	4.87	5.85	6.69	7.54	9.24	11.80
70	3.68	4.46	5.62	6.84	7.93	9.01	11.19	14.43
80	3.90	4.79	6.13	7.52	8.74	9.99	12.47	16.18
For Each 100 Lbs.	4.33	5.44	7.13	8.85	10.40	11.95	15.04	19.69

**AIR SHIPMENTS:** We will ship your order by Air Parcel Post, Air Express or Air Freight if you instruct us to do so. Air Parcel Post rates are given below. Consult your local express office for Air Express charges, and your nearest commercial airport office for Air Freight rates. Air Parcel Post size and weight limits are 70 lbs. and 100", length and girth combined.

### AIR PARCEL POST RATES

(7c per ounce, up to 8 ounces)

ZONES	1, 2 & 3	4	5	6	7	8	U. S. Territories, Possessions and APO & FPO Addresses, 80c per lb.
1st Lb.	60c	65c	70c	75c	75c	80c	
For Each Extra Lb.	Add 48c	Add 50c	Add 56c	Add 64c	Add 72c	Add 80c	

**TRUCK AND RAIL FREIGHT:** Freight is the cheapest form of transportation on the heavier shipments (minimum charge is for 100 lbs). Truck shipment is especially economical on shipments of about 70 lbs. or more. The approximate truck freight charges shown below will differ in various sections of the country. Freight charges are collected on delivery.

Minimum Charge 100 lbs.	Maximum Distance in Miles							
	50	150	300	500	750	1000	1500	2250
	3.25	3.41	3.68	4.20	4.48	5.46	7.40	9.28
For each Extra Lb.	2c	3c	3c	4c	4c	4c	7c	9c

# IMPORTANT ORDER INFORMATION

Every item you buy from us must satisfy in every way—or we want you to return it at once for exchange, repair or refund. See Page 1 for full details of our guarantees which protect you on every purchase.

**ALLIED'S  
GUARANTEE  
TO YOU**

## CASH TERMS

Our general terms of sale are cash with order. You save payment of C.O.D. fees by including full remittance with your order. Every penny not used is refunded. If desired, we will ship C.O.D. See opposite page for C.O.D. orders.

## NEW EASY PAY TERMS

You can buy anything in this catalog for as low as \$2.00 down with up to 24 months to pay. The minimum order is only \$20.00. Your application form is on the back of our order blanks. It's easy to open an Easy Pay account. See page 436 for details.

## OPEN ACCOUNTS

We ship on open account to well-rated firms, schools, institutions and government agencies. Firms without a published rating may apply for an open account by submitting three trade or bank references. Terms are net, 10 days, E.O.M.



### IF IT IS NECESSARY TO WRITE TO US . . .

On cash orders, we return your original order and all related papers. Before writing us, please check explanations on your order and attached papers. If you do find it necessary to write us, please include all order papers and correspondence that apply. If you do not have the order papers, be sure to give in detail the stock numbers and descriptions of the items ordered and the same name and address as on your original order. On Easy Payment or Open Account orders, only your invoice or account number is necessary.

### HOW TO RETURN MERCHANDISE

Please include your instructions with your shipment, pack the merchandise carefully and insure.

On parcel post, place your instructions, all order papers and correspondence in an envelope inside your package. On the outside, mark "First Class Mail Enclosed" and affix additional four cents postage for the enclosure.

On express shipments, place all papers in a stamped and sealed envelope inside the package. Date this envelope and draw several lines across postage stamp with a pen.

Your name and address should be plainly marked on your enclosure as well as on the outside of your package. **Note:** Merchandise not regularly stocked, but obtained especially for you, may not be returned for refund or exchange.

## ABOUT OUR PRICES

**You Pay NET Catalog Prices.** Catalog prices are net, f.o.b. Chicago, except where otherwise indicated. All trade and cash discounts have already been deducted from every price. Our NET catalog prices are the prices you pay.

**Your Order is Shipped at the Current Price.** Prices in this book replace prices in all previous Allied catalogs and are subject to change without notice. *Orders will be filled at prices in effect at time of shipment.*

**You Get Immediate Benefit of Any Price Reductions.** If prices are reduced during the life of this catalog, we always give you the advantage of the lower prices and refund the difference. We reserve the right to add any Federal, State or Local taxes now in effect or which may be levied after this book is printed.

## TELEPHONE ORDERS

Phone: **HAymarket 1-6800**

We have a specially trained staff to handle your telephone orders. If you are in a hurry for any merchandise, telephone your order. It will be filled and shipped promptly. For extra-fast service, specify Air Shipment (see opposite page).



## VISIT OUR CENTRAL SALESROOMS AND HI-FI STUDIOS

Salesrooms where you can obtain all merchandise listed in this catalog, as well as High-Fidelity demonstration studios, are located in our main building at 100 N. Western Ave. You are invited to come in to see us. Enjoy a thrilling Hi-Fi demonstration, check the Knight-Kits wired for your inspection, and examine tape recorders, tools, test instruments, sound equipment, and the great variety of other merchandise we have on display.

Our location at Western Avenue and Washington Blvd. is only a short distance from Chicago's Loop.

**HOURS:** Monday and Thursday, 9:00 A.M. to 9:00 P.M.  
Other weekdays, and Saturday, 9:00 A.M. to 5:30 P.M.



**100 N. WESTERN AVE.  
CHICAGO 80, ILL.**

Allied Radio Corporation, 100 N. Western Ave., Chicago 80, Illinois

# ALLIED'S New Easy Payment Plan

brings you **INCREASED BUYING POWER**

**Enjoy These Buying Advantages Today...**

1. Only \$2 to \$5 down on orders up to \$200
2. Only \$10 down on orders over \$200
3. Up to 24 months to pay
4. No down payment with Add-on purchases

**EVERYTHING** in our catalog is now available on **EASY TERMS**

It's **EASY** to Open An Account at **ALLIED**.  
Choose Either Regular or Extended Terms Below.

### ALLIED'S NEW EASY TERMS

**Minimum Order**—\$20.00 total cash value.

**Down Payment**—Orders of \$20.00 to \$50.00, \$2.00 down; orders of \$50.01 to \$200.00, \$5.00 down; orders over \$200.00, \$10.00 down. (Larger down payment reduces handling charge and monthly payment.) No down payment required on add-ons of less than \$100.00.

**Handling Charge**—The moderate handling charges are clearly shown in the table below. All charges are included for handling and financing your Easy Pay account. There is nothing else to pay.

**Extended Terms**—You have a choice of making your easy payments under the Regular or Extended terms shown in the table below. The new extended terms permit you to make smaller payments each month over a longer period, up to 24 months. When you place your order, please indicate in the space provided on the front of our order blank whether you prefer regular or extended terms.

### NO HANDLING CHARGE IF PAID IN 60 DAYS

On any Easy Term purchase, you may take the full time to pay if you wish, but if you complete your payments within sixty days after shipment, you will receive a full refund of handling charges. This is an extra benefit to you on Allied's Easy Pay Plan.

### HOW TO ORDER ON NEW EASY TERMS

Everything in this catalog may be purchased on Easy Pay Terms. Use your Allied order blank to enter the merchandise you want. Fill in the answers to the simple questions on the back of the order blank and sign it. Attach your remittance for the down payment with your order. It will be shipped as soon as your credit is approved. The first payment is not due until at least 30 days after shipment. Your invoice will have full details. No red tape—no finance companies to deal with—no hidden charges. Any responsible person of legal age, with a steady income, can get credit approved. Additional order blanks will be sent on request.

### "ADD-ON" PURCHASES

Once your credit is established with Allied, you can "add on" to your account with purchases of \$20 or more. No down payment is required on add-ons or re-opened accounts for less than \$100.00. Simply list the items you want on our order blank, write "add to my account" and give your account number. Please be sure to sign the Easy Payment agreement on the reverse side. After the amount of your new purchase and carrying charge are added, you pay on only one account, in most cases the same amount monthly. If your new unpaid balance is substantially different from the original amount, a new monthly payment will be set up.

**NEW EASY PAYMENT TABLE**

REGULAR TERMS			EXTENDED TERMS		REGULAR TERMS			EXTENDED TERMS	
If Unpaid Balance Is	Handling Charge	Monthly Payment	Handling Charge	Monthly Payment	If Unpaid Balance Is	Handling Charge	Monthly Payment	Handling Charge	Monthly Payment
Up to \$20.00	\$2.00	\$5.00	NOT APPLICABLE TO ORDERS UNDER \$50.00		\$130.01 to \$140.00	\$14.00	\$11.00	\$21.00	\$7.00
20.01 to 30.00	3.00				140.01 to 160.00	16.00	12.00	24.00	8.00
30.01 to 40.00	4.00				160.01 to 180.00	18.00	13.00	27.00	9.00
40.01 to 50.00	5.00				180.01 to 200.00	20.00	14.00	30.00	10.00
50.01 to 60.00	6.00	6.00	\$7.00	\$5.00	200.01 to 225.00	22.50	15.00	34.00	11.00
60.01 to 70.00	7.00	7.00	8.00		225.01 to 250.00	25.00	16.00	38.00	12.00
70.01 to 80.00	8.00		9.00		250.01 to 275.00	27.50	17.00	42.00	14.00
80.01 to 90.00	9.00	8.00	11.00		275.01 to 300.00	30.00	19.00	45.00	15.00
90.01 to 100.00	10.00	9.00	13.00	6.00	300.01 to 350.00	35.00	21.00	51.00	17.00
100.01 to 110.00	11.00	10.00	15.00		350.01 to 400.00	40.00	24.00	58.00	19.00
110.01 to 120.00	12.00		17.00		400.01 to 450.00	45.00	27.00	66.00	22.00
120.01 to 130.00	13.00	19.00	7.00		450.01 to 500.00	50.00	30.00	73.00	24.00

NOTE: On orders over \$500.00, send down payment of \$10.00 or more. Payments and carrying charge will be in proportion to amounts shown on chart.

NOTE: Allied's Easy Payment Plan is offered to residents of the United States, Canada, and Puerto Rico. It does not cover shipments to other U. S. Possessions or Territories, or other countries.

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**OUR GUARANTEE... Page 1**

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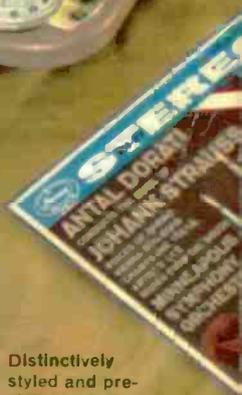
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