

# ALLIED

## Electronics for Everyone 1970



OUR 49TH YEAR • CATALOG 290 • INDEX PAGE 443 • SATISFACTION GUARANTEED OR YOUR MONEY BACK—SEE PAGE 442  
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only **1¢** more

**Choice of Elliptical Cartridge**



Empire  
888E  
Reg. \$39.95



Pickering  
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**Garrard's best! SL95B  
plus Empire 999VE  
super-elliptical Cartridge**



only **\$25** more

Save \$49.95. Connoisseur's choice for superb stereo from automatic turntables... Empire 999VE plus Garrard SL95. 13 A 0952 DU. 13 lbs. . . 154.50 13 A 3976. 999VE Alone. . . 74.95

**Garrard precision Synchro-Lab Automatic Turntables with money-saving elliptical stereo cartridge offers**

**A SL95B . . Garrard's finest model**

SL95B  
Alone

**129<sup>50</sup>**

With Deluxe  
Elliptical

**134<sup>50</sup>**

With Elliptical  
Cartridge

**129<sup>51</sup>**

**B SL72B . . One of Garrard's newest**

SL72B  
Alone

**89<sup>50</sup>**

With Deluxe  
Elliptical

**94<sup>50</sup>**

With Elliptical  
Cartridge

**89<sup>51</sup>**

Save \$39.94. Acclaimed by experts—finest Garrard ever! Has perfect-speed Synchro-Lab motor, adjustable counterweight, combined manual and cueing controls, stylus force dial, ultra-low mass pickup arm, gimballed needle pivots. Automatic or manual operation at 33 $\frac{1}{3}$ , 45 and 78 rpm. Less base, 45-rpm automatic spindle. Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E elliptical stereo cartridge—specify.

13 A 0950 CDU. Shpg. wt., 13 lbs. . . . . 129.51

SL95B Automatic Turntable with Deluxe Elliptical Stereo Cartridge for \$5 more. Save \$44.95. Empire 888TE, Pickering XV15/AME or Shure M91E—specify.

13 A 0951 CDU. Shpg. wt., 13 lbs. . . . . 134.50

13 A 3114 U. SL95B Alone. Shpg. wt., 13 lbs. . . . . 129.50

Save \$39.94. Precision three-speed automatic turntable has styling and many features of the SL95B, but at a more modest price. Famous Synchro-Lab motor for perfect speed, low-mass pickup arm, gimballed needle pivots. Adjustable counterweight, anti-skating control, calibrated stylus pressure gauge. Slide-in cartridge. Less base, 45-rpm spindle. Empire 888E, Pickering V15/ATE-3 or Saure M93E elliptical stereo cartridge—specify.

13 A 0955 CDU. Shpg. wt., 13 lbs. . . . . 89.51

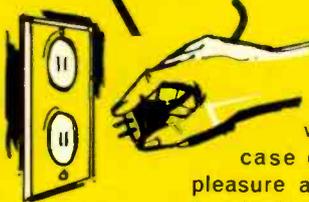
SL72B Automatic Turntable with Deluxe Elliptical Stereo Cartridge for \$5 more. Save \$44.95. Empire 888TE, Pickering XV15/AME or Shure M91E—specify.

13 A 0956 CDU. Shpg. wt., 13 lbs. . . . . 94.50

13 A 3118 U. SL72B Alone. Shpg. wt., 13 lbs. . . . . 89.50

SEE PAGES 56-59 FOR DETAILS ON THE COMPLETE LINE OF GARRARD TURNTABLES AND ACCESSORIES  
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# THIS IS ALL YOU HAVE TO KNOW



This is the world's best known electronics catalog. Yet thousands of our customers don't know a millivolt from a miniskirt.

They don't have to. Neither do you. You can buy intelligently from this catalog without any special knowledge of electronics.

If you *are* knowledgeable in electronics, you'll find all the specifications, down to the last Hz, dB and  $\mu$ V. If you're not, you'll find clear, simple descriptions for each product of what it is, what it does and why you might want to have it.

Remember, you're not buying decibels or millivolts or microfarads. In the case of stereo, you're buying pleasure and relaxation. And in the hundreds of other products we offer . . . tape recorders, antennas, radio and TV sets, car radios and accessories, cameras, tools, wire and cable . . . just to name a few . . . you have the benefit of an incomparable selection of items. All accurately described to guide you to the best choice to suit your needs.

The Allied catalog brings you better merchandise for less money. And you don't have to be an engineer to get *exactly* what you need.

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# THIS IS ALL YOU HAVE TO DO



No crowds. No traffic. No waiting for salespeople. No carrying packages.

And mailboxes never close.

When you shop by mail from Allied, you get some special advantages:

You're more likely to get *exactly* what you want, because there's so much more to choose from. No store in the world could show you as much electronic equipment as you'll find in this catalog.

You save money. We have the merchandise you want at the price you want to pay. No need to shop around. The lowest prices available are right here at your fingertips.

There's a good reason: when you buy from Allied, you're dealing with the world's largest electronics supply house. Our size and volume buying permit great savings, which we pass along to you.

Please see page 442 for our full money-back guarantee.

# THIS IS ALL THE MONEY YOU HAVE TO SEND



Send *no* money.

With your first order, fill in the credit application on the reverse side of our order blank. We'll process it and open an Allied Credit Fund Account for you. This means several things to you:

It means you pay *after* you get your merchandise, not before.

It means you pay only a few dollars a month, which stretches your buying power. For example, if you order a \$100 stereo amplifier, you pay only \$5 a month.\*

It means you can order more items before your first order is paid, often without increasing your monthly payment.

It means you never have to figure taxes or delivery charges. We figure them for you and include them

in your account.

It means you'll receive—automatically—all our sales flyers, Preferred Customer tabloids, plus special money-saving offers each month. Most of all, it means you can have what you want when you want it—with no money down. Everything in this catalog is available on Allied's Credit Fund Plan.

Further details of our Credit Fund Plan are on the next page and page 438. The application is on the back of our order blank.

## THIS IS HOW TO CHARGE IT AT ALLIED

To open an Allied Credit Fund Account, send us your order along with a filled out application on the back of the order blank. Your monthly payments are determined by the amount of your order as shown in the table at right.

For example, if your order is for \$100, you pay \$5 a month. If you like, you can pay more than the minimum amount and your finance charge will be less. If you pay your bill in full within 30 days after the billing date, no finance charge is assessed at all.

Can you buy more items before your order is paid up? Sure. Just send us the order (minimum \$10) and we'll add it to your account. If this brings your unpaid balance to more than the amount of the original order, your monthly payment will increase according to the table at right. If not, it will stay the same.

### CREDIT FUND PAYMENT TABLE

Monthly Payment	Unpaid Balance
Only	Buys Up To
\$5	\$100
\$6	\$120
\$7	\$140
\$8	\$160
\$9	\$180
\$10	\$200
\$11	\$220
\$12	\$240
\$13	\$260
\$14	\$280
\$15	\$310
\$16	\$340
\$17	\$370
\$18	\$400
\$19	\$440
\$20	\$480
\$21	\$500
\$22	\$525
\$23	\$550
\$24	\$575
\$25	\$600
\$26	\$625

Over \$625—Monthly payments will be 1/24 of the unpaid balance.

**Example:**

Unpaid Balance	Monthly Payment
\$1200	$\div 24 = \$50$

**SEE PAGE 438 FOR FULL CREDIT DETAILS**

Integrated circuits, FET front-end, plus luxury styling and low price make this 40-watt Stereo FM-AM Receiver a best buy



Shown in walnut case

**Allied® all-silicon solid-state Stereo FM-AM Receiver**

**149<sup>95</sup>**  
Metal case

Model 339. Latest circuit and Allied's low price make this a spectacular value in a solid-state stereo receiver. All-silicon solid-state circuit has Field-Effect-Transistor front-end for exceptional stability and sensitivity. Integrated circuit in 3rd FM IF stage for extra selectivity. Transformerless output delivers plenty of power with pure tonal quality for full-fidelity stereo realism. A full array of controls and inputs lets you master almost every program source.

Features include: lighted slide-rule dial with smooth flywheel tuning; automatic stereo-mono switching; stereo indicator light; tuning meter. AFC prevents FM drift. Loudness control provides full-range response even at low volume levels. Stereo headphone jack. Tape recording inputs, outputs and monitor. Shortproof speaker connectors. Has transistor output protection. Two AC convenience sockets on rear, one switched. Built-in ferrite AM, FM dipole antennas. With metal case. Takes optional walnut case below. 5x16 x12 1/2". For 117 VAC. From Japan.

14 A 5039 U. Shpg. wt., 26 lbs. . . . . 149.95

14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 19.95

**SPECIFICATIONS**

**AMPLIFIER CIRCUIT.** Power Output at 4 Ohms: 40 watts ±1 dB; 32 watts IHF; 11 watts per channel rms. Response: 20-40,000 Hz, ±3 dB. Harmonic Distortion: 1% at rated power. IM Distortion: 0.22%. Hum and Noise: Mag. phono, -65 dB; Aux., -65 dB. Outputs: 4-16 ohms stereo headphones, re-order. Inputs: tape, magnetic phono, auxiliary, tape monitor. **TUNER CIRCUIT.** FM: IHF Sensitivity: 2.5 µV. Selectivity: Exceeds 20 dB. Separation: Exceeds 25 dB. Capture Ratio: 7.0 dB. Signal-to-Noise: Exceeds 56 dB. AM: Sensitivity: 8 µV. **CONTROLS:** Selector: (AM, FM Mono, FM Stereo, phono, Aux.), Ganged Bass and Treble, Dual-Concentric Volume, Mono-stereo, Main/Remote Speaker, Power, Loudness, Tape Monitor.

Field-Effect-Transistor front-end pulls in weak stations, prevents crosstalk and overloading

**SPEAKERS REMOTE**  
Convenient Main/Remote speaker switch lets you select either one of two sets of stereo speakers

**MAIN**

Polarized plug-n speaker connectors prevent shorts, aid in speaker swapping

# FM-AM-Phono Systems featuring the Allied 339 40-watt Stereo Receiver



Shown in wood case

Save  
**\$155.85**

**349<sup>95</sup>** Metal Case

Our finest 40-watt System . . . powerful  
Argos 12" three-way speaker systems

Allied 339 40-watt Stereo FM-AM Receiver . . . . .	\$149.95
Garrard SL75B 3-speed Automatic Turntable . . . . .	109.50
B-2 Base for Turntable . . . . .	6.50
Empire 888VE Stereo Elliptical Cartridge . . . . .	59.95
Two Argos XL-500 12" 3-way Speaker Systems . . . . .	179.90
<b>SEPARATELY</b>	<b>\$505.80</b>
<b>System Price</b>	<b>349.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$155.85</b>

Our best 40-watt system features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut wood case listed below. Superb Garrard SL75B 3-speed Automatic Turntable features precision Synchro-Lab motor for perfect speed accuracy, cueing, antiskate and stylus force adjustments. With Base. Empire 888VE Stereo Cartridge has .0004x .0009" elliptical diamond stylus. Two Argos XL-500 three-way Speaker Systems have 12" Jensen woofer, 8" closed-back midrange radiator and horn tweeter. Walnut veneer finish. Complete with all audio connecting cables and hi-fi booklet.

14 A 0217 D5Z. Shpg. wt., 108 lbs. . . . . 349.95  
14 A 5003 X. Walnut Wood Case. Wt., 6 lbs. . . . . 19.95

## (A) Deluxe System with 12" 3-way speakers

Allied 339 40-watt Stereo FM-AM Receiver . . . . .	\$149.95
Garrard SL65B 4-speed Automatic Turntable . . . . .	79.50
B-1 Base for Turntable . . . . .	5.50
Shure M91E Stereo Elliptical Cartridge . . . . .	49.95
Two Allied 3030B 12" 3-way Speaker Systems . . . . .	129.90
<b>SEPARATELY</b>	<b>\$414.80</b>
<b>System Price</b>	<b>299.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$114.85</b>

Beautifully matched component system features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut wood case at left. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor, cueing, stylus pressure and antiskate adjustments. With Base. Shure M91E Stereo Cartridge has .0002x.0007" elliptical diamond stylus. Allied 3030B three-way Speaker Systems feature powerful 12" high-compliance woofer, 6" midrange radiator and wide-dispersion 3 1/2" cone tweeter. Walnut-veneer finish with matching cane grille cloth. With all cables and hi-fi booklet.

14 A 0216 D5Z. Shpg. wt., 100 lbs. . . . . 299.95

## (B) System with 10" 3-way speakers

Allied 339 40-watt Stereo FM-AM Receiver . . . . .	\$149.95
Allied 929 4-speed Automatic Turntable . . . . .	69.95
Base for Turntable . . . . .	7.95
Empire 888E Stereo Elliptical Cartridge . . . . .	39.95
Two Allied 3017 10" 3-way Speaker Systems . . . . .	99.90
<b>SEPARATELY</b>	<b>\$367.70</b>
<b>System Price</b>	<b>249.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$117.75</b>

Specially selected component system features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut wood case at left. Allied 929 4-speed Automatic Turntable has perfect-pitch precision motor, cueing and stylus pressure adjustment. With Base. Empire 888E Stereo Cartridge has .0004x.0009" elliptical diamond stylus for precision tracking. Allied 3017 three-way Speaker Systems have husky 10" woofer for deep bass, 6" direct-radiator midrange, plus a 3 1/2" cone tweeter. Handsome walnut-veneer finish with matching cane grille cloth. Complete with all cables and hi-fi booklet.

14 A 0219 D5Z. Shpg. wt., 84 lbs. . . . . 249.95

## (C) System with 8" 2-way speakers

Allied 339 40-watt Stereo FM-AM Receiver . . . . .	\$149.95
Allied 919 4-speed Automatic Turntable . . . . .	49.95
Base for Turntable . . . . .	7.95
Shure M55E Stereo Elliptical Cartridge . . . . .	29.95
Two Allied 3007 8" 2-way Speaker Systems . . . . .	49.90
<b>SEPARATELY</b>	<b>\$287.70</b>
<b>System Price</b>	<b>219.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$67.75</b>

Our lowest priced 339 system offers outstanding performance and is an ideal choice for the audio buff on a tight budget. Features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut case at left. Allied 919 4-speed Automatic Turntable has counterbalanced pickup arm with stylus pressure adjustment. With Base. Shure M55E Stereo Cartridge has .0004x.0007" elliptical diamond stylus. Allied 3007 two-way Speaker Systems have 8" woofer and 3 1/2" cone tweeter. Complete with all cables and hi-fi booklet.

14 A 0218 D5Z. Shpg. wt., 74 lbs. . . . . 219.95



Shown in wood case



**299<sup>95</sup>**  
Metal Case Save \$114.85



Save \$67.75 **219<sup>95</sup>**  
Metal Case

Shown in wood case



Save \$117.75 **249<sup>95</sup>**  
Metal Case

Shown in wood case

# My husband the Stereo expert . . .



My husband, the Stereo expert, likes music. But he isn't what you'd call handy. And he isn't an audio engineer. So when he decided to get a stereo hi-fi system from Allied, I had my doubts. I needn't have worried. All he did was plug it together—and it took just minutes. The sound is fabulous. I keep looking for an orchestra in our living room. Everyone's impressed by our component stereo hi-fi system . . .

And by my husband, the stereo expert.

Component stereo, the best stereo you can have, is simple to choose and easy to use. You pick out a record player, a receiver or amplifier, and speaker systems. Place the units where you wish and hook them together by plugging in a few cables. Then play it.

If you're unaccustomed to component stereo, you're in for an enjoyable surprise. Component stereo sounds like you're there.

That's because people who make stereo components (and this includes Allied) are single-minded fanatics. They concentrate on one thing: making that music sound like it did when it was recorded. Their only standard

is: how perfectly does it recreate the sound of the original performance.

Not how well. How perfectly.

The components they make—the ones in this catalog—are generally too expensive for use in pre-packaged stereo consoles. Yet the system you choose from this catalog will probably cost much less than a pre-packaged console.

The reason is that component manufacturers don't have to worry about assembling complete consoles to sell at a certain price. They're not overly concerned about whether Italian Provincial or Louis Quinze or Moroccc Modern is in vogue this year. They don't incur the costs of furniture, or assembling and shipping large consoles.

If you want great sound, pick out a component system offered in this catalog. Or select a system made up of components of your own choice. Allied will give you a special system price. See card opposite page 55.

Either way, you can use the money you save to buy some hi-fi cabinetry, if you want it. Allied sells that, too.

Great hi-fi, plus extras not expected at Allied's low price make this our best selling Stereo FM-AM Receiver



Shown in wood case

Allied® 40-watt full-feature Stereo FM-AM Receiver **129<sup>95</sup>** \$7 monthly\*  
Metal case

Model 333. No other stereo FM-AM receiver offers so many extras for so little money! The 333 delivers crisp, clean 40-watt power for superb stereo realism. Feature-packed preamp has controls, inputs and outputs for every music program source. Deluxe FM tuner circuit has switchable AFC and time-switching multiplex for perfect mono and stereo FM reception. Wide slide-rule dial and velvet-smooth flywheel tuning assure precise, effortless FM and AM tuning. Magic Eye indicator accurately shows the strongest signal for the FM or AM station you want to receive. Also has stereo indicator light to indicate stereo FM reception.

Preamp features ganged bass and treble tone controls, six-position program selector switch, dual-concentric volume/balance control, mono/stereo mode switch, loudness contour and tape monitor for use with three-head tape machines. Other controls are separate AC power switch and speakers on/off switch. Stereo headphone jack. Handsome extruded aluminum front panel is Sierra Gold. Built-in ferrite AM antenna. With metal case. Takes optional walnut wood case below. Dependable 13-tube circuit. Size, 5 3/8 x 15 1/8 x 13 3/8". For 10-127 V, 50-60 Hz AC. From Japan.

14 A 5073 U. Shpg. wt., 28 lbs. . . . . 129.95  
14 A 5008 X. Oiled Walnut Wood Case. Shpg. wt., 5 lbs. . . . . 14.95

**SPECIFICATIONS**

FM TUNER CIRCUIT: Usable IHF Sensitivity: 3.0  $\mu$ V. Image Rejection: better than 30 dB. Channel Separation: 30 dB. AM CIRCUIT: Image Rejection: better than 40 dB. AMPLIFIER CIRCUIT: Power: 40 watts  $\pm$  1 dB; 32 watts IHF; 12 watts per channel rms. Overall Frequency Response:  $\pm$  2 dB, 20-30,000 Hz. Harmonic Distortion: less than 1% at rated power output. Hum and Noise: -55 dB, mag. phono; -70 dB, auxiliary. Inputs: magnetic phono, ceramic phono or low-level auxiliary, high-level auxiliary or recorder. Outputs: 8 and 16 ohms, stereo headphones and tape recording. Overall: 13 tubes, two silicon rectifiers and eight diodes.



**SELECTOR**  
FM AFC AM PHONO FM AUX STEREO FM AFC  
Selector switch has 6 positions for almost any program source

**VOLUME**  
FRONT LT REAR RT  
Dual-concentric volume adjusts channels for perfect balance

**TAPE MONITOR**  
NORM REC  
Tape monitor switch for use with three-head tape machines

**SPEAKER**  
OFF ON  
**PHONES**  
Stereo headphone jack with speaker on/off switch

\*See page 438 for full Credit details



Shown in wood case



(A)

Save  
\$114.85

**269<sup>95</sup>**  
Metal Case



(B)

Save  
\$100.35

**239<sup>95</sup>**  
Metal Case



(C)

Save \$60.35

**199<sup>95</sup>**  
Metal Case

Shown in wood case

# Allied 40-watt Stereo FM-AM-Phono Systems

## A Featuring Allied 3-way 12" speaker systems

Allied 333 Stereo FM-AM Receiver.....	\$129.95
Garrard SL65B 4-Speed Automatic Turntable.....	79.50
Base for turntable.....	5.50
Empire 888E Stereo Elliptical Cartridge.....	39.95
Two Allied 3030B 3-Way 12" Speaker Systems.....	129.90
<b>SEPARATELY</b>	<b>\$384.80</b>
<b>System Price</b>	<b>269.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$114.85</b>

Excellent true-to-life stereo at big savings. Handsomely designed Allied 333 40-Watt Stereo FM-AM Receiver has handsome front panel in Sierra Gold. With metal case; optional walnut case below. Garrard SL65B 4-Speed Synchro-Lab Automatic Turntable with Base. Cuing and pause control, optical-type stylus pressure adjustment, anti-skate compensation. Empire 888E Stereo Elliptical Cartridge with diamond stylus. Two Allied 3030B 3-Way 12" Walnut Speaker Systems. Assembled and finished. 12" woofer, 6" midrange, direct-radiator 3 1/2" tweeter. All necessary audio cables and connectors. Allied Music System Instruction Booklet.

14 A 0052 D5Z. Shpg. wt., 103 lbs. .... 269.95  
 14 A 5008 X. Walnut Wood Case. Wt., 5 lbs. .... 14.95

## B Outfit with 3-way 10" speaker systems

Allied 333 Stereo FM-AM Receiver.....	\$129.95
BSR McDonald 600 4-Speed Automatic Turntable....	74.50
Base for turntable.....	6.00
Shure M55E Stereo Cartridge.....	29.95
Two Allied 3017 3-Way 10" Speaker Systems.....	99.90
<b>SEPARATELY</b>	<b>\$340.30</b>
<b>System Price</b>	<b>239.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$100.35</b>

Delivers dazzling stereo hi-fi at a moderate price. Allied 333 40-Watt Stereo FM-AM Receiver is exquisitely designed for your listening room. With metal case. Optional walnut case above. BSR McDonald 600 deluxe 4-Speed Automatic Turntable and base. Tubular pickup arm has fixed counterbalance, convenient stylus pressure adjustment. Oversized turntable, cuing lever. Shure M55E Stereo Elliptical Cartridge. Two Allied 3017 3-Way 10" Walnut Shelf Speaker Systems. Beautifully crafted cabinet is sturdy 3/4" wood paneling with handsome oiled walnut veneer; cane grille. 10" woofer, 6" midrange, 3 1/2" tweeter. With cables and connectors, Music System Instr. Booklet.

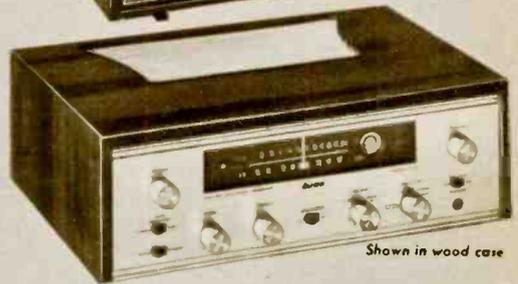
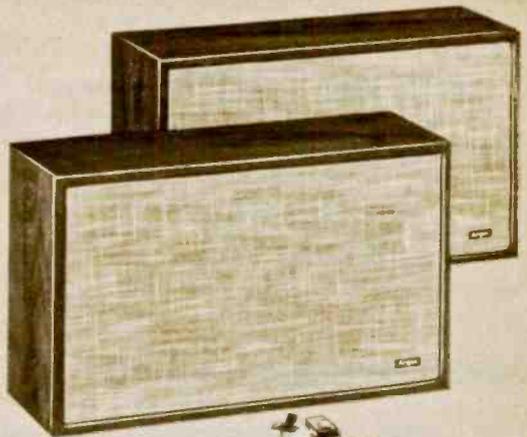
14 A 0223 D5U. Shpg. wt., 86 lbs. .... 239.95

## C Low-cost outfit with 8" speaker systems

Allied 333 Stereo FM-AM Receiver.....	\$129.95
BSR McDonald 400 4-Speed Automatic Turntable....	49.50
Base for turntable.....	6.00
Shure M44E Stereo Cartridge.....	24.95
Two Allied 3007 2-Way 8" Speaker Systems.....	49.90
<b>SEPARATELY</b>	<b>\$260.30</b>
<b>System Price</b>	<b>199.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$ 60.35</b>

True hi-fi stereo sound at a surprisingly low price. Allied 333 40-Watt full-feature Stereo FM-AM Receiver with handsomely decorated front panel. With metal case; optional walnut case above. BSR McDonald 400 Automatic Turntable and base. Four-pole motor, counterbalanced arm with stylus pressure adjustment. Shure M44E Stereo Elliptical Cartridge. Two Allied 3007 Two-Way 8" Walnut Shelf Speaker Systems. 8" woofer delivers rich bass. Direct-radiator 3 1/2" tweeter for clean highs. Enclosed in a sturdy 3/4" hardwood cabinet with oiled walnut veneer finish, matching grille cloth. With all cables and connectors, Allied Music System Instruction Booklet.

14 A 0222 D5U. Shpg. wt., 78 lbs. .... 199.95



Shown in wood case

**329<sup>95</sup>**  
Metal Case

Save  
**\$140.85**

**Our best stereo system with 333 Receiver features Argos 3-way 12" speaker systems**

Allied 333 Stereo FM-AM Receiver.....	\$129.95
Garrard SL75B Automatic Turntable.....	109.50
Base for turntable.....	6.50
Pickering XV-15/200E Stereo Cartridge.....	44.95
Two Argos XL-500 3-Way 12" Speaker Systems..	179.90
<b>SEPARATELY</b>	<b>\$470.80</b>
<b>System Price</b>	<b>329.95</b>
<b>SYSTEM SAVINGS</b>	<b>\$140.85</b>

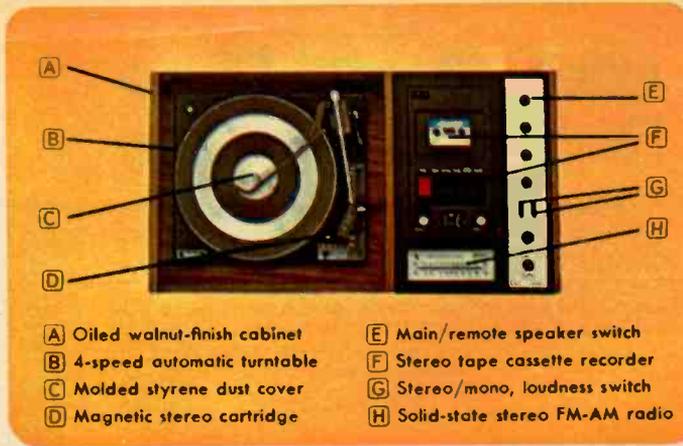
Outstanding selection of components for flawless reproduction of any music source. Allied 333 40-Watt Stereo FM-AM Receiver offers brilliant performance, handsome styling. Metal case included. Optional walnut wood case above, left. Garrard SL75B Automatic Turntable and base. Featuring Synchro-Lab motor, twin-braced low-mass pickup arm, adjustable counterweight. Operates at 33 1/3, 45, 78. Pickering XV-15/200E Stereo Elliptical Cartridge. Two Argos XL-500 Three-Way Speaker Systems in walnut cabinets. Feature Jensen 12" woofer, 8" solid-back midrange, high-compression horn tweeter. Includes all necessary audio cables and connectors, Instruction Booklet.

14 A 0221 D5Z. Shpg. wt., 109 lbs. .... 329.95

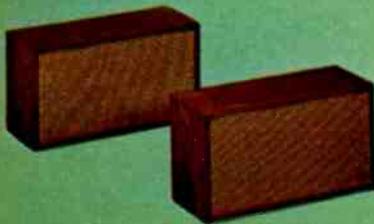
Allied® Music Center  
brings you total home  
stereo entertainment

**349<sup>95</sup>**  
less  
speakers

\$17 monthly  
see page 438



Special offer with  
Allied Music Center



Music Center with Two Allied  
3-way 10" Speaker Systems

Save  
**\$69.90** **379<sup>95</sup>**

Separately, \$449.85

**Records and plays stereo tape cassettes..plays all records, stereo and mono..tunes stereo-FM and AM ..55-watt amplifier..FETs and integrated circuits**

Model 1450. Styling you would want in your home, plus performance to satisfy the stereo enthusiast. Luxurious all-wood cabinet fits atop record cabinet or coffee table . . has smart oiled walnut finish. *Four-Speed Automatic Turntable* has magnetic stereo cartridge with diamond stylus for dazzling stereo. Low-mass arm, anti-skate control, cueing and pause control, separate spindles for automatic and manual play. Includes molded styrene dust cover.

*Stereo Cassette Recorder* tapes direct from FM-AM, or records, or your own mikes. Plays back cassettes, stereo or monophonic, with wide response. Pop-up cassette loading, pushbutton controls, lighted dual recording level meter separate level controls, push-to-reset digital counter. *Stereo FM-AM Tuner* boasts PETS in front end, all silicon transistors, plus integrated circuits and AFC for spectacular reception. Dial has unique point-of-light tuning indicator. Tuning meter. Stereo FM light. Sensitivity 3.0  $\mu$ V on FM.

*Stereo Amplifier* has separate bass and treble controls, stereo-mono switch loudness control. Mike inputs and stereo headphone jack behind hinged panel, tape and aux. inputs. Output at 4 ohms: 55 watts  $\pm$  1 dB, 45 watts IHF 17.6 watts/channel rms. 20-30,000 Hz,  $\pm$  1 dB. Impedance, 4-16 ohms. AC convenience outlet. Built-in FM-AM antennas. 8 $\frac{3}{4}$ "x26 $\frac{1}{4}$ "x14 $\frac{1}{4}$ ". Mikes and speakers optional. (3017 speakers on page 73). 117 VAC, Japan.

14 A 5050 Z. Shpg. wt., 38 lbs. . . . . 349.9  
14 A 0360 L3Z. With Two 3017 10" Walnut Speaker Systems. 88 lbs. . . . . 379.9

# Superb Allied 75-watt Stereo FM-AM Receiver has all silicon transistors, FET front-end plus 3 integrated circuits



Shown in walnut case

Years-ahead circuit pulls in all stations, weak or strong, without distortion . . . rejects unwanted signals . . . Silicon transistors pour out power to spare for stereo with full dynamic range that recreates the music hall

**189<sup>95</sup>**  
Metal Case  
\$10 monthly\*

Model 369. Certain to be one of the best sellers of the year! Moderately-priced stereo FM-AM receiver offers nearly every feature you could want, plus stereo realism to satisfy any audiophile. Advanced design all-silicon solid-state circuit boasts three integrated circuits, FET front end, automatic stereo-mono switching circuit, output transistor protection, direct-coupled transformerless output for extra-wide power bandwidth, and more. Delivers a breathtaking 75-watt power output,  $\pm 1$  dB at 4 ohms, for distortionless stereo even on the loudest musical passages.

Accommodates every stereo source: inputs for magnetic phono, tape, ceramic phono, aux. Tape monitor. Controls for bass, treble, volume, balance; main/remote/both/off speaker switch; stereo headphone jack. Loudness control assures full response even at low listening levels. AFC locks-in FM stations. Slide-rule tuning dial, tuning meter, stereo indicator. Two AC convenience outlets on rear, one switched. FM dipole antenna. With metal case. Optional wood case below.  $5\frac{1}{2} \times 16 \times 13\frac{3}{4}$ ". 117 VAC. Japan.  
14 A 5069 U. Shpg. wt., 28 lbs. . . . . 189.95  
14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 19.95

### SPECIFICATIONS

**AMPLIFIER CIRCUIT.** Power Output at 4 ohms: 75 watts  $\pm 1$  dB, 60 watts IHF. 20 watts/channel rms. Response:  $\pm 3$  dB, 20-50,000 Hz. 1M Distortion: less than 2%. Channel Separation: better than 35 dB at 10 kHz. Hum and Noise Magnetic Phono,  $-60$  dB; Aux.,  $-70$  dB. Input Sensitivity: Mag. Phono, 5 mV; Aux., 300 mV; Tape Monitor, 300 mV. **TUNER CIRCUIT.** FM Sensitivity, 2.0  $\mu$ V. Harmonic Distortion: 0.7%. Selectivity: 35 dB. Separation: better than 25 dB at 1000 Hz. Signal to Noise: better than 56 dB. Capture Ratio: 2 dB. Image Rejection: better than 40 dB.



Special speaker connectors prevent shorts . . . polarized for easy speaker phasing



Has 2 integrated circuits in the IF stage, plus an integrated circuit in stereo FM stage



Completely automatic Schmidt all-electronic stereo-mono FM switching circuit

\*No money down, low monthly payments . . . see page 438

ALLIED 15

# Allied 60-watt stereo FM-AM phono systems at big savings

## A Featuring Goodmans 12" speaker systems

Allied 369 Stereo FM-AM Receiver .....	\$189.95
Garrard SL75B Automatic Turntable.....	109.50
Base for turntable.....	6.50
Shure M91E Stereo Elliptical Cartridge.....	49.95
Two Goodmans G-20 3-Way 12" Speaker Systems...	199.90

SEPARATELY	\$555.80
System Price	<b>399.95</b>
SYSTEM SAVINGS	<b>\$155.85</b>

Superb quality system offers exceptional performance. Features the Allied 369 60-Watt Solid-State Stereo FM-AM Receiver, one of our newest models. FET front-end, three integrated circuits. Output for two pairs of stereo speakers. With metal case. Optional walnut case below. Garrard SL75B Automatic Turntable with base, 33 $\frac{1}{3}$ , 45, 78 rpm. Synchro-Lab motor for perfect speed accuracy. Shure M91E Stereo Elliptical Cartridge with diamond stylus. Two Goodmans G-20 Three-Way 12" Speaker Systems. 12" woofer, 6" midrange, 3 $\frac{1}{2}$ " tweeter. Walnut veneer. Cables, connectors, hi-fi booklet.

14 A 0229 D5Z. Shpg. wt., 129 lbs.....	399.95
14 A 5003 X. Oiled Walnut Case. Wt., 6 lbs.....	19.95

## B With deluxe Allied speaker systems

Allied 369 Stereo FM-AM Receiver .....	\$189.95
Garrard SL65B Automatic Turntable.....	79.50
Base for turntable.....	5.50
Pickering V15/ATE-3 Stereo Elliptical Cartridge.....	39.95
Two Allied 2330A 3-Way 12" Speaker Systems.....	159.90

SEPARATELY	\$474.80
System Price	<b>349.95</b>
SYSTEM SAVINGS	<b>\$124.85</b>

Great value in a quality stereo system at big savings. Allied 369 60-Watt Solid-State Stereo FM-AM Receiver. FET front-end, three integrated circuits. Has loudness and muting switches. With metal case. Optional oiled walnut case above. Garrard SL65B 4-Speed Automatic Turntable with base. Synchro-Lab motor. Cast, balanced over-size turntable. Plays up to six records automatically or operates manually. Pickering V15/ATE-3 Stereo Elliptical Cartridge with diamond stylus. Two Allied 2330A Three-Way 12" Speaker Systems. 12" woofer, 8" midrange, 3 $\frac{1}{2}$ " tweeter. Assembled and finished in oiled walnut. With all cables and connectors, hi-fi booklet.

14 A 0231 D5Z. Shpg. wt., 112 lbs.....	349.95
--	--------

## C Featuring Allied speaker systems

Allied 369 Stereo FM-AM Receiver .....	\$189.95
Garrard SL65B Automatic Turntable.....	79.50
Base for turntable.....	5.50
Shure M55E Stereo Elliptical Cartridge.....	29.95
Two Allied 3030B 3-Way 12" Speaker Systems.....	129.90

SEPARATELY	\$444.80
System Price	<b>329.95</b>
SYSTEM SAVINGS	<b>\$104.85</b>

Enjoy excellent stereo sound at a surprisingly low price. Allied 369 Stereo FM-AM Receiver. FET front-end, three integrated circuits. Styled to grace any decor. With metal case. Optional walnut case above. Garrard SL65B 4-speed Automatic Turntable with base. Synchro-Lab motor, cueing and pause control, optical-type stylus pressure adjustment, anti-skate compensation. Shure M55E Stereo Elliptical Cartridge with diamond stylus. Two Allied 3030B 3-Way 12" Shelf Speaker Systems. 12" woofer, 6" midrange, 3 $\frac{1}{2}$ " tweeter. Factory assembled and finished in oiled walnut. With all necessary cables and hi-fi booklet.

14 A 0232 D5Z. Shpg. wt., 102 lbs.....	329.95
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Save  
**\$84.85** **299<sup>95</sup>** Metal Case

## Our lowest priced 60-watt system features Allied 3-way 10" shelf speaker systems

Allied 369 Stereo FM-AM Receiver .....	\$189.95
Garrard SL55B Automatic Turntable.....	59.50
Base for turntable.....	5.50
Empire 808E Stereo Elliptical Cartridge.....	29.95
Two Allied 3017 3-Way 10" Speaker Systems...	99.90

SEPARATELY	\$384.80
System Price	<b>299.95</b>
SYSTEM SAVINGS	<b>\$ 84.85</b>

Selected to provide top value for your dollar. Features the Allied 369 60-Watt Solid-State Stereo FM-AM Receiver. FET front-end, three integrated circuits. Tape monitoring facility. Handsome modern styling. With metal case. Optional oiled walnut case above. Garrard SL55B 4-Speed Automatic Turntable with base. Anti-skating compensation, stylus pressure adjustment. Empire 808E Stereo Elliptical Cartridge with diamond stylus. Two Allied 3017 Three-Way Shelf Speaker Systems. 10" woofer, 6" midrange, 3 $\frac{1}{2}$ " tweeter. Sturdy  $\frac{3}{4}$ " wood paneling with handsome oiled walnut veneer; cane grille cloth. All necessary audio cables and connectors, Allied Music System Instruction Booklet. 14 A 0230 D5U. Shpg. wt., 86 lbs..... 299.95



~~399.95~~ Save \$155.85

**B**

Save \$124.85 **349.95** Metal Case

**C**

Save \$104.85 **329.95** Metal Case

**NOTE:** For full specifications on A (and Model 162 Receiver - see page 15), Receiver included in metal case, but it is necessary to purchase metal case.

**AMFED**

## Experts at High Fidelity Magazine praise our best Allied® Receiver. Here's what they say . .

"Allied 395 offers features and performance that are distinctly better than average. . . The tuner section . . . is a real winner. Stations seem to pop in all up and down the dial. . . Audio response on mono FM is good; it actually improves on stereo FM. . . Channel separation is excellent. . . the entire tuner portion of this receiver suggests much costlier equipment. . . S/N figures on magnetic phono and tape playback inputs, in particular, are excellent. . . Styling and control features have not been skimmed on in this set." (From February, 1969 issue.)



Shown in wood case

## Allied 195-watt solid-state Stereo FM-AM Receiver

# 299<sup>95</sup>

Metal Case

Model 395. Our finest and most powerful receiver. Field-effect-transistors in the RF stage and integrated circuits in the IF section pull in stereo FM that must be heard to be believed. Sensitivity and selectivity are so good that you'll tune in stations you've never heard before. Nothing has been skimmed on in the AM circuit either . . . local stations will come in with fidelity rivaling some FM stations. The full-feature preamp has all the controls and inputs you'll ever need. All silicon transistors, plus 195 watts of power give you the finest stereo hi-fi possible.

Preamp has volume, balance, and dual-concentric bass and treble controls. Switch selects AM, FM Mono, FM Automatic, Phono, Aux, *plus* Tape Head equalized at either 3 3/4" or 7 1/2" ips. Rocker switches control loudness contour, scratch and rumble filters, between-station silencing on FM, Phono 1 and 2, and AFC. Five-position switch for AC power, main speakers, remote speakers, main-plus-remote speakers, and speakers off. Mode/monitor switch for stereo, left and right channels. Also has signal-strength tuning meter, stereo FM indicator light, flywheel tuning, and stereo headphone jack. With metal case. Takes optional wood case below. For 110-120 VAC. Size, 5 1/2 x 16 x 13 3/4". From Japan.

14 A 5074 U. Shpg. wt., 30 lbs. . . . . 299.95  
14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 19.95

### SPECIFICATIONS

**AMPLIFIER CIRCUIT:** Power Output at 4 ohms: 195 watts ±1 dB; 160 watts IHF; 55 watts rms per channel. Frequency Response: ±1.5 dB, 15-100,000 Hz. Harmonic Distortion: 1%. Hum and Noise: down more than -80 dB. Inputs: mag. (2) and ceramic phono, tape head, tape monitor and auxiliary. Outputs: 4-16 ohms; tape and stereo headphones. **TUNER CIRCUIT:** FM Section. IHF Sensitivity: 1.4 μV. Harmonic Distortion: 0.8%. Sep.: over 35 dB. S/N Ratio: 69 dB. Capture Ratio: 0.95 dB. AM Section. Sensitivity: 5 μV.



Plug-in speaker connectors make speaker phasing easy, prevent shorts and overloads



Five-position switch controls AC power, speaker systems and stereo headphone jack



Advanced FM circuit has field-effect-transistors and integrated circuits



Receiver shown in wood case

## Allied's finest Stereo FM-AM-Phono System

Save \$195.85 **549<sup>95</sup>**  
Metal Case

Allied 395 195-watt solid-state Stereo FM-AM Receiver.....	\$299.95
Garrard SL95B 3-speed Automatic Turntable.....	129.50
Model B-2 Base for turntable.....	6.50
Pickering XV-15/400E Elliptical Stereo Cartridge.....	49.95
Two Allied 2370 three-way 12" Speaker Systems.....	259.90

SEPARATELY	\$745.80
System Price	549.95
SYSTEM SAVINGS	\$195.85

Our best stereo FM-AM-phono system features the Allied 395 with metal case; takes optional wood case below. Garrard SL95B 3-speed Automatic Turntable has cuing, stylus pressure gauge, antiskate adjustment and Synchro-Lab motor. With base. Pickering XV-15/400E Stereo Elliptical Cartridge. Allied 2370 three-way 12" acoustic-suspension Speaker Systems have 12" woofer, compression midrange with diffraction horn, and horn-loaded compression tweeter. With cables and hi-fi booklet.

14 A 0225 D5Z. Shpg. wt., 149 lbs..... 549.95  
14 A 5003 X. Walnut Wood Case. Shpg. wt., 6 lbs..... 19.95

### Our finest System plus Allied 3-head Stereo Tape Deck

Separately, \$925.75. An audiophile's dream! Our best system, shown above, plus the Allied TD-1095 Deck with silicon transistors for finest sound. Three heads permit tape monitoring, sound-on-sound and echo. 7½, 3¼ or 1½ ips. Pause control, automatic shutoff, automatic tape lifters, monitor switch, sound-with-sound, level meters, counter and headphone jack. 4-pole motor for low flutter and wow, less than 0.2% at 7½ ips. Response: ±3 dB, 30-20,000 Hz at 7½ ips. Wood case has walnut vinyl cover. Patch cords, 7" takeup reel, cables, booklet.

14 A 0233 D6Z. Shpg. wt., 181 lbs..... 695.95

Allied® TD-1095 3-head Stereo Tape Deck with above System  
... our "everything" System!



**695<sup>95</sup>**  
Save \$229.80



(A)

Save \$155.85 **499<sup>95</sup>** Metal Case



(B)

**399<sup>95</sup>** Save \$144.85



(C)

**449<sup>95</sup>** Save \$134.85 Metal Case

## Allied 195-watt Stereo Systems

### A Deluxe Stereo System

Allied 395 195-watt solid-state Stereo FM-AM Receiver.....	\$299.95
Garrard SL75B three-speed Automatic Turntable.....	109.50
B-2 Base for turntable.....	6.50
Empire 888E Elliptical-stylus Stereo Cartridge.....	39.95
Two Goodmans G-20 three-way 12" Speaker Systems.....	199.90
SEPARATELY	\$655.80
System Price	499.95
SYSTEM SAVINGS	\$155.85

Features the Allied 395 195-watt stereo FM-AM Receiver. Metal case. Garrard SL75B 3-speed Automatic Turntable. Walnut Base. Empire 888E Cartridge. Two Goodmans G-20 3-way 12" speaker systems. Optional wood case below. Cables, hi-fi booklet. Shpg. wt., 131 lbs.  
 14 A 0362 D5Z..... 499.95  
 14 A 5003 X. Wood Case. 6 lbs... 19.95

### B Budget Stereo System

Allied 395 195-watt solid-state Stereo FM-AM Receiver.....	\$299.95
Garrard SL65B four-speed Automatic Turntable.....	79.50
B-1 Base for turntable.....	5.50
Empire 808E Elliptical-stylus Stereo Cartridge.....	29.95
Two Allied 3030B three-way 12" Speaker Systems.....	129.90
SEPARATELY	\$544.80
System Price	399.95
SYSTEM SAVINGS	\$144.85

Great value in a quality system. Features the Allied 395 solid-state stereo FM-AM Receiver. Metal case. Walnut wood case above. Garrard SL65B 4-speed Automatic Turntable. With Walnut Base. Empire 808E Cartridge. Two Allied 3030B 3-way 12" speaker systems. Cables, booklet. Wt., 104 lbs.  
 14 A 0364 D5Z..... 399.95

### C Special Stereo System

Allied 395 195-watt solid-state Stereo FM-AM Receiver.....	\$299.95
Garrard SL65B four-speed Automatic Turntable.....	79.50
B-1 Base for turntable.....	5.50
Shure M93E Elliptical-stylus Stereo Cartridge.....	39.95
Two Allied 2330A three-way 12" Speaker Systems.....	159.90
SEPARATELY	\$584.80
System Price	449.95
SYSTEM SAVINGS	\$134.85

Powerful system features the Allied 395 solid-state stereo FM-AM Receiver. Metal case. Optional wood case above. Garrard SL65B 4-speed Automatic Turntable, with walnut base. Shure M93E stereo elliptical Cartridge. Two Allied 2330A 3-way 12" speaker systems. Cables, hi-fi booklet. Shpg. wt., 114 lbs.  
 14 A 0363 D5Z..... 449.95

# Lowest priced Allied Stereo FM-AM Receiver



Includes oiled walnut wood case



Indicator light flashes on when you're tuned to stereo FM



Input selector lets you choose stereo FM, FM, AM, tape



Signal-strength meter for always-perfect FM and AM tuning

Unbeatable value! Just add speakers for component-type solid-state stereo at a low, low price you'd never have thought possible... inputs for phono and tape, too

# 89<sup>95</sup>

\$5 monthly  
see page 438

Model 325. Only Allied could give you a solid-state stereo receiver, with so many important features, at such a low price. All-semiconductor circuit pulls in full-fidelity stereo FM, plus good-quality AM, and develops a full 30 watts of peak music power for plenty of volume without distortion. Preamp includes selector switch and inputs for plugging in a tape deck or player, and a stereo record changer with ceramic cartridge. Has pushbutton switches for AC on-off and AFC on-off. Also has separate bass and treble controls, channel balance controls. Features genuine D'Arsonval signal-strength tuning meter for always-perfect tuning of FM and AM stations. Illuminated slide-rule dial. Panel light flashes on whenever you're tuned to an FM stereocast. There's even a headphone jack for listening to stereo, at high volume, without disturbing others. Has built-in FM and AM antennas, plus terminals for adding outdoor FM antenna to pull in more stations. Low price includes handsome all-wood case with walnut veneer. From Japan.  
 14 A 5079 U. Shpg. wt., 21 lbs..... 89.95

### SPECIFICATIONS

FM CIRCUIT. Sensitivity: 3  $\mu$ V for 30 dB quieting. Image Rejection: 45 dB. FM MULTIPLEX CIRCUIT. Channel Separation: 26 dB. AM CIRCUIT. Image Rejection: 36 dB. AMPLIFIER CIRCUIT. Power Output at 4 ohms: 19 watts = 1 dB; 15 watts IHF, 30 watts peak, 7.5 watts r.m.s. Frequency Response: 40-15,000 Hz. Harmonic Distortion: 1.5%. Inputs: Ceramic Phono; Preamplified Tape. Speaker Output: 8 ohms. Overall: 21 transistors, 17 diodes. Power Requirements: 110-120 V, 60 Hz AC.

NOTE: For full specifications on Allied Model 395 receiver, see page 20. Receiver includes metal case, but is shown in optional wood case.



Save \$44.90 **139<sup>95</sup>**



Save \$74.90 **159<sup>95</sup>**

## Stereo FM-AM-Phono Systems with Allied 325 Receiver

### Allied 325 Ensemble with 8" speaker system

- Allied 325 Solid-State Stereo FM-AM Receiver..... \$89.95
- Garrard 30 Automatic Turntable with Stereo Cartridge 39.50
- Base for Garrard Turntable..... 5.50
- Two Allied 3007 2-Way 8" Speaker Systems..... 49.90

SEPARATELY	\$184.85
System Price	<u>139.95</u>
SYSTEM SAVINGS	\$44.90

### Allied 325 Ensemble with 10" speaker system

- Allied 325 Solid-State Stereo FM-AM Receiver..... \$89.95
- Garrard 30 Automatic Turntable with Stereo Cartridge 39.50
- Base for Garrard Turntable..... 5.50
- Two Allied 3017 3-Way 10" Speaker Systems..... 99.90

SEPARATELY	\$234.85
System Price	<u>159.95</u>
SYSTEM SAVINGS	\$74.90

Here's a genuine component stereo system actually priced as low as many portable phonos. Allied 325 solid-state Stereo FM-AM Receiver featuring signal-strength meter for precision FM and AM tuning, AFC, stereo indicator light, and stereo headphone jack. Includes walnut-veneer wood case. Garrard 30 Four-Speed Automatic Stereo Turntable with ceramic stereo cartridge and long-lasting diamond stylus. Two Allied 3007 Two-Way 8" Walnut Shelf Speaker Systems. The 8" woofer delivers rich lows down to 50 Hz. Direct-radiator 3 1/2" tweeter gives good, clean highs to 15,000 Hz. All necessary audio cables and connectors, two 15-ft. speaker cables, instruction booklet. 14 A 0029 15U. Shpg. wt., 70 lbs..... 139.95

Allied 325 Stereo FM-AM Receiver features stereo indicator light which flashes on when you're tuned to stereo FM. AFC, signal-strength meter, channel balance control, input selector switch for stereo FM, FM, AM, phono, tape. Includes handsomely designed walnut-veneer wood case. Garrard 30 Four-Speed Automatic Stereo Turntable with ceramic stereo cartridge and long-lasting diamond stylus. Two Allied 3017 Three-Way 10" Walnut Shelf Speaker Systems. Includes a 10" woofer for deep, resonant bass, smooth 6" midrange, and 3 1/2" tweeter that delivers pure, brilliant highs. 40-17,000 Hz. All audio cables and connectors, Allied Music System Instruction Booklet. 14 A 0200 15U. Shpg. wt., 78 lbs..... 159.95

Only Allied sells this Scott Receiver at a price so low . . .  
 IC's, FET's and 125-watt output give superb stereo FM



**Cut**  
**\$50.00**  
**249<sup>95</sup>** less case  
 \$13 monthly\*

Model 344C. Was \$299.95. Allied's special purchase makes possible this exclusive low price on one of Scott's finest stereo FM receivers! Silver-plated field-effect-transistor front end and integrated circuit IF stages for noise-free reception. Flywheel-weighted knob, signal-strength meter, stereo indicator light and between-station quieting make tuning easier. Feature-packed preamp has front panel microphone input and stereo headphone jacks, volume, balance, dual concentric bass and treble controls. Computer-type pushbuttons control loudness compensation, tape monitor, mono/stereo mode switch, noise filter, FM interstation muting, main and remote speaker systems. Inputs: magnetic phono, tape, FM, mike and auxiliary. Outputs: 4-16 ohms, tape and headphones. Power Output at 4 ohms: 125 watts  $\pm 1$  dB, 90 watts IHF, 35 watts rms per channel. Response:  $\pm 1$  dB, 15-30,000 Hz. FM Sensitivity: 1.9  $\mu$ V IHF. 5 $\frac{1}{2}$ x17 $\frac{1}{8}$ x13". Takes optional case below. For 115 VAC.

13 A 2714 U. Shpg. wt., 25 lbs. . . . . 249.95  
 13 A 2733 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 26.95

*Silicon transistor transformerless output assures cooler operation plus lower noise, wide frequency response and power bandwidth with virtually unmeasurable distortion—even at high listening levels!*

Available at this low price only from Allied . . . Kenwood  
 75-watt solid-state Stereo FM Receiver with FET's



**Cut**  
**\$40.00**  
**159<sup>95</sup>**  
 \$8 monthly\*

Model TK-55. Was \$199.95. Exclusive low Allied price on this Kenwood receiver. Field-effect-transistor front end and highly selective IF circuit with five stages and four limiters for outstanding, static-free reception. Automatic stereo/mono FM switching, flywheel-weighted knob, signal-strength meter and stereo indicator light make accurate tuning a breeze. Preamp has tape monitoring facilities for use with a 3-head stereo tape deck. Stereo headphone jack permits listening to hi-fi in privacy. Dual concentric volume, bass and treble controls let you tailor the sound to suit your taste or the acoustics of the listening room. Rocker switches control loudness compensation, noise filter, tape monitor and mono/stereo mode. Also has provision for two sets of speaker systems. Inputs: magnetic phono, tape and FM. Outputs: 4-16 ohms, tape and headphones. Power Output at 4 ohms: 75 watts  $\pm 1$  dB, 60 watts IHF, 20 watts rms per channel. Response:  $\pm 2$  dB, 20-50,000 Hz. FM Sensitivity: 2.5  $\mu$ V IHF. With attractive walnut-finish metal case. Size, 5x16 $\frac{1}{2}$ x12". For 115 VAC. From Japan.

13 A 2442 U. Shpg. wt., 20 lbs. . . . . 159.95

*Handsome walnut finish metal cabinet and stylish silver-gold front panel with two-tone brown trim will complement anyone's decorating scheme . . . your Kenwood will keep its attractive good looks for years to come*

\* See page 438 for full Credit details . . . Buy with no money down

ALLIED 25

# RECEIVERS

FISHER



**Fisher 65-watt Stereo  
FM-AM Receiver with FET's  
and integrated circuits for great hi-fi**

**249<sup>95</sup>**  
less  
case

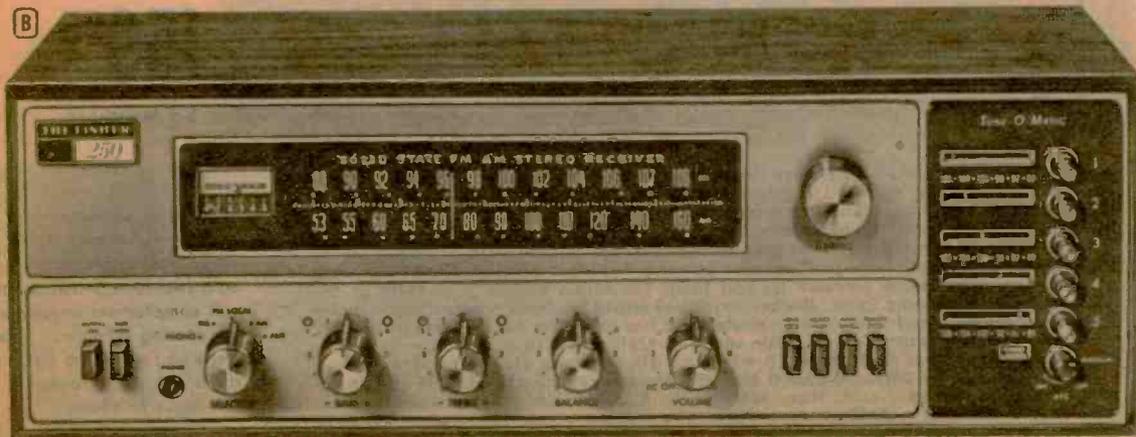
\$13 monthly  
see page 438



**Fisher 100-watt Stereo FM-AM  
Receiver with Tune-O-Matic pushbuttons  
plus FET's and integrated circuits**

**299<sup>95</sup>**  
less  
case

\$15 monthly  
see page 438



**A Fisher 65-watt Stereo FM-AM Receiver with silicon-transistor output**

Field-effect-transistors in front-end plus integrated circuits in IF stages bring in superb stereo FM dual detector for wide-response AM, too

Model 175-T. This stylish receiver delivers thrilling stereo at a budget price. Pulls in static-free stereo FM and wide-band AM. Field-effect-transistors bring in weak stations, prevent crosstalk on strong stations. Integrated circuits set new standards in overall performance and reliability. Signal-strength tuning meter. "Stereo Beacon" shows when you are tuned to a stereo FM station and automatically switches circuit to stereo. Dual-detector design for superior AM reception. Transformerless output is protected by Fisher's Transist-O-Gard® circuit. Power bandwidth is 25-25,000 Hz at 8 ohms.

Controls include bass, treble, balance, volume, selector for Phono, FM, FM Local, AM and Aux. Also has loudness contour, tape recording inputs and outputs, switches for main and remote speakers, stereo headphone jack and built-in AM antenna. Takes optional walnut vinyl-covered wood case below. Size, 4 3/4 x 15 1/2 x 12 3/4". For 117 V, 50-60 Hz AC. Shpg. wt., 18 lbs.  
13 A 2539 U. . . . . 249.95  
13 A 2538 U. Walnut Vinyl Wood Case. Wt., 8 lbs. . . . . 19.95

**SPECIFICATIONS**

**AMPLIFIER CIRCUIT.** Output at 8 Ohms: 65 watts ±1 dB; 56 watts IHF; 20 watts/ch. rms. Response: ±2 dB, 20-20,000 Hz. Harmonic Distortion: 0.5%. Hum and Noise: 85 dB below rated output. Outputs: 4-16 ohms, headphones, recorder. Input Sensitivity: Magnetic Phono Low/High, 2.5 mV/7.5 mV; Aux., 250 mV. **TUNER CIRCUIT.** FM Section. Sensitivity: 2.0 µV. IHF. Harmonic Distortion: 0.6%. Selectivity: 45 dB. Separation: 35 dB. Signal-to-Noise: 65 dB. Capture Ratio: 2.8 dB. AM Section. Sensitivity: 10 µV. Selectivity: 50 dB.

**B Fisher 100-watt Stereo FM-AM Receiver with easy pushbutton FM tuning**

Tune-O-Matic® FM pushbutton tuning for instant selection of any of five preset FM stations  
regular slide-rule manual FM-AM tuning, also

Model 250-T. Superb Fisher receiver features outstanding stereo and mono FM, wide-band AM, and Tune-O-Matic®. Two field-effect-transistors in the front-end and two integrated circuits in the IF strip assure superior sensitivity and selectivity on FM. Also has tuning meter, between-station silencing and "Stereo Beacon". Automatic stereo/mono FM switching. Superior dual-detector AM-circuit. 100-watt stereo amplifier packs plenty of punch to drive several pairs of speakers. Silicon-transistor-transformerless output protected by Transist-O-Gard®.

Deluxe preamp has controls, inputs and outputs for every music source. Has direct tape monitor, loudness contour, speaker switches for main and remote speakers, selector switch for Phono, FM, FM Local, AM and Aux. Has bass, treble and balance controls. Stereo headphone jack. Takes optional walnut vinyl wood case below. Size, 4 3/8 x 12 3/4 x 15 3/8". For 117 V, 50-60 Hz AC. Shpg. wt., 19 lbs.  
13 A 2544 U. . . . . 299.95  
13 A 2538 U. Walnut Vinyl Wood Case. Wt., 8 lbs. . . . . 19.95

**SPECIFICATIONS**

**AMPLIFIER CIRCUIT.** Output at 8 Ohms: 100 watts ±1 dB; 80 watts IHF, 30 watts/ch. rms. Response: ±2 dB, 20-20,000 Hz. Bandwidth: 15-25,000 Hz at 8 ohms. Harmonic Distortion: 0.5%. Hum and Noise: 90 dB below rated output. Inputs: Hi-Lo Phono, Aux., Monitor. Outputs: 4-16 ohms, headphones, recorder. Damping Factor: exceeds 10. **TUNER CIRCUIT.** FM Section. Sensitivity: 2.0 µV IHF. Harmonic Distortion: 0.5%. Selectivity: 45 dB. Separation: 38 dB. Signal-to-Noise Ratio: 65 dB at 100% modulation. Capture Ratio: 2.8 dB. AM Section. Sensitivity: 10 µV.



**Fisher 40-watt solid-state FM-AM-Phono Stereo Compact**

**329<sup>95</sup>**

Field-effect-transistors and silicon-transistor output assure outstanding stereo

Model 125. This deluxe Stereo Compact offers exciting stereo FM wideband AM, 40 watts of power for wide-range sound and complete control facilities. All in an attractive walnut-finished ensemble that will grace anyone's bookshelf. FM circuit boasts field-effect-transistors and integrated circuits for superb stereo reception. "Stereo Beacon," signal-strength indicator. AM has AGC, plus dual detector for wider response.

Preamp has balance, gunged bass and treble tone controls, loudness contour and tape facilities. Main and remote speaker switches and stereo headphone jack. Four-speed automatic turntable has automatic system shutoff and Pickering magnetic cartridge. XP-55B 2-way walnut speaker systems have 8" woofer and 3" tweeter. Control center, 8 1/2 x 17 1/2 x 15 1/8". Speakers, 10x29x9". Optional dust cover below. For 117 VAC.  
13 A 0485 13U. Shpg. wt., 76 lbs. . . . . 329.95  
13 A 2659 X. Dust Cover. Shpg. wt., 5 lbs. . . . . 14.95



**High-fidelity FM Table Radio by Fisher in compact walnut finish cabinet**

**99<sup>95</sup>**

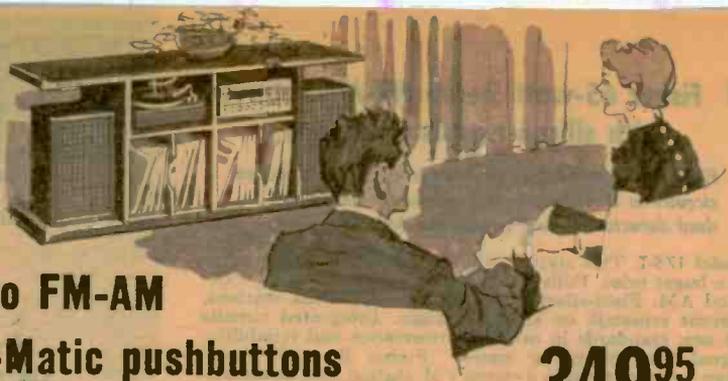
Tune-O-Matic pushbutton FM tuning, separate bass and treble controls, built-in 5 1/4" speaker

Model 100. High-fidelity monophonic radio provides wide-response hi-fi sound from its built-in 5 1/4" speaker with 2-lb. magnet structure. Tune-O-Matic FM pushbutton tuning lets you select any one of five favorite preset FM stations at the push of a button—or tune manually as you wish. Baxandall bass and treble tone controls provide tone compensation on without distortion. AFC. Walnut cabinet, 6 5/8 x 13 1/2 x 6 3/4". For 117 V, 50-60 Hz AC. Shpg. wt., 14 lbs.

13 A 2663 X. . . . . 99.95  
13 A 2664 X. S-30 Speaker System. Extension speaker. 6 1/2 x 13 3/8 x 6 3/4". Shpg. wt., 9 lbs. . . . . 29.95

# RECEIVERS

FISHER  
UNIVERSITY



**Fisher 150-watt Stereo FM-AM  
Receiver with Tune-O-Matic pushbuttons  
for fast selection of any five FM stations**

**349<sup>95</sup>**  
less  
case  
\$17 monthly\*



with any other FM receiver

Tune-O-Matic FM pushbutton tuning for fastest

**Fisher's finest Stereo FM-AM Receiver  
has 190-watt power plus Autoscan for  
easiest FM tuning ever . . . tunes electronically**

**449<sup>95</sup>**  
less  
case  
\$20 monthly\*



**A Fisher 150-watt Stereo FM-AM Receiver brings new convenience to hi-fi listening**

*Tune-O-Matic FM pushbutton tuning, field effect-transistor front-end, plus integrated circuit IF and other advanced features*

Model 400-T. Magnificent Fisher solid-state receiver features plenty of power to drive several sets of speakers, outstanding stereo FM, plus the convenience and accuracy of Tune-O-Matic FM pushbutton tuning. Excellent AM, too. Sensitive FM circuit has field-effect-transistors in the RF stage and integrated circuits in the IF strip for pulling in even weak stations with full fidelity. Also has precision d'Arsonval tuning meter, ultra-smooth flywheel tuning, between-station quieting on FM, automatic stereo/mono FM switching and Fisher's famous "Stereo Beacon" indicator light!

Deluxe preamp has direct tape monitor, loudness contour, Baxandall-type bass and treble tone controls, main and remote pushbutton speaker switches, and stereo headphone jack. Silicon-transistor output is protected against shorts and overloads by patented Transist-O-Gard® overload protection circuit. Takes optional vinyl-covered walnut wood case below. Size, 4 $\frac{1}{2}$ "x15 $\frac{1}{2}$ "x14 $\frac{1}{2}$ " deep. For 105-128 volts, 50-60 Hz AC.

13 A 1626 U. Shpg. wt., 25 lbs. . . . . 349.95  
13 A 2041 X. Walnut Wood Case. Shpg. wt., 9 lbs. . . . . 22.95

**SPECIFICATIONS**

**AMPLIFIER CIRCUIT.** Output at 8 Ohms: 150 watts  $\pm$ 1 dB, 120 watts IHF. 50 watts rms/ch. Response:  $\pm$ 2 dB, 20-25,000 Hz. Power Bandwidth: 10-30,000 Hz. Harmonic Distortion: 0.5%. Hum and Noise: better than 90 dB down. Inputs: Hi-Lo Phono, Aux., Monitor. Outputs: 4-16 ohms, stereo headphones, tape recording. **FM CIRCUIT.** Sensitivity: 2.0  $\mu$ V IHF. Harmonic Distortion at 1 kHz: 0.5%. Selectivity: alternate channel, 45 dB. Stereo FM Separation: 38 dB at 1000 Hz. Signal-to-Noise Ratio: 65 dB at 100% modulation. Capture Ratio: 2.8 dB.



**Fisher Reverberation System for the vibrant excitement of the concert hall**

**69<sup>95</sup>**

*Works through tape monitor or separate preamp to create the acoustics of the concert hall*

Model K-10. Add the vibrant, exciting sound of a live performance to your hi-fi system with the Fisher reverberation system. By delaying part of the audio signal for 33 milliseconds, the K-10 creates the reverberation effect of the concert hall or auditorium. This important effect adds greater realism to musical playback in stereo or mono. Works with most Fisher receivers including earlier models 400, 500 and 800. (Not recommended for Fisher 160-T or 175-T.) Also for systems with tape monitor or separate preamplifier. Easy to operate—has only one control. Three-tube circuit with selenium rectifier. Size, 7x9 $\frac{1}{2}$ x2". For 105-120 volts, 50-60 Hz AC. 13 A 2097 X. Shpg. wt., 10 lbs. . . . . 69.95

**B Fisher's finest Stereo FM-AM Receiver has everything for the connoisseur**

*AutoScan electronically sweeps the dial and converts the signal-strength meter to a frequency indicator for the most accurate FM tuning yet devised*

Model 500-TX. The supreme achievement of famous Fisher engineering! Mighty 190-watt stereo receiver features three methods of FM tuning—AutoScan, Tune-O-Matic® and smooth flywheel tuning. Dual-gate MOSFETs (metal-oxide-silicon-field-effect-transistors) plus crystal IF filter assure amazing sensitivity and selectivity for truly remarkable stereo FM reception. Also has precision d'Arsonval tuning meter, between-station quieting, AFC, "Stereo Beacon" and automatic stereo/mono FM switching. AM circuit has advanced 4-resonator ceramic ladder filter.

Versatile preamp has direct tape monitor, 5-position speaker switch, stereo headphone jack, Baxandall-type bass and treble tone controls, high and low filters, and loudness contour. Silicon-transistor output is protected by Fisher's Transist-O-Gard®. Takes optional case below. Size, 5 $\frac{1}{2}$ "x16 $\frac{1}{2}$ "x14 $\frac{1}{2}$ ". For 105-128 V, 50-60 Hz AC.

13 A 2627 U. Shpg. wt., 30 lbs. . . . . 449.95  
13 A 2042 X. Walnut Vinyl Inlaid Case. Shpg. wt., 9 lbs. 22.95

**SPECIFICATIONS**

**AMPLIFIER CIRCUIT.** Output at 8 Ohms: 190 watts  $\pm$ 1 dB, 150 watts IHF. 65 watts rms/ch. Response:  $\pm$ 1.5 dB, 15-25,000 Hz. Power Bandwidth: 8-35,000 Hz at 8 ohms. Harmonic Distortion: 0.4% at full power output. Hum and Noise: 90 dB below full rated output. **FM CIRCUIT.** Sensitivity: 1.7  $\mu$ V IHF. Harmonic Distortion: 0.4%. Signal-to-Noise Ratio: 65 dB at 100% modulation. Selectivity: alternate channel, 70 dB. Capture Ratio: 1.5 dB. Stereo FM Separation: 38 dB at 1000 Hz. **AM TUNER.** Sensitivity: 10  $\mu$ V. Selectivity: 80 dB.



**University 120-watt Stereo FM Receiver features integrated circuit IF strip**

**379<sup>50</sup>**  
less end-panels

*Pick up stations you never heard before with MOSFET front-end*

Studio Pro 120-A. This receiver features the latest MOSFETs in front-end. MOSFETs set new standards for stereo FM reception because they are more stable than FET's, and reduce drift, noise and distortion to never-before-possible levels. Also has automatic stereo/mono FM logic switching circuit, stereo indicator light, between-station quieting and center-channel tuning meter. Integrated-circuit IF strip boasts razor-sharp 55 dB selectivity and astonishing capture ratio under 1 dB.

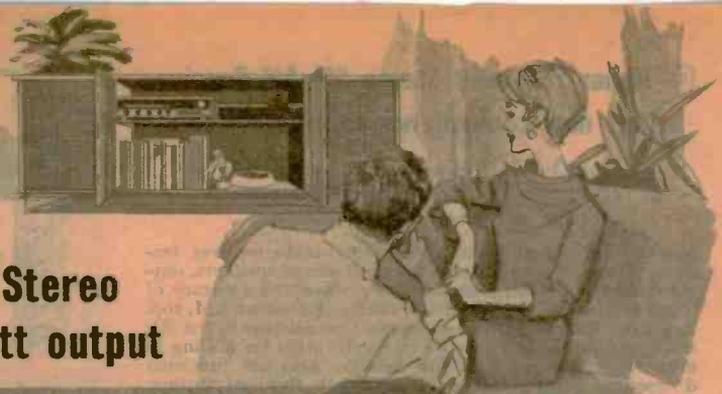
Silicon-transistor stereo amplifier has 120 watts of IHF power to drive several sets of speakers. Versatile preamp has tape monitor, center-channel output, high and low filters, speaker and mode switches, loudness contour and stereo headphone jack. Response: +0, -3 dB, 20-100,000 Hz. FM Sensitivity: 2.3  $\mu$ V. 4 $\frac{1}{2}$ "x16x12". End panels below. For 110-120 V, 60 Hz AC.

13 A 2770 U. Shpg. wt., 18 lbs. . . . . 379.50  
13 A 2771 X. Walnut End Panels. Wt., 6 lbs. . . . . Pair. 9.95

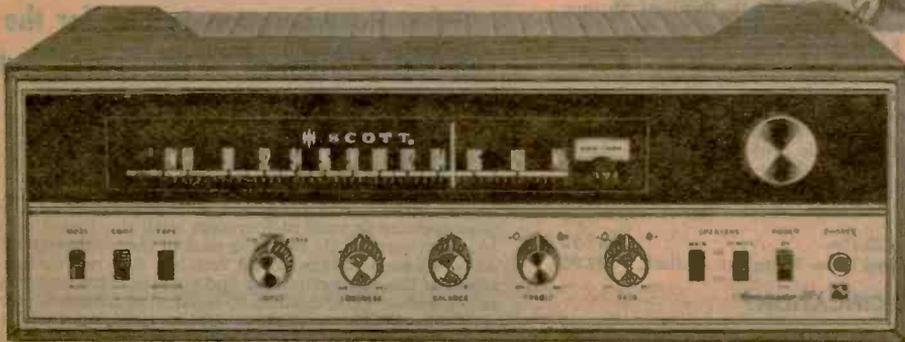
Use Allied's Credit Fund Plan to buy now

# RECEIVERS

H. H. SCOTT



**Scott's lowest priced Stereo FM Receiver . . 70-watt output**



**A**

*FET front-end and integrated circuit IF strip assure sensitive, static-free FM reception*

**199<sup>95</sup>**  
less case

**\$10 monthly**  
see page 438

**Scott 110-watt Stereo FM-AM Receiver with quartz crystal filter in IF strip . . never needs realignment**



**B**

*Wire-wrap bonded connections plus plug-in PC modules assure longer life, easier servicing*

**299<sup>95</sup>**  
less case

**\$15 monthly**  
see page 438

**Scott 175-watt Stereo FM-AM Receiver has quartz crystal filter and rugged silicon output transistors**



**C**

*Microphone input jacks conveniently mounted on front panel let you make your own music!*

**349<sup>95</sup>**  
less case

**\$17 monthly**  
see page 438

## A 70-watt solid-state FM Receiver has field-effect-transistors for superior FM

Model 341X. Even Scott's lowest priced solid-state stereo FM receiver offers many convenient features, plus the sensitive field-effect-transistor front-end found in Scott's higher priced models. FETs assure greater sensitivity, freedom from cross-modulation and lower noise than conventional bipolar transistors. You will hear more stations more clearly with FET design. Also has tuning meter, stereo indicator light and flywheel weighted knob to simplify accurate, pinpoint tuning. Integrated circuits in IF strip assure great stereo FM.

Convenient, positive-acting slide-type switches control both main and remote speaker systems; also control tape monitor for use with three-head tape decks and loudness contour which automatically compensates for loss of human hearing sensitivity to bass and treble at low volume. Preamp has volume, balance, bass and treble tone controls. Front panel stereo headphone jack lets you enjoy hi-fi in complete privacy. Rugged transformerless output stage assures full power over the entire audio frequency spectrum.

Power Output at 4 ohms: 70 watts  $\pm 1$  dB, 55 watts IHF; 15 watts rms per channel at 8 ohms. Response:  $\pm 1$  dB, 20-20,000 Hz. Hum and Noise: -55 dB. Harmonic Distortion: 0.8% at rated output. Sensitivity: 2.5  $\mu$ V. Separation: 30 dB. Inputs: mag. phono, tape, aux. Outputs: 4-16 ohms, tape and headphones. Size,  $4\frac{1}{2} \times 14\frac{1}{2} \times 12\frac{1}{2}$ ". Takes optional case below. For 117 VAC.

13 A 2774 U. Shpg. wt., 17 lbs. . . . . 199.95  
13 A 2040 X. Walnut Wood Case. Wt., 4 lbs. . . . . 22.50

## B 110-watt solid-state FM-AM Receiver has rugged silicon-transistor output stage

Model 382C. This Scott receiver has many extras to assure superb stereo. Field-effect-transistors in the front end, quartz crystal lattice filter in the IF and integrated circuit IF strip and multiplex provide sensitive, noise-free FM and superior stereo separation. Tuning meter, flywheel tuning, stereo indicator light and Perfectune light that flashes on when FM is tuned in perfectly. Between-station quieting eliminates interstation "hash" when you're tuning FM stations.

Computer-type pushbuttons control loudness compensation, scratch filter, tape monitor, mono/stereo mode, muting, main and remote speaker systems. Also has volume, balance, ganged bass and treble controls. Plug-in speaker connectors prevent accidental short circuits.

Power Output at 4 ohms: 110 watts  $\pm 1$  dB, 90 watts IHF; 30 watts rms per channel at 8 ohms. Response:  $\pm 1$  dB, 20-20,000 Hz. Sensitivity: 2.5  $\mu$ V. Separation: 40 dB. Takes optional case below.  $5 \times 15 \times 14$ ". 117 VAC.

13 A 2772 U. Shpg. wt., 19 lbs. . . . . 299.95  
13 A 2184 X. Walnut Wood Case. Wt., 4 lbs. . . . . 22.50

## C 175-watt solid-state FM-AM Receiver easily drives two sets of speaker systems

Model 386. Powerful receiver offers superb mono and stereo FM, ultra-versatile preamp facilities for every music source and enough power to drive any speaker systems made. Field-effect-transistor front-end and integrated circuit IF and multiplex assure finest stereo FM reception. Crystal filter in the IF strip provide outstanding selectivity so that you'll hear more stations than ever before. Tuning meter, stereo indicator light and flywheel tuning make station selection easy. Between-station quieting eliminates noise when you tune FM.

Computer-type pushbuttons control loudness contour, tape monitor, scratch filter, muting, mono/stereo mode, main and remote speakers. Also has bass, treble, volume, stereo headphone jack and front panel microphone inputs. Power output at 4 ohms: 175 watts  $\pm 1$  dB, 137 watts IHF; 36 watts per channel at 8 ohms. Response:  $\pm 1$  dB, 9-22,000 Hz. Sensitivity: 1.9  $\mu$ V. Takes optional case below. Size,  $4 \times 15 \times 14$ ". For 117 VAC.

13 A 2773 U. Shpg. wt., 22 lbs. . . . . 349.95  
13 A 2733 X. Walnut Wood Case. Wt., 6 lbs. . . . . 26.95

## Scott 12 VDC/110 VAC Receiver with speakers



199<sup>95</sup>

\$10 monthly\*

Field-effect-transistors in the front end assure better FM reception

Model 2550. Stereo FM-AM receiver system operates on 12 VDC in cars or boats or from AC line. Offers features comparable to many more expensive component systems. Automatic stereo switching. Separate tone controls for each channel. Sensitive FET front-end. Integrated circuit preamp and IF strip. "Full Complementary Output" delivers virtually undistorted sound even at the lowest listening levels. Walnut finish wood.

Includes inputs for tape recorder and magnetic phono. Front panel stereo headphone jack. Complete tape monitoring facilities. Acoustic suspension speaker systems. FM Sensitivity, 2.5  $\mu$ V. Receiver,  $5\frac{1}{2} \times 13\frac{1}{2} \times 7\frac{1}{4}$ ". Speakers,  $7\frac{1}{2} \times 13\frac{3}{8} \times 6\frac{3}{4}$ ". For 12 VDC/110 VAC.  
13 A 2678 X. Shpg. wt., 30 lbs. . . . . 199.95

## Advanced Scott 110-watt Stereo FM Receiver



269<sup>95</sup>

\$14 monthly\*

Silicon output transistors assure highly reliable operation and cleaner sound

Model 342C. Outstanding stereo FM receiver features plug-in PC modules and wire-wrap permanent bonded connections for reliability that meets military standards. Crystal filter in IF, field-effect-transistor front-end and integrated circuits in the IF and multiplex sections assure superb mono and stereo FM. Has tuning meter, stereo indicator light, Perfectane<sup>®</sup>, muting, tape monitor, loudness contour, main and remote speaker switches. Stereo headphone jack. Power Output at 4 ohms: 110 watts  $\pm 1$  dB, 90 watts IHF; 30 watts rms per channel at 8 ohms. Response:  $\pm 1$  dB, 20-20,000 Hz. Sensitivity: 1.9  $\mu$ V. Takes optional case below. Size,  $5 \times 15 \times 12$ ". For 117 VAC.

13 A 2025 U. Shpg. wt., 17 lbs. . . . . 269.95  
13 A 2184 X. Walnut Wood Case. Wt., 4 lbs. . . . . 22.50

# RECEIVERS

H. H. SCOTT

## 210-watt Stereo FM-AM Receiver

**399<sup>95</sup>** \$18 monthly  
see page 438

Model 3800. Exciting Scott stereo FM-AM receiver has the latest design feature for superlative performance. Sensitive silver-plated FET front-end pulls in most stations. Integrated-circuit IF strip and preamp virtually eliminates distortion. All silicon output transistors. Delivers tremendous 210-watt output,  $\pm 1$  dB at 4 ohms; 170-watt IHF at 4 ohms; 8 watts/channel rms.

Back-lit slide-rule tuning dial, stereo light, "Perfectune" indicator and tuning meter assure precise station selection. Crystal filter for top selectivity. Dual bass and treble controls; balance, loudness controls. Inputs for tape, phono, aux. Tape monitor. Outputs: stereo headphone jack, tape, 4-16 ohm speakers.

Response:  $\pm 1$  dB, 9-22,000 Hz. FM Sensitivity: 1.9  $\mu$ V IHF. FM Stereo Separation: 40 dB. Signal-to-Noise Ratio: 65 dB. Capture Ratio: 2.5 dB. Size, 5 $\frac{1}{2}$ " x 14 $\frac{1}{2}$ ". With handsome oiled walnut wood case. For 117 VAC. 13 A 2461 U. Shpg. wt., 28 $\frac{1}{2}$  lbs. .... 399<sup>95</sup>

Model 3900. Finest Scott stereo FM-AM receiver ever! Built to give you stereo realism that rivals the depth and splendor of the original performance. Magnificent solid-state circuit pours out a full 85 watt continuous (rms) power per channel at 4 ohms.

Has IC's in IF strip, preamp and multiplex circuits. Silver-plated FET front-end for super sensitivity. Dual crystal filters give razor sharp selectivity. Inputs for tape, phono, aux. Outputs for 4-ohm speakers, recording, stereo headphone. Tape monitor. Full control stereo light, "Perfectune," and meter.

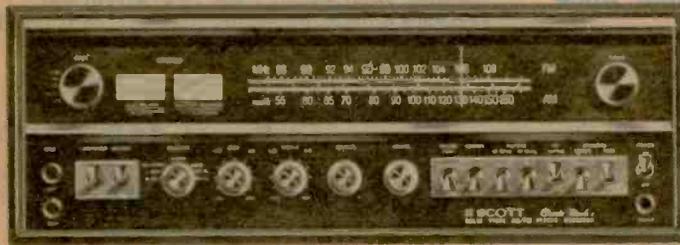
Response:  $\pm 1$  dB, 20-30,000 Hz. FM Sensitivity: 1.7  $\mu$ V. FM Stereo Separation: 40 dB. Signal-to-Noise Ratio: 65 dB. Capture Ratio: 2.5 dB. 4 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 12 $\frac{1}{2}$ ". Optional case below. For 117 VAC. 13 A 2464 U. Shpg. wt., 35 lbs. .... 699<sup>95</sup>

Deluxe Walnut Wood Case. 13 A 2733 X. Shpg. wt., 6 lbs. .... 26



## Scott professional quality Stereo FM-AM Receiver

**699<sup>95</sup>** less case  
\$29 monthly  
see page 438



## Exciting Scott "Casseiver" combines 82-watt solid-state Stereo FM Receiver with Stereo Cassette Recorder

**369<sup>95</sup>** \$17 monthly  
see page 438



Easy-to-use Cassettes

Records or plays up to two hours of stereo on cassettes



Model 3600. The latest concept in home entertainment! Scott combines a deluxe solid-state stereo FM-AM receiver with a versatile stereo tape cassette recorder in an attractive low-profile wood cabinet with a smart walnut finish. Full-feature receiver boasts sensitive silver-plated FET front-end and IC's in the IF strip for top performance. Pulls in marvelous true-to-life stereo FM, crystal-clear mono FM. Power Output at 4 ohms: 82 watts,  $\pm 1$  dB; 65 watts IHF; 22 watts rms per channel. Has a full array of

controls and inputs for all music sources. Stereo cassette recorder can tape directly off-the-air, or live with mikes. Features synchronous motor, level meters, digital count pushbutton controls. Plays back through Casseiver for fidelity sound. Response:  $\pm 1$  dB, 20-20,000 Hz. FM Sensitivity: 2.5  $\mu$ V. FM Separation: 30 dB. Signal-to-Noise Ratio: 60 dB. With walnut end panels, Size, 22 $\frac{1}{2}$ " x 11 $\frac{3}{4}$ " x 4 $\frac{1}{2}$ ". For 117 VAC. 13 A 2036 U. Shpg. wt., 24 lbs. .... 369<sup>95</sup>

Model KR-77. This solid-state receiver by Kenwood is a fine "starter" component for your home stereo system. Just add speakers and a turntable to enjoy beautiful stereo music from FM or records; receives crystal-clear AM too.

Super sensitive front-end features two field-effect-transistors and 4-gang tuning condenser to pull in the weakest FM stations with ease. IF strip has two integrated circuits for superior selectivity. Also has muting on FM, stereo indicator light and precision tuning meter.

Tape monitor, front-panel tape dubbing, speaker selector, headphone jack, loudness contour, rumble and scratch filters, preamp and main amplifier outputs. Overload circuit protects output stage. Power output at 4 ohms: 90 watts  $\pm 1$  dB; 150 watts IHF; 33 watts rms per channel.  $\pm 1.5$  dB, 15-50,000 Hz. Sensitivity: 1.9  $\mu$ V. Walnut-finish metal case, 5 $\frac{1}{2}$ x16 $\frac{1}{2}$ x2 $\frac{1}{2}$ ". 117 VAC. Japan.

13 A 2087 U. Shpg. wt., 29 lbs. . . . 239.95

Model KR-70. As above, but FM only.

13 A 2088 U. . . . 199.95

Model KR-100. Here's a powerful stereo FM-AM receiver with all the controls and FM sensitivity you need for magnificent stereo. FM front end has two field-effect-transistors and four-gang tuning condenser for outstanding stereo reception. The IF circuit has four integrated circuits for superior selectivity and low 2.5 dB capture ratio. Also has between-station quieting on FM, stereo indicator light and tuning meter.

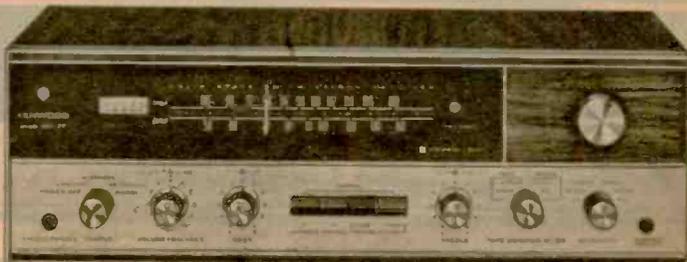
Tape monitor, front-panel tape dubbing, center channel and preamp outputs, speaker selector, stereo headphone jack, rumble and rumble filters, mode switch, and loudness contour. Overload circuit protects output stage. Power output at 4 ohms: 170 watts  $\pm 1$  dB; 140 watts IHF; 33 watts rms per channel.  $\pm 1.5$  dB, 13-50,000 Hz. Sensitivity: 1.8  $\mu$ V. FM separation: 35 dB. Walnut-finish metal case, 5 $\frac{1}{2}$ x16 $\frac{1}{2}$ x12 $\frac{1}{4}$ ". 117 VAC. Japan.

13 A 2492 U. Shpg. wt., 26 lbs. . . . 299.95

## 90-watt Stereo FM-AM Receiver

# 239<sup>95</sup>

\$12 monthly\*



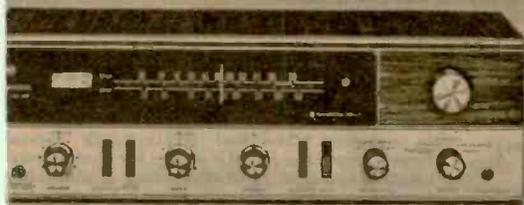
## RECEIVERS

KENWOOD

## 170-watt Stereo FM-AM Receiver

# 179<sup>95</sup>

\$9 monthly\*



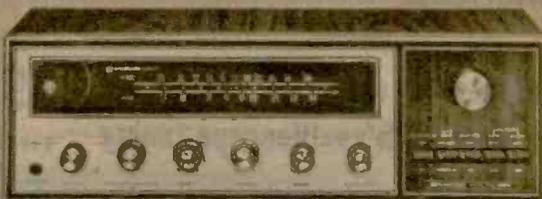
Model KR-44. Big value in solid-state stereo receiver that has many of the features of more expensive Kenwoods. Sensitive FM circuit has two FETs and two ICs for excellent stereo FM; clear AM. Tuning meter, stereo indicator light. Tape monitor, front-panel tape dubbing, low level center channel output, speaker switch, headphone jack, loudness contour, noise filter. Power output at 4 ohms: 60 watts  $\pm 1$  dB; 48 watts IHF; 20 watts rms per channel.  $\pm 1.5$  dB, 20-50,000 Hz. Sensitivity: 2.2  $\mu$ V. Walnut-finish metal case, 5 $\frac{1}{2}$ x16 $\frac{1}{2}$ x15 $\frac{1}{2}$ ". 117 VAC. Japan.

13 A 2089 U. Shpg. wt., 27 lbs. . . . 179.95

## Kenwood's finest . . . 250-watt FM-AM

# 349<sup>95</sup>

\$17 monthly\*



Model TK-140X. Kenwood's best receiver features ultra-sensitive field-effect-transistor front-end with integrated circuits in the IF stages for superlative stereo FM. Wide-band AM, too. Stereo indicator light, tuning meter, between-station quieting on FM. Preamp has tape monitor, mode switch, speaker selector, headphone jack, loudness contour, rumble and scratch filters. Power output at 4 ohms: 250 watts  $\pm 1$  dB; 200 watts IHF; 80 watts rms per channel.  $\pm 1.5$  dB, 8-120,000 Hz. Sensitivity: 1.7  $\mu$ V. Walnut-finish metal case, 5 $\frac{1}{2}$ x16 $\frac{1}{2}$ x12 $\frac{1}{4}$ ". 117 VAC. Japan.

13 A 2490 U. Shpg. wt., 33 lbs. . . . 349.95

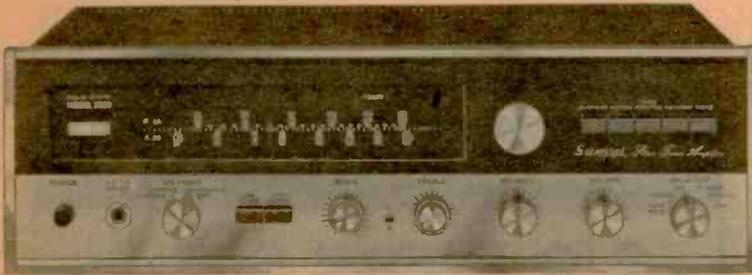
# RECEIVERS

SANSUI  
MARANTZ

## Sansui 125-watt Stereo FM-AM Receiver with "black-out" dial

**299<sup>95</sup>**

\$15 monthly\*



Model 2000. Premium-quality receiver features silicon transistors for purest sounding stereo hi-fi. Field-effect-transistors in the front-end and automatic stereo/mono FM switching assure superb mono and stereo FM reception; excellent AM too. Tuning meter; stereo indicator light; illuminated program function indicators. Stereo headphone jack, speaker system selector switch, rumble and scratch filters, loudness contour, between-station quieting on FM, tape monitor. Two-tone black and brushed silver-gold panel; metal case. 117 VAC. 4 $\frac{1}{2}$  x 16 $\frac{1}{4}$  x 13 $\frac{1}{4}$ ". Japan.  
13 A 2075 U. Shpg. wt., 26 $\frac{1}{2}$  lbs. . . . . 299.95  
13 A 2098 X, Walnut Wood Case, Shpg. wt., 7 lbs. . . . . 22.50

### SPECIFICATIONS

**AMPLIFIER CIRCUIT:** Power Output at 4 Ohms: 125 watts  $\pm$ 1 dB, 100 watts IHF; 36 watts rms per channel at 4 ohms. Response:  $\pm$ 1.5 dB, 15-40,000 Hz. Power Bandwidth: 20-40,000 Hz. Harmonic Distortion: less than 0.8% at rated output. Hum and Noise: better than -70 dB. Inputs: magnetic phono, tape and auxiliary. Outputs: 4-16 ohms, tape, headphones and tape monitor.

**TUNER CIRCUIT:** FM. Sensitivity: 1.8  $\mu$ V IHF. Harmonic Distortion: less than 0.8%. Separation: 35 dB. Signal-to-Noise Ratio: 65 dB. Selectivity: 50 dB at 96 MHz. Capture Ratio: 2.5 dB. Image Rejection: 80 dB. AM Section Sensitivity: 15  $\mu$ V.

## Sansui 90-watt Stereo FM-AM Receiver

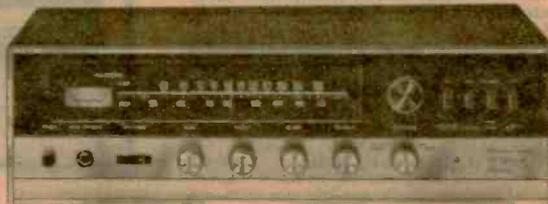
**249<sup>95</sup>**  
\$13 monthly\*

## Sansui 60-watt Stereo FM-AM Receiver

**199<sup>95</sup>**  
\$10 monthly\*



Model 800. Silicon-transistors; field-effect-transistors in FM front-end. Tuning meter, stereo light, headphone jack, speaker selector, FM interstation muting, tape monitor. Power Output at 4 Ohms: 90 watts  $\pm$ 1 dB, 70 watts IHF; 28 watts rms per channel. Response:  $\pm$ 1 dB, 15-50,000 Hz. Sensitivity: 2.8  $\mu$ V. Metal case. 4 $\frac{1}{2}$  x 15 $\frac{1}{8}$  x 13 $\frac{1}{8}$ ". For 117 VAC. From Japan.  
13 A 2077 U. Shpg. wt., 23 lbs. . . . . 249.95  
13 A 2080 X, Walnut Wood Case, Shpg. wt., 7 lbs. . . . . 22.50



Model 350. Silicon-transistors; field-effect-transistors in front end for superior FM. Tuning meter, stereo indicator light, headphone jack, speaker selector, tape monitor, loudness contour. Power Output at 4 ohms: 60 watts  $\pm$ 1 dB, 46 watts IHF; 16 watts rms per channel. Response:  $\pm$ 1 dB, 20-30,000 Hz. Sensitivity: 3  $\mu$ V. Metal case. 4 $\frac{1}{2}$  x 15 $\frac{1}{8}$  x 13 $\frac{1}{8}$ ". 117 VAC. Japan.  
13 A 2096 U. Shpg. wt., 20 lbs. . . . . 199.95  
13 A 2095 X, Walnut Wood Case, Shpg. wt., 7 lbs. . . . . 19.95

## Marantz 80-watt-rms Stereo FM Receiver with oscilloscope tuning

**695<sup>00</sup>**  
less case  
\$29 monthly\*



Model 18. A landmark in receiver design! Passive RF stage has only pure tuning sections; there are no tubes, transistors or FETs to overload. Modified Butterworth crystal filters couple the four IF stages for phenomenal limiting and stereo FM separation. Oscilloscope tuning assures station selection with unparalleled precision.

Has stereo indicator light, "gyro-touch" tuning flywheel, tape monitor, front-panel tape dubbing and stereo headphone jacks, muting speaker selector, scratch and rumble filters. Power: 40 watts rms per channel. Response  $\pm$ 0.5 dB, 20-20,000 Hz. Distortion: 0.2%. Sensitivity: 2.8  $\mu$ V. Signal-to-Noise Ratio: 7 dB. Separation: 45 dB. Size, 6x18 $\frac{1}{4}$ x16 $\frac{1}{2}$ ". Takes optional case below. For 117 VAC.  
13 A 2260 U. Shpg. wt., 46 lbs. . . . . 695.00  
13 A 2261 X, Walnut Case, 11 lbs. . . . . 39.95

# Midland's best Stereo FM-AM Receiver packs mighty 150 watts

**299<sup>95</sup>**  
\$15 monthly\*

## RECEIVERS

MIDLAND  
BOGEN

### SPECIFICATIONS

**AMPLIFIER CIRCUIT:** Power Output at 4 Ohms: 150 watts  $\pm$  1 dB; 120 watts IHF; 40 watts/ch. rms. Response:  $\pm$  1.5 dB, 25-30,000 Hz. Harmonic Distortion: 0.2% at rated output. Hum and Noise: -55 dB below rated output. Inputs: magnetic phono, tape head and auxiliary. Outputs: 4-16 ohms, stereo headphones, tape and tape monitor.

**TUNER CIRCUIT: FM Section.** Usable Sensitivity: 1.5  $\mu$ V. Harmonic Distortion: 0.3% at 100% modulation. Signal-to-Noise Ratio: 60 dB at 100% modulation. Separation: 35 dB at 400 Hz. Image Rejection: 60 dB at 98 MHz. AM Section. Sensitivity: 300  $\mu$ V per meter.



Model 19-560. Midland's most powerful solid-state receiver features field-effect-transistors in the front-end and four integrated circuits in the IF strip for superb reception of even distant FM stations; excellent AM too. Color-coded indicator lights show choice of program source when receiver is in operation. Automatic stereo/mono FM switching, stereo indicator light, signal strength and "0 center" meters simplify tuning. Also has between-station quieting on FM; main and remote speaker system switches, tape monitor, scratch filter, loudness contour and stereo headphone jack. Extruded aluminum front panel with walnut veneer wood case. 5x17 $\frac{1}{2}$ x10". 117 VAC. Japan. 13 A 2050 U. Shpg. wt., 27 $\frac{1}{2}$  lbs. . . . . 299.95

## Midland 75-watt Stereo FM-AM Receiver

**199<sup>95</sup>**  
\$10 monthly\*

## Midland 100-watt Stereo FM-AM Receiver

**249<sup>95</sup>**  
\$13 monthly\*



Model 19-551. Offers field-effect-transistor front end for greater FM sensitivity; plus fine AM. Program indicator lights. Stereo indicator light, tuning meter, AFC, scratch filter, loudness contour and headphone jack. Power Output at 4 ohms: 75 watts  $\pm$  1 dB, 60 watts IHF; 20 watts/ch. rms. Response:  $\pm$  1.5 dB, 15-30,000 Hz. FM Sensitivity: 2  $\mu$ V. Aluminum front panel. With walnut wood case. Size, 4 $\frac{3}{4}$ x16 $\frac{3}{8}$ x9 $\frac{1}{2}$ ". For 117 VAC. Japan. 13 A 2052 U. Shpg. wt., 24 $\frac{1}{2}$  lbs. . . . . 199.95



Model 19-555. Features field-effect-transistor front end for noise-free FM; clear AM too. Program indicator lights. Stereo indicator light, tuning meter, between-station quieting on FM, speaker switches, and tape monitor. Power Output at 4 ohms: 100 watts  $\pm$  1 dB; 80 watts IHF; 30 watts/ch. rms. Response:  $\pm$  1.5 dB, 25-30,000 Hz. FM Sensitivity: 1.8  $\mu$ V IHF. Size, 5x17 $\frac{1}{4}$ x9" deep. For 117 VAC. Japan. 13 A 2054 U. Shpg. wt., 24 $\frac{3}{4}$  lbs. . . . . 249.95

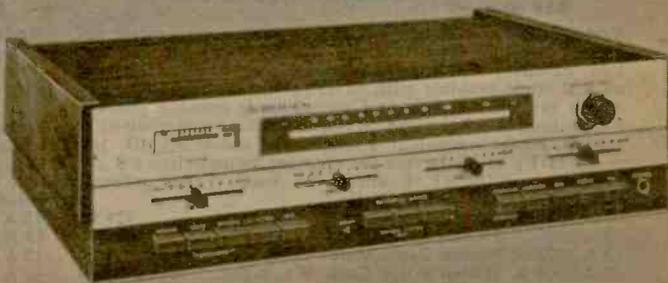
Model D8240. Advanced receiver features push-button or manual electronic tuning. Field-effect-transistor front-end and ceramic filter in the integrated circuit IF strip for noise-free FM reception; offers clear AM too. Slide-type treble, bass, volume and balance controls.

Pushbuttons control AC power, main and remote speaker systems, scratch filter, AFC, mode, loudness contour, auxiliary, phono, and FM or AM. Also has stereo headphone jack. Optional remote control listed below.

Output at 8 ohms: 55 watts  $\pm$  1 dB, 45 watts IHF, 18 watts rms per channel. Response:  $\pm$  2 dB, 20-20,000 Hz. Harmonic Distortion: less than 0.7% at rated output. FM Sensitivity: 1.5  $\mu$ V IHF. With walnut veneer end panels, metal case. 4 $\frac{1}{2}$ x16 $\frac{1}{2}$ x11 $\frac{1}{2}$ ". 117 VAC. 13 A 2058 U. Shpg. wt., 18 lbs. . . . . 249.95  
13 A 2101 X. Remote Control. 1 lb. . . . . 39.95

## Bogen 55-watt Stereo FM-AM Receiver has electronic tuning

**249<sup>95</sup>**  
\$13 monthly\*



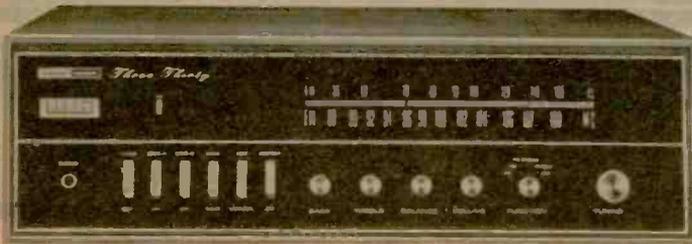
\*See page 438 for full Credit details

# RECEIVERS

HARMAN-KARDON  
SHERWOOD

## Harman-Kardon 90-watt Stereo FM-AM Receiver

**199<sup>95</sup>** metal case  
\$10 monthly\*



Shown in wood case

Model 330. Solid-state receiver features ultra-wide response, important control features and decorator-designed styling at a low price. Advanced metal oxide silicon field-effect-transistor (MOSFET) front-end assures high signal-to-noise ratio and superior sensitivity for static-free reception of even distant FM stations. Also has automatic stereo/mono FM switching and stereo indicator light to indicate stereo FM reception. Flywheel tuning and signal-strength meter simplify tuning.

Rocker switches for AC power, main and remote speaker systems, mode, tap monitor and loudness contour. Illuminated program indicators for AM, FM, Stereo FM, Phono, Aux. Stereo headphone jack. Output at 4 ohms: 90 watts  $\pm 1$  dB, 70 watts IHF; 20 watts rms per channel. Response:  $\pm 1.5$  dB, 7-50,000 Hz. Sensitivity: 2.7  $\mu$ V. Harmonic Distortion: less than 0.8%. 4 $\frac{1}{4}$  x 15 $\frac{1}{2}$  x 13". With metal case; takes optional case below. 117 VAC. Japan. Wt., 20 lbs.

13 A 2064 U. . . . . 199.95  
13 A 2069 X. Walnut Case, 6 lbs. . . . . 21.95

## Harman-Kardon 140-watt Stereo FM Receiver

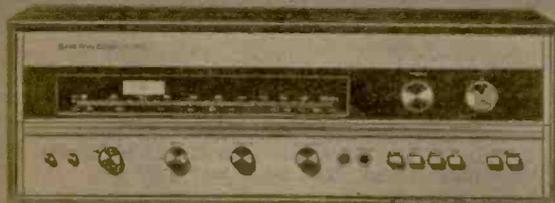
**299<sup>95</sup>** metal case  
\$15 monthly\*



Model 820. Harman-Kardon's finest! Features metal-oxide-silicon-field-effect-transistors (MOSFETs) in front end, integrated circuits and crystal filter in the IF strip for superb mono and stereo FM reception. Between-station quieting on FM suppresses annoying hash between stations. Tuning meter, flywheel tuning automatic stereo/mono FM switching and stereo indicator light. Lighted indicators for program source.

Front panel has tape monitor, stereo headphone jack, loudness contour, scratch filter and main/remote speaker switches. Ebony dial with gold front panel. Output at 4 ohms: 140 watts  $\pm 1$  dB; 110 watt IHF; 40 watts rms per channel. Response  $\pm 1$  dB, 5-60,000 Hz. Distortion: less than 0.5%. Sensitivity: 1.8  $\mu$ V. With metal case. Optional walnut case below. 4 $\frac{1}{4}$  x 16 $\frac{1}{2}$  x 12". 117 VAC. Japan.

13 A 2288 U. Shpg. wt., 25 lbs. . . . . 299.95  
13 A 2289 X. Walnut Case, 6 lbs. . . . . 25.50

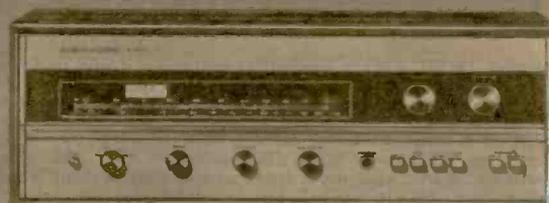


Shown in wood case

## Sherwood 225-watt Stereo FM-AM Receiver

**429<sup>95</sup>** less case  
\$19 monthly\*

Silicon output delivers full 225 watts with wide power bandwidth of 12-30,000 Hz



Shown in wood case

## Sherwood 125-watt Stereo FM-AM Receiver

**329<sup>95</sup>** less case  
\$16 monthly\*

Solid-state filter and integrated circuits in the IF strip for studio-monitor quality stereo FM

Model S-7900. Features FET front-end and integrated circuits plus solid-state filter in the IF strip for superior FM; excellent AM too. Also has between-station quieting on FM, tape monitor with front panel tape dubbing jack, stereo headphone jack and monophonic speaker output. Stereo indicator light and "0 center" tuning meter simplify tuning. Power output at 4 ohms: 225 watts  $\pm 1$  dB, 180 watts IHF; 50 watts rms per channel. Sensitivity: 1.8  $\mu$ V. Distortion: 0.1% at 10 watts. 117 VAC. Takes optional case below. 5x16 $\frac{1}{2}$ x14". 28 lbs.

13 A 2031 U. . . . . 429.95  
13 A 2030 U. S-8900. Above, but no AM. 27 lbs. . . . . 399.95  
13 A 2007 X. Walnut Grain Metal Case, 8 lbs. . . . . 9.00  
13 A 2006 X. Walnut Wood Case. Wt., 8 lbs. . . . . 28.00

Model S-7500. Sensitive field-effect-transistor front-end. Integrated circuits and solid-state filter in the IF strip for noise-free FM reception. Interstation hush on FM, tap monitor with front panel tape dubbing jack, headphone jack, monophonic speaker output and main and remote speaker pushbuttons. Stereo indicator light and "0 center" tuning meter make tuning easier. Power Output at 4 ohms: 125 watts  $\pm 1$  dB, 100 watts IHF; 35 watts rms per channel. Sensitivity: 1.8  $\mu$ V. 117 VAC. Takes optional case below. 5x16 $\frac{1}{2}$ x12". Shpg. wt., 22 lbs.

13 A 2071 U. . . . . 329  
13 A 2073 U. S-8500. Above, but no AM. 22 lbs. . . . . 299  
13 A 2046 X. Walnut Grain Metal Case, 7 lbs. . . . . 9  
13 A 2000 X. Walnut Wood Case. Wt., 7 lbs. . . . . 28

Model 1282. Budget-priced receiver has many features usually found only in more expensive models. Field-effect-transistor front-end and integrated circuits in the F strip deliver superb stereo FM reception; excellent AM too. Has "0 center" tuning meter and stereo indicator light to simplify AM and FM tuning. Illuminated call outs indicate choice of Auxiliary, Mono, FM or AM program sources.

Locker switches control loudness contour, tape monitor, main and remote speaker systems. Push-pull mode switch is combined with balance control. Stereo headphone jack, bass and treble controls. Power output at 4 ohms: 130 watts  $\pm 1$  dB, 105 watts IHF; 40 watts rms per channel. FM Sensitivity: 2.5  $\mu$ V IHF.  $4\frac{1}{2} \times 14\frac{1}{2} \times 10\frac{1}{4}$ ". Optional case below.

3 A 2809 U. . . . . 239.40

3 A 2807 X. Walnut Case, 7 lbs. . . . . 19.80

Model 1281 Stereo FM Receiver. Above, but less AM. Takes case above. Wt., 18 lbs.

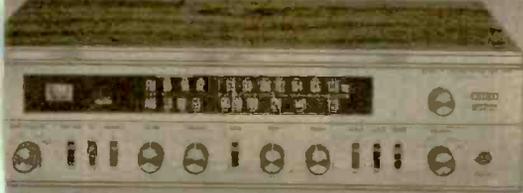
3 A 2808 U. . . . . 219.60

Model 1482. Finest E-V receiver features tuning by means of nine preset pushbuttons on blackout dial. Field-effect-transistor front-end, crystal filters and integrated circuit IF strip assure superb FM reception; excellent AM too. Tuning meter, stereo indicator light and automatic stereo/mono FM switching simplify tuning. Controls include bass, treble, volume, balance, tape monitor, loudness compensation, scratch filter. Stereo headphone jack. "Black-out" dial.

Locker switches for controlling two sets of speaker systems. Silicon transistors assure high reliability and finest sound. Power output at 4 ohms: 250 watts  $\pm 1$  dB, 200 watts IHF; 50 watts rms per channel. Response:  $\pm 1$  dB, 10-40,000 Hz. Sensitivity: 2  $\mu$ V. Hum and Noise: -74 dB. Satin gold panel. Takes optional case below.  $5 \times 17 \times 13\frac{1}{2}$ ". 117 VAC.

3 A 2292 U. Shpg. wt., 23 lbs. . . . . 399.60

3 A 2293 X. Walnut Case, 9 lbs. . . . . 24.95



**Eico 80-watt FM Receiver**  
Silicon-transistor circuit for finer sound, longer life **259.95**  
\$13 monthly\*

Model 3570. Famous Eico stereo FM receiver has silicon transistors for finest stereo. Boasts five tuned circuits in front-end plus four double-tuned IF stages for excellent sensitivity and selectivity. Transformerless output assures wide response: 0.5 dB, 8-60,000 Hz. Tuning meter, stereo indicator light, AFC, SCA filter, speaker selector and stereo headphone jack. Power output at 4 ohms: 80 watts  $\pm 1$  dB, 70 watts IHF, 20 watts rms per channel. Sensitivity: 2.4  $\mu$ V. With walnut-grain metal case,  $4\frac{1}{2} \times 16 \times 9$ ". 115 VAC.

3 A 2343 U. Shpg. wt., 14 lbs. . . . . 259.95

**Electro-Voice  
130-watt Stereo  
FM-AM Receiver**  
**239.40** less case \$12 monthly\*



**RECEIVERS**  
ELECTRO-VOICE  
EICO

**Electro-Voice 250-watt  
Stereo FM-AM Receiver**  
**399.60** less case \$18 monthly\*



**SEE PAGES  
472-475  
FOR  
EICO STEREO  
COMPONENTS  
IN KIT FORM**

**Eico 80-watt FM-AM Receiver**  
Superb FM, good AM and full preamp control facilities **279.95**  
\$14 monthly\*

Model 3770. Eico's best stereo FM-AM receiver. Delivers clean 80-watts power output plus excellent stereo FM and AM. Direct-coupled silicon-transistor circuit boasts wide  $\pm 0.5$  dB, 8-60,000 Hz response. Preamp has complete control facilities including tape monitor for use with 3-head tape machines. Also has speaker selector and stereo headphone jack. Tuning meter and stereo indicator light. Power: Same as 3570, left. Sensitivity: 2.4  $\mu$ V. With walnut-grain metal case,  $4\frac{1}{2} \times 16 \times 9$ ". 115 VAC.

13 A 2335 U. Shpg. wt., 14 lbs. . . . . 279.95

Full Credit details on page 438 . . buy with no money down

# COMPACTS

HARMAN-KARDON  
SCOTT-KENWOOD

## Solid-state 3-piece Stereo Systems .. superb hi-fi in space-saving form



HARMAN-KARDON

**80-watt Stereo FM-Phono-Tape Cassette System**

**449<sup>50</sup>**



**80-watt Stereo FM-AM-Phono with omnidirectional speakers**

**399<sup>95</sup>**

Model SC-2520. Versatile stereo compact includes stereo FM receiver, tape cassette recorder, 4-speed Garrard automatic turntable and two speaker systems. Record up to 2 hours direct from records, FM, or with your own mikes. Bass, treble, loudness controls. Stereo indicator light. Keyboard recording controls, record level meter. Stereo headphone jack. Switches for main, auxiliary speakers. Speaker systems have 8" woofer, 3" tweeter. 80 watts ±1 dB. 20-30,000 Hz. Receiver, 8 1/2" x 18 1/4" x 17 3/8"; speakers, 17 1/4" x 11 1/4" x 8 1/4". Walnut. 117 VAC. Less mikes.  
13 A 0350 L2U. Shpg. wt., 75 lbs. .... 449.50  
13 A 2132 X. Molded Plastic Dust Cover. Wt., 2 lbs. .... 19.95

Model SC-2350. Compact stereo FM-AM system features omnidirectional speaker systems that can be placed behind chairs or drapes, used as end tables, or put wherever they look best, and still give you full stereo realism. Has four-speed Garrard automatic turntable. Receiver has integrated micro-circuits and wideband IFs. Inputs and controls for extra pair of stereo speakers. Speaker systems have 8" woofer, 2 1/4" tweeter. 80 watts ±1 dB; 60 watts IHF. ±1.5 dB, 18-30,000 Hz. Receiver, 8 1/2" x 18 3/8" x 17 3/4". Speakers, 18 x 10 3/4" x 10 3/4". Walnut. 117 VAC. Dust cover, left.  
13 A 0193 L3U. Shpg. wt., 70 lbs. .... 399.95



H. H. SCOTT

**50-watt Stereo FM-AM-Phono**

**339<sup>95</sup>**

Model 2503-17. Compact features sensitive stereo FM-AM receiver with FET front-ends on FM and AM, silicon transistors, 4-speed automatic turntable with Pickering stereo cartridge, and two 8" air-suspension speaker systems. Separate channel bass and treble controls, main and remote speaker switches, tape mounter, stereo headphone jack, front panel mike and guitar inputs. Automatic off switch. Speaker systems have 8" woofer, 3" tweeter. Power at 4 ohms: 50 watts ±1 dB; 40 watts IHF. 18-25,000 Hz. Walnut. Receiver, 9 1/4" x 16 1/4" x 15 3/8"; speakers, 18 x 10 1/2" x 8 1/2". 117 VAC.  
13 A 0931 L2U. Shpg. wt., 68 lbs. .... 339.95  
13 A 2677 X. Plastic Dust Cover. Wt., 5 lbs. .... 9.95



KENWOOD

**38-watt Stereo FM-AM**

**199<sup>95</sup>**

Model KS-33. Deluxe stereo FM-AM receiver system features sensitive FET front-end and silicon-transistor amplifier circuit to bring you magnificent stereo FM. Silent automatic FM stereo/mono switching. Precision illuminated tuning meter; stereo indicator light. Controls include loudness contour, bass, treble, AFC. Tape monitor. Stereo headphone jack. Two-way walnut speaker systems have 6 1/2" cloth-roll woofer and 2 3/4" cone-type tweeter. Outputs for extra pair of stereo speakers. 38 watts ±1 dB; 30 watts IHF. ±2 dB, 30-40,000 Hz. Receiver has walnut finish metal case, 14 1/4" x 4 3/4" x 11 1/4". Speakers 8 1/4" x 14 1/2" x 7 1/8". 117 VAC. Japan.  
13 A 0916 L2U. Shpg. wt., 50 lbs. .... 199.95

# Specially selected FM-AM-Phono Stereo Component Systems at great savings

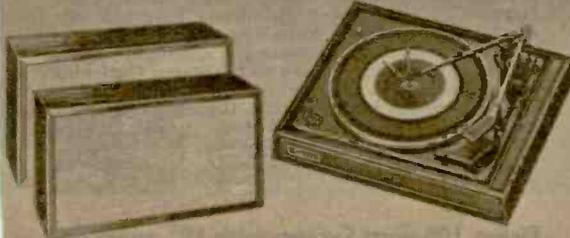
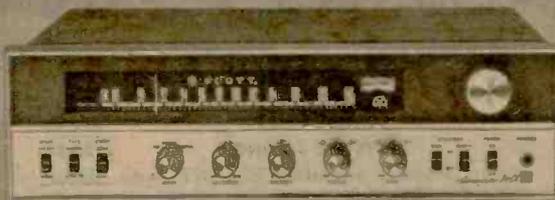
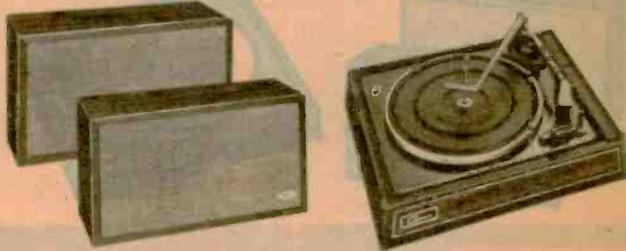
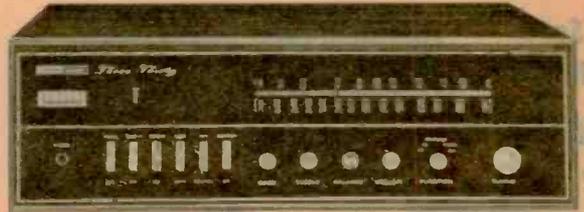
HI-FI  
MANAGER'S  
SYSTEMS

**Harman-Kardon 90-watt Stereo System**  
with Allied 2-way 8-inch speaker systems

Save \$45.30 **279<sup>50</sup>**  
less case

Separately, \$324.80. Exciting selection of perfectly matched stereo components provides fine performance at big savings. Harman-Kardon 330 90-watt Solid-State Stereo FM-AM Receiver offers high sensitivity and wideband sound. Tape monitor, main and remote speaker switches, D'Arsonval signal-strength meter, automatic FM stereo-mono switching,  $\pm 1.5$  dB, 7-50,000 Hz response. Takes case below.

Garrard 40B 4-speed Automatic Turntable and Base. Viscous damped cuing and stylus pressure gauge. Pickering P/ATE-1 elliptical-stylus Stereo Cartridge. Two Allied 3007 2-way 8" Speaker Systems. 8" woofer and 3 1/2" tweeter in enclosure with oiled walnut veneer. With cables, hi-fi booklet.  
13 A 0977 D5U. Shpg. wt., 76 lbs. . . . . 279.50  
13 A 2069 X. Walnut Wood Case. Wt., 7 lbs. . . . . 21.95



**Quality Scott 70-watt Stereo System**  
with Allied 3-way 10" speaker systems

Save \$55.80 **339<sup>00</sup>**  
less case

Separately, \$394.80. Enjoy the thrilling sound of true-to-life stereo realism with this excellent system. Scott 341X 70-watt Solid-State Stereo FM-AM Receiver features integrated circuits and silicon output transistors. Takes case below. Garrard SL55B 4-speed Automatic Turntable with Base. Has famous Synchro-Lab motor for perfect speed. Damped cuing and automatic intermix. Empire 808E elliptical-stylus Stereo Cartridge. Two Allied 3017 3-way 10" Assembled Speaker Systems. 10" woofer 6" midrange, 3 1/2" tweeter. Enclosed in walnut veneer cabinet with cane grille cloth. With cables and hi-fi booklet.  
13 A 0976 D5U. Shpg. wt., 86 lbs. . . . . 339.00  
13 A 2040 X. Walnut Wood Case. Wt., 6 lbs. . . . . 20.82



**Superb Fisher 65-watt Stereo System**  
with Allied 3-way 12" speaker systems

Save \$115.80 **419<sup>00</sup>**  
less case

Separately, \$534.80. Superb system offers exceptional performance at a tremendous savings. Fisher 175-T 65-Watt Solid-State Stereo FM-AM Receiver has Field-Effect-Transistors in front-end and integrated circuits in IF for superb stereo FM. Takes case below. Garrard 8L65B 4-speed Automatic Turntable with Base. Synchro-Lab motor, adjustable counter-weight antiskate. Shure M93E elliptical-stylus Stereo Cartridge. Two Allied 2330A Assembled 3-way 12" Speaker Systems. Each has 12" woofer, 8" midrange, 3 1/2" tweeter in walnut enclosure. With all cables, connectors, and Allied Music System Instruction Booklet.  
13 A 0975 D5U. Shpg. wt., 97 lbs. . . . . 419.00  
13 A 2538 U. Walnut Wood Case. Wt., 8 lbs. . . . . 19.95

Ensembles are ready to play—complete with cables, hi-fi booklet

ALLIED 39

HI-FI  
MANAGER'S  
SYSTEMS

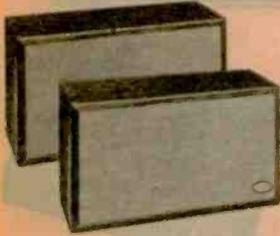
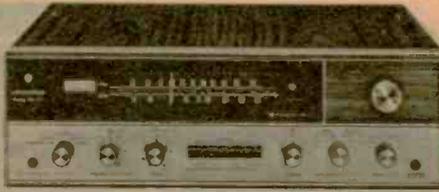
Save up to \$136.30 on these  
Stereo FM-AM-Phono Systems

Save

\$115.30

**349<sup>50</sup>**

\$17 monthly\*



**Kenwood 90-watt System has 10" speakers**

Kenwood KR-77 Stereo FM-AM Receiver.....\$239.95  
Garrard SL65B 4-speed Automatic Turntable. 79.50  
B-1 Base for turntable..... 5.50  
Shure M93E Elliptical Stereo Cartridge..... 39.95  
Two Allied 3017 10" Speaker Systems..... 99.90

COMPONENTS SEPARATELY \$464.80

SYSTEM PRICE 349.50

SYSTEM SAVINGS **\$115.30**

Fine system features Kenwood KR-77 with field-effect-transistor front end, integrated circuit IF and many other extras for superb stereo. With metal Case. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor, stylus force gauge, antiskate adjustment and viscous damped cuing. With Base. Shure M93E Stereo Cartridge has elliptical diamond stylus. Allied 3017 3-way speaker systems have 10" woofer, 6" midrange and 3 1/2" tweeter. Sturdy 3/4" wood enclosure has attractive walnut finish. With cables, hi-fi booklet.

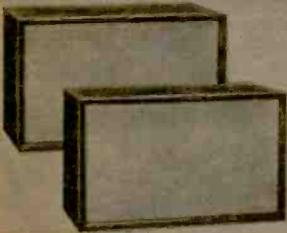
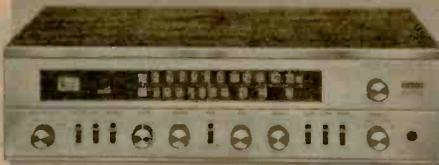
13 A 0983 D5U. Shpg. wt., 91 lbs..... 349.50

Save

\$125.85

**419<sup>95</sup>**

\$19 monthly\*



**Eico 80-watt System with 10" speakers**

Eico 3770 Stereo FM-AM Receiver.....\$279.95  
Garrard SL72B 3-speed Automatic Turntable. 89.50  
B-2 Base for turntable..... 6.50  
Empire 888E Elliptical Stereo Cartridge..... 39.95  
Two Allied 3030B 10" Speaker Systems..... 129.90

COMPONENTS SEPARATELY \$545.80

SYSTEM PRICE 419.95

SYSTEM SAVINGS **\$125.85**

System features assembled Eico 3770 with silicon-transistor circuit, tape monitor and full preamp facilities for all music sources. With metal Case. Garrard SL72B 3-speed Automatic Turntable has Synchro-Lab motor, Auto-Rise safety platform, damped cuing, stylus pressure and antiskate adjustments. With Base. Empire 888E Stereo Cartridge has elliptical diamond stylus. Allied 3030B 3-way speaker systems have powerful 10" woofer, 6" midrange and 3 1/2" tweeter. Walnut veneer finished enclosure. With cables, hi-fi booklet.

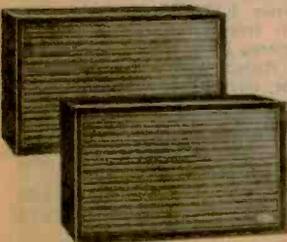
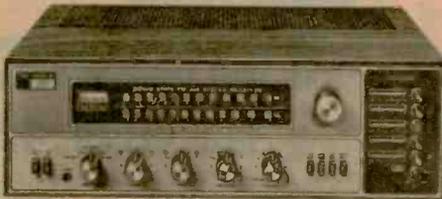
13 A 0984 D5U. Shpg. wt., 94 lbs..... 419.95

Save

\$136.30

**489<sup>50</sup>**

less case  
\$21 monthly\*



**Fisher 100-watt System with 12" speakers**

Fisher 250T Stereo FM-AM Receiver.....\$299.95  
Garrard SL75B 3-speed Automatic Turntable. 109.50  
B-2 Base for turntable..... 6.50  
Pickering XV-15/400E Stereo Cartridge..... 49.95  
Two Allied 2330A 12" Speaker Systems..... 159.90

COMPONENTS SEPARATELY \$625.80

SYSTEM PRICE 489.50

SYSTEM SAVINGS **\$136.30**

Powerful system features Fisher 250T with versatile preamp facilities, main and remote speaker switches. Takes optional case below. Garrard SL75B 3-speed Automatic Turntable has Synchro-Lab motor, Auto-Rise, cuing, antiskate and stylus pressure adjustments. With Base. Pickering XV-15/400E elliptical-stylus Stereo Cartridge. Allied 2330A 3-way Speaker Systems have 12" woofer, 8" midrange and 3 1/2" tweeter. Walnut-finish enclosures have matching grille cloth. With cables, hi-fi booklet.

13 A 0985 D5U. Shpg. wt., 98 lbs..... 489.50  
13 A 2538 X. Walnut Wood Case. 8 lbs..... 19.95

\*See page 438 for full Credit details - buy with no money down

# Save up to \$160.80 on deluxe Stereo FM-AM-Phono Systems

HI-FI  
MANAGER'S  
SYSTEMS

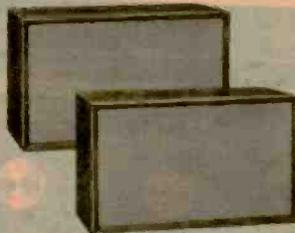
## Scott 175-watt System with 10" speakers

Scott 386 Stereo FM-AM Receiver . . . . . \$349.95  
Garrard SL72B 3-speed Automatic Turntable . . . 89.50  
B-2 Base for turntable . . . . . 6.50  
Pickering XV-15/400E Stereo Cartridge . . . . . 49.95  
Two Allied 3030B 3-way Speaker Systems . . . 129.90

COMPONENTS SEPARATELY \$625.80  
SYSTEM PRICE 504.50  
SYSTEM SAVINGS **\$121.30**

Superb system features Scott 386 with FET's, ICs, crystal filter IF and versatile preamp. Full controls for complete sound mastery. Takes optional case, below. Garrard SL72B has damped cuing, stylus pressure and antiskate adjustments. With Base. Pickering XV-15/400E Stereo Elliptical Cartridge. Allied 3030B 3-way Speaker Systems have high-compliance 10" woofer, 6" direct-radiator midrange and 3 1/2" cone tweeter. Walnut veneer finish. With cables and hi-fi booklet.

13 A 0986 D5U. Shpg. wt., 99 lbs. . . . . 504.50  
13 A 2733 X. Walnut Wood Case. 6 lbs. . . . . 26.95



Save  
**\$121.30**

**504<sup>50</sup>**  
less case  
\$22 monthly\*

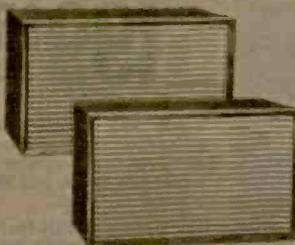
## Sherwood 125-watt System . . 12" speakers

Sherwood S-7500 Stereo FM-AM Receiver . . . \$329.95  
Garrard SL75B 3-speed Automatic Turntable . . 109.50  
B-2 Base for turntable . . . . . 6.50  
Shure M91E Stereo Elliptical Cartridge . . . . . 49.95  
Two Allied 2300C 3-way Speaker Systems . . . 199.90

COMPONENTS SEPARATELY \$695.80  
SYSTEM PRICE 549.00  
SYSTEM SAVINGS **\$146.80**

Magnificent system features Sherwood S-7500 with FETs, ICs, crystal filter IF and deluxe preamp. Takes optional case below. Garrard SL75B has damped cuing, stylus pressure and antiskate adjustments. With Base. Shure M91E Stereo Elliptical Cartridge. Allied 2300C 3-way acoustic-suspension Speaker Systems have 12" woofer, horn-loaded compression midrange and compression tweeter. Solid 3/4" wood enclosure has walnut finish. With cables and hi-fi book.

13 A 0987 D5U. Shpg. wt., 107 lbs. . . . . 549.00  
13 A 2046 X. Metal Case. 8 lbs. . . . . 9.00  
13 A 2047 X. Walnut Wood Case. 8 lbs. . . . . 28.00



Shown in wood case

Save  
**\$146.80**

**549<sup>00</sup>**  
less case  
\$23 monthly\*

## Fisher 190-watt System . . 12" speakers

Fisher 500-TX Stereo FM-AM Receiver . . . . . \$449.95  
Garrard SL95B 3-speed Automatic Turntable . . 129.50  
B-2 Base for turntable . . . . . 6.50  
Empire 888VE Stereo Elliptical Cartridge . . . . . 59.95  
Two Allied 2370 12" Speaker Systems . . . . . 259.90

COMPONENTS SEPARATELY \$905.80  
SYSTEM PRICE 745.00  
SYSTEM SAVINGS **\$160.80**

Connoisseur-quality system features Fisher's finest receiver with FETs, ICs, crystal filter IF and three methods of tuning. Optional case below. Garrard's finest Automatic Turntable has damped cuing, stylus pressure and antiskate adjustments. With Base. Empire 888VE Stereo Elliptical Cartridge. Allied's finest shelf speaker systems have 12" acoustic-suspension woofer, horn-loaded compression midrange and tweeter. Walnut veneer finish and matching grille cloth. With hi-fi book and cables.

13 A 0988 D5U. Shpg. wt., 120 lbs. . . . . 745.00  
13 A 2042 X. Walnut Vinyl Case. 9 lbs. . . . . 22.95



Save  
**\$160.80**

**745<sup>00</sup>**  
less case  
\$31 monthly\*

\*See page 438 for full Credit details . . low monthly payments

# Allied 250-watt silicon-transistor Stereo Amplifier



Shown in wood case

**199<sup>95</sup>**  
Metal Case

Silicon transistors, full array of controls and convenience features, and tremendous 250-watt output make this Allied's best stereo amplifier!

Model 995. Finest Allied amplifier ever! You get tremendous 250-watt power, distortion levels so low that they're almost unmeasurable, plus a preamplifier with control facilities for absolute mastery of any music program source. You could pay more and still not get an amplifier with this power or such complete control facilities.

Solid-state circuit features silicon transistors for long life and cooler high-power operation. Preamp has complete tape recording facilities. Mode monitor switch has positions for stereo reverse, stereo normal, mono left, mono right and mono mixed (mono L-R). Pushbutton switches control scratch and rumble filters, loudness contour, and tape monitor which permits instant comparison between signal source and tape output signal from 3-head tape decks. Five-position switch controls AC power, main speakers, speakers off, remote speakers and main plus remote speakers. Tone compensation provided by separate-channel bass and treble controls. Front panel stereo headphone jack lets you enjoy your favorite hi-fi music in complete privacy.

Has three AC convenience outlets (one switched, two unswitched) at rear of chassis. With rugged metal case; takes optional walnut wood case listed below. Size, 5 1/2 x 16 x 13 3/4". For 110-120 VAC. From Japan.

14 A 5521 U. Shpg. wt., 28 lbs. .... 199.95  
14 A 5003 X. Walnut Wood Case. Shpg. wt., 6 lbs. .... 19.95

## SPECIFICATIONS

**Power Output:** 250 watts  $\pm 1$  dB at 4 ohms; 200 watts IHF at 4 ohms; 60 watts rms per channel at 4 ohms. **Harmonic Distortion:** less than .08% at 45 W. **IM Distortion:** less than 0.2% at 45 watts per channel with 8 ohm load. **Frequency Response:**  $\pm 2$  dB, 10-50,000 Hz. **Power Bandwidth:** 10-60,000 Hz at 1% harmonic distortion. **Hum and Noise:** -65 dB on mag. phono; -75 dB on other inputs. **Channel Separation:** better than 35 dB at 10 kHz. **Input Sensitivity:** 2.0 mV on mag. phono; 200 mV on aux. and tape monitor. **Tone Controls:** Bass,  $\pm 9.5$  dB at 100 Hz; treble,  $\pm 10$  dB at 10,000 Hz. **Filters:** -10 dB at 10,000 Hz; -6 dB at 100 Hz. **Damping Factor:** 30 at 8 ohm load.

**Silicon transistors** cut distortion to the vanishing point, and are super reliable

**Tape monitor switch** permits comparison of signal source and tape output signal

**Rumble and scratch filters** eliminate noise from records, tape and radio

**Stereo headphone jack** permits private enjoyment of your music

# Allied 250-watt Stereo Phono Systems



Shown in wood case



## Our best 250-watt System has acoustic-suspension speakers

Separately, \$586.80. Our finest 250-watt phono system features the Allied 995 Stereo Amplifier. Includes metal case; takes optional walnut wood case below.

Famous Garrard SL95B 3-speed Automatic table has cuing and pause control, optical-type stylus pressure gauge and antiskating adjustment. Precision Synchro-Lab motor assures perfect record speed regardless of line voltage fluctuations. With Base, Pickering XV-15/400E Stereo Cartridge has .0003x .0009" elliptical diamond stylus and "Dust-omatic" record cleaning brush.

Deluxe Allied 2300C three-way Speaker Systems have high-compliance 12" acoustic-suspension woofer for deep, natural bass. Compression midrange with diffraction horn delivers outstanding midrange sound. Ring radiator compression tweeter disperses clean, sparkling highs. Sturdy 3/4" wood enclosure has handsome walnut veneer finish with matching grille cloth.

With all necessary connecting cables and informative hi-fi booklet.  
14 A 0338 D5U. Shpg. wt., 126 lbs. . . . 399.95  
14 A 5003 X. Walnut Case, 6 lbs. . . . 19.95

Save  
\$185.85

**399<sup>95</sup>**  
Metal Case



Shown in wood case



Shown in wood case

## Our lowest priced 250-watt System

Save \$144.85 **299<sup>95</sup>**  
Metal Case

Separately, \$444.80. Our lowest priced 250-watt Stereo Phono System features the Allied 995 Stereo Amplifier with metal case; takes optional walnut wood case above. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor, cuing, stylus pressure gauge and antiskate adjustment. With Base, Empire 808E Stereo Cartridge has .0004 x .0009" elliptical diamond stylus. Allied 3030B three-way Speaker Systems have 12" high-compliance woofer, 6" midrange radiator and 3 1/2" tweeter. Walnut veneer finish with matching grille cloth. Cables and hi-fi booklet.  
14 A 0339 D5U. Shpg. wt., 87 lbs. . . . 299.95

## Better System with bass-reflex speakers

Save \$154.85 **329<sup>95</sup>**  
Metal Case

Separately, \$484.80. High-performance Stereo Phono System features the 250-watt Allied 995 Stereo Amplifier with metal case; takes optional walnut wood case above. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor for perfect record speed. With Base, Empire 888E Stereo Cartridge has .0004x .0009" elliptical diamond stylus. Two Allied 2330A three-way Speaker Systems have 12" woofer with cloth-roll suspension, 8" midrange radiator and 3 1/2" cone tweeter. Walnut veneer finish with complementary grille cloth. Cables and hi-fi booklet.  
14 A 0342 D5U. Shpg. wt., 101 lbs. . . . 329.95

Buy with no money down . . . see page 438 for full Credit details.

**Allied 40-watt Stereo Amplifier . . proven circuit permits superb hi-fi and important extra features even at this low price**

**69<sup>95</sup>**  
Metal Case

\$5 monthly

see page 438



Shown in wood case



Concentric volume control adjusts channels together or individually

Monitor switch to compare tape with program source (with 3-head deck)

Front-panel stereo headphone jack for personal listening

Model 935. This full-feature stereo amplifier outperforms all others in its price class. Offers thrilling, lifelike stereo at a low price. Delivers 64 watts peak stereo power for music with thrilling full-dynamic-range, plus deep and powerful bass. Full midrange and sparkling, crystal-clear highs, too. Provides a wide array of controls, inputs and outputs for complete mastery of every music source and application. Dual concentric volume controls let you adjust channels together or separately. Has front-panel stereo headphone jack for full-volume listening without disturbing others. Boasts sturdy mechanical construction featuring a beautiful Sierra Gold  $\frac{3}{16}$ " thick extruded aluminum front panel with machined knobs. Equalized magnetic phono, ceramic phono and tape inputs plus tuner and aux. inputs. Rocker switches offer fingertip control. Seven tube, 4-diode circuit.  $4\frac{1}{4} \times 13\frac{3}{4} \times 9\frac{3}{4}$ ". With brown metal case; wood case below. For 110-127 V, 60 Hz AC. From Japan.

14 A 5525 U. Shpg. wt., 22 lbs. . . . . 69.95  
14 A 5005 X. Oiled Walnut Wood Case. Shpg. wt., 5 lbs. . . . . 12.95

**SPECIFICATIONS**

Power: 40 watts  $\pm 1$  dB; 32 watts IHF; 12 watts per channel rms. Response:  $\pm 2$  dB, 20-30,000 Hz. Harmonic Distortion: 1% at rated output. Hum and Noise: Magnetic phono, -55 dB, Auxiliary, -70 dB. Inputs: Magnetic Phono; Tuner; Ceramic or High-Level Auxiliary; Low-Level Auxiliary; Tape Recorder. Sensitivity: Magnetic Phono, 2.3 mV. Outputs: 8 or 16 ohms per channel; Stereo Headphone Jack; Recorder; Tape and Source Monitoring. Two AC Convenience Outlets: one switched by amplifier.



Save  
**\$49.85**  
**149<sup>95</sup>**

**32-watt Stereo Phono System**

- Allied 935 Stereo Amplifier . . . . . \$69.95
- Garrard 40 B Turntable . . . . . 44.50
- B-1 Walnut Turntable Base . . . . . 5.50
- Pickering V15/ACE-3 Stereo Cartridge . . . . . 29.95
- Two Allied 3007 8" Speaker Systems . . . . . 49.90
- Total . . . . . \$199.80
- System Price . . . . . 149.95
- YOU SAVE . . . . . \$49.85

Allied 935 Amplifier with metal case; optional wood case above, Garrard 40B four-speed Automatic Turntable with Walnut Base, Pickering V15/ACE-3 Stereo Elliptical Cartridge. Two Allied 3007 2-way 8" walnut Speaker Systems. 8" woofer, 3 $\frac{1}{2}$ " tweeter. Cables, hi-fi booklet. 14 A 0220 D5Z. Shpg. wt., 71 lbs. . . . . 149.95

# AMPLIFIERS

FISHER

Fisher's finest Stereo Amplifier . . .  
silicon transistors and 120-watt power



**329<sup>95</sup>**  
less case

\$16 monthly\*

Power, styling  
and control  
flexibility for  
the connoisseur

Model TX-1000, Tremendous power, handsome styling and complete control flexibility make this Fisher's finest solid-state stereo amplifier. Circuit has silicon transistors for total stability. Transformerless output stage is protected by famous Transist-O-Gard® overload protection circuit. Versatile preamp permits absolute mastery of any music program source.

Convenient pushbuttons control main, center and remote speakers, mono/stereo mode, dual high filters, rumble filter and loudness contour. Also has 4-position tape monitor and 6-position program selector switches, clutch-type bass and treble tone controls, balance control, mono and stereo

program indicator lights, stereo headphone jack and front-panel tape dubbing jack. Power at 4 ohms: 120 watts IHF, 50 watts rms per channel. Response: ±1.5 dB, 20-40,000 Hz. Harmonic Distortion: 0.5%. IM Distortion: 0.8%. Hum and Noise: -90 dB.

Inputs: mike, tape head, phono, tuner, auxiliary 1 and 2. Outputs: 4-16 ohms, stereo headphones, tape recording. Elegant gold-plated front panel. Takes optional wood case below. Overall size, 4<sup>13</sup>/<sub>16</sub>x15<sup>1</sup>/<sub>8</sub>x12<sup>3</sup>/<sub>4</sub>" deep. For 117 VAC. Shpg. wt., 24 lbs.

13 A 2652 U..... 329.95  
13 A 2629 X. Walnut Wood Case. Shpg. wt., 8 lbs. 22.95

Fisher low-priced  
65-watt solid-state  
Stereo Amplifier

**149<sup>95</sup>** \$8  
less case monthly\*



Model TX-50. This attractively styled amplifier gives you an advanced solid-state circuit with versatile preamp and husky 65-watt stereo amplifier. And it's priced low to fit into almost anyone's budget. Convenient rocker switches control main and remote speaker systems, plus high filter (to cut phono needle scratch) and loudness contour. Also has program selector switch for phono, tuner, auxiliary.

Ganged bass and treble tone controls have costly Baxandall feedback circuits for distortion-free tone compensation. Has balance control, mono/stereo mode switch and AC power/volume control. Front panel stereo headphone jack permits enjoyment of beautiful high-fidelity music in com-

plete privacy. Transformerless output stage is protected against any short-circuits by Fisher's patented Transist-O-Gard® overload circuit. Power at 8 ohms: 65 watts ±1 dB, 20 watts rms per channel. Harmonic Distortion: 0.5% at full power output. IM Distortion: 1% at rated output. Power Bandwidth: 25-25,000 Hz. Hum and Noise: 85 dB below rated output.

Striking gold-color front panel retains its stylish appearance for life. Takes oiled walnut wood case below. 4<sup>13</sup>/<sub>16</sub>x15<sup>1</sup>/<sub>8</sub>x9". For 117 VAC. Shpg. wt., 16 lbs.

13 A 2068 U..... 149.95  
13 A 2629 X. Walnut Wood Case. Shpg. wt., 6 lbs. 22.95

\*See page 438 for full Credit details

ALLIED 45

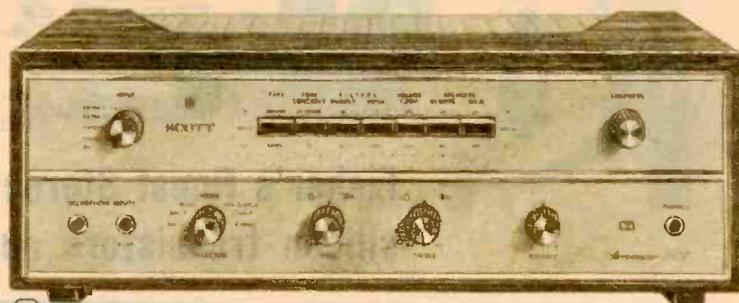
# AMPLIFIERS

H. H. SCOTT  
MARANTZ

Scott's most powerful  
Stereo Amplifier . . 160 watts

**249<sup>95</sup>**  
less  
case  
\$13 Monthly\*

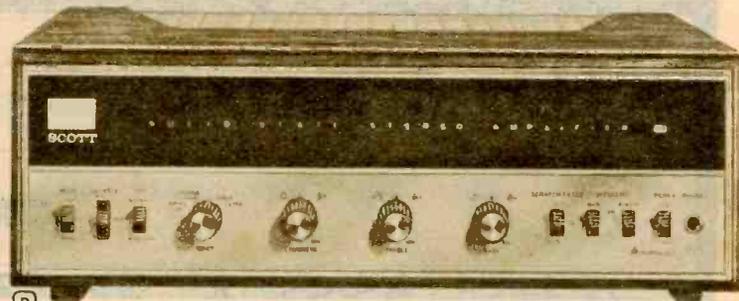
See page 471 for  
Scott Components  
in kit form



(A)

Scott 82-watt  
full-feature  
Stereo Amplifier

**179<sup>95</sup>** \$9  
less case monthly\*



(B)

### (A) 160-watt solid-state Stereo Amplifier

Model 2608. Delivers 160 watts for thrilling stereo realism. Features transformerless output; 7-position input switch; bass and treble controls for each channel; rumble and noise filters. Also has pushbutton selector switches; tone control bypass switch; speaker switches; mike inputs; selectable phono sensitivity. *Power at 4 Ohms:* 160 watts  $\pm$  1 dB; 120 watts IHF; 40 watts/channel rms at 8 ohms. *Response:*  $\pm$  1 dB, 15-30,000 Hz. *Outputs:* 4-16 ohms, tape, headphone. Takes optional case below.  $5\frac{1}{4} \times 15\frac{1}{2} \times 13\frac{1}{4}$ ". 115 VAC.

13 A 2732 U. Shpg. wt., 21 lbs. . . . . 249.95  
13 A 2040 X. Deluxe Oiled Walnut Wood Case. 6 lbs. . . . . 22.50

### (B) 82-watt solid-state Stereo Amplifier

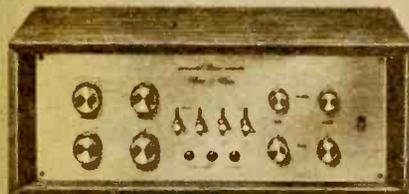
Model 299F. Silicon solid-state amplifier has tape monitoring facilities; separate bass and treble controls for each channel; headphone jack; scratch filter; dual speaker switching for main, remote, or simultaneous operation. Direct-coupled output for full response. *Power Output at 4 Ohms:* 82 watts  $\pm$  1 dB; 65 watts IHF; 18 watts rms/channel at 8 ohms. *Response:*  $\pm$  1 dB, 18-25,000 Hz. *Harmonic Distortion:* 0.8%. With chassis enclosures. Takes optional case below.  $5\frac{1}{4} \times 15\frac{1}{2} \times 12$ ". For 115 VAC. 13 A 2737 U. Shpg. wt., 14 $\frac{1}{4}$  lbs. . . . . 179.95  
13 A 2040 X. Deluxe Oiled Walnut Wood Case. 6 lbs. . . . . 22.50

For the perfectionist . .  
deluxe Stereo Preamplifier

**325<sup>00</sup>**  
less case  
\$16 Monthly\*

For finest stereo . . 160-watt  
Stereo Basic Amplifier

**395<sup>00</sup>**  
less case  
\$18 monthly\*



**MARANTZ**  
Matching Stereo  
Preamp and 160-watt  
Basic Amplifier



### Solid-state Stereo Preamplifier

Model 7T. Ideal companion for Model 16 basic amplifier at right. Unsurpassed for versatility and quality of sound. Two front panel jacks let you record, play back, or copy with external tape recorder. Stereo headphone jack automatically cuts off speakers when plugged in. Separate bass and treble controls for each channel. Inputs for mike, 2 phonos, tape head, tuner, TV, and 2 aux. Four stereo outputs. Flat from 20-20,000 Hz. *IM Distortion:* 0.15%. Optional case below.  $5\frac{3}{4} \times 15\frac{3}{4} \times 8\frac{3}{4}$ ". 117 VAC.

13 A 2280 U. Shpg. wt., 15 lbs. . . . . 325.00  
13 A 2270 X. Walnut Wood Case. Shpg. wt., 9 lbs. . . . . 24.50

### Solid-state Basic Stereo Amplifier

Model 16. Features all silicon transistor circuit that develops 80 watts rms per channel at 8 ohms. Separate power supplies for each channel assure complete isolation. Direct-coupled amplifiers provide instantaneous recovery from overload and full rated power throughout the entire frequency range. *Response:*  $\pm$  1 dB, 10-60,000 Hz. *Harmonic Distortion:* under 0.1%. *IM Distortion:* under 0.1%. *Noise:* -110 dB. Ideal for use with 7T Preamp. Optional case below.  $5\frac{3}{4} \times 15\frac{3}{4} \times 7$ ". 117 VAC.

13 A 2093 U. Shpg. wt., 34 lbs. . . . . 395.00  
13 A 2452 X. Walnut Case. Shpg. wt., 9 lbs. . . . . 29.50

# Dyna solid-state 120-watt Basic Stereo Amplifier

**199<sup>95</sup>**

\$10 monthly\*

# AMPLIFIERS

DYNA  
SHERWOOD



See pages 468-470  
for Dyna components  
in kit form

# Dyna solid-state Preamplifier . . for Stereo 120

**129<sup>95</sup>** \$7  
monthly\*



## A 120-watt solid-state Stereo Basic Amplifier

Stereo "120." Delivers magnificent stereo with complete freedom from coloration. All silicon transistors for superior stability and reliability. No response-limiting interstage or output transformers. Output transistors electronically protected. Self-adjusting bias circuit. Regulated power supply. *Output:* 60 watts rms per channel. *Response:* ±0.5 dB, 5-100,000 Hz. *Harmonic Distortion:* under 0.5%. *IM Distortion:* under 0.5%. *Noise:* -95 dB. Use with PAT-4 Preamp. Plated chassis, metal cover. 4x13x10<sup>1</sup>/<sub>2</sub>". For 120/240 V, 50-60 Hz AC.

13 A 2234 U. Shpg. wt., 20 lbs. . . . . 199.95

## B Versatile solid-state stereo Preamplifier

Model PAT-4. Perfect mate for the "Stereo 120" or any other basic amplifier. All silicon-transistor design for superior stability. Positive-action rocker switches control loudness, power, tape monitor, lo-filter, dual modes. Four-position hi-filter. Also has six-position selector switch, volume, balance, bass and treble controls for each channel. Inputs for high and low level phono cartridges, tape head, tuner, tape recorder. Front-panel input for guitar or recorder. *Response:* ±0.5 dB, 10-100,000 Hz. 4<sup>1</sup>/<sub>4</sub>x13<sup>1</sup>/<sub>2</sub>x8". 120/240 V, 50-60 Hz AC.

13 A 2241 X. Shpg. wt., 11 lbs. . . . . 129.95



# Sherwood 100-watt solid-state Stereo Amplifier

**189<sup>50</sup>**  
less  
case  
\$10 monthly\*

Model 9500B. Boasts all silicon semiconductors, the choice of designers where maximum reliability and superior performance are required. Has separate rocker switches for main and remote stereo speakers. Separate bass, treble controls; volume control. Single-knob balance control for left/right compensation.

Rocker switches offer easy fingertip control. Tape-monitor permits instantaneous A-B comparisons for flawless tape recording. Loudness contour defeat switch on front panel.

High filter suppresses annoying scratch or hiss. Fused overload protection of output transistors. Separate monophonic speaker terminals: front-panel headphone jack. *Power Output at 4 Ohms:* 100 watts = 1 dB; 80 watts IHF, 30 watts/channel rms. *Response:* = 1 dB, 12-35,000 Hz. Takes optional case below. 4x14x10". For 117 VAC.

13 A 2455 U. Shpg. wt., 13 lbs. . . . . 189.50  
13 A 2401 X. Walnut-Grained Metal Case. 5 lbs. . . . . 7.50  
13 A 2427 X. Walnut Wood Case. Shpg. wt., 7 lbs. . . . . 28.00

\*Buy with no money down . . . full Credit details on page 438

# AMPLIFIERS

ACOUSTIC RESEARCH  
EICO • KENWOOD

## Connoisseur-quality Stereo Amplifier by Acoustic Research.. full 120-watt rms power with inaudible distortion



**250<sup>00</sup>**  
less case

\$13 monthly  
see page 438

Exceptional dynamic  
range.. handles  
loudest passages  
without distortion

AR Inc. A powerful 120-watt stereo amplifier with important circuit advancements at an outstanding low price. All silicon transistors and DC driver clamping circuit boost usable dynamic range, and hold harmonic distortion to less than 0.5% even at full 120-watt output. Wonderfully clear sound, with flat response from 20-20,000 Hz at all power output levels, including full volume. Idler power supply prevents turn-on noise bursts when main amplifier switch is off. Null circuit for perfect channel balance. 60-watts-per-

channel rms power drives any speaker system to magnificent sound. Clutch-type bass, treble controls for each channel. Power Output: 120 watts rms at 4 ohms; 100 watt at 8 ohms. Inputs for magnetic phono, tuner, tape. Outputs: 4-16 ohms; tape. In handsome black metal case. Takes optional walnut case below. For 117 VAC. Size, 4 1/2" x 15 3/4" x 10" deep.

13 A 2445 U. Shpg. wt., 21 lbs. .... 250.00  
13 A 2446 X. Oiled Walnut Wood Case. Wt., 6 lbs. .... 150.00

### Eico silicon transistor 80-watt Stereo Amplifier

**139<sup>95</sup>**



"Cortina" 3070. Here's an amplifier with many deluxe features at an unusual low price. All-silicon-transistor circuit for pure, undistorted stereo. High-gain preamp has high overload level. Tape monitoring facilities, high and low-cut filters. Speaker switch for off/main/remote/all. Mono and stereo selection. Separate volume and balance controls. Inputs for magnetic phono tuner, aux., tape. Power output at 4 ohms: 80 watts ±1 dB; 70 watts IHF; 20 watts rms per channel. Response: ±1.5 dB, 5-100,000 Hz. Outputs: 4-16 ohms; stereo headphones; tape recording. With metal case. 3 1/4" x 12 x 7 3/4". 117 VAC. 13 A 2339 U. Shpg. wt., 8 lbs. .... 139.95

### Eico silicon transistor 190-watt Stereo Amplifier

**225<sup>00</sup>**



Eico  
components  
in kit form  
on pages  
472-473

"Cortina" 3150. Features transformerless drive and output stages—peaks, transients and power bursts are reproduced effortlessly, and response is extended. Almost unmeasurable 0.15% harmonic distortion. Scratch, rumble filters suppress needle-scratch. Complete array of inputs at controls. Tape monitor. Can drive two sets speakers. Electronic output transistor and speaker protection. Power output at 4 ohms: 190 watts ±1 dB; 150 watts IHF; 50 watts rms per channel. Response: ±1.5 dB, 10-30,000 Hz. Output 4-16 ohm speakers, tape. With walnut grain metal case. 3 1/2" x 14 3/8" x 8 1/4". 117 VAC. 13 A 2253 U. Shpg. wt., 17 lbs. .... 225.00

### Kenwood 225-watt solid-state Stereo Amplifier with deluxe preamp



**249<sup>95</sup>**

7 stereo  
inputs;  
8 stereo  
outputs

Model KA-6000. For the more demanding audiophile. Key-type muting switches for loudness a high and low filters. Step-type tone control. Input indicator lights. Tape monitor. Response ±1 dB, 10-50,000 Hz. Distortion: 0.5%. Power output at 4 ohms: 225 watts ±1 dB; 180 watts IHF; 60 watts rms per channel. Inputs include high and low level mag. phono, tape head, mic. Complete outputs include for 2 pairs speakers stereo headphone tape. Metal case, walnut panels 115 VAC. Size, 5 3/8" x 16 3/8" x 11 1/2". Jap 13 A 2086 U. Shpg. wt., 25 lbs. .... 249.95

# Bogen 60-watt Stereo Amplifier has silicon transistors for finest sound

## AMPLIFIERS

BOGEN • ELECTRO-VOICE  
SANSUI • KENWOOD



**119<sup>95</sup>**  
Metal Case

\$6 monthly\*

Modular transformerless circuit assures highest reliability and great stereo hi-fi sound!

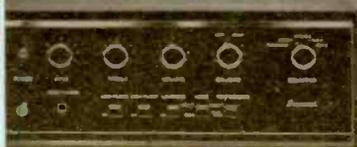
Shown in wood case

Model TA-150. Here's a low-priced amplifier with full control facilities for all program sources, plus 60-watt power to drive even low-efficiency speaker systems to room-filling volume. Silicon-transistor transformerless output circuit for wide frequency response and full dynamic range. Modular construction assures super reliability and ease of repair should service ever be required. Two-position slide switches control AC power on/off and mono/stereo mode. Rotary switch selects phono, tape, auxiliary and tuner. Also has volume, balance, ganged bass and treble tone

controls; headphone jack permits listening to music in privacy. Fused output transistor protection. Power Output at 4 ohms: 60 watts  $\pm 1$  dB, 50 watts IHF; 15 watts rms per channel. Response:  $\pm 1$  dB, 20-50,000 Hz. Power Bandwidth: 20-22,000 Hz. Inputs: magnetic phono, tape and auxiliary. Outputs: 4-16 ohms (2 pair), tape and headphones. Wood-grain metal case; optional wood case below.  $3\frac{3}{4} \times 14\frac{1}{2} \times 10"$ . For 117 VAC.

13 A 2512 U. Shpg. wt., 15 lbs. . . . . 119.95  
13 A 2511 X. Walnut Wood Case. Shpg. wt., 7 lbs. . . . . 24.95

### Sansui silicon solid-state 60-watt Stereo Amplifier has full array of controls



**119<sup>95</sup>**

\$6 monthly\*

Model AU222. Compact stereo amplifier boasts deluxe reamp and silicon transistors. Tape monitor, rumble and scratch filters, mode switch and stereo headphone jack. Transformerless circuit for wide response:  $\pm 1$  dB, 20-30,000 Hz. Power Output at 8 ohms: 60 watts  $\pm 1$  dB, 46 watts IHF 18 watts rms per channel. Harmonic Distortion: less than 0.8%. Hum and noise: better than -60 dB. Satin black front panel. Metal case.  $4\frac{3}{8} \times 11\frac{1}{2} \times 10\frac{1}{2}"$ . 117 VAC. Japan.

13 A 2100 X. Shpg. wt., 13 lbs. . . . . 119.95

### Kenwood's lowest priced solid-state Stereo Amplifier delivers clean 50 watts



**89<sup>95</sup>**

\$5 monthly\*

Model KA-2000. Fits on any bookshelf and has the power and many features of higher priced models. Tape monitor; loudness compensation; stereo headphone jack. Power Output at 4 ohms: 50 watts  $\pm 1$  dB, 36 watts IHF, 15 watts rms per channel. Response: 20-20,000 Hz. Inputs: mag. phono, tuner, tape and aux. Outputs: 4-16 ohms, tape and headphones. Metal case.  $4\frac{3}{8} \times 10\frac{1}{2} \times 9\frac{3}{8}"$ . For 117 VAC. Japan.

13 A 2493 X. Shpg. wt., 13 lbs. . . . . 89.95



### Electro-Voice 80-watt Stereo Amplifier

**129<sup>60</sup>**

\$7 monthly\*

Model 1244. Solid-state stereo amplifier boasts compact size and powerful 80-watt output. Color-coded lights indicate program. Tape monitor, loudness compensation and stereo headphone jack. Power Output at 4 ohms: 80 watts  $\pm 1$  dB, 65 watts IHF, 18 watts rms per channel. Response:  $\pm 1.5$  dB, 20-20,000 Hz. Inputs: magnetic phono, tape, tuner and aux. Outputs: 4-16 ohms tape. Metal cover, walnut end panels.  $3\frac{3}{4} \times 10\frac{1}{4}"$ . For 117 VAC.

13 A 2766 X. Shpg. wt., 11 lbs. . . . . 129.60

### Electro-Voice solid-state 36-watt Stereo Amplifier

**79<sup>90</sup>**

\$5 monthly\*



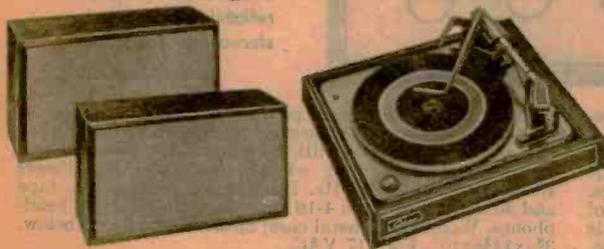
Model 1122. Compact solid-state stereo amplifier's clean, uncluttered styling fits into any decor. Features color-coded program lights, bass and treble tone controls, and stereo headphone jack. Power Output at 4 ohms: 36 watts  $\pm 1$  dB, 30 watts IHF, 10 watts rms per channel. Response:  $\pm 1.5$  dB, 20-20,000 Hz. Inputs: magnetic phono, tuner and auxiliary. Outputs: 4-16 ohms, headphones. Walnut-finish case.  $4\frac{1}{4} \times 15\frac{3}{4} \times 8\frac{1}{2}"$ . For 117 VAC.

13 A 2762 X. Shpg. wt., 18 lbs. . . . . 79.90

HI-FI  
MANAGER'S  
SYSTEMS

Save up to \$114.85 on Stereo Phono Systems with deluxe amplifiers

Save  
\$74.85  
249<sup>95</sup>



Stereo Phono System with Eico 80-watt assembled solid-state amplifier

Separately, \$324.80. Specially selected system powered by Eico's assembled 3070 with walnut finish metal case. Garrard SL55B 4-speed Automatic Turntable has Synchro-Lab motor, stylus pressure adjustment, cueing and automatic record intermix. Base. Pickering V15/ACE-3 Stereo Cartridge has .0005x.0009" elliptical diamond stylus. New Allied 3017 three-way Speaker Systems have 10" woofer, 6" midrange radiator and 3 1/2" cone tweeter. Walnut veneer, matching grille cloth. Cables and hi-fi book. 13 A 0924 D5U. Shpg. wt., 65 lbs. . . . . 249.95

System with 190-watt Eico Amplifier

Save  
\$109.90  
339<sup>95</sup>

Separately, \$449.85. Assembled solid-state 3150 with metal case, Garrard SL55B with Base, Pickering V15/ACE-3, Allied 3030B 3-way 12" Speaker Systems. Cables, hi-fi book. 13 A 0923 D5U. Wt., 89 lbs. . . . . 339.95

Save  
\$84.85  
279<sup>95</sup>



Stereo System with Fisher 65-watt solid-state Amplifier and 10" Speaker Systems

Separately, \$364.80. High performance system features Fisher TX-50; takes optional case below. Garrard SL65B 4-speed Automatic Turntable has cueing, antiskate, stylus force adjustment and Synchro-Lab motor. With Base. Shure M93E Stereo Elliptical Cartridge. Allied 3017 three-way Speaker Systems have high-compliance 10" woofer, 6" midrange and 3 1/2" wide dispersion tweeter. Attractive walnut veneer finish. With cables and hi-fi booklet. 13 A 0413 D5U. Shpg. wt., 83 lbs. . . . . 279.95  
13 A 2629 X. Walnut Case. Wt., 6 lbs. . . . . 22.95

Above with 12" 3-way Speaker Systems

Save  
\$104.85  
329<sup>95</sup>

Separately, \$434.80. Same as Fisher system above but with Allied 2330A Speaker Systems which have 12" woofer, 8" midrange and 3 1/2" tweeter. With cables and hi-fi booklet. 13 A 0922 D5Z. Wt., 108 lbs. . . . . 329.95

Save  
\$94.85  
419<sup>95</sup>



Stereo System with Dynaco silicon solid-state 80-watt Amplifier and 12" Speaker Systems

Separately, \$614.80. Premium performance and great hi-fi sound. Features Dynaco SCA-80 with metal case. Garrard SL65B 4-speed Automatic Turntable offers cueing, antiskate compensation, stylus force pressure gauge and perfect-pitch Synchro-Lab motor. With Base. Pickering XV-15/400E Stereo Cartridge has .0003x.0009" elliptical diamond stylus. Allied 3030B three-way Speaker Systems have 12" high-compliance woofer, 6" cone midrange radiator and 3 1/2" wide dispersion tweeter. With cables, hi-fi booklet. 13 A 0411 D5U. Shpg. wt., 95 lbs. . . . . 419.95

Above, with better 12" Speaker Systems

Save  
\$114.85  
429<sup>95</sup>

Separately, \$644.80. Same as Dynaco system above but with Allied 2330A Speaker Systems which have 12" woofer, 8" midrange and 3 1/2" tweeter. With cables and hi-fi booklet. 13 A 0412 D5Z. Wt., 105 lbs. . . . . 429.95

# Best Allied® Stereo FM-AM Tuner!

## Silicon transistors, ICs, FETs, crystal filters and dual meters

# 249<sup>95</sup>

Metal Case

\$13 monthly  
see page 438



Shown in wood case

**Model 295.** This magnificent all silicon transistor tuner has every advancement necessary to give you the finest reception of stereo-FM and AM. Field-effect transistors in the front end pull in static-free stereo even in fringe areas. Four integrated circuits and two crystal filters in the IF circuit assure razor-sharp selectivity that rejects interference and unwanted stations. Crystal filters never need realignment, prevent deterioration in performance. Center-channel meter, plus signal-strength meter for perfect tuning. Pushbuttons for AFC, between-station muting, and high blend. Outputs for tape recording. FM output level controls. Switched AC convenience outlet. Built-in AM antenna, provision for FM and AM external antennas. With metal case; takes optional wood case below. 5 1/2 x 16 x 13 3/4". For 117 VAC. Japan.

14 A 5520 U. Shpg. wt., 25 lbs. . . . . 249.95  
14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 19.95

### SPECIFICATIONS

**FM CIRCUIT.** Sensitivity: 1.5 microvolts, Frequency Response: ±1 dB, 15-20,000 Hz. Signal-to-Noise Ratio: better than 60 dB. Image Rejection: 90 dB. Alternate Channel Selectivity: 65 dB. IF Rejection: 90 dB. Capture Ratio: 1.5 dB. Harmonic Distortion: 0.6% at 100% modulation. Stereo FM Separation: better than 35 dB at 1000 Hz. **AM CIRCUIT.** Sensitivity: 10 microvolts at 1 MHz. Selectivity: 30 dB = 10 kHz.

Center channel indicator for exact tuning



Stereo light shows when you're tuned to stereo FM



Selector switch for AM, FM Mono, and FM Auto



Easy flywheel tuning for smooth dialing



# Lowest priced Allied Stereo FM-AM Tuner . . . sensational value

# 79<sup>95</sup>

Metal Case

\$5 monthly  
see page 438



Shown in wood case

### SPECIFICATIONS

**FM CIRCUIT.** Sensitivity: 2.5 μV for 20 dB quieting. Frequency Response: ±2 dB, 20-20,000 Hz. Harmonic Distortion: 1% at 100% modulation. Channel Separation: better than 30 dB. Image Rejection: better than 30 dB. IF Stages: three; shielded for hum-free operation. **AM CIRCUIT.** Sensitivity: 12 μV for 20 dB quieting.

**Model 285.** Even our lowest priced Allied tuner gives you important features often reserved for expensive tuners. Deluxe 8-tube circuit has time-switching multiplex, three IF stages and wideband ratio detector for excellent stereo FM. Delivers clear AM too. Precision signal-strength meter and flywheel weighting simplify tuning. Four-position switch selects stereo FM with AFC, monophonic FM with AFC, monophonic FM without AFC, and AM. Also has stereo indicator light, AC power switch, tape and preamp outputs, ferrite rod AM antenna, and provision for external AM and FM antennas. Sierra Gold extruded aluminum front panel matches Allied 935 on page 44. With metal case; takes optional wood case below. 4 3/4 x 13 1/2 x 9 3/4". For 117 VAC. Japan.

14 A 5526 U. Shpg. wt., 20 lbs. . . . . 79.95  
14 A 5005 X. Oiled Walnut Wood Case. Shpg. wt., 5 lbs. . . . . 12.95

**SHIPPING NOTE:** Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

# TUNERS

SCOTT • KENWOOD  
SHERWOOD

## Scott Stereo FM-AM Tuner has FETs and ICs for superb FM

**199<sup>95</sup>**  
less  
case  
\$10 monthly



See the Scott  
LT-112B-1 Tuner  
in Kit Form  
on page 471  
in Kit Section

Shown in wood case

Model 330T. Advanced tuner delivers outstanding stereo and mono FM; wideband AM too. Silver-plated field-effect-transistor front-end and integrated circuit IF strip provide sensitive, static-free reception with fine separation in stereo. Automatic time-switching multiplex, Perfectune® automatic tuning meter, stereo indicator light and flywheel tuning. Switchable filter cuts out noise on weak stereo stations. With tape recording outputs. Full array of stereo inputs. Takes optional case below. 5x15x14". 117 VAC

13 A 2181 U. Shpg. wt., 17 lbs. . . . . 199.95  
13 A 2184 X. Walnut Wood Case. Wt., 6 lbs. . . . . 22.50

### SPECIFICATIONS

FM Circuit. FET front-end with integrated circuit IF strip. Equipped with interstation muting. Sensitivity: 1.9  $\mu$ V IHF. Signal-to-Noise Ratio: 60 dB. Alternate Channel Selectivity: 40 dB. Capture Ratio: 2.5 dB. Frequency Response:  $\pm 1$  dB, 50-15,000 Hz. Cross Modulation Rejection: 80 dB. Harmonic Distortion: 0.8% at 100% modulation. Stereo Separation: 40 dB at 400 Hz. AM Circuit. FET front-end. Sensitivity: 3  $\mu$ V for 20 dB signal-to-noise ratio. Selectivity: 30 dB adjacent channel rejection. Antenna built-in rod.

## Scott's best stereo FM Tuner . . . for perfectionists

**249<sup>95</sup>**  
less  
case



Model 312D-1. Features silver-plated field-effect-transistor front end and integrated circuit IF strip for high sensitivity, low noise and better stereo separation. Crystal filters in the IF strip provide phenomenal selectivity. Tuning meter, stereo FM light, interstation muting; tape recording, headphone and oscilloscope outputs. Sensitivity: 1.7  $\mu$ V. Signal-to-Noise Ratio: 65 dB. Takes optional case below. 4 1/2 x 15 1/2 x 13 1/4". 117 VAC.

13 A 2182 U. Shpg. wt., 13 lbs. . . . . 249.95  
13 A 2040 X. Walnut Wood Case. 6 lbs. . . . . 20.6

## Kenwood's finest solid-state Stereo FM-AM Tuner

**249<sup>95</sup>**



Model KT-7000. Kenwood's best tuner has field-effect transistor front-end and integrated circuit IF strip for super-sensitive, noise-free FM; wideband AM too. Two crystal filters in the IF provide superior selectivity. Two tuning meters, stereo indicator light, between-station muting on FM, MPX filter and tape outputs. Sensitivity: 1.5  $\mu$ V. Response:  $\pm 0$ ,  $-2$  dB, 20-15,000 Hz. Harmonic Distortion: less than 0.6%. Metal case with walnut end panels. 5 1/2 x 16 1/2 x 11 1/2". 117 VAC. Japan.

13 A 2037 U. Shpg. wt., 24 1/2 lbs. . . . . 249.95

## Sherwood Stereo FM-AM Tuner has FETs and ICs

**224<sup>50</sup>**  
less  
case

Shown in metal case



Model S-2300. Field effect transistor front-end and integrated circuit IF strip assure superior sensitivity and selectivity for superb FM; wideband AM too. Has stereo light, zero-center tuning meter, multiplex filter and interstation muting on FM. Sensitivity: 1.8  $\mu$ V. Distortion: 0.8 dB. Optional case below. 4x14x10 1/2". 115 VAC.

13 A 2495 U. Shpg. wt., 14 lbs. . . . . 224.50  
13 A 2401 X. Leatherette Covered Metal Case. 5 lbs. . . . . 7.  
13 A 2427 X. Walnut Case. Wt., 7 lbs. . . . . 28.  
13 A 2470 U. S-3300. As above, less AM. 13 lbs. . . . . 197.

# Dyna tube-type Stereo FM Tuner . . . professional quality at a low price



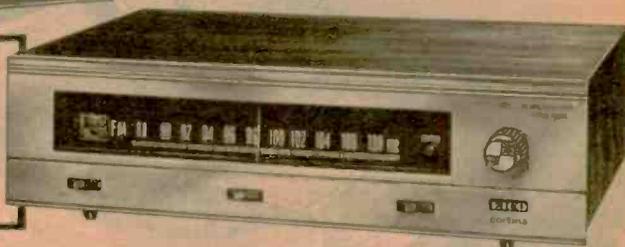
For Dyna in Kit Form See pages 468-470 in Kit Section

For Eico in Kit Form See pages 472-475 in Kit Section

154<sup>95</sup>

**TUNERS**  
EICO • DYNA  
KENWOOD • CROWN  
ELECTRO-VOICE

# Eico solid-state Stereo FM Tuner 139<sup>95</sup>



Model FM-3A. Superbly engineered tuner features four progressive limiting IF stages and balanced wideband discriminator for static-free FM. Time-switching multiplex, planetary driven knob, stereo indicator light and tuning ear simplify station selection. Dependable 10-tube circuit. Sensitivity:  $4 \mu\text{V}$  IHF. Separation: 30 dB. Harmonic Distortion: 0.5% at 100% modulation. Satin tone excluded front panel with metal case.  $4\frac{1}{4} \times 13\frac{1}{2} \times 8"$ . 117 VAC. 3 A 2589 X. Shpg. wt., 13 lbs. . . . . 154.95

Model 3200. Compact tuner delivers brilliant mono and stereo FM. Silicon transistors assure long life and stable performance. Has automatic stereo/mono FM switching, AFC, stereo indicator light and D'Arsonval tuning meter. Sensitivity:  $2.4 \mu\text{V}$  IHF. Response:  $\pm 1$  dB, 20-15,000 Hz. Selectivity: 45 dB. Image Rejection: 45 dB. Separation: 40 dB at 1000 Hz. Stylish vinyl-clad, walnut finish metal case. Size,  $3\frac{1}{2} \times 12 \times 8"$ . 117 VAC. 13 A 2341 X. Shpg. wt., 7 lbs. . . . . 139.95

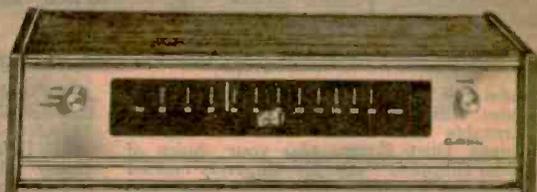
# Kenwood Stereo FM-AM Tuner has FETs 89<sup>95</sup>

Model KT-1000. Budget priced tuner features field-effect-transistor front end for low noise and high sensitivity. Offers fine AM too. Five IF stages with three limiters and wideband ratio detector assure clean, noise-free reception. Also has time-switching multiplex, stereo indicator light, tuning meter and multiplex noise filter. Sensitivity:  $3 \mu\text{V}$  HF. Signal-to-Noise Ratio: -55 dB. Separation: better than 22 dB at 1 kHz. Size,  $4\frac{3}{8} \times 10\frac{1}{4} \times 10\frac{1}{8}"$ . For 110-120 VAC. From Japan. 3 A 2044 U. Shpg. wt.,  $8\frac{1}{2}$  lbs. . . . . 89.95



# Electro-Voice solid-state Stereo FM Tuner 79<sup>90</sup>

Model 1159. Low priced tuner offers surprising performance. Features automatic stereo/mono FM switching, stereo indicator light, flywheel driven tuning knob and large, easy-to-read slide rule dial. Sensitivity:  $3 \mu\text{V}$  for 30 dB quieting. Hum and Noise: -55 dB. Harmonic Distortion: 1%. Signal-to-Noise Ratio: 60 dB at 100% modulation. Separation: 35 dB at 400 Hz. With handsome walnut-finished wood case. Size,  $4\frac{1}{4} \times 15\frac{3}{4} \times 8\frac{1}{2}"$ . Ideal mate for the E-V 122 stereo amplifier—see page 49. For 115 VAC. 3 A 2763 X. Shpg. wt., 16 lbs. . . . . 79.90



# Crown budget priced compact Stereo FM Tuner 59<sup>95</sup>

Model FM-300. Here's a fine solid-state tuner at a rock bottom price that almost anyone can afford. Features automatic stereo/mono FM switching. Stereo indicator light shows reception of stereo FM broadcast. Also has pitchable AFC and large, easy-to-read slide rule dial for pinpoint tuning accuracy. Front panel output level control is combined with AC power switch. Has stylish red walnut wood case. Fits anywhere—only  $2\frac{3}{8} \times 11\frac{1}{8} \times 4"$  deep. For 117 VAC. From Japan. 3 A 2258 U. Shpg. wt., 5 lbs. . . . . 59.95



Buy now with Allied's Convenient Credit Fund Plan

# Our finest Allied® Stereo Turntable Package



**SAVE \$47.85 ON COMPLETE PACKAGE**

**YOU GET ALL THIS**

*plus choice of Stereo Cartridge*



Empire 888E Reg. \$39.95  
Pickering V15/ATE-3 Reg. \$39.95  
Shure M93E Reg. \$39.95



Allied 929



Deluxe base



Dust cover



Dynamically counter-balanced pickup arm



Extra-heavy cast, balanced platter



Easy-mount cartridge holder



Stylus pressure adjustment



Adjustable anti-skating control



Automatic lock secures arm

Allied 929 Alone

**69<sup>95</sup>**

\$5 monthly\*

Complete Package

**74<sup>95</sup>**

\$5 monthly\*

**Automatic Turntable precision-crafted in England**

Model 929 Package. Separately, \$122.80. Includes: Allied 929 4-speed stereo Automatic Turntable with Deluxe Base and Molded Styrene Dust Cover, plus your choice of Stereo Elliptical Cartridge. Superbly crafted automatic turntable has every important feature for finest performance—certain to please the most critical listener. Has 2 spindles for manual or automatic operation. Boasts dynamically-balanced low-mass tubular pickup arm, adjustable stylus pressure and anti-skating compensation. Precise cueing and pause control. "Pop" filter, muting. Flutter, less than .05%; wow, less than 0.12% rms. Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—Specify. Size, 13<sup>1</sup>/<sub>8</sub>x11<sup>1</sup>/<sub>4</sub>". For 110-120 volts, 60 Hz AC.

14 A 0373 CDX. Shpg. wt., 20 lbs.....74.95

Allied 929 Automatic Turntable with Stereo Elliptical Cartridge for 1¢ More. Separately, \$109.90—Save \$39.94. Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—Specify. Order optional base, dust cover below.

14 A 0129 CDU. Shpg. wt., 11 lbs..... 69.96

Allied 929 Automatic Turntable Alone.

14 A 5429 U. Shpg. wt., 11 lbs.....69.95

Ebony-Black Base with Walnut Insert.

14 A 5472 X. Shpg. wt., 3 lbs..... 7.95

Mounting Board. For custom installations.

14 A 5614 X. Shpg. wt., 2 lbs.....1.95

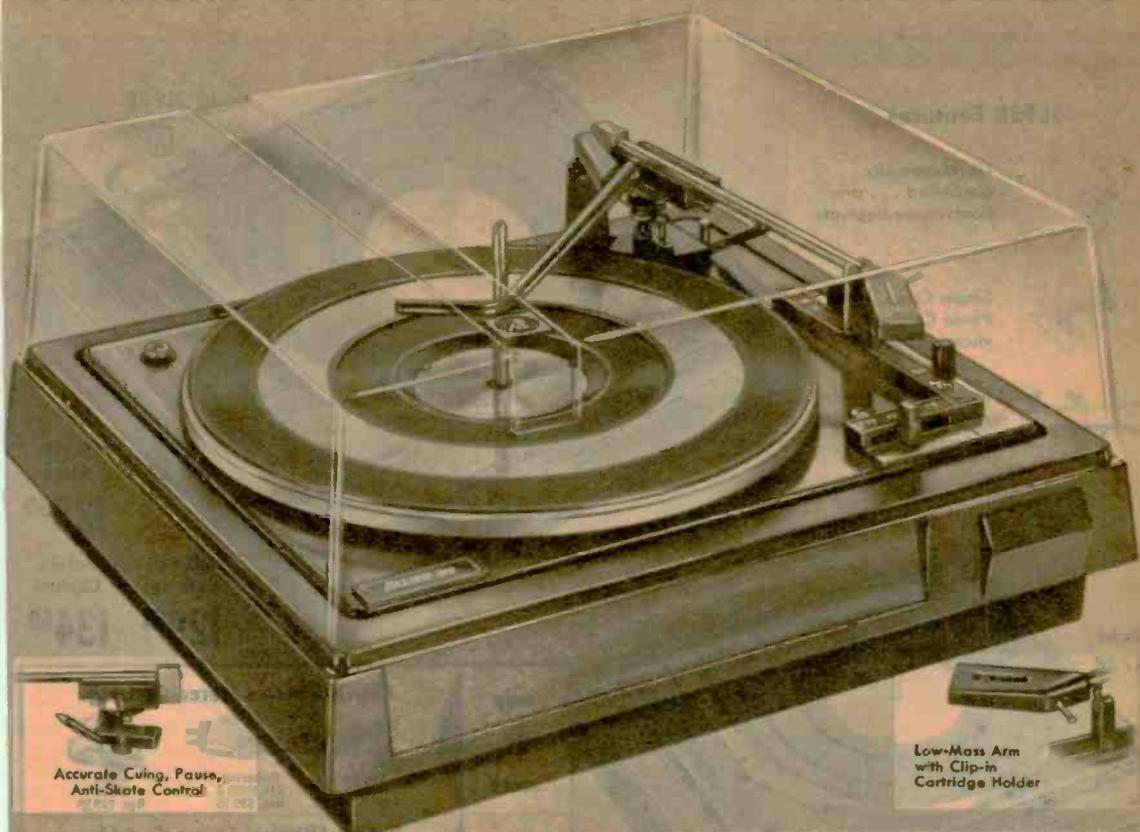
Dust Cover, Transparent Styrene.

14 A 5453 X. Shpg. wt., 5 lbs..... 4.95

45-rpm Automatic Spindle.

14 A 5454. Shpg. wt., 12 oz.....1.69

# Complete Allied Stereo Turntable Package



Accurate Cuing, Pause, Anti-Skate Control

Low-Mass Arm with Clip-in Cartridge Holder

**BUY THE COMPLETE PACKAGE AND GET BIG \$47.85 SAVINGS**

**YOU GET ALL THIS**  
plus choice of Stereo Cartridge

<p>Allied 919 Alone</p> <p><b>49<sup>95</sup></b></p> <p>\$5 monthly*</p>	<p>Complete Package</p> <p><b>54<sup>95</sup></b></p> <p>\$5 monthly*</p>
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Empire 888E Reg. \$39.95  
Pickering V15/ATE-3 Reg. \$39.95  
Shure M93E Reg. \$39.95

**Model 919 Package. Separately, \$102.80.** Includes: Allied 919 4-speed stereo Automatic Turntable with Deluxe Base and Molded Styrene Dust Cover, plus your choice of Stereo Elliptical Cartridge. Precision-made for exceptional performance and beautifully styled for attractive appearance. Plays single records manually, or stack of records automatically. Two spindles. Automatic intermix of different size records.

Low-mass tubular aluminum pickup arm is counter-balanced on friction-free ball-bearings. Accurate cuing and pause control. Powerful 4-pole motor is resiliently mounted. Anti-skate control assures flawless tracking. "Pop" filter, muting. Clip-in cartridge holder. Automatic shutoff after last record has played. Flutter, less than .05%; wow, less than 0.12% rms. Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—Specify. Size, 13¼x8x11¼". For 110-120 volts, 60 Hz AC.  
14 A 0372 CDX, Shpg. wt., 18 lbs. . . . . 54.95

**Automatic Turntable precision-crafted in England**

Allied 919 Automatic Turntable with Stereo Elliptical Cartridge for 1¢ More. Separately, \$89.90—Save \$39.94. Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—Specify. Order optional base, dust cover below. Or, order mounting board for special custom installation.  
14 A 0132 CDX, Shpg. wt., 9½ lbs. . . . . 49.96

Allied 919 Automatic Turntable Alone.  
14 A 5459 X, Shpg. wt., 9½ lbs. . . . . 49.95

Ebony Black Base with Walnut Insert.  
14 A 5472 X, Shpg. wt., 3 lbs. . . . . 7.95

Mounting Board. For custom installations.  
14 A 5614 X, Shpg. wt., 2 lbs. . . . . 1.95

Dust Cover. Molded transparent Styrene.  
14 A 5453 X, Shpg. wt., 5 lbs. . . . . 4.95

45-rpm Automatic Spindle.  
14 A 5454, Shpg. wt., 12 oz. . . . . 1.69

\*No money down. . . full Credit details on page 438

# Garrard Automatic Turntables with exclusive

## SL95B Features



Gyroscopically gimballed . . . arm floats on needle pivots



Single Cueing/Pause Control . . . viscous damped



Platform for 2-point record support in automatic play



Model SL95B

(A)

SL95B  
Alone

**129<sup>50</sup>**

Elliptical  
Cartridge

**129<sup>51</sup>**

Deluxe  
Elliptical

**134<sup>50</sup>**

All models shown  
on optional base

Model  
SL75B



(B)

SL75B  
Alone

**109<sup>50</sup>**

Elliptical  
Cartridge

**109<sup>51</sup>**

Deluxe  
Elliptical

**114<sup>50</sup>**

only  
**1<sup>00</sup>**  
more

## Elliptical-stylus Stereo Cartridge



Empire  
888E  
Reg. \$39.95



Pickering  
V15/ATE-3  
Reg. \$39.95



Shure  
M93C  
Reg. \$39.95

only  
**5<sup>00</sup>**  
more

## Deluxe Elliptical Stereo Cartridge



Empire  
888TE  
Reg. \$49.95



Pickering  
XV-15/AME  
Reg. \$49.95



Shure  
M91E  
Reg. \$49.95

## SL72 Features



Counterweight mounted in rubber to prevent pickup arm resonance



Single Cueing/Pause Control . . . viscous damped



Platform for 2-point record support in automatic play



(C)

Model  
SL72B

SL72B  
Alone

**89<sup>50</sup>**

Elliptical  
Cartridge

**89<sup>51</sup>**

Deluxe  
Elliptical

**94<sup>50</sup>**

# Synchro-Lab motor

## A Garrard's finest Automatic Turntable.. for perfectionists

Model SL95B. *Save \$39.94.* Magnificent automatic turntable has every feature for flawless record play. Synchro-Lab motor assures perfect record speed accuracy. Pickup arm is fully damped during cuing and automatic play to protect your records and stylus. Adjustable counterweight. Precision antiskating and stylus pressure gauges. Plays up to six records manually or automatically at 33 $\frac{1}{3}$ , 45 or 78 rpm. Rotating center spindle, full-size 12" platter and Auto-Rise® record platform. 15 $\frac{1}{8}$ "x14 $\frac{1}{8}$ ". Req. 4 $\frac{3}{8}$ " above, 3" below mounting board. Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E cartridge. For 117 VAC. Shpg. wt., 13 lbs.  
13 A 0950 CDU. Specify Cartridge. .... 129.51

SL95B with Deluxe Elliptical Cartridge for \$5 More. *Save \$44.95.* Choose Empire 888TE, Pickering XV-15/AME or Shure M91E. 13 lbs.  
13 A 0951 CDU. Specify Cartridge. .... 134.50  
13 A 3114 U. SL95B Alone. Wt., 13 lbs. .... 129.50

### SL95B with Empire 999VE for \$25 more

SL95B with Empire 999VE Stereo Cartridge. *Save \$49.95.*  
13 A 0952 DU. 13 lbs. .... 154.50

## B Deluxe model with twin-braced pickup arm and 12" platter

Model SL75B. *Save \$39.94.* Features Synchro-Lab motor for perfect speed accuracy. Has twin-braced low-mass pickup arm with adjustable counterweight and stylus force gauge. Auto-Rise® record platform. Plays up to six records manually or automatically at 33 $\frac{1}{3}$ , 45 or 78 rpm, 16 $\frac{1}{8}$ "x14 $\frac{1}{8}$ ". Req. 4 $\frac{3}{8}$ " above, 3" below mounting board. Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E cartridge. 117 VAC. Shpg. wt., 13 lbs.  
13 A 0953 CDU. Specify Cartridge. .... 109.51

SL75B with Deluxe Elliptical Cartridge for \$5 More. *Save \$44.95.* Choose Empire 888TE, Pickering XV-15/AME or Shure M91E. 13 lbs.  
13 A 0954 CDU. Specify Cartridge. .... 114.50  
13 A 3115 U. SL75B Alone. Wt., 13 lbs. .... 109.50

## C One of Garrard's newest.. offers important extras at a low price

Model SL72B. *Save \$39.94.* Automatic turntable features Synchro-Lab motor for constant record speed, plus an improved low-mass tubular aluminum-pickup arm with adjustable counterweight, precision antiskating control and stylus pressure gauge. Damped in both cuing and automatic play modes to protect your stylus and records. Auto-Rise® record platform treats your records with feather-like gentleness. Plays up to six records manually or automatically at 33 $\frac{1}{3}$ , 45 or 78 rpm. 15 $\frac{1}{8}$ "x14 $\frac{1}{8}$ ". Req. 4 $\frac{3}{8}$ " above, 3" below mounting board. Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E elliptical cartridge. For 117 VAC. Shpg. wt., 13 lbs.  
13 A 0955 CDU. Specify Cartridge. .... 89.51

SL72B with Deluxe Elliptical Cartridge for \$5 More. *Save \$44.95.* Choose Empire 888TE, Pickering XV-15/AME or Shure M91E. 13 lbs.  
13 A 0956 CDU. Specify Cartridge. .... 94.50  
13 A 3118 U. SL72B Alone. Wt., 13 lbs. .... 89.50



## GARRARD'S EXCLUSIVE EXACT-SPEED MOTOR

Synchro-Lab combines the power of an induction motor with the exact-speed accuracy of a fine synchronous motor for flawless turntable performance.

only 1¢ more

Empire 808E Reg. \$29.95	Pickering V15/ACE-3 Reg. \$29.95	Shure M55E Reg. \$29.95

only \$5 more

Empire 888E Reg. \$39.95	Pickering V15/ATE-3 Reg. \$39.95	Shure M93E Reg. \$39.95



Base optional

## Deluxe 4-speed model has damped cuing

Elliptical Cartridge  
**79<sup>51</sup>**  
Deluxe Elliptical  
**84<sup>50</sup>**  
SL65B Alone  
**79<sup>50</sup>**

Model SL65B. *Save \$29.94.* Has Synchro-Lab motor, damped cuing, stylus force gauge, adjustable counterweight, antiskate, automatic intermix. Plays up to six records at 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 or 78 rpm. 15 $\frac{1}{8}$ "x16 $\frac{2}{3}$ ". Req. 4 $\frac{3}{8}$ " above, 2 $\frac{1}{8}$ " below mtg. board. Empire 808E, Pickering V15/ATE-3 or Shure M55E. 117 VAC. 13 lbs.  
13 A 0957 CDU. Specify Cartridge. .... 79.51

SL65B with Deluxe Elliptical Cartridge for \$5 More. *Save \$34.95.* Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E. 13 lbs.  
13 A 0958 CDU. Specify Cartridge. .... 84.50  
13 A 3116 U. SL65B Alone. Wt., 13 lbs. .... 79.50

only 1¢ more

Empire 808E Reg. \$29.95	Pickering V15/ACE-3 Reg. \$29.95	Shure M55E Reg. \$29.95

only \$5 more

Empire 888E Reg. \$39.95	Pickering V15/ATE-3 Reg. \$39.95	Shure M93E Reg. \$39.95



Base optional

## Budget-priced Garrard with 4 speeds

Elliptical Cartridge  
**59<sup>51</sup>**  
Deluxe Elliptical  
**64<sup>50</sup>**  
SL55B Alone  
**59<sup>50</sup>**

Model SL55B. *Save \$29.94.* Has Synchro-Lab motor, automatic intermix and more. Plays up to six records manually or automatically. 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45, 78 rpm. 14 $\frac{1}{8}$ "x12 $\frac{1}{4}$ ". Req. 4 $\frac{3}{8}$ " above, 2 $\frac{1}{8}$ " below mtg. board. Empire 808E, Pickering V15/ATE-3 or Shure M55E. 117 VAC. 11 lbs.  
13 A 0959 CDU. Specify Cartridge. .... 59.51

SL55B with Deluxe Elliptical Cartridge for \$5 More. *Save \$34.95.* Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E. 11 lbs.  
13 A 0960 CDU. Specify Cartridge. .... 64.50  
13 A 3117 U. SL55B Alone. Wt., 11 lbs. .... 59.50

# Garrard Automatic and Manual Turntables



Order base below

## Four-speed Automatic Turntable

40B Alone	Elliptical Cartridge	Deluxe Elliptical Cartridge
<b>44<sup>50</sup></b>	<b>44<sup>51</sup></b>	<b>49<sup>50</sup></b>

Model 40B. Save \$24.94. Features silent four-pole motor for exact 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 and 78 rpm speeds. Has stylus pressure gauge, viscous damped cuing and easy-to-use slide-in cartridge holder. Automatic or manual operation; two spindles. 13 $\frac{1}{8}$ x12". Reg. 4 $\frac{1}{2}$ " above, 2 $\frac{1}{8}$ " below mtg. board. Choose Empire 80EE, Pickering P/ATE-1 or Shure M44E. 117 VAC. England. 10 lbs.

13 A 0963 CDU. Specify Cartridge..... 44.51  
40B with Deluxe Elliptical Cartridge for \$5 More. Save \$24.95. Choose Empire 808E, Pickering V15/ACE-3 or Shure M55E. 10 lbs.  
13 A 0964 CDU. Specify Cartridge..... 49.50  
13 A 3120 U. 40B Alone. 10 lbs..... 44.50

## Four-speed Manual Turntable

SP20B Alone	Elliptical Cartridge	Deluxe Elliptical Cartridge
<b>37<sup>50</sup></b>	<b>37<sup>51</sup></b>	<b>42<sup>50</sup></b>

Model SP20B. Save \$24.94. This quality manual turntable features counter-balanced pickup arm which returns to rest after record is played; automatic end-of-record shutoff. Also has newly designed tubular aluminum pickup arm with stylus force adjustment and easy-to-use slide-in cartridge holder. 14 $\frac{1}{8}$ x12 $\frac{1}{2}$ ". Choose Empire 80EE, Pickering P/ATE-1 or Shure M44E. With 45-rpm adapter. 117 VAC. England. 10 lbs.

13 A 0965 CDU. Specify Cartridge..... 37.51  
SP20B with Deluxe Elliptical Cartridge for \$5 More. Save \$24.95. Empire 808E, Pickering V15/ACE-3 or Shure M55E. 10 lbs.  
13 A 0966 CDU. Specify Cartridge..... 42.50  
13 A 3121 U. SP20B Alone. 10 lbs..... 37.50

**only 1¢ more**

Empire 80EE Reg. \$24.95	Pickering P/ATE-1 Reg. \$24.95	Shure M44E Reg. \$24.95

**only \$5 more**

Empire 808E Reg. \$29.95	Pickering V15/ACE-3 Reg. \$29.95	Shure M55E Reg. \$29.95

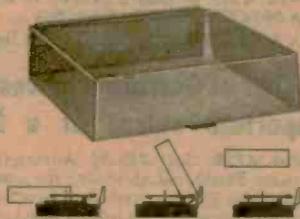


Order base below

## Garrard Turntable Bases, Dust Covers and Accessories



Coordinated bases with accessory trays are made of molded, simulated pin-seal leather and ebony with black and silver trim. Provision for easy mounting of slides if desired. "Power-Matic" bases turn off amplifier or receiver after last record is played. Dust covers are clear molded styrene. Special design lets you slide cover into place from front or tilt up and lock into place for loading or adjusting turntable. Can be left in place while playing. Mounting boards are sanded unfinished wood, 16x18".



Stock No.	Mfr's Type	Description	Wt.	EACH
13 A 3122 X	B-1	Base for SL65B, SL55B, 40B, 30 and SP20B.	5 lbs.	5.50
13 A 3123 X	B-2	Base for SL95B, SL75B and SL72B.	6 lbs.	6.50
13 A 3292 X	WB-2	Deluxe wood base for 95B, 75B, 72B	9 lbs.	19.95
13 A 3124 X	B-1P	Like B-1 Base, but with "Power-Matic" feature.	7 lbs.	14.95
13 A 3125 X	B-2P	Like B-2 Base, but with "Power-Matic" feature.	8 lbs.	15.95
13 A 3290 X	D-1	Dust cover for B-1 and B-1P bases.	5 lbs.	5.50
13 A 3291 X	D-2	Dust cover for B-2, DB-2 and B-2P bases.	5 lbs.	6.50
13 A 3060 X	MB10	Mounting board for SL65B, SL55B, 40B, 30 and SP20B	2 lbs.	2.25
13 A 3070 X	MB11	Mounting board for SL95B, SL75B, and SL72B.	2 lbs.	2.25
13 A 3078 X	FLRS35	45-rpm auto. spindle for SL65B, SL55B, 40B, 30, SLX-2, X10.	3 oz.	1.95
13 A 3076	LR525	45-rpm auto. spindle for SL95B, SL75B, SL72B, SLX-3.	8 oz.	3.80
13 A 3079	F40	45-rpm auto. spindle for X-11	3 oz.	1.95
13 A 3077	C1	Slide-in cartridge clip for SL75B.	3 oz.	1.75
13 A 3089	C2	Slide-in cartridge clip for SL95B, SL72B, SL65B, SL55B, 40B, SP20B	3 oz.	1.75

# Garrard Modules with base, cover, cartridge

## A Miniature Turntable Module

Model X-11. Budget-priced automatic turntable gives you traditional Garrard-quality in a very compact package. Only 12" x 8" x 6". Automatic or manual operation at 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 or 78 rpm. Automatic intermix pickup to six 10" and 12" records. Balanced tubular aluminum pickup arm protects stylus and records. Automatic shutoff. With pre-mounted ebony pinseal base, ceramic stereo cartridge, diamond flip-over stylus, dust cover, 2 spindles. Optional F-40 45-rpm spindle on p. 58. 117 VAC. England. 10 lbs.

13 A 3109 X..... 39.95



With ceramic cartridge

A

**3995**  
\$5 monthly\*

## B 3-speed Automatic Turntable Module

Model X-10. Precision-made automatic turntable features low-mass tubular aluminum pickup arm with a single lever cuing/pause control to protect stylus and records. Automatic or manual operation at 33 $\frac{1}{3}$ , 45 or 78 rpm. Simplified controls 'up front' for record speed and size selection. Ceramic stereo cartridge has flipover diamond stylus pre-set for correct stylus pressure. With ebony pinseal base, 3-position dust cover and two spindles. Optional LRS25 45-rpm spindle on page 58. 7 $\frac{3}{4}$  x 15 x 13 $\frac{1}{4}$ ". For 117 VAC. England. Shpg. wt., 17 lbs.

13 A 3110 X..... 52.50

With ceramic cartridge **5250**  
\$5 monthly\*

B



## C Deluxe Automatic Turntable Module

Model SLX-2. Superb automatic turntable comes with walnut and ebony pinseal base, dust cover and pre-mounted stereo magnetic cartridge with diamond stylus. Has Synchro-Lab motor for perfect 33 $\frac{1}{3}$ , 45 or 78 rpm speeds. Combined speed and record size selector. Low-mass tubular aluminum pickup arm has cuing/pause control, adjustable counterweight and stylus pressure gauge. Automatic or manual operation. 7 $\frac{3}{4}$  x 15 x 13 $\frac{1}{4}$ ". Order FLRS35 45-rpm automatic spindle on page 58. With long and short spindles. For 117 VAC. From England. Shpg. wt., 17 lbs.

13 A 2679 X..... 69.50



With magnetic cartridge **6950**  
\$5 monthly\*

C

## D Finest Automatic Turntable Module

Model SLX-3. Garrard's finest module features Synchro-Lab motor for perfect speed accuracy. Auto-Rise platform protects records during automatic play. Low-mass tubular pickup arm has adjustable counterweight, stylus force and antiskating gauges, and damped cuing during manual and automatic play. Automatic or manual play at 33 $\frac{1}{3}$ , 45 or 78 rpm. With elliptical diamond stylus magnetic stereo cartridge, pre-mounted ebony pinseal base and styrene dust cover. LRS25 45-rpm spindle on p. 58. 7 $\frac{3}{4}$  x 15 x 13 $\frac{1}{4}$ ". 117 VAC. England. 22 lbs.

13 A 2683 X..... 99.50

With magnetic cartridge **9950**  
\$5 monthly\*

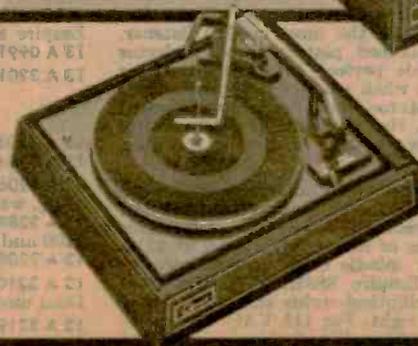
D



## Low-cost Automatic Turntable

Model 30. Garrard's lowest priced automatic turntable has oversize, weighted record platter and smooth, silent-running motor for 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 or 78 rpm speeds. Also has automatic record intermix, automatic end-of-record shutoff, two spindles for manual or automatic play, and ceramic stereo cartridge with diamond stylus. Size, 14" x 12 $\frac{1}{4}$ ". Order optional base, dust cover and 45-rpm spindle on page 58. For 117 VAC. From England. Shpg. wt., 10 lbs.

13 A 3167 X..... 39.50



With ceramic cartridge

**3950**  
\$5 monthly\*

# Automatic Turntables by Dual .. all with

only 1¢ more  
Elliptical Stereo Cartridge



Empire 888E Reg. \$39.95  
Pickering V15/ATE-3 Reg. \$39.95  
Shure M93E Reg. \$39.95

only \$5 more  
Deluxe Elliptical Cartridge



Empire 888TE Reg. \$49.95  
Pickering XV15/400E Reg. \$49.95  
Shure M91E Reg. \$49.95

1219 with Empire 999VE  
Save \$49.95



\$25 more **184.50**

For connoisseurs, Dual 1219 with Empire's superb 999VE elliptical-stylus stereo cartridge.  
13 A 0989 DU. Wt., 24 lbs. . . 184.50



1219 Alone	With Elliptical Stereo Cartridge	With deluxe Elliptical Stereo
<b>159.50</b>	<b>159.51</b>	<b>164.50</b>

Shown on WB19 base

 <p>7 lbs. Full 12" diameter dynamically balanced 7 lb. platter</p>	 <p>Single-play spindle rotates with record to prevent wear</p>	 <p>Separate anti-skating for conical and elliptical styl</p>	 <p>"Feather touch" cue control with one-groove accuracy</p>	 <p>6% variable pitch control for perfect speed</p>	 <p>Selector lowers arm for perfect 15° stylus-tracking</p>
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## Dual 1219 three-speed Automatic Turntable with money-saving cartridge offer

Save \$39.94. Dual's best turntable has every deluxe feature to meet the demands of the most critical listener. Full 12" dynamically balanced platter. Mode selector lowers arm base to provide perfect 15° stylus tracking (0° vertical tracking error) when set for single play, raises base for multiple play. Motor combines absolute speed accuracy with high torque. Has 6% variable pitch control for "tuning" records to synchronize with tape recorders or musical instruments.

Cue-control system silicone-damped in both directions to prevent bounce. Elastically damped counterbalance has 0.01 gram click stops for precision balancing. Adjustable stylus overhang. Automatic or manual operation at 33 1/3, 45, 78-rpm. Multiple play spindle holds up to 6 records. 14 1/2 x 12 1/4". Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E elliptical-stylus stereo cartridge. Order base, accessories at right. For 115 VAC. Imported. 13 A 0990 CDU. Specify Cartridge. Wt., 24 lbs. . . . 159.51

1219 with Deluxe Elliptical Stereo Cartridge. Save \$34.95  
Empire 888TE, Pickering XV15/400E or Shure M91E  
13 A 0991 CDU. Specify Cartridge. Wt., 18 lbs. . . . 164.50  
13 A 3201 U. Model 1219 Alone. Shpg. wt., 18 lbs. . . . 159.50

### DUAL TURNTABLE ACCESSORIES

13 A 3203 X. WB19 Walnut Base. For 1219, 5 lbs. . . . 14.95  
13 A 3204 X. DC9 Dust Cover. For WB19 above. 4 lbs. . . 12.95  
13 A 3206 X. WB12 Walnut Base. For Models 1209 and 1212 Shpg. wt., 4 lbs. . . . 10.95  
13 A 3289 X. WB93 Deluxe Oiled Walnut Base. For Model 1209 and 1212. Shpg. wt., 5 lbs. . . . 12.95  
13 A 3209 X. DC2 Dust Cover. For WB12, WB93. 3 lbs. 10.95  
13 A 3210 X. Model AS12 45-rpm Automatic Spindle. For all Dual models. Shpg. wt., 10 oz. . . . 5.95  
13 A 3219 X. Model CH12 Extra Cartridge Holder. For all Dual models. Shpg. wt., 3 oz. . . . 3.95

# elliptical-stylus stereo cartridge offers

## Dual 1209 with Cartridge Offer

1209 Alone	With Elliptical Stereo Cartridge	With deluxe Elliptical Stereo
<b>119<sup>50</sup></b>	<b>119<sup>51</sup></b>	<b>124<sup>50</sup></b>

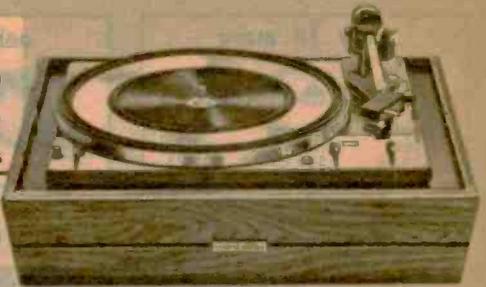
Save \$39.94. Fine features at a moderate price. Synchronous hi-torque motor; low-mass tubular arm; flawless 0.5 gram tracking; pitch control. Auto or manual: 33 $\frac{1}{3}$ , 45, 78-rpm. 12 $\frac{7}{8}$ x10 $\frac{3}{4}$ ". With 888E, V15/ATE-3 or M93E cartridge. Base, accessories p. 60. 115 VAC. Imported. 15 lbs.  
 13 A 0992 CDU. Specify Cartridge. . . . . 119.51  
 1209 with Deluxe Elliptical Cartridge. Save \$44.95. 888TE, XV15/400E, M91E. 15 lbs.  
 13 A 0993 CDU. Specify Cartridge. . . . . 124.50  
 13 A 3202 U. 1209 Alone. 15 lbs. . . . . 119.50

only 1¢ more

 Empire 888E Reg. \$39.95	 Pickering V15/ATE-3 Reg. \$39.95	 Shure M93E Reg. \$39.95
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only \$5 more

 Empire 888TE Reg. \$49.95	 Pickering XV15/400E Reg. \$49.95	 Shure M91E Reg. \$49.95
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Shown on W893 base

## Dual 1212 with Cartridge Offer

1212 Alone	With Elliptical Stereo Cartridge	With deluxe Elliptical Stereo
<b>79<sup>50</sup></b>	<b>79<sup>51</sup></b>	<b>84<sup>50</sup></b>

Save to \$29.94. Good performance at a low price. Hi-torque motor; low-mass counter-balanced arm; 1.0 gram tracking; pitch control. Auto or manual: 33 $\frac{1}{3}$ , 45, 78-rpm. 12 $\frac{7}{8}$ x10 $\frac{3}{4}$ ". With 808E, V15/ACE-3 or M55E cartridge. Order base, accessories p. 60. For 115 VAC. Imported. Wt., 14 lbs.  
 13 A 0926 CDU. Specify Cartridge. . . . . 79.51  
 1212 with Deluxe Elliptical Cartridge. Save \$34.95. 888E, V15/ATE-3, M93E. 14 lbs.  
 13 A 0929 CDU. Specify Cartridge. . . . . 84.50  
 13 A 3267 U. 1212 Alone. 14 lbs. . . . . 79.50

only 1¢ more

 Empire 808E Reg. \$29.95	 Pickering V15/ACE-3 Reg. \$29.95	 Shure M55E Reg. \$29.95
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only \$5 more

 Empire 888E Reg. \$39.95	 Pickering V15/ATE-3 Reg. \$39.95	 Shure M93E Reg. \$39.95
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Shown on W812 base



Shown on walnut base

only 1¢ more

 Empire 888E Reg. \$39.95	 Pickering V15/ATE-3 Reg. \$39.95	 Shure M93E Reg. \$39.95
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only \$5 more

 Empire 888TE Reg. \$49.95	 Pickering XV15/400E Reg. \$49.95	 Shure M91E Reg. \$49.95
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Shown on walnut base

## ELPA PE-2020 with Cartridge Offer

PE-2020 Alone	129 <sup>95</sup>	With Elliptical	129 <sup>96</sup>	Deluxe Elliptical	134 <sup>95</sup>
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Save \$39.94. Deluxe, for finest stereo. Anti-skate. Tracks to 1 $\frac{1}{2}$  gram. 4 speeds auto or manual. 7 $\frac{1}{2}$  lb. platter. 888E, V15/ATE-3 or M93E cartridge. 14 $\frac{1}{16}$ x12". Base, accessories below. 115 VAC. Imported.  
 13 A 0387 CDU. Specify Cartridge. 20 lbs. . . . . 129.96  
 PE-2020 with "Lighter-Tracking" Deluxe Cartridge. Save \$44.95. Choose 888TE, XV15/400E or M91E.  
 13 A 0384 CDU. Specify Cartridge. 20 lbs. . . . . 134.95  
 13 A 3273 U. Model PE-2020 Alone. 20 lbs. . . . . 129.95  
 13 A 3261 X. Deluxe Walnut Base. Wt., 3 lbs. . . . . 7.00  
 13 A 3237 X. Dust Cover. Wt., 1 lb. . . . . 5.95  
 13 A 3242. 45-rpm Automatic Spindle. 3 oz. . . . . 5.95  
 13 A 3241. Extra Cartridge Holder. 3 oz. . . . . 5.95

## ELPA PE-2018 with Cartridge Offer

PE-2018 Alone	99 <sup>95</sup>	With Elliptical	99 <sup>96</sup>	With Deluxe Elliptical	104 <sup>95</sup>
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Save \$30.94. Smaller version of PE-2020. Pitch control; 15° vert. tracking adjustment. 3 speeds auto or manual. With 888E, V15/ATE-3 or M93E cartridge. 13x10 $\frac{3}{4}$ ". Base, accessories below. 115 VAC. Imported.  
 13 A 0994 CDU. Specify Cartridge. 18 lbs. . . . . 99.96  
 PE-2018 with "Lighter-Tracking" Deluxe Cartridge. Save \$44.95. Choose 888TE, XV15/400E or M91E.  
 13 A 0995 CDU. Specify Cartridge. 18 lbs. . . . . 104.95  
 13 A 3240 U. Model PE-2018 Alone. 18 lbs. . . . . 99.95  
 13 A 3235 X. Vinyl-Covered Walnut Base. 5 lbs. . . . . 7.00  
 13 A 3225 X. Dust Cover. Wt., 2 lbs. . . . . 7.00  
 13 A 3222. 45-rpm Automatic Spindle. 4 oz. . . . . 4.95  
 13 A 3241. Extra Cartridge Holder. 3 oz. . . . . 5.95

# Miracord Turntables with cartridge offers

only 1¢ more



Empire  
888E  
\$39.95

Pickering  
V15/ATE-3  
\$39.95

Shure  
M93E  
\$39.95

only \$25 more



Save \$49.95.  
Empire's 999VE  
super-elliptical  
stereo cartridge

Base



Dust Cover

Empire  
1000VE

only \$40 more

Save \$79.90. Base,  
dust cover, Empire's  
1000VE super deluxe  
elliptical cartridge



Base and dust  
cover optional

## Top-of-the-line Automatic Turntable with cartridge

Model PW50H. Features hysteresis motor and full-size 12" platter. Push-button operation. Automatic or manual. Anti-skating, damped cuing. Balanced pickup arm. Speeds: 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 or 78 rpm. 14 $\frac{1}{2}$ x12 $\frac{1}{2}$ ". Empire 888E, Pickering V15/ATE-3 or Shure M93E only 1¢ more—specify. Accessories below. 115 VAC. Imported. 13 A 0400 CDU. Wt., 20 lbs. .... 159.51  
PW50H With Empire 999VE Cart.  
13 A 0402 CDU. 20 lbs. .... 184.50  
Package: PW50H, base, dust cover, super deluxe Empire 1000VE Cartridge.  
13 A 0996CD3U. Wt., 26 lbs. .... 199.50  
13 A 3256 U. PW50H Alone. 20 lbs. 159.50

### MIRACORD ACCESSORIES

13 A 3262 X. RB-5 Molded Base. For PW50H, 750. 3 lbs. .... 5.95  
13 A 3263 X. RB-6 Molded Base. For model 620. 3 lbs. .... 5.95  
13 A 3268 X. DC1 Dust Cover. For all models. Wt., 2 lbs. .... 4.95  
13 A 3193. CR50 Extra Cartridge Mount. For PW50H, 750. 3 oz. .... 5.00  
13 A 3195. CR20 Extra Cartridge Mount. For 620, 3 oz. .... 3.00

With Stereo  
Elliptical Cartridge

**159<sup>51</sup>**

With Super-  
Elliptical Cartridge

**184<sup>50</sup>**

With Base, Dust Cover,  
Empire 1000ZE Cartridge

**199<sup>50</sup>**



Base optional

only 1¢ more



Empire Pickering Shure  
888E V15/ATE-3 M93E  
\$39.95 \$39.95 \$39.95

only \$5 more



Empire Pickering Shure  
888TE XV15/400E M91E  
\$49.95 \$49.95 \$49.95



Base optional

only 1¢ more



Empire Pickering Shure  
888E V15/ATE-3 M93E  
\$39.95 \$38.95 \$39.95

only \$5 more



Empire Pickering Shure  
888TE XV15/400E M91E  
\$49.95 \$49.95 \$49.95

## Full-feature 4-speed Automatic Turntable

Model 750 Alone **139<sup>50</sup>** With Elliptical Cartridge **139<sup>51</sup>** With Deluxe Elliptical **144<sup>50</sup>**

Model 750. Includes many of the features of deluxe Model PW50H. Heavy-duty 4-pole motor and full 12" platter for smooth and steady performance. Speeds: 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45, 78 rpm. Precise damped cuing. Empire 888E, Pickering V15/ATE-3 or Shure M93E for 1¢ more—specify. Accessories above. 115 VAC. Imported. 14 $\frac{1}{2}$ x12 $\frac{1}{2}$ .  
13 A 0997 CDU. 18 lbs. Specify Cartridge. .... 139.51  
13 A 0998 CDU. 750 With Deluxe Elliptical. 888TE, XV15/400E or M91E. 18 lbs. Specify Cartridge. .... 144.50  
13 A 3180 U. Model 750 Alone. 18 lbs. .... 139.50

With 999VE Super-Elliptical Cartridge

only \$25 more

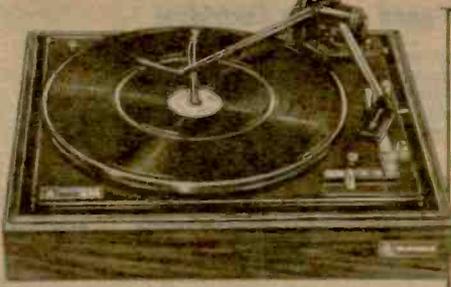
13 A 0999 CDU. For the extra-critical audiophile. 18 lbs. .... 164.50

## Budget-priced 4-speed Automatic Turntable

Model 620 Alone **99<sup>50</sup>** With Elliptical Cartridge **99<sup>51</sup>** With Deluxe Elliptical **104<sup>50</sup>**

Model 620. For those who want Miracord quality craftsmanship at a lower price. Exclusive light touch push-button operation. Precise damped cuing for easy selection of any point on the record. Anti-skate. Balanced four-pole induction motor. Dynamically balanced tone arm. Heavy, pressure-formed turntable platter. All four speeds. Empire 888E, Pickering V15/ATE-3 or Shure M93E only 1¢ more—specify. Accessories above. 115 VAC. 13 $\frac{1}{2}$ x11 $\frac{1}{2}$ . Imported.  
13 A 0415 CDU. 15 lbs. Specify Cartridge. .... 99.51  
13 A 0416 CDU. 620 With Deluxe Elliptical. 888TE, XV15/400E, M91E. 15 lbs. Specify Cartridge. .... 104.50  
13 A 3146 U. Model 620 Alone. 15 lbs. .... 99.50

# BSR McDonald and Allied® Stereo Turntables



only 1¢ more

Empire 808E \$29.95    Pickering V15/ACE-3 \$29.95    Shure M55E \$29.95

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only \$5 more

Empire 888E \$39.95    Pickering V15/ATE-3 \$39.95    Shure M93E \$39.95

*Bases optional*



Model 600 Alone <b>74<sup>50</sup></b>	With Elliptical Cartridge <b>74<sup>51</sup></b>	With Deluxe Elliptical <b>79<sup>50</sup></b>	Model 400 Alone <b>49<sup>50</sup></b>	With Elliptical Cartridge <b>49<sup>51</sup></b>	With Deluxe Elliptical <b>54<sup>50</sup></b>
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## BSR top-of-the-line 4-speed Automatic Turntable

**BSR 600.** Offers cueing and pause control. Perfectly counter-balanced low-mass tubular aluminum pickup arm. Adjustable anti-skate compensation. Full-size heavy cast turntable platter. 13 $\frac{3}{4}$ x11 $\frac{1}{4}$ ". Req. 4" above, 2 $\frac{1}{2}$ " below mtg. board. Empire 808E, Pickering V15/ACE-3 or Shure M55E 1¢ more—specify. Optional base below. 115 VAC. 13 A 0105 CDU. Shpg. wt., 14 lbs. *Specify Cartridge...* 74.51

**BSR 600 With Deluxe Elliptical Cartridge for \$5 more.** Empire 888E, Pickering V15/ATE-3 or Shure M93E. 13 A 0106 CDU. Shpg. wt., 14 lbs. *Specify Cartridge...* 79.50

13 A 3050 U. Model 600 Alone. Wt. 14 lbs. .... 74.50

## Low-priced BSR 4-speed Automatic Turntable

**BSR 400.** Excellent four-speed model features cueing for protection of cartridge and record. Jamproof low-mass pickup arm. Anti-skate adjustment. Automatic or manual. 13 $\frac{3}{4}$ x11 $\frac{1}{4}$ ". Requires 4" above, 2 $\frac{1}{2}$ " below mtg. board. Empire 808E, Pickering V15/ACE-3 or Shure M55E for 1¢ more—specify. Optional base below. 115 VAC. 13 A 0109 CDU. Shpg. wt., 12 lbs. *Specify Cartridge...* 49.51

400 with Deluxe Elliptical Cartridge for \$5 more. Empire 888E, Pickering V15/ATE-3, Shure M93E—specify. 13 A 0121 CDU. Shpg. wt., 12 lbs. *Specify Cartridge...* 54.50

13 A 3011 U. Model 400 Alone. Wt. 12 lbs. .... 49.50

## BSR McDonald Accessories

- 13 A 3052 X. PB-1 Power-Matic Base. Auto shutoff. 2 $\frac{1}{2}$  lbs. .... 15.00
- 13 A 3051 X. WB-6 Deluxe Base. Ebony walnut veneer. Recessed, scalloped top. 5 lbs. .... 12.00
- 13 A 3057 X. PB-2 Base. Ebony. Silver, walnut accents. 3 lbs. 6.00
- 13 A 3113. AS-2 45-rpm Automatic Spindle. Shpg. wt., 8 oz. .... 2.25
- Molded Dust Covers. Usable while turntable is playing. Deluxe: vinyl walnut, silver trim. 2 $\frac{3}{4}$  lbs.
- 13 A 3093 X. Deluxe DC-3. .... 7.00
- 13 A 3090 X. DC-2. .... 5.00
- 13 A 3055 X. MB-2 Mounting Board, Unfinished. 15 $\frac{3}{8}$ x15 $\frac{3}{8}$ ". 2 lbs. 2.25

## BSR McDonald introduces low-cost Turntable Package

Package includes: BSR 300 4-speed Automatic Turntable with Base, Dust Cover, and Shure M75 Magnetic Stereo Cartridge. Features jamproof, low-mass aluminum pickup arm. Anti-skate control. Automatic shutoff.

Dynamically balanced, resiliently mounted, 4-pole motor has constant-speed design to prevent flutter and wow. Automatic or manual. Takes 7", 10" or 12" records.

All four speeds: 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 and 78 rpm. Overall size: 15 $\frac{1}{2}$ x13 $\frac{1}{2}$ x6 $\frac{3}{8}$ ". For 117 volts, 60 Hz AC. 13 A 3177 X. Wt. 12 lbs. .... 44.50



**44<sup>50</sup>** Includes turntable, base, dust cover, magnetic cartridge

## Allied low-priced 4-speed Automatic Changer with stereo cartridge

**Allied 480.** Stereo automatic changer offers excellent quality at a low, low price. Plays stack of six 12", 10" or 7" records automatically, mixes 12", 10", 7" sizes of same speed. Automatic shutoff. Lightweight pickup arm offers excellent tracking for low record wear. Flip-over ceramic stereo cartridge. Dual synthetic-sapphire needles play any stereo or mono record.

Nine-inch platter. All four speeds: 16 $\frac{2}{3}$ , 33 $\frac{1}{3}$ , 45 and 78 rpm. 13 $\frac{3}{16}$ x12". Requires 4 $\frac{3}{8}$ " above, 1 $\frac{3}{4}$ " below mounting board. With cartridge, audio cables. Order base, 45-rpm automatic spindle, below. For 115 volts, 60 Hz AC. Shpg. wt., 11 lbs.

14 A 5460 X. .... 19.95

14 A 5471 X. Walnut Base, 3 lbs. .... 4.95

14 A 5463. 45-rpm Spindle. 8 oz. .... 1.29



**19<sup>95</sup>**  
less  
base

# Popular hi-fi magnetic Stereo Cartridges

Your component stereo phono system is only as good as your Cartridge!

Playback of stereo records is complicated by the high groove velocities and complex sounds recorded on today's records. Modern records demand better-tracking cartridges because the cartridge is the first link in the playback process and it must be free of distortion

for you to get true hi-fi sound from your amplifier and speaker systems. All cartridges offered below are capable of precision-tracking when installed and maintained properly. Each is a good value and has a full frequency response for wonderful stereo realism.



Special  
Purchase!  
**21<sup>95</sup>**

## Empire Deluxe Elliptical

Model 888E. Allied's special purchase makes this low price possible. For manual and automatic turntables. Has 15° .0003" x .0007" elliptical diamond stylus. 6-32,000 Hz. Sep., 30 dB. Comp., 25x10<sup>-6</sup> cm/dyne. 1 to 3 grams. Wt., 4 oz. 13 A 3991 S ..... 21.95



Empire's  
Finest—  
1000VE

(A)



Deluxe  
999VE  
888VE

(C)

888TE  
888E  
888P  
888



(B)

808E  
80EE  
808



(D)

## ADC Stereo Cartridges



ADC's finest  
Cartridge  
**59<sup>50</sup>**

Model 10E MK II Elliptical. Boasts 15° .0003x.0007" diamond stylus. Response, 10-20,000 Hz. Compliance, 35x10<sup>-6</sup> cm/dyne. Separation, 30 dB. Tracks from 1/2 to 1 1/2 grams. Shpg. wt., 4 oz. 13 A 3834 S ..... 59.50



Deluxe  
Cartridge  
**49<sup>50</sup>**

Model 550E Elliptical. Features "induced magnet" for minimum distortion. 15° .0003"x.0007" elliptical diamond stylus. 10-20,000 Hz. Comp., 28x10<sup>-6</sup> cm/dyne. Separation, 30 dB. Tracks from 3/4 to 2 1/2 grams. 4 oz. 13 A 3833 S ..... 49.50



ADC  
Economy  
Cartridges

Model 990E Elliptical. For automatic and manual turntables. Has 15° .0003"x.0007" diamond stylus. 10-18,000 Hz. 18x10<sup>-6</sup> cm/dyne. Sep., 1/2 to 4 grams. Wt., 4 oz. 13 A 3840 S ..... 29.50

Model 220E Conical. Features 15° .0007" conical-tip diamond stylus. Response, 10-18,000 Hz. Comp., 15x10<sup>-6</sup> cm/dyne. Separation, 20 dB. Tracks from 2 to 5 grams. 4 oz. 13 A 3967 S ..... 19.50

## Empire magnetic Stereo Cartridges

(A) Model 1000VE Elliptical. Empire's newest and finest! Allows no foreign noises, has perfect magnetic balance. Has 15° .0002"x.0007" elliptical diamond stylus. Frequency response, 6-40,000 Hz. Output, 5 mV per channel. Channel separation, 30 dB. Compliance, 35x10<sup>-6</sup> cm/dyne. Tracks 1/2-1 1/4 grams. Wt., 3 oz. 13 A 3883 S ..... 100.00

(B) Model 888TE Elliptical. Widely acclaimed for top performance. Ideal for manual and automatic turntables. Has 15° .0002"x.0007" elliptical diamond stylus. 8-32,000 Hz. Output, 6.0 mV. Sep., 32 dB. Comp., 30x10<sup>-6</sup> cm/dyne. Tracks from 1/2 to 1 1/2 grams. Wt., 4 oz. 13 A 3964 S ..... 49.95

(B) Model 888E Elliptical. For fine manual and automatic turntables. 15° .0004"x.0009" elliptical diamond stylus. Response, 10-30,000 Hz. Output, 8.0 mV per channel. Separation, 30 dB. Compliance, 28x10<sup>-6</sup> cm/dyne. Tracks 3/4-3 grams. 13 A 3992 S. Wt., 4 oz. .... 39.95

(D) Model 808E Elliptical. Has 15° .0004"x.0009" elliptical diamond stylus. Response, 10-25,000 Hz. Output, 8.0 mV per channel. Stereo channel separation, 30 dB. Compliance, 20x10<sup>-6</sup> cm/dyne. 3/4 to 4 grams. Shpg. wt., 4 oz. 13 A 3969 S ..... 29.95

(D) Model 80EE Elliptical. Has 15° .0004"x.0007" stylus. 20-20,000 Hz. Separation, 25 dB. 1 3/4-4 grams. 13 A 3825 S. Wt., 6 oz. .... 24.95

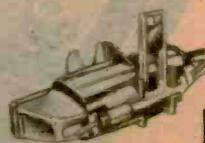
(C) Model 999VE Elliptical. Top quality for the perfectionist. Has .0002" x .0007" diamond stylus. 6-35,000 Hz. Output, 5.0 mV per channel. Comp., 35x10<sup>-6</sup> cm/dyne. Sep., 35 dB. Wide tracking force range from 1/2 to 1 1/2 grams. Wt., 4 oz. 13 A 3976 S ..... 74.95

(C) Model 888VE Elliptical. Lower priced version of famed 999VE. Has .0002"x.0007" diamond stylus. 6-32,000 Hz. Output, 5.0 mV per channel. Compliance, 32x10<sup>-6</sup> cm/dyne. Separation, 32 dB. Tracks from 1/2 to 1 3/4 grams. Wt., 4 oz. 13 A 3977 S ..... 59.95

(B) Model 888P Conical. Reproduces the entire musical range with preciseness and clarity. 15° .0006" conical-tip diamond stylus. 10-28,000 Hz. Output, 8.0 mV per ch. Sep., better than 30 dB. Comp., 15x10<sup>-6</sup> cm/dyne. 1/2 to 4 grams. Wt., 4 oz. 13 A 3986 S ..... 29.95

(B) Model 888 Conical. Performs admirably in manual and automatic turntables. Has 15° .0007" conical tip diamond stylus. Response, 12-25,000 Hz. Output, 8.0 mV per ch. Sep., 30 dB. Comp., 20x10<sup>-6</sup> cm/dyne. 3/4 to 4 grams. Wt., 4 oz. 13 A 3985 S ..... 24.95

(D) Model 808 Conical. Has .0007" conical-tip diamond stylus. Response, 15-25,000 Hz. Output, 8.0 mV per channel. Sep., 30 dB. Compliance, 10x10<sup>-6</sup> cm/dyne. Tracks from 1 to 5 grams. Shpg. wt., 4 oz. 13 A 3982 S ..... 19.95



**14<sup>55</sup>**

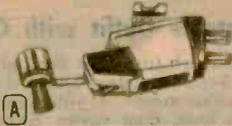
## Sonotone ceramic Cartridge

Model 9TAFHC-D77V Conical. Ceramic cartridge matches magnetic inputs. Has dual .0007" diamond styli. 20-20,000 Hz. Comp. 15x10<sup>-6</sup> cm/dyne. Sep., 30 dB. Tracks from 1 1/2 to 4 grams. Shpg. wt., 9 oz. 13 A 3823 S ..... 14.5

# Pickering hi-fi magnetic Stereo Cartridges

ALL PICKERINGS HAVE SNAP-IN BRACKETS—NO MOUNTING TOOLS REQUIRED

V15/AME-3  
V15/ATE-3  
V15/ACE-3  
V15/AM-3  
V15/AT-3  
V15/AC-3



A

P/ATE-1  
V15/AC-2  
P/AT-1  
P/AC-1



B



## "XV" Series

XV-15/750E  
XV-15/400E  
XV-15/200E  
XV-15/150  
XV-15/100

## Superb V and P Series Pickering Cartridges

**A** V15/AME-3 Elliptical. 15° .0003"x.0009" diamond stylus. 10-25,000 Hz. 32 dB sep. 3/4-1 1/2 grams. Brush. 3 oz. 13 A 3890 S. . . . . 44.95

**A** V15/ATE-3 Elliptical. Has .0004"x.0009" diamond stylus. 10-23,000 Hz. Sep., 32 dB. 2-5 grams. Brush. 3 oz. 13 A 3892 S. . . . . 39.95

**A** V15/ACE-3 Elliptical. Has .0004"x.0009" diamond stylus. 10-20,000 Hz. Sep., 26 dB. 3-5 grams. Brush. 3 oz. 13 A 3929 S. . . . . 29.95

**A** V15/AM-3 Conical. Has .0007" conical-tip diamond stylus. 10-23,000 Hz. Sep. 32 dB. 1-3 grams. Brush. 3 oz. 13 A 3893 S. . . . . 34.95

**A** V15/AT-3 Conical. Has .0007" conical-tip diamond stylus. Response, 10-23,000 Hz. Sep., 32 dB. 2-5 grams. 3 oz. 13 A 3894 S. . . . . 29.95

**A** V15/AC-3 Conical. Has .0007" conical-tip diamond stylus. 10-20,000 Hz. Sep., 26 dB. 3-7 grams. Brush. 3 oz. 13 A 3897 S. . . . . 24.95

**B** P/ATE-1 Elliptical. .0005"x.0010" diamond stylus. 10-20,000 Hz. 26 dB sep. Tracks 3-5 grams. Brush. Wt., 3 oz. 13 A 3901 S. . . . . 24.95

**B** V15/AC-2 Conical. Has .0007" diamond stylus. Response, 20-20,000 Hz. Separation, 26 dB. Tracks 3-7 grams. 3 oz. 13 A 3844 S. . . . . 21.95

**B** P/AT-1 Conical. Features .0007" conical tip diamond stylus. Response, 20-15,000 Hz. 2-5 grams. Wt., 3 oz. 13 A 3917 S. . . . . 19.95

**B** P/AC-1 Conical. Has .0007" conical tip diamond stylus. Response, 20-15,000 Hz. Tracks 3-7 grams. Wt., 3 oz. 13 A 3918 S. . . . . 17.95

XV-15/750E Deluxe Elliptical. For automatic and manual turntables. Light tracking. .0002"x.0009" elliptical diamond stylus. Response, 10-25,000 Hz. Separation 35 dB. 1/2 to 1 gram. Shpg. wt., 3 oz. 13 A 3851 S. . . . . 60.00

XV-15/400E Deluxe Elliptical. Extra-light tracking. .0003"x.0009" elliptical diamond stylus. 10-25,000 Hz. 35 dB sep. Tracks from 1/4 to 1 1/2 grams. Record cleaning brush. Wt., 3 oz. 13 A 3980 S. . . . . 49.95

XV-15/200E Elliptical. Light tracking. .0004"x.0009" elliptical diamond stylus. Response, 10-25,000 Hz. Separation, 35 dB. Tracks from 2 to 4 grams. Cleaning brush. 3 oz. 13 A 3983 S. . . . . 44.95

XV-15/150 Conical. Has .0007" tip diamond stylus. Response, 10-25,000 Hz. Separation, 35 dB. Tracks from 2 to 5 grams. With record cleaning brush. Shpg. wt., 3 oz. 13 A 3990 S. . . . . 34.95

XV-15/100 Conical. Low priced cartridge ideal for record changers. Features .0007" spherical stylus. Output, 8.0 mV per channel. 10-20,000 Hz. 3 to 7 grams. Shpg. wt., 3 oz. 13 A 3889 S. . . . . 29.95

# Shure "Dynetic" magnetic Stereo Cartridges

**C** V15 Type 11. Bi-radial .0002"x.0007" diamond stylus. 20-25,000 Hz. Over 25 dB sep. 3/4-1 1/2 grams. Trackability at 1 gram, 30 cm/sec at 1000 Hz. Shpg. wt., 6 oz. 13 A 3886 S. . . . . 67.50

**E** M44E Elliptical. Features .0004"x.0007" elliptical diamond stylus. Frequency response, 20-20,000 Hz. Separation, 25 dB. Wide tracking force range from 1 3/4 to 4 grams. Wt., 6 oz. 13 A 3887 S. . . . . 24.95

**G** M75-6 Conical. Hi track .0006" conical stylus. Frequency response, 20-20,000 Hz. Separation, 25 dB. Tracks from 1 1/2 to 3 grams. 6 oz. 13 A 3865 S. . . . . 24.50

**J** M7/N21D Conical. .0007" conical diamond stylus. Frequency response, 20-20,000 Hz. Separation, 20 dB. Tracks 1 1/2 to 2 1/2 grams. 3 oz. 13 A 3915 S. . . . . 17.95

**K** M3D Conical. Ever-popular economy cartridge. Has .0007" conical diamond stylus. Response, 20-15,000 Hz. 20 dB sep. Tracks from 3 to 6 grams. Wt., 6 oz. 13 A 3900 S. . . . . 12.95

**D** M55E Elliptical. 15° .0002"x.0007" diamond stylus. Frequency response, 20-20,000 Hz. Separation, 25 dB. Tracks from 3/4 to 1 1/2 grams. Shpg. wt., 6 oz. 13 A 3827 S. . . . . 29.95

**F** M32E Elliptical. Fine, low-cost cartridge with .0004"x.0007" diamond stylus. Response, 20-17,000 Hz. Compliance, 10x10<sup>-6</sup> cm/dyne. Separation, 20 dB. Tracks from 2 to 5 grams. 3 oz. 13 A 3879 S. . . . . 29.50

**H** M44-7 Conical. Retractable needle. 15° .0007" diamond stylus. 20-20,000 Hz. Separation, 25 dB. Tracks from 1 1/2 to 3 grams. Shpg. wt., 6 oz. 13 A 3820 S. . . . . 19.95

**H** M44C Conical. Has 15° .0007" conical-tip diamond stylus. Frequency response, 20-20,000 Hz. Separation, 25 dB. Tracks 3-5 grams. Wt., 4 oz. 13 A 3934 S. . . . . 17.95

## Elliptical Cartridges



V15 Type 11 **C** M55E **D**



M44E **E** M32E **F**

## Conical Cartridges



M75-6 **G** M44-7 **H**



M7/N21D **J** M3D **K**

## Hi-Track Series



M91E  
M92E  
M93E

### M91E Elliptical Cartridge

Bi-radial .0002"x.0007" diamond stylus. 20-20,000 Hz. 25 dB sep. Tracks from 3/4 to 1 1/2 grams. Trackability at 1 gram; 28 dm/sec at 1 kHz. Wt., 6 oz. 13 A 3872 S. . . . . 49.95

### M92E Elliptical Cartridge

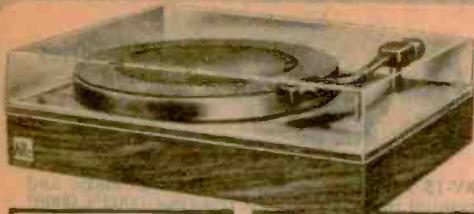
Bi-radial .0002"x.0007" diamond stylus. Response, 20-20,000 Hz. Separation, 25 dB. Tracks from 3/4 to 1 1/2 grams. Trackability; 26 cm/sec at 1 kHz. Shpg. wt., 6 oz. 13 A 3873 S. . . . . 44.95

### M93E Elliptical Cartridge

Provides exceptional performance in automatic or manual turntables. Bi-radial .0004"x.0007" diamond stylus. Response, 20-20,000 Hz. Separation, 25 dB. Tracks from 1 1/2 to 3 grams. Shpg. wt., 6 oz. 13 A 3874 S. . . . . 39.95

All cartridges on these pages have standard mounting centers

# Manual Turntables with Cartridge Offers



## Famous AR "XA" Turntable Outfit with Cartridge

With Elliptical Cartridge

**78<sup>00</sup>**

Deluxe Elliptical Cartridge

**83<sup>00</sup>**

XA Alone

**78<sup>00</sup>**

Save \$24.94. Superb turntable has belt drive for exact 33 $\frac{1}{3}$ , 45-rpm speeds. Viscous-damped 12" arm. Synchronous motor. 3 $\frac{1}{2}$ -lb. platter. Turntable includes base, dust cover. Empire 80EE, Pickering P/ATE-1 or Shure M44E stereo cartridge 1¢ more—specify. 5 $\frac{1}{4}$ x16 $\frac{3}{4}$ x12 $\frac{1}{2}$ ". For 115 VAC.

13 A 0932 CDU. Shpg. wt., 20 lbs. .... 78.01

XA with Deluxe Elliptical Cartridge. Save \$34.95. Empire 888E, Pickering V15/ATE-3, or Shure M93E—Specify Cartridge.

13 A 0393 CDU. Shpg. wt., 20 lbs. .... 83.00

13 A 3119 U. XA Alone. Wt., 20 lbs. .... 78.00

**only 1¢ more**

80EE \$24.95    P/ATE-1 \$24.95    M44E \$24.95

**only \$5 more**

888E \$39.95    V15/ATE-3 \$39.95    M93E \$39.95

**Save \$59.90**



Empire 999VE Stereo Elliptical Cartridge

With Base, Dust Cover, Cartridge

**249<sup>95</sup>**

Alone

**199<sup>95</sup>**

**Save \$44.95**



Empire 999VE Stereo Elliptical Cartridge

With 999VE

**219<sup>95</sup>**

Alone

**189<sup>95</sup>**

## Empire 598 with Base, Dust Cover, Cartridge

Separately \$309.85. Has new arm for cartridges tracking low as  $\frac{1}{4}$  gram. Hysteresis synchronous motor has belt drive to turn massive flywheel—largest ever in a home turntable—and 10-lb. platter for low rumble of -90 dB. Pneumatic suspension will absorb dancing and even jumping. Very low wow and flutter. Chrome finish. 8 $\frac{1}{2}$ x17 $\frac{1}{2}$ x15 $\frac{1}{8}$ ". With walnut base, dust cover, 999VE stereo elliptical cartridge. 115 VAC.

13 A 0968 L2U. Shpg. wt., 30 lbs. .... 249.95

13 A 2139 U. 598 Alone. Shpg. wt. 26 lbs. .... 199.95

13 A 2140 X. Base and Dust Cover. Wt., 14 lbs. .... 34.95

## Empire 398A-G Turntable with 999VE Cartridge

Separately \$264.90. Deluxe outfit with walnut base and Empire's finest stereo elliptical cartridge. Turntable's hysteresis motor on isolated suspension boasts belt-drive to turn 8-lb. balanced aluminum platter for vibration-free performance. Balanced arm has anti-skating and free suspension for perfect tracking at lowest pressure—adjustable from 0-8 grams. Top-of-plate belt positioning for 33 $\frac{1}{3}$ , 45, or 78 rpm. Rich satin-gold finish. Size, 7 $\frac{1}{2}$ x17x15". For 115 VAC.

13 A 0418 DU. Shpg. wt. 28 lbs. .... 219.95

13 A 2257 U. 398A-G Alone. Wt., 28 lbs. .... 189.95



**only 1¢ more**

Empire 80EE Rez. \$24.95

Pickering P/ATE-1 Rez. \$24.95

Shure M44E Rez. \$24.95

With Cartridge **67<sup>96</sup>**

B-62 Alone **67<sup>95</sup>**



**74<sup>95</sup>**

## Empire 990 Pickup Arm tracks low as $\frac{1}{4}$ gram

Designed for new low-tracking-force cartridges. Provides full stereo balance front and back. Cuing lever, variable anti-skate. Sealed ball bearings. Tracking force, 0-8 grams. Chrome finish. Less cartridge.

13 A 2163 X. Shpg. wt., 7 lbs. .... 74.95

## Deluxe Rek-O-Kut Pickup Arm tracks under one gram

**44<sup>95</sup>**



## Bogen Manual Turntable with Stereo Cartridge

Model B-62. Save \$24.94. Precision manual turntable has click-stop variable speed control for all four speeds. Counterweighted arm with cuing control protects your records and stylus. Size, 15 $\frac{1}{4}$ x13 $\frac{1}{4}$ ". Optional base below. Choose Empire 80EE, Pickering P/ATE-1 or Shure M44E stereo elliptical cartridge. For 115 VAC. Imported.

13 A 0399 CDU. Specify Cartridge. Wt., 23 lbs. .... 67.96

13 A 3277 X. B-62 Alone. Wt., 23 lbs. .... 67.95

13 A 3278 X. PB7 Walnut Base. Wt., 3 lbs. .... 8.25

13 A 3221 X. COV-1 Dust Cover. Wt., 2 lbs. .... 8.25

Model S-320. Premium-quality 12" stereo pickup arm. Exact lateral balance is assured by exclusive Rek-O-Kut "Omni-Balance" feature. Also has completely isolated counterweight to prevent pickup arm resonance. Single-hole mounting. Tracks at less than one gram. Less cartridge. Shpg. wt., 2 $\frac{1}{2}$  lbs.

13 A 3020 X. .... 44.95

13 A 3024. PS-20L Extra Plug-in Head. Wt., 6 oz. .... 5.95

# Replacement Styli and Record Packages

Manufacturer's exact-replacement Styli for stereo hi-fi cartridges

- Made by manufacturer to duplicate the original stylus
- Precision-manufactured to insure exact performance
- Wide selection to fit most popular stereo cartridges

Replacement styli (needles) made by the original cartridge manufacturer, so performance exactly duplicates the original stylus. These are exact replacements for exact performance. When you need a replacement stylus be sure of top quality by selecting from this list. Selection includes styli from the most popular cartridge manufacturers for their most popular models. "For" column indicates cartridges.



Choose the exact-replacement Stylus for your stereo cartridge

Stock No.	Mfr.	Needle Type	Size	For	EACH
13 A 3836	S Shure	VN2E	.0007"	V-15	25.00
13 A 3231	S Shure	VN15E	.0007"	V-15 Type II	27.00
13 A 3316	S Shure	N32E	.0007"	M32E	14.50
13 A 3808	S Shure	N99	.0007"	M99 Series	12.95
13 A 3837	S Shure	N44-5	.0005"	M44-5	11.00
13 A 3838	S Shure	N44-7	.0007"	M44-7, M98/A	9.75
13 A 3923	S Shure	N21-D	.0007"	M7, M3/N21D	11.00
13 A 3839	S Shure	N55E	.0007"	M55E, M80 Series	14.95
13 A 3920	S Shure	N3D	.0007"	M3D, M7D, M8D	7.95
13 A 3862	S Shure	N44C	.0007"	M44C	9.00
13 A 3312	S Shure	N44E	.0007"	M44E	12.50
13 A 3828	S Shure	N91E	.0007"	M91E	24.50
13 A 3829	S Shure	N92E	.0007"	M92E	22.50
13 A 3842	S Shure	N93E	.0007"	M93E	19.50
13 A 3850	S Shure	N75-6	.0007"	M75-6	11.35
13 A 3866	S Pick.	PD07/C	.0007"	P/AC-1	9.15
13 A 3336	S Pick.	PDE	.0007"	PAT/E	14.95
13 A 3843	S Pick.	DI500AME-2	.0007"	V15/AME-1, 2	19.90
13 A 3305	S Pick.	DI500AME-3	.0007"	V15/AME-3	24.95
13 A 3306	S Pick.	DI500ATE-3	.0007"	V15/ATE-3	22.50
13 A 3308	S Pick.	DI507AT-3	.0007"	Pick. V15/AT-3	13.75
13 A 3309	S Pick.	DI500ATE-2	.0007"	V15/ATE-2	17.90
13 A 3863	S Pick.	DI507AT-2	.0007"	V15/AT-2, -1; KLH V15/AT-1, HAT, HAT-2, and HBAT-2; Scott V15/AT-2	10.95
13 A 3319	S Pick.	DI500ACE-3	.0007"	V15/ACE-3	20.40
13 A 3320	S Pick.	PD07/T	.0007"	P/AT	9.90
13 A 3805	S Pick.	D3807ATG	.0007"	D3807ATG Series	12.00
13 A 3321	S Pick.	4500AME	.0007"	XV15/AME.450E	26.95
13 A 3322	S Pick.	4507AM	.0007"	XV15/AM.350	22.95

Stock No.	Mfr.	Needle Type	Size	For	EACH
13 A 3323	S Pick.	4500ATE	.0007"	XV15/ATE, 200E	24.95
13 A 3324	S Pick.	4507AT	.0007"	XV15/AT.150	14.95
13 A 3303	S Pick.	4507AC	.0007"	XV15/AC.100	12.40
13 A 3334	S Pick.	D1507AM-2	.0007"	V15/AM-2, Scott V15/AM-2	12.25
13 A 3335	S Pick.	D1507AC-2	.0007"	V15/AC-2, -1; Bogen V15/AC-2; Fisher V15/AC-1	9.95
13 A 3908	S Empire	S880P-6RD	.0006"	880P	12.95
13 A 3845	S Empire	S880PE-ERD	.0007"	880PE	18.95
13 A 3906	S Empire	S880-7RD	.0007"	880	9.95
13 A 3859	S Empire	S888P-6RD	.0006"	888P	13.95
13 A 3860	S Empire	S888PE-ERD	.0007"	888PE	15.95
13 A 3861	S Empire	S888-7RD	.0007"	888	10.95
13 A 3337	S Empire	S80EE-ERD	.0007"	80EE	14.95
13 A 3323	S Empire	S888E-ERD	.0007"	888E	17.45
13 A 3304	S Empire	S888E-ERD	.0007"	888SE	22.45
13 A 3325	S Empire	S808E-ERD	.0007"	808E	14.95
13 A 3326	S Empire	S808-7RD	.0007"	808	10.95
13 A 3328	S Empire	S888TE-ERD	.0007"	888TE	24.95
13 A 3806	S Empire	S888VE-ERD	.0007"	888VE	29.95
13 A 3329	S Empire	S999VE-ERD	.0007"	999VE	36.95
13 A 3338	S Empire	S1000VE-ERD	.0007"	1000ZE	47.50
13 A 3330	S ADC	R12-E	.0007"	10E, 10E MK II	22.50
13 A 3847	S ADC	R-4/E	.0007"	Point-Four-E	25.00
13 A 3849	S ADC	R-770	.0007"	770	10.00
13 A 3331	S ADC	R20	.0007"	20	7.00
13 A 3807	S ADC	R-5/E	.0007"	350E	18.00
13 A 3809	S ADC	R-9/E	.0007"	990E	12.00
13 A 3332	S Grado	BTR/S	.0007"	BTR	7.50
13 A 3333	S Grado	BTE/S	.0007"	BTE	12.50

## Record Packages for spectacular stereo sound



George Wright's "Organ Spectacular" **1588**

Famous 5-record "Stereo Launcher" **779**

Fascinating sound effects in stereo **995**

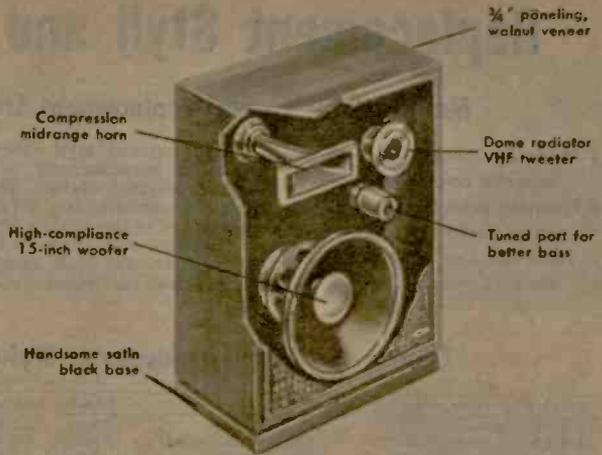
Ten magnificent organ records in an exciting, money-saving collection. You'll thrill to stirring stereo high fidelity music. Titles include: The George Wright Sound; Showtime; George Wright Plays the Mighty Wurlitzer Organ; The Roaring 20's; Have Organ Will Travel; Command Performance; Encores, Vol. II; The Genius of George Wright; Original Sweet and Low; others. 5 lbs.  
13 A 2022 EX. . . . . 15.88

Discover the full dynamics of your stereo hi-fi system. Five-record set helps you set up your system; they're great entertainment too. Stereo LP records include spectacular sound effects, percussion instruments, powerful classical music, popular big-band music, and original Hollywood film sound tracks. Provides almost 3 1/2 hours of glorious listening pleasure. Shpg. wt., 4 lbs.  
13 A 3215 EX. . . . . 7.79

A broad, categorized assortment of sounds, familiar and unusual, recorded in spectacular stereo for truly exciting listening and emotional impact. Five-record set includes sounds of surf, ocean liners at sea, jet engines, percussion instruments, tropical birds, roaring lions and over a hundred others. Perfect for special effects in home movies, sound tracks or editing into tapes. Wt., 4 lbs.  
13 A 2146 EX. . . . . 9.95

You get more for your dollar at Allied

**Big 15" woofer, horn  
midrange and dome  
radiator tweeter  
.. all in a beautiful  
cabinet for use  
on shelf or floor**



## Our finest Allied® hi-fi Speaker System

**149<sup>95</sup>** \$8  
monthly\*

*Three superb hi-fi speakers plus precision-engineered enclosure with luxurious walnut veneer finish and handsome sculptured moldings make this Speaker System an amazing value!*

Model 2385. Our finest Allied speaker system offers features and superb hi-fi sound which you will not find anywhere else at this price. Powerful 15" woofer has cloth-roll suspension for high compliance and long cone excursions necessary for bass that you can actually feel. Giant 5¼-lb. magnet structure and 1½" voice coil assure distortion-free bass down to the lowest pipe-organ frequencies.

Die-cast, horn-loaded compression-type midrange speaker features large magnet structure and 1" voice coil. Provides high-efficiency and smooth, clear midrange sound from 2000 to 10,000 Hz. Wide-dispersion dome radiator tweeter sounds brilliant treble tones from 10,000 Hz to beyond audibility. Built-in electrical crossover network divides the audio range at 1000 and 8000 Hz. Tweeter, midrange controls on rear of cabinet.

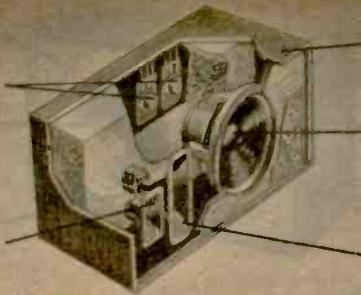
Solid ¾" hardwood enclosure has handsome walnut veneer finish on all four sides and stylish sculptured moldings. Fiberglass insulation prevents annoying resonances. Tastefully accented grille cloth will blend with almost any decorating scheme. Can be placed horizontally on bookshelf or vertically on floor with flush-grooved satin black base included. Carefully handcrafted for lasting beauty. Power capacity, 100 watts peak. 30¼"x20½"x14". 20 A 9715 Z. Shpg. wt., 70 lbs. . . . . 149.95



### SPECIFICATIONS

*Frequency Response:* 20 Hz to beyond audio range. *Woofer:* 15" high compliance; cloth-roll suspension; 5¼-lb. magnet structure; 1½" voice coil for excursions of up to 1¾". Flux, 6975 gauss. Free-air resonance, 16 Hz. Response, 20-2000 Hz. *Midrange:* die-cast, horn-loaded compression-type; 4-oz. magnet structure. 1" voice coil. Flux, 8100 gauss. Response, 2000-10,000 Hz. *Tweeter:* dome radiator; 9-oz. magnet structure. 1" voice coil. Flux; 12,200 gauss. Response; 10,000 Hz to beyond audibility. *Crossovers:* 1000 Hz and 8000 Hz. *Capacity:* 50 watts, 100 watts peak. *Impedance:* 8 ohms.

Midrange and treble controls



3/4" wood paneling with walnut veneer

Acoustic-suspension 12" woofer

Compression hi-frequency tweeter

Compression midrange with diffraction horn

Kit form

99<sup>95</sup>

\$5 monthly  
see page 438

Assembled

129<sup>95</sup>

\$7 monthly  
see page 438

**Best Allied<sup>®</sup> bookshelf acoustic-suspension system . . . with horn midrange and tweeter**

**ASSEMBLE IT YOURSELF AND SAVE \$30.00**



**Three-way 12-inch acoustic-suspension Speaker System Kit for magnificent high-fidelity sound**

12" acoustic-suspension woofer for powerful bass, plus a horn midrange and a horn tweeter make this our best Allied bookshelf system . . . truly professional performance

Model 2370K. You could pay more for a bookshelf speaker system, and still not get sound that will give you more satisfying listening. Heavy-duty 12" acoustic-suspension woofer pours out deep bass as low as 20 Hz. Compression-type midrange with diffraction horn delivers the important middle frequencies with a realism that brings music to life. High-frequency tweeter, also with a diffraction horn, gives you wide-dispersion, bell-like tones for a more precise "stereo image." Two level controls at rear of enclosure permit easy adjustment of midrange and tweeter volume for personalized response. Kit includes everything for easy assembly in one evening, using just a screwdriver. With walnut finishing oil and easy-to-follow, fully illustrated instructions. Size, 14x25x13" deep. Shpg. wt., 50 lbs.  
20 A 9729 Z. Kit Form . . . . .99.95  
20 A 9730 Z. Model 2370. Factory Assembled and Finished . . . 129.95

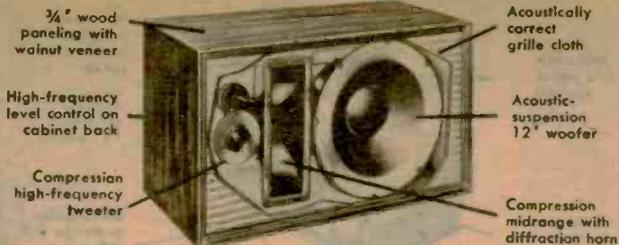
**SPECIFICATIONS**

- Overall Frequency Response:* 20 Hz to beyond audio range.
- Woofer:* 12" acoustic-suspension high-compliance, with 3 1/2 lb. magnet structure. Flux, 6000 gauss. 2" 4-layer voice coil. Frequency response, 20-1000 Hz.
- Midrange:* compression-type with diffraction horn, 6-oz. magnet structure, 1" voice coil. Flux, 7000 gauss. 1000 to 5000 Hz.
- Tweeter:* compression-type with diffraction horn, 13-oz. Alnico V magnet structure, 1" voice coil. Flux, 9000 gauss. Responds to beyond audio range.
- Power Capacity:* 35 watts, 70 watts peak.
- Crossovers:* 1000 and 5000 Hz.
- Voice Coil Impedance:* 8 ohms.
- Controls:* two level—adjust tweeter and midrange.
- Enclosure:* solid 3/4" wood paneling with walnut veneer.

**SHIPPING NOTE:** All items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

# Allied three-way 12" acoustic-suspension bookshelf Speaker System . . . priced low

**ASSEMBLE IT YOURSELF  
AND SAVE \$25.00**



Kit form

Assembled

**74<sup>95</sup>**

\$5 monthly  
see page 438

**99<sup>95</sup>**



## SPECIFICATIONS

**Overall Frequency Response:** 25 to over 20,000 Hz.

**Woofer:** 12" acoustic-suspension, high-compliance, cloth-roll with 6 $\frac{1}{2}$ -lb. ceramic magnet structure. Flux, 12,000 gauss. 2" voice coil. Response, 25-2500 Hz.

**Midrange:** compression driver with wide-dispersion diffraction horn, 6-oz. Alnico V magnet structure. Flux, 8500 gauss.  $\frac{3}{4}$ " voice coil. Response, 2500-10,000 Hz.

**Tweeter:** compression-type, with 6-oz. Alnico V magnet structure and  $\frac{3}{4}$ " voice coil. Response, 10,000 Hz to beyond 20,000 Hz.

**Crossovers:** L-C at 1000 Hz and 10,000 Hz.

**Power Capacity:** 30 watts, 60 watts peak.

**Voice Coil Impedance:** 8 ohms.

**Control:** tweeter balance.

**Overall Size:** 14x25x13 $\frac{1}{2}$ " deep.

**Material:**  $\frac{3}{4}$ " wood with walnut veneer and sculptured molding.

## Three-way 12-inch acoustic-suspension Speaker System Kit with midrange diffraction horn

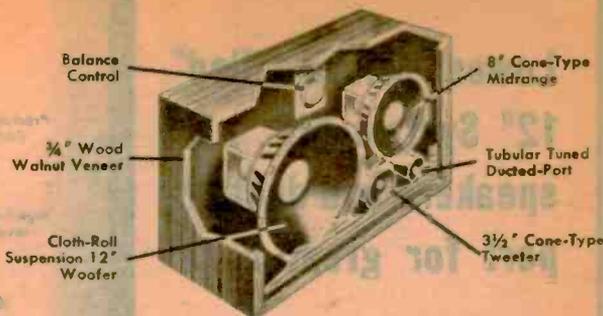
Even at our thrifty price you get acoustic-suspension for deep bass down to 25 Hz, plus compression tweeter and compression midrange horn for response beyond 20,000 Hz

Model 2300CK. Only at Allied can you get an acoustic-suspension system of this quality with handsome sculptured molding at such a low price! Powerful 12" acoustic-suspension woofer features cloth-roll suspension with massive 6 $\frac{1}{2}$ -lb. magnet structure and 2" voice coil for thundering bass down to 25 Hz. Compression midrange with diffraction horn for smooth wide-dispersion sound. Compression-type tweeter offers clean response to beyond 20,000 Hz. Crossovers at 1000 Hz and 10,000 Hz. Tweeter balance control at rear of cabinet permits adjustment of high-frequency response to suit individual room acoustics. Fiberglass insulated. For vertical or horizontal placement. Only a screwdriver is needed to assemble the kit. With detailed, easy-to-follow instructions and walnut finishing oil. Size, 14x25x13 $\frac{1}{2}$ ". Shpg. wt., 49 lbs.

20 A 9762 U. Kit Form. . . . . 74.95  
20 A 9761 U. Model 2300C. Factory Assembled and Finished. . . . . 99.95

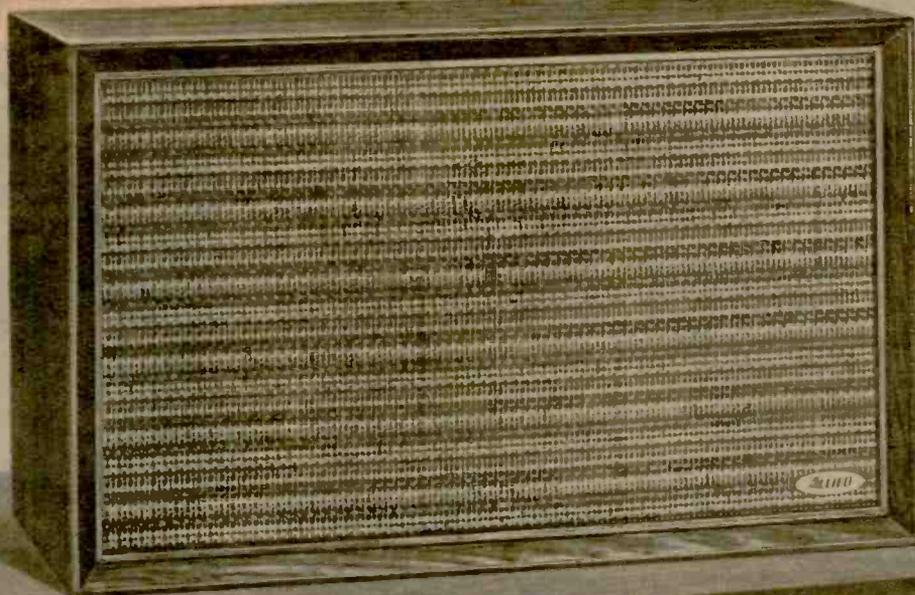
# Allied three-way 12" Speaker System with tuned ducted-port bass reflex enclosure

**ASSEMBLE IT YOURSELF  
AND SAVE \$20.00**



Kit form **YOURSELF** Assembled

**59<sup>95</sup>** \$5 monthly  
see page 438 **79<sup>95</sup>**



## SPECIFICATIONS

**Overall Response:** 30-18,000 Hz.  
**Woofer:** 12", 2 1/4-lb, Alnico V magnet structure, cloth-roll suspension, 1 1/2" copper voice coil. Response, 30-2000 Hz.  
**Midrange:** 8" cone-type, 4-oz. Alnico V magnet structure, 1" voice coil. Response, 2000 to 5000 Hz.  
**Tweeter:** 3 1/2" cone-type, 6-oz. Alnico V magnet structure, 3/8" voice coil. Response, 5000-18,000 Hz.  
**Crossovers:** electrical, 2000 and 5000 Hz.  
**Power Capacity:** 30 watts, 60 watts peak.  
**Voice Coil Impedance:** 8 ohms.  
**Control:** tweeter balance, at rear.  
**Enclosure:** tubular-tuned ducted-port bass reflex-type with fiberglass insulation to prevent resonance.  
**Overall Size:** 14 1/2 x 24 x 10" deep.  
**Material:** 3/4" wood paneling with walnut veneer finish, sculptured molding.

## SPECIFICATIONS

### High-performance three-way Speaker System Kit with powerful cloth-roll-suspension 12" woofer

You can't beat this speaker system for value. . . big 12" woofer and cone-type midrange and tweeter units provide 30-18,000 Hz response that covers full orchestral range

Model 2330AK. Here's more proof that an Allied speaker system gives you more value for your money. Three separate speakers are matched to give you superb music reproduction. Husky high-compliance 12" cloth-roll suspension woofer for smooth bass down to 30 Hz. Cone-type 8" midrange speaker delivers clear mid-frequencies. Cone-type 3 1/2" tweeter provides sparkling treble response up to 18,000 Hz. Tweeter balance control permits adjustment to room acoustics and your taste. Enclosure is 3/4" wood with walnut finish and sculptured molding, and custom woven grille cloth. Fiberglass-lined to prevent annoying spurious resonance. Kit easily assembles in just a few hours with only a screwdriver. With all parts, instructions and walnut finishing oil. Size, 14 1/2 x 24 x 10". Shpg. wt., 33 lbs.  
 20 A 9709 U. Kit Form. . . . . 59.95  
 20 A 9720 U. Model 2330A, Factory Assembled and Finished. . . 79.95

# Lowest-priced Allied® 12" System Kit . . . 3 speakers and ducted port for great hi-fi

**ASSEMBLE IT YOURSELF  
AND SAVE \$20.00**

Precision-tuned  
ducted-port

High-frequency  
level control

¾" wood  
cabinet



6" midrange  
radiator

3½" cone-type  
tweeter

Powerful 12"  
woofer

Kit form

**44<sup>95</sup>**

Assembled

**64<sup>95</sup>**

\$5 monthly  
see page 438



**ALLIED**

## SPECIFICATIONS

**Overall Response:** 35-17,000 Hz.

**Woofer:** 12" high-compliance with 1¾ lb. Alnico V magnet structure. Flux, 10,200 gauss. 1¼" voice coil. Response, 35-400 Hz.

**Midrange:** 6" cone-type. 12-oz. Alnico V magnet structure. Flux, 9400 gauss. ¾" voice coil. Response, 400-5000 Hz.

**Tweeter:** 3½" cone-type direct-radiator. 6-oz. Alnico V magnet structure. Flux, 8200 gauss. 9/16" voice coil. Response, 5000 to 17,000 Hz.

**Crossovers:** electrical at 400 and 5000 Hz.

**Power Capacity:** 30 watts, 60 watts peak.

**Voice Coil Impedance:** 8 ohms.

**Enclosure:** Bass reflex-type with tubular tuned port and fiberglass insulation to prevent resonance.

**Cabinet Material:** ¾" wood finished with oiled walnut veneer.

**Control:** tweeter level on back.

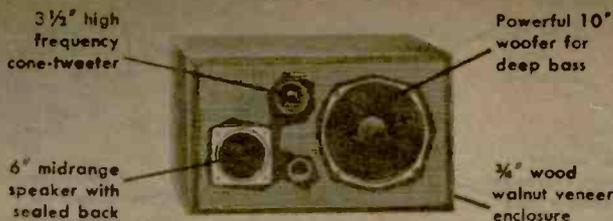
## Three-way 12" Speaker System Kit combines special acoustic design with handsome walnut styling

Here's our lowest priced Allied system kit that has a powerful 12" woofer . . . hear solid 35-Hz bass, and treble response up to 17,000 Hz . . . a best buy for audiophiles on a budget

Model 3030BK. Enjoy full-range hi-fi reproduction and luxurious styling with this popular speaker system. Features 12" woofer for resounding bass down to 35 Hz. Highly efficient 6" midrange speaker provides smooth coverage of the important middle frequencies. Special design 3½" direct-radiator tweeter disperses sparkling highs. Balance control at rear of cabinet permits adjustment of tweeter response. Acoustic insulation prevents resonance. Has ¾" wood enclosure with walnut finish, beautiful sculptured molding, and cane grille cloth that matches walnut finish. Can be assembled in less than one hour with just a screwdriver. Then sit back—enjoy great hi-fi—and count your savings! With parts, instructions and finishing oil, 14½x24x9". Shpg. wt. 28 lbs.

20 A 9743 U. Kit Form. . . . . 44.95  
20 A 9745 U. Model 3030BK. Factory Assembled and Finished. . . . . 64.95

**SHIPPING NOTE:** Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages



Kit form  
**34<sup>95</sup>**

\$5  
monthly\*

Assembled  
**49<sup>95</sup>**

**Lowest Priced Allied  
Speaker System Kit  
has 3-way design  
with 10" woofer**

**ASSEMBLE IT YOURSELF  
AND SAVE \$15.00**



Model 3017K. Imagine the thrill of assembling a three-way speaker system that looks and sounds as good as this! And you pocket big \$15.00 savings when you "do it yourself." Allied has made it so easy that all you have to do is follow the clearly illustrated instructions and in practically no time at all the job is done. No special tools are required—all you need is a screwdriver. Even the finishing oil is included for rubbing in a handsome professional-looking walnut finish.

This three-way speaker system features a big 10-inch woofer with husky 1 3/4 pound ceramic magnet structure coupled to a large 1-inch four-layer copper-wire voice coil for smooth, peak-free bass you can feel. Sturdy 3/4-inch wood enclosure is a bass reflex type with precision tuned ducted-port which permits deep, natural bass response down to 40 Hz.

Efficient 6-inch cone type speaker with 3 1/4-ounce Alnico V magnet structure and 3/4-inch voice coil delivers pure midrange sound between 800 Hz and 5000 Hz. Features sealed back to prevent annoying, strident sound due to intermodulation with the woofer. Specially designed 3 1/2-inch cone tweeter with 2-ounce Alnico V magnet structure and 3/8-inch voice coil provides brilliant, sparkling treble response up to 17,000 Hz. Built-in capacitor type electrical crossover network divides system response at 800 Hz and 5000 Hz for the smoothest possible sound.

Wood enclosure has handsome walnut veneer with attractive, acoustically transparent cane grille cloth which will complement any decor. Kit includes all parts, finishing oil and detailed instructions. Shpg. wt., 22 lbs. Sent truck or express.

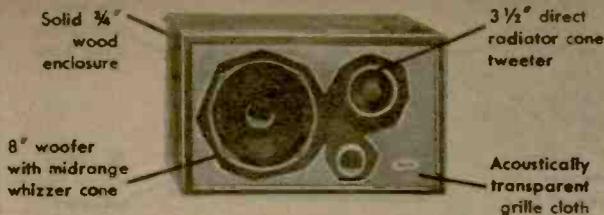
20 A 9742 U, Kit Form..... 34.95  
20 A 9741 U, Model 3017, Factory Assembled and Finished..... 49.95

**SPECIFICATIONS**

**Overall System Frequency Response:** 40-17,000 Hz. **Woofer:** 10-inch cone with 1 3/4 pound ceramic magnet structure. Flux density: 8600 gauss. Four-layer copper-wire voice coil with 1-inch diameter. Frequency response: 40-800 Hz. **Mid-range:** 6-inch cone type with sealed back to prevent intermodulation with woofer. 3 1/4-ounce Alnico V magnetic structure with 6200 gauss flux density. 3/4-inch diameter copper-wire voice coil. Frequency response: 800-5000 Hz. **Tweeter:** 3 1/2-inch cone type with 2-ounce Alnico V magnet structure. Flux density: 4800 gauss. 3/8-inch diameter copper-wire voice coil. Frequency response: 5000-17,000 Hz. **Crossover Network:** built-in electrical capacitor type, with crossovers at 800 and 5000 Hz. **Power Handling Capacity:** 20 watts program, 40 watts peak. **System Impedance:** 8 ohms nominal. **Enclosure Design:** bass reflex type with tuned ducted port. **Material:** 3/4-inch wood with five-ply walnut veneer and 1/2-inch-thick fiberglass acoustic insulation. Acoustically transparent cane grille cloth. **Overall Size:** 12x22x8" deep.

\*Buy with no money down . . . see full Credit details on page 438

Our lowest priced  
**Allied bookshelf  
 Speaker System . . .**  
**8" woofer has heavy  
 magnet for good bass**



**24<sup>95</sup>**

\$5 monthly\*

Ideal for compact stereo systems  
 or wherever limited space is a  
 major problem

Excellent choice for piping  
 beautiful hi-fi music into any  
 room in your home

Sturdy construction and smart  
 styling will delight even the  
 fussiest buyer!



Model 3007. Our lowest priced Allied bookshelf speaker system. Built for outstanding high-fidelity performance at an unbeatable low price! Special 8" woofer has powerful high-flux 1½-lb. ceramic magnet structure coupled to 1" voice coil for high efficiency and smooth, peak-free bass down to 50 Hz. Bass reflex type enclosure with precision tuned ducted port and fiberglass insulation prevents annoying resonance and improves bass output. Whizzer cone improves mid-frequency response for much greater "presence". Direct radiator cone tweeter has 6-oz. Alnico V magnet structure coupled to ¾" voice coil for brilliant treble response up to 15,000 Hz. Built-in resistor-capacitor type crossover network divides system response at 8000 Hz for efficient distribution of sound. Solid ¾" wood enclosure has handsome walnut moldings and oiled walnut veneer finish. Durable, attractive cane grille cloth will complement any decor. Fits almost anywhere—only 11½x18½x7½" deep.  
 20 A 9739 X. Shpg. wt., 17 lbs. . . . . 24.95

**SPECIFICATIONS**

*Frequency Response:* 50-15,000 Hz. *Woofer:* 8" with whizzer midrange cone; 1½-lb. ceramic magnet structure and 1" voice coil. *Tweeter:* 3½" with 6-oz. Alnico V magnet structure and ¾" voice coil. *Crossover:* R-C type at 8000 Hz. *Power Capacity:* 15 watts, 30 watts peak. *Impedance:* 8 ohms. *Enclosure:* ¾" wood bass reflex with fiberglass insulation and tuned port.

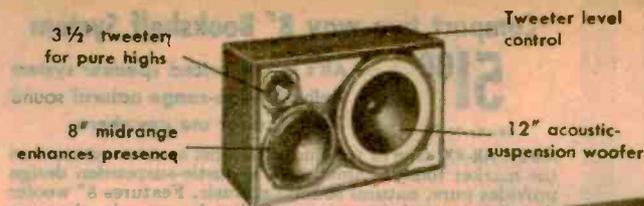
**Allied Extension Speaker with walnut finish**

**12<sup>95</sup>**

Perfect extension speaker for stereo in that "other" room, or an auxiliary speaker for radios or TV sets

Model 2375A. Here's wide-range sound at the lowest possible price. This decoratively-styled extension speaker system features convenient side-mounted volume control, plus a husky 6x9" oval speaker with ¾" voice coil for smoother sound. Use a pair for surprisingly good stereo sound. Handsome walnut-finished cabinet with matching cane grille cloth. Includes 25 feet of speaker cable with alligator clips attached. *Power Capacity:* 6 watts, 12 watts peak. *Impedance,* 8 ohms. *Measures* only 7¾x11½x3¾" deep.  
 20 A 9746 X. Shpg. wt., 4 lbs. . . . . 12.95





Save when you buy  
a pair of our  
best-selling Utah  
acoustic-suspension  
3-way 12" Systems

One system **89<sup>95</sup>**  
Two systems **90<sup>95</sup>**  
\$5 monthly\*

**A special-purchase value**

Model A-90. Two three-way acoustic-suspension speaker systems engineered for fine quality can be yours for only \$90.95. Big 12" high-compliance woofer with 2 1/4-lb. magnet structure (Alnico V magnet) and 1 1/2" copper voice coil delivers powerful, natural bass all the way down to 28 Hz.

Midrange 8" speaker produces clear middle frequencies. 3 1/2" cone tweeter provides clean, pure treble. Tweeter brilliance control. Sturdy 3/4" wood walnut veneer cabinet with complementary beige grille cloth.

Smooth response from 28 to 18,000 Hz. Electrical crossovers at 2200 and 5000 Hz. Power capacity, 30 watts, 60 watts peak. Impedance 8 ohms. Size, 14x23x10".

20 A 7053 U. One System. Wt., 33 lbs. .... 89.95  
Two Systems. Shpg. wt., 66 lbs. .... 90.95

**Sensational offer on two Utah acoustic-suspension two-way 8-inch Speaker Systems**

One System **49<sup>95</sup>** Two Systems **50<sup>95</sup>**  
\$5 monthly\* \$5 monthly\*

Model AS-2. An unbeatable value... great for the budget-minded. You can buy a pair of quality-made Utah two-way 8-inch acoustic-suspension speaker systems for only \$50.95. Offers wide response sound. Compact cabinet fits most anywhere.

Features 8" woofer, with four-layer 1" voice coil, that reproduces deep, powerful bass down to 40 Hz. Low resonant frequency. 3 1/2" tweeter with 3/16" diameter voice coil offers sparkling treble all the way up to 18,000 Hz. Impedance, 8 ohms.

Crossover at 4500 Hz for optimum frequency distribution. Capacity: 15 watts, 25 watts peak. Handsomely styled 3/4" walnut veneer cabinet only 11x18x9".

20 A 7073 U. One Speaker System. Wt., 22 lbs. .... 49.95  
Two Speaker Systems. Shpg. wt., 44 lbs. .... 50.95



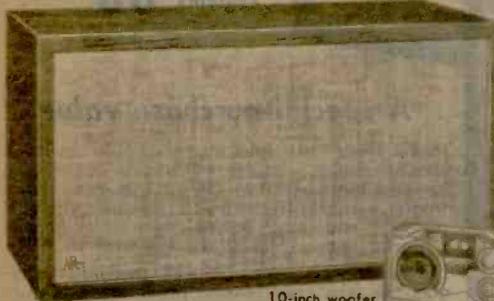
\*See page 438 for full Credit details

# Acoustic-suspension Speaker Systems

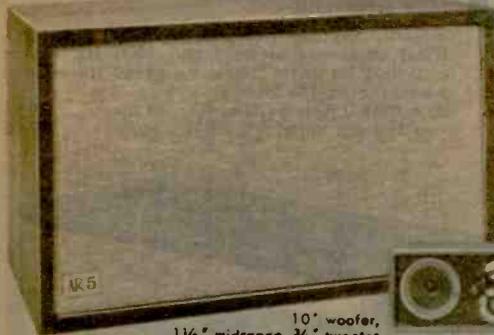
by AR INC.



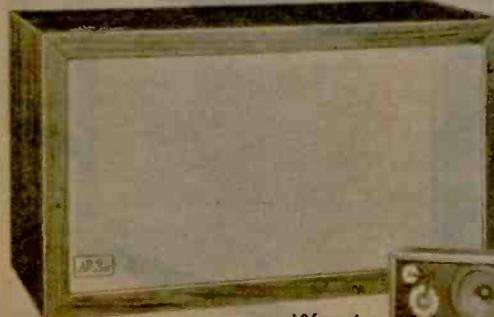
8-in. woofer  
2 1/4-in. tweeter



10-inch woofer  
3 1/2" midrange, 1 3/8-inch tweeter



10" woofer,  
1 1/2" midrange, 3/4" tweeter



12" woofer,  
dome midrange, dome tweeter

## Compact two-way 8" Bookshelf System

**51<sup>00</sup>**

- AR's lowest-priced speaker system
- Delivers wide-range natural sound
- Shelf size for use anywhere

Ready-to-finish

**Model AR-4X.** One of the finest low-cost speaker systems on the market today. Famous AR acoustic-suspension design provides pure, natural sounding music. Features 8" woofer that delivers rich bass response that far exceeds what you would expect in a model this size. Specially designed tweeter for smooth treble. Built-in tweeter level control. Compact shelf size for easy installation. 1200 Hz L-C (electronic) crossover network. Requires amplifier rated at least 15 watts per channel. Impedance, 8 ohms. Size, 10x19x9". Shpg. wt., 22 lbs.

20 A 7629 U. Oiled Walnut.....\$7.00  
20 A 7628 U. Ready-to-Finish Pine.....\$1.00

## Popular three-way 10" Speaker System

**109<sup>00</sup>**

- 10" woofer with 3/4-lb. magnet
- Extra-wide dispersion tweeter
- Response from 42-20,000 Hz

Ready-to-finish

**Model AR-2AX.** One of AR's most popular systems. Offers excellent performance at a moderate price. Includes a 10" acoustic-suspension woofer with 3/4-lb. magnet assembly, plus 3 1/2" midrange speaker and a 1 3/8" dome type super-tweeter. Tweeter and midrange level controls, L-C crossovers at 2000 and 7500 Hz. 42-20,000 Hz. Requires amplifier rated at least 20 watts per channel. Impedance, 8 ohms. Size, 13 1/2x24x11 1/2". Floor base below. 43 lbs.

20 A 7046 U. Oiled Walnut.....\$128.00  
20 A 7044 U. Natural Birch.....\$122.00  
20 A 7047 U. Ready-to-Finish Pine.....\$109.00

**AR-2X Two-Way 10" System.** Above, no midrange. 38 1/4 lbs.  
20 A 7050 U. Oiled Walnut.....\$102.00  
20 A 7051 U. Ready-to-Finish Pine.....\$89.00

## Deluxe three-way 10" Speaker System

**156<sup>00</sup>**

- Extended low-frequency response
- Uniquely accurate midrange
- Extremely low distortion level

Ready-to-finish

**Model AR-5.** Offers superb wide-range sound in a compact system that allows easy placement. Basically the same system as the famous AR-3a but with a 10" acoustic-suspension woofer that offers uniform and extended low-frequency response. 1 1/2" dome midrange, 3/4" tweeter. Independent midrange and tweeter level controls. Requires amplifier rated at least 20 watts per channel. Impedance, 8 ohms. 13 1/2x24x11 1/2". Floor base below. Shpg. wt., 39 lbs.

20 A 7224 U. Oiled Walnut.....\$175.00  
20 A 7225 U. Natural Birch.....\$168.00  
20 A 7227 U. Ready-to-Finish Pine.....\$156.00

## Finest three-way 12" Speaker System

**225<sup>00</sup>**

- 12" woofer
- 1 1/2" midrange
- 3/4" dome radiator tweeter
- Response from 32 to 20,000 Hz

Ready-to-finish

**Model AR-3a.** AR's finest acoustic-suspension speaker system. Lifelike sound down to low bass frequencies. 12" woofer, two dome radiator speakers, 1 1/2" and 3/4". Requires amplifier rated at least 25 watts per channel. 4 ohms. 14x25x11 3/8". Shpg. wt., 55 3/4 lbs.

20 A 7042 Z. Oiled Walnut.....\$250.00  
20 A 7041 Z. Natural Birch.....\$240.00  
20 A 7040 Z. Ready-to-Finish Pine.....\$225.00

**AR-3 Three-Way 12" System.** Above, but one tweeter. 55 3/4 lbs.  
20 A 7624 Z. Oiled Walnut.....\$225.00  
20 A 7149 Z. Natural Birch.....\$216.00  
20 A 7002 Z. Ready-to-Finish Pine.....\$203.00  
20 A 8015 X. Oiled Walnut Floor Base. Fits all AR systems except AR-4X. 11x14 1/2x13". Shpg. wt., 3 3/4 lbs.....\$7.50

# Decorator-styled deluxe hi-fi floor Speaker Systems



**269<sup>95</sup>**

\$14 monthly\*

**199<sup>95</sup>**

\$10 monthly\*

## A Fisher three-way 15" System

Model XP-15B. Superbly crafted contemporary floor system has massive 15" woofer with 12-lb. magnet structure for outstanding bass response down to 28 Hz. Full, clean midrange is supplied by an 8" midrange speaker. Soft-dome 1 1/2" tweeter provides thrilling highs to 20,000 Hz. Crossovers at 400 and 2500 Hz. Capacity, 60 watts. 8 ohms. Finished in striking oiled walnut. 27x27x14 3/4". 20 A 7215 Z. Shpg. wt., 90 lbs. .... 269.95

## B Fisher three-way 12" System

Model XP-12. Attractively-styled three-way floor system delivers exceptional high-fidelity reproduction. Has powerful 12" woofer, with 6-lb. magnet structure for full, rich bass. Clean middle frequencies delivered by 8" midrange with molded rubber surround for life-like presence in sound. Soft dome 1 1/2" tweeter for crisp clear highs. Boasts exceptionally smooth response from 30-20,000 Hz. Impedance, 8 ohms. Capacity, 50 watts. Handsome oiled walnut finish. 24x22 1/2 x 13 3/4". Shpg. wt., 80 lbs. .... 199.95



**299<sup>95</sup>**

\$15 monthly\*



**285<sup>00</sup>**

\$15 monthly\*

## C Empire three-way 15" marble-top System

Model 9000M. A masterpiece of acoustic design, elegant hexagonally styled 3-way floor speaker system has a mass-loaded 15" woofer for deep, resonant bass; smooth, direct-radiator midrange; ultrasonic tweeter for startling highs. Exceptional 20-20,000 Hz response. Capacity, 100 watts. Impedance, 8 ohms. Tweeter level control. Satin walnut finish; imported marble top. 22" diameter, 29" high. 20 A 7270 Z. Shpg. wt., 123 lbs. .... 299.95

## D University three-way 12" System

"Mediterranean." Elegant enclosure combines decorator-design with superb performance. High-compliance 12" woofer, 8" direct-radiator midrange, and reciprocating flare-horn tweeter combine to produce thrilling hi-fi from 20 Hz to beyond audibility. Capacity, 50 watts. Impedance, 8 ohms. Beautiful grained antique butternut, pumice-brown finish. 22 1/2 x 24 1/2" diameter. 20 A 7122 Z. Shpg. wt., 75 lbs. .... 285.00



## ALTEC-LANSING

These 3 systems boast some superb components as famous "Voice of the Theatre"



F

E

Low as

**339<sup>00</sup>**

\$16 monthly\*

## Deluxe 15" floor Speaker Systems

E Model 846A. Magnificent "Valencia" system has same components as Altec's renowned Voice of the Theatre system, but in an enclosure half the size! Gigantic 416A 15" woofer offers rich, powerful bass response. Precision 806A high frequency driver and 811B sectoral horn deliver smooth midrange and brilliant highs. Dual LC network with 800 Hz crossover. Response: 35-22,000 Hz. Impedances: 8, 16 ohms. Capacity: 50 watts. Hand-finished walnut cabinet with fretwork grille. 29 3/4 x 27 1/2 x 19". 20 A 7439 Z. Shpg. wt., 100 lbs. .... 339.00  
20 A 8210 U. Model A-7. Components above (woofer, driver, horn, crossover), less enclosure. 43-lbs. .... 190.50

F Model 371A. Famous "Voice of the Theatre" system above in "Milano" Italian Provincial cabinet. Sculptured doors open. Distressed pecan cabinet. 29 1/4 x 28 x 19". 20 A 8199 Z. Shpg. wt., 112 lbs. .... 395.00

G Model 848A. Same excellent sound quality as the famous "Voice of the Theatre" system, described above. Finished in true Spanish-design "Flamenco" hand-crafted oak cabinet with unique grillework of Spanish-style simulated wrought iron. 27 3/4 x 27 1/2 x 19 3/8". 20 A 8198 Z. Shpg. wt., 105 lbs. .... 339.00

\*See page 438 for full Credit details

# Floor Speaker Systems

## Luxurious four-way 12½" System

**179<sup>95</sup>**

- Big 12½" woofer with 9½-lb. magnet
- Vibrationless sand-filled construction
- Air-tight acoustic-suspension enclosure

Model W70D. Deluxe floor system offers superlative performance. Unique construction features white sand packed between layers of hardwood to create inert panels which prevent cabinet vibration. Has 12½" long-throw woofer with massive 9½-lb. magnet for thunderous bass. An 8" speaker serves as passive radiator for upper bass and energized driver for lower midrange. Isolated upper midrange 5" speaker. Omnidirectional Mylar-domed super tweeter for pure, wide-angle treble. Midrange, treble controls. Response, 25-20,000 Hz. Capacity, 40 watts. 4-8 ohms. Oiled walnut finish, deluxe moldings. 24x22¾x13½". 20 A 7414 Z. Shpg. wt., 73 lbs. .... 179.95



**WHARFEDALE**



Sand-filled construction... inert cabinet prevents bass distortion



**EMPIRE pedestal three-way 12" System**  
**199<sup>95</sup>**

Floating-suspension 12" woofer

Model 7000M. Elegant pedestal-styled three-way system features mass-loaded 12" floating-suspension woofer direct radiator midrange, and ultra-sonic dome tweeter for full, rich sound across the entire audio range. Frequency response, 25-20,000 Hz. Power capacity, 75 watts. Impedance, 8 ohms. Satin walnut finish cabinet with imported marble top. 26½" high, 19" diameter. 20 A 7297 Z. Wt., 90 lbs. .... 199.95



**EMPIRE pedestal three-way 10" System**  
**149<sup>95</sup>**

Deluxe imported marble top

Model 3000M. Handsome pedestal-styled three-way system boasts 10" high-compliance woofer for powerful bass to 30 Hz. Direct-radiator midrange handles middle frequencies clearly and cleanly. Super tweeter delivers crisp, sparkling treble. Frequency response, 30-20,000 Hz. Power capacity, 60 watts. Impedance, 8 ohms. Satin walnut cabinet with imported marble top. Size, 21¼x11⅞x11⅞". 20 A 7295 U. Wt., 49 lbs. .... 149.95



Features popular Biflex 15" speaker

**229<sup>95</sup>**

**ALTEC-LANSING**

## Contemporary-styled 15" system

Model 872 Madrid. Features 420A Biflex 15" full-response speaker with 10½-lb. magnet structure and 3" voice coil for wide dynamic range and excellent transient response. Direct radiating tweeter for bell-like highs. Response, 40-18,000 Hz to assure faithful sound reproduction. Capacity, 35 watts. 8 ohms. Oiled walnut finish, fretwork grille. 24x21¼x17½". 20 A 7442 Z. Wt., 65 lbs. .... 229.95



**WHARFEDALE**

Magnificent sounding acoustic-suspension deluxe System

**289<sup>00</sup>**  
less base

## Powerful six-speaker 12½" System

Model W90D. Wharfedale's finest system. Boasts two 12½" woofers, each with 9½-lb. magnet, which divide the range for magnificent bass; two 5" midranges; two omnidirectional super tweeters. Sand-filled construction prevents cabinet vibration. Response, 20 Hz to beyond audibility. Midrange, treble controls. Capacity, 50 watts. 4-8 ohms. Oiled walnut. 23¼x30x13½". Optional base below. 20 A 7416 Z. Shpg. wt., 115 lbs. .... 289.00  
20 A 7590 X. Four-Leg Base. Shpg. wt., 1¾ lbs. .... 8.93



**JENSEN**

Smart contemporary styling blends with any decor

**247<sup>50</sup>**

## Superb four-way 12" Speaker System

Model 700-XLW. Four-way speaker system puts uncompromising sound reproduction in a smart, contemporary cabinet. Features 12" Flexair woofer with 3.6-lb. magnet, horn-loaded midrange, super-tweeter and ultra-tweeter. Has mid- and high-frequency balance controls. Frequency response, 20-25,000 Hz. Impedance, 8 ohms. Power capacity, 40 watts. Oiled walnut finish. 16¼x25½x12". 20 A 8364 U. Shpg. wt., 60 lbs. .... 247.50  
20 A 8368 X. Stand for above. Wt., 3¾ lbs. .... 17.96

# Deluxe hi-fi bookshelf Speaker Systems

## Four-way 12" System for true-to-life sound

- Full response with sparkling highs
- 3-position treble balance control
- Four-way LC-type crossover network

**179<sup>95</sup>**

Model XP-9B. Delivers smooth, rich bass, clean, clear mid-frequencies, and crystal-clear highs. Features 12" woofer with 2" voice coil and 6-lb. magnet structure; 6" lower-midrange with 1" voice coil and 2-lb. magnet structure; 5" upper-midrange with 3/4" voice coil and 1-lb. magnet structure; plus 1 1/2" soft-dome treble speaker with 1 1/2" voice coil and 3-lb. magnet structure. Has four-way LC network with air-core coils. Treble balance control adjusts the texture of upper frequencies to perfection. Response, 28-22,000 Hz. Power capacity, 10-60 watts. Impedance, 8 ohms. Walnut finish. 14x24 1/2 x 12". 20 A 7312 Z. Shpg. wt., 60 lbs. .... 179.95



FISHER



**ELECTRO-VOICE**  
12" .. E-V's best  
bookshelf System

**179<sup>95</sup>**

Model EV-4A. Three-way system features 12" woofer with 10-lb. magnet structure. Closed-cell polymer foam surround allows, long, linear cone excursions. 6" midrange with half-roll surround for smooth, flat response. 2 1/2" viscous-damped cone tweeter. Crossover employs high-Q inductors for high efficiency. Separate level controls for midrange and tweeter. 30-20,000 Hz. Capacity, 70 watts peak. 8 ohms. Walnut. 14x25x13 1/2". 20 A 7244 Z. Wt., 55 lbs. .... 179.95

**KLH**  
Four-speaker  
three-way  
12" acoustic  
suspension

**179<sup>95</sup>**

Model 5. Combines wide frequency range, low distortion, and uniform response across the audible frequency range. Has 12" woofer with heavy cone and magnet assemblies. Two heavy magnet midrange speakers. 1 1/4" direct radiator tweeter. Two three-position switches enable you to adjust mid- and high-frequency ranges. Capacity, 25 watts minimum. 8 ohms. 3/4" plywood with furniture-grade walnut veneer. 26x13 1/4 x 11 1/2". 20 A 7140 Z. Wt., 51 lbs. .... 179.95



**ALTEC-LANSING**  
Famous 10"  
deluxe System

**179<sup>00</sup>**

Model 890C. Features 10" woofer with cast aluminum frame, 10-lb. magnet structure, and 10" passive radiator. Compression-driven exponential die cast aluminum horn tweeter. LC crossover network at 2000 Hz with three-position switch for adjusting high-frequency range. Response, 35-20,000 Hz. Power handling capacity, 50 watts. Impedance, 8 ohms. Hand-rubbed walnut finish with cor temporary grille fretwork. 14 1/2 x 25 1/2 x 12 1/4". 20 A 7443 U. Wt., 38 lbs. .... 179.00



**ALTEC-LANSING**  
Two-way 10"  
Superb System

**145<sup>00</sup>**

Model 892A. Combines wideband response with extremely low distortion and wide-angle distribution. Boasts big 10" low-frequency woofer; compression-drive with an exponential aluminum high-frequency horn. Sealed infinite-baffle enclosure. Response, 45-18,000 Hz. Power capacity, 50 watts. Impedance, 8 ohms. Oiled walnut finish. Size, 13x11 1/4 x 23 3/4". 20 A 7448 U. Wt., 39 lbs. .... 145.00



**FISHER**  
Four-speaker  
3-way 12" System

**139<sup>95</sup>**

Model XP-7. Features four perfectly matched speakers to bring you exceptional performance. Has 12" high-compliance woofer with 5 1/2-lb. magnet; two 5" midranges; soft-dome tweeter. LC crossovers at 300 and 2500 Hz. Frequency response, 30-20,000 Hz. Power handling capacity, 60 watts (10 watts minimum). Impedance, 8 ohms. Walnut finish. 24 1/2 x 14 x 12". 20 A 7305 U. Wt., 47 lbs. .... 139.95



**JENSEN**  
Four-speaker  
3-way 10" System

**115<sup>20</sup>**

Model TF-38W. Fine-performing shelf system includes 10" Flexair® woofer with 1 1/4-lb. magnet, two 3 1/2" midranges, and Sono-Dome® ultra-tweeter. Offers magnificent high-fidelity sound throughout the entire frequency range from 25-20,000 Hz. Power capacity, 25 watts. Impedance, 8 ohms. Oiled walnut finish with handsome fretwork grille. 13 1/2 x 23 3/4 x 11 1/8". 20 A 8362 U. Wt., 40 lbs. .... 115.20

# Deluxe-quality hi-fi bookshelf Speaker Systems



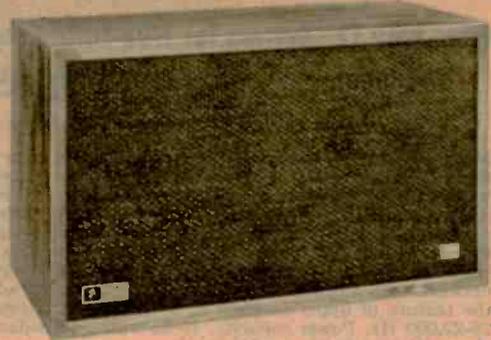
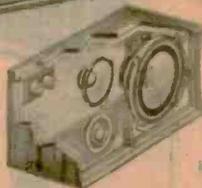
**12995**

Woofer has massive 9 1/2-lb. magnet assembly

**WHARFEDALE**

## Acoustic-suspension three-way 12 1/2" System

Model W-60D. A best-seller for years. Features exclusive sand-filled Achromatic design. Has same exceptionally powerful 12 1/2" woofer with 9 1/2-lb. magnet assembly found in Wharfedale's larger models. Acoustically-isolated 5" cone with cloth suspension and low mass aluminum voice coil for clear, smooth midrange. Omnidirectional domed super tweeter for distortion-free treble. Midrange, treble controls. Frequency response, 30-20,000 Hz. Power capacity, 40 watts. Impedance, 4-8 ohms. Walnut cabinet, 14 1/4 x 24 x 13". Operates vertically or horizontally. 20 A 7413 Z. Shpg. wt., 56 lbs. . . . . 129.95



**10995**

High-compliance woofer with 5-lb. magnet structure

**FISHER**

## Free-piston three-way 12" system

Model XP-66. Fisher excellence is designed into this 3-way bookshelf system. Free-piston 12" woofer with 5-lb. magnet structure delivers natural, uncolored bass down to 30 Hz. You hear even deepest organ notes with life-like timbre. Isolated 6" midrange speaker reproduces 400 to 1000 Hz notes with clarity. Wide-dispersion cone tweeter offers crisp highs to 19,000 Hz without shrillness and with excellent transient response. Power capacity, 60 watts. Impedance, 8 ohms. Attractive, hand-rubbed oiled walnut finish. Size, 14 x 24 1/2 x 12". 20 A 7174 U. Shpg. wt., 40 lbs. . . . . 109.95



**UNIVERSITY**

**11995**

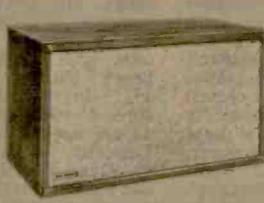
Dramatic styling



**UTAH**

**11895**

Horn midrange and tweeter



**UNIVERSITY**

**9995**

Ultra-linear response



**GOODMANS**

**9995**

Delivers natural sounding bass

## "Laredo" four-way 12" system

Four-way speaker system in contemporary Moorish cabinet. 12" woofer delivers natural, uncolored sound. 8" two-way midrange reproduces middle frequencies with clarity. Sphericon tweeter offers bell-like highs. Frequency response, 30-30,000 Hz. Brilliance control lets you adjust highs to your taste. Power handling capacity, 40 watts. Impedance, 8 ohms. Beautiful oiled walnut finish. Size, 24 x 15 1/2 x 12 1/4". 20 A 7103 U. 47 lbs. . . . . 119.95

## Acoustic-suspension three-way 12" system

Model A-520. Superb system has high-compliance 12" acoustic-suspension woofer delivers natural sounding bass. Wide-dispersion compression horn midrange and tweeter speakers. Response, 30-20,000 Hz. Capacity, 30 watts. 8 ohms. Tweeter control. Oiled walnut. Size, 14 x 25 x 13 1/2". 20 A 7058 U. 49 lbs. . . . . 118.95  
Model A-501. As above, except 8" direct radiator midrange. Response, 33-20,000 Hz. 14 x 24 x 10". 20 A 7059 U. 33 lbs. . . . . 99.95

## Project "M" two-way 11" speaker system

Features new 11" woofer with four-layer voice coil for smooth distortion-free bass response. The special 2 1/2" closed-back tweeter gives extended high-frequency response and broad dispersion without beaming effect at any frequency. Frequency response, 30-20,000 Hz. Power handling capacity, 30 watts, 60 watts peak. Impedance, 8 ohms. Beautiful handrubbed oiled walnut finish. Size, 12 1/2 x 23 1/2 x 11 1/2". 20 A 7236 U. 30 lbs. . . . . 99.95

## Acoustic-suspension three-way 12" system

Model G-20. Handsome system delivers excellent sound over the audio range. Acoustic-suspension 12" woofer reproduces stunning bass down to 20 Hz. 6" midrange has high-compliance cloth suspension. 3 1/2" tweeter. Electrical crossovers. 3/4" wood enclosure with walnut veneer and solid walnut moldings. Tweeter brilliance control. Response, 20-20,000 Hz. Capacity, 20 watts, 40 peak. 8 ohms. 14 3/4 x 23 3/4 x 11 1/4". 20 A 7142 U. 41 lbs. . . . . 99.95

for every decor



**9450**

**WHARFEDALE**  
Acoustic-suspension  
three-way 10" system

Model W40D. Three-way system in air-tight acoustic-suspension enclosure delivers natural wide-range sound. 10" high-compliance woofer. 5" isolated midrange in cloth suspension. Omnidirectional super-tweeter with aluminum voice coil for extended response. Acoustic phase compensator for uniform dispersion. Midrange and treble controls. Frequency response, 35-20,000 Hz. Power capacity, 35 watts. Impedance, 4-8 ohms. Oiled walnut enclosure, 12 $\frac{1}{4}$ x23 $\frac{1}{2}$ x10 $\frac{1}{8}$ ".  
20 A 7412 U. Shpg. wt., 37 lbs. . . . . 94.50



Special  
purchase

**UTAH**

**5995**

Acoustic-suspension  
three-way 12" System

Model A-100. Allied's buying power makes this low price possible. Excellent hi-fi reproduction of the full orchestral range. Features acoustic-suspension 12" woofer that delivers natural, undistorted bass down to 28 Hz. Die-cast midrange horn for wide dispersion of clear mid-tones. High-efficiency tweeter for highs up to 19,500 Hz. Level control. Crossovers at 2200 and 4500 Hz. Capacity, 60 watts peak. Impedance, 8 ohms.  $\frac{3}{4}$ " oiled walnut veneer cabinet. 14x23x10".  
20 A 7055 U. Wt., 35 lbs. . . . . 59.95



**8995**

**ARGOS**  
Three-way  
12" System

Model XL-500. Features Jensen 12" woofer for resounding bass. Powerful 8" midrange speaker. Compression horn tweeter for wide dispersion highs. Response, 35-18,000 Hz. Capacity, 50 watts peak. Impedance, 8 ohms.  $\frac{3}{4}$ " walnut cabinet. Size, 14 $\frac{3}{4}$ x25x9".  
20 A 7357 U. Wt., 31 lbs. . . . . 89.95



**8995**

**ELECTRO-VOICE**  
Acoustic-suspension  
two-way 10" System

Model E-V Five C. 10" woofer has 4-layer voice coil for deep bass. 2 $\frac{1}{2}$ " tweeter. Tweeter control. 30-20,000 Hz. 60 watts peak. 8 ohms. Walnut. 12 $\frac{1}{4}$ x21 $\frac{3}{4}$ x10 $\frac{3}{8}$ ".  
20 A 7238 U. Wt., 31 lbs. . . . . 89.95  
20 A 7239 U. Model E-V Nine. Above, 5" midrange, 3 $\frac{1}{2}$ " tweeter. 13 $\frac{1}{2}$ x24x11 $\frac{1}{2}$ ". Wt., 43 lbs. . . . . 129.60



**8995**

**UTAH**  
Acoustic-suspension  
three-way 12" System

Model WD-90. High-compliance 12" woofer provides deep bass. 8" midrange. 3 $\frac{1}{2}$ " tweeter. 35-18,000 Hz. Capacity, 30 watts. 8 ohms. Tweeter cont. Walnut. 14x23x10".  
20 A 7061 U. Wt., 33 lbs. . . . . 89.95  
20 A 7062 U. WD-80. Above, but 5" midrange. 35-17,500 Hz. Shpg. wt., 28 lbs. . . . . 79.95



**7995**

**DYNACO**  
High-capacity  
two-way 10" system

Model A-25. Aperiodic (non-resonant) design for high power capacity without distortion. 10" extended excursion woofer. Dome tweeter. Five-position level control. Hz. Capacity, better than 60 watts rms. 8 ohms. With wall brackets. Walnut. 11 $\frac{1}{2}$ x20x10".  
20 A 7316 U. Wt., 22 lbs. . . . . 79.95



**8550**

**ALTEC-LANSING**  
Acoustic-suspension  
two-way 10" system

Model 893A. Natural bass delivered by high compliance 10" woofer in infinite baffle. Clear highs from 3" direct radiating tweeter. Response, 50-18,000 Hz. Capacity, 40 watts (rms). Crossover at 2500 Hz. Impedance, 8 ohms. Oiled walnut. Size, 12 $\frac{1}{4}$ x22x9 $\frac{1}{2}$ ".  
20 A 7387 U. Wt., 22 lbs. . . . . 85.50

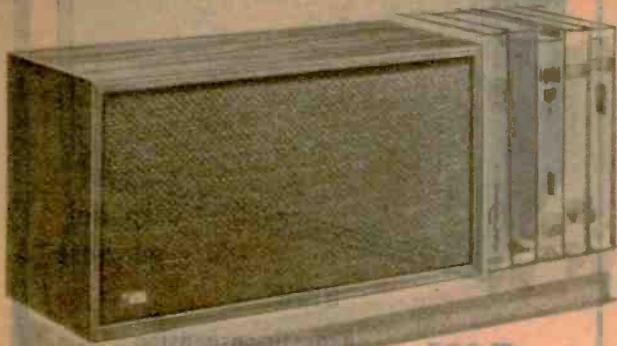


**7995**

**FISHER**  
Two-way 10" free-piston system

Model X-60. Free-piston woofer with 4-lb. magnet structure operates with high compliance for rich bass response. 2 $\frac{1}{2}$ " treble speaker provides pure highs and clear midrange. 35-20,000 Hz. Capacity, 40 watts (10 watts min.). 8 ohms. Walnut. 13x23x10 $\frac{1}{2}$ ".  
20 A 7212 U. Wt., 30 lbs. . . . . 79.95

# Bookshelf Speaker Systems at popular prices

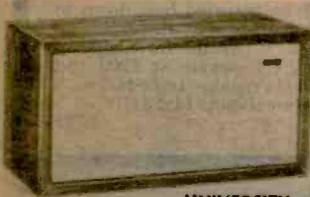


**Two-way 8" Speaker System with special-design suspension**

**49<sup>95</sup>** 8" woofer features long-throw half-roll surround

Model XP-55B. Bookshelf size, yet delivers impressive wide-range sound. 8" woofer with 2-lb. magnet structure, in a newly-designed suspension system using a long-throw half-roll surround. 3" treble speaker has a low-mass cone for peak-free response to 20,000 Hz, without coloration. Completely enclosed baffle is heavily damped with Acoustiglas packing, resulting in fundamental bass response down to 37 Hz, without doubling. Response, 37-20,000 Hz. 8 ohms. Recommended amplifier power, 10 to 30 watts. Walnut finish. Size, 10x20x7½". 20 A 7214 U. Ship. wt., 18 lbs. . . . . 49.95

**FISHER**



**UNIVERSITY**

**79<sup>95</sup>** Three-way 10" ultra-linear System

Ultra-D. Features an ultra-linear distortion-free 10" woofer for excellent bass reproduction. 4" mid-range speaker with a special curvilinear cone, 3½" cone tweeter, aluminum voice coil. Brilliance/presence control. Response ranges from 30 Hz to beyond audibility. 8 ohms. 32 watts peak power capacity. Oiled walnut finish. Size, 11½x23½x9¾". 20 A 7121 U. Wt., 24 lbs. . . . . 79.95



**UTAH**

**69<sup>95</sup>** 8" three-way with acoustic suspension

Model A-70. High-performance speaker system offers quality sound reproduction at moderate cost. Features high-compliance 8" woofer that delivers deep, natural bass without boominess. Has 5" direct radiator midrange speaker and 3½" tweeter. Response, 40-17,500 Hz. 8 ohms. 15 watts; 30" peak. Handsome hand-rubbed oiled walnut veneer finish. 11¾x19x8½". 20 A 7057 U. Wt., 19 lbs. . . . . 69.95



**ADC**  
Two-way 8" acoustic suspension system

**69<sup>00</sup>**

Model 210. Designed to fill the needs of those who seek truly impressive sound at a modest price. Delivers smooth sound reproduction over the entire musical spectrum. 8" acoustic suspension woofer with treated cone and plasticized rubber surround. 2½" cone tweeter. Three-position treble control. 35 Hz to beyond audibility. 8 ohms. 30 watts. Walnut. 23¼x13x11". 20 A 7241 U. Wt., 37 lbs. . . . . 69.00



**JENSEN**

**69<sup>50</sup>** 8" two-way with horn-loaded tweeter

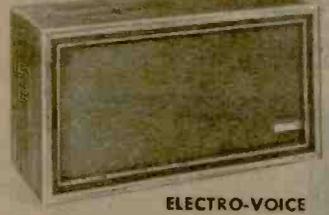
Model X-45. Offers natural sound reproduction of the resounding lows and clear shimmering highs of your favorite music. Excellent for compact central stereo or remote extensions. 8" Flexair woofer and compression driven horn-loaded tweeter. Balance control. Response, 30-18,000 Hz. 8 ohms. 25 watts. 2000 Hz crossover. Oiled walnut finish. 10½x19½x9". 20 A 7081 U. Wt., 24½ lbs. . . . . 69.50



**WHARFEDALE**

**59<sup>45</sup>** 8" two-way with acoustic compensator

Model W30D Mark II. Heavy-duty long-throw 8" woofer for deep, riel bass reproduction. Features super omnidirectional 3" tweeter with acoustic phase compensator. Variable tweeter control. Floating grill eliminates buzz. Frequency response, 40-18,500 Hz. 4-8 ohms. 35 watts power capacity. Attractive hardwood walnut veneer finish. Size, 10x19x9¼". 20 A 7418 U. Wt., 20 lbs. . . . . 59.45



**ELECTRO-VOICE**

**59<sup>85</sup>** 8" two-way with unique cone damping

Model E-V Seven B. Special, high-compliance 8" woofer delivers exceptionally low bass without distortion. 3½" cone tweeter employs unique symmetrical cone damping to endure silky-smooth highs. Variable tweeter control. Frequency response, 40-20,000 Hz. Impedance, 8 ohms. 50 watts peak capacity. 2000 Hz electrical crossover. Walnut finish. 10x19x8½". 20 A 7243 U. Wt., 19 lbs. . . . . 59.85

# Low-cost compact bookshelf Speaker Systems

## Two-way air-suspension System with 6" woofer and 1½" tweeter

Ideal for compact stereo rigs,  
or as a "second room" system **49<sup>95</sup>**

Model ADC 404. This compact speaker system, not much larger than a few books, is an ideal choice for moderately-priced stereo-music enjoyment. Offers excellent, well-balanced, wide-range sound. High-compliance 6" woofer provides realistic low frequencies. 1½" dome tweeter gives clear highs. Sealed enclosure is filled with sound-absorbing material, causing it to function as an air-suspension system. Response ranges from 45 Hz to beyond audibility. Impedance, 8 ohms. Capacity, 10 to 60 watts. Beautiful oiled walnut finish. Size, 7½x11½x8½". 20 A 7240 X. Shpg. wt., 11 lbs. . . . . **49.95**



ADC



WHARFEDALE

**44<sup>95</sup>** 8" two-way features  
acoustic suspension

Model W20D. Achromatic acoustic suspension in a compact speaker system. Has high-compliance 8" woofer for mellow bass response. Omnidirectional pressure dome 3" tweeter provides impressive highs. Variable acoustic control for maximum tonal adjustment. 45-18,000 Hz. 10 watts minimum power requirement. 4-8 ohms. Handsome oiled walnut finish. 9¼x14x8½". 20 A 7417 X. Wt., 14 lbs. . . . . **44.95**



**FISHER**  
High-compliance  
6" two-way  
with full 2-lb.  
magnet structure

**44<sup>50</sup>**

Model XP-44. Designed especially for high-fidelity enthusiasts who demand the quality performance of a large speaker system, but in an enclosure far smaller in size, and at an economical price. Specially-engineered 6" woofer with heavy 2-lb. magnet structure and 1" voice coil gives smooth bass response at frequencies down to 39 Hz without distortion. Treble speaker with 2½" cone provides pure, sparkling highs. Frequency Response, 39-19,000 Hz. Impedance, 8 ohms. Recommended amplifier power, 10-25 watts. Handsome hand-rubbed oiled walnut finish. Size, 8¼x15¼x6½". 20 A 7213 X. Shpg. wt., 15 lbs. . . . . **44.50**



BOGEN

**44<sup>95</sup>** 6" two-way with  
acoustic suspension

Model LS10. Delivers excellent full-range sound. 6" woofer for smooth bass; 3" tweeter renders remarkable highs. Response, 40-20,000 Hz. Impedance, 8 ohms. Power capacity, 30 watts. Oiled walnut finish. Size, 8x15x7". 20 A 8310 X. Wt., 12 lbs. . . . . **44.95**  
Model LS20. Above, but 8" woofer. Frequency Response, 30-20,000 Hz. Power capacity, 40 watts. 20 A 8311 X. Wt., 19-lbs. . . . . **53.95**



ELECTRO-VOICE

**3330** Specially-designed  
6" two-way System

Model EV-Eleven. Fine-sounding two-way system economizes on space and budget. Enclosure resonance tuned to special 6" two-way speaker. Two coaxial cones, operating from a single voice coil, divide the audio spectrum. Impedance, 8 ohms. Power handling capacity, 25 watts peak. Has walnut finished vinyl coat for lasting beauty. Size, 8¼x15¼x6½". 20 A 7242 X. Wt., 12 lbs. . . . . **33.30**



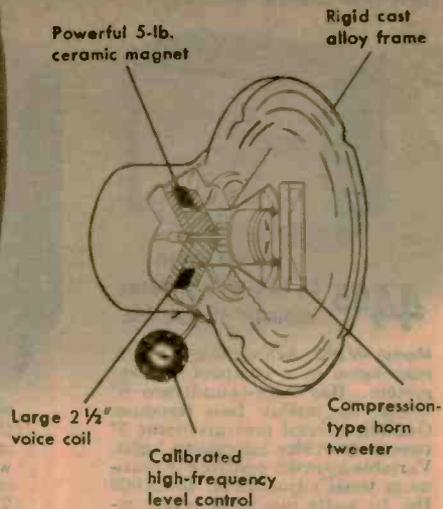
UTAH

**25<sup>95</sup>** 8" two-way offers  
space-saving size

Model PT4C. Stand it on the floor, place it on a shelf, or hang it like a picture. Built-in keyhole slots. Features an 8" woofer and a 3½" tweeter. Built-in volume control. Impedance 8 ohms. Peak power capacity, 12 watts. Walnut veneer finish. Dimensions, 12x18x3½". Shpg. wt., 7 lbs. 20 A 7077 X. . . . . **25.95**  
PT2B. Above, except 3x5" tweeter. 20 A 7066 X. Wt., 6 lbs. . . . . **18.95**

# Our very best! 15" Speaker gives you studio-monitor quality

Professional quality, high power capacity, high efficiency and full response for astounding hi-fi realism



## Allied® three-way Speaker with massive 5-lb. ceramic magnet for bass you can actually feel

**74<sup>95</sup>** \$5  
monthly  
see page 438

Model 615HC. Nowhere else will you find a speaker at this price offering the premium quality, professional features and superlative performance of the 615HC. Our best high-fidelity speaker boasts a huge 15" high-compliance woofer coupled to a massive 5-lb. ceramic magnet and outside 2½" voice coil for powerful, distortion-free bass down to 20 Hz.

Middle frequencies from 2000 Hz to 3500 Hz are handled by the Radax midrange cone with transparency and realism that must be heard to be believed! Compression-type horn loaded VHF tweeter provides sparkling treble from 3500 Hz to beyond audibility. Mighty 100-watt peak power handling capacity assures effortless reproduction of even the most demanding orchestral passages.

All moving parts are locked in perfect alignment by the super-strong cast alloy frame for extra durability and years of trouble-free, dependable performance. Precision calibrated brilliance control permits adjustment of high-frequency response to suit room acoustics or personal taste. Built-in electrical crossover network saves you money and effort—you don't have to buy any accessories to properly install the 615HC. Also has convenient coded, push-type binding terminals for fast, easy speaker connection to your amplifier or receiver. Overall mounting depth, 9⅞". Actual weight, 28 lbs.

20 A 9702 U. Shpg. wt., 32 lbs. 74.95

### SPECIFICATIONS

*Free-Air Resonant Frequency:* 25 Hz.

*Frequency Response:* 20-20,000 Hz.

*Crossover Frequencies:* Mechanical at 2000 Hz; electrical at 3500 Hz.

*Power Handling Capacity:* 50 watts, 100 watts peak.

*Woofer Magnet:* 5-lb. ring-type ceramic.

*Tweeter Magnet:* 6.8 oz. Alnico V.

*Flux Density:* 14,500 gauss.

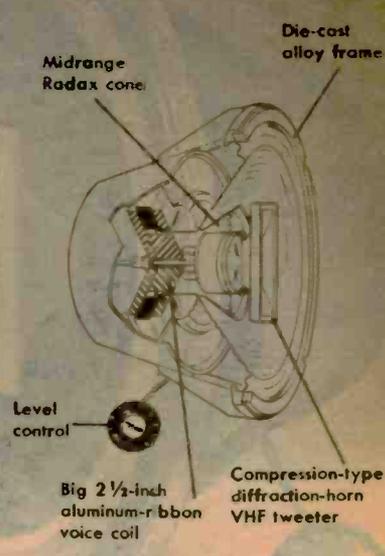
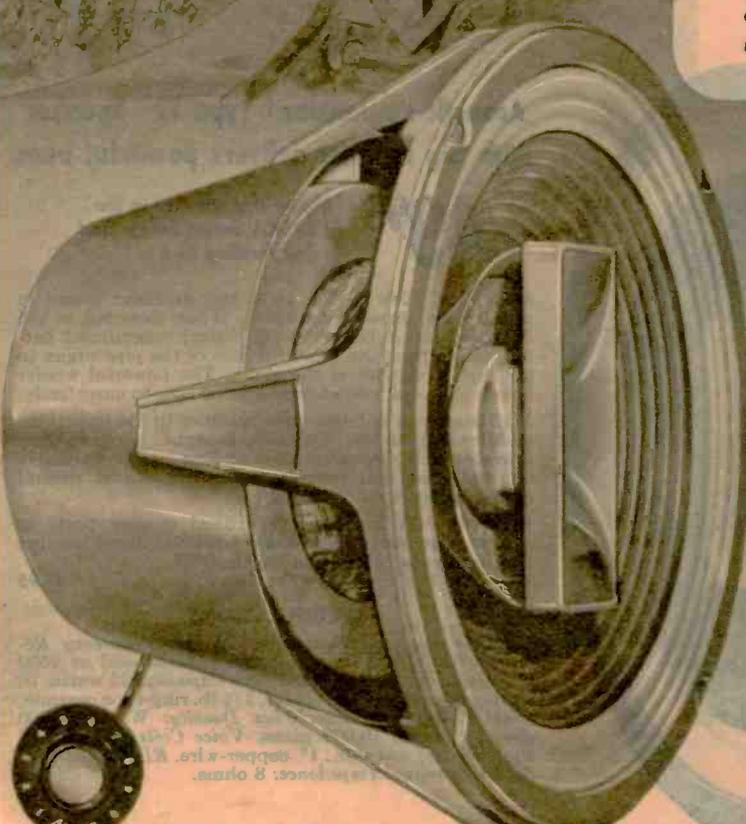
*Voice Coils:* Woofer, 2½" edge-wound aluminum ribbon; tweeter, 1" edge-wound aluminum ribbon.

*Rated EIA Sensitivity:* 55 dB.

*Nominal Impedance:* 8 ohms.

# 5-pound magnet, plus 3-way design . . . it's our best 12" Speaker

Smooth, wide-range response plus very high power capacity and efficiency for magnificent hi-fi sound



**Allied 12" Speaker with heavy-duty components  
and high-compliance woofer for full-spectrum music**

**64<sup>95</sup>** \$5  
monthly  
see page 438

Model 612HC. This is the finest 12" three-way speaker you can buy anywhere at this price! Includes features usually found only in professional-quality broadcast studio speakers. Husky, heavy-duty 12" high-compliance woofer is coupled to a powerful 5-lb. ceramic magnet and an oversize 2½" edge-wound aluminum-ribbon voice coil for solid, distortion-free bass down to 22 Hz. Low free-air resonant frequency permits outstanding bass response in almost any speaker enclosure.

Midrange Radax cone with mechanical crossover at 2000 Hz produces smooth, clear midrange sound. Electrical crossover channels frequencies above 3500 Hz to VHF compression-type horn-loaded tweeter which disperses sparkling treble response up to 20,000 Hz. Tremendous 70-watt peak power capacity assures big-beat sound with thunderous realism. The 612HC is highly efficient—can be driven by amplifiers rated as little as ten watts per channel.

Durable die-cast alloy frame locks voice coils and other moving parts in perfect alignment. Calibrated brilliance control adjusts the tweeter output level to suit individual room acoustics or personal taste. Convenient coded, screw-type binding post terminals permit quick, easy connection of the speaker to your amplifier; also simplifies stereo phasing. Mounting depth, 7½". Actual weight, 27 lbs.

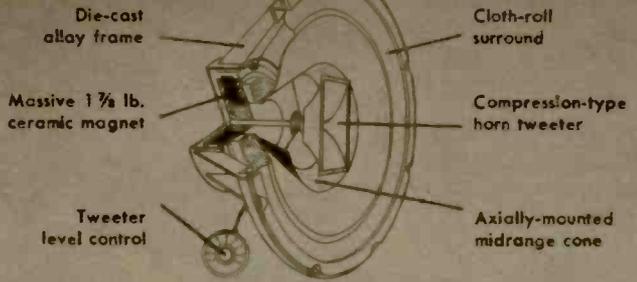
20 A 9701 U. Shpg. wt., 33 lbs. . . . . 64.95

**SPECIFICATIONS**

*Free-Air Resonant Frequency:* 40 Hz.  
*Frequency Response:* 22-20,000 Hz.  
*Crossover Frequencies:* Mechanical at 2000 Hz; electrical at 3500 Hz.  
*Power Handling Capacity:* 35 watts, 70 watts peak.  
*Woofer Magnet:* 5-lb. ring-type ceramic.  
*Tweeter Magnet:* 3.15-oz. Alnico V  
*Flux Density:* 14,500 gauss.  
*Voice Coils:* Woofer, 2½" edge-wound aluminum ribbon; tweeter, 1" edge-wound aluminum ribbon.  
*Rated EIA Sensitivity:* 53 dB.  
*Nominal Impedance:* 8 ohms.

# Allied® 3-way 12" acoustic-suspension† hi-fi Speaker

Cloth-roll surround and massive magnets make this speaker really effective in any good acoustic-suspension speaker enclosure



## Acoustic-suspension† type 12" Speaker with big magnet delivers powerful bass

**49<sup>95</sup>** Mount this speaker in the 1290KA shown below and enjoy thrilling hi-fi

Model 884. New design gives you excellent sound in a full-range three-way speaker. When mounted in the Allied enclosure below, it will deliver magnificent natural music from the powerful bass of the pipe organ to the high overtones of the violin. The powerful woofer boasts cloth-roll suspension to allow cone to move freely.

Midrange cone radiator adds presence to the important middle frequencies. Compression-type horn tweeter provides wide dispersion of sparkling treble. Exclusive internal dust seal protects voice coil. Level control adjusts tweeter output level.

Rigid die-cast frame keeps critical moving parts in perfect alignment. Color-coded teflon-insulated binding post terminals. Mounting depth, 6 5/8".  
 20 A 9733 X. Shpg. wt., 11 1/2 lbs. . . . . 49.95

### SPECIFICATIONS

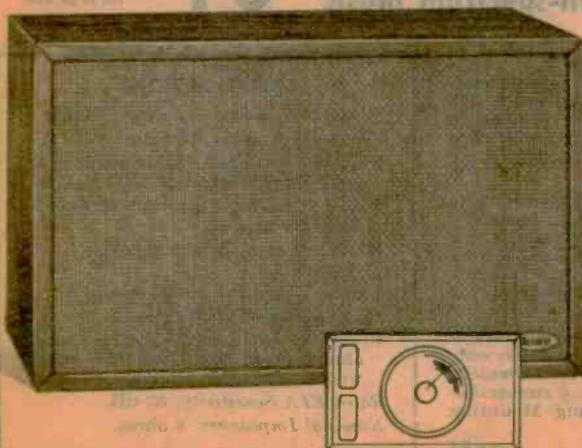
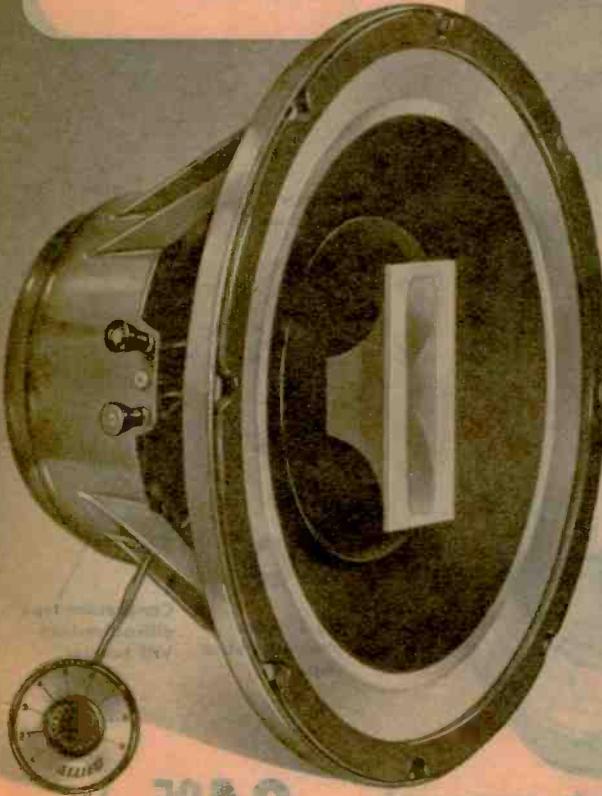
Free-Air Resonant Frequency: 25 Hz. Frequency Response: 23-20,000 Hz. Crossovers: Mechanical at 2500 Hz; electrical at 4500 Hz. Power Capacity: 35 watts, 70 watts peak. Magnets: Woofer, 1 1/4 lb. ring-type ceramic; tweeter, 3-oz. ceramic. Flux Density: Woofer, 9000 gauss; tweeter, 10,000 gauss. Voice Coils: Woofer, 2" copper-wire; tweeter, 1" copper-wire. EIA Sensitivity: 53 dB. Nominal Impedance: 8 ohms.

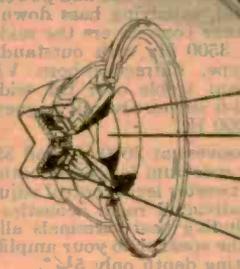
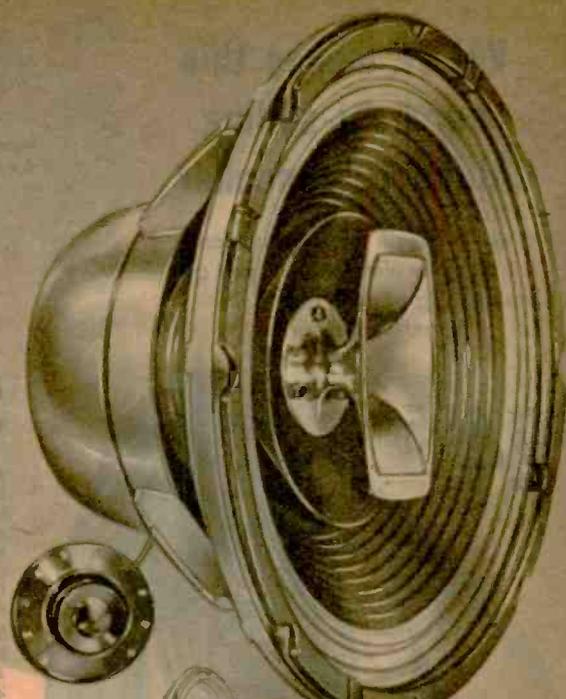
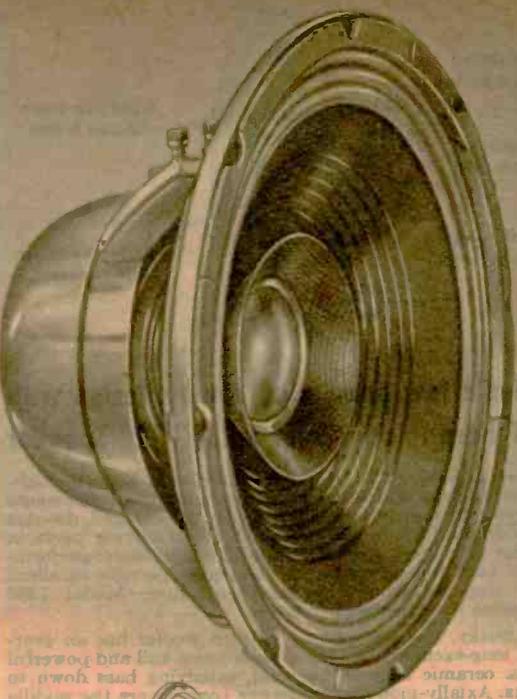
## Allied 12" Enclosure Kit works as bass reflex or air-tight design

**24<sup>95</sup>** Can be used successfully with any 12" speaker—ideal for the Allied 884

Model 1290KA. Handsome 12-inch speaker enclosure kit works as a bass reflex enclosure—easily converts to an air-tight acoustic-suspension design with the included accessories. Assures outstanding performance with any quality 12-inch speaker; painstakingly crafted to give a professional appearance after your quick, easy assembly.

Features fiberglass acoustic lining to prevent annoying resonance. Hardwood panels are finished with attractive walnut veneer. Place the assembled kit horizontally on bookshelf or vertically on floor. Kit is easy to assemble—all you need is a screwdriver. Even includes oil for rubbing-in a beautiful, professional-looking walnut finish. Acoustically transparent grille cloth is factory-mounted. Terminal strip for easy connection to your amplifier. With instructions, oil, conversion kit. Overall size, 14 3/4 x 24 x 12".  
 20 A 9712 U. Shpg. wt., 29 lbs. . . . . 24.95





- Separate treble cone
- High-frequency aluminum dome
- Rigid die-cast alloy frame
- 13-oz. ceramic magnet



- Die-cast alloy frame
- Chromed tweeter horn
- 1 1/2-inch voice coil
- Axially-mounted midrange cone
- Tweeter level control

**Lowest priced Allied 12-inch Speaker . . . two-way design at a budget price**

**14<sup>95</sup>**

Features high-compliance woofer, midrange cone and aluminum dome for fine sound

Model 822HCA. Only Allied offers such great high-fidelity sound at this low price. Our lowest priced 12" speaker offers two-way design, high-compliance woofer and aluminum dome for solid bass and sparkling treble. An excellent choice or low-cost hi-fi systems. Has powerful 12-inch high-compliance woofer with 1 1/4" voice coil and 13-oz. ceramic magnet for satisfying bass down to 25 Hz. Midrange cone with aluminum dome handles the midrange and treble with surprising clarity all the way up to 15,000 Hz. Sturdy, die-cast alloy frame keeps voice coil in precise alignment for dependable performance and long operating life. Convenient binding terminals for easy connections. Low free-air resonant frequency assures excellent bass response from any good enclosure. Mounting depth, 6 3/8".  
 20 A 9751 X. Shpg. wt., 7 1/2 lbs. . . . . 14.95

**SPECIFICATIONS**

Free-air Resonant Frequency: 30 Hz. Overall Frequency Response: 25-15,000 Hz. Power Handling Capacity: 20 watts, 0 watts peak. Crossover: Mechanical at 5000 Hz. Magnet: 3-oz. ceramic type. Magnetic Flux Density: 11,500 gauss. Voice Coil: 1 1/4", long-throw sealed copper-ribbon. Rated Impedance: 8 ohms.

**Our biggest value in a three-way 12-inch hi-fi Speaker . . has 1 3/4-lb. ceramic magnet**

**39<sup>95</sup>**

Rugged design and massive magnet/voice coil structure deliver stunning hi-fi!

Model 888HCA. A great performer which belongs with even the most expensive component systems. Superior components deliver natural full-range sound. Features heavy-duty 12-inch high-compliance woofer with massive 1 3/4 lb. ceramic magnet and large 1 1/2" copper-ribbon voice coil for soul-satisfying bass down to 25 Hz. Axially-mounted midrange cone radiates middle frequencies from 2000 Hz to 4000 Hz with startling hi-fi realism. Compression-type horn-loaded tweeter disperses clean, sparkling treble up to 19,000 Hz. Has built-in mechanical and electrical crossovers. Rugged die-cast frame locks voice coils in precise alignment for extra durability. Level control adjusts tweeter output to suit listening room's acoustics or personal preference. Mounting depth, 6 3/8".  
 20 A 9753 X. Shpg. wt., 11 1/2 lbs. . . . . 39.95

**SPECIFICATIONS**

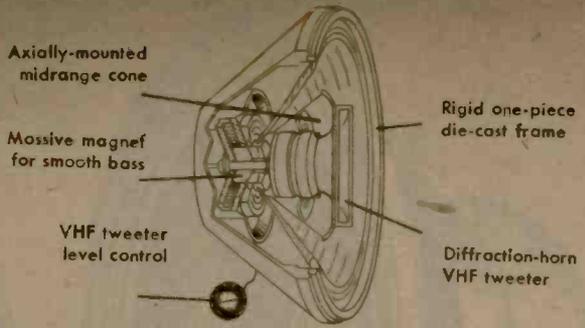
Resonant Frequency: 25 Hz. Response: 25-19,000 Hz. Capacity: 25 watts, 50 watts peak. Crossovers: Mechanical, 2000 Hz; electrical, 4000 Hz. Magnet: Woofer, 1 3/4-lb. ceramic; tweeter, 4.65-oz. Alnico V. Flux: Woofer, 12,650 gauss; tweeter, 13,500 gauss. Voice Coils: Woofer, 1 1/2"; tweeter, 1". E.I.A. Sensitivity: 53 dB. Impedance: 8 ohms.

to money down . . low monthly payments . . full Credit details on page 438

**VALUE makes this  
our best-selling  
Allied 12" Speaker**

Quality design and construction of all three elements . . . you get natural high-fidelity sound at a budget-minded price

**24<sup>95</sup>**



**Allied's low price, plus 3-way design with VHF horn . . . our "best value" 12" Speaker**

Model 830BHC. This popular three-way 12-inch high-fidelity speaker is loaded with many engineering refinements to give you true hi-fi sound at a thrifty price. Rigid, die-cast alloy frame locks voice coils and other moving parts in perfect alignment for extra durability and better performance. Low free-air resonant frequency permits excellent bass response from any good enclosure—Model 1286 enclosure recommended (below).

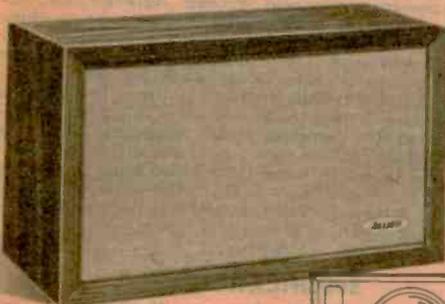
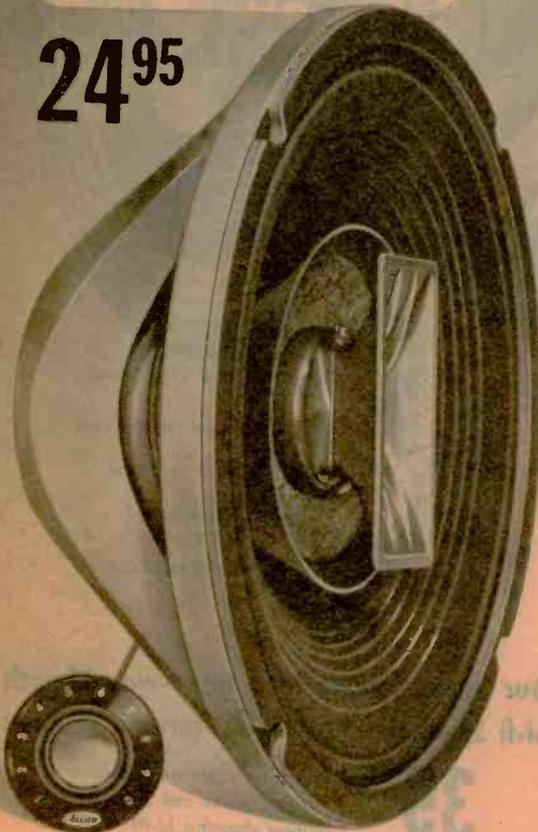
The husky, high-compliance 12-inch woofer has an over-size, long-excursion copper-ribbon voice coil and powerful 13-oz. ceramic magnet for solid, satisfying bass down to 25 Hz. Axially-mounted midrange cone covers the middle frequencies from 2000 Hz to 3500 Hz with outstanding hi-fi realism. Compression-type, diffraction-horn VHF tweeter disperses clear, brilliant treble over the widest possible area for truly "big" hi-fi sound. Overall frequency response is from 25 Hz to 18,000 Hz.

Mechanical and electrical crossovers at 2000 Hz and 3500 Hz divide the audio frequency spectrum for the smoothest response. Precision-calibrated tweeter level control adjusts the treble response to suit individual room acoustics or personal taste. Convenient binding post terminals allow easy, solderless connection of the speaker to your amplifier in a matter of seconds. Mounting depth only 5 1/4".

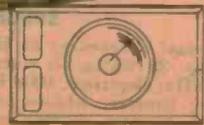
20 A 9707 X. Shpg. wt., 10 1/2 lbs. . . . . 24.95

**SPECIFICATIONS**

- Free-Air Resonant Frequency: 30 Hz.
- Frequency Response: 25-18,000 Hz.
- Power Capacity: 20 watts, 40 watts peak.
- Magnet Weight: Woofer, 13-oz.; tweeter, 1.47-oz.
- Magnetic Material: Woofer, ceramic; tweeter, Alnico V.
- Crossover Frequencies: Mechanical at 2000 Hz; electrical at 3500 Hz.
- Flux Density: Woofer, 9750 gauss; tweeter, 7000 gauss.
- Voice Coils: Woofer, 2"; tweeter, 1".
- Rated EIA Sensitivity: 45 dB.
- Impedance: 8 ohms.



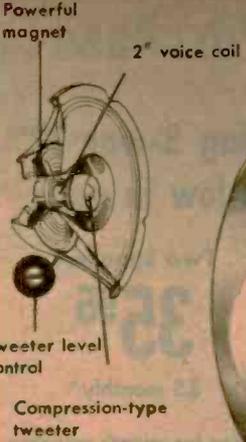
**29<sup>95</sup>**



**Allied factory-assembled tapered-port bass reflex 12-inch Speaker Enclosure**

Model 1286. Tastefully finished, factory-assembled 12-inch speaker enclosure is the perfect choice for those who want to mount their own speakers with minimal expense. The 1286 features the time-tested tapered-port bass reflex enclosure for maximum efficiency, low cost and easier speaker installation. Improves bass response and performance of any 12-inch speaker—the perfect match for the Allied 830BHC listed above.

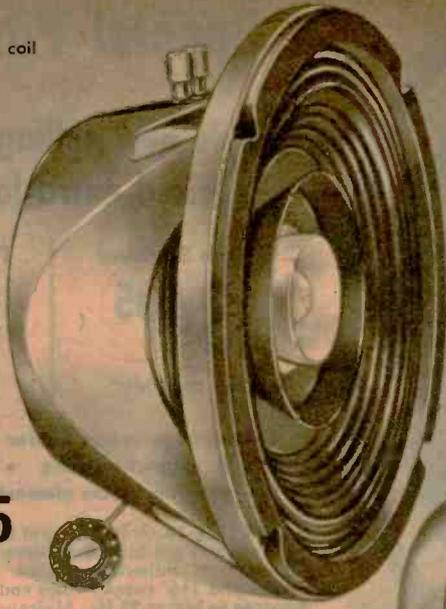
Has deluxe construction and compact, space-saving size. Constructed of sturdy 3/4" wood with a handsome walnut-veneer finish on all four sides of cabinet. Insulated with fiberglass to prevent annoying resonance. Has rear-mounted two-lug terminal strip for easy phasing and connection of the speaker system to your amplifier. Size, 14 1/2 x 24 x 12". Shpg. wt., 31 3/4 lbs. 20 A 9731 X. . . . . 29.95



# Allied 8" speakers .. quality sound for compact hi-fi systems

Feature deluxe construction,  
wide response and quality  
features that give you the most  
value for your hi-fi dollar

**21<sup>95</sup>**



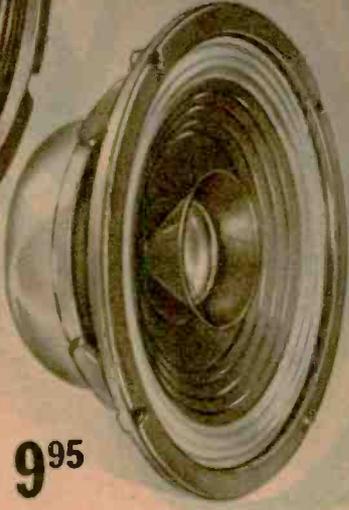
## Allied's best 8" Speaker features 3-way design for great hi-fi at a low price

**Model 839.** Our finest 8" high-fidelity speaker. Performs like a 12" speaker, yet it's actually priced lower than many "8s"! Ultracompact size, only 3 7/8" deep, makes it an ideal choice for wall or custom mounting. Three-way design for brilliant sound in any good 8" speaker enclosure—we recommend using the Allied 1295K speaker enclosure kit listed below.

High-compliance 8" woofer with outside 2" voice coil and powerful 10-oz. ceramic magnet delivers solid bass down to 45 Hz. Midrange cone covers the range from 2000 Hz to 4000 Hz with excellent fidelity. Compression-type tweeter disperses distortion-free treble up to 18,000 Hz. Level control adjusts tweeter output. Built-in crossovers at 2000 Hz and 4000 Hz. Screw-type binding post terminals allow fast, easy connection of the speaker to your amplifier.  
20 A 9700. Shpg. wt., 7 lbs. . . . . 21.95

### SPECIFICATIONS

- Free-Air Resonant Frequency: 65 Hz.
- Frequency Response: 45-18,000 Hz.
- Crossover Frequencies: Mechanical at 2000 Hz; electrical at 4000Hz.
- Power Capacity: 20 watts, 40 watts peak.
- Magnets: Woofer, 10-oz. ceramic; tweeter, 1.47-oz. Alnico V.
- Voice Coil: Woofer, 2"; tweeter, 1".
- Rated Impedance: 8 ohms.
- Mounting Depth: 3 7/8".
- Actual Weight: 6 lbs.



**9<sup>95</sup>**



## Allied's lowest priced 8-inch two-way Speaker for audio buffs on a tight budget

**Model 809HC.** An unmatched value for compact or low-cost stereo systems. Compact size, only 3 3/8" deep, makes it the perfect choice for wall or custom mounting. Will deliver excellent performance with the Allied 1295K 8" speaker enclosure listed below.

Specially-designed 8" high-compliance woofer is coupled to 1" voice coil and powerful 10-oz. ceramic magnet for natural bass down to 40 Hz. Separate midrange cone with aluminum dome radiator covers the important middle frequencies and the treble range.

Rigid, die-cast alloy frame locks voice coil and other moving parts in precise alignment for years of trouble-free, dependable performance. Power capacity, 15 watts (30 watts peak). Frequency response, 40-13,000 Hz. Impedance, 8 ohms. Binding post terminals for quick connection to your amplifier.  
20 A 9750. Shpg. wt., 3 3/4 lbs. . . . . 9.95

## Allied 8-inch walnut Speaker Enclosure Kit

**Model 1295K.** Absolutely the best value we have in a shelf-size 8-inch speaker enclosure kit. Features ducted-port bass reflex design for maximum efficiency and smooth bass response. For floor or shelf use; can be placed vertically or horizontally. Constructed of 3/4" wood with smart walnut veneer on all sides. Rub in finishing oil (not included) for handsome oiled walnut finish. Fiberglass insulated; has terminal strip for connection to your amplifier. With instructions. Size, 11x24x9".  
20 A 9721 X. Shpg. wt., 16 lbs. . . . . 16.95

**16<sup>95</sup>**



# Special Purchase . .

Utah's best selling 3-way 12"  
 . . priced extra-low in pairs

One Speaker

**34<sup>95</sup>**

\$5 monthly\*

Two Speakers

**35<sup>95</sup>**

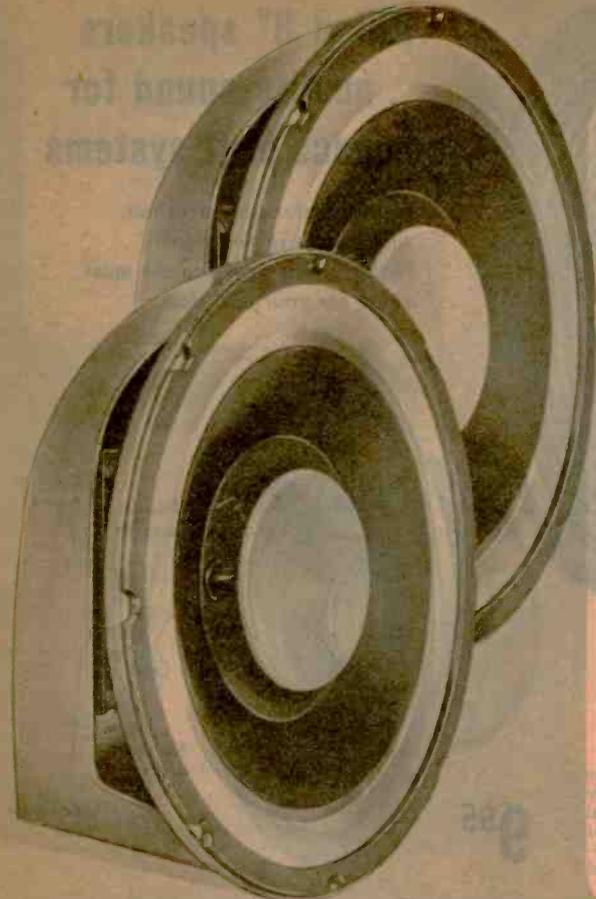
\$5 monthly\*

- Cloth-roll suspension woofer for smooth response
- 4½-lb. magnet structure • 1½" voice coil
- Die-cast frame locks elements in alignment

Model C12PC-3B. Order a pair of these popular "Celesta" speakers and get full-range stereo hi-fi at a special low Allied price. Superbly crafted. Cloth-roll suspension woofer and 1½" copper voice coil for smooth, rich bass response as low as 25 Hz. Midrange cone produces clear, distinct middle frequencies. Tweeter, with Alnico V magnets, delivers brilliant highs to 20,000 Hz. Cross-overs at 1000 and 3500 Hz.

Features rugged die-cast frame that locks speaker elements in perfect alignment for years of trouble-free performance. Large windows in frame permit maximum cone travel. Internal dust seal protects voice-coil gap. Fits most slim-line enclosures—modern shallow profile for mounting depth of only 5½". Convenient spring-loaded fingertip speaker terminals are color-coded for easy phasing. Impedance, 8 ohms. Capacity, 45 watts peak. Shpg. wt. each, 12¼ lbs.

20 A 8229 X. . . . . One Speaker 34.95  
 Two Speakers . . . . . 35.95



Utah 3-way 15" Speaker  
 . . buy a pair for stereo

One Speaker

**39<sup>95</sup>**

\$5 monthly\*

Two Speakers

**40<sup>95</sup>**

\$5 monthly\*

- 15-inch woofer delivers bass down to 20 Hz
- Anodized aluminum screen protects tweeter

Model D15PXC-3. Take advantage of Allied's amazing low price on a pair of these magnificent speakers. An unbeatable value in quality and performance. Gigantic 15-inch woofer with a 1½-lb. ceramic magnet delivers astonishingly rich bass response to 20 Hz without booming. Built-in 4" tweeter covers the midrange and high frequencies up to 18,000 Hz with sparkling clarity. Anodized aluminum screen protects the tweeter from damage. Spring-loaded phase-coded terminals for fast, easy installation. Impedance, 8 ohms. 45-watt peak power handling capacity. Mounting depth, 8" Shpg. wt. each, 12 lbs.

20 A 8230 X. . . . . One Speaker 39.95  
 Two Speakers . . . . . 40.95



# of popular Utah and Altec Lansing Speakers

Buy two Utah 3-way 8" Speakers at this low price

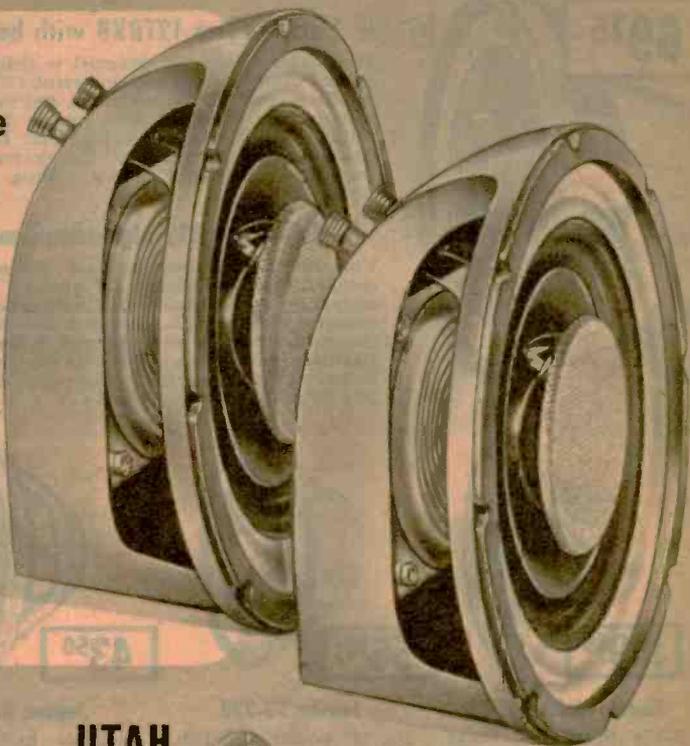
One Speaker	Two Speakers
<b>18<sup>95</sup></b>	<b>19<sup>95</sup></b>

Buy a pair for \$5 monthly\*

Model CBJC3. Get two of these excellent 3-way 8" hi-fi speakers at this money-saving low price. Cloth-roll suspension woofer with 10-oz. ceramic magnet produces rich, full bass down to 35 Hz; midrange cone provides clear middle frequencies; tweeter with Alnico V magnet delivers pure, undistorted highs up to 20,000 Hz.

Rigid, die-cast frame has large windows to permit maximum cone travel. Internal dust seal protects voice-coil gap. Spring-loaded, color-coded terminals for easy phasing. 30 watts peak. Impedance, 8 ohms. Shpg. wt. each, 5½ lbs.

20 A 8414..... One Speaker 18.95  
Two Speakers..... 19.95



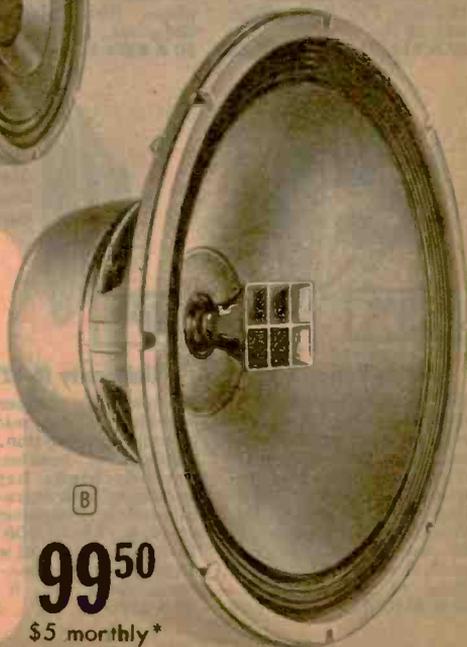
Sensational value!  
Full-response 2-way 8"  
Speaker by Utah

One Speaker  
**10<sup>73</sup>**

Two Speakers  
**11<sup>73</sup>**

**UTAH**

**ALTEC-LANSING**



**A** Model D81A. Get a pair of two-way 8" speakers at this special low Allied price—great for budget systems. Dual-diameter Alnico V magnet, 1¼" voice-coil plus treated cone edge woofer assure surprisingly good bass response down to 40 Hz. Whizzer cone supplies brilliant highs to 16,000 Hz. Capacity, 25 watts peak. Impedance, 8 ohms. 4" deep. Shpg. wt. each, 4 lbs.

20 A 8437. One Speaker ..... 10.73 Two Speakers..... 11.73

Special purchase! Altec-Lansing 2-way 15"

**B** Model 602D. Outstanding value on this superb 15-inch two-way coaxial speaker. Features high-compliance woofer with 3" voice-coil and 10½-lb. magnet structure for deep, resonant bass all the way down to 20 Hz. Compression driver and cast-zinc horn with 0°x90° dispersion distributes sparkling highs to 22,000 Hz. Cast-aluminum frame. Built-in crossover; level control. Capacity, 25 watts. Impedance, 8 ohms. 7" deep.

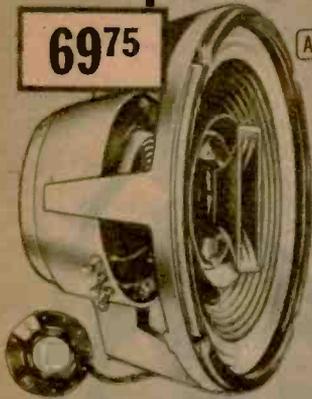
0 A 8220 X. Shpg. wt. \$21 lbs. .... 99.50

**99<sup>50</sup>**

\$5 monthly\*

# Popular 3-way 12" high-fidelity Speakers

6975

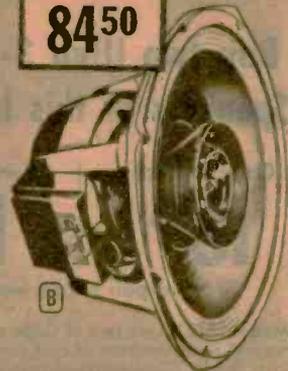


A

## A Electro-Voice 12TRXB with horn tweeter

World-famous speaker designed to delight the most critical listener. Combines powerful 12" woofer with 1½-lb. magnet, Radax midrange, and wide-dispersion horn tweeter. Beautiful tone from a deep 35 Hz to bell-like 20,000 Hz. 60 watts peak. Level control. Crossovers: mechanical, 2000 Hz; electrical, 3500 Hz. Impedance, 16 ohms. 7" deep. Shpg. wt., 16 lbs. 20 A 8137 X..... 69.75

8450



B

## B University 312 high-compliance model

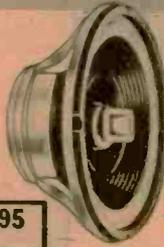
University's most popular and best-selling 3-way speaker. High-compliance 12" woofer; "Diffusicone" midrange, and exclusive "Sphericon" coaxially mounted tweeter with reflector baffle. Self-contained electrical crossover with integral brilliance control. 1000 Hz mechanical and 3000 Hz electrical crossover. 28-40,000 Hz. 35 watts. 8 ohms. 6½" deep. 20 A 8006 X. Shpg. wt., 10¼ lbs..... 84.50



10980

### Electro-Voice 12TRX

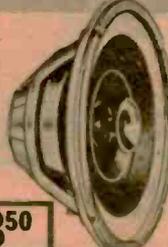
E-V's finest 12" 3-way speaker. Superb full-range sound from 30 Hz to beyond audio range. Powerful 12" woofer with 3-lb. magnet, Radax midrange, wide-dispersion tweeter. 2000, 3500 Hz crossovers. 80 watts peak. Impedance, 16 ohms. 7½" deep. Shpg. wt., 25 lbs. 20 A 8138 U..... 109.80



5695

### Jensen SG-220

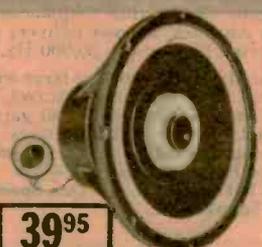
Big 12" woofer with 1-lb. magnet for rich bass down to 20 Hz. Midrange frequencies handled by a smooth midrange radiator. Wide-dispersion super tweeter for brilliant highs. Response, 20-18,000 Hz. 20 watts. Impedance, 8 ohms. Size, 5¼" deep. Shpg. wt., 12 lbs. 20 A 8374 X..... 56.95



4350

### Jensen DL-220

Provides excellent hi-fi sound in any enclosure. Big 12" woofer with 1-lb. magnet delivers full bass. Midrange radiator, compression tweeter. Frequency response, 25-17,000 Hz. Power capacity, 20 watts. Impedance, 8 ohms. Size, 5½" deep. Shpg. wt., 10 lbs. 20 A 8376 X..... 43.50



3995

### Utah R12PC-HF

Features rich-sounding 12" woofer with cloth-roll suspension. Midrange cone and coaxially-mounted tweeter. Rigid, die-cast frame is shaped for maximum strength. Level control. Response, 22-20,000 Hz. Capacity, 45 watts peak. 8 ohms. 5½" deep. Shpg. wt., 13 lbs. 20 A 8317 X..... 39.95



3960

### Electro-Voice LT-12

High-quality popular E-V speaker has big 12" woofer with 12-oz. magnet, Radax midrange and horn tweeter. Offers full bass response and superb highs. Response: 40-18,000 Hz. Power handling capacity, 40 watts peak; Impedance, 8 ohms. 5¼" deep. Shpg. wt., 9 lbs. 20 A 8120 X..... 39.60



Slim Line Design

3950

### University M-12T

A fine 12" speaker for superb low and mid-frequency reproduction, plus "Sphericon" tweeter that extends highs beyond audibility with extra-wide dispersion. Frequency response, 35-40,000 Hz. Power capacity, 30 watts. Impedance, 8 ohms. 3¼" deep. Shpg. wt., 9 lbs. 20 A 8280 X..... 39.50



3750

### Utah C12PC-3C

One of Utah's newest and finest hi-fi speakers. Full 12" woofer with cloth roll suspension. Midrange cone and coaxially mounted tweeter. Baked on lacquer finish. Die-cast frame. 23-20,000 Hz. Capacity, 45 watts peak. 8 ohms. 5¼" deep. Shpg. wt., 12 lbs. 20 A 8318 X..... 37.50



3495

### Utah C12PC-HF

Full 12" woofer with cloth roll suspension and 1½-lb. ceramic magnet brings you smooth bass down to 25 Hz. Compression horn tweeter brings highs to 20,000 Hz. Asymmetric frame. 45 watts peak capacity. Impedance, 8 ohms. Size, 5¼" deep. Shpg. wt., 12 lbs. 20 A 8240 X..... 34.95

# 2-way 12" high-fidelity Speakers

Special Purchase! Utah 12" Speakers

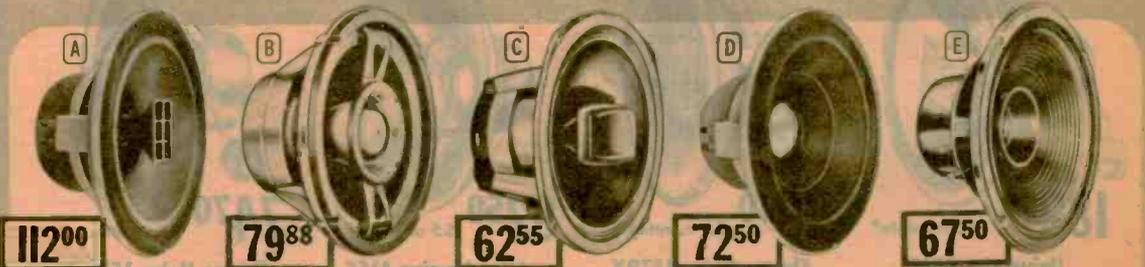
One Speaker **28<sup>50</sup>**  
\$5 monthly\*

Two Speakers **29<sup>50</sup>**  
\$5 monthly\*



Get two Utah speakers for little more than the price of one speaker. Feature 12" cloth roll suspension woofer with 1½-inch voice coil and 1¼-lb. ceramic magnet. Delivers rich, deep bass down to 23 Hz. Coaxially-mounted cone smoothly reinforces the all-important middle frequencies of the orchestra and reproduces highs to 19,000 Hz. Mounts on front or rear of baffle board. Power capacity, 45 watts peak. Impedance, 8 ohms. Solderless color-coded terminals. 5⅞" deep. Shpg. wt., each, 12 lbs.

20 A 8202 X. One Speaker..... 28.50  
Two Speakers..... 29.50



**112<sup>00</sup>**

**79<sup>88</sup>**

**62<sup>55</sup>**

**72<sup>50</sup>**

**67<sup>50</sup>**

**A Altec-Lansing 601D**

12" woofer with 9½-lb. magnet structure. VHF driver, multi-cell horn. Level control. 30-22,000 Hz. 30-watts peak. 8 ohms. 5⅝" deep. Shpg. wt., 18 lbs.  
20 A 8249 X..... 112.00

**C University 6201**

Coaxial speaker with separate magnets for woofer and compression tweeter. 28 Hz to beyond audio range. 35 watts. 8 ohms. 6⅞" deep. Wt., 10½ lbs.  
20 A 8009 X..... 62.55

**E Electro-Voice SP12**

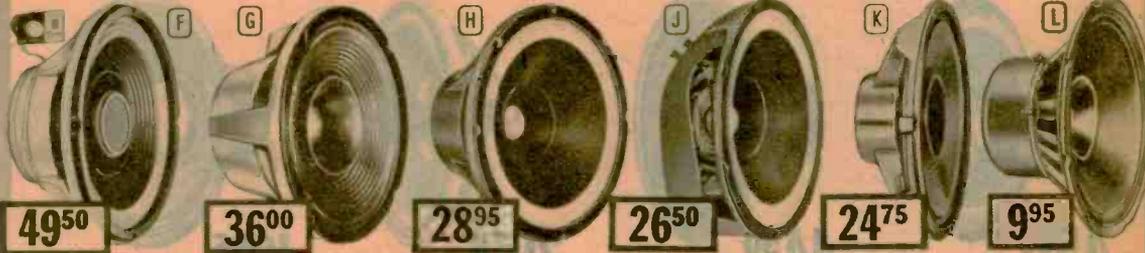
Hi-compliance 12" woofer for great base, has 3-lb. magnet; Radax high-frequency radiator. Cross-over at 4000 Hz. Frequency response, 30-15,000 Hz. Power capacity, 80 watts peak. Impedance, 16 ohms. 7½" deep. Shpg. wt., 21 lbs.  
20 A 8130 X..... 67.50

**B Jensen SG-223**

"Flexair" 12" woofer, 1¼ lb. magnet, horn-loaded reflex tweeter. 20-20,000 Hz. 25 watts. 8 ohms. 6⅞" deep. 15 lbs.  
20 A 8382 X..... 79.88

**D Altec-Lansing 412D**

Biflex multiple-compliance design. 12" woofer. 30-15,000 Hz. 30 watts peak. 8 ohms. 5⅝" deep. Wt., 16 lbs.  
20 A 8324 X..... 72.50



**49<sup>50</sup>**

**36<sup>00</sup>**

**28<sup>95</sup>**

**26<sup>50</sup>**

**24<sup>75</sup>**

**9<sup>95</sup>**

**F Jensen SG-210**

Advance design "Flexair" woofer with 1-lb. "Syntox-6" magnet. Curvilinear-radiator tweeter. Mech. mid-range, 20-16,000 Hz. 20 watts. 8 ohms. 5⅞" deep. Wt., 12 lbs.  
20 A 8201 X..... 49.50

**H Utah R12PC-2C**

Combines 12" woofer with "Open" frame design for maximum cone travel. Response, 20-19,000 Hz. Capacity, 45 watts peak. 8 ohms. 5⅞" deep. Shpg. wt., 12 lbs.  
20 A 8319 X..... 28.95

**K Electro-Voice LS12A**

Popular Electro-Voice speaker can double as low-frequency driver. Woofer has 13-oz. ceramic magnet. Radax tweeter. 40-14,000 Hz. 20 watts. 8 ohms. 3½" deep. 8 lbs.  
20 A 8476 X..... 24.75

**G Electro-Voice SP12B**

Wide-range coaxial reproducer. High compliance 12" woofer, Radax super tweeter. Response, 35-15,000 Hz. 60 watts peak capacity. 16 ohms. 6¼" deep. Wt., 15 lbs.  
20 A 8131 X..... 36.00

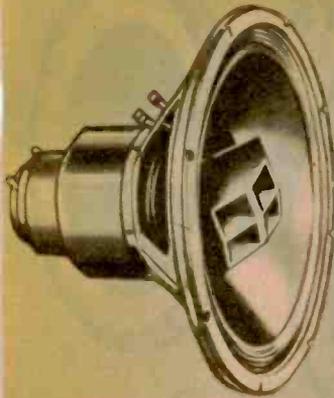
**J Utah C12PC-2C**

Features big 12" woofer in a rigid, die-cast frame. Cloth-roll suspension, 23-19,000 Hz. 45 watts peak. Impedance, 8 ohms. 5½" deep. Shpg. wt., 11 lbs.  
20 A 8316 X..... 26.50

**L Low-Cost Lincoln L-102**

Woofer cone delivers rich bass, whizzer cone, midrange and highs. 1¼-lb.—equivalent Alnico V magnet. 30-14,000 Hz. 20 watts. 8 ohms. 6⅞" deep. Shpg. wt., 6¼ lbs.  
20 A 8440 X..... 9.95

# Full-range 15" hi-fi Speakers



## Altec-Lansing studio-quality Speaker with horn tweeter

Quality constructed for outstanding performance across the full audio range

**195<sup>00</sup>**

\$10 monthly\*

Model 604E. Deluxe speaker for the most demanding high-fidelity devotee. "Super-Duplex" two-way 15" hi-fi speaker features high-compliance cone with massive 27-lb. dual magnet structure with Alnico V magnets. Boasts wide-range, distortion-free response. Widely used in professional recording and broadcast monitoring. Coaxially-mounted multicellular high-frequency horn gives superb 40°x90° dispersion. Dual full-section 1500 Hz crossover network. Level control. Frequency response from 20 to 22,000 Hz. Power handling capacity, 35 watts. Impedance, 8-16 ohms. Depth, 11 $\frac{1}{8}$ ". 20 A 8215 U. Shpg. wt., 40 lbs. . . . . 195.00

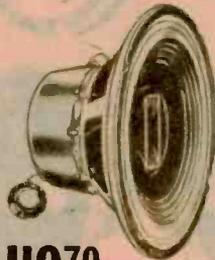


**189<sup>50</sup>**

\$10 monthly\*

### University 315C

Three-way speaker features 15" theater-type woofer with heavy-duty 6 $\frac{1}{2}$ -lb. Alnico V magnet and special anti-breakup diaphragm. Diffusicone midrange; compression horn tweeter. 25 Hz to beyond audio range. 50 watts. Two level controls. 8 ohms. 12" deep. 35 lbs. 20 A 8008 U. . . . . 189.50

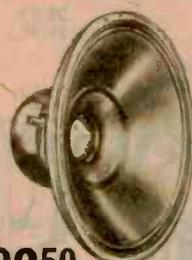


**119<sup>70</sup>**

\$6 monthly\*

### Electro-Voice 15TRX

Electro-Voice's finest, most popular three-way 15" speaker. Boasts woofer with 4 $\frac{3}{4}$ -lb. ceramic magnet; exclusive Radax propagator; plus horn-loaded super-tweeter with 6.8-oz. Alnico V magnet. Brilliance control. 25-20,000 Hz. 40 watts. 16 ohms. 8 $\frac{1}{4}$ " deep. 30 lbs. 20 A 8136 U. . . . . 119.70

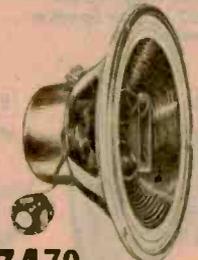


**82<sup>50</sup>**

\$5 monthly\*

### Altec-Lansing 415C

Fine value in a full-range two-way 15" speaker. Employs exclusive "Biflex" multiple compliance for unusually wide frequency range. Has 3" voice coil. Durable cast-aluminum frame. Response from 25 to 14,000 Hz. Power capacity, 25 watts. 8 ohms. Depth, 7". 19 lbs. 20 A 8211 X. . . . . 82.50



**74<sup>70</sup>**

\$5 monthly\*

### Electro-Voice 15TRXB

Quality three-way design for magnificent sound over the entire audio range. 15" woofer has 1 $\frac{3}{4}$ -lb. ceramic Indox magnet. Radax-type midrange cone. Wide-dispersion horn-type super-tweeter. Brilliance control. Response, 30-20,000 Hz. Peak power, 60 watts. 16 ohms. 9" deep. 18 lbs. 20 A 8070 X. . . . . 74.70



**45<sup>00</sup>**

\$5 monthly\*

### Electro-Voice SP15B

Fine value in a moderately low-priced radax coaxial hi-fi speaker. Features giant 15" woofer with 1 $\frac{3}{8}$ -lb. ceramic magnet for smooth, rich bass to 30 Hz. Built-in crossover at 3500 Hz to high-frequency cone. Frequency response, 30-15,000 Hz. Peak power capacity, 60 watts. Impedance, 16 ohms. 9" deep. Shpg. wt., 16 lbs. 20 A 8282 X. . . . . 45.00

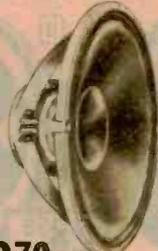


**44<sup>50</sup>**

\$5 monthly\*

### Utah G15RXC-HF

Three-way speaker features powerful 15" woofer that delivers thunderous bass to 30 Hz. Compression horn tweeter. Spring loaded, finger-tip terminals are color coded for easy stereo phasing. Smooth, clear response from 30 to 20,000 Hz. Peak power handling capacity, 50 watts. 8 ohms. 8" deep. 13 lbs. 20 A 8320 X. . . . . 44.50



**29<sup>70</sup>**

\$5 monthly\*

### Electro-Voice LS15

Here's an exciting value in a two-way 15" speaker. Features E-V's famous "Wolverine" crossover and Radax propagator. Provides a smooth frequency response from 30 to 14,000 Hz. Built-in crossover at 4500 Hz. Power handling capacity is 20 watts (40 watts peak). Impedance is 8 ohms. Depth, 6 $\frac{1}{4}$ ". 11 lbs. 20 A 8123 X. . . . . 29.70



**19<sup>95</sup>**

\$5 monthly\*

### Lincoln L-155

Three-way 15" hi-fi speaker at a sensational low price. Excellent for budget stereo systems. Woofer has 1 $\frac{1}{2}$ " voice coil, 1 $\frac{1}{2}$ -lb. magnet. Whizzer cone and tweeter for clear mid-frequencies and pure highs. Frequency response, 25-18,000 Hz. Peak power capacity, 40 watts. Impedance, 8 ohms. 8" deep. Wt., 10 lbs. 20 A 8160 X. . . . . 19.95

# Value-packed 8-inch hi-fi Speakers

## Altec-Lansing ultra-slim "Biflex" Speaker

Model 755E. Versatile "Biflex" speaker is so slim that it fits just about anywhere—it's depth is only  $2\frac{1}{4}$ ". Compact but powerful 8" woofer boasts  $1\frac{1}{2}$ -lb. ceramic Indox V magnet for rich bass without booming. Features multiple concentric compliance suspension. 90° dispersion. Smooth, clear frequency response from 50 to 15,000 Hz. Power capacity, 15 watts. Impedance, 8 ohms.  
20 A 8205. Shpg. wt., 7 lbs. . . . . 30.75

Convenient slim design allows easy placement

**30<sup>75</sup>**  
\$5 monthly\*



## Special Purchase



## University three-way

Cut \$12.80

**29<sup>95</sup>**

Model 308. Was \$42.75. This is the 8" version of the famous University 312. Three-way speaker boasts true coaxial construction. Features high-efficiency woofer, multi-element diffusicone midrange section, and compression-driven, wide-angle reciprocating flare horn tweeter.

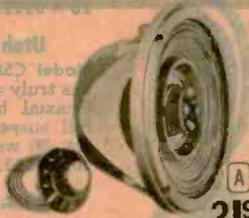
Electrical crossover network at 5000 Hz, mechanical crossover network at 1000 Hz. Frequency response, 30-17,000 Hz. Power handling capacity, 35 watts. Impedance, 8 ohms.  $6\frac{1}{8}$ " deep. Shpg. wt.,  $7\frac{1}{2}$  lbs.  
20 A 8011 . . . . . 29.95



**32<sup>50</sup>**

## University "Diff-8"

Popular "Diffusicone-8" two-way 8" "Difaxial" speaker features high-efficiency woofer with multi-element "Diffusicone" midrange. Superb wide-angle treble dispersion. 30-15,000 Hz. 35 watts. 8 ohms.  $4\frac{3}{16}$ " deep.  
20 A 8010. 5 lbs. . . . . 32.50



**31<sup>95</sup>**

## A Electro-Voice three-way Speaker

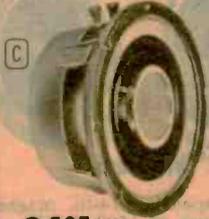
Model LT8. Woofer, midrange cone, and tweeter with ring diaphragm. Response, 45-18,000 Hz. 40 watts peak power. 8 ohms. Depth,  $3\frac{1}{16}$ ".  
20 A 8314. Shpg. wt., 7 lbs. . . . . 31.95



**29<sup>70</sup>**

## B Electro-Voice Radax coaxial Speaker

Model SP8B. Two-way speaker has  $1\frac{3}{8}$ -lb. ceramic magnet. 35-15,000 Hz. Peak power capacity, 40 watts. 16 ohms. Depth,  $4\frac{3}{4}$ ".  
20 A 8315. Shpg. wt., 9 lbs. . . . . 29.70



**24<sup>95</sup>**

## C Utah cloth roll suspension three-way

Model R8JC-3. Can be mounted from front or rear of baffle board. Rigid die-cast frame. Response, 30-20,000 Hz. 32 watts peak. 8 ohms. Depth,  $3\frac{5}{8}$ ".  
20 A 8322. Shpg. wt., 5 lbs. . . . . 24.95  
20 A 8323. Model R8JC-2. As above, but 2-way instead of 3-way. Response, 30-19,000 Hz. Wt.,  $4\frac{3}{4}$  lbs. . . . . 17.95



**20<sup>50</sup>**

## D Jensen two-way Speaker

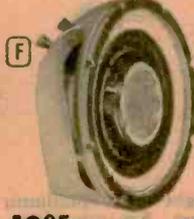
Model SG80. Moderately-priced two-way speaker features dual-cone design and  $\frac{5}{8}$ -lb. magnet for clear, crisp performance. Response, 40-15,000 Hz. Power capacity, 15 watts. Impedance, 8 ohms.  $3\frac{3}{8}$ " deep.  
20 A 8388. Shpg. wt., 5 lbs. . . . . 20.50



**19<sup>80</sup>**

## E Electro-Voice two-way Speaker

Model LS8. Versatile speaker can be mounted conveniently in ceiling, wall and thinline enclosures. Woofer plus Radax midrange/high-frequency cone. Boasts smooth response from 45 to 14,000 Hz. Peak power capacity, 40 watts. Impedance, 8 ohms.  $3\frac{1}{2}$ " deep.  
20 A 8124. Shpg. wt., 5 lbs. . . . . 19.80



**18<sup>95</sup>**

## F Utah "Celesta" three-way Speaker

Model C8JC-3C. Features efficient 8" woofer with accordion-pleated cloth roll suspension for smooth bass, midrange cone, coaxially mounted tweeter. Pressure-cast frame for lasting alignment of critical parts. 35-20,000 Hz. 30 watts peak. 8 ohms.  $3\frac{3}{16}$ " deep.  
20 A 8321. Shpg. wt.,  $5\frac{1}{2}$  lbs. . . . . 18.95



**15<sup>75</sup>**

## G Jensen low-cost two-way Speaker

Model DL80. Dual-cone high-fidelity speaker features compact but powerful 8" woofer and radiator cone-type tweeter. Frequency response, 45-15,000 Hz. Power capacity, 15 watts. Impedance, 8 ohms. Depth,  $3\frac{1}{8}$ ".  
20 A 8389. Shpg. wt., 4 lbs. . . . . 15.75



**15<sup>75</sup>**

## H Electro-Voice bargain-priced two-way

Model MC8. Features efficient 8" woofer with ceramic magnet structure. Has radax midrange and high-frequency cone to assure surprisingly extended highs and wide dispersion at a low price. Response, 50-13,000 Hz. Peak power capacity, 24 watts. 8 ohms.  $3\frac{3}{16}$ " deep.  
20 A 8472. Shpg. wt., 5 lbs. . . . . 15.75

# Custom hi-fi and outdoor Speakers

## Outdoor hi-fi Speakers

### Utah 8" two-way Patio Speaker

Model HFOD-8A. Two-way 8" speaker in weatherproof drawn steel green cabinet. Volume control. Response: 35-19,000 Hz. Capacity: 15 watts. 8 ohms. With 25' cable. 10<sup>7</sup>/<sub>8</sub>x10<sup>7</sup>/<sub>8</sub>x5<sup>7</sup>/<sub>8</sub>". 20 A 8448 X. Wt., 7 lbs. . . . . 13.95

### Electro-Voice Sonocaster I

Lightweight and rugged. Versatile for extension or portable use. Radax coaxial 8" speaker. Molded black housing. 70-13,000 Hz. 30 watts peak. 8 ohms. 16<sup>3</sup>/<sub>4</sub>x17x5<sup>1</sup>/<sub>8</sub>". 20 A 7237 X. Wt., 7 lbs. . . . . 22.50

### Electro-Voice Musicaster IA

Weatherproof 12" dual-cone Radax wide-range driver. Compression molded housing. 80-10,000 Hz. 30 watts; 60-W peak. 8 ohms. 21<sup>1</sup>/<sub>2</sub>x21<sup>1</sup>/<sub>2</sub>x8<sup>1</sup>/<sub>2</sub>". 12 A 7044 U. Wt., 29 lbs. . . . . 69.90  
12 A 7479 U. Musicaster IIA. Above; VHF driver. 16,000 Hz. 31 lbs. . . . . 88.50

### Altec Patio Speaker System

Model 829A. 8" wide-range, high-compliance speaker for smooth response, 40-15,000 Hz; wide angular dispersion. Infinite baffle enclosure of hi-impact Kydex®. 8 ohms. 60-W peak. 17<sup>7</sup>/<sub>8</sub>x14<sup>1</sup>/<sub>8</sub>x12<sup>1</sup>/<sub>2</sub>". Chrome plated stand. 20 A 8246 U. Wt., 10<sup>1</sup>/<sub>2</sub> lbs. . . . . 77.50

## Acoustic-suspension Speakers

### Utah 5" full-range Speaker

Model CS5JFC. Cloth-roll acoustic-suspension speaker performs like a much larger model. 1<sup>3</sup>/<sub>4</sub>-lb. magnet structure; 3/4" voice coil. 65-17,000 Hz. 18 watts peak. 8 ohms. 2<sup>1</sup>/<sub>8</sub>" deep. 20 A 8163. Wt., 2 lbs. . . . . 6.90

### Utah 6" full-range Speaker

Model CS6JWC. Acoustic-suspension 2-way 6" speaker features compact size, big sound. 10-oz. barium-ferrite magnet. Response, 50-17,000 Hz. 25 watts peak. 8 ohms. 2<sup>5</sup>/<sub>8</sub>" deep. 20 A 8222. Wt., 2 lbs. . . . . 7.90

### Utah 8" full-range Speaker

Model CS8JWC. Two-way 8" speaker has truly amazing response for its size. Coaxial high-frequency cone; cloth-roll suspension. Response, 30-20,000 Hz. 30 watts peak. 8 ohms. 3" deep. 20 A 8223. Wt., 2<sup>3</sup>/<sub>4</sub> lbs. . . . . 8.90

### Utah 12" and 15" Woofers

12" Model V12RXC-7. Features 1<sup>7</sup>/<sub>8</sub>-lb. ceramic magnet; 2" voice coil; cloth-roll suspension. 25-2500 Hz. 30 watts, 60 peak. 8 ohms. 5" deep. 20 A 8325 X. Wt., 9 lbs. . . . . 23.95  
15" Model V15RXC-5. Above, but 20-2500 Hz. 35 watts, 70 peak. 6<sup>1</sup>/<sub>2</sub>" deep. 20 A 8328 X. Wt., 12 lbs. . . . . 28.95

## Altec-Lansing Woofers



**A** Altec 406B 10" Woofer. Lightweight cast aluminum frame. 9-lb. 7-oz. magnet structure. Exceptional response, 25-4500 Hz. 25 watts. 8 ohms. 5<sup>1</sup>/<sub>4</sub>" deep. 20 A 8214 U. Shpg. wt., 16 lbs. . . . . 56.00

**B** Altec 414B 12" Woofer. 9-lb. 7-oz. magnet structure. 3" edge-wound voice coil; cast aluminum frame. Response, 30-4000 Hz. 25 watts. 16 ohms. 5<sup>5</sup>/<sub>8</sub>" deep. 20 A 8247 U. Shpg. wt., 16 lbs. . . . . 58.00

**C** Altec 416A 15" Woofer. 10-lb. 8-oz. magnet structure. 3" edge-wound copper ribbon voice coil. Cast aluminum frame. 20-1600 Hz. 30 watts. 16 ohms. 7" deep. 20 A 8221 U. Shpg. wt., 19 lbs. . . . . 62.00

### Altec 4" Mini-Speaker

Model 405A. Compact full-range speaker for high-fidelity or car tape systems. Water-resistant cone. Response, 60-15,000 Hz. 10 watts. 8 ohms. 2<sup>1</sup>/<sub>8</sub>" deep. 20 A 8065. Shpg. wt., 3 lbs. . . . . 12.00

### Lincoln Midrange-Tweeter

Model L-104. Exceptional Allied value! Has 1-oz. Alnico V magnet. 5000 Hz crossover. Response, 3500-16,000 Hz. Capacity, 15 watts. 8 ohms. 1<sup>1</sup>/<sub>8</sub>" deep. 20 A 8442. Shpg. wt., 8 oz. . . . . 1.99



## Popular 15" and 12" Woofers

**D** University C15W 15". Twin suspension 14-lb. magnet structure; dual voice coil. Response, 25-1500 Hz. Capacity, 50 watts. Impedance; 4-20 ohms. 10<sup>1</sup>/<sub>8</sub>" deep. 20 A 8025 U. Shpg. wt., 27 lbs. . . . . 109.50

University C15HC 15". (Not illus.) 10-lb. magnet structure; dual voice coil. 18-800 Hz. 60-W. 4-20 ohms. 8<sup>3</sup>/<sub>8</sub>" deep. 20 A 8026 U. Shpg. wt., 25 lbs. . . . . 97.50

University C-12HC 12". (Not illus.) 8-lb. magnet structure; dual voice coil. 20-3000 Hz. 50-W. 4-20 ohms. 6<sup>3</sup>/<sub>8</sub>" deep. 20 A 8027 X. Shpg. wt., 14 lbs. . . . . 57.00

**E** Jensen W15-LF 15". "Flexair" design with 3<sup>1</sup>/<sub>2</sub>-lb. magnet. 16-2000 Hz. 45 watts. 8 ohms. 8" deep. 20 A 8301 X. Shpg. wt., 15<sup>1</sup>/<sub>2</sub> lbs. . . . . 92.25

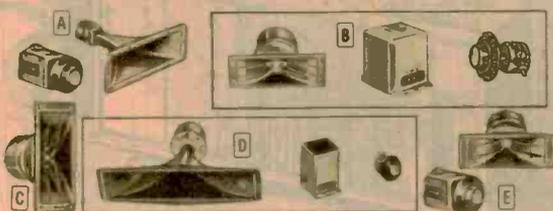
Jensen W12NF 12". (Not illus.) "Flexair" suspension; 1<sup>3</sup>/<sub>4</sub>-lb. magnet. 20-2000 Hz. 35 watts. 8 ohms. 7<sup>1</sup>/<sub>2</sub>" deep. 20 A 8300 X. Shpg. wt., 9<sup>1</sup>/<sub>4</sub> lbs. . . . . 52.65

**F** Lincoln L-109 15". Has 20-oz. equivalent dual-diameter magnet; 1<sup>1</sup>/<sub>2</sub>" voice coil. Response, 24-4500 Hz. Power capacity, 30 watts. 8 ohms. 7<sup>7</sup>/<sub>8</sub>" deep. 20 A 8445 X. Shpg. wt., 9 lbs. . . . . 15.95

Lincoln L-112 12". (Not illus.) 20-oz. equivalent magnet; 1<sup>1</sup>/<sub>2</sub>" voice coil. 30-4000 Hz. 25 watts. 8 ohms. 6<sup>1</sup>/<sub>4</sub>" deep. 20 A 8444 X. Shpg. wt., 7<sup>1</sup>/<sub>2</sub> lbs. . . . . 12.95

# Speaker System Components and Accessories

## ELECTRO-VOICE Speaker Accessories



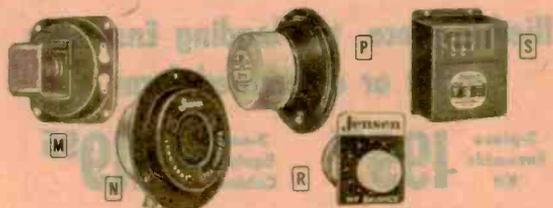
- A** Electro-Voice HF-1 Tweeter Package. Wide-angle tweeter; 3500 Hz crossover; level control; wiring. 3500 Hz to beyond audio range. 25 watts. 8 ohms. 20 A 8128. Shpg. wt., 3 lbs. . . . . 27.90
- B** E-V BB-1 Deluxe Tweeter Package. T35 tweeter; X36 crossover; AT37 control. 3500-20,000 Hz. 40 watts. Impedance, 16 ohms. 20 A 8113. Shpg. wt., 6 lbs. . . . . 49.50
- C** E-V T-35 Tweeter. Response: 3500 to 20,000 Hz. Capacity, 40 watts. Impedance, 16 ohms. 20 A 8142. Shpg. wt., 3 lbs. . . . . 28.80
- D** Electro-Voice BB-4 Package. Complete with: T25A driver; 8HD diffraction horn; X8 crossover; AT37 control; wiring. 80-3500 Hz. 40 watts. 16 ohms. 20 A 8114 X. Shpg. wt., 16 lbs. . . . . 99.00
- E** Electro-Voice MF1 Midrange Speaker Package. Includes: MR-10 treble driver; CR-10 crossover; level control; wiring. 1000-3500 Hz. 20 W. 8 ohms. 20 A 8129 X. Shpg. wt., 1 1/2 lbs. . . . . 29.70

## ALTEC "Voice of the Theater" Components



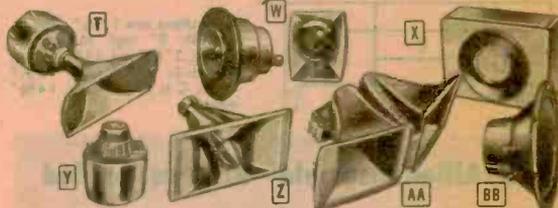
- F** Altec-Lansing 511B H.F. Sectoral Horn. 500 Hz to beyond audio range. 90°x40° dispersion. 18 1/2" deep. 20 A 8234 U. Shpg. wt., 18 lbs. . . . . 44.50
- G** Altec-Lansing 802D H.F. Driver. 500-22,000 Hz. Couples to 511B horn. 30 W. 16 ohms. 3 1/16" deep. 20 A 8233. Shpg. wt., 9 lbs. . . . . 71.50
- H** Altec-Lansing 3000H H.F. Speaker. Multicell horn, driver. 3000-22,000 Hz. 20 W. 8 ohms. 4 5/16" deep. 20 A 8237. Shpg. wt., 2 lbs. . . . . 39.50
- J** Altec-Lansing N-500G Crossover. Two-section crossover for 802D driver divides at 500 Hz. 16 ohms. 20 A 8236. Shpg. wt., 9 lbs. . . . . 53.00
- K** Altec-Lansing N-3000E Crossover. 3000 Hz crossover for 406B or 414A woofer and 300H tweeter. 8 ohms. 20 A 8238. Shpg. wt., 2 lbs. . . . . 20.50
- L** Altec-Lansing 100A Bass Energizer. Boost low-end bass 6 dB. Begins at 150 Hz, optimum at 50 Hz. 20 A 8218. Shpg. wt., 1 lb. . . . . 25.00

## JENSEN Speaker Accessories



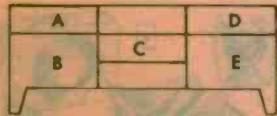
- M** Jensen Model TP35-V Direct Radiating Tweeter. Engineered with 3 1/2" diaphragm. Frequency response, 2000 Hz to 16,000 Hz. Power handling capacity rated at 25 watts. Impedance, 8 ohms. 20 A 8302. Shpg. wt., 3/4 lbs. . . . . 5.95
- N** Jensen Model TE-40 Sono-Dome® Ultra-Tweeter. For use in 3- or 4-way systems above 4000 Hz response. Full frequency response, 4000 Hz to 25,000 Hz. Power handling capacity. 35 watts. Impedance, 8 ohms. 20 A 8303. Shpg. wt., 1 1/2 lbs. . . . . 26.96
- P** Jensen Model MQ8-R Direct Radiator 8-inch Mid-Frequency Unit. Closed back permits use in woofer enclosures without danger of losing fidelity. Frequency response, 600 Hz to 4000 Hz. Power handling capacity rated at 40 watts. Impedance, 8 ohms. 20 A 8304. Shpg. wt., 4 lbs. . . . . 20.93
- R** Jensen Model BCL-2 Two-Deck L-Pad. Wirewound with knob and escutcheon. For mid- and high-frequency balance adjustments in multi-way speaker systems. Power handling capacity, 45 watts. Impedance, 8 ohms. 20 A 8307. Shpg. wt., 1/2 lb. . . . . 8.06
- S** Jensen Model A6410/8 Crossover Network. For use in 3- or 4-way speaker systems. Crossover frequencies at 600 Hz, 4000 Hz, and optional 10,000 Hz. Power handling capacity, 100 watts. Impedance, 8 ohms. 20 A 8306. Shpg. wt., 7 lbs. . . . . 40.05

## UNIVERSITY Speaker Accessories



- T** 20 A 8051. HF-206 Tweeter. 2500 Hz to beyond audio range. For 3-way systems, use N-1 Filter, below. Capacity: 50 watts. Impedance, 8 ohms. 6x3 5/16"x6 5/16". Shpg. wt., 3 1/2 lbs. . . . . 39.50
- W** 20 A 8283. MS Supertweeter. 3000-40,000 Hz. Crossover, brilliance control. 30 W. 8 ohms. 3 1/8"x3 1/8". 1 1/2 lbs. 19.95
- X** 20 A 8060. T-203W Sphericorn Tweeter. 3000-40,000 Hz. Crossover, brilliance control. Capacity: 30 watts, 8 ohms. Walnut case. 6 3/4"x5 1/4"x2 3/4". Wt., 2 3/4 lbs. . . . . 27.00
- 20 A 8061. T-202 Tweeter. Above, less case. 4 5/8"x4". Shpg. wt., 2 1/2 lbs. . . . . 27.00
- 20 A 8053. N-1 Adjustable High-Pass Filter. (Not illus.) 4-16 ohms. 2500, 5000, 10,000 Hz xover. 3 5/8"x3 1/4"x3". 2 lbs. 15.00
- AP-8** Level Control. (Not illus.) For 8-16 ohm systems. 20-A 8055. Shpg. wt., 7 oz. . . . . 7.50
- Y** 20 A 8049. T-30 Midrange/HF Driver. For H-600 or Cobreflex horns. 350 Hz to beyond audibility. 50 watts. 8 ohms. 1 3/4"-18 throat. 3 1/2"x3 3/4". Shpg. wt., 2 3/4 lbs. . . . . 33.40
- Z** 20 A 8050. H-600 Midrange/HF Horn. Midrange down to 600 Hz. 7 3/4"x8 3/4"x4 3/4". Shpg. wt., 2 lbs. . . . . 23.80
- AA** 12 A 7566 X. Cobreflex Twin-Flare Horn. Midrange down to 200 Hz. 1 3/8"-18 throat. 10 1/4"x18 1/2"x9 1/4". Use with T-30 above. Shpg. wt., 10 1/4 lbs. . . . . 29.39
- BB** 20 A 8048. C-8M 8" Midrange Speaker. 500-5000 Hz. 50 watts. Impedance: 8 ohms. Shpg. wt., 3 1/2 lbs. . . . . 18.20

Distinctively styled  
 Allied® hi-fi Furniture  
 complements any decor



All sections are 17 1/2" wide. A and D: 9" high (6" above board, 3" below), 14 1/4" deep. B and E: 12 3/4" high, 15 1/4" deep. C is 21 1/4" high, 14 1/4" deep.

**Allied 3-piece, top-loading Ensemble in kit or assembled form**

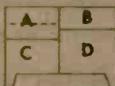
3-piece Ensemble Kit **199<sup>95</sup>**

3-section Equipment Cabinet Kit **119<sup>95</sup>**

**Smart Allied Ensemble—kit or assembled**



Three-Piece Ensemble Kit



Two-Section Equipment Cabinet Kit

**154<sup>85</sup>**

All 17 1/2" w. A, C; 21 1/4" h. 16 1/4" d. with sd. shelves. B: 19" h. (6" above board, 3" below). 14 1/4" d. D: 12 3/4" h. 16 1/4" d.

**79<sup>95</sup>**

Allied 3-piece ensemble or 1511 two-section equipment cabinet and 1511 speaker enclosures separately. Kits assemble with screwdriver, come with oil for walnut finish. 3/4" construction. Cabinet, 27 1/4 x 38 1/2 x 17 1/4". Enclosure, 27 1/4 x 18 1/4 x 17 1/4". Precut for 15", with 12" speaker adapter. Assembled, oiled walnut finish.

Item	Wt., Lbs.	Kit Ready-to-Finish		Assembled, Finished	
		Stock No.	EACH	Stock No.	EACH
Ensemble Cabinet	209	20 A 9363 L3ZF	154.85	20 A 9364 L3ZF	204.85
Enclosure	98	20 A 9356 ZF	79.95	20 A 9360 ZF	109.95
	55	20 A 9357 ZF	39.95	20 A 9361 ZF	49.95

20 A 9461 XF. Custom Mount Panel. Wt., 4 lbs. . . . . 2.95

98 **ALLIED**

Handsomely-styled ensemble enhances your room decor while the special design provides excellent acoustics for your hi-fi speakers. Features top-loading design for easy access to separate recorder and turntable compartments. Record compartment has convenient sliding doors. Removable motor boards. Bass-reflex speaker enclosures. Sculptured styled base. Baffles precut for 15" speakers; adapters for 12" speakers also included. Storage space for 200 LP's, with sturdy record support wires.

Allied 1523 equipment cabinet, 28 3/8 x 57 1/2 x 18 1/4". Allied 1524 speaker enclosures, each 28 3/8 x 18 1/4 x 18 1/4". All you need is a screwdriver to assemble kits. Predrilled holes, sanded, ready-to-finish with quick-drying walnut finishing oil, included. Complete with custom mounting panels. Smart-looking brown grille cloth. Instructions. Assembled cabinets finished in beautiful oiled walnut. See shipping information below.

Item	Wt., Lbs.	Kit, Ready-to-Finish		Assembled, Finished	
		Stock No.	EACH	Stock No.	EACH
Ensemble Cabinet	264	20 A 9322 L3ZF	199.95	20 A 9324 L3ZF	279.95
Enclosure	144	20 A 9316 ZF	119.95	20 A 9319 ZF	179.95
	60	20 A 9318 ZF	44.95	20 A 9321 ZF	54.95

**SHIPPING INFORMATION**

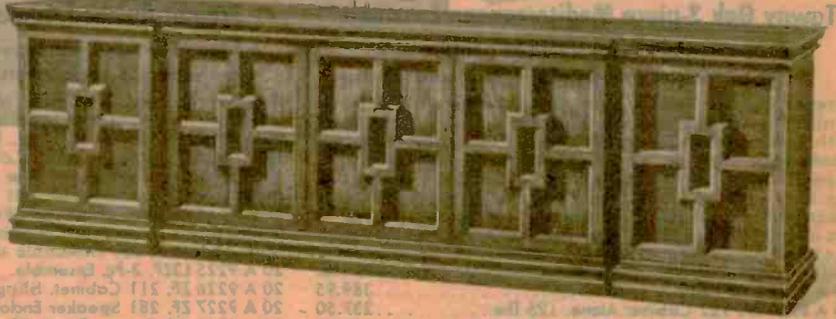
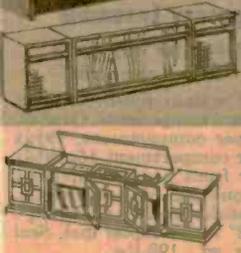
Furniture is shipped by truck or express from Stevens Point, Wisconsin (shipping charges collected by carrier on delivery). Allow 30 days for kits, 45 days for assembled units. Sorry, no C.O.D. orders.

Buy with no money down . . . see page 438

# BARZILAY

Exquisitely styled  
furniture for your  
hi-fi components

Choose from factory assembled  
models or money-saving kits



**A** "Design X" 3-piece contemporary ensemble

**B** "Design Eight" 3-pc. Mediterranean Ensemble

**274<sup>95</sup>**  
Kit Form  
Uniquely slanted panels . . . record  
drawers on ball-bearing slides

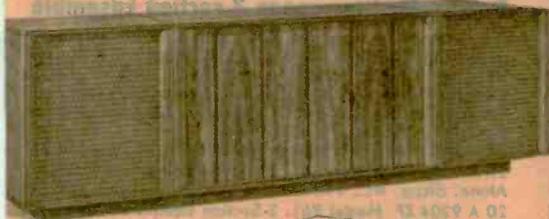
**299<sup>95</sup>**  
Kit Form  
Gorgeous Classic Mediterranean  
style in oak solids and veneers

Matched grain, premium-grade walnut. Full-width lift top. Changer section, 18<sup>3</sup>/<sub>4</sub>" w., 15" deep. Receiver and tape sections each, 18<sup>3</sup>/<sub>4</sub>" w., 15<sup>3</sup>/<sub>4</sub>" deep. Record drawers each, 12<sup>1</sup>/<sub>2</sub>x16<sup>1</sup>/<sub>2</sub>x14<sup>1</sup>/<sub>2</sub>". Overall cabinet, 29<sup>1</sup>/<sub>2</sub>x58<sup>1</sup>/<sub>2</sub>x19". Enclosures for 12" or 15" speakers with tunable ducted ports. Each, 29<sup>1</sup>/<sub>2</sub>x19<sup>1</sup>/<sub>2</sub>x19". Kits in ready-to-finish form with finishing kit supplied. See shpg. Note below.

20 A 9220 L2ZF. Ensemble Kit. 280 lbs.	274.95
20 A 9221 L2ZF. 11E. Assembled Ensemble. 280 lbs.	424.95
20 A 9222 ZF. K101. Eqpt. Cab. Kit. 160 lbs.	164.95
20 A 9223 ZF. 111. Assembled Eqpt. Cab. 160 lbs.	259.95
20 A 9224 ZF. K102. Spkr. Encl. Kits. 120 lbs.	Pair 114.95

Full top-loading cabinet in matched grain pecan veneer. Changer section, 17<sup>1</sup>/<sub>4</sub>" w., 15" deep. Receiver section, 18<sup>3</sup>/<sub>4</sub>" w., 15" dp. Tape section, 18<sup>3</sup>/<sub>4</sub>" w., 15" dp. Overall cabinet, 29x59<sup>1</sup>/<sub>4</sub>x18<sup>3</sup>/<sub>4</sub>". Enclosures for 12" or 15" speakers. Each, 29x21<sup>1</sup>/<sub>4</sub>x18<sup>3</sup>/<sub>4</sub>". Kits with finishing kit supplied for six different tones. Assembled, oiled pecan veneer finish. See Shpg. Note below.

20 A 9215 L2ZF. Ensemble kit. 270 lbs.	299.95
20 A 9218 L2ZF. 87E Assembled Ensemble. 270 lbs.	559.95
20 A 9216 ZF. K81 Eqpt. Cab. Kit. 140 lbs.	184.95
20 A 9219 ZF. 871 Eqpt. Cab. Assembled. 145 lbs.	349.95
20 A 9217 ZF. K82 Spkr. Encl. kits. 125 lbs.	Pair 129.95



Kit Form **259<sup>95</sup>**

Barzilay "Design Five" 3-piece ensemble

In kit-form with finishing kit supplied; or assembled with walnut veneer and solids. Cabinet 48" w. Record player drawer, 20" w., 15" dp. Receiver section, 20" w., 24<sup>1</sup>/<sub>2</sub>" h. Enclosures for up to 15" speakers with tunable ducted port, deluxe grille, are 29x24x18". Tambour door cabinet, 29x48x18". See Shpg. Note below.

20 A 9005 L2ZF. Ensemble Kit. 265 lbs.	259.95
20 A 9006 L2ZF. 700E Assembled Ensemble. 265 lbs.	389.95
20 A 9007 ZF. K71 Eqpt. Cabinet Kit. 110 lbs.	159.95
20 A 9010 ZF. 761 Eqpt. Cabinet, Assembled. 135 lbs.	219.50
20 A 9008 ZF. K72 Spkr. Encl. Kits. 160 lbs.	Pair 114.95

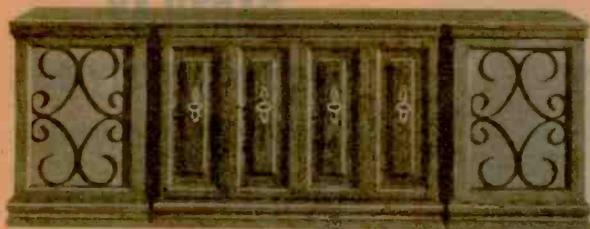


Kit Form **294<sup>95</sup>**

Barzilay "Design One"/b deluxe Ensemble

Full-width lift top. Top center, 18<sup>3</sup>/<sub>4</sub>" w., 15<sup>1</sup>/<sub>2</sub>" dp. Top left and right, 18<sup>3</sup>/<sub>4</sub>" w., 15<sup>1</sup>/<sub>2</sub>" d. Lower left and right 18<sup>3</sup>/<sub>4</sub>" w., 13" h., center, 18<sup>3</sup>/<sub>4</sub>" w., 23" h. Overall cabinet, 28<sup>3</sup>/<sub>4</sub>x58<sup>1</sup>/<sub>2</sub>x18<sup>1</sup>/<sub>2</sub>". Enclosures for 12" or 15" speakers with tunable ducted ports. Each, 28<sup>3</sup>/<sub>4</sub>x22x18<sup>1</sup>/<sub>2</sub>". Kits with finishing kit. Assembled, oiled black walnut. See shpg. Note below.

20 A 9151 L2ZF. 3-pc. Ensemble Kit. 280 lbs.	294.95
20 A 9152 L2ZF. 3-pc. 100E/b Assembled Ensemble	459.95
20 A 9153 ZF. K61/b Eqpt. Cabinet Kit. 160 lbs.	174.95
20 A 9155 ZF. 161/b Assembled Eqpt. Cabinet	279.95
20 A 9154 ZF. K62/b Spkr. Encl. Kits. 120 lbs.	Pair 124.95



**389<sup>95</sup>**

Easy component access



**Rockford**

**224<sup>95</sup>**

Ideal for "compacts"



**Tawny Oak 3-piece Mediterranean Ensemble**

- Fully assembled and styled in genuine oak
- Space for components plus 150 record albums

Elegantly styled 3-piece Mediterranean ensemble in beautifully finished genuine oak. Features double-hinged doors with smart decorator-styled pulls. Full length lift top. Panel behind left door permits custom mounting of components; may be cut to double record storage space. Upper left, 19x16<sup>1</sup>/<sub>4</sub>", adjustable height. Upper right inside (changer), 6<sup>1</sup>/<sub>2</sub>x18x16<sup>1</sup>/<sub>4</sub>". Storage space below. Hi-fi cabinet overall, 30<sup>1</sup>/<sub>2</sub>x42x19". Each speaker enclosure, 30<sup>1</sup>/<sub>2</sub>x20<sup>1</sup>/<sub>2</sub>x19<sup>1</sup>/<sub>4</sub>". . . accommodates 15" speaker, 12" with adapter incl. Sent from Rockford, Ill. Shipping Note Below. 239 lbs.  
 20 A 9229 L3ZF. 3-Pc. Ensemble. . . . . 389.95  
 20 A 9230 ZF. 922 Cabinet Alone. 125 lbs. . . . . 237.50  
 20 A 9231 ZF. 982 Speaker Enclosure. 57 lbs. . . . . 97.50



**Walnut-finished Contemporary Ensemble**

- Clean lines and handsome styling for any decor
- For separate components or "stereo compacts"

Completely assembled with oiled walnut finish. Cabinet is perfect for "compacts" or standard components. Overall, 29<sup>1</sup>/<sub>4</sub>x21x21<sup>1</sup>/<sub>8</sub>". Full lift top, Upper compartment, 19<sup>1</sup>/<sub>2</sub>x18"; height adjusts to 9<sup>1</sup>/<sub>4</sub>". Lower compartment 15x19<sup>1</sup>/<sub>2</sub>x18" behind hinged doors; use for front panel component mounting. For custom front mounting of components, order panel below. Each speaker enclosure 29<sup>1</sup>/<sub>4</sub>x21x21<sup>1</sup>/<sub>8</sub>". Takes up to 15" speaker. Takes 12" with adapter incl. Sent from Rockford, Ill. Ensemble shpg. wt., 198 lbs.  
 20 A 9225 L3ZF. 3-Pc. Ensemble. . . . . 224.95  
 20 A 9226 ZF. 211 Cabinet. Shpg. wt., 70 lbs. . . . . 89.50  
 20 A 9227 ZF. 281 Speaker Enclosure. Wt., 64 lbs. . . . . 77.50  
 20 A 9228 XF. Custom Panel. Shpg. wt., 4 lbs. . . . . 5.00

**Gamber-Johnson**



**384<sup>85</sup>**

lift top



**434<sup>85</sup>**

Holds 200 LPs



**349<sup>85</sup>**

Holds 200 LPs



**Early American 3-section Ensemble**

Genuine maple veneers and solids in Colonial styling; harvest maple finish. Full length lift top. Cabinet size overall, 27<sup>1</sup>/<sub>2</sub>x59x18<sup>5</sup>/<sub>8</sub>". Center, 14x18<sup>3</sup>/<sub>4</sub>x14<sup>3</sup>/<sub>4</sub>". Sides, 9x17<sup>3</sup>/<sub>8</sub>x14<sup>3</sup>/<sub>4</sub>". Record storage for 200 LP's below. Each speaker enclosure, for 12" or 15" speakers, 27<sup>1</sup>/<sub>2</sub>x20<sup>5</sup>/<sub>8</sub>x18<sup>5</sup>/<sub>8</sub>". From Stevens Point, Wis.  
 20 A 9060 L2ZF. 3-Pc. Ensemble. 3-Section Cabinet. Shpg. wt., 238 lbs. . . . . 384.85  
 20 A 9062 ZF. Model 924. 3-Section Equipment Cabinet Alone. Shpg. wt., 142 lbs. . . . . 219.95  
 20 A 9073 ZF. Model 921. 2-Section Equipment Cabinet similar to above. Shpg. wt., 105 lbs. . . . . 164.95  
 20 A 9063 ZF. 922. Speaker Enclosure. 48 lbs. Ea. 84.95

**Deluxe Mediterranean 3-section Ensemble**

Spanish oak veneers, solids, Gamber-Johnson's finest ensemble! Cabinet size overall, 27x59x18<sup>5</sup>/<sub>8</sub>". Upper left and right, 9x17<sup>3</sup>/<sub>8</sub>x14<sup>3</sup>/<sub>4</sub>" with adj. panels. Center, 14x18<sup>3</sup>/<sub>4</sub>x14<sup>3</sup>/<sub>4</sub>". Storage below each section. Enclosures, for 12" or 15" speakers, 27x21<sup>1</sup>/<sub>2</sub>x18<sup>5</sup>/<sub>8</sub>". Sent from Stevens Point, Wis.  
 20 A 9202 L3ZF. 3-Pc. Ensemble. 240 lbs. . . . . 434.85  
 20 A 9203 ZF. Model 964. 3-Section Equipment Cabinet Alone. Shpg. wt., 148 lbs. . . . . 259.95  
 20 A 9204 ZF. Model 961. 2-Section Equipment Cabinet similar to above. Shpg. wt., 105 lbs. . . . . 179.95  
 20 A 9205 ZF. 962 Speaker Encl. 46 lbs. . . . . Ea. 89.95

**Popular Mediterranean 3-section Ensemble**

Spanish oak veneers, solids . . . low price for this quality. Cabinet size overall, 25<sup>1</sup>/<sub>2</sub>x58<sup>1</sup>/<sub>2</sub>x18<sup>1</sup>/<sub>2</sub>". Upper left and right, 9x17<sup>7</sup>/<sub>8</sub>x14<sup>1</sup>/<sub>2</sub>" with adj. panels. Center, 19<sup>1</sup>/<sub>4</sub>x17<sup>7</sup>/<sub>8</sub>x14<sup>1</sup>/<sub>2</sub>". Storage below each section. Enclosures, take 12" or 15" speakers, 25<sup>1</sup>/<sub>2</sub>x21x18<sup>1</sup>/<sub>2</sub>". Sent from Stevens Point, Wis.  
 20 A 9206 L3ZF. 3-Pc. Ensemble. 220 lbs. . . . . 349.85  
 20 A 9207 ZF. Model 994. 3-Section Equipment Cabinet alone. Shpg. wt., 138 lbs. . . . . 214.95  
 20 A 9208 ZF. Model 991. 2-Section Equipment Cabinet similar to above. Shpg. wt., 98 lbs. . . . . 149.95  
 20 A 9209 ZF. 992 Speaker Encl. 41 lbs. . . . . Ea. 69.95

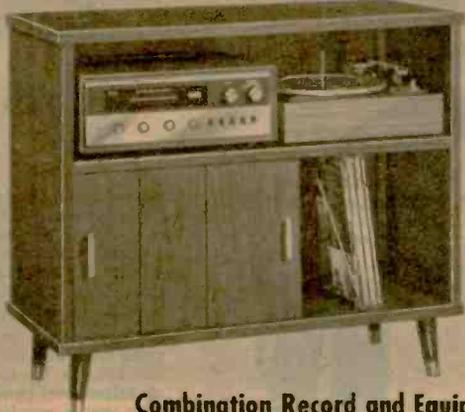
# Smart Record Cabinets at low Allied prices



**11<sup>95</sup>**

## Contemporary Record Cabinet

Handsomely-styled cabinet adds a smart touch to the decor of modern homes. Sturdy construction features stain and scar resistant walnut-like finish. Offers generous storage space for records. Storage section has sliding doors, holds up to 150 LP's. Matching brass door pulls. Overall size, 25x30x16". Assembles in a few minutes. Shpg. wt., 12 lbs.  
 20 A 9024 X..... 11.95



## Combination Record and Equipment Cabinet

Combines function and beauty. Finely-crafted contemporary design cabinet houses hi-fi components, long-playing records, and books. Rich, lustrous walnut-like finish on hardboard. Component shelf section, 9x15" deep, offers easy front access. Smoothly sliding doors below conceal storage space for 300 record albums, plus your favorite books. Record storage section, with dividers, 15x15" deep. Provides compact storage space for use in small apartments, recreation rooms. Overall, 36x30x15". Assembles easily.  
 20 A 7043 X. Shpg. wt., 33 lbs..... 27.95

Provides ample storage space for components, records, books

**27<sup>95</sup>**

\$5 monthly\*  
 less components



**19<sup>95</sup>** \$5 monthly\*

Contemporary Record Cabinet. Handsomely styled. Four smooth-sliding doors conceal storage space. Holds up to 225 LP's. 3 brass-plated record dividers. Stain, scar-resistant walnut-like finish. 25x40x17 1/2". Assembles in minutes. Shpg. wt., 24 lbs.  
 20 A 9023 U..... 19.95



**29<sup>95</sup>** \$5 monthly\*

Handy Record Cabinet/Room Divider. Flush-with-floor 1-tier cabinet stores 225 LP's. 35 1/2 x 14 x 31" h. Beautifully styled with walnut grain finish. Use several together. 48" h. 20" h.  
 20 A 9040 U. 43 lbs..... 29.95  
 20 A 9042 Z. With 2 Tiers. 58 lbs. 34.95  
 20 A 9041 X. Without Tier. 30 lbs. 24.95



**44<sup>95</sup>** \$5 monthly\*

Deluxe Contemporary Record Cabinet. Striking contemporary design will blend with almost any modern decor. Solid veneer construction with walnut-like finish. Tough, mar-proof top is virtually indestructible. Stores 175 LP's. 25x27x18". Shpg. wt., 55 lbs.  
 20 A 9043 Z..... 44.95

## Mediterranean Record Cabinets



**54<sup>95</sup>** \$5 monthly\*

### A Solid-Oak Veneer Cabinet

Elegant Mediterranean styling in a record cabinet that is truly functional. Carefully constructed of solid-oak veneer and superbly finished in rich pecan. Easily maintains a high lustre. Holds up to 200 LP's. Boasts two strikingly detailed doors, period-matched hardware. 25x28x16".  
 20 A 9044 Z. Shpg. wt., 50 lbs..... 54.95

### B Hexagonal Record Cabinet

Dramatically styled in hexagonal shape. Finished with selected pecan-oak veneers. Two swing-open doors with magnetic latches. Extra-large storage space holds up to 200 long-playing records. Hand-woven lattice veneer on doors; antique finish hardware. Record rack is removable. Size, 21x28x24".  
 20 A 9021 Z. Shpg. wt., 52 lbs..... 64.95



**64<sup>95</sup>** \$5 monthly\*

\*See page 438 for complete Credit information

# Finest Allied® Headphones ever .. hear music "come alive"

## 39<sup>95</sup>

Woofer and tweeter in each earphone assure superior full-range stereo hi-fi

Model H886. Enjoy live-concert realism at home with no outside distractions. These superb stereo headphones are engineered to tailor music to your individual pleasure. Separate bass and treble in each earphone— $2\frac{3}{4}$ " dynamic woofer,  $1\frac{1}{8}$ " dynamic tweeter—deliver the rich lows and crisp highs needed for full stereo enjoyment.

Separate volume and tone controls on each earphone assure the maximum in listening pleasure without bothersome trips back and forth to your receiver. Each control is easily identifiable by touch when wearing headset. Cushioned, stainless steel headband and soft, highly compliant earcups give you a comfortable airtight fit that permits hours of personal audio satisfaction.

Lifelike response across the full audio range from 20 Hz to beyond audio range. Impedance 8-16 ohms to match any stereo amplifier. Gray. With 5-foot coiled cord that extends to 16 feet and standard  $\frac{1}{4}$ " phone plug. Japan. 20 A 9710. Shpg. wt.,  $1\frac{1}{4}$  lbs. . . . . 39.95



Volume and tone control for each ear



Volume control for each earphone

## 19<sup>95</sup>



## 11<sup>95</sup>

### Wide-range response at a thrifty price .. our best selling Allied Stereo Headphones

Model H876. Get full stereo realism at a value price. Volume/balance control for each ear assures full stereo sound no matter where you sit. Has dynamic driver elements to surround you with full-range stereo. Soft polyfoam ear cushions lock out room noise and let you listen with full comfort. Stainless steel headband adjusts to fit anyone. Cushions and headband are removable and of easy to clean vinyl. Frequency response, 16-16,000 Hz. 3-16 ohm impedance matches any stereo amplifier. Brown and tan. With 8-foot cord, standard  $\frac{1}{4}$ " plug. 20 A 9508. Shpg. wt.,  $1\frac{1}{4}$  lbs. . . . . 19.95

### Lowest priced Allied Stereo Headphones .. excellent fidelity at a budget price

Model H878. Only Allied could bring you these fine stereo headphones at such a low price. They literally surround you with wide-range stereophonic sound. Comfortable vinyl earcups seal out unwanted room noises; easily removed for cleaning. Vinyl-covered foam rubber headband lets you listen without feeling of fatigue. Large  $3\frac{1}{2}$ " transducers for each ear. Frequency response, 30-15,000 Hz. Impedance 3-16 ohms to match any stereo amplifier or receiver. Charcoal gray. With 8-ft. cord and standard  $\frac{1}{4}$ " phone plug. 20 A 9579. Shpg. wt.,  $1\frac{1}{4}$  lbs. . . . . 11.95

### Allied Model H879 Remote-Control for stereo headphones



## 9<sup>95</sup>

Can be used with or without speakers

Adjust volume of 2 headphones from your chair. 2 volume controls.  $\frac{1}{4}$ " jacks.  $2\frac{3}{4} \times 4 \times 2$ ". Cable below. 20 A 9577. Wt., 1 lb. . . . . 9.95  
55 A 9855. 5-Conductor Cable. Shpg. wt.,  $\frac{3}{4}$  lb. . . . . 25-foot Roll 2.10

### Extension Cord/2-headphone Adapter



## 7<sup>95</sup>

Allied H881. An easy and thrifty way to use two headphones with a stereo receiver or amplifier. No rewiring, plugs into standard headphone jack. Two  $\frac{1}{4}$ " jacks for phones, 20-ft. cord. Shpg. wt.,  $1\frac{1}{2}$  lbs. 20 A 9581 . . . . . 7.95

# Koss hi-fi Stereo Headphones



Wider response than ever before possible

95<sup>00</sup>

## A Wide-range electrostatic Stereo Headphones

Model ESP-6. Delivers a never-before possible depth and breadth of sound for truly superb stereo listening. Electrostatic driver elements provide response far beyond limits of ordinary voice coils and cone-type driver elements. Self-energized diaphragms for fine 10-32,000 Hz response. No special amplifier or power supply needed.

Level indicator in each earpiece lights up to indicate excessive sound pressure. Foam rubber headband plus fluid-filled earcushions for total comfort. 4-16 ohms. With case, 10' cord, junction box, speaker-on-off switch for easy hook-up. Individual machine-run response curve with each set.

20 A 8033. Shpg. wt., 5 lbs... 95.00

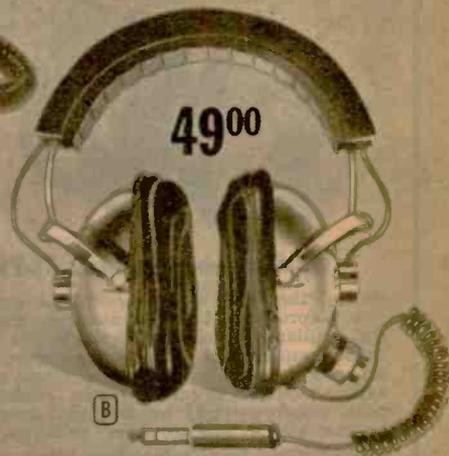
## B The most popular Koss Stereo Headphones

Model Pro-4A. One of the most popular stereo headphones ever produced. These deluxe stereo headphones provide full-fidelity private listening—allow you to hear the best in stereo music without outside interruptions.

Soft fluid-filled earcushions and adjustable padded headband permit you to listen for hours with no resulting fatigue. Heavy-duty shatterproof construction will take all the wear and tear you can give it. Frequency response, 20-20,000 Hz. Impedance, 4-16 ohms. With 10-foot coiled cord and standard 1/4" plug. Wt., 2 lbs.

20 A 8356..... 49.00

20 A 8044. Pro-600A. As above, but 600 ohms. Shpg. wt., 2 lbs. 53.90



Fluid-filled earcushions allow hours of listening pleasure with no fatigue



19<sup>95</sup>

## Low-cost "Stereophones"

Model SP-3XC. 3 1/2" dynamic element in each earpiece. Foam-cushioned earcups. Rugged plastic headband. Frequency response, 20-16,000 Hz. Impedance, 4-16 ohms. 10-ft. cord, plug.

20 A 8357. Shpg. wt., 2 lbs. .... 19.95

Model SP-5SM. Similar to above, but with lavalier-type stereo/mono switch. Frequency response, 20-15,000 Hz. Impedance, 4-8 ohms.

20 A 8030. Shpg. wt., 2 1/2 lbs. .... 19.95



34<sup>25</sup>

## High-quality "Stereophones"

Model KO-727. Make stereo listening a personal experience. These fine stereo headphones accept up to 60 watts per channel from any normal program source. For any system with 4, 8 or 16 ohms output. Adjustable headband, foam-filled earcushions. Cushions remove for easy cleaning. Response, 40-15,000 Hz. Distortion less than 1%. With 10-ft. cord, plug.

20 A 8019. Shpg. wt., 2 lbs. .... 34.25



26<sup>00</sup>

## Lightweight "Stereophones"

Model K-6. Provide breathtaking full-dimensional sound. Accept up to 60 watts per channel from any normal music program source. Padded headband, vinyl-covered foam-filled earcushions. Lightweight (only 15 oz.)—listen for hours in complete comfort. Earcushions are removable for easy cleaning. Response, 10-15,000 Hz, 4-16 ohms. With 10-ft. cord, plug.

20 A 8358. Shpg. wt., 2 lbs. .... 26.00

## Remote-Controls for stereo headphones and Hookup Box

C T-10 Control Box. Control stereo headphones from your chair. Accepts two pairs of phones; volume control for each phone, speaker cutoff switch. Walnut case, 6 1/4 x 4 5/8 x 2 5/8". 4-16 ohms.

20 A 8045. Shpg. wt., 2 lbs. .... 24.95

20 A 8031. T-5 Control Box. (Not illus.) Vol. control, speaker cutoff switch. 2 stereo phone jacks. 4-16 ohms. 5 1/4 x 3 1/2 x 2 1/8". 1 lb. .... 9.95

20 A 8032. T-1 Hookup Box. (Not illus.) Match SP-3XC, SP-5SM above to 600-10,000 ohms. 6 1/4 x 3 3/8 x 2". Shpg. wt., 8 oz. .... 7.95



# Stereo Headphones . . a great way to hear hi-fi



**SUPEREX**

**49<sup>95</sup>**

\$5 monthly\*  
See page 438

Separate  
woofers,  
tweeters

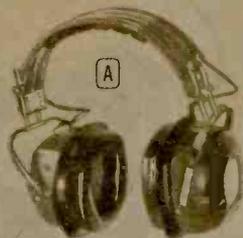
## World-famous Superex ST-PRO-B

One of the finest stereo headphone sets you can own. Reproduces the full audio range with a clarity and brilliance usually restricted to the symphonic concert auditorium. Engineering design features a separate dynamic woofer and ceramic tweeter coaxially mounted in each earpiece. Produces a compact, comfort-weight headset that surrounds the listener with a "you are there" performance.

Vinyl-covered foam earcushions block out external noise. Padded, spring steel headband is adjustable. Full-range response of 18-22,000 Hz. Full L-C crossover network. Impedance, 4-16 ohms. With 7-ft. cord and 1/4" plug.

20 A 8359. Shpg. wt., 2 lbs. . . . . 49.95

20 A 8366. Model ST-PRO. Similar to above, but simpler highpass crossover network. Somewhat narrower response of 20-20,000 Hz. Wt., 2 lbs. 39.95



**SUPEREX 59<sup>95</sup>**



**TELEX 59<sup>95</sup>**

**A** Superex Model PRO-B-V. New concept in stereo headset design. Each earpiece has specially calibrated and matched 2-way woofer/tweeter system with crossover network. Individually tuned and ported to reproduce sound comparable to the finest musical systems. Cover full frequency range without coloration or distortion. Unique ear cushion design follows head contours to form perfect seal. . . soft vinyl-covered urethane foam assures comfort fit. Adjustable headband. Amazing response of 16 to 25,000 Hz. 4-16 ohms impedance. With 10-ft. coiled cord.  
20 A 8409. Shpg. wt., 3 lbs. . . . . 59.95

**B** Telex "Serenata-1." Fine stereo headphones. Built-in tone control. Liquid-filled earcushions have earcup pressure adjustment to seal out noise. 20-20,000 Hz response. 4-16 ohms. 8-ft. detachable coiled cord and 1/4" plug. Scuff-resistant vinyl carrying case.  
20 A 8353. Shpg. wt., 2 1/2 lbs. . . . . 59.95  
20 A 8377. "Serenata-2." As above, but no tone control or carrying case. With 8-ft. attached cord. Wt., 2 1/2 lbs. 44.95

## Dustproof headphone Carry/Storage Case



**5<sup>95</sup>**

Model CAD-1. Rugged naugahyde has the look of fine, natural-grain leather. Case has full-length zipper, tote tab. 9x7x3 1/2".  
20 A 8419. Wt., 2 lbs. . . . . 5.95

## Popular Stereo Headphones for every budget



**SUPEREX 39<sup>95</sup>**



**SUPEREX 29<sup>35</sup>**



**SONY 22<sup>50</sup>**



**TELEX 19<sup>95</sup>**



**TELEX 9<sup>95</sup>**

**C** Superex Model ST-MB-IV. Reproduces musical range and depth brilliantly and flawlessly. Each earcup has tweeter level control, "tuned port" design. Each features 3 1/2" dynamic woofer and coaxially-mounted dynamic tweeter. Perfect-seal earcushions of vinyl-covered urethane foam. Comfort-fit adjustable headband. Response: 18-21,000 Hz. Impedance: 4-16 ohms. 10-ft. cord, standard 1/4" plug.  
20 A 8408. Shpg. wt., 2 lbs. . . . . 39.95

**D** Superex ST-M. Each earpiece has separate woofer, tweeter and crossover network. Both channels have level control for perfect stereo balance. Adjustable headband for precise fit, comfortable vinyl-covered foam earcushions. Frequency response, 20 to 20,000 Hz. Impedance, 4-16 ohms. With 7-ft. cord and 1/4" plug.  
20 A 8420. Wt., 2 lbs. . . . . 29.35  
20 A 8423. Model STM-2H. Above, but 200-15,000 ohms. Wt., 2 lbs. . . . . 35.00

**E** Sony DR-6A. Dynamic stereo headphones provide full-range frequency response for private stereo listening or tape monitoring. Built-in transducer has dome-shaped configuration for flatter response throughout the entire audio spectrum. Full-range frequency response. Comfort-fit earcushions, adjustable headband. Impedance, 8 ohms. With 7-ft. cord and standard 1/4" plug. Japan.  
20 A 8412. Shpg. wt., 2 lbs. . . . . 22.50

**F** Telex "Combo." Fine quality at a modest price . . outstanding hi-fi value. Big 3 1/2" speaker in each earcup for rich bass. Earcup gliders adjust to listener's head for maximum comfort. Vinyl earcushions provide excellent seal. Foam padded headband. Response, 10-15,000 Hz. Impedance, 4-16 ohms. With 8-ft. cord, standard 1/4" plug.  
20 A 8426. Shpg. wt., 1 lb. . . . . 19.95

**G** Telex "Encore." Fine quality and great versatility at a low price. Features completely adjustable headband that also can be worn under chin for extra convenience and comfort—avoids ruffled hair. Good frequency response 30 to 15,000 Hz. Impedance, 8 ohms. With 8-ft. cord and standard 1/4" plug. Shpg. wt., 1 lb.  
20 A 8367. . . . . 9.95

# Classic, Folk, Electric Guitars and Outfits



**2-pickup Tremolo  
Guitar, Amp Outfit**

Save **\$30.00** **109<sup>90</sup>**

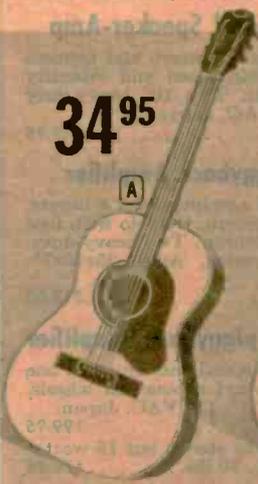
Separately, \$139.90. Hollow-body guitar has 3-way selector switch, volume, tone controls. Reinforced maple neck, 8-way adjustable bridge, rosewood fingerboard. 40<sup>3</sup>/<sub>4</sub>x14<sup>3</sup>/<sub>4</sub>x3". 20-watt peak music power amp has tremolo speed, depth controls. 17x16x6". Access. illus. 10 A 0100 L2U. Japan. Shpg. wt., 22 lbs. .... 109.90  
10 A 5133 U. Guitar, Case, Access. 10 lbs. .... 79.95  
10 A 5074 U. Amplifier Alone. Wt., 12 lbs. .... 59.95



**3-pickup Tremolo  
Guitar, Amp Outfit**

Save **\$20.00** **89<sup>90</sup>**

Separately \$109.90. Bargain-priced outfit. Twin-horn solid-body guitar has recessed tremolo, three-way selector switch. 40x13x1<sup>1</sup>/<sub>2</sub>". 10-watt peak music power amplifier has 3 inputs, 8" speaker, volume and tone controls. 15<sup>1</sup>/<sub>4</sub>x12<sup>3</sup>/<sub>4</sub>x5<sup>3</sup>/<sub>4</sub>". Accessories illustrated. Japan. 10 A 0147 L2U. Shpg. wt., 22 lbs. .... 89.90  
10 A 5075 U. Guitar, Case, Access. 10 lbs. .... 69.95  
10 A 5076 U. Amplifier Alone. 12 lbs. .... 39.95



**34<sup>95</sup>**

**A**



**39<sup>95</sup>**

**B**



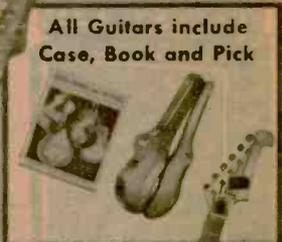
**69<sup>95</sup>**

**C**



**49<sup>95</sup>**

**D**



**All Guitars include  
Case, Book and Pick**



**99<sup>95</sup>**

**E**



**89<sup>95</sup>**

**F**

**A** Custom-Crafted Folk Guitar. Has the deep mellow tone just right for folk singing. Selected spruce top, grained mahogany back and sides in natural finish. Heavy celluloid binding. Fan bracketed reinforcement, rosewood fingerboard. 39x14<sup>1</sup>/<sub>2</sub>x3<sup>3</sup>/<sub>4</sub>". Japan. 10 A 5134 U. Shpg. wt., 6 lbs. .... 34.95

**B** Concert-Size Classic Guitar. Expertly constructed 18-fret instrument has selected spruce top, special hardwood body with sunburst effect on back. Finest quality nylon strings, steel reinforced neck, rosewood fingerboard. 39x14<sup>1</sup>/<sub>2</sub>x3<sup>3</sup>/<sub>4</sub>". Japan. 10 A 5135 U. Shpg. wt., 7 lbs. .... 39.95

**C** Solid-Body 2-Pickup Bass Guitar. Brilliant natural tone, rich, vibrant bass. Separate volume and tone controls. Adjustable maple neck, bridge. Rosewood fingerboard, tortoiseshell plastic guard. Red sunburst. 40<sup>1</sup>/<sub>2</sub>x14x1<sup>3</sup>/<sub>4</sub>". Japan. 10 A 5136 U. Shpg. wt., 10 lbs. .... 69.95

**D** Our Lowest Priced Solid-Body 2-Pickup Guitar. Perfect for the aspiring guitarist in your family. Fast action, easy to play. Has torsion-bar tremolo, slim, fast-action steel reinforced neck, adjustable bridge. 37<sup>1</sup>/<sub>2</sub>x12x1". From Japan. 10 A 5137 U. Shpg. wt., 12 lbs. .... 49.95

**E** 2-Pickup Hollow-body Acoustic Guitar with Tremolo. Our finest. Has exceptionally rich and mellow tone. Spruce top, flame maple back and sides. Fast action, adjustable laminated maple neck, pearl markers. 41x13x1<sup>3</sup>/<sub>4</sub>". Japan. 10 A 5138 U. Shpg. wt., 9 lbs. .... 99.95

**F** Violin-Shaped 2-Pickup Full-Size Semi-Acoustic Bass Guitar. Excellent performer. Crafted of quality woods: arched spruce top, maple body, ebony fingerboard. Adjustable bridge, two adjustable pickups. Volume, tone controls. 41x11x2". Japan. 10 A 5139 U. Shpg. wt., 16 lbs. .... 89.95

**SHIPPING NOTE:** Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

**ALLIED**

# Our finest selection ever of Musical Instrument Amplifiers



**C 315<sup>00</sup>**



**A 169<sup>95</sup>**



**B 149<sup>95</sup>**



**D 199<sup>95</sup>**



**E 89<sup>95</sup>**



**F 64<sup>95</sup>**



**G**

**249<sup>95</sup>**

**A Solid-state 50-watt\* Amp with tremolo and reverb**

Piggyback amplifier with tilt-back legs. Tremolo and reverb; pulsating tremolo speed indicator light. Inputs: two instrument, one mike. Separate bass, treble controls. Two 10" speakers, HF horn in 28x22x9" enclosure. Amp, 22x9½x6". 117 VAC. Japan. 10 A 5141 ZF. †Shpg. wt., 55 lbs. 169.95

**B Full-feature solid-state 40-watt\* Speaker-Amp**

Tilt-back amplifier has 3 inputs, VU meter, reverb and tremolo with separate foot switch jacks. Tremolo speed and intensity controls, pulsating speed indicator light. Two 10" heavy-duty speakers, HF horn. 28½x20x8¼". 117 VAC. Japan. 10 A 5142 UF. †Shpg. wt., 31 lbs. 149.95

**C Dual-channel 100-watt\* piggyback Amplifier**

High-performance dual-channel tilt-back amplifier with 4 inputs. Volume, bass, treble for each channel. Reverb, tremolo with foot switch jacks. "E" oscillator; earphone monitor. Two heavy-duty, giant 15" speakers. Scuff-resistant covering. Amp, 25x10x7"; speaker, 35x22x12". 117 VAC. Japan. 10 A 5143 ZF. †Shpg. wt., 95 lbs. 315.00

**D Padded 90-watt\* solid-state piggyback Amplifier**

Dual channel, 4 inputs. Reverb, tremolo speed and depth on one channel. Two 12" speakers in padded vinyl cabinet on wheels. Amp, 6x17½x6½"; speaker, 29½x17½x11". 117 VAC. Japan. 10 A 5103 ZF. †Shpg. wt., 70 lbs. 199.95  
10 A 5144 ZF. 75-Watt\* Amplifier. Similar to above, but 75 watts\* and not padded. From Japan. †Shpg. wt., 70 lbs. 179.95

**E Solid-state 30-watt\* Amp has reverb, tremolo**

Piggyback amplifier delivers full sound from two 8" speakers. 3-inputs. Volume, bass, treble, tremolo depth, speed controls. Amp, 4x15x5¾"; speaker, 26x15x8". 117 VAC. Japan. 10 A 5145 UF. †Shpg. wt., 30 lbs. 89.95  
10 A 5147 UF. 20-Watt\* Amplifier. Solid-state. 3 inputs. Amp., 17x7½x5"; spkr., 23¾x17x7½". 117 VAC. Japan. †30 lbs. 79.95

**F Value-priced 17-watt\* Amp with reverb, tremolo**

Compact, solid-state amplifier features reverb and tremolo with foot switch jacks. 3 instrument inputs. Volume and tone controls. Heavy-duty 10" speaker. 20x16x8". 117 VAC. Japan. 10 A 5148 U. †Shpg. wt., 17 lbs. 64.95

**G 100-watt\* tremolo-reverb Amp with 15" speakers**

Sensational 100-watt\* piggyback boasts two giant 15" speakers, sound duct. Solid-state preamp, 4 inputs. Dual channel, each with volume, bass, treble; tremolo and reverb on channel 1. Dual foot switch jacks. Amp, 8x26½x10½"; tuned-port speaker enclosure, 36x10½x26½". 117 VAC. Japan. 10 A 5146 ZF. †Shpg. wt., 60 lbs. 249.95

# Super-power 15-inch Speaker

## UTAH "big beat" Instrument Speaker

- Full 125-watt peak power handling capacity
- Massive 15-pound magnet structure
- Delivers deep, rich bass frequency response

MH15R3R. There's no better buy in a 15" speaker. Handles the punishing power and low-end frequency range of a bass guitar or string bass even through high-output amplifiers. Giant 15" cone delivers truly impressive sound—a must for the big bass beat of today's rock sound, or for the rich, mellow tones of single-string melody. 3" heat-proofed voice coil operates in a massive 15-lb. magnet structure for a tremendous 125-watt peak power capacity. Frequency response, 30-5000 Hz. Impedance, 8 ohms. Mounting diameter, 14 $\frac{1}{16}$ "; depth, 8 $\frac{3}{16}$ ". Shpg. wt., 21 lbs.

16 A 3522 U, ..... 34.75



**SPECIAL  
SPEAKER  
VALUE**

Was \$69.50  
in last year's  
catalog

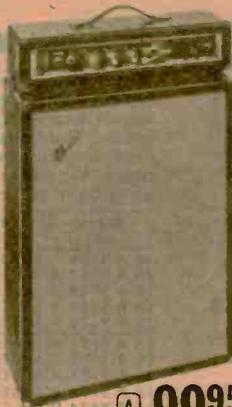
**34.75**

## Combo Instruments, Amplifiers and Accessories

### A 50-watt\* piggyback bass Amplifier

Piggyback bass amplifier provides fine sound through two 12" speakers. Two inputs; volume, bass, treble controls; 3 speaker jacks; pilot light; fuse. 4 dual-purpose tubes, 2 diodes. Amplifier, 4 $\frac{1}{2}$ x17 $\frac{1}{2}$ x9"; speaker, 24x17 $\frac{1}{2}$ x9". 117 VAC. From Japan.

10 A 4773 UF. †Shpg. wt., 38 lbs. 99.95



A 99.95

### B 12-voice Rhythm Box

Solid-state rhythm box provides 12 voices to expand your combo sound: march, cha-cha, mambo, samba, rumba, tango, swing, fox trot, bossa nova, slow rock, rock 'n roll, waltz. Has volume control, soft-sharp control, slow-quick control. Foot switch. Input, output jacks. 6 $\frac{1}{2}$ x20x6 $\frac{1}{2}$ ". Japan.

10 A 5162UF. †Shpg. wt., 20 lbs. 179.95

### C Solid-state Reverberation unit

Add an exciting reverb effect to your instrument amplifier. Has inputs for 1 mike and 1 instrument; foot switch jack; amplifier jack. Reverb depth and tone control. On-off switch, pilot light. Rugged case, 3 $\frac{1}{2}$ x12x5". 117 VAC. From Japan.

10 A 5104 S. Shpg. wts, 6 lbs. 29.95



B

### D All-metal solid-state Fuzz Box

Saucer-shaped unit introduces a far-out "fuzzy" sound effect to any amplifier. Attack control varies effect. Volume control; foot switch. 3 transistors. Input and output jacks. With connecting cable and 9-volt battery. 5 $\frac{3}{4}$ " dia. From Japan.

10 A 4580 S. Shpg. wt., 2 lbs. 14.95



C

### E Wah-Wah Pedal

Solid-state wah-wah pedal creates really unique sounds. Turns on automatically with amplifier for a sensational "turned-on" effect. Brings your sound up-to-date. Durable chrome plated base, rubber pedal. With 9-volt battery and cord. Japan.

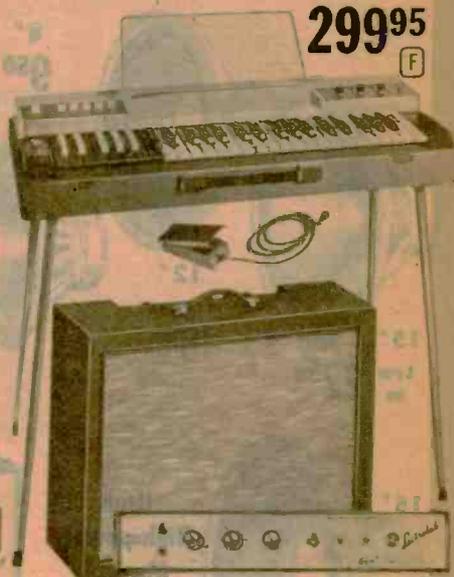
10 A 5164 X. Shpg. wt., 3 lbs. 32.95



D

E

**299.95**



F

**149.95**

G

### F Combo Organ with bass coupler

Liven up your combo with this portable electronic organ. 49-key 4-octave "C" scale. Coupler drops bass octave to "G". Flute, wood, brass, string and reed voices. Vibrato, vibrato speed, balance, volume controls; volume can be controlled with foot pedal or from keyboard. With removable legs, foot pedal, amplifier cord, carrying case, vinyl cover. 5 $\frac{1}{2}$ x31 $\frac{1}{2}$ x14" closed. Requires amp, see below. 117 VAC. Japan.

10 A 4634 ZF. †Shpg. wt., 55 lbs. 299.95

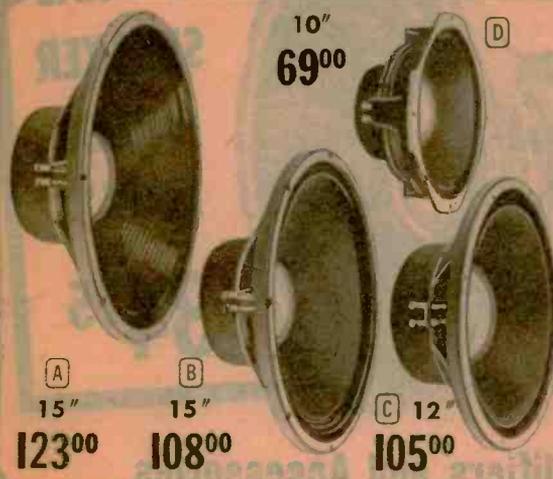
### G Deluxe 75-watt\* bass Amplifier

Perfect amp for organ above—great for bass guitars too. Boasts two 12" Jensen speakers, 3 $\frac{1}{2}$ " tweeter. 2 inputs. Bass, treble, volume controls. 4 tubes, 5 silicon rectifiers. 21 $\frac{1}{2}$ x26 $\frac{1}{2}$ x10 $\frac{1}{2}$ ". 117 VAC.

10 A 4628 UF. †Shpg. wt., 48 lbs. 149.95

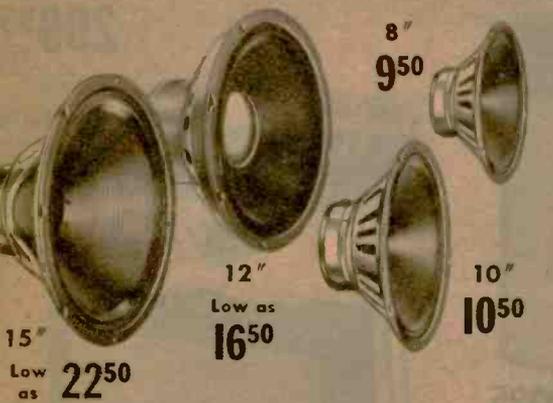
†SHIPPING NOTE: Combo Organ and amplifiers on these two pages sent truck or express from Chicago warehouse. See Ordering Information pages.

# Musical Instrument Speakers to fit every need



## James B. Lansing Instrument Speakers

- A** Model D140F 15" Bass Guitar Speaker. Produces stunning musical realism. Precision-made speaker is designed for the professional bass guitarist or organist. Has 4" voice coil and 11-lb. magnet structure. Solid construction. 8-16 ohms. Requires 1 1/2" dia. mounting hole. 16 A 3190 U. Shpg. wt., 23 lbs. . . . . 123.00
- B** Model D130F 15" Instrumental Speaker. Provides distortion-free sound through the musical spectrum. 4" edge-wound voice coil; aluminum centerdome. 11-lb. magnet structure. 8-16 ohms. Requires 1 1/2" mtg. hole. 16 A 3189 U. Shpg. wt., 23 lbs. . . . . 108.00
- C** Model D120F 12" Instrumental Speaker. Perfect for guitars and accordions. Rich bass and crisp treble. 4" edge-wound aluminum-ribbon voice coil. 11-lb. magnet structure. 8-16 ohms. Requires 1 1/2" diameter mtg. hole. 16 A 3188 U. Shpg. wt., 21 lbs. . . . . 105.00
- D** Model D110F 10" Instrumental Speaker. You get great sound even from a small enclosure with this reproducer. 3" voice coil is larger than those in ordinary speakers. 6 lb. magnet structure; 8-16 ohms. For 9" mtg. hole. 16 A 3187 U. Shpg. wt., 15 lbs. . . . . 69.00



## Utah Musical Instrument Speakers

Heavy-gauge reinforced steel chassis for strength and rigidity. Steel pot plates use full potential of barium-ferrite magnet. Oversize voice coil absorbs heat of transient peaks. Rubberized cone edges smooth response, extend cone life. Internal dust seal. 8 ohms. \*Use: EO, electric organ; G, guitar; BG, bass guitar; All, organ, any guitar, accordion. †Complete magnet structure. ‡Heavy-duty.

Stock No.	Mfr's Type	Size	Peak Watts	Magnet, Lbs.	Use	Wt., Lbs.	EACH
16 A 3166	MS-8G	8"	30	1 3/4	EO, G	2 3/4	9.50
16 A 3167 X	MS-10G	10"	35	1 3/4	EO, G	3	10.50
16 A 3168 X	MS-12G	12"	60	4	All	6	16.50
16 A 3169 X	MS-12L	12"	75	6 3/4	EO, BG	10 1/4	24.95
16 A 3170 X	MS-12B	12"	85	7 3/4	EO, BG	10 3/4	38.50
16 A 3171 X	MS-15G	15"	75	4	All	9	22.50
16 A 3172 X	MS-15L	15"	80	6 3/4	EO, BG	12 1/4	29.95
16 A 3173 X	MS-15B	15"	90	7 3/4	EO, BG	12 3/4	43.50
16 A 3174 U	MS-1264B	12"	100 ‡	15	BG	18 1/2	63.95
16 A 3474 U	MS-1564B	15"	100 ‡	15	BG	21	68.50



**Utah High-power Musical Instrument Speakers**  
**59.95**

Model MI-15R2R 15". Built to handle the punishing power and low-end frequency range of a bass guitar or string bass even through high-output amplifiers. 2" heat-proofed voice coil operates in a massive 12 1/2-lb. magnet structure for a full 100-watt peak power capacity. Enamel finish. 8 ohms. Mtg. dia. 1 1/2"; depth, 8 3/8". 16 A 3535 U. Wt., 17 3/4 lbs. . . . . 59.95

Model MI-12R2R 12". Same specs as above, except compact 12" diameter; power capacity, 80 watts peak. Mounting dia. 1 1/16"; depth, 6 3/4". 16 A 3534 U. Wt., 15 1/4 lbs. . . . . 54.95



**UTAH**  
**59.95**

## Musical Instrument Columns

- E** Utah MC-10-4. Four 10" speakers, 100-watts peak. 8 ohms. Charcoal vinyl covered wood. Size 43 3/8 x 13 1/4 x 7". 16 A 3572 Z. Shpg. wt., 52 lbs. . . . . 59.95
- Utah MC-10-4D. Above, plus four compression tweeters. 16 A 3573 Z. Shpg. wt., 56 lbs. . . . . 95.00
- Utah MC-12-4. Four 12" speakers, 150-watts peak. Other specs. same as MC-10-4. Size, 52 5/8 x 15 1/4 x 8". 16 A 3574 Z. Shpg. wt., 68 lbs. . . . . 79.95
- Utah MC-12-4D. Above, plus 4 compression tweeters for extra crispness. 16 A 3575 Z. Shpg. wt., 72 lbs. . . . . 125.00
- F** University CS-2. Six 5" speakers. Plastic enclosure. 30-watts peak. 8 ohms. Gray. 41 3/8 x 11 7/8 x 7 3/4". 12 A 7421 U. Shpg. wt., 14 lbs. . . . . 59.70
- University CSO-4 Indoor/Outdoor Column. Four 8" speakers, 9.4-oz. magnets. 75-watts peak. 8 ohms. Acrylic finish steel. Size, 41 3/8 x 11 7/8 x 7 3/4". 12 A 7944 U. Shpg. wt., 40 lbs. . . . . 149.40



**UNIVERSITY**  
**59.70**

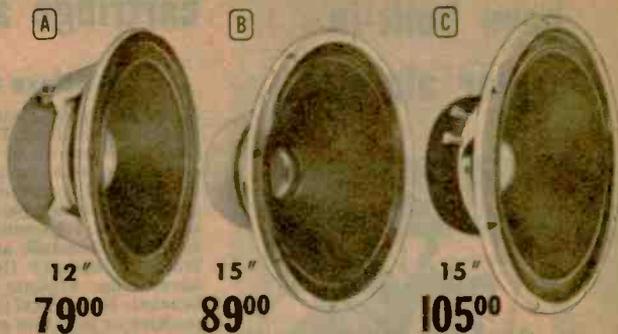
# Top quality Musical Instrument Speakers

## Altec Lansing Speakers for guitar, bass

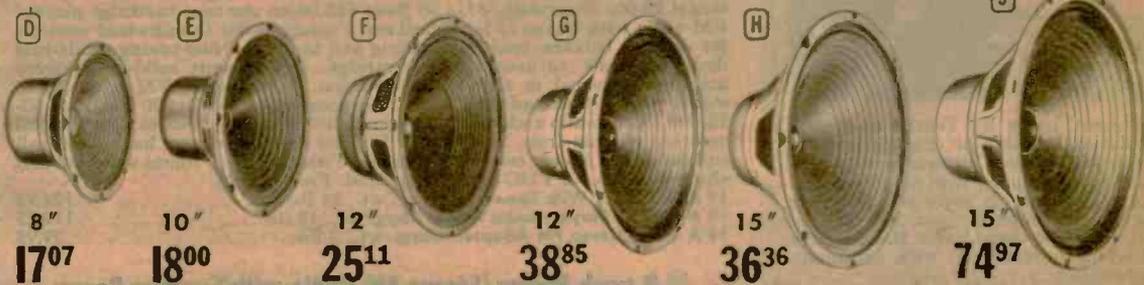
**A** Model 417-8C. 12" professional-quality instrument speaker. Handles 75-watts music power; 3" edge-wound voice coil; 10½-lb. magnet structure; cast aluminum frame and dome; 8 ohms. Can be either front or back mounted. Shpg. wt., 19 lbs. 16 A 3198 U. .... 79.00

**B** Model 4188. 15" musical instrument speaker designed for professionals who demand the finest. May be used with amplifiers rated up to 100 watts. Other specs. as above. Shpg. wt., 19 lbs. 16 A 3186 U. .... 89.00

**C** Model 421A. Heavy-duty deluxe 15" bass speaker. Specially designed for string bass and organ reproduction. 100 watt power rating. 17½-lb. magnet structure. Other specs as above. 16 A 3181 U. Shpg. wt., 26 lbs. .... 105.00



## Jensen super-lifetime Musical Instrument Speakers



Concert-Vibrato® Series. Special voice coil coated with high-temperature enamel, wound on fiberglass bobbin, withstands high ambient temperature produced by overtones. Stress-resistant cone has treated edge for smooth response. All have heavy-duty Synox-6® magnets except for Model LMI-152 which has Alnico V magnet. All with break-proof leads to speaker terminals. Impedance, 8 ohms. \*For guitar only; †for guitar, accordion; ‡for bass guitar and string bass.

Stock No.	Mfr's Type	Fig.	Size	Magnet Weight	Peak Power (Watts)	Mounting Hole	Wt., Lbs.	EACH
16 A 3157	MI-81*	D	8"	10 oz.	25	6¼"	4	17.07
16 A 3158 X	MI-101*	E	10"	10 oz.	30	8¼"	4	18.00
16 A 3159 X	MI-120†	F	12"	1 lb.	50	10½"	7	25.11
16 A 3160 X	MI-122†	F	12"	1 lb.	50	10½"	7	25.11
16 A 3161 X	LMI-122‡	G	12"	1¼ lbs.	100	10½"	8½	38.85
16 A 3162 X	LMI-125†	G	12"	1¼ lbs.	100	10½"	8½	38.85
16 A 3163 X	MI-150‡	H	15"	1¼ lbs.	60	13¼"	11	36.36
16 A 3164 X	MI-151†	H	15"	1¼ lbs.	60	13¼"	10½	36.36
16 A 3165 U	LMI-152‡	J	15"	3½ lbs.	100	13¼"	17½	74.97

## Electro-Voice Speakers

15"  
99.00



Model SRO-15 15" Speaker. For heavy-duty replacement use. Reproduces natural tones and special effects. Boasts large, heavy 4-lbs. 10-oz. ceramic magnet and edge-wound copper voice coil. 60 watts continuous, 150 watts peak. 8-16 ohms. Requires 13½" mtg. hole. 16 A 3530 U. Wt., 29 lbs., .... 99.00

Model SRO-12 12" Speaker. Large 3-lb. Alnico V magnet, edge-wound copper voice coil. 60 watts continuous, 150 watts peak. 8-16 ohms. Requires 11" mtg. hole. 16 A 3531 U. Wt., 19 lbs., .... 88.00

## University 12" Musical Instrument Speaker

59.70

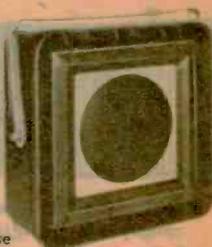


Model GS-100 12". Designed to give today's high quality young sound with the high power handling capacity demanded by today's progressive instrumentalists. Special design techniques allow heat to be dissipated before damage can occur. 2" hardened aluminum voice coil operates in a massive 8½-lb. magnet structure. 100-watt rms power handling capacity. Breakdown-proof seamless molded cone construction. Impedance, 8 ohms. Requires 11" mounting hole; depth, 4½". Shpg. wt., 12¼ lbs. 16 A 3199 X. .... 59.70

## Super-Caster Portable

119.95

Molded polyester case



Electro-Voice "Super-Caster." For use on stage outdoors or indoors. 12" speaker in bass reflex enclosure is designed to take extremely high power input and deliver high sound pressure output. Handles 160-watts peak power input. Weatherproof and fungus resistant. Tough, attractive black matte finish with brushed aluminum trim panel. Chrome handle and positioning knobs. Impedance, 8 ohms. Includes 18" connecting cable with ¼" phone plugs at both ends. Size, 21½x21½x8½". 16 A 3473 U. Wt., 39 lbs., .... 119.95

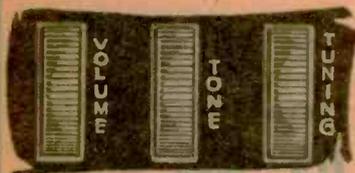
# These Tape Players have built-in burglar alarms!



Ranger, made by Tenna, offers the solution to theft or damage to your auto tape system. Ranger tape players are now equipped with a built-in burglar alarm which saves you worrying while it protects your investment. Here's how these latest Ranger tape players provide you with maximum protection.

Should an unauthorized person remove a properly installed Ranger player from your car, he will trip an alarm which sounds your car's horn until the alarm is reset. Continuous and conspicuous noise will scare off any would-be thief and discourage theft or tampering. Don't be without this important Ranger feature!

## Ranger features



Thumbwheel-type controls comply with the latest Federal safety regulations



Illuminated channel indicator



Special fine-tuning control

# Ranger brings you thrilling stereo cartridge and FM music for your car!

## A Deluxe 4- and 8-track Car Stereo Tape Player

Model RR-42. This cartridge player plays all 4- and 8-track cartridges with true-to-life realism. Features convenient automatic operation and non-protruding thumbwheel controls for greater safety. Powerful built-in 20-watt solid-state stereo amplifier delivers wide-range, full-fidelity sound. Volume, balance and tone controls let you tailor sound to your taste. Illuminated channel indicator permits easy selection of your favorite music on any part of the tape. Fine-tuning control moves tape head into precision position to eliminate crosstalk and assure full channel separation even on worn cartridges. Frequency Response, 50-10,000 Hz. Black metal case has chrome silver trim. Mounts easily under the dash with the included mounting bracket. Size,  $2\frac{7}{8} \times 7\frac{1}{8} \times 8$ " deep. Order speakers from page 114. For 12 VDC positive or negative ground. From Japan.

19 A 4089 X. Shpg. wt., 12 lbs. . . . . 79.95

## B 4- and 8-track Tape Player/FM Radio with Speaker Bonus

Model RR-60. Separately, \$144.95 Save \$15.00 on car tape cartridge player/FM radio with bonus of four speakers. Features safer thumbwheel controls for volume, balance, tone, FM tuning and tape head fine-tuning. Slide-rule dial flips back to accept tape cartridge. Has 20-watt solid-state stereo amplifier; Manual or automatic operation. Monophonic FM converts to stereo with optional adapter below. Response: tape, 50-10,000 Hz; FM, 50-15,000 Hz. Mounts under dash with included mounting bracket. Black metal case has chrome trim.  $2\frac{7}{8} \times 7\frac{1}{8} \times 8$ ". Our car stereo speakers have cloth-roll surround and 5.5-oz. ceramic magnets. With four  $5\frac{1}{4}$ " round speakers and chrome grilles. 12 VDC negative ground. From Japan.

19 A 0081 L3U. With Speakers. Shpg. wt., 21 lbs. . . . . 129.95

19 A 4090 U. Player/Radio Alone. Shpg. wt., 13 lbs. . . . . 119.95

19 A 4434. Stereo FM Adapter. Shpg. wt., 3 lbs. . . . . 29.95

## C 8-track Player/Stereo FM Radio with Speaker Bonus

Model RR-62. Separately, \$144.95 Save \$15.00 on 4- and 8-track stereo tape cartridge player and stereo FM radio with bonus of four speakers. Features manual or automatic operation, thumbwheel controls, and slide-rule dial which flips back to accept cartridge. Solid-state stereo amplifier delivers 20 watts. Volume, balance and tone controls adjust the sound to suit your taste. Fine-tuning prevents crosstalk and assures full channel separation even on worn tape cartridges. Illuminated channel indicator. Mounts under the dash with included mounting bracket. Response: tape, 50-10,000 Hz; FM, 50-15,000 Hz. Size,  $2\frac{7}{8} \times 7\frac{1}{8} \times 8$ " deep. With four of our best  $5\frac{1}{4}$ " round speakers and chrome grilles. For 12 volts DC, negative ground. From Japan.

19 A 0096 L3U. With Speakers. Shpg. wt., 20 lbs. . . . . 129.95

19 A 4099 U. Player/Radio Alone. Shpg. wt., 12 lbs. . . . . 119.95

## D Compact 4- and 8-track Car Stereo Tape Player

Model RR-59. Mini 4- and 8-track tape player fits in the smallest places but performs with the big models! Features manual or automatic operation and safe, easy-to-use thumbwheel controls. Individual volume controls for each channel balance the sound while the tone control adjusts the sound to suit your taste. Selector control and illuminated channel indicator make it very easy for you to choose your favorite from any part of the tape cartridge. Fine-tuning control properly positions the tape playback head to eliminate annoying crosstalk and assure full channel separation on worn tape cartridges. Solid-state stereo amplifier delivers 20 watts. Response, 50-10,000 Hz. Size, only  $3 \times 5 \times 6\frac{1}{8}$ " deep. With universal mounting bracket and easy-to-follow mounting instructions. Order speakers from page 114. For 12 volts DC, negative ground. From Japan.

19 A 4096 X. Shpg. wt., 10 lbs. . . . . 79.95

## E Mini 8-track Stereo Tape Player

RR-45T. Mini player fits anywhere space is at a premium, but performs like bigger models. Plays all 8-track cartridges with full stereo realism. Features manual or automatic operation. Illuminated channel indicator. Volume, balance and tone controls permit tailoring the sound to your particular tastes. Channel selector and indicator make it easy to choose your favorite music from any part of the tape. Fine-tuning control brings the tape playback head into proper position to prevent crosstalk and assure maximum channel separation even on worn cartridges. Has powerful, built-in 20-watt solid-state stereo amplifier. Response, 50-10,000 Hz.  $3 \times 5 \times 6\frac{1}{8}$ ". With universal mounting bracket and easy-to-follow instructions. Order speakers from page 114. For 12 volts DC, positive or negative ground. From Japan.

19 A 4036 X. Shpg. wt., 9 lbs. . . . . 59.95

**79<sup>95</sup>** \$5  
monthly\*



(A)

With Speakers **129<sup>95</sup>**

Player Alone **119<sup>95</sup>**

Bonus! Four of our best speakers with RR-60 or RR-62

Save \$15.00



With Speakers **129<sup>95</sup>**

Player Alone **119<sup>95</sup>**



(B)



(C)



(D)

**79<sup>95</sup>**

\$5 monthly\*

**59<sup>95</sup>**

\$5 monthly\*

(E)



\*See page 438 for full Credit details



Stereo FM Cartridge  
**5995**

AM Tuner Cartridge  
**2495**

FM-AM Tuner Cartridge  
**4695**

**Stereo FM Tuner Cartridge.** Instantly converts any tape player on this page to rich-sounding stereo-FM radio. Solid-state. Slide-rule dial for easy tuning. Powered by tape player. From Japan.

19 A 4599 S. Shpg. wt., 1½ lbs..... 59.95

**AM Tuner Cartridge.** Converts your tape player to AM radio at a modest price. Slides in like regular cartridge. Illuminated slide-rule dial. With batteries. Japan.

19 A 4246 S. Shpg. wt., 1 lb..... 24.95

**Monophonic FM-AM Tuner Cartridge.** For any 4- or 8-track tape player. Solid-state. Provides excellent reception of AM and FM. AFC locks-in FM stations. With batteries. From Japan.

19 A 4022 S. Shpg. wt. 1 lb..... 46.95



**8995 4- and 8-track Stereo Tape Cartridge Player**

**Craig 3116.** Hear your favorite music anywhere, anytime, on 4- or 8-track stereo tape cartridges. This compact tape player delivers brilliant stereo through a powerful 22-watt amplifier. So easy to hear music on-the-go... just insert cartridge into slot and you're ready for today's sounds in stereo. Tape programs change automatically or at the touch of a pushbutton. Ejector for easy cartridge removal. Volume, balance, and tone controls. Frequency response: 70-10,000 Hz. Order speakers from page 114. Mounts under dash (bracket included). Size, 27/8x7¾x10½". 12 VDC negative ground. Japan. 19 A 4606 X. Shpg. wt., 10 lbs..... 89.95

**Craig 3117 Stereo 4- and 8-track Tape Player/Stereo FM Radio.** Offers total mobile entertainment. 22-watt player features automatic of ration and track-changing. Radio has AFC on FM, slide-rule dial. 70-10,000 Hz. Order speakers from page 114. 3¾x7¾x10½". 12 VDC negative ground. Japan. 19 A 4607 U. Shpg. wt., 10 lbs..... 139.95

**A 4\*/8-track Stereo Tape Player with Speaker Bonus**

*Separately, Was \$104.95.* Automatic Radio SCE-6804. Plays all 8-track cartridges, plus 4-track cartridges with \*Gidget adapter (included). Accepts AM or FM-stereo tuner cartridges at left. Automatic operation; safe thumbwheel controls; 8-watt solid-state amplifier. 50-15,000 Hz. Four 5¼" round coax speakers have tweeter, chrome grille. 2x7x8". With mounting bracket. Japan.

19 A 0040 L3U. Player with Speakers. Shpg. wt., 13 lbs..... 89.95  
19 A 4598 X. Player Alone. Shpg. wt., 10 lbs..... 79.95

**B "Mini" 4\*/8-track Stereo Tape Cartridge Player**

Automatic Radio MNE-6725. Compact tape player for auto or boat. Plays 8-track stereo cartridges, plus 4-track cartridges with \*Gidget adapter (included). Powerful stereo amplifier produces 6 watts total music power. Order speakers from page 114. Solid-state circuit. 50-15,000 Hz. Volume, tone, separation controls. 12 VDC negative ground. 8x6½x3". Japan.

19 A 4267 X. Shpg. wt., 10 lbs..... 59.95

**C 4\*/8-track Home/Car Stereo Tape Cartridge Player**

Automatic Radio GES-8111. Versatile 4\*/8-track stereo tape player for your car converts instantly to home player (with AC adapter below). Plays 8-track stereo cartridges, plus 4-track cartridges with \*Gidget adapter (included). Handsome styling with fully automatic operation. 8-watt solid-state stereo amplifier. Convenient, safety-type thumbwheel controls—volume, tone, left-right and front-rear balance. Channel selector button; backlit channel indicator. Response: 50-15,000 Hz. Special "slipout" mounting bracket for instant conversion to home use. With four speakers, chromed grilles, bracket with lock and key. Walnut finish case, 3¾x8½x8". 12 VDC negative ground. Japan.

19 A 4019 U. Shpg. wt., 13 lbs..... 109.95

19 A 4250. 117 VAC Adapter. Shpg. wt., 4 lbs..... 27.95

19 A 4003. Car Floor Mount. Shpg. wt., 5 lbs..... 8.95

**D 4\*/8-track Stereo Tape Player/Stereo FM Radio**

Automatic Radio EMX-6810. Combination tape player and FM radio. Plays 8-track stereo tape cartridges, plus 4-track cartridge with \*Gidget adapter (included). Radio tunes stereo FM and monophonic FM. Volume, tone, and balance controls. Solid-state stereo amplifier delivers 8 watts of music power. Special indicator light tells you when you are tuned to FM stereo broadcast. Illuminated channel indicator. Response: 50-15,000 Hz. With mounting bracket. 7½x7x2½". 12 VDC neg. ground. Order speakers from page 114. From Japan.

19 A 4601 U. Shpg. wt., 10 lbs..... 119.95

**E 4- and 8-track Stereo Tape Cartridge Player**

Automatic Radio CFE 8001. Automatically plays all 4- and 8-track stereo cartridges, without need for adapters. Easy operation—insert tape cartridge to begin play—depress "Off" button to eject cartridge. Automatic or manual channel selection. Has 10-watt solid-state stereo amplifier; volume, tone, separation controls; lighted channel indicator. Response: 50-15,000 Hz. Bracket for easy installation under dash. 14x11½x7½". For 12 VDC negative ground. Order speakers from page 114. Japan.

19 A 4005 X. Shpg. wt., 11 lbs..... 79.95

**F 8-track Stereo Tape Player/Stereo FM Radio**

Craig 3119. Stereo tape player accepts all 8-track cartridges. Stereo FM radio for complete auto entertainment. Pours out a full 22-watts of music power. Player has automatic operation and track selection. FM radio provides excellent stereo reception with AFC to prevent station drift; slide-rule dial. Volume, balance, and tone controls. Frequency response: 70-10,000 Hz. Order speakers from page 114. Overall size, 3¾x7¾x10½". With mounting bracket. 12 VDC negative ground. From Japan.

19 A 4608 U. Shpg. wt., 10 lbs..... 119.95

**G 8-track Stereo Tape Cartridge Player/Stereo FM Radio**

Gibbs CR-627. Deluxe tape player with FM radio. Fully automatic. Plays through 12-watt solid-state stereo amplifier. Excellent fidelity with 70-10,000 Hz frequency response. Radio provides fine stereo FM with AFC control to prevent drift; channel separation. Volume, tone, balance controls. Track indicator lights, manual channel selector. Stereo FM indicator light. Black leatherette case with brushed chrome trim. With mounting bracket. For 12 VDC negative ground. Order speakers from page 114. Japan.

19 A 4057 U. Shpg. wt., 13 lbs..... 129.95

# Enjoy the thrilling sound and convenience of Stereo Tape and FM Radio in your car

With Speakers **89<sup>95</sup>**      Player Alone **79<sup>95</sup>**      Save \$15  
With Speakers



**A**



**B** Compact 4\*/8-track Auto Player **59<sup>95</sup>**



**C** Tape Player for Home/Car **109<sup>95</sup>**  
less adapter



**D** Tape Player with Stereo FM **119<sup>95</sup>**



**E** 4- and 8-track Car Tape Player **79<sup>95</sup>**



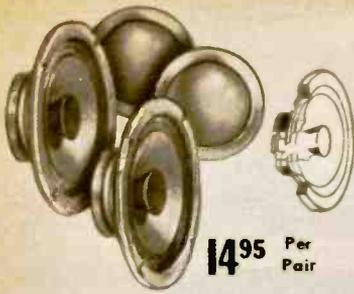
**F** 8-track Player with Stereo FM **119<sup>95</sup>**



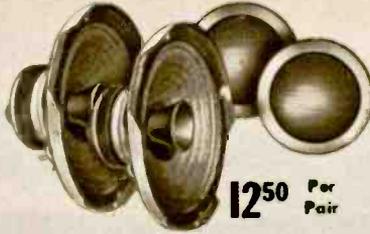
**G** 8-track Player with Stereo FM **129<sup>95</sup>**

Allied has quality tape players for every budget

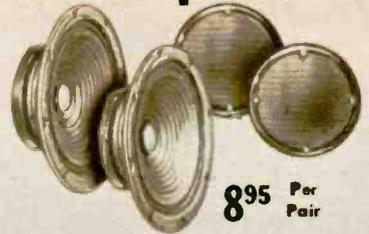
# Values in Car Stereo Speakers



**14<sup>95</sup>** Per Pair



**12<sup>50</sup>** Per Pair



**8<sup>95</sup>** Per Pair

## Our finest car stereo Speakers

For the best in-car stereo realism. Features 5 1/4" round speakers with extra-powerful 5.5-oz. ceramic magnet. Cloth-cones edges for deeper bass. Can be mounted in car doors without removing panels. 10-watt capacity. With two speakers, two grilles, hardware, instructions. Wt., 4 lbs. 19 A 4119. . . . . Per Pair 14.95

## Deluxe car stereo Speakers

Good hi-fi sound at a low price. High-quality 5 1/4" round speakers have 3-ounce ceramic magnet for plenty of power handling ability and sensitivity. Handle 8 watts per speaker. With two speakers, two grilles, color-coded wiring harness, hardware and instructions. Wt., 2 1/2 lbs. 19 A 4023. . . . . Per Pair 12.50

## Economy car stereo Speakers

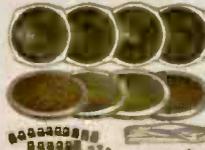
A fine speaker outfit for great sound from tapes and radio. 5" speakers have 3-oz. ceramic magnet; handle 8 watts per speaker. Speakers mount easily in car doors without removing door panels. With two speakers, plastic grilles, hardware, instructions. Shpg. wt., 3 lbs. 19 A 4120. . . . . Per Pair 8.95



## "Instant-mount" Speakers

A great value. High-quality 5 1/4" speakers for use with any car stereo player. Deliver wide-range sound. Low-profile enclosures permit simple installation; excellent for mounting on rear panel-shelf. No cutting or fitting necessary. Enclosures, 7 1/2 x 7 1/2", tapered 3" to 1 1/4". Shpg. wt., 4 lbs. 19 A 4259 X. . . . . Per Pair 7.95

Per Pair **7<sup>95</sup>**



Set of Four **8<sup>95</sup>**

## Custom in-door Speaker Set

Easy "do-it-yourself" installation. Four heavy-duty 5" round ceramic-magnet speakers. Mount underdash, underseats, on kick panels, doors, or rear package shelf. With grilles. Includes all necessary cables, mounting hardware and self adhering tape for "in-door" installation. Shpg. wt., 4 lbs. 19 A 4699. . . . . Set of Four 8.95



## Allied deluxe solid-state car stereo Reverberation System

**29<sup>95</sup>**

\$5 monthly\*

Adds thrilling extra dimension of realism to any car stereo tape player or stereo FM radio. Mixes sound from each channel, delays it through rear speaker. Volume, balance, Reverb controls—pilot lights for "On" and "Stereo." 1 3/4 x 8 x 5 3/4". With 6" speaker on 6x9" adapter board, grille. 12 VDC neg. ground. 19 A 4579. Shpg. wt., 6 lbs. . . . . 29.95  
19 A 4133. Above, without speaker. 5 lbs. . . . . 28.95

# Economy-priced car Stereo Tape Cartridge Players



**56<sup>95</sup>**

**4 and 8-track Car Stereo Tape Player**

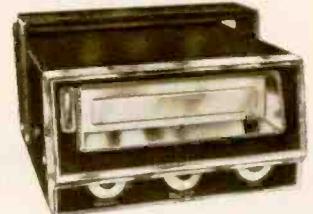
Automatic Radio SEL-9606. 8-watt solid-state stereo tape player plays all 8-track cartridges in magnificent stereo sound, and any 4-track cartridge with Gidget adapter (included). Automatic and manual channel control for changing tape selections. Cartridge ejector; volume tone, balance controls. Response, 70-12,000 Hz. Order speakers above. Mounting bracket. 3x5 1/2 x 7". 12 VDC neg. gnd. Japan. Shpg. wt., 10 lbs. 19 A 4609. . . . . 56.95



**59<sup>95</sup>**

**Budget 8-track car Stereo Tape Player**

Gibbs 3328. 8-track player boasts automatic operation; 12-watt solid-state stereo amplifier; black leatherette case with brush chrome trim. Plays all standard 8-track stereo tapes with excellent fidelity. Has volume, tone balance controls; manual channel selector. Response, 70-10,000 Hz. Wow and flutter, less than 0.3%. 8 3/4 x 8 1/8". For 12 VDC negative ground. Order speakers above. From Japan. Shpg. wt., 11 lbs. 19 A 4602 X. . . . . 59.95



**56<sup>95</sup>**

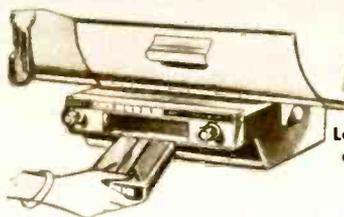
**Compact 8-track car Stereo Tape Player**

Ranger RR-47T. Offers exceptional sound and distinctive styling. Handsome compact case is designed for mounting where space is limited. Has 3-watt solid-state stereo amplifier; illuminated channel selector switch; automatic electronic channel-transfer. Has balance, Dual-channel volume and tone controls. Wow and flutter less than 0.35%. 40-12,000 Hz. 3x5x6 1/8". Mounting bracket. 12 VDC neg. gnd. Order speakers above. 19 A 4025 X. Shpg. wt., 10 lbs. . . . . 56.95

# 8-track Cartridges, Accessories

Wide selection by famous artists, for home or car stereo tape players

Choose from the most popular tunes of today. Below is a wide selection by famous artists for every type of listening enjoyment. All cartridges operate at 3 1/2 ips. \*Indicates Twin-Pack, a cartridge equivalent to two full stereo LP's. Av. shpg. wt., 6 oz.



Low as **589**



## INSTRUMENTALS—EASY LISTENING

Stock No.	Title	Artist	EACH
19 A 4271 S	Whipped Cream and Others	Tijuana Brass	5.89
19 A 4390 S	Sounds Like the Tijuana Brass	Tijuana Brass	5.89
19 A 4474 S	Going Places	Tijuana Brass	5.89
19 A 4614 S	The Beat of the Brass	Tijuana Brass	5.89
19 A 4475 S	Golden Hits	Manlovani	5.89
19 A 4615 S	Memories	Manlovani	5.89
19 A 4616 S	Manlovani Touch	Manlovani	5.89
19 A 4291 S	Best of H. Mancini	H. Mancini	5.89
19 A 4284 S	*Lovers/Martins/Memories	Jackie Gleason	8.49
19 A 4477 S	The Best of Billy Vaughn	Billy Vaughn	5.89
19 A 4480 S	Boots with Strings	Boots Randolph	5.89
19 A 4481 S	Best of Al Hirt	Al Hirt	5.89
19 A 4091 S	Love Rhapsodies	Midnight String Quartet	5.89
19 A 4617 S	The Look of Love	Midnight String Quartet	5.89
19 A 4092 S	Greatest Hits	Leonard Bernstein	6.89
19 A 4093 S	Greatest Hits	Eugene Ormandy	6.89
19 A 4618 S	Fool on a Hill	Sergio Mendes	5.89
19 A 4619 S	Do You Know the Way to San Jose	Baja Marimba	5.89
19 A 4620 S	Bloomin' Hits	Paul Mauriat	5.89
19 A 4621 S	Prevailing Winds	Paul Mauriat	5.89

## POPULAR VOCALS

Stock No.	Title	Artist	EACH
19 A 4630 S	Happening in Central Park	Barbra Streisand	6.89
19 A 4333 S	The Very Best of Connie Francis	Connie Francis	5.89
19 A 4103 S	Valley of the Dolls	Dionne Warwick	5.89
19 A 4631 S	Promises Promises	Dionne Warwick	5.89
19 A 4102 S	Lady Soul	Aretha Franklin	5.89
19 A 4501 S	That's Life	Frank Sinatra	5.89
19 A 4632 S	Greatest Hits Vol. 1	Frank Sinatra	5.89
19 A 4633 S	Cycles	Frank Sinatra	5.89
19 A 4326 S	Everybody Loves Somebody	Dean Martin	5.89
19 A 4634 S	Gentle on my Mind	Dean Martin	5.89
19 A 4635 S	Greatest Hits, Vol. 1	Dean Martin	5.89
19 A 4505 S	My World	Eddy Arnold	5.89
19 A 4506 S	Best of Eddy Arnold	Eddy Arnold	5.89
19 A 4636 S	Walkin' in Love Land	Eddy Arnold	5.89
19 A 4507 S	My Cup Runneth Over	Ed Ames	5.89
19 A 4637 S	Apologize	Ed Ames	5.89
19 A 4508 S	Greatest Hits	Johnny Cash	5.89
19 A 4638 S	TV Special	Elvis Presley	5.89
19 A 4639 S	Golden Records I	Elvis Presley	5.89
19 A 4640 S	Golden Records IV	Elvis Presley	5.89
19 A 4641 S	Wichita Lineman	Glen Campbell	5.89
19 A 4642 S	By the Time I Get to Phoenix	Glen Campbell	5.89
19 A 4643 S	Gentle on my Mind	Glen Campbell	5.89
19 A 4644 S	Feliciano	Jose Feliciano	5.89
19 A 4645 S	Souled	Jose Feliciano	5.89
19 A 4646 S	Special Request	The Lettermen	5.89
19 A 4647 S	Going Out of my Head	The Lettermen	5.89
19 A 4648 S	Greatest Hits I	Johnny Mathis	5.89
19 A 4649 S	Honey	Johnny Mathis	5.89

## TODAY'S SOUND—TEEN FAVORITES

Stock No.	Title	Artist	EACH
19 A 4069 S	Greatest Hits, Vol. 1	Supremes	5.89
19 A 4070 S	Greatest Hits, Vol. 2	Supremes	5.89
19 A 4650 S	Join the Temptations	Supremes	5.89
19 A 4651 S	Love Child	Supremes	5.89
19 A 4513 S	Golden Hits	The Ventures	5.89
19 A 4518 S	Greatest Hits	The Temptations	5.89
19 A 4071 S	Sounds of Silence	Simon/Garfunkle	5.89
19 A 4072 S	Parsley, Sage, Etc.	Simon/Garfunkle	5.89
19 A 4622 S	*Beatles	The Beatles	11.89
19 A 4653 S	Yellow Submarine	The Beatles	5.89
19 A 4654 S	Sgt. Pepper's Lonely Hearts Club Band	The Beatles	5.89
19 A 4655 S	Beggars Banquet	Rolling Stones	5.89
19 A 4656 S	Supper Session	Mike Bloomfield	5.89
19 A 4657 S	Electric Lady Land	Jimi Hendrix	8.89
19 A 4658 S	Realization	Johnny Rivers	5.89
19 A 4659 S	Greatest Hits	James Brown	7.89
19 A 4660 S	Boogie with	Canned Heat	5.89
19 A 4661 S	Saving the Blues I	Canned Heat	5.89
19 A 4662 S	Living the Blues II	Canned Heat	5.89
19 A 4663 S	Steppenwolf 2nd	Steppenwolf	5.89
19 A 4664 S	Wild Flowers	Judy Collins	5.89
19 A 4665 S	Greatest Hits	Petula Clark	5.89
19 A 4666 S	Golden Ear II	Mamas and Papas	5.89
19 A 4667 S	Greatest Hits	Rascals	5.89
19 A 4668 S	Greatest Hits	Association	5.89
19 A 4669 S	Wheels of Fire Vol. II	The Cream	5.89
19 A 4670 S	Distra! Gears	The Cream	5.89
19 A 4671 S	In-A-Gadda-Da-Vida	Iron Butterfly	5.89
19 A 4672 S	Stone Soul Picnic	5th Dimension	5.89
19 A 4673 S	Incredible	The Union Gap	5.89
19 A 4674 S	Super Hits Vol. I	Various Artists	5.89
19 A 4675 S	Super Hits Vol. II	Various Artists	5.89
19 A 4676 S	Super Hits Vol. III	Various Artists	5.89
19 A 4677 S	Late Again	Peter, Paul & Mary	5.89

## JAZZ

Stock No.	Title	Artist	EACH
19 A 4296 S	Time Out	Dave Brubeck	5.89
19 A 4486 S	A Day in the Life	Wes Montgomery	5.89
19 A 4487 S	Best Of	Wes Montgomery	5.89
19 A 4622 S	Willow Weep for Me	Wes Montgomery	5.89

## SOUNDTRACKS

Stock No.	Title	Artist	EACH
19 A 4297 S	Sound of Music	Original Track	6.89
19 A 4301 S	Dr. Zhivago	Original Track	6.89
19 A 4623 S	Space Odyssey 2001	Original Track	7.89
19 A 4624 S	Funny Girl	Original Track	6.89
19 A 4625 S	Finian's Rainbow	Original Track	6.89
19 A 4626 S	Camelot	Original Track	6.89
19 A 4627 S	Mission Impossible	TV Soundtrack	5.89

## PIANO AND ORGAN

Stock No.	Title	Artist	EACH
19 A 4404 S	Ebb Tide	Earl Grant	5.89
19 A 4628 S	Only For Lovers	Roger Williams	5.89
19 A 4629 S	More than a Miracle	Roger Williams	5.89

### "Gidget" 4-track to 8-track Adapter



298

Doubles the versatility of your tape player. Lets you play the lower priced standard 4-track cartridges on 8-track-only players. Simple insertion and removal from 4-track cartridges. With full instructions. Shpg. wt., 4 oz.  
19 A 4551.....2.98

### RCA Head-Cleaning Tape Cartridge



195

Keep your player in top professional condition. Insert in player like regular cartridge. Tape moves across heads to remove oxides, dirt, oil and other harmful particles. Not for 4-track-only models. Shpg. wt., 4 oz.  
19 A 4269 S.....1.95

### Burglar Alarm System for car tape players



795

Protect your valuable car tape player against theft with this unique alarm. Protects any 12-volt stereo car tape system. "Squealer" connects easily, provides loud horn-alarm if tape unit is tampered with. Shpg. wt., 10 oz.  
19 A 4117.....7.95

### Rubbermaid® Cartridge Holder

Holds up to 10 cartridges

595



Provides ideal storage for 4- or 8-track cartridges. Stores up to 10 cartridges. Keeps tape library organized and cartridges dust-free. Molded carrying handle. Plastic case, vinyl top. 13x5x6".  
19 A 4118 X. Wt., 2 lbs.....5.95

# Enjoy full-fidelity stereo music in your car with one of these Car Tape Cassette Players



**A** Built-in burglar alarm sounds car's horn to scare off would-be thieves

**99<sup>95</sup>**  
\$5 monthly\*



**B** Thumbwheel-type volume, balance and tone controls are safe and easy to use

**79<sup>95</sup>**  
\$5 monthly\*



**C** Special narrow-gap head for extended-range frequency response

**99<sup>95</sup>**  
\$5 monthly\*



**D** Automatic cassette eject and pushbuttons for safe, convenient operation

**119<sup>50</sup>**  
\$6 monthly\*

## Stereo FM Car Radios at low Allied prices



**E** Sensitive front end plus four IF stages assure noise-free reception

**99<sup>95</sup>**  
\$5 monthly\*



**F** Delivers sensitive, noise-free FM reception plus clear, wideband AM

**129<sup>95</sup>**  
\$7 monthly\*

### A Tenna Car Stereo Tape Cassette Player

Model R-100C. This car cassette player includes a built-in alarm system to discourage theft. Has instant cassette loading and automatic or manual ejection at end of play. Fast forward and fast reverse let you find any selection on the tape cassette in just seconds. Non-protruding thumbwheel controls for volume, balance and tone let you adjust the sound to suit your personal taste. Powerful built-in solid-state stereo amplifier develops 10 watts. Response 50-10,000 Hz. Mounts under dash with included bracket. Size, 2x7x8" deep. For 12 VDC negative ground. Order speakers from page 114. Japan.  
19 A 4035 X. Shpg. wt., 10 lbs. .... 99.95

### B Automatic Radio Car Stereo Cassette Player

Model CRS-9440. Compact cassette player plays standard monophonic or stereo cassettes with true-to-life realism. Non-protruding thumbwheel volume, balance and tone controls let you tailor stereo to your taste. Fast forward and reverse pushbuttons let you find any selection with ease. Automatic cassette ejection, plus security device that locks in cassette when ignition key is removed. Solid-state stereo amplifier delivers 8 watts music power. Mounts under dash with included mounting bracket. 2-3/4x6-5/8x7". For 12 VDC neg. gnd. Order speakers from page 114. Japan.  
19 A 4028 X. Shpg. wt., 10 lbs. .... 79.95

### C Crown Automatic Car Stereo Cassette Player

Model CSC-1000. Deluxe cassette player plays all standard monophonic or stereo cassettes with full-fidelity realism. Precision narrow-gap playback head assures better high frequency response with lower distortion. Keyboard-type controls for play, stop and eject operation. Fast forward and rewind let you find any selection on the tape in no time at all. Volume, balance and tone controls adjust the sound to taste. Stereo amplifier delivers 10-watt output. Response, 70-10,000 Hz. Dash mounting bracket is equipped with security lock. Size, 3x7 1/2x8". For 12 VDC negative ground. Order speakers from page 114. From Japan.  
19 A 4604 U. Shpg. wt., 8 lbs. .... 99.95

### D Sony/Superscope Car Stereo Cassette Player

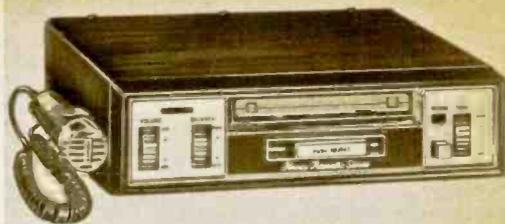
Model TC-20. Instant-load model plays standard monophonic or stereo cassettes with hi-fi realism. Pushbuttons for stop, fast forward and reverse let you find any selection on cassette in a matter of seconds. Volume, balance and tone controls let you adjust the sound to suit your taste. Cassette ejects automatically at the end of play. Solid-state stereo amplifier delivers 12 watts. Response, 50-10,000 Hz. Flutter and Wow, 0.28%. Signal-to-Noise Ratio, 45 dB. With tape head cleaning pencil and dash mounting bracket. Size, 2 1/8x7 3/8x8 1/4". For 12 VDC positive or negative ground. Order speakers from page 114. From Japan.  
19 A 4045 U. Shpg. wt., 7 lbs. .... 119.50

### E Car Stereo FM Radio by Automatic Radio

Model MXR-8404. Enjoy beautiful stereo FM at the touch of a button. Multi-ganged tuning condenser and four IF stages assure sensitive, noise-free FM reception. Indicator light shows reception of stereo broadcasts. Thumbwheel controls for tuning, volume, balance and tone. Slide-rule dial and AFC permit fast, pinpoint tuning for finest reception. Powerful built-in solid-state stereo amplifier develops 10 watts to drive any speakers to full volume. Response 50-10,000 Hz. Separation, 30 dB. Slim design is easy to mount under the dash. 2x8 3/4x7". For 12 VDC negative ground. Order speakers from page 114. Japan.  
19 A 4037 U. Shpg. wt., 8 lbs. .... 99.95

### F Tenna pushbutton Stereo FM-AM Radio

Model R-12-PBX. Enjoy concert-hall fidelity on stereo FM, and AM too, with this quality auto radio. Five pushbuttons let you select your favorite FM or AM station instantly. Advanced solid-state design assures sensitive reception and years of dependable service. Stereo indicator light shows reception of stereo stations. Volume, balance and tone controls let you adjust the sound to suit your taste. Built-in stereo amplifier delivers 10 watts. Response, 50-10,000 Hz. Custom mounts in or under the dash. Size, only 2x8 1/2x6 1/2" deep. For 12 volts DC negative ground. Order speakers from page 114. Japan.  
19 A 4048 U. Shpg. wt., 10 lbs. .... 129.95



### 10995 Kraco Car Stereo Cassette Recorder with microphone

\$6 monthly\*

Model KS-999. Plays standard cassettes with life-like fidelity. Also records with dynamic mike included. Thumbwheel controls for volume, balance and tone. Has front-loading, automatic operation with automatic cassette ejection. Power Output: 16 watts. Response, 100-11,000 Hz. With mounting bracket. Order speakers from page 114. Size, 2 5/8x8 3/4x8 1/8". For 12 VDC negative ground. Japan.  
19 A 4081 U. Shpg. wt., 6 lbs. .... 109.95



### 7995 Kraco deluxe 8-track Car Stereo Cartridge Player

\$5 monthly\*

Model KS-888. Plays all standard 8-track cartridges with hi-fi realism. Thumbwheel controls for volume, balance and tone. Illuminated channel indicator makes track selection easy. 16-watt stereo amplifier. 50-11,000 Hz. Mtg. bracket. Order speakers, page 114. 3 1/8x7 1/2x7 1/8". 12 VDC neg. gnd. (Does not play cassettes.) Japan.  
19 A 4083 X. Shpg. wt., 6 3/4 lbs. .... 79.95



### 5995 Kraco compact 8-track Car Stereo Cartridge Player

\$5 monthly\*

Model KS-700. Fits anywhere but performs like bigger models. Pushbutton track selector; volume, balance and tone controls. Powerful 10-watt solid-state stereo amplifier. Response, 70-10,000 Hz. Mounting bracket. Order speakers from page 114. 2 1/8x6 1/2x6 1/8". For 12 VDC neg. ground. (Plays 8-track cartridges, not cassettes.)  
19 A 4082 X. Japan. Shpg. wt., 6 lbs. .... 59.95



## Allied low-priced Stereo Tape Deck

**99<sup>95</sup>** \$5 monthly  
see page 438

Model TD-1025. Lots of features at a remarkable low price! You can build an impressive tape library by taping stereo FM broadcasts off the air, or by taping your record collection. You also can tape live performances with mikes. Records and plays 4-track stereo and mono through your hi-fi system or console.

Single control knob for fast-forward, pause, play, record, stop, reverse. Level controls for each channel, two level meters. Push-to-reset tape counter. Automatic tape lifters, automatic shutoff. Inputs: 2 mike, 2 aux. Outputs: 2 line, stereo headphone jack. Speeds: 7½, 3¾ and 1½ ips. Response: 50-16,000 Hz at 7½ ips. Flutter/Wow: 0.15% at 7½ ips. Size: 11½x13½x7". Vinyl walnut case. 7" takeup reel, patch cords. For 117 V, 60 Hz AC. Japan.

15 A 7593 U. Wt., 20 lbs. .... 99.95

Allied TD-1025 Recorder with Mike Outfit Bonus. Separately, \$133.70. 2 Allied 4525 Dynamic Mikes, Deluxe Carrying Case. Mike has 80-10,000 Hz response. -58 dB output. High impedance. Omnidirectional. Japan. Shpg. wt., 23 lbs.

15 A 0183 L2U. .... 119.95



### Save \$28.80 on Bonus Offer!

Two Allied 4525 Dynamic Mikes and Carrying Case only \$4.95 more

Deck and Bonus **139<sup>95</sup>** \$7 monthly  
see page 438

**135<sup>00</sup>**

\$7 monthly  
see page 436

## Allied three-speed Stereo Tape Deck

Model TD-1036. Expand your stereo music system with Allied's deluxe solid-state stereo tape deck and enjoy the luxury of superb music recording and reproduction. Handsome and versatile performer records and plays 4-track stereo and mono at 7½, 3¾ and 1½ ips through your hi-fi component system or console. Features automatic end-of-reel shutoff, automatic tape lifters to protect tape heads during fast forward and rewind; dual recording level meters, accurate push-to-reset digital counter, built-in stereo headphone amplifier with volume control, and stereo headphone jack for private listening.

Operates in either a vertical or horizontal position. Has easy-to-operate single-knob control, recording ready light. Inputs: two microphone, two auxiliary. With oiled walnut-veneer wood case, 7" takeup reel, patch cord, splicing tape, dust cover. For 117V, 60 Hz AC. Japan.

15 A 7103 U. Shpg. wt., 2 lbs. .... 135.00

Deck with Mike Outfit. Separately, \$108.75. Includes TD-1030 Deck, 2 Allied 4525 Dynamic Mikes, Mike Carrying Case. Mikes have 80-10,000 Hz response. -58 dB output. High impedance. Omnidirectional.

15 A 0682 L2U. Shpg. wt., 26 lbs. .... 139.95

### SPECIFICATIONS

Speeds: 7½, 3¾, 1½ ips. Frequency response: ±3 dB, 30-18,000 Hz at 7½ ips; ±3 dB, 40-12,000 Hz at 3¾ ips. Flutter/Wow: less than 0.15% at 7½ ips; 0.25% at 3¾ ips; 0.45% at 1½ ips. Signal-to-Noise Ratio: 50 dB. Harmonic Distortion: below 1%. Equalization: NAB at 7½ ips. Size: 15½x13½x6¾"

## Three-speed reversing Stereo Tape Deck

**249<sup>95</sup>** \$13 monthly  
see page 438

Model TD-1070. Our finest deck! Automatic-reverse model records and plays in both directions without reel turnover. Has solid-state preamps for playback through your stereo system or console, plus stereo headphone amplifier with level control. Can be set for one complete play and shutoff, continuous replay, or automatic stop at a predetermined point.

Automatically equalized response at all three speeds. Four heads (two in each direction). Has sound-on-sound. Level meters, 4-digit counter. Inputs: 2 mike, 2 aux. Outputs: 2 line, headphones. Speeds: 7½, 3¾, 1½ ips. Response: 30-20,000 Hz at 7½ ips. Flutter/Wow: less than 0.15% at 7½ ips. Size: 12½x19x7½". With walnut veneer case. 7" takeup reel, patch cords. For 117 V, 60 Hz AC. Japan.

15 A 7578 U. Wt., 35 lbs. .... 249.95

Allied TD-1070 Recorder with Mike Outfit Bonus. Separately, \$309.90. Two Allied 3310 Cardioid-Dynamic Mikes, Deluxe Carrying Case. Mike has 40-16,000 Hz response. 50,000 ohms impedance. Japan.

15 A 0184 L2U. Wt., 41 lbs. .... 259.95

Save \$13.75

TD-1025 Deck  
plus two Allied  
4525 Dynamic Mikes  
with Carrying Case

only \$20 more



Add tape recording and playback to your music system  
with an Allied solid-state Stereo Tape Deck

Save \$49.95

TD-1070 Deck  
plus Allied 3310  
Stereo Mike Outfit

only \$10 more



# Three-head solid-state Stereo Tape Deck



**Allied® Deck with most-wanted features at a value price**

**179<sup>95</sup>**

- Double lamination playback head
- Tape monitoring, sound-on-sound
- All silicon transistor circuit

Model TD-1095. You'd expect to pay much more for a three-head deck with all these features. Quality-designed to satisfy the critical recording enthusiast. Records four-track stereo or mono; plays through your stereo music system or console. Separate record, play and erase heads permits direct tape monitoring, sound-on-sound, and echo. Also records sound-with-sound. Single-knob function control with instant pause.

Flutterless four-pole motor provides accurate 7½, 3¾, and 1⅞ ips speeds. Slide-type controls adjust easily for accurate recording levels. Illuminated dual comparison level meters. Automatic tape lifters protect heads during rewind and fast forward. Automatic shutoff. Push-to-reset four-digit counter for editing and locating selections easily. Tape monitor switch. Inputs: 2 mike, 2 aux. Outputs: line, stereo headphone jack. 7" reel capacity. Walnut-grain vinyl covered wood case. 12¾x16x6⅝". For 117 V, 60 Hz AC. From Japan. 15 A 7574 U. Shpg. wt., 25 lbs. 179.95

Stereo Tape Deck with Mike Bonus. TD-1095 stereo tape deck with Allied 3311P mike outfit for \$5.00 more. Pair of wide-range dynamic mikes, desk stands in custom-fitted case. 13½x11¾x21½". From Japan. 15 A 0182 L2U. Shpg. wt., 31 lbs. 184.95

## SPECIFICATIONS

*Frequency Response:* ±3 dB, 30-22,000 Hz at 7½ ips; ±3 dB, 30-12,000 Hz at 3¾ ips. *Flutter/wow:* less than 0.1% at 7½ ips; 0.15% at 3¾ ips. *Signal-to-Noise Ratio:* 48 dB. *Input Sensitivity:* Mike, 0.25 mV; aux., 50 mV. *Harmonic Distortion:* less than 2.1%.

## A Compact Sony/Superscope Deck

Model 355. Four-track stereo and mono at 7½, 3¾, 1⅞ ips. Erase, record, playback head arrangement permits direct tape monitoring, sound-on-sound, echo. Scrape flutter filter and non-magnetizing head help eliminate tape modulation and hiss. Level meters, digital counter, automatic tape lifters. Retractable pinch rollers. Noise suppressor switch. Response, 20-22,000 Hz. Flutter/wow, less than 0.09% at 7½ ips. Operates in vertical or horizontal position. Size, 15½x6x7⅞x14". With walnut wood case, dust cover, and 7" takeup reel. For 117 V, 60 Hz AC. From Japan. 15 A 7567 U. Shpg. wt., 26 lbs. 199.50

## B Concord Deck with integrated circuits

Model Mk III. Features non-magnetizing long-life heads, hysteresis-synchronous motor. Flutter filter, tape tension arm, automatic shutoff. Automatic tape lifters. Tape/source monitoring. Sound-on-sound switch, echo control. Dynamic Range Expander eliminates tape hiss. Instant pause. Flip-up head cover with gap positions marked for editing. Level meters, counter. Speeds: 7½, 3¾, 1⅞ ips. Response: 20-27,000 Hz at 7½ ips. Wow/flutter: 0.09% at 7½ ips. Inputs: 2 mike, 2 aux. Outputs: line, stereo headphone. Vertical or horizontal operation. 15x19x7". With dust cover. For 117 V, 60 Hz AC. From Japan. 15 A 7019 U. Shpg. wt., 21 lbs. 239.50  
15 A 7020 U. Mk IV. Above, with automatic reverse play. Dual capstan, Shpg. wt., 39 lbs. 299.50

## C Sony/Superscope deluxe Deck

Model 630-D. Records and plays four-track stereo and mono at 7½, 3¾, 1⅞ ips. Long-life non-magnetizing record, play and erase heads. Sound-on-sound, echo. Tape/source monitor. Scrape flutter filter, noise suppressor switch. Large professional VU meters, push-to-reset four-digit counter, pause control with lock for easy editing. Slide controls for accurate record level settings. Automatic tape lifters, retracting pinch rollers, automatic shutoff. Headphone jack. Response, 20-22,000 Hz at 7½ ips. Flutter and wow, 0.09% at 7½ ips. In Walnut case, 7¼x16x19". With dust cover, 7" takeup reel, reel caps, patch cords. For 117 volts, 60 Hz AC. From Japan. 15 A 7584 U. Shpg. wt., 26 lbs. 279.50

## D Ampex Deck with dual capstan drive

Model 755. Preamps for record/play of 4-track stereo and mono at 7½, 3¾, 1⅞ ips. Long-life deep-gap heads. Tape monitoring, sound-on-sound. Counter, shutoff, level meters, pause control, automatic tape lifters. Response, 20-20,000 Hz at 7½ ips. Flutter/wow, 0.15%. With 7" takeup reel. 13x15¾x6½". With deluxe walnut base. For 115 VAC. 15 A 7265 U. Shpg. wt., 29 lbs. 249.95

Model 1455. Automatic reverse play; automatic threading; four heads (erase, record, play, reverse play). With deluxe walnut base. 15 A 7263 U. Shpg. wt., 29 lbs. 349.95

## E Teac Deck with three precision motors

Model A-1200. Has preamps for record/play of 4-track stereo and mono at 7½, 3¾ ips. Hysteresis-synchronous capstan motor, two reel motors. Record, play, erase heads. Counter, level meters, automatic shutoff, electrically switched speeds, push-button controls. Double protection against accidental erasure. Tape monitoring, sound-on-sound. Stereo headphone jack. Response: 30-17,000 Hz at 7½ ips. Wow and flutter, 0.12% at 7½ ips. Stainless steel panel for lasting professional appearance. Walnut case, 17x15½x9¾". For 117 volts, 60 Hz AC. 15 A 7450 Z. Shpg. wt., 64 lbs. 299.50



SONY STEREO DECK

199<sup>95</sup>



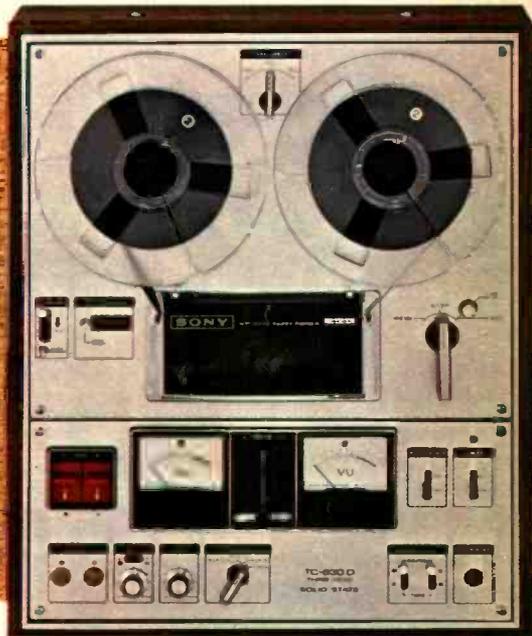
AMPEX

239<sup>95</sup>

**Stereo Decks with  
three-head design  
for direct tape  
monitoring, sound  
on sound, echo**

SONY  
CIPHERSCOPE

279<sup>50</sup>



AMPEX  
249<sup>95</sup>

TEAC  
299<sup>50</sup>



# Add the versatility of tape to your system . .



## CONCORD

Low-priced  
full-feature  
Stereo Deck

**9950**

\$5 monthly\*

Model 509-D. Solid-state stereo tape deck offers complete 4-track record/play facilities. Plays through your system or console at  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  or  $1\frac{1}{8}$  ips. Clean, uncluttered styling with two level meters, single-knob function control, digital counter, cue and edit control. Automatic record equalization shift with speed change. Flux-field heads assure finest sound quality.  $7\frac{1}{2}$  ips: 30-15,000 Hz; Flutter/Wow, less than 0.17%. Walnut case.  $11\frac{1}{2} \times 13\frac{3}{4} \times 4\frac{1}{8}$ ". 117 VAC. Japan.

15 A 7496 X. Shpg. wt., 16 lbs. . . . . 99.50



## SONY/ SUPERSCOPE

2-speed Stereo  
Tape Deck

**11950**

\$6 monthly\*

Model 252-D. Value-priced stereo tape deck records and plays 4-track stereo or mono through your system or console at  $7\frac{1}{2}$  or  $3\frac{3}{4}$  ips. Has sound-with-sound capability, stereo headphone monitor jack, dual level meter, single-knob control, automatic tape lifter, automatic shutoff, digital counter. Non-magnetizing record/play head reduces tape hiss. 2 mike, 2 aux. inputs.  $7\frac{1}{2}$  ips: 30-18,000 Hz; Flutter/Wow, 0.12%. 52 dB S/N. Walnut case.  $7\frac{1}{2} \times 15\frac{1}{4} \times 13\frac{1}{2}$ ". 117 VAC. Japan.

15 A 7557 U. Shpg. wt., 18 lbs. . . . . 119.50



## WOLLENSAK

3-speed Stereo  
Tape Deck with  
2-motor drive

**15995**

\$8 monthly\*

Model 6120. Beautifully-styled deck features two motors for precise  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  and  $1\frac{1}{8}$  ips speeds. Records and plays 4-track stereo or mono through your system or console. Has convenient open-front threading. Electro-dynamic brakes, tone and pause controls, counter, automatic shutoff, stereo headphone jack, two level meters. Mike and preamp inputs; line outputs.  $7\frac{1}{2}$  ips: Response, 40-20,000 Hz; Flutter and Wow, 0.15%. With walnut-finish wood case, 7" takeup reel.  $13 \times 16 \times 5$ ". 117 VAC.

15 A 7571 U. Shpg. wt., 23 lbs. . . . . 159.95



## SONY/ SUPERSCOPE

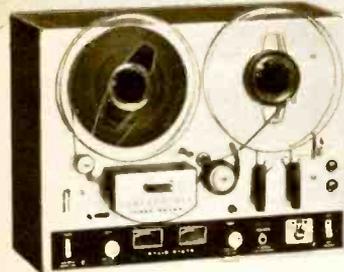
3-speed Stereo  
Tape Deck

**15950**

\$8 monthly\*

Model 255. Sony quality and features at a moderate price. Records and plays 4-track stereo or mono through your system or console at  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. Records sound-with-sound. Two level meters, digital counter, automatic tape lifters. Scrape-flutter filter cuts distortion. Non-magnetizing head circuit helps prevent tape hiss. Easy-threading retract-o-matic pinch roller.  $7\frac{1}{2}$  ips: 30-18,000 Hz; Flutter/Wow, 0.09%. Dust cover, walnut case.  $15\frac{3}{8} \times 7\frac{1}{4} \times 13\frac{3}{4}$ ". 117 VAC. Japan.

15 A 7566 U. Shpg. wt., 24 lbs. . . . . 159.50



## ROBERTS

All-silicon  
3-head Stereo  
Tape Deck

**17995**

\$9 monthly\*

Model 450. All-silicon-transistor deck boasts professional three-head design to permit direct monitoring and recording sound-with-sound. Records and plays 4-track stereo or mono through your system or console. Dynamically-balanced split-capacitor motor for precise  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips speeds. Record level meters, stereo headphone jack, instant stop, automatic shutoff.  $7\frac{1}{2}$  ips: 15-15,000 Hz; Flutter/Wow, 0.2%. Wood case.  $11\frac{1}{8} \times 15\frac{3}{4} \times 5\frac{1}{8}$ ". 110/240 V, 50-60 Hz. Japan.

15 A 7032 U. Shpg. wt., 26 lbs. . . . . 179.95



## SONY/ SUPERSCOPE

Stereo Tape  
Playback Deck

**9950**

\$5 monthly\*

Model 155. Loaded with features for superb playback of prerecorded 4-track stereo tapes through your system or console at  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  or  $1\frac{1}{8}$  ips. Retractable pinch roller simplifies threading. Non-magnetizing heads and scrape-flutter filter reduce distortion and hiss for cleaner sound. Automatic tape lifters, digital counter, automatic shutoff. 30-18,000 Hz at  $7\frac{1}{2}$  ips. Walnut case.  $15\frac{3}{8} \times 6\frac{3}{4} \times 12\frac{1}{2}$ ". 117 VAC. Japan. *Plays back recorded tapes only—does not record.*

15 A 7558 X. Shpg. wt., 17 lbs. . . . . 99.50

# ... with a solid-state Stereo Tape Deck



**PANASONIC**  
Stereo Tape Deck with three-heads  
**179<sup>95</sup>**  
\$9 monthly\*

Model RS-768. Record and play 4-track stereo and mono through your music system or console at 7½, 3¾ or 1⅞ ips. Three heads permit sound-on-sound, monitoring. Easy threading, automatic stop, dual level meters, digital counter, tape/source monitor. Single-knob function control. Inputs for 2 mike, 2 aux.; outputs: 2 line, stereo headphones. 30-21,000 Hz. With wood case, dust cover, 7" takeup reel, reel holders, splicing tape, patch cords. 14x19½x7¾". 117 VAC. Japan.  
15 A 7494 U. Shpg. wt., 23 lbs. .... 179.95



**BELL & HOWELL**  
3-head Stereo Tape Deck  
**199<sup>95</sup>**  
\$10 monthly\*

Model 2433. Outstanding tape deck boasts 3-head design for direct monitoring, sound-with-sound and echo effects. Records and plays 4-track stereo or mono through your music system or console at 7½, 3¾ and 1⅞ ips. Has two lighted level meters, two recording confidence lights on head cover; exclusive Audio-Eye indicates mode of operation, 7½ ips: 30-20,000 Hz; Flutter/Wow, 0.10%. Modern, space-age styling. With case, 7" takeup reel, patch cords. 11¾x15½x6¾". 117 VAC.  
15 A 7024 U. Shpg. wt., 30 lbs. .... 199.95



**UHER**  
Top-quality Stereo Deck with 3 heads  
**199<sup>95</sup>**  
\$10 monthly\*

Model 7300D. Deluxe stereo tape deck boasts features and quality that rivals more costly units. Has 3 heads for direct tape monitoring; sound-on-sound. Easy-to-operate keyboard-type pushbutton controls; two level meters; digital counter. Records and plays 4-track stereo or mono at 7½ or 3¾ ips through your system or console. Positive track selection for mono recording. Automatic shutoff with metallic leader. 7½ ips: 40-18,000 Hz; Flutter/Wow, .08%. Walnut case. 7x15x14". 117 VAC. Imported.  
15 A 7514 U. Shpg. wt., 23 lbs. .... 199.95



**PANASONIC**  
Automatic reversing Stereo Deck  
**199<sup>95</sup>**  
\$10 monthly\*

Model RS-796US. Conveniently plays an entire tape without the bother of reel turnover or rethreading. Automatic reversing stereo tape deck records and plays 4-track stereo and mono in both directions. Plays through your music system or console at 7½, 3¾ or 1⅞ ips. Deluxe dual-capstan drive. Dual record level meters, digital counter. Positive solenoid operation. 7½ ips: 40-15,000 Hz; Flutter/Wow, under 0.25%; S/N, over 50 dB. Wood case. 14x19½x7¾". 117 VAC. From Japan.  
15 A 7465 U. Shpg. wt., 38 lbs. .... 199.95



**TANDBERG**  
Precision-made Stereo Tape Deck  
**249<sup>95</sup>**  
\$13 monthly\*

Model 1600X. Precision-crafted to meet the exacting standards of the serious recordist. Records and plays 4-track stereo or mono at 7½, 3¾ or 1⅞ ips. through your system or console. Two level meters illuminate for record mode indication. Digital counter, automatic shut-off. Convenient tape motion lever for instant stop and start. 7½ ips: 40-20,000 Hz; Flutter/Wow, less than 0.1%; S/N, 55 dB. With wood base. 6¾x11¾x15½". For 117 VAC. Imported.  
15 A 7654 U. Shpg. wt., 23 lbs. .... 249.95



**VIKING**  
Professional-quality 3-head Stereo Deck  
**374<sup>95</sup>**  
less case  
\$18 monthly\*

Model 433. Magnificent silicon-solid-state deck has 3 heads to permit tape monitoring, plus switch controlled echo and sound-on-sound. Three motors, digital counter, pause control, level meters. Total shut-off at end of tape. Plays through system or console at 7½, 3¾ or 1⅞ ips. Records 4-track stereo or mono. 7½ ips: 40-18,000 Hz; Flutter/Wow, under 0.2%. 14¾x15¾x8¾". 117 VAC. Takes case below.  
15 A 7448 U. Shpg. wt., 30 lbs. .... 374.95  
15 A 7449 X. Wood Case. Shpg. wt., 4 lbs. .... 29.50



Sony reversing  
Stereo Tape System **399<sup>50</sup>**



Teac 3-motor reversing  
Stereo Tape Deck **469<sup>50</sup>**



Sony 3-motor reversing  
Stereo Tape Deck **489<sup>50</sup>**



Lundberg four-head  
Stereo Tape Deck **549<sup>00</sup>**



Teac 3-motor reversing  
Stereo Tape Deck **664<sup>50</sup>**



Sony studio quality  
Stereo Tape Deck **750<sup>00</sup>**

## Sony/Superscope automatic-reversing Stereo Deck

Model 560D. (Not illus.) Four-track stereo/mono record and play in both directions—E.S.P. reverses reels without sensing tape. Dual capstan drive, retracting pinch roller. Solid-state. Servocontrol motor. Level meters, counter,  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 30-18,000 Hz at  $7\frac{1}{2}$  ips.  $15\frac{1}{2} \times 16 \times 6\frac{1}{2}$ ". Walnut case, 7" takeup reel, 117 VAC. Japan.  
15 A 7049 U. Shpg. wt., 29 lbs. 299.50

**A** Model 560 ESP Automatic Reverse Stereo Tape System. Built-in 20-watt stereo amplifier has control center with tuner and phono inputs. Two speaker systems.  $17\frac{1}{2} \times 20\frac{3}{8} \times 11$ ". Japan. Full specifications on page 151.  
15 A 7304 Z. Shpg. wt., 53 lbs. 399.50

## B Teac automatic-reversing Stereo Tape Deck

Model A-4010 S. Separate record and play solid-state preamps. Record, play, erase heads in one direction, play head for reverse play. Tape monitoring, sound-on-sound. Hysteresis-synchronous capstan motor, two reel motors. Electrically-switched  $7\frac{1}{2}$  and  $3\frac{3}{4}$  ips speeds. Tape tension switch,  $3\frac{1}{2}$ " VU meters, digital counter, automatic shutoff. Stereo headphone jack. Response, 30-20,000 Hz at  $7\frac{1}{2}$  ips. Wow/flutter, 0.12% at  $7\frac{1}{2}$  ips. Walnut case,  $17\frac{1}{4} \times 17\frac{1}{2} \times 9\frac{3}{4}$ ". 117 V. 60 Hz AC. Japan.  
15 A 7087 Z. Shpg. wt., 64 lbs. 469.50

## C Sony/Superscope deluxe automatic-reverse Deck

Model 666D. Records and plays stereo or mono in both directions—E.S.P. feature reverses tape without any sensing tape or pulses. Solid-state. Smooth solenoid controls. Hysteresis-synchronous capstan motor, 2 reel motors. Noise reduction system. Scrape flutter filter. Record level meters, instant stop, digital counter. Stereo headphone jack with 2-position level switch. Speeds:  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  ips. Response, 20-22,000 Hz at  $7\frac{1}{2}$  ips. Vertical or horizontal operation. With walnut case, 7" takeup reel, dust cover.  $16\frac{5}{8} \times 17\frac{3}{16} \times 8\frac{1}{16}$ ". 117 VAC. Japan.  
15 A 7573 Z. Shpg. wt., 58 lbs. 489.50

## D Tandberg four-head Stereo Tape Deck

Model 64X. Records, plays 4-track stereo and mono through your music system. Separate record, play, erase, bias heads. Bias head provides hi-fi response even at slower speeds. Tape monitoring, sound-on-sound. Hysteresis synchronous drive motor. Pause control, level "eyes" automatic shutoff. FM multiplex filter. Response: 20-25,000 Hz at  $7\frac{1}{2}$  ips; 20-18,000 Hz at  $3\frac{3}{4}$  ips. Flutter/wow: 0.15% at  $7\frac{1}{2}$  ips. Speeds:  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips.  $15\frac{3}{8} \times 11\frac{5}{8} \times 6\frac{5}{8}$ ". With teak base, 7" takeup reel. For 117 VAC. Imported.  
15 A 7650 Z. Shpg. wt., 23 lbs. 549.00

## E Teac deluxe automatic-reversing Stereo Deck

Model A-6010. Separate silicon-transistor record and play preamps. Records in one direction; plays in either. Hysteresis-synchronous motor assures low wow and flutter. 0.08% at  $7\frac{1}{2}$  ips. Independent mike and line inputs provide versatile mixing facilities. Tape tension switch. Large  $3\frac{1}{2}$ " VU meters. Digital counter, automatic shutoff. Electrically-switched speeds of  $7\frac{1}{2}$  and  $3\frac{3}{4}$  ips. Four premium heads plus 100-kHz bias for seat-free stereo FM recordings. Response: 30-20,000 Hz at  $7\frac{1}{2}$  ips. Signal-to-noise ratio: 55 dB. Walnut case.  $21 \times 17\frac{1}{2} \times 8\frac{1}{4}$ ". 117 V. 60 Hz AC. From Japan.  
5 A 7453 Z. Shpg. wt., 70 lbs. 664.50

## F Sony/Superscope battery/AC Stereo Tape Deck

Model 770-4. Professional-quality 7"-reel deck for on-location or studio use. Record, play and erase heads. Tape/source monitor. Servocontrol  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ , and  $1\frac{1}{8}$  ips. speeds, plus 5% equalizing control. Switchable playback noise reduction system permits an increase in signal-to-noise ratio from 58 dB to 64 dB, a 100% increase in dynamic range. Switchable transient overload limiter. Front-panel bias and equalization adjustments. Mike and line mixing. Scrape/flutter filter, tape lifters, JAB type VU meters, digital counter. Stereo headphone jack. Jannon XLR mike inputs. Built-in rechargeable nickel cadmium battery. Response, 20-22,000 Hz at  $7\frac{1}{2}$  ips. Wow/flutter, 0.09% at  $7\frac{1}{2}$  ips.  $5\frac{3}{4} \times 16\frac{1}{8} \times 15\frac{1}{4}$ ". Japan.  
5 A 7570 Z. Shpg. wt., 33 lbs. 750.00



## Deluxe Teac Stereo Tape Deck takes up to 10 1/2-inch reels

Offers 15 ips speed for  
finest possible stereo  
high-fidelity sound

**749<sup>50</sup>**  
\$31 monthly\*

Model A-7030. Achieves highest standards of frequency response, wow and flutter, speed accuracy and signal-to-noise ratio. Two-track stereo record, play and erase heads, plus four-track play head. Three-stage direct coupled silicon transistor preamplifier offers excellent sound quality with minimum distortion. Response of  $\pm 2$  dB, 30-20,000 Hz at 15 inches per second.

Hysteresis-synchronous capstan motor and two eddy current reel motors for accurate speeds and stable tape travel. Front-panel control to switch from two-track to four-track play. Reel pushbutton for selecting proper tension when using different reel sizes. Pushbutton for cueing during fast forward and rewind. Two large VU meters permit recording levels to be easily read for achieving stereo balance.

Four-digit tape counter. Automatic shutoff on completion of tape travel. Stereo headphone jack.  $23 \times 19 \times 9$ ". With walnut case,  $10\frac{1}{2}$ " takeup reel. For 117 V, 60 Hz AC. From Japan.

15 A 7454 Z. Shpg. wt., 74 lbs. 749.50

### SPECIFICATIONS

Speeds: 15 and  $7\frac{1}{2}$  ips. Response:  $\pm 2$  dB, 30-20,000 Hz @ 15 ips;  $\pm 2$  dB, 45-15,000 Hz @  $7\frac{1}{2}$  ips. Wow/flutter: 0.06% @ 15 ips; 0.08% @  $7\frac{1}{2}$  ips. Signal-noise: -55 dB. Bias: 100 kHz. Rewind and F. fwd.: 1200 ft. in 120 sec. Inputs: Mic—10,000 ohms, 0.5 V minimum; line—300,000 ohms, 0.1 V minimum. Output: 1 V for impedance of 1000 ohms minimum.



## Allied® solid-state Stereo Tape Recorders

*"The Allied TD-1080 is one of the more versatile and easy to use tape recorders in its price class. One would have to spend hundreds of dollars more to get better performance." . . . . STEREO REVIEW, APRIL 1969*



# Allied silicon-transistor 3-speed Stereo Tape Recorder

**\$179<sup>95</sup>**

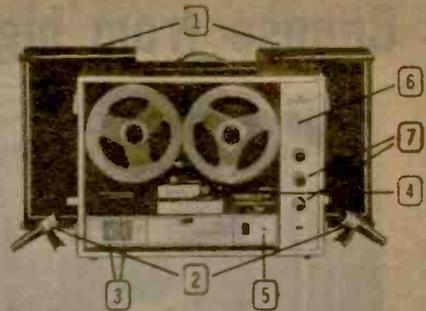
Fine features like 3-speed capstan drive, powerful split-capacitor motor, automatic tape lifters and shutoff assure quality recordings and trouble-free operation

\$9 monthly\*

Model TR-1040. Convenient features, first-rate performance and uncluttered styling—this Allied three-speed solid-state stereo tape recorder has them all at a pleasantly low price. You even get detachable speaker systems that separate up to 18-ft. for a "wall" of stereo sound. Records and plays back four-track stereo or monophonic tapes at  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  or  $1\frac{1}{8}$  ips. Powerful capacitor-start motor drives capstan for imperceptible flutter and wow of less than 0.15% at  $7\frac{1}{2}$  ips. Convenient single-lever function control provides instant and positive control of the tape transport.

Record from radio, phono or "live" with the included microphones. Preamp outputs allow you to use this recorder as a tape deck for record or playback through your home stereo system. Silicon-transistor circuit assures fine wide-range sound and longer operating life. Built-in stereo amplifier delivers ample power to drive the detachable speaker systems which form the recorder cover when the case is closed. Also has 2 level meters, push-to-reset digital counter, automatic tape lifters during fast forward and rewind to protect heads, automatic end-of-reel shutoff, separate volume and tone controls for each channel, and stereo headphone jack with its own level control.

Inputs: two microphone and two auxiliary. Outputs: two preamp, two extension speakers and stereo headphones. Response: 40-16,000 Hz. Signal-to-Noise Ratio: 50 dB. With 7" takeup reel, two omnidirectional dynamic microphones, and patch cords. Black vinyl-covered case. Size:  $13\frac{3}{4} \times 18\frac{1}{2} \times 9\frac{1}{8}$ ". For 110-120 volts, 60 Hz AC. From Japan. H 00 1010  
15 A 7104 U. Shpg. wt. 34 lbs. U. S. A. 21 ..... 179.95



- 1 Detachable wide-range speaker systems assure full stereo realism, and cover the carrying case when recorder is used as a portable
- 2 Omnidirectional dynamic microphones permit full-response recordings every time
- 3 Accurate meters indicate recording levels for highest signal levels without distortion
- 4 Precision capstan drive for flutter and wow that is virtually imperceptible
- 5 Front panel mounted stereo headphone jack has its own level control and permits enjoyment of beautiful stereo music in privacy
- 6 Built-in stereo amplifier has silicon circuit for longer life and cleaner sound
- 7 Separate volume and tone controls allow adjustment of sound to suit individual taste and program material

# Allied automatic-reversing solid-state Stereo Tape Recorder

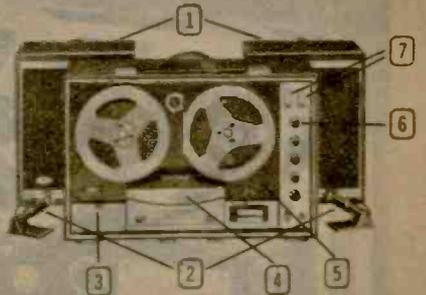
**\$299<sup>95</sup>**

You simply can't buy an easier to use 7-inch reel tape recorder . . . and it includes sound-with-sound, plus sound-on-sound recording facilities for special effects

\$15 monthly\*

Model TR-1080. Never reverse tape reels again. Let our finest silicon solid-state stereo recorder do the work for you with its automatic-reversing feature! Recorder can be set for one complete play and shutoff, continuous replay or automatic stop at a predetermined point. Records and plays back 4-track stereo or monophonic tapes at  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  or  $1\frac{1}{8}$  ips. Four heads permit sound-with-sound and sound-on-sound. Preamp outputs let you use this model as a deck with your home stereo system. Pause control and 4-digit indexing counter simplify tape editing.

Rocker switches control solenoid-operated transport. Automatic tape lifters, two level meters, separate volume and tone controls for each channel, speakers on/off switch and stereo headphone jack. Oversize capacitor-start motor keeps flutter and wow under 0.15% at  $7\frac{1}{2}$  ips. Response: 40-19,000 Hz at  $7\frac{1}{2}$  ips. Inputs: two mike and auxiliary. Outputs: two preamp and extension speakers, headphones. Vinyl-covered case.  $12\frac{3}{4} \times 19\frac{1}{8} \times 12\frac{1}{4}$ ". With 7" takeup reel, 2 mikes, patch cords, sensing tape. 117 VAC. Japan.  
15 A 7579 U. Shpg. wt. 45 lbs. .... 299.95



- 1 Detachable speaker systems form the cover of the recorder and separate for stereo sound with full channel separation and realism
- 2 Premium-quality omnidirectional microphones permit full-fidelity recordings
- 3 Separate record pushbuttons and microphone inputs are neatly concealed behind front panel fold-down door
- 4 Four professional-quality heads permit record and playback in either direction; also have internal switching circuit for recording sound-on-sound
- 5 Easy-to-operate solenoids for safe, effortless operation of the tape transport
- 6 Built-in stereo amplifier has silicon circuit for utmost reliability and finest sound
- 7 Two large level meters allow easy, instant monitoring of recording volume



Controls for each ear

## Allied TR-1080 with Headphone Bonus for only \$10 more

Separately, \$339.90. Save \$29.95. Includes TR-1080 automatic reversing recorder with Allied H886 Stereo Headphones, 16' cord and  $\frac{3}{4}$ " plug. 15 A 0177 L2U. Wt., 47 lbs. .... 309.95

\*See page 438 for full Credit details

# Choose from big selection of popular priced



## Allied Stereo Recorder offers versatility at a low price

Equipped for use as a deck or as a portable . . . Includes two built-in speakers plus two microphones

**Model TR-1035.** You can use this recorder to build up your own tape library by using the mikes included, or record from any radio or phono, or play pre-recorded tapes. Solid-state stereo amplifier delivers ample power to two wide-range speakers. Easy-to-use single-knob function control with instant stop.

Volume controls for each channel; tone control. Tape lifters prevent head wear during rewind. Two large recording level meters. Automatic shutoff at end of reel. Front-panel stereo headphone jack. Speaker on-off switch. Can be used as a stereo tape deck with your music system for even greater fidelity.

Speeds:  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{2}$  ips. Inputs: 2 mike, 2 aux. Outputs: Preamp, 2 extension speakers, headphone. Response: 40-15,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow: under 0.15% at  $7\frac{1}{2}$  ips. Vinyl-covered case,  $12\frac{1}{2} \times 15\frac{3}{4} \times 7\frac{3}{4}$ ". With 7" takeup reel, two mikes and patch cords. For 110-120 volts, 60 Hz AC. From Japan. 15 A 7577 U. Shpg. wt., 32 lbs. . . . 149.95

**149<sup>95</sup>** \$8 monthly  
see page 438



**179<sup>95</sup>**

## Roberts Stereo Tape Recorder

**Model 1719.** Compact solid-state recorder has two built-in speakers. Records and plays 4-track stereo or mono at  $3\frac{3}{4}$  and  $7\frac{1}{2}$  ips. Volume and tone controls for each channel. Digital counter; twin level meters. Sound-with-sound. Automatic shutoff. Source monitoring. 20 watts peak total. Response, 40-15,000 Hz at  $7\frac{1}{2}$  ips. Flutter and wow: 0.25% at  $7\frac{1}{2}$  ips. Inputs: 2 mike, 2 radio/phono. Outputs: equalized preamp, external speakers, stereo headphone. Size,  $15\frac{1}{8} \times 14\frac{5}{8} \times 9$ ". With one mike, 7" takeup reel. From Japan. For 115 volts, 60 Hz AC. 15 A 7384 U. Shpg. wt., 25 lbs. . . . 179.95



**149<sup>95</sup>**

## Aiwa battery/AC Stereo Tape Recorder

**Model TP-1012.** Records and plays full-range four-track stereo or mono tapes anywhere—home, car, beach, outings. Two built-in speakers. Level meters, digital counter, pause control. Output: 5 watts peak. Speeds:  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{2}$  ips. Response: 50-16,000 Hz at  $7\frac{1}{2}$  ips. 7" reel capacity. Inputs: 2 mike, 2 radio/phono/TV. Outputs: external speakers, stereo headphones. Compartment for two mikes; and AC bnc cord. With 2 mikes, 5" reel of tape, takeup reel, 8 "D" batteries, and AC cord. Size,  $13\frac{1}{2} \times 12\frac{3}{8} \times 7\frac{1}{4}$ ". From Japan. 15 A 7151 U. Shpg. wt., 17 lbs. . . . 149.95

# solid-state hi-fi Stereo Tape Recorders



**PANASONIC**  
Stereo Recorder  
featuring  
trans-a-track

**159<sup>95</sup>**

\$8 monthly\*

Model RS-760S. Records and plays 4-track stereo and mono at 7½, 3¾ and 1⅞ ips. Trans-a-Track feature for language lab use and special effects. Two level meters, pause control, source monitoring, automatic shutoff. Two built-in speakers, 50-17,000 Hz at 7½ ips. Flutter/wow: 0.25% at 7½ ips. Inputs: 2 mike, 2 radio/phon. Outputs: preamps, external speaker, stereo headphone. With 2 mikes, 7" reel tape, takeup reel, cord. 14x13½x7". 115 V, 60 Hz AC. Japan. 15 A 7224 U. Shpg. wt., 22 lbs. . . . . 159.95



**ROBERTS**  
Recorder with  
detachable  
speakers

**199<sup>95</sup>**

\$10 monthly\*

Model 1720. Feature-packed recorder has speakers that separate for maximum stereo effect. Records and plays 4-track stereo and mono at 7½ and 3¾ ips. Head demagnetizer, pause lever, counter, level meters, automatic shutoff. Inputs: 2 mike, 2 radio/phon. Outputs: preamp, external speakers, stereo headphone. 40-15,000 Hz at 7½ ips. Wow/flutter, less than 0.25% at 7½ ips. Vinyl covered case. 15½x14½x10½". 2 mikes, 7" takeup reel. 115 VAC. 15 A 7113 U. Japan. Shpg. wt., 26 lbs. . . . . 199.95



**WOLLENSAK**  
Recorder with  
compression  
speakers

**199<sup>95</sup>**

\$10 monthly\*

Model 6200. Features built-in compression speakers, two motors and open-front threading. Records and plays stereo and mono at 7½, 3¾ and 1⅞ ips. Tone control, pause control, automatic shutoff, level meters, stereo headphone jack. Electro-dynamic braking. Peak power output: 16 watts. 40-20,000 Hz at 7½ ips. Flutter and wow: 0.15% at 7½ ips. Inputs: 2 mike, 2 radio/phon. With two dynamic mikes, 7" reel of tape, takeup reel. Size, 13x16x5". For 115 volts, 60 Hz AC. 15 A 7581 U. Shpg. wt., 32 lbs. . . . . 199.95



**AIWA**  
3-speed  
Stereo  
Recorder

**179<sup>95</sup>**

\$9 monthly\*

Model TP-1001 W. Deluxe features for excellent performance. Records and plays 4-track stereo and mono at 7½, 3¾ and 1⅞ ips. Hysteresis-synchronous motor, tone controls for each channel, level meters, four-digit counter, pause control. 4x8" built-in speakers. Inputs: 2 mike, 2 radio/phon. Outputs: external speakers, stereo headphone. 70-15,000 Hz at 7½ ips. Flutter/wow: 0.15% at 7½ ips. 14½x13½x10". Two mikes, 7" reel tape, takeup reel, cord. 115 V, 60 Hz AC. Japan. 15 A 7289 U. Shpg. wt., 27 lbs. . . . . 179.95



**SONY/SUPERSCOPE** Recorder **199<sup>50</sup>**

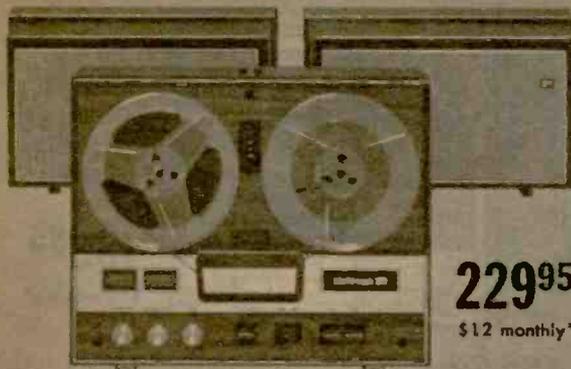
Model 252. Two full-range lid-integrated speakers provide beautiful sound. Records and plays 4-track stereo and mono at 7½, 3¾ and 1⅞ ips. Non-magnetizing record read, pause control, retracting pinch roller, automatic tape lifters, scrape flutter filter, sound-with-sound, speaker monitor switch, PA facility. Inputs: 2 mike, 2 aux. Outputs: preamps, stereo headphone. 30-18,000 Hz at 7½ ips. 10½x6x15". 115 VAC. Two mikes. Japan. 15 A 7555 U. Shpg. wt., 30 lbs. . . . . 199.50



**PANASONIC** Stereo Recorder  
with detachable speakers **199<sup>95</sup>**

Model RS-761S. Features two two-way speaker systems that separate for impressive stereo. Records and plays 4-track stereo at 7½, 3¾ and 1⅞ ips. Pause control, four-digit counter, two large level meters, automatic shutoff. Inputs: 2 mike, 2 aux. Outputs: preamp, stereo headphone. Response, 30-18,000 Hz at 7½ ips. Walnut cabinets. 11½x17½x6½". With 2 mikes, 7" reel of tape, takeup reel, splicing tape, reel holders. 115 VAC. Japan. 15 A 7140 U. Shpg. wt., 30 lbs. . . . . 199.95

# Solid-state 7"-reel Stereo Tape Recorders



**229<sup>95</sup>**

\$12 monthly\*

## Wollensak Stereo Tape Recorder

- Compression-loaded speakers for good bass
- Two motors with electro-dynamic braking
- Automatic shutoff • Pause control for editing

Model 6300. Records and plays stereo and mono at  $7\frac{1}{2}$ ,  $3\frac{3}{4}$  and  $1\frac{1}{8}$  ips. Solid-state. Delivers 16 watts music power to detachable speaker systems. Two motors and electro-dynamic brakes. Open-front threading. Tone control, pause control, automatic shutoff, digital counter, level meters. Stereo headphone jack. Die-cast aluminum chassis. Frequency response, 40-20,000 Hz at  $7\frac{1}{2}$  ips. Flutter and wow, 0.15% at  $7\frac{1}{2}$  ips. With two mikes, 7" reel of tape, takeup reel.  $14\frac{1}{2} \times 16\frac{1}{2} \times 10\frac{1}{2}$ ". For 115 VAC. Shpg. wt., 35 lbs. 15 A 7580 U. . . . . 229.95



**B**

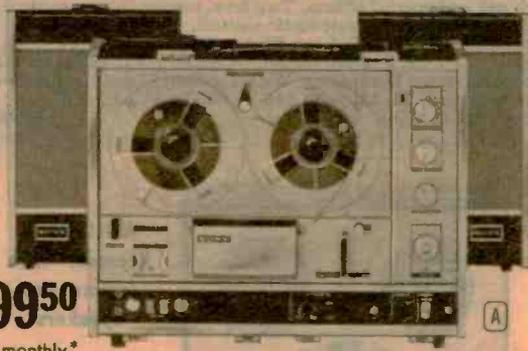
**279<sup>95</sup>**

\$14 monthly\*

Wing speakers optional

**299<sup>50</sup>**

\$15 monthly\*



**A**

## A Sony/Superscope quadradiagonal-sound Stereo Recorder

Model 540. Four-track stereo and mono recorder features high frequency XL-4 20-watt sound system. Speakers built into lids. Sound-with-sound, bass and treble controls, noise suppressor switch, retracting pinch rollers, shutoff.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 30-20,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow, 0.09% at  $7\frac{1}{2}$  ips.  $10 \times 9\frac{3}{4} \times 15\frac{1}{2}$ ". Two mikes, 7" reel. 115 VAC. Japan. 15 A 7240 U. Shpg. wt., 42 lbs. . . . . 299.50

## B Panasonic automatic-reversing Stereo Recorder

Model RS-790S. Records and plays in both directions. Dual capstan drive. Pause control, level meters, tone controls, sound monitor, shutoff. Built-in speakers.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 30-20,000 Hz at  $7\frac{1}{2}$  ips.  $17 \times 16\frac{1}{2} \times 9$ ". Two mikes, 7" tape, takeup reel, sensing tape, reel holders. Optional wing speakers below. 115 VAC. Japan. 15 A 7163 U. Shpg. wt., 51 lbs. . . . . 279.95  
15 A 7164 X. Detachable Speakers. 40 lbs. . . . . Pair 79.95

## C Ampex three-head Stereo Recorder

Model 767. Three separate deep-gap heads permit tape monitoring, sound-on-sound, echo. Hysteresis synchronous motor. Dual capstan drive. Bass, treble controls; pause control, sound-with-sound. Walnut acoustic-suspension speakers. Automatic shutoff, automatic tape lifters.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 20-20,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow, 0.08% at  $7\frac{1}{2}$  ips.  $14 \times 23\frac{1}{2} \times 8\frac{1}{2}$ ". With two mikes. 115 VAC. 15 A 7386 Z. Shpg. wt., 55 lbs. . . . . 349.95

## D Ampex automatic-reversing Stereo Recorder

Model 1161. Recorder threads itself automatically and plays complete 4-track stereo tape, automatically reversing. Slide-on speaker enclosures separate to 20". Deep-gap heads. VU meters, digital counter, monitor. Automatic shutoff or replay.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 20-18,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow, 0.10% at  $7\frac{1}{2}$  ips.  $13\frac{1}{2} \times 19 \times 7\frac{1}{2}$ ". With 2 mikes. 115 VAC. 15 A 7264 U. Shpg. wt., 48 lbs. . . . . 369.00



**C**

**349<sup>95</sup>**

\$17 monthly\*



**D**

**369<sup>00</sup>**

\$17 monthly\*

# with separate speaker systems for finer stereo

## Sony/Superscope 3-head Stereo Tape Recorder

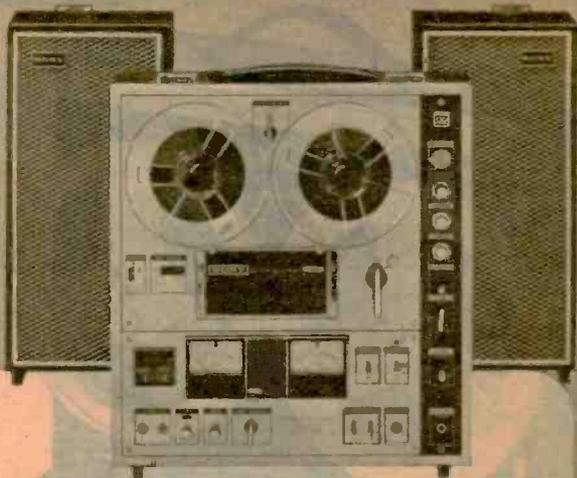
- Switching for sound-on-sound
- Tape and source monitor
- Unique scrape flutter filter

**379<sup>50</sup>**

\$18 monthly\*

Model 630. Separate record, play, erase heads permit tape monitoring, sound-on-sound, echo. Non-magnetizing record head. Scrape flutter filter, noise suppressor. Retracting pinch roller. Counter, bass and treble controls, pause control. Built-in, lid-integrated speakers deliver 40 watts total music power. PA feature. Two stereo headphone jacks.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. Response, 20-22,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow, 0.09% at  $7\frac{1}{2}$  ips.  $20 \times 17\frac{1}{2} \times 11\frac{1}{2}$ ". With two mikes, 7" takeup reel. 117 VAC. Japan.

15 A 7585 U. Shpg. wt.,  $46\frac{1}{2}$  lbs. . . . . 379.50



(A)

**399<sup>95</sup>**

\$18 monthly\*



(B)

**399<sup>50</sup>**

\$18 monthly\*

### (A) Roberts reel/8-track-cartridge Stereo Recorder

Model 778X. Records and plays 4-track stereo or mono reel-to-reel tape, plus 8-track stereo tape cartridges. Record your own cartridges for car stereo tape players. Cross-Field head for reels. Counter. Response: Reel, 30-23,000 Hz; cartridge, 50-15,000 Hz.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips;  $3\frac{3}{4}$  ips for cart. Built-in speakers with sound deflectors.  $15 \times 13\frac{1}{2} \times 9\frac{1}{2}$ ". Less mikes. 115 VAC. Japan.

15 A 7499 Z. Shpg. wt., 50 lbs. . . . . 399.95

### (B) Sony/Superscope ESP automatic-reversing Recorder

Model 560. Features inputs for tuner and phono—forms the basis of a 20-watt stereo system. Two speaker systems in lid separate up to 15 feet. Servo-control motor, dual capstan drive, Non-magnetizing heads. Scrape, flutter filter. Retracting pinch roller, noise suppressor switch, digital counter, level meters.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. With 2 mikes, 7" reel.  $17\frac{1}{2} \times 20\frac{3}{8} \times 11$ ". Japan.

15 A 7304 Z. Shpg. wt., 53 lbs. . . . . 399.50

### (C) Ampex automatic-reversing Stereo Recorder

Model 1467. Reverses automatically at end of tape. Automatic threading. Four deep-gap heads. Direct tape monitoring, sound-on-sound, echo. Hysteresis synchronous motor. Dual capstan drive. Walnut acoustic-suspension speakers. Automatic shutoff, automatic tape lifters.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 20-20,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow, 0.08% at  $7\frac{1}{2}$  ips.  $14 \times 23\frac{1}{2} \times 8\frac{1}{2}$ ". With two mikes. 115 VAC.

15 A 7385 Z. Shpg. wt., 55 lbs. . . . . 449.95

### (D) Ampex automatic-reversing Stereo Recorder

Model 2161. Records and plays 4-track stereo or mono in both directions. Automatic threading. Dual capstan drive for perfect tape tension. Professional quality deep gap heads. Monophonic mixer for mixing two sources on one track. 9x6" wing speakers separate for stereo, close to form cover. 20-22,000 Hz at  $7\frac{1}{2}$  ips. Flutter/wow, 0.07% at  $7\frac{1}{2}$  ips. Also has  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips speeds.  $13\frac{3}{4} \times 18\frac{3}{8} \times 7$ ". With 2 mikes. 115 VAC.

15 A 7260 Z. Shpg. wt., 55 lbs. . . . . 499.95



(C)

**449<sup>95</sup>**

\$20 monthly\*



(D)

**499<sup>95</sup>**

\$21 monthly\*

\*See page 438 for full Credit details . . . no money down

# Portable monophonic Tape Recorders with



Allied® Portable has automatic level control for professional recordings

**79<sup>95</sup>** Digital counter makes editing and locating selections on tape easy

Model 1050. Solid-state recorder is loaded with extras for outstanding monophonic tape recording and playback. Luxurious styling with uncluttered design for handsome appearance and convenient vertical operation. Compact for easy portability, yet takes up to a full-size 7" reel. Records and plays two-track mono at 7½ and 3¾ ips.

Response of 50-12,000 Hz for fine music reproduction. Amplifier delivers two watts peak power output to built-in 4x6" wide-range speaker. Tone control lets you adjust response. Line output allows use as a deck to play through your music system.

Record directly from any radio or phono, or use mike for live recordings. Automatic level control maintains constant level, prevents distortion; can be switched off for music recording. Accurate recording level meter. High or low level speaker monitor switch. Push-to-reset digital counter makes it easy to locate selections on a tape. Pause/fast forward control lets you edit tapes as-you-go.

External speaker jack. Reel locks. Accessory compartment on rear for storing AC cord and mike. Carrying strap. Transparent dust cover. 13½x13½x7½". With mike, 5" reel of tape, 5" takeup reel, splicing tape, patch cord. 115 VAC. Japan. 15 A 7575 U. Shpg. wt., 18 lbs. . . . . 79.95



PANASONIC

3-speed Recorder may be used as PA system

**99<sup>95</sup>** Choice of automatic or manual level control for distortion-free recording

Model RQ-706S. Moderately-priced monophonic tape recorder boasts many expensive-recorder features. Has choice of automatic or manual level control for distortion-free recording every time. Sound monitoring selector permits recorder's use as a public address system. Records and plays two-track mono at 1⅞, 3¾ and 7½ ips. Solid-state circuit assures dependability. Provides beautiful reproduction of voice or music from 50 to 15,000 Hz at 7½ ips. Two quality dual-cone speakers. Tone control lets you adjust response to suit your own preference. Level meter, pause control, tape counter. 12x14x6¾". With mike, stand, 7" takeup reel. 115 VAC. Japan. 15 A 7259 X. Shpg. wt., 19 lbs. . . . . 99.95



WOLLENSAK

Deluxe Recorder for true hi-fi performance

**184<sup>95</sup>** Designed to satisfy the requirements of professional and educational applications

Model 1500SS. Features simple keyboard operation that puts all controls right at your fingertips. Accurate level meter indicates recording level for quality recordings. Special provision permits monitoring and use as PA system. Powerful 10-watt push-pull solid-state amplifier. Has tone control, digital counter, tape lifters. Sturdy all-metal construction will take plenty of wear-and-tear and provide years of dependable service. Plays mono at 7½ and 3¾ ips. Response, 40-15,000 Hz at 7½ ips. Inputs: mike/phono-radio. Outputs: extension speaker, preamp. Size, 6½x10¼x11¾". With dynamic mike, 7" takeup reel, reel of tape. For 115 VAC. 15 A 7339 U. Shpg. wt., 20 lbs. . . . . 184.95

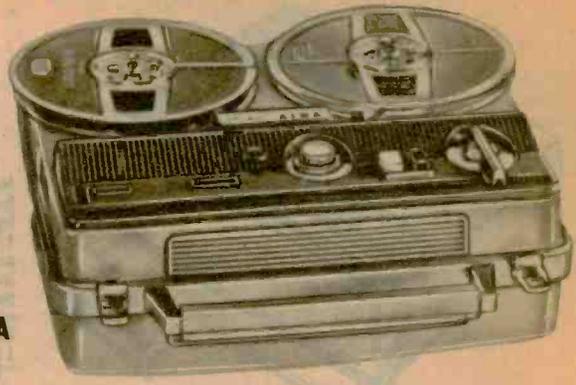
# 7-in. reel capacity and solid-state circuits



**AIWA**

## 119<sup>95</sup> Battery/AC 3-speed portable with automatic level control

Model TP-719. Full 7" reel capacity in a compact portable in a deluxe, lockable attache case. Operates on batteries, 12 VDC or 115 VAC. Features automatic recording level control for distortion-free 2-track mono recordings. Push-button function control for fast-forward, rewind and play-back. Three capstan-controlled speeds: 1 7/8, 3 3/4, 7 1/2 ips. Level meter, digital counter, tone control, 5" oval speaker; input for recording from radio-TV. 3 3/4 x 16 1/2 x 13". With remote-control start/stop mike, 7" takeup reel, 4 batteries. 12 VDC car adapter. Japan.  
 15 A 7271 U. Shpg. wt., 17 lbs. . . . . 119.95



## 89<sup>95</sup> 2-speed portable Recorder in handsome attache-style case

Model TP-802. Features solid-state circuit with frequency response of 70-15,000 Hz for excellent clarity. Plays mono through built-in 6" speaker or earphone. Outputs for playback through hi-fi system or external speaker. Full 7" reel capacity permits recording lengthy radio broadcasts on a single tape. Has recording level meter, digital counter, pushbutton fast forward, and tone control. 3 3/4, 7 1/2 ips. Vinyl-coated steel attache case. 6x14x14". With remote-control start/stop mike, earphone, 7" takeup reel, reel of tape, patch cords. 115 VAC. Japan.  
 15 A 7258 X. Shpg. wt., 18 lbs. . . . . 89.95

## Sony/Superscope portable Recorder

Model 104-A. Solid-state tape recorder automatically adjusts recording level, or lets you adjust it manually using level meter. Also has instant one-handed tape threading; automatic sentinel shut-off; amplifier that doubles for PA; pause control; digital counter; automatic tape lifter; two-track heads. Plays mono at 1 7/8, 3 3/4 and 7 1/2 ips. Response, 40-18,000 Hz at 7 1/2 ips. 6x4" speaker; low- and high-impedance inputs; outputs for monitor and speaker. 6 1/2 x 16 x 10 3/4". With mike, earphone, 7" takeup reel. For 115 VAC. From Japan.  
 15 A 7253 U. Shpg. wt., 16 lbs. . . . . 112.50

Automatic level control assures fine recordings

**112<sup>50</sup>**  
 \$6 monthly\*



## Sony/Superscope four-track Recorder

Model 105. Quality monophonic tape recorder features four tracks for double recording time. Automatic level control prevents fading or blasting. Has retractable pinch rollers for easy threading. Tone control lets you adjust response. Level meter gives accurate indication of recording level for quality recordings. Separate record/play level controls; automatic shutoff; instant stop; AVC defeat. Three speeds: 1 7/8, 3 3/4 and 7 1/2 ips. Response, 40-18,000 Hz at 7 1/2 ips. 6x14x8". With mike, earphone, 7" takeup reel. 115 VAC. Japan.  
 15 A 7287 U. Shpg. wt., 12 lbs. . . . . 139.50

Four tracks provide double recording time

**139<sup>50</sup>**  
 \$7 monthly\*



## Wollensak quality pushbutton Recorder

Model 5710. Fine quality solid-state monophonic tape recorder is packed with superb engineering features. Has power-activated pushbutton control center for easy fingertip operation. Other deluxe features: built-in tape head demagnetization; full tape monitoring facilities; level meter; two-track heads; tape lifter; reel locks; 6x4" speaker. Digital counter and pause control. Operates vertically or horizontally. 1 7/8, 3 3/4 and 7 1/2 ips. Response, 40-17,000 Hz at 7 1/2 ips. 10x16x7". With mike, 7" takeup reel, reel of tape. 115 VAC.  
 15 A 7041 U. Shpg. wt., 23 lbs. . . . . 159.95

Pause control, digital counter for easy editing

**159<sup>95</sup>**  
 \$8 monthly\*



\*Full Credit details on page 438 . . . buy any recorder with no money down

# 5"-reel battery/AC portable Tape Recorders



Allied® Recorder with automatic level control

**49<sup>95</sup>**

\$5 monthly\*

- ALC prevents overload distortion
- 3x6" speaker delivers good sound
- Push-to-reset three-digit counter

Model 1055. Solid-state portable is an excellent value. Ideal for home, school, business, music at parties, dictation, TV college courses. Records and plays two-track mono at 3¾ and 1½ ips. Keyboard-type pushbutton controls. Switchable automatic level control prevents overload distortion. Built-in 3x6" speaker for wide-response sound and good music reproduction. Tone control. Speaker monitor lets you hear sound source when recording. Counter, level/battery meter. Inputs: mike and aux. Output: extension speaker/headphone. 11-4/5x9½x3½". With remote start-stop dynamic mike, 6 "D" batteries, AC cord, patch cord, 5" reel of tape, 5" takeup reel. From Japan. Shpg. wt., 9 lbs.

15 A 0016 X..... 49.95



AIWA

**69<sup>95</sup>**

\$5 monthly\*

(A)



AIWA

**79<sup>95</sup>**

\$5 monthly\*

(B)

## (A) Recorder with ALC

Model TP-713. Solid-state mono recorder operates at 3¾ and 1½ ips. Features automatic level control to prevent fading and blastings on recordings. Push-button controls, recording level/battery condition meter, tone control, digital counter, 4x2¾" speaker. Inputs: mike, radio/TV/phono. Output: extension speaker/earphone. Size, 3x11½x12". With remote start/stop mike, earphone, 5" reel tape, takeup reel, 4 "D" batteries, AC cord. Japan. Shpg. wt., 10 lbs. 15 A 7274 U..... 69.95

## (B) Lightweight Recorder

Model TP-537. Easy-to-carry tape recorder is perfect for home, school or car. Great for parties, indoors or outdoors. Records and plays two-track mono at 3¾ and 1½ ips. Features constant speed capstan drive, front-mounted 4" speaker, recording level/battery strength meter. Inputs: mike and aux. Outputs: extension speaker/headphone. 11½x11x4½". With remote start-stop mike, 5" reel tape, takeup reel, six "D" batteries, AC cord. From Japan. Shpg. wt., 6 lbs. 15 A 7469 X..... 79.95



(C)

**89<sup>95</sup>**

\$5 monthly\*

WOLLENSAK

## (C) Deluxe Recorder with ALC

Model 3500. Quality compact battery/AC recorder. Operates at 3¾ and 1½ ips. Automatic level control prevents distortion from overloud sounds. Convenient pushbutton controls, recording level/battery condition meter, tone control, digital counter, speaker. Inputs: mike, aux. 4x11½x10¼". With remote stop/start mike, earphone, 5" reel tape, takeup reel, AC cord. Order 6 batteries below. Japan. 9 lbs. 15 A 7522 X..... 89.95  
18 A 5779. Batteries. Shpg. wt., 10 oz..... Pkg. of 2 for 33¢

## (D) 4-track mono Recorder

Model RQ-194S. Four-track mono heads for double recording time! "Easy-Matic" automatic level control prevents over-recording. If AC fails, batteries take over automatically. Sound-with-sound. Record level/battery condition meter, digital counter, built-in speaker. Speeds: 3¾, 1½ ips. Inputs: mike, radio/phono. Attache-style case, 4x14¼x11". With remote stop/start mike, earphone, 5" reel of tape, takeup reel, patch cord, AC cord, and batteries. Japan. Wt., 7 lbs. 15 A 7463 X..... 99.95



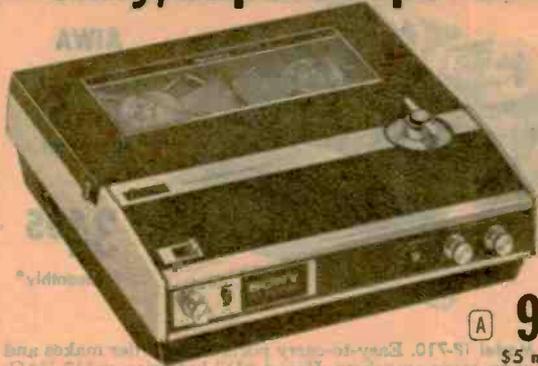
(D)

**99<sup>95</sup>**

\$5 monthly\*

PANASONIC

# Sony/Superscope 5" Battery/AC Recorders



**A** 9950  
\$5 monthly\*

## **A** Recorder with automatic level control

Model 222A. Compact solid-state portable recorder records and plays crystal-clear mono at  $3\frac{3}{4}$  and  $1\frac{1}{8}$  ips. Single lever function control. Switchable automatic level control prevents overload distortion. Record level/battery condition meter, counter,  $5\frac{1}{2} \times 2\frac{1}{2}$ " speaker.  $12 \times 9 \times 4$ ". With remote stop-start mike, 5" takeup reel, batteries, AC cord. Japan.

15 A 7568 X. Shpg. wt., 12 lbs. .... 99.50



**B** 12950  
\$7 monthly\*

## **B** Recorder with "Servocontrol" speed control

Model 860. "Servocontrol" electronically maintains precise speeds. Electrically switchable  $3\frac{3}{4}$  and  $1\frac{1}{8}$  ips speeds. Automatic level control for undistorted recordings. Tone control, speaker monitor, PA facility, digital counter. Size,  $4 \times 12 \times 10$ ". With F-85 remote stop-start cardioid dynamic mike, 5" takeup reel, batteries, AC cord. Japan.

15 A 7552 U. Shpg. wt., 13 lbs. .... 129.50



**C** 13950  
\$7 monthly\*

## **C** Four-track model with "Servocontrol" and ALC

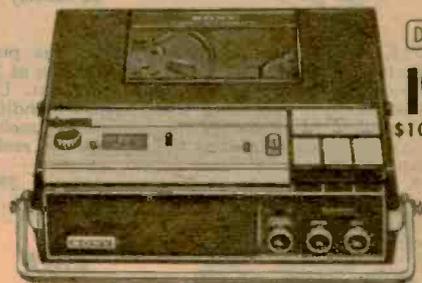
Model 864. Four tracks for double mono recording time. Automatic level control, varispeed pitch control, automatic tape lifters, speaker monitor, PA facility, record indicator light, tone control, counter.  $3 \times 6$ " speaker.  $3\frac{3}{4}$ ,  $1\frac{1}{8}$  ips. 50-13,000 Hz at  $3\frac{3}{4}$  ips.  $4 \times 12 \times 10$ ". With remote stop-start mike, 5" takeup reel, batteries, AC cord. Japan.

15 A 7551 U. Shpg. wt., 13 lbs. .... 139.50

## **D** 4-speed Recorder with "Servocontrol" and ALC

Model 800-B. Built-in condenser mike with IC amplifier for high sensitivity and directivity, plus remote cardioid mike.  $7\frac{1}{2}$ ,  $3\frac{3}{4}$ ,  $1\frac{1}{8}$ ,  $1\frac{1}{16}$  ips. Vari-speed tuning, servo-control motor, level/battery meter. Synomatic record mode (voice or music) plus manual. Record interlock, tone control, monitoring.  $4\frac{1}{2} \times 12\frac{1}{4} \times 10\frac{1}{2}$ ". Batteries, 5" takeup reel, AC cord. Japan.

15 A 7586 U. Shpg. wt., 15 lbs. .... 199.50



**D** 19950  
\$10 monthly\*

# Uher professional 4-speed battery/AC Recorder Outfit

Solid-state 2-track monophonic portable

Complete Outfit **299<sup>95</sup>** \$15 monthly\*

Model 4000L-M514. Broadcast-quality portable recorder. Ideal for use by reporters, businessmen, teachers, students or anyone who requires professional performance. Calibrated VU meter. Quiet high-frequency motor. Piano-key style controls. Operates in any position. Built-in belt cleaning brushes. Exceptional frequency response of 40-22,000 Hz at  $7\frac{1}{2}$  ips, 40-17,000 Hz at  $3\frac{3}{4}$  ips, 40-10,000 Hz at  $1\frac{1}{8}$  ips, 40-4500 Hz at  $1\frac{1}{16}$  ips. Wow/flutter, 0.15% at  $7\frac{1}{2}$  ips.  $3\frac{1}{2} \times 9 \times 11$ ". Complete with remote mike, leather case, rechargeable battery pack, and AC power supply/battery charger. Imported.

15 A 7500 U. Shpg. wt., 9 lbs. .... 299.95



Leather case



Rechargeable battery pack



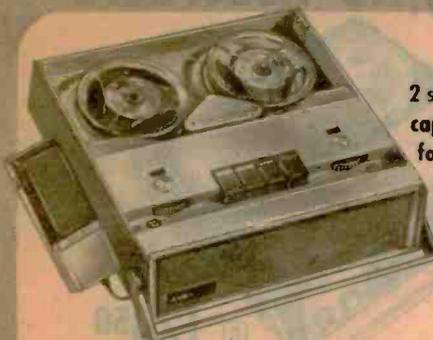
AC supply and battery charger



Remote mike

With all items shown

# Portable 3 1/4"-reel solid-state Tape Recorders



**AIWA**  
2 speeds with  
capstan drive  
for accuracy

**29<sup>95</sup>**

\$5 monthly\*

Model TP-714. Compact portable records and plays at 3 3/4 and 1 7/8 ips. Capstan drive maintains uniform tape speed. Has easy-to-use pushbutton controls, tone control, 6x2" oval speaker for clear sound. Extension speaker output jack. Auxiliary input jack. Only 2 5/8 x 9x9". With stop-start dynamic mike, 4 "C" batteries, reel of tape, takeup reel, earphone. From Japan.

15 A 7183 X. Shpg. wt., 7 lbs..... 29.95



**AIWA**  
Two-speed,  
battery/AC  
operation

**34<sup>95</sup>**

\$5 monthly\*

Model TP-710. Easy-to-carry portable recorder makes and plays tapes anywhere. Uses 4 "D" batteries or 117 VAC. Automatic level control. 3" speaker delivers clear sound. 3 3/4 and 1 7/8 ips speeds. Sturdy case has mike storage under molded handle. 2 7/8 x 8 1/4 x 10 1/4". With start-stop mike, batteries, AC cord, reel of tape, takeup reel, earphone. From Japan.

15 A 7466 X. Shpg. wt., 7 lbs..... 34.95



**AIWA**  
Easy-to-use  
pushbutton  
operation

**39<sup>95</sup>**

\$5 monthly\*

Model TP-715. Easy-to-use portable recorder has pushbutton operation. Records and plays 2-track mono at 3 3/4 and 1 7/8 ips; capstan drive keeps speed constant. Uses 4 "C" batteries. Has recording level/battery condition meter. 2 1/2" speaker. Mike storage compartment in molded case. 3x9 1/2 x 9 1/2". With start-stop mike, batteries, reel of tape, takeup reel, earphone. From Japan.

15 A 7515 X. Shpg. wt., 7 lbs..... 39.95



**CRAIG**  
Has ALC for perfect  
recordings every time

**34<sup>95</sup>** \$5  
monthly\*



Includes  
117 VAC  
Adapter

Model 212. Popular recorder features automatic level control to prevent distortion. Operates at 3 3/4 or 1 7/8 ips on 6 "C" batteries or with 117 VAC adapter. "T" function control. With stop-start mike, 3 1/4" reel of tape, takeup reel. 3 1/8 x 7 1/8 x 9 3/4". With AC adapter. Order batteries below. From Japan.

15 A 0178 L2X. Shpg. wt., 6 lbs..... 34.95  
18 A 5078. "C" Batteries. Shpg. wt., 10 oz. .... Pkg. of 2/33¢



**AIWA**  
Pushbutton  
battery/AC  
portable

**42<sup>95</sup>**

\$5 monthly\*

Model TP-716. Versatile recorder is great for home, school or business. Operates on 4 "C" batteries or 117 VAC. Pushbutton operation with fast forward; record/battery meter; mike storage compartment. 3 3/4 and 1 7/8 ips speeds, capstan drive. Tone control. 3x9 1/2 x 9 1/2". With batteries, AC cord, start-stop mike, reel of tape, takeup reel, earphone. From Japan.

15 A 7528 X. Shpg. wt., 8 lbs..... 42.95



**SONY/SUPERSCOPE**  
Battery/AC  
with automatic  
level control

**69<sup>95</sup>**

\$5 monthly\*

Model 910. Operates on 4 "D" batteries, nickel-cadmium batteries (recorder has recharging circuit), or 117 VAC. Records and plays 2-track mono at 3 3/4 or 1 7/8 ips. Automatic level control prevents distortion. Level meter. Automatic tape lifter protects heads during fast forward and rewind. 4 1/2 x 8 3/4 x 8 1/2". With start-stop mike, "D" batteries, AC cord, takeup reel, earphone. Japan.

15 A 7254 X. Shpg. wt., 6 lbs..... 69.95

# Allied® portable Tape Cassette Recorder with snap-on AC adapter

Compact solid-state recorder uses  
easy-loading snap-in tape cassettes  
for the ultimate in convenience

Was \$59.95 in  
last year's catalog

NOW ONLY

**39<sup>95</sup>**

\$5 monthly\*



## Our lowest priced Allied Cassette Portable

- Space-saving cassettes snap in or out easily
- Easy-to-use keyboard-type controls
- Solid-state circuit for lasting reliability

The perfect portable for everyone from jet-setters to students, housewives to executives. Use it in classrooms, car, home, yacht or office. Use it for taping lectures, business meetings, correspondence, dictation, parties or bedtime stories for tiny tots. Compact, streamlined styling and battery/AC operation make it great for any kind of on-the-go recording.

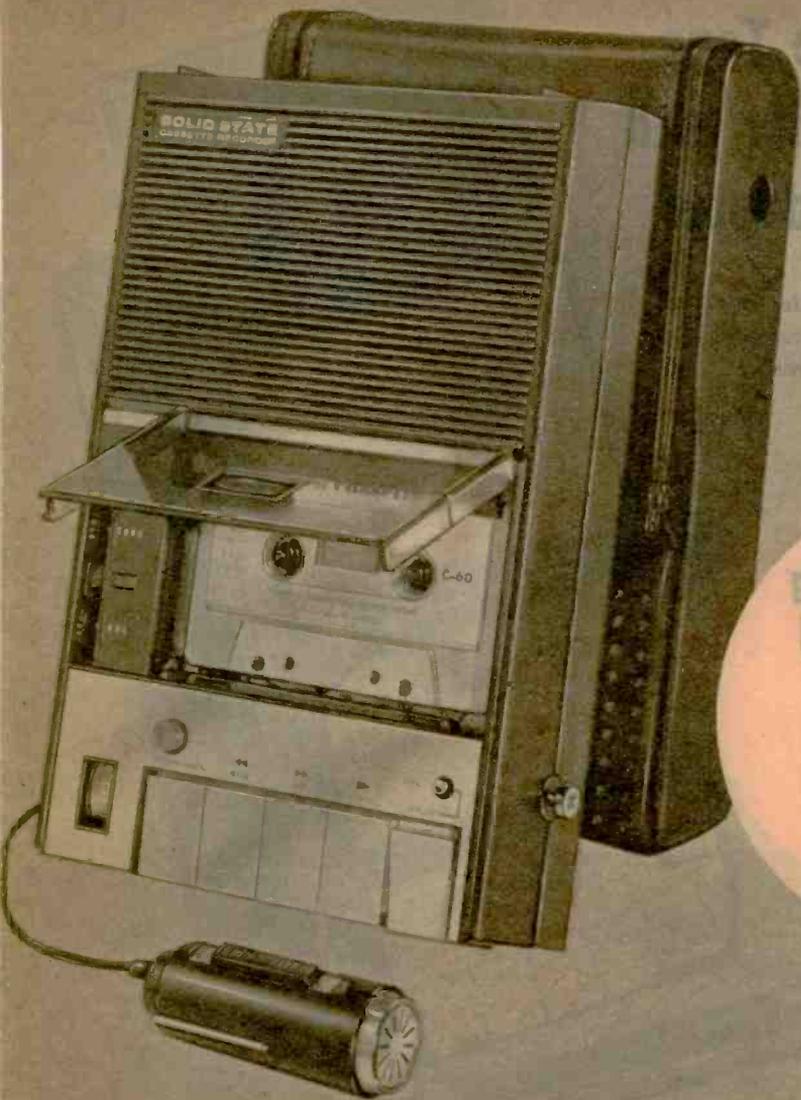
Space-age design lets you "jettison" the AC adapter when using batteries . . . at home, the unique 117 VAC adapter snaps-on to become part of the recorder. Adapter has cord-storing compartment. Features keyboard-type pushbutton controls with fast forward and rewind. Record interlock prevents accidental erasure of tapes. Meter reads level on record, indicates battery condition during playback.

- Offers greatest convenience and versatility
- Combined record level/battery condition meter
- With unique snap-on adapter for 117 VAC

Records and plays up to two hours (both tracks) of clear, distinct mono on modern, miniature tape cassettes. Easy-to-store cassettes snap in or out of recorder instantly . . . no tapes to thread or rewind, no reels to fumble. Big  $3\frac{1}{2}$ " speaker delivers clean, clear sound. Recorder has jack to allow use of an extension speaker. Thumbwheel volume control.

Complete with 5 "C" batteries, snap-on 117 VAC adapter, remote start-stop dynamic mike, 60-minute C-60 tape cassette, earphone and vinyl carrying case for portable use. Additional tape cassettes are available on page 156 of this catalog. Size,  $2\frac{1}{2}$ "x5"x12" with adapter ( $2\frac{1}{2}$ "x5"x8" less adapter.) From Japan.

15 A 7136 X. Shpg. wt., 7 lbs. . . . . 39.95  
18 A 5076. Extra "C" Batteries. Wt., 10 oz. Pkg. of 2/33¢



# Our finest Allied Cassette Tape Recorder

Was \$89.95 in  
last year's catalog

NOW ONLY

**69<sup>95</sup>**

\$5 monthly\*

Full 200-11,000 Hz  
frequency response for  
crystal-clear tapes . . . Records  
anywhere on batteries or built-in AC

## Full-feature portable for professional-quality tapes

- Automatic level control for flawless recordings
- Five pushbuttons for easy operation by anyone
- 1¼-watt audio power and wide-range response
- Built-in AC power supply, no adapter required
- Continuous tone control • Monitor switch
- With remote start-stop mike, cassette and case

Model 1150. Here's a take-along recorder with every wanted feature, at an unbeatable low price. It's the perfect portable for students, executives or salesmen who want professional-quality recordings every time. Lots of uses in the home, too. Records up to two hours on snap-in cassettes that load and unload instantly. No reels to change, never any threading or handling of tape. Solid-state circuit has frequency response of 200 to 11,000 Hz for high-quality recordings of voice and music. Delivers 1¼-watt audio power for plenty of volume without distortion. Automatic level control circuit may be switched in to smooth out variations in recording level for always-perfect voice recordings. Five keyboard-type pushbuttons for stop-open, rewind, fast forward, play, pause (for editing as you record). Features monitor switch, plus auxiliary

input, that permits listening as you record from a radio, phono or TV. Has combination recording level/battery condition meter. Continuous tone control. Flutter and Wow: less than 0.5% rms. Signal-to-Noise Ratio: better than 38 dB. Push-pull audio output circuit cuts distortion. Includes remote control start-stop dynamic microphone, earphone for private listening, patch cord for taping direct from radio-TV-phono, one 60-minute recording cassette, plus a carrying case with shoulder strap. Order six batteries, below. High-impact case, 9¾x6x2½" deep. From Japan. (Extra recording cassettes are sold on page 156.)

15 A 7116 X. Shpg. wt., 5 lbs. . . . . 69.95

"C" Batteries. (Uses 6.) Shpg. wt., 10 oz.  
18 A 5078. . . . . Pkg. of 2 for 33¢

# Compact, portable Cassette Recorder with level control

Automatic level control keeps recording level constant for clear, distortion-free recordings regardless of voice variations

A versatile portable tape cassette recorder at a remarkable low price. Perfect for students, great for lectures, notes, parties, or for correspondence. And even at this low price you get automatic level control for professional recordings every time. Record and play up to two hours of 2-track mono on shirt-pocket size tape cassettes. Pop-up cassette loading and removal . . . change tapes quickly and easily without rewinding or threading. Space-saving cassettes are easy to store and mail. too.

Easy-to-carry solid-state recorder operates on 4 "C" batteries. Take it along anywhere to capture the sounds of the moment on tape to be enjoyed time after time. Has keyboard-type pushbutton controls with fast forward and rewind, plus cassette pop-up button. With remote start-stop mike and carrying strap. Order batteries below. Less cassette. 3x5x10". Japan.

15 A 7055 X. Shpg. wt., 3 lbs. . . . . 24.95  
18 A 5078. "C" Batteries. 10 oz. . . . . Pkg. of 2 33¢

Full-feature  
Tape Cassette Recorder  
at a budget price

**24<sup>95</sup>**

\$5 monthly\*



- Pop-up cassette loading
- Automatic level control
- Pushbutton operation
- All solid-state circuit
- Records and plays up to 2 hours, 2-track mono
- Remote start-stop mike
- 2 3/4" dynamic speaker

## Cassette Recorders and Players



### Portable Cassette Recorder

**29<sup>95</sup>**

Automatic level control circuit

Panasonic RQ-204S. For business or pleasure, this is an ideal recorder. Records and plays up to two hours of crystal-clear 2-track mono. Cassette ejector for instant cassette changing. Easy-to-use single-knob function control. Automatic level control for constant-volume voice recordings.

Record level/battery condition meter. Built-in speaker, preamp output. 9x10x2 3/4". With start-stop mike, cassette, 6 "C" batteries. Takes optional 117 VAC adapter below. Japan.  
15 A 7477 S. Shpg. wt., 5 lbs. . . . . 29.95  
15 A 7478. AC Adapter. 1 lb. . . . . 6.95

### Cassette Recorder

**29<sup>95</sup>**

Constant-speed capstan drive

Aiwo TP-739. An unbeatable value for almost any portable recording need. Small in size and price, yet offers full-feature performance. Records and plays up to two full hours on easy-loading snap-in tape cassettes. Perfect for taped correspondence. Capstan drive for constant tape speed.

Recorder has convenient single-lever function control, record interlock to prevent accidental erasure. Complete with mike, 4 "C" batteries, one 60-minute cassette, earphone. Only 2 3/2 x 5 1/2 x 8 1/2". From Japan.  
15 A 7054 X. Shpg. wt., 3 lbs. . . . . 29.95

### Cassette Player/AM Radio

Player/  
Radio

**24<sup>95</sup>**

Player  
Alone

**19<sup>95</sup>**

York KPR-88. Great idea in portable entertainment. Compact cassette player with built-in AM radio. Let's you hear your favorite radio programs, or listen to pre-recorded tape cassettes. Plays mono or stereo tapes monophonically. Easy-to-use keyboard controls for tape player. With 4 "C" batteries, earphone. *Does not record.*  
15 A 7053 X. Japan. 3 1/2 lbs. . . . . 24.95

York KP-55. Tape Player. Above, less radio. *Does not record.* With batteries, earphone. 2 1/2 x 6 x 10".  
15 A 7052 X. Japan. 3 lbs. . . . . 19.95

# Our greatest selection ever of portable

## Panasonic battery/AC Cassette Recorder

Convenient pop-up  
cassette ejector

**39<sup>95</sup>**

\$5 monthly\*



Model RQ-2095. Versatile recorder features pushbutton controls with pop-up cassette ejection for fast loading and removal of cassettes. Fast forward and rewind. Plays on 4 "C" batteries or 117 VAC. Automatic level control prevents distortion on voice recordings. Response, 80-8000 Hz. Built-in speaker. Mike and aux. inputs. Monitor output. With remote start-stop mike, pre-recorded cassette, earphone, batteries.  $2\frac{3}{4} \times 5\frac{1}{2} \times 10\frac{1}{4}$ ". Japan.  
15 A 7225 X. Shpg. wt., 3 lbs. .... 39.95

## Craig battery/AC Cassette Recorder

"T" control for  
easy operation

**49<sup>95</sup>**

\$5 monthly\*



Model 2603. Cassette version of the popular "212" open-reel recorder. Famous "T" control for easy operation. Uses 4 "C" batteries or 117 VAC. Automatic level control keeps recording level constant, prevents distortion. Record interlock prevents accidental erasure of tapes. Cassettes snap in or out easily. With start-stop mike, AC cord. Order batteries below.  $5\frac{1}{4} \times 9 \times 2\frac{3}{4}$ ". Japan.  
15 A 7474 S. Shpg. wt., 4 lbs. .... 49.95  
18 A 5078. "C" Batteries. 10 oz. .... Pkg. of 2/33¢



**39<sup>95</sup>**

\$5 monthly\*

## Aiwa deluxe Tape Cassette Recorder

Model TP-707PJ. Smartly-styled recorder records or plays up to two hours (both tracks) on compact cassettes. Has pop-up cassette loading. Separate record level and playback volume controls. Pushbutton operation with fast forward and rewind. Record level/battery condition meter. With 4 "C" batteries, start-stop mike, C-60 60 minute cassette, earphone.  $2\frac{1}{4} \times 8 \times 5\frac{3}{4}$ ". Japan.  
15 A 7308 S. Shpg. wt., 5 lbs. .... 39.95

**49<sup>95</sup>**

\$5 monthly\*



## Panasonic Cassette Recorder with ALC

Model RQ-2035. Take this fine recorder anywhere for recording or playback of 2-track mono cassettes. Operates on 6 "C" batteries or 117 VAC. Automatic level control prevents distortion. Boasts fast, easy pop-up cassette loading and removal. Single-knob function control. 3" speaker. Monitor facility. With start-stop mike, batteries, cassette.  $2\frac{3}{4} \times 9 \times 10$ ". Japan.  
15 A 7491 X. Shpg. wt., 5 lbs. .... 49.95

## Crown portable Tape Cassette Recorder

With custom leather  
carrying case

**49<sup>95</sup>**

\$5 monthly\*



Model CRT-9001. Latest Crown tape cassette recorder includes a handsome leather carrying case with accessory compartment. Records and plays crystal-clear 2-track mono on easy-loading cassettes. Keyboard controls with fast forward. Tone control. Record level/battery condition meter. With 4 "C" batteries, start-stop dynamic mike, C-60 cassette, earphone.  $2\frac{1}{2} \times 4\frac{3}{4} \times 8\frac{3}{16}$ ". Japan..  
15 A 7533 X. Shpg. wt.,  $3\frac{1}{4}$  lbs. .... 49.95

## Wollensak compact Cassette Recorder

Separate record level  
and volume controls

**69<sup>95</sup>**

\$5 monthly\*



Model 4200. Convenience-engineered recorder has single 4-position switch for instant control of tape direction. Record safety interlock; record level/battery condition meter. Response;  $\pm 3$  dB, 80-10,000 Hz. With remote start-stop dynamic mike, C-60 tape cassette, carrying case.  $4\frac{1}{2} \times 7\frac{1}{8} \times 2\frac{1}{4}$ ". Order batteries below. Imported.  
15 A 7349 X. Shpg. wt., 4 lbs. .... 69.95  
18 A 5078. "C" Batteries. Uses 5. Wt., 10 oz. ... Pkg. of 2/33¢

# solid-state Tape Cassette Recorders

## Ampex battery/AC portable Tape Cassette Recorder

- Recharges nickel cadmium batteries while playing on AC
- Delivers over 2-watt peak power output to big 5" speaker

Micro 24. Smartly-styled for convenience and versatility . . . ruggedly made for durable use. Records or plays up to 2 hours of 2-track mono on compact tape cassettes using 5 "D" batteries or 117 VAC. Automatically recharges nickel cadmium batteries while operating on AC. Fast, easy pop-up cassette loading.

Pushbutton controls with fast forward and rewind; switchable automatic recording level control; digital counter; tone control. Record level/battery condition meter. With leatherette carrying case, Start-stop dynamic mike, earphone, C-60 cassette. 3x7x12". Order batteries below (uses 5). From Japan.

15 A 7521 X. Shpg. wt., 10 lbs. . . . . 89.95  
 18 A 5634. Ni-Cad Battery. 3 oz. . . . . Ea. 6.30  
 18 A 5862. "D" Batteries. 8 oz. . . . . Pkg. 2/38¢

**8995** \$5 monthly\*



*Slim, compact design for easy portability*



**6995**

\$5 monthly\*

### Crown battery/AC Cassette Recorder

Model CTR-8750. Record and play up to 2-hours of excellent 2-track mono anywhere. Works on 4 "C" batteries or 117/220 VAC. Pushbutton controls; record level/battery condition meter; tone control. Tape cassettes load or remove instantly. Response, 100-10,000 Hz. 2x4" dynamic speaker. With start-stop mike, batteries. 2 1/2 x 7 1/2 x 7 1/4". From Japan.

15 A 7525 X. Shpg. wt., 6 lbs. . . . . 69.95

*With built-in electret-condenser microphone*



**9950**

\$5 monthly\*

### Sony/Superscope battery/AC Cassette-Corder

Model TC-110. Sensitive built-in mike can be used alone or with external mike. Easy cassette loading, ejector button. Uses 4 "C" batteries or 117 VAC. Pushbutton controls; level/battery meter; tone control; end-of-tape alarm. Start-stop mike, set of batteries, leather carrying case, earphone, plus one C-60 cassette. Size, 5 1/2 x 2 3/8 x 9 3/8". From Japan.

15 A 7066 X. Shpg. wt., 7 lbs. . . . . 99.50

**12950**

\$7 monthly\*

### Sony/Superscope executive Cassette-Corder

Model TC-120. Deluxe recorder features a built-in high-sensitivity mike. Provides top performance on 4 "C" batteries, rechargeable Ni-Cad batteries, or 117 VAC. Digital counter, level/battery meter, end-of-tape alarm. With start-stop mike, four "C" batteries, leather carry case, C-60 tape cassette, earphone, built-in recharging circuit. 2 1/2 x 10 1/4 x 6". From Japan.

15 A 7067 U. Shpg. wt., 9 lbs. . . . . 129.50

*Back-space cueing for easier transcribing*

**6950**

\$5 monthly\*

### Sony/Superscope battery/AC Cassette-Corder

Model TC-70. Perfect for business use. Smart slide-panel styling. Start-stop mike for dictation . . . back space cueing for easier transcribing. Instant cassette loading, ejector button. End-of-tape alarm, level/battery meter. Uses 4 "C" batteries or 117 VAC. With mike, earphone, four "C" batteries, convenient tote bag for recorder and accessories. 2 1/8 x 8 1/8 x 8 1/4". Japan.

15 A 7074 X. Shpg. wt., 9 lbs. . . . . 69.50

\*Order now with no money down . . . full Credit details on page 438

# Compact Cassette Recorders . . many with



## Ampex pocket-size portable Cassette Recorder

**89<sup>95</sup>** Advanced solid-state design includes integrated circuits for trouble-free performance and longer battery life  
 \$5 monthly\*

Micro 7. Professional-quality cassette recorder for school, business, interviewers. Great for dictating, taking notes or recording lectures. Records and plays up to two full hours of monophonic sound on instant-loading tape cassettes. Easy-to-use controls include pushbutton fast forward and rewind; slide-lever for play or record, record interlock; pushbutton cassette ejector. Recording level/battery condition meter. Operates on 3 "AA" penlight cells. With remote control start-stop dynamic mike, C-60 cassette, batteries, earphone and leatherette carrying case. Only 6 $\frac{1}{4}$ x1 $\frac{1}{4}$ x4 $\frac{1}{2}$ ".  
 15 A 7529 S. Shpg. wt., 2 $\frac{3}{4}$  lbs. Japan. . . . . 89.95



## Panasonic miniature Recorder has ALC plus pop-up loading

**99<sup>95</sup>** \$5 monthly\*

Automatic level control prevents distortion for professional recordings

Model RQ-2105. Battery-powered cassette recorder has six integrated circuits for finest performance and smaller size. Handy single touch-lever operation and fast, easy pop-up cassette loading. Automatic level control eliminates distortion from over-recording. Record level/battery condition meter. Output for external amplifier. With remote start-stop mike, 4 "AA" batteries, C-60 tape cassette, earphone and carrying case. 1 $\frac{1}{8}$ x3 $\frac{3}{4}$ x6 $\frac{1}{4}$ ". From Japan.  
 15 A 7461 S. Shpg. wt., 2 $\frac{1}{2}$  lbs. . . . . 99.95



## Sony/Superscope Cassette-Recorder . . built-in mike

**119<sup>50</sup>** \$6 monthly\*

Actually small enough to fit in your coat pocket

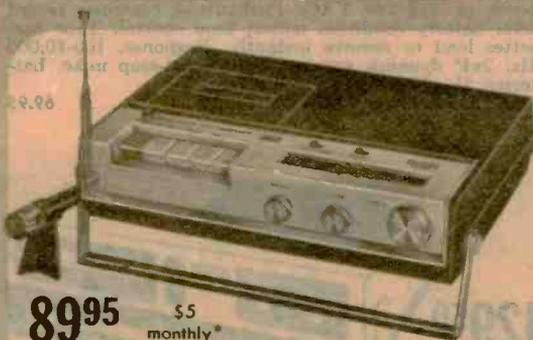
Model TC-50. Fully self-contained cassette recorder is amazingly small and lightweight, can actually fit in a coat pocket, yet provides performance comparable to larger models. Features separate built-in mike and speaker, record level/battery condition meter, convenient pushbutton controls. Automatic recording control for distortion-free recording. Complete with snap-in battery pack, 4 "AA" batteries, leather carrying case, C-60 cassette. 7x3x1 $\frac{1}{2}$ ". Japan.  
 15 A 7073 S. Shpg. wt., 2 lbs. . . . . 119.50



## York battery/AC Recorder with FM-AM

**89<sup>95</sup>** \$5 monthly\*

Model KR-120. Smartly-styled portable combines full-feature cassette recorder with FM-AM radio in one, easy-to-carry unit. Plays anywhere on batteries or 117 VAC. Solid-state circuit provides good FM-AM reception. AFC switch to prevent FM drift. AM, telescoping FM antennas. Recorder has keyboard controls, pop-up loading, level/battery meter. Large 5" speaker. Tone control. With remote start-stop mike, 6 "D" batteries, earphone, cassette. 11 $\frac{1}{4}$ x3 $\frac{1}{4}$ x13 $\frac{1}{4}$ ". Japan.  
 15 A 7056 X. Shpg. wt., 10 lbs. . . . . 89.95



**89<sup>95</sup>** \$5 monthly\*

## Sharp battery/AC Recorder/FM-AM Radio

Model RD-404. Versatile cassette recorder/FM-AM radio operates on batteries, 117 VAC or 12 VDC with optional car cord (below). Records and plays up to two hours on instant loading cassettes. Pushbutton controls, level/battery meter, automatic level control. Record with mike or directly from radio. Tone control. Telescoping FM antenna. With 4 "C" batteries, start-stop mike, cassette. 2 $\frac{1}{4}$ x12 $\frac{1}{8}$ x8 $\frac{3}{16}$ ". From Japan.  
 15 A 7118 X. Shpg. wt., 5 lbs. . . . . 89.95  
 15 A 7120. 12 VDC Car Cord. 8 oz. . . . . 5.95

# built-in FM-AM Radio and battery/AC versatility

## Amplex Cassette Recorder with FM-AM Radio

Built-in charger automatically recharges optional nickel-cadmium batteries while playing on 117 VAC

**129<sup>95</sup>**  
\$7 monthly\*

Micro 32. Record live or from built-in FM-AM radio. Automatic level control for perfect voice recordings, can be switched off for full-range music recording. Pushbutton operation, digital counter, level/battery meter. Plays cassettes with over 2-watt peak music power through big 5" speaker. Switch eliminates radio interference while recording. For batteries or 117 VAC. Start-stop mike, carry case, 5 "D" batteries, earphone, C-60 cassette. Ni-cad batts. below. 3x7x12". Japan. 15 A 7524 X. Shpg. wt., 8 lbs. . . . . 129.95  
18 A 5634. Nickel-Cadmium Batteries. 3 oz. . . . . 6.30



Record direct from FM, AM or mike

**99<sup>50</sup>**  
\$5 monthly\*

## Concord battery/AC FM-AM "Radiocorder"

Model F-103. Portable cassette recorder with built-in FM-AM radio is an entertainment center in itself. Full-feature cassette recorder records and plays up to two hours on space-saving tape cassettes. Record direct from radio, or live with mike. Record level/battery condition meter. AFC on FM. Slide-rule tuning. Tone control. Operates on 5 "D" batteries (order below) or 117 VAC. With start-stop mike. 12x9x11½". Japan. 15 A 7536 X. Shpg. wt., 5½ lbs. . . . . 99.50  
18 A 5079. "D" Batteries. 10 oz. . . . . 6.50



**Aiwa Cassette Recorder with 3-band Radio**

**119<sup>50</sup>**  
\$6 monthly\*

Radio tunes FM, AM, 1.6-4 MHz marine band

Model TPR-101. Exciting portable cassette recorder has a built-in 3-band radio. Enjoy listening to your favorite FM or AM stations, plus 1.6-4 MHz marine band. Tape directly from the radio, live with a mike, or play prerecorded tapes. Uses 4 "D" batteries or 117 VAC. Pushbutton record function controls and band selection. Level/battery meter. Tone control; 5x3" speaker. AM, telescoping FM antennas. Mike; batteries, earphone, cassette. 11¼x3½x9". Japan. 15 A 7114 U. Shpg. wt. 6½ lbs. . . . . 119.50

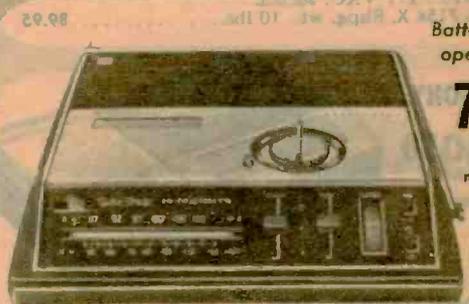


**Aiwa battery/AC Cassette Recorder with FM Radio**

**69<sup>95</sup>**  
\$5 monthly\*

Automatic cassette pop-up and shutoff at end of tape play

Model TPR-104. Compact portable cassette recorder features a built-in FM radio. You can record directly from the radio, record live with a mike, or just listen to the radio or prerecorded tapes. Plays anywhere on 4 "C" batteries or 117 VAC. Automatic cassette pop-up and shutoff at end of tape. Easy-to-use pushbutton controls, monitor switch, tone control. Telescoping FM antenna. With remote start-stop mike, batteries, earphone, cassette. 10¼x7½x3¼". Japan. 15 A 7166 X. Shpg. wt., 5 lbs. . . . . 69.95



Battery/AC operation

**79<sup>95</sup>**  
\$5 monthly\*

## Panasonic Cassette Recorder/FM-AM Radio

Model RQ-232. All the convenience of an easy-loading cassette recorder, plus FM-AM radio. Record and play anywhere on 6 "C" batteries or 117 VAC. Automatic level control gives you distortion-free recordings every time. Cassette pops up for easy changing. Record with mike or direct from radio. Slide-rule dial with thumb-wheel tuning, switchable AFC, tone control. Response, 70-10,000 Hz. With remote start-stop mike, batteries, earphone, prerecorded cassette, 3x9½x11". Japan. 15 A 7227 X. Shpg. wt., 6 lbs. . . . . 79.95

\*See page 438 for full Credit details . . . no money down

# Huge selection of Stereo Cassette Tape Decks



CRAIG

**79<sup>95</sup>**

\$5 monthly\*

**59<sup>95</sup>**

\$5 monthly\*



## Stereo Cassette Deck with ALC

Model 2708. Just drop in cassette and push a button to record or play! Automatic level control prevents distortion. Records stereo or monophonic for playback through your music system. Recording signal indicator, digital counter. Response, 50-12,000 Hz. Has walnut grain finished plastic case.  $3\frac{3}{4} \times 14\frac{1}{4} \times 9\frac{1}{4}$ ". 117 VAC. Japan. 15 A 7480 X. Shpg. wt., 13 lbs. . . . . 79.95

## Low-priced Stereo Cassette Player

Model 2804. Compact deck plays through any stereo or mono amplifier or receiver—lets you enjoy the wide variety of pre-recorded tape cassettes available. Easy-to-operate keyboard controls; digital counter accurately locates tape selections. Cassettes are easy to load and remove. Does not record.  $3\frac{3}{4} \times 14\frac{1}{4} \times 9\frac{1}{4}$ ". 117 VAC. Japan. 15 A 7479 X. Shpg. wt., 9 lbs. . . . . 59.95



PANASONIC

**89<sup>95</sup>**

\$5 monthly\*

## Stereo Cassette Deck in wood case

Model RS-256US. Smart looking—top performing—ideal for use with any stereo system. Pushbutton controls, level meters, easy cassette loading. Records stereo and monophonic. Automatic stop on playback. 30-12,000 Hz response. Inputs: 2 mike, 2 aux. Stereo headphone jack. Walnut veneer case.  $10\frac{1}{8} \times 3\frac{3}{4} \times 10$ ". 117 VAC. Japan. 15 A 7154 X. Shpg. wt., 10 lbs. . . . . 89.95



AIWA

**99<sup>95</sup>**

\$5 monthly\*

## Stereo Cassette Deck . . . headphone jack

Model TP-1009. Smartly-styled deck with walnut wood sides. Pushbutton controls, cassette "pop-up." Records stereo and monophonic for play through your system. Level meters, pause control, counter. 50-10,000 Hz response. Inputs: 2 mike, 2 aux. Stereo headphone jack. With C-60 cassette, patch cords.  $3\frac{3}{4} \times 11 \times 10$ ". For 117 VAC. Japan. 15 A 7251 S. Shpg. wt., 9 lbs. . . . . 99.95



SONY

**109<sup>50</sup>**

\$6 monthly\*

## SONY/SUPERSCOPE

### Sonymatic Stereo Cassette Deck has ALC

Model TC-125. Connects easily to your present stereo system to provide complete cassette record and playback facilities. Records and plays stereo cassettes (compatible with monophonic) up to 120 minutes. Automatic Level Control prevents blasting, assures even volume. "Pop-up" cassette ejector. 50-10,000 Hz at  $1\frac{1}{8}$  ips.  $3\frac{3}{8} \times 13 \times 7\frac{3}{8}$ ". C-60 cassette, patch cord. 117 VAC. Japan. 15 A 7588 U. Shpg. wt.,  $7\frac{1}{2}$  lbs. . . . . 109.50



CRAIG

**119<sup>95</sup>**

\$6 monthly\*

## Feature-packed Stereo Cassette Deck

Model 2704. Designed for operating convenience and fine performance. Records stereo or monophonic for play through your music system. Easy-to-use keyboard-type pushbutton controls. Illuminated level meters, magnified instant-reset digital counter. 2 mike, 2 aux. inputs. Stereo headphone jack. 50-10,000 Hz at  $1\frac{1}{8}$  ips. Walnut-finish wood cabinet  $3\frac{3}{4} \times 14\frac{1}{4} \times 9\frac{1}{2}$ ". 117 VAC. Japan. 15 A 7252 U. Shpg. wt., 13 lbs. . . . . 119.95

...choose from the world's best known names

AMPEX

**14995**

\$8 monthly\*



**Professional Stereo Cassette Tape Deck**

Micro 52. Handsome smoked plastic panels and walnut veneers—beautiful addition to your stereo system. Features stereo mixing with individual level controls—mike and line inputs for each channel. Pushbutton controls for all functions; “pop-in” cassette loading; recording indicator light; digital counter; 2 level meters. Automatic Level Control assures virtually distortion-free recordings—switches out for full dynamic range. 40-12,000 Hz response. 10 1/4 x 16 1/4 x 5 3/4". With 2 mikes, demo tape. 117 VAC. 15 A 7540 U. Japan. Shpg. wt.. 15 lbs. 149.95

TEAC

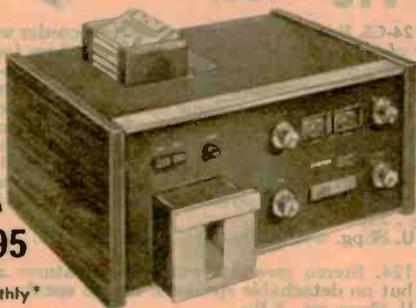
**13950**

\$7 monthly\*



**All-silicon Stereo Cassette Tape Deck**

Model A-20. Provides full-fidelity tape deck performance plus cassette convenience. Quality features include: two precision heads, outer rotor motor drive system, all-silicon transistor amplifier. Hysteresis synchronous motor provides efficient drive and stable tape travel. “Pop-up” cassette housing opens when stop button is pressed. Pause control, 2 recording level meters, headphone monitoring facility. 60-10,000 Hz. 4 1/4 x 9 3/4 x 10". With unidirectional stereo mike. 117 VAC. Japan. 15 A 7455 U. Shpg. wt., 14 lbs. 139.50



AIWA

**18995**

\$10 monthly\*

**Auto-Changer Stereo Cassette Tape Player**

Model TP-1018. Amazing automatic cassette changer can provide up to 9 hours of continuous entertainment using C-90 cassettes. For commercial or home use. Reject button stops cassette playing, starts a new one. All silicon transistor circuit. Hysteresis-synchronous motor, 2 level meters, tone control. 40-10,000 Hz response. Headphone jack. Does not record. Wood case, 7 7/8 x 15 3/4 x 9 1/8". With 2 patch cords. 117 VAC. From Japan. 15 A 7467 U. Shpg. wt., 20 lbs. 189.95



WOLLENSAK

**15995**

\$8 monthly\*

**Deluxe Stereo Cassette Tape Deck**

Model 4700. Records and plays stereo or mono through your music system. Features interlock controls to permit changing the function of the recorder without stopping it. Has two recording level meters, digital counter, convenient tape cassette ejector. Response: ±3 dB, 60-12,000 Hz. Signal-to-noise ratio: better than 46 dB, Mike and phono inputs, preamp outputs. Handsome cabinet, 13 7/8 x 9 1/4 x 4 1/2". With 60-minute tape cassette. 117 VAC. 15 A 7338 X. Shpg. wt., 13 lbs. 159.95

**Cassette Tape Recorder/Player with built-in 10-watt stereo amplifier**

- Two illuminated record level meters
- With 2 remote on-off microphones
- Speaker monitor switch

**15995**

\$8 monthly\*

Model CAH-2000. Deluxe recorder packed with quality features. Safety interlock prevents accidental erasures or damage to pre-recorded tapes. Speaker monitor switch lets you hear recording source. Two illuminated level meters, pushbutton function selectors, pause control, digital counter. Balance, volume, tone controls. Response: 50-12,000 Hz at 1 1/2 ips. Smart, slimline cabinet. 4 3/4 x 13 1/2 x 8 5/8". With 2 mikes and stands, patch cord. (Order 8-ohm speaker systems from pages 68-83.) For 117 VAC. From Japan. 15 A 7179 U. Shpg. wt., 15 lbs. 159.95

**AUTOMATIC RADIO**



\*Buy now on Credit terms—see page 438 for details

# Portable Stereo Cassette Tape Recorders

Concord solid-state recorder with automatic level control

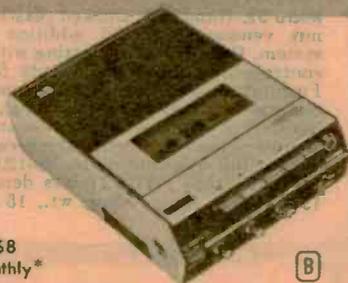
**139<sup>50</sup>**

- Operates on batteries or house current
- Two built-in speakers
- Pushbutton operation

Model F-400. Record and listen to your favorite sounds of stereo at this remarkable low price. Versatile recorder tapes outstanding 4-track stereo or mono on compact, convenient cassettes. Just snap-in and you're ready to record or playback. Switch-controlled Automatic Level Control for crisp, distortion-free recording of conferences. Operates on its own self-contained batteries or from standard 117 VAC. Quality transport features pushbutton operation. Plays through its own speakers, has outputs for auxiliary speakers, plus preamp output. Powerful 8-watt stereo amplifier. Complete with dynamic remote-control mike, one blank cassette, 6 batteries. Order additional blank tape cassettes from page 155. Overall dimensions, 9<sup>3</sup>/<sub>4</sub> x 12<sup>3</sup>/<sub>8</sub> x 3<sup>3</sup>/<sub>4</sub>". From Japan.  
15 A 7322 U. Shpg. wt., 12 lbs. .... 139.50



**Sony/Superscope**  
ultracompact  
battery/AC Stereo  
Cassette Recorders



Recorder Alone **149<sup>50</sup>** \$8 monthly\*

**A** Model 124-CS. Battery/AC stereo cassette recorder with built-in speaker plus two detachable wide-range speakers for true separation. Features convenient pushbutton operation; pop-up cassette ejector; Sonymatic recording control. Has record level/battery indicator; separate tone and volume controls; balance control. PA capability. Microphone and auxiliary inputs; stereo speakers, headphone outputs. 4-track stereo (compatible with 2-track mono) recording system at 1<sup>7</sup>/<sub>8</sub> ips. Response, 50-10,000 Hz. S/N, 45 dB. Flutter/wow, 0.28%. Stereo mike, C-60 cassette, earphone, 2 patch cords, batteries, AC power cord, carrying case. Size, 2<sup>1</sup>/<sub>16</sub> x 6<sup>1</sup>/<sub>16</sub> x 9<sup>25</sup>/<sub>32</sub>". Japan.  
15 A 7589 U. Shpg. wt., 12 lbs. .... 175.00

**B** Model 124. Stereo recorder with same features as recorder above, but no detachable speakers. Stereo speaker outputs.  
15 A 7590 U. Shpg. wt., 5 lbs. .... 149.50

Recorder plus Two Wing Speakers

**175<sup>00</sup>**  
\$9 monthly\*



**Crown**  
Stereo  
Cassette/  
Stereo  
FM-AM

**159<sup>50</sup>**  
\$9 monthly\*

Model CSC-9350. A complete portable entertainment center at a modest price. Includes stereo FM-AM radio, stereo cassette tape recorder, and detachable speakers. Records directly from radio . . . stereo FM has striking realism. Makes "live" recordings from mikes. Convenient pushbutton recorder operation. Tone control. Record level meters. Aux. input, preamp output, stereo headphone jack. AFC. Hi-impact case. 12<sup>3</sup>/<sub>2</sub> x 17<sup>1</sup>/<sub>2</sub> x 4". With mikes, C-60 cassette, batteries. 117 VAC. Japan.  
15 A 7530 U. Shpg. wt., 11 lbs. .... 159.50



**Aiwa**  
battery/AC  
Stereo  
Cassette  
Recorder

**109<sup>95</sup>**  
\$6 monthly\*

Model TP-1004. Compact recorder records and plays 4-track stereo and mono. Here is a budget-priced portable with many quality features. Pushbutton controls, level and tone controls for each channel, two record level meters. Two 3x5" speakers in matching enclosures. Accessory storage compartment for added convenience. Lets you record from all sources—radio, phono, TV. Outfit includes two dynamic mikes (one with remote control), C-60 cassette, two earphones. For 115 VAC or batteries (included). 12<sup>3</sup>/<sub>4</sub> x 13<sup>3</sup>/<sub>8</sub> x 3<sup>1</sup>/<sub>2</sub>".  
15 A 7162 U. Japan. Shpg. wt., 9 lbs. .... 109.95

# Stereo Cassette Recorders for the home

## Wollensak Stereo Cassette Recorder

- Compression-loaded wing speakers
- With two dynamic mikes and one cassette

**199<sup>95</sup>**

Model 4800. Deluxe stereo recorder with latest features. Hear all the young sounds of stereo on trouble-free, snap-in cassettes. Records and plays mono or stereo at 1 7/8 ips. Special interlocked controls permit changing the function of the machine without stopping it. Two level meters, counter, cassette ejector. Mike and phono inputs. Preamp output. Advanced solid-state circuitry. Delivers 8 watts of sound power to two compression-loaded speaker systems. Response: 60-12,000 Hz. Recorder size, 4 1/2 x 13 1/4 x 9 3/4"; speakers each, 4 1/2 x 13 1/4 x 8 1/8". With 2 mikes, 60-minute cassettes. For 115 VAC.

15 A 7583 U. Shpg. wt., 22 lbs. .... 199.95



**199<sup>50</sup>**

\$10 monthly\*

## Sony/Superscope Stereo Cassette-Recorder

Model 130. Full cassette recording facilities, plus matching oiled walnut speakers. Full 15-watt music power stereo amplifier. Speaker monitor switch; balance, volume, tone controls. Noise suppressor switch. "Easyomatic" automatic recording level. Pause control, digital tape counter, headphone jack. 3 1/2 x 13 1/4 x 9 1/4". 50-10,000 Hz. With mike, C-60 blank cassette, patch cord. 117 VAC. Japan.

15 A 7587 U. Shpg. wt., 9 1/2 lbs. .... 199.50



**269<sup>95</sup>**

\$14 monthly\*

## Ampex automatic Cassette-changing/Recorder

Micro 95. Lets you stack up to 6 cassettes at one time for a full 6 hours of non-stop stereo recording or playback. Automatically moves played cassettes into storage compartment. Easy-to-use pushbutton recording controls. Record level meter for accurate monitoring. Solid-state circuitry. With 2 dynamic mikes, matched 6x9" speakers in walnut enclosures. Preamp outputs. 15 1/4 x 9 1/4 x 4 3/8". 110 VAC.

15 A 7539 U. Shpg. wt., 22 lbs. .... 269.95



**219<sup>95</sup>**

\$11 monthly\*

## Ampex high-performance Cassette Recorder

Micro 87. Records up to 120 minutes of stereo from any sound source—radio, phono, or live performances. Plays all prerecorded stereo and mono cassettes with 50 watts of power through wide-range 6x9" speaker systems. Switchable Automatic Level Control. Push-button function controls. Digital counter for indexing tapes. Headphone output. Record level meter. Synchronous motor provides constant speed. Hand-somely finished in walnut cabinetry. With two mikes, blank cassette. Player, 10 1/4 x 16 1/4 x 5 3/4"; speakers, 9 x 14 1/2 x 7 1/4". 117 VAC.

15 A 7538 U. Shpg. wt., 34 lbs. .... 219.95



**149<sup>95</sup>**

\$8 monthly\*

## Midland home Stereo Cassette Recorder

Model 12-157. Attractive low-profile model records, plays, amplifies cassettes through matched 4x6" speakers. Delivers 5-watt peak power. Accepts all standard stereo or mono cassettes. Offers pop-up loading, push-button function controls, slide-type volume and tone controls. Two illuminated recording meters. Synchronous motor for constant speed. Inputs: mikes, radio. Outputs: speakers, preamp, headphone. Wood cabinetry in walnut finish. With 2 remote mikes, smoked dust cover, 2 patch cords, blank cassette. 3x13x9". 117 VAC. Japan

15 A 7178 U. Shpg. wt., 15 lbs. .... 149.95

# Home Cassette Recorders, Recorder/Radios



**189<sup>95</sup>**

## Ampex Cassette Recorder/Stereo FM-AM

Model 87R. Stereo recorder, stereo FM-AM tuner, amplifier, speaker systems in 3-piece walnut ensemble. Recorder has ALC, level meters, hysteresis-synchronous motor, counter. Radio has FET, stereo light, "disappearing" dial. Control center has bass, treble, volume controls; inputs for mikes, magnetic phono, line; stereo headphone. 40-12,000 Hz. Control center, 10x16x5<sup>3</sup>/<sub>4</sub>"; speakers, 9x14<sup>1</sup>/<sub>2</sub>x7<sup>1</sup>/<sub>4</sub>". With 2 mikes, tape. 115 VAC. Japan.

15 A 7270 U. Shpg. wt., 36 lbs.....189.95



**199<sup>95</sup>**

## Craig Stereo Cassette Recorder/Stereo FM-AM

Model 2705. Records and plays 4-track stereo with superb fidelity using quick-loading cassettes. FM-AM radio and two separate speakers offer exciting stereo entertainment. Slide-rule dial tuning, stereo jack, tone and balance controls, stereo headphone jack. Recorder features digital counter, record-level VU meters, keyboard-type controls. Handsome walnut-finish wood case, 4<sup>1</sup>/<sub>8</sub>x15<sup>7</sup>/<sub>8</sub>x10<sup>1</sup>/<sub>4</sub>". Matching speakers, 15<sup>7</sup>/<sub>8</sub>x10<sup>1</sup>/<sub>4</sub>x4<sup>1</sup>/<sub>8</sub>". Japan.

15 A 7489 U. Shpg. wt., 34 lbs.....199.95



**139<sup>95</sup>**

## Craig deluxe Stereo Cassette Tape System

Model 2707. Compact system records and plays 4-track stereo/mono using efficient, snap-in cassettes. Separate speaker systems provide full-fidelity stereo sound. Features automatic level control, digital counter, keyboard-type pushbuttons for precise control of all operations. Slide controls for tone, balance and volume. Three-piece system is finished in walnut-veneer wood cabinets. Recorder, 3<sup>1</sup>/<sub>4</sub>x14<sup>1</sup>/<sub>2</sub>x7<sup>3</sup>/<sub>4</sub>"; speaker systems, 14<sup>1</sup>/<sub>8</sub>x7<sup>3</sup>/<sub>4</sub>x3<sup>1</sup>/<sub>4</sub>". Japan.

15 A 7486 U. Shpg. wt., 29 lbs.....139.95

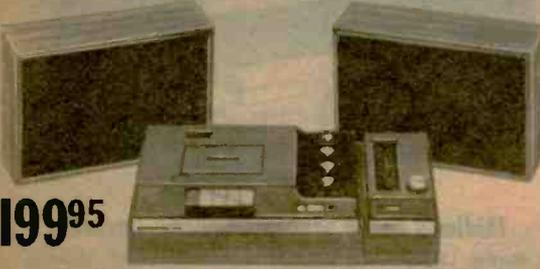


**199<sup>95</sup>**

## Lloyd's Cassette Recorder/Stereo FM-AM Radio

Model 9V88. Stereo outfit in walnut finish cabinets has cassette recorder and FM-AM radio with two speaker enclosures. Recorder uses easy-loading cassettes, has piano-type controls, digital counter. Radio has lighted slide-rule dial, logging scale; stereo headphone jack; volume, tuning, tone, balance controls. Inputs for mikes, aux. Radio/recorder, 3<sup>3</sup>/<sub>8</sub>x12<sup>3</sup>/<sub>4</sub>x12" speakers, 16x9x6<sup>1</sup>/<sub>2</sub>". With two mikes. For 115 VAC. Japan.

15 A 7177 U. Shpg. wt., 26 lbs.....199.95



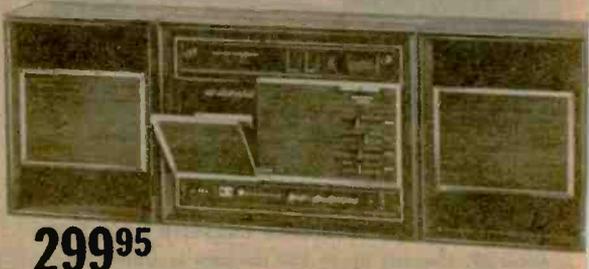
**199<sup>95</sup>**

## Crown Stereo Cassette Recorder/FM-AM Radio

Model SHC-44B. Stereo recorder, stereo FM-AM radio and two speakers in three walnut-grain cabinets. Recorder has piano-type controls, monitor, stereo phono input. Radio has slide-rule dial, stereo FM light, distance/local switch, tone control. 100-10,000 Hz. Recorder, 3<sup>1</sup>/<sub>2</sub>x13<sup>1</sup>/<sub>4</sub>x9"; radio, 3<sup>1</sup>/<sub>4</sub>x4<sup>1</sup>/<sub>4</sub>x9"; speakers, 8<sup>3</sup>/<sub>4</sub>x13x4<sup>1</sup>/<sub>4</sub>". With 2 mikes. Operates on AC or batteries (optional). Japan.

15 A 7513 U. Shpg. wt., 8 lbs.....199.95

18 A 5079. "D" Batteries (Uses 6.) Wt., 10 oz..... Pkg. 2/33¢



**299<sup>95</sup>**

## Panasonic Cassette Recorder/Stereo FM-AM

Model RE-7080. For the serious listener! Stereo FM-AM radio has FET's, pushbutton band selection, automatic touch-tuning. Sliding bass, treble, volume, balance controls. Stereo FM light. Recorder has digital counter. Speaker systems have 8" and 2<sup>1</sup>/<sub>2</sub>" speakers. Inputs: Mikes, stereo headphone, magnetic and ceramic cartridge. Walnut. Recorder/radio, 16x13<sup>3</sup>/<sub>4</sub>x6<sup>7</sup>/<sub>8</sub>"; speakers, 16x11<sup>1</sup>/<sub>2</sub>x6<sup>3</sup>/<sub>4</sub>". 115 VAC. With two mikes. Japan.

15 A 7476 U. Shpg. wt., 31 lbs.....299.95

# Telephone Answerers . . . Cassette Recorders

Automatic telephone answering systems—essential for people on the go, in business or at home

**19995**

\$10 monthly\*



**11995**

\$6 monthly\*



## Crown Telephone Answerer and Recorder

Model CTA-4400. Practical and efficient telephone answerer permits you to return important calls you have missed. Automatically answers your telephone for you when you're away. Gives the caller your pre-recorded, up to 30-second message, from an endless-loop tape. Also, records caller's message on built-in cassette recorder for playback later. Cassette recorder is usable separately. Takes standard snap-in cassettes. Installs in minutes, no re-wiring. Attractive walnut cabinet. Size,  $3\frac{5}{8} \times 10\frac{1}{16} \times 12\frac{1}{16}$ ". With endless loop tape, tape cassette and built-in mike. For 117 VAC. From Japan. Shpg. wt., 9 lbs.

15 A 7541 U. . . . . 199.95

## Crown Automatic Telephone Valet

Model CTA-4100. Automatic telephone answerer at a budget price. Perfect for home or business. Voice induction device automatically answers your telephone, gives caller a pre-recorded 30-second message and resets, ready for the next call. Hooks up to your phone quickly and easily. No re-wiring necessary. Your pre-recorded message, on endless-loop tape, is easily changed using built-in mike. Can also record caller's message, using any standard tape recorder with remote-control facilities. Solid-state circuit. Wood-grain steel cabinet,  $3\frac{3}{8} \times 8\frac{1}{2} \times 10\frac{1}{16}$ ". For 117 VAC. From Japan. Shpg. wt., 7 lbs.

15 A 7527 U. . . . . 119.95



**17995**

\$9 monthly\*

## Midland Stereo Cassette Recorder/FM-AM Radio

Model 12-165. Solid-state stereo cassette recorder with FM-AM radio and two separate full-range speakers for stereo home entertainment. Recorder controls include record, rewind, fast-forward, play and stop. Volume and tone controls. Automatic level control. Recording monitor. Level meter. Digital tape counter. 20 watts peak power, 5 watts rms per channel. FM-AM radio has lighted dial stereo light, AFC switch.  $3\frac{3}{4} \times 15\frac{1}{2} \times 9$ ". Two 6" speakers in handsome, matching enclosures. Size,  $5\frac{3}{8} \times 9\frac{1}{8} \times 7\frac{1}{4}$ ". Plastic walnut-finish cabinets look, feel like wood. With dust cover, 2 mikes, 60-minute cassette. Japan.

15 A 7176 U. Shpg. wt., 15 lbs. . . . . 179.95



**8995**

\$5 monthly\*

## Midland Battery/AC Stereo Cassette Recorder

Model 12-150. Versatile, solid-state stereo cassette recorder plays anywhere. Operates on batteries for outdoor activities or indoors on AC cord. Features 2-channel sound-system with twin  $2\frac{1}{4} \times 4$ " speakers for full-fidelity stereo sound reproduction. Uses efficient snap-in cassettes. Has left and right VU/battery level meters, volume controls, auxiliary and mike jacks. Pushbutton function controls for all recording operations. Mike and aux. inputs. High-impact polystyrene cabinet has wood-tone finish, dust cover, die-cast handle. With 4 "D" cells, 2 remote mikes and stands, blank cassette.  $10\frac{1}{2} \times 16 \times 4$ ". Japan.

15 A 7175 X. Shpg. wt., 11 lbs. . . . . 89.95

\*No money down . . . see Page 438 for full Credit details

# Stereo 8-track Tape Decks and Players



**12950**  
\$7 monthly\*

## Sony/Superscope stereo record/play Deck

Model TC-8. Enjoy the luxury of snap-in tape cartridges and hours of uninterrupted stereo music. Solid-state 8-track cartridge deck records and plays through your hi-fi system. Tapes from TV, radio, phono, or live, using mikes. Plays any 8-track pre-recorded tape cartridge. Has stereo headphone jack, level meters, automatic shutoff, visual channel indicator. Response, 40-12,000 Hz. Less mikes, 8½x12x4½". For 117 VAC. 15 A 7047 U. Japan. Shpg. wt., 11 lbs. . . . . 129.50



**16995**  
\$9 monthly\*

## Viking stereo record/play Deck

Model 811R. Deluxe solid-state deck in handsome walnut case records and plays 8-track stereo cartridges through your hi-fi system or console with excellent fidelity and response. Has pushbutton and automatic track selection, level meter, record level control for each channel. Can be set for continuous play or automatic stop. Response, 40-15,000 Hz. Less mikes. Compact case, 4½x15x11". For 117 VAC. 15 A 7440 U. Shpg. wt., 25 lbs. . . . . 169.95

## Craig solid-state record/playback Stereo Tape Cartridge Deck



**11995** • Plays pre-recorded cartridges  
• Continuous 8-track playback

Model 3302. Stereo tape system has fully automatic cartridge selection. Records and plays 8-track tape cartridges through your hi-fi system. Record your own tapes from radio, phono, or live, with mikes. Features record signal meter, automatic level control, channel selector. Can be set for single selection or continuous play. Headphone jack. Response, 50-12,000 Hz. Less mikes. Walnut case. 4x9½x9". 117 VAC. Japan. 15 A 7472 U. Shpg. wt., 11 lbs. . . . . 119.95

Lightweight,  
compact, goes  
anywhere

**8995**  
\$5 monthly\*



## Battery-powered Portable 8-track Tape Player

Big value in a small but mighty tape cartridge player, perfect for outdoor activities. Solid-state portable plays pre-recorded 8-track tape cartridges. Operates on six "D" batteries. Offers outstanding sound reproduction and easy snap-in cartridge operation. Has channel selector, tone controls, earphone jack, external power jack. Order batteries below. 8x6½x3". Japan. (Does not record.) 15 A 7181 X. Shpg. wt., 8 lbs. . . . . 34.95  
18 A 5079. "D" Batteries, 8 oz. . . . Pkg. of 4/65¢

Great for  
all outdoor  
activities

**3495**  
\$5 monthly\*



## Automatic Radio 8-track battery/AC stereo Tape Cartridge Player

Model SEP-9800. Take it along with you, anywhere! Portable stereo tape cartridge player operates on house current, 8 "D" batteries or 12-volt car battery. Snap-in any 8-track pre-recorded tape cartridge and enjoy hours of uninterrupted listening pleasure. Speakers separate for full-dimensional stereo. Tone controls, level meters, channel selector. With batteries, 12-VDC cord for car cig. lighter socket. 11x14½x5". Japan. (Does not record.) 15 A 7180 X. Shpg. wt., 10 lbs. . . . . 89.95

# Stereo Tape Cartridge Players and Tape Decks

3 Panasonic Players offer hours of listening pleasure, automatic operation



**A** **69<sup>95</sup>** \$5 monthly\*

**A** Model RS-800AS. Plays 8-track cartridges through your hi-fi music system or console. Built-in solid-state preamp plugs into auxiliary input of amplifier. Automatic or manual track changing. Track indicator lights. Tape speed, 3 $\frac{3}{4}$  ips. Response, 50-12,000 Hz. Signal-to-Noise ratio, 51 db. Deluxe walnut cabinet, 4 $\frac{1}{2}$ x16 $\frac{1}{2}$ x8 $\frac{1}{2}$ ". For 117 VAC. From Japan. 15 A 7209 X. Shpg. wt., 8 $\frac{1}{2}$  lbs. . . . . 69.95



**B** **129<sup>95</sup>**  
\$7 monthly\*

- Plays all 8-track cartridges
- Brilliant sound reproduction
- Automatic track changing
- Includes 2 speaker systems

**B** Model RS-8105. Solid-state 8-track stereo cartridge player with matching speaker systems. Automatic continuous play; pushbutton track selector; balance, tone controls; mode selector. 16-watt-peak stereo amplifier, two separating speaker systems. 3 $\frac{3}{4}$  ips. 50-12,000 Hz. 51 dB S/N. Phono, aux. inputs; headphone jack. Walnut cabinet. 4x16 $\frac{1}{2}$ x9". For 117 VAC. Japan. 15 A 7142 U. Shpg. wt., 21 lbs. . . . . 129.95



**C** **49<sup>95</sup>** \$5 monthly\*

**C** Model RS-802US. Stereo cartridge tape deck plays 8-track cartridges through your hi-fi system or console. Offers convenient pushbutton program selection, easy-to-see lighted channel indicators. Lets you enjoy uninterrupted music for hours. Response, 50-12,000 Hz. Walnut-look metal cabinet, 4 $\frac{1}{4}$ x8 $\frac{1}{4}$ x9 $\frac{3}{4}$ ". For 117 VAC. From Japan. 15 A 7161 X. Shpg. wt., 8 lbs. . . . . 49.95



**CRAIG**

**59<sup>95</sup>** \$5 monthly\*  
**99<sup>95</sup>** \$5 monthly\*



## Stereo 8-track Tape Cartridge Player Deck

Model 3207. Solid-state 8-track cartridge player adds the convenience and luxury of tape cartridge performance to your stereo system. Plays through the amplifier of your music system or console. Lets you enjoy unattended, uninterrupted programming for hours. Plays any 8-track pre-recorded tape cartridge. Completely automatic, with eject-cartridge release button. Tape speed 3 $\frac{3}{4}$  ips. Response, 60-12,000 Hz. Walnut cabinet, 6 $\frac{1}{2}$ x15x10". 117 VAC. 15 A 7498 X. Japan. Shpg. wt., 9 lbs. . . . . 59.95

## Stereo 8-track Tape Cartridge Player System

Model 3705. Complete stereo tape cartridge player ensemble with separate speakers offers outstanding hi-fi performance. Features automatic channel selector; cartridge-eject button; volume, balance and tone controls. Compact space-saving design has walnut-finish wood cabinet, matching wide-response speakers. Tape speed 3 $\frac{3}{4}$  ips. Response, 50-12,000 Hz. Tape player, 4x11 $\frac{1}{2}$ x9 $\frac{1}{2}$ ". Speakers, 11 $\frac{1}{2}$ x9 $\frac{1}{2}$ x4 $\frac{1}{2}$ ". For 117 VAC. Japan. 15 A 7495 X. Shpg. wt., 18 lbs. . . . . 99.95

## Stereo 8-track Tape Cartridge Player System

Model 8400. Full-feature tape player at a budget price. Plays all 8-track tape cartridges at 3 $\frac{3}{4}$  ips. Solid-state circuitry features silicon transistors. Has pushbutton or automatic track selection, lighted track indicators. Volume, balance and tone controls. Stereo headphone jack. Speaker systems have 4" woofer and 3" midrange/tweeter. Walnut-finish wood cabinet, 4 $\frac{1}{4}$ x9 $\frac{1}{2}$ x10". Speakers, 9x6x5". Response, 60-11,000 Hz. For 117 VAC. Japan. 15 A 7004 X. Shpg. wt., 20 lbs. . . . . 89.95

**TONYSONIC**



For 8-track Pre-Recorded Tapes, see page 158

**ALLIED**SERIES NO. 255  
RECORDING TAPE

# Allied® 255 Recording Tape . . fine quality at lowest possible prices lets you record more for less

Low as  
**56¢**  
3¼" reel

- Special oxide formula for good recording
- High tensile strength prevents breakage
- Deep lubrication to reduce tape head wear
- Resists temperature and humidity extremes
- Every reel guaranteed splice-free

Our lowest priced Allied recording tape. Tops for transcribing your valuable record collection, recording radio-TV broadcasts, classroom lectures, interviews, dictation. Make a permanent record of children's voices, parties, weddings, discussions or family fun, at the lowest prices possible. You can use your tape recorder more and save money besides.

Splice-free tape has a specially developed oxide formula to assure excellent fidelity from any good recorder. High tensile strength virtually eliminates tape breakage. Deep lubrication protects tape and tape recorder heads. Uniform sensitivity throughout permits smooth response. One 1200-ft. length of tape on a 7-inch reel plays up to 8 hours at 1½ ips.

Stock No.	Reel Size	Length in Feet	Applications	Mil	Base Material	Wt., Lbs.	EACH		
							1-11	12-24	25-Up
15 A 8275	3¼"	375	Dictation and Voice Letters Dictation, Voice, Letters, Lectures	1.0	Acetate	¾	.69	.59	.56
15 A 8276	5"	900		1.0						Acetate	¾	.84	.76	.72
15 A 8277	7"	1200	Family, Children's Voices, Duplicating LP's	1.5	Acetate	1½	.99	.94	.89
15 A 8278	7"	1800	Radio-TV Broadcasts, Duplicating LP's	1.0	Acetate	1½	1.59	1.43	1.39
15 A 8279	7"	2400	Extra-Long Broadcasts, Concerts, Symphonies	0.5	Polyester	2	2.99	2.69	2.54

## Save \$5.95 on Allied's special Tape Case Bonus offer

**BUY 10 REELS OF TAPE AND GET TAPE CASE FOR \$1 MORE**

Special Allied bonus. Deluxe 10-reel carrying case, worth, \$6.95, for just \$1.00 when you purchase 10 reels of Allied 255 recording tape (described above). Sturdy, wooden, hinged-top case is covered and lined in blue and white leatherette. Has strong plastic handle fastened to lid for complete portability, plus secure metal latch. Stock up on tapes now; store and protect them in this useful case.

- 15 A 0168 X. Ten 1200-ft. Reels of Allied 255 Recording Tape and Case. 18 lbs. . . . . 10.90
- 15 A 0167 X. Ten 1800-ft. Reels of Allied 255 Recording Tape and Case. 18 lbs. . . . . 16.90
- 15 A 0166 X. Ten 2400-ft. Reels of Allied 255 Recording Tape and Case. 23 lbs. . . . . 30.90
- 15 A 8057. Case Alone. Leatherette covered wood. 8x8x8". Shpg. wt., 3 lbs. . . . . 6.95



**995**

### Robins low-cost Tape Care Kit

Essential for better recordings and tape recorder maintenance. Low-cost outfit includes: "Cut-N-Splice" splicer; tape recorder head and guide cleaner kit, and lubricant; splicing tape; 7" take-up reel; 75 tape clips; 1200-ft. reel 1.5 mil recording tape; 6 tape storage boxes. In compact attache case, 3¼x16x11".

15 A 8088. Shpg. wt., 5½ lbs. . . . . 9.95

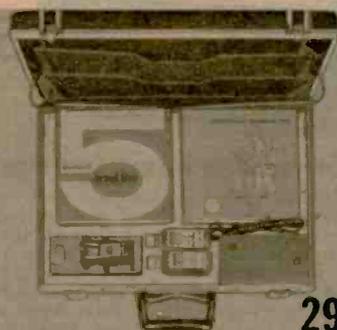


**1995**

### Robins deluxe Tape Care Kit

Advanced outfit for the serious recordist. Contains "Junior" tape splicer; recorder head and guide cleaner kit, and lubricant; head demagnetizer; 75 tape clips; splicing tape; 7" takeup reel; color-coding title labels; book on tape splicing; three 1200-ft. reels 1.5 mil tape; 4 tape storage boxes. Attache case, 3¼x16x11".

15 A 8089. Shpg. wt., 7 lbs. . . . . 19.95



**2995**

### Robins complete Tape Care Kit

Professional outfit with the finest accessories. Includes: bulk tape eraser; head demagnetizer; "Junior" tape splicer; 1200-ft. reel 1.5 mil recording tape; recorder head and guide cleaner kit with lubricant; splicing tape; 75 tape clips; 7" take-up reel; 2 tape storage boxes. Handsome, durable attache case, 3¼x18½x13¾".

15 A 8443 X. Shpg. wt., 10 lbs. . . . . 29.95

# Allied 260 Recording Tape

... guaranteed high quality  
for full-fidelity sound  
from any good recorder

Excellent all-purpose recording tape manufactured of the finest materials—offers flawless performance, exceptional strength, full response, and long life

*Specially processed for outstanding recording and listening pleasure*

Designed to provide consistently fine sound quality, Allied's 260 tape lets you record with confidence at low cost. Manufactured to meet Allied's specifications. 260 tape is absolutely free of such microscopic irregularities as skew, edge burrs, shedding and curling. Excellent for transcribing from pre-recorded tapes, record albums, taping off-the-air stereo broadcasts, and many other general-purpose uses.

Continuous length, splice free tape has exceptional strength and resistance to adverse temperature and humidity conditions. A special, deep lubrication is added to assure long tape life and to prevent oxide build-up on recorder heads. Permits the intimate recorder head contact essential to full-range fidelity without excessive head wear. Fine oxide coating assures superb recording fidelity and high signal-to-noise ratio.

The Allied 260 tape meets the highest standards of recording quality demanded of high-fidelity perfectionists. Full frequency response, low noise level, high sensitivity and uniform output. For the serious, quality-conscious recordist—no other general-purpose recording tape offers so many features at such low cost. Whatever your tape needs, Allied provides the greatest selection of the finest recording tape at minimum expense.

Stock No.	Reel Size (Inches)	Length (Feet)	Mil	Base	Wt., Lbs.	EACH		
						1-11	12-24	25-Up
15 A 8740	3 3/4	600	0.5	Polyester	1/2	.89	.79	.69
15 A 8741	5	900	1.0	Polyester	3/4	1.37	1.24	1.12
15 A 8742	7	1200	1.5	Acetate	1	1.49	1.34	1.19
15 A 8743	7	1800	1.0	Polyester	1 1/4	2.14	1.93	1.75
15 A 8744	7	2400	0.5	Tensitized Polyester	1	3.49	3.14	2.86
15 A 8745	7	3600	0.5	Tensitized Polyester	1	4.98	4.49	3.99



## Outstanding features for best recordings

- Extra tensile strength to avoid tape breakage
- Deep lubrication to prevent oxide build-up, assure long tape life
- Resistant to moisture, temperature extremes
- High sensitivity, low noise level, and full frequency response
- Each reel splice-free for uniform quality

## Save \$5.95 on Allied's special Tape Case Offer!

**STOCK-UP ON TAPE NOW AND SAVE!**

Special Allied offer! Deluxe 10-reel carrying case worth \$6.95 for just \$1.00 when you purchase 10 reels of Allied 260 tape described above. Sturdy wooden hinged-top case is covered and lined in blue and white leatherette. Has strong plastic handle fastened to top of lid and secure metal latch for complete portability. Stock up on tapes now, store and protect them in this useful case.

15 A 0169 X. Ten 1200-ft. reels with Case. Wt., 13 lbs. . . 15.90

15 A 0170 X. Ten 1800-ft. reels with Case. Wt., 15 1/2 lbs. . . 22.40

15 A 0171 X. Ten 2400-ft. reels with Case. Wt., 13 lbs. . . 35.90

15 A 0172 X. Ten 3600-ft. reels with Case. Wt., 15 lbs. . . 50.80

15 A 8057. Case Alone. 10-reel tape case. 8x8x3". 3 lbs. . . 6.95

Buy 10 Reels of Tape,  
Get Case for  
**\$1**  
only more





## Allied® 265 . . . our very best ultra range full-spectrum professional Recording Tape with extra deluxe features

Allied's best tape. Studio-quality for finest professional recordings. Manufactured to Allied's specifications, it's the first choice of audiophiles and high-fidelity perfectionists. Designed for maximum frequency response. Lubricated to provide longer wear plus giving added protection to tape recorder heads. Contains only first-quality materials and is guaranteed splice-free.

- Special micro-polishing process and homogenized lubrication reduces wear
- Latest binder system assures full fidelity and prevents oxide peeling or flaking
- Precision wound on computer-type 7-inch reel

### LOOK AT THESE IMPORTANT FEATURES



1. Head-cleaning tape spliced to end of reel
2. Sensing foil at each end of tape actuates recorder with reverse mechanism
3. Color-coded leader at each end of tape



Book of silicone tape cleaning pads with each reel



Heavy-duty computer-type reel is heat treated to prevent warping

A remarkable, versatile tape that's priced for top value. Allied Ultra Range recording tape gives you features and quality that meet the requirements of the most critical recording connoisseur. A specially developed micro-polishing process cuts tape abrasion to a minimum; helps reduce wear on your tape recorder heads. Built-in homogenized lubrication helps reduce the possibility of oxide peeling or flaking. Wound on heavy-duty, heat-treated 7" computer-type reel. Each reel comes with a book of silicone-impregnated rayon tape-cleaning pads that help to extend tape and head life.

Polyester leaders are attached to each end of the tape; red at one end, green at the other. Ultra-thin bonded sensing foils at each end of the reel actuate recorders equipped with automatic reverse mechanism. A length of head cleaning tape is spliced into one end of every reel to help remove accumulated material from recorder heads. Has the latest binder system. 1½-mil acetate tape is recommended for taping parties, home recordings, dictation; 1-mil polyester for taping stereo LP's or for recording either live or from a tuner; ½-mil polyester for making extra-long recordings from a single reel.

Stock No.	Length (Feet)	Base	Wt., Lbs.	EACH		
				1-11	12-24	25-Up
15 A 8269	1275	1½-mil Acetate	1	2.09	1.88	1.67
15 A 8270	1875	1-mil Polyester	1	3.19	2.97	2.65
15 A 8271	2475	½-mil Polyester	1½	4.60	4.14	3.89

## Save \$5.95 on special Tape Case Bonus Offer

### Deluxe 265 Tape with Carrying Case

Buy 10 reels of Tape, get Case for

only **\$1** more



Special savings on 10-reel carrying case! Buy 10 reels of deluxe 265 recording tape (above). You get the savings of buying at low prices, plus a sturdy wooden tape carrying case (separately at right), to store, protect and transport tapes, for only \$1 more. Gives you up to 24,750 feet of tape on specially developed warp-resistant reels. Up to 80 hours recording time.

15 A 0179 X. Ten 1275-Ft. Reels with Case. Wt., 12½ lbs. . . 21.90  
 15 A 0180 X. Ten 1875-Ft. Reels with Case. Wt., 15 lbs. . . 32.90  
 15 A 0181 X. Ten 2475-Ft. Reels with Case. Wt., 17½ lbs. . . 47.00  
 15 A 8057. Case Alone. Handsome blue and white leatherette over sturdy wood. Plastic carry handle; inside covered and lined. Size, 8x8x8". Shpg. wt., 3 lbs. . . 6.95

## 1¢ BONUS PACKAGE

TEN ALLIED CASSETTES  
PLUS TAPE BUTLER

Save  
\$6.94



Low as  
**17<sup>91</sup>**

Take advantage of this special offer and save \$6.94. Buy package of 10 top-quality Allied cassettes in 60-minute, 90-minute, or 120-minute lengths (described at right) and get the versatile, handy Tape Butler worth \$6.95 (described below) for only 1¢ more.

Pkg. of 10: C-60. Records up to 10 hours. Includes Tape Butler bonus. Shpg. wt., 7½ lbs.

15 A 0102 L2X..... 17.91

Pkg. of 10: C-90. Records up to 15 hours. Includes Tape Butler bonus. Shpg. wt., 10 lbs.

15 A 0103 L2X..... 26.91

Pkg. of 10: C-120. Records up to 20 hours. Includes Tape Butler bonus. Shpg. wt., 12½ lbs.

15 A 0104 L2X..... 36.51

## Allied full-frequency blank Tape Cassettes . . super-coated

Top-quality tape  
with "pop-in"  
playing  
convenience

Low  
as **88¢**



- Deep lubrication protects recorder heads
- Offer excellent response with uniform output level

Allied's recording tape cassettes offer quality on a par with the best reel-tape recording tape. *Plus*, all the added convenience of "pop-in" and play. Made to our rigid specifications for your assurance of finest results. Deep lubrication preserves tape life and protects precision-made tape recorder heads. Reduced friction gives instant start at normal operating speed and smooth operation throughout recording and playback. Super-coated for superior signal to noise ratio. Excellent frequency response, uniform output. Moisture and heat resistant. Made on finest polyester base; strong, resilient, free from microscopic defects. Packaged in self-mailing boxes. Compatible with all recorders using cassette tape system.

Type C-30 Blank Tape Cassette. Records up to 30 minutes. Wt., ¼ lb.  
15 A 8000. 1-11..... Each 98¢ 12-Up..... Each 88¢

Type C-60 Blank Tape Cassette. Records up to 60 minutes. Wt., ½ lb.  
15 A 8001. 1-11..... Each 1.79 12-Up..... Each 1.61

Type C-90 Blank Tape Cassette. Records up to 90 minutes. Wt., ¾ lb.  
15 A 8002. 1-11..... Each 2.69 12-Up..... Each 2.42

Type C-120 Blank Tape Cassette. Records up to 120 minutes. Wt., 1 lb.  
15 A 8003. 1-11..... Each 3.65 12-Up..... Each 3.28

## Economy blank Tape Cassettes—record up to 120 minutes

Economy cassettes for low-cost recording of radio and TV programs, dictation, interviews, discussions. Feature trouble-free, non-jamming design and good quality recording tape. Deep lubrication protects tape recorder heads from excessive wear. No-bind construction permits instant-start, smooth operation. Tape is free from microscopic defects such as edge burr, feathered edges, cupping and curling. For use on any cassette tape recorder including: Allied 1100 and 1150; Aiwa 707; Ampex "Micro" Series; Concord

F-100, F-103, F-105; Norelco 150; Wollensak 4100 and 4200; many more. Available below in 60-minute, 90-minute, and 120-minute lengths.

Type C-60 Cassette. Recording time: up to 60-minutes. Wt., ½ lbs.  
15 A 8272..... 1.25

Type C-90 Cassette. Recording Time: up to 90-minutes. Wt., ¾ lbs.  
15 A 8273..... 1.89

Type C-120 Cassette. Recording Time: up to 120-minutes. Wt., 1 lb.  
15 A 8274..... 2.39



- Non-jamming
- No-bind construction
- Easy instant-start

## Organize and protect your cassettes with handy auto/home Tape Butler

- Holds up to 36 tape cassettes
- Snap-fast lids • Cushioned base

**6<sup>95</sup>**

Protect your stereo tape cartridges and cassettes from temperature extremes and physical damage. Tape Butler holds 36 cassettes or twelve 4 or 8-track cartridges. Requires no special installation. Easel mounting and 5-position adjustment fits all cars, foreign and domestic. Installs on consoles, rear hump, top of front seat. Cushioned foam base permits use in home or office, even on polished surfaces. Durable high-impact case with black leather-grain finish. Size, 10½x8½x8½". Shpg. wt., 2½ lbs.  
15 A 8055 X..... 6.95



Snap-fast lids open wide  
for full exposure of tapes  
and fingertip selection



# Scotch

Recording Tape



## "Scotch" professional audio magnetic Recording Tape

- Continuous length, guaranteed splice-free recording tape
- Deep-lubricated for minimum recorder head wear
- Full frequency response and high signal-to-noise ratio

### Sensitive "Dynarange" Series Tape

Choice of professionals. So sensitive it lets you use slow speeds without fidelity loss. 15% longer life; low noise; good hi-frequency response, low run-off. Superior signal/noise ratio—ideal for transcribing from pre-recorded tapes and records. Polyester, except acetate. Av. wt., 1 lb.



Stock No.	Type	Base	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8535	201-6	1½-mil†	600	5"	1.95	1.75
15 A 8504	201-12	1½-mil†	1200	7"	2.99	2.69
15 A 8536	202-6	1½-mil	600	5"	1.99	1.79
15 A 8537	202-12	1½-mil	1200	7"	3.40	3.06
15 A 8538	203-9	1-mil	900	5"	2.83	2.55
15 A 8505	203-18	1-mil	1800	7"	4.90	4.41

### 111 Standard 1½-mil Acetate Tape

For all general recording. International standard of the recording industry—provides flawless sound reproduction at low cost. Silicone lubricated to protect heads. \*NAB-type alum. reels with 3" center hole. Av. wt., 8 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8542	111-1.5	150	3"	.52	.47
15 A 8543	111-3	300	4"	1.35	1.21
15 A 8547	111-6	600	5"	1.69	1.52
15 A 8548	111-12	1200	7"	2.59	2.33
15 A 8549	111-25RO*	2500	10½"	7.20	6.48

### 150 Extra-length 1-mil Polyester Tape

50% more playing time plus extra-strong base. Withstands temperature, humidity extremes. \*NAB-type alum. reels with 3" center hole. High-potency oxide. Av. wt., 12 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8531	150-9	900	5"	2.29	2.06
15 A 8532	150-18	1800	7"	3.99	3.59
15 A 8533	150-36RO*	3600	10½"	9.57	8.61

### 290 Triple-length ½-mil Polyester Tensitized Tape

Extra thin, stretch and break-resistant tape gives more playing time at a minimum cost per foot. For all general recording uses. Shpg. wt., 5" reel, 8 oz.; 7" reel, 1½ lbs.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8304	290-18	1800	5"	4.69	4.22
15 A 8545	290-36	3600	7"	7.99	7.19

### 200 Double-length ½-mil Tensitized Polyester

100% more time—as much as two reels standard tape. Super-strong and stretch resistant. High-potency oxide. Av. shpg. wt., 12 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8500	200-12	1200	5"	3.69	3.32
15 A 8541	200-24	2400	7"	6.49	5.84

### 131 low-print-through 1½-mil Acetate Tape

Reduces print-through to a point below the noise level of most professional machines. Allows long storage. \*NAB-type alum. reels with 3" center hole. Av. shpg. wt., 12 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8313	131-6	600	5"	1.87	1.68
15 A 8534	131-12	1200	7"	2.93	2.64
15 A 8540	131-25RO*	2500	10½"	8.14	7.32

### 120 high-output 1½-mil Acetate Tape

Over 100% higher output level than standard tape for greater dynamic range and freedom from distortion on signal peaks. For sensitive recording applications. On plastic reels. Av. shpg. wt., 10 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8312	120-6	600	5"	1.69	1.52
15 A 8554	120-12	1200	7"	2.59	2.33

### 175 heavy-duty 1½-mil "Tenzar"

Longer-wearing tape shrugs off hard use, rough handling... lasts many times longer than ordinary tape. Made with same wear-resistant high-potency oxide coating proved durable in heavy-duty tapes for high-speed computers. Fights heat, won't dry out in storage nor absorb any moisture; doesn't tear if edges become nicked. Specify color: Clear, Red, Blue, Green or Yellow. Av. shpg. wt., 10 oz.

Stock No.	Size	Feet	1-11, EA.	12-Up, EA.
15 A 8315 C	5"	600	1.60	1.44
15 A 8316 C	7"	1200	2.50	2.25

### 190 extra-length 1-mil Acetate Tape

50% more tape—as much recording time as 1½ standard reels. High-potency oxide for purity of sound. Av. wt., 12 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8550	190-9	900	5"	2.29	2.06
15 A 8552	190-18	1800	7"	3.99	3.56

### "Living Letters" Tape with plastic mailing container

Newest way to send personal notes. Plastic container meets postal regulations as mailer. Hinge, snap closer. †Tensitized. Shpg. wt., 4 oz.



Stock No.	Base	Feet	1-11, EA.	12-Up, EA.
15 A 8300	1½-mil Acetate	150	.69	.62
15 A 8301	½-mil Polyester†	300	1.39	1.25
15 A 8302	½-mil Polyester†	600	1.99	1.79
15 A 8303	Mailer w/empty 3" reel	...	.40	.36

15 A 8501, #11 Address Labels..... Pkg. of 10 for 33¢

### Tape Cassettes for all cassette recorders

Standard tape cassettes for all cassette recorders. Feature high strength, wide frequency response, and high signal-to-noise ratio. Type 271 comes in mailer box; others, plastic display album box. †Recording time, both directions. Shpg. wt., 3 oz.

Stock No.	Type	Feet	†Minutes	1-11, EA.	12-Up, EA.
15 A 8309	271	150	30	1.75	1.58
15 A 8311	271	300	60	2.05	1.85
15 A 8314	272	450	90	2.95	2.65
15 A 8310	273	600	120	3.95	3.56

### "SCOTCH" Video Recording Tape



Helical-scan tape, precision made for superior signal-to-noise ratio and long life. Low-noise oxide for clear pictures, sharp contrast. Type 351 is for Sony, Concord and Panasonic recorders, on 7" plastic self-threading reel in book-style box. Type 357 is for Ampex VR7000 and VR6000, on 9¼" phenolic hub with riveted alum. flanges. \*Minutes. Shpg. wt.: ½-hour tape, 1 lb.; 1-hour, 1½ lbs.

Stock No.	Type	Feet	Dia.	Width	*Min.	1-9, EA.	10-24, EA.
15 A 8320	351	1250	7"	½"	32	21.95	20.85
15 A 8319	351	2400	7"	½"	64	39.95	37.95
15 A 8318	357	1500	9"	1"	31	44.95	42.70
15 A 8317	357	3000	9"	1"	62	59.95	56.95

# A complete Tape selection for every recording need

## Robins Correspondence Tape

High-quality recording tape with impact-resistant plastic mailer and two-sided address card. Mailer meets all postal requirements. 3" reels except \*3 1/4". Material: A-Acetate; P-Polyester; PTP-Polyester Triple Play. 6 oz.



Stock No.	Type	Feet	Base	Time (7 1/2 ips)	EACH
15 A 8183	15HJ	150	1.5 mil. A	7 1/2 Min.	.59
15 A 8184	10H3	225	1. mil. A	11 Min.	.75
15 A 8185	10H3M	225	1. mil. P	11 Min.	.87
15 A 8186	SH3MT	300	.5 mil. P	15 Min.	1.05
15 A 8187	SH3MTS	450	.5 mil. PTP	22 1/2 Min.	1.59
15 A 8188	SH32MTS	*600	.5 mil. PTP	30 Mtn.	1.89

## Robins quadruple-play 1/4-mil Tape

You can get up to 32 hours recording time on this high quality 1/4 mil tensilized Mylar for extra strength. Good frequency response for sharp, bright recordings. Extends recording time of recorders. \*At 1 1/8 ips. Shpg. wt., 6 oz.



Stock No.	Type	Reel	Feet	*Time	EACH
15 A 8196	3C25MT	2 1/2"	500	3 hrs. 20 min.	1.49
15 A 8197	3C32MT	3 1/4"	1100	7 hrs. 20 min.	2.97
15 A 8198	3D5MT	5"	2400	16 hrs.	5.89
15 A 8199	3D7MT	7"	4800	32 hrs.	11.25

## 8-track blank Recording Tape Cartridges

- High signal-to-noise ratio
- Extra-strong polyester base
- Lubricated to cut wear on heads



Quality blank tape cartridges for 8-track cartridge recorders. Contain high-strength polyester tape. Uniform oxide coating for wide-response, high signal-to-noise ratio, outstanding recording results. Lubricated to reduce wear on tape recorder heads. Shpg. wt., 3 oz.

Stock No.	Playing Time	EACH		
		1-5	6-11	12-Up
15 A 8644	64 minutes	1.98	1.79	1.49
15 A 8645	32 minutes	1.69	1.49	1.29

## Scotch Taping Accessories

Type 24 Leaders & Timing Tape. 100'. 15 C 8560 is white; 15 A 8568, yellow. Dispenser package. Wt., 8 oz.  
 15 A 8569. 12-Up. Each .54 1-11. Each .60  
 15 A 8568. 12-Up. Each .54 1-11. Each .60  
 Type 21-10. Leader Tape. White. 1000'. 7" reel. Wt., 8 oz.  
 15 A 8546. 12-Up. Each 2.70 1-11. Each 3.00  
 15 A 8557. Type 41 1/2-S Splicing Tape. Non-run adhesive on one side. 1/2"x150". Dispenser pkg. Wt., 3 oz. Each .39  
 15 A 8577. Type 51-7/2-S. Aluminized Sensing Tape. For recorders with automatic "stop" and "reverse" controls. Adhesive on one side, foil on other. 150" reel. In handy dispenser package. Shpg. wt., 3 oz. Each 1.89

## Scotch self-threading Tape Reel

Eliminates tedious reel threading. Place any tape or leader on reel hub and let recorder do the rest. 7" plastic reel with snap-tight collar. Seals out dust, makes reel self-storing without box. Wt., 8 oz.  
 15 A 8014. T2-Up. Each .90 T-T. Each 1.00 Type PRST-7



## Scotch empty Plastic Reels with Index box

Standard reels in most frequently used sizes. Av. wt., 4 oz.

Stock No.	Reel Size	EACH	
		1-11, EACH	12-Up, EACH
15 A 8559	3"	.17	.15
15 A 8558	5"	.44	.39
15 A 8556	7"	.50	.45

Tape recordists look to Allied for sound values

# BASF extra-strength deluxe Recording Tape for full-range sound



- Luvitherm® or Polyester
- Prestressed
- High response
- Not affected by humidity
- No rub-off
- No print-through
- Colored leaders
- Auto-stop foil



Packed in Plastic Library Box Has Inner Box and Index

Luvitherm unplasticized polyvinyl chloride film or polyester base. Prestressed for exceptional strength and dimensional stability. Luvitherm types are unaffected by humidity and temperature variations, and are extremely supple for superior tape-to-head compliance. Excellent frequency response. Mirror finish—no drop outs, no rub off. No print through. Automatic stop switch foil. Colored leader tape on each end. Packaged in plastic library storage container. Imported.

## 1 1/2-mil Luvitherm Tape (Standard Play)

Stock No.	Feet	Reel	Shpg. Wt.,	EACH	
				1-10	11-Up
15 A 8816	600	5"	10 oz.	1.79	1.59
15 A 8817	1200	7"	1 lb.	2.69	2.39

## 1-mil Luvitherm Tape (Long Play)

15 A 8818	900	5"	9 oz.	2.39	2.09
15 A 8819	1800	7"	18 oz.	3.89	3.49

## 3/4-mil Luvitherm Tape (Double Play)

15 A 8820	300	3"	3 oz.	1.29	1.19
15 A 8821	1200	5"	10 oz.	3.49	3.09
15 A 8822	2400	7"	18 oz.	5.59	4.99

## 1-mil Polyester Tape (Long Play)

15 A 8823	1800	7"	1 lb.	4.79	4.29
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## 1/2-mil Polyester Tape (Triple Play)

15 A 8824	1800	5"	10 oz.	5.49	4.89
15 A 8840	3600	7"	19 oz.	8.49	7.49

## BASF Cassettes in mailer box

Standard cassettes with new low-noise high-quality tape. Full response, high signal-noise ratio. In plastic library/mailer box.



Stock No.	Type No.	Time	Wt., Oz.	EACH	
				1-12	13-Up
15 A 8841	C-60	60 minutes	4	2.21	1.85
15 A 8842	C-90	90-minutes	4	3.64	3.05
15 A 8843	C-120	120 minutes	5	4.48	3.75



# Big selection of pre-recorded Stereo Tapes and Cassettes by popular recording artists



The best of Recordings on standard 4-track 7" reels

Cassettes

## INSTRUMENTALS—EASY LISTENING

Stock No.	Title	Artist	E.A.
15A 8004S	*Dance Beat	Popular Favorite	6.78
15A 8005S	*Broadway Music	Popular Favorite	6.78
15A 8006S	*Moods	Popular Favorite	6.78
15A 8013S	*Moods 2	Popular Favorite	6.78
15A 8016S	Phase 4 Concert Sampler	Popular Favorite	6.78
15A 8017S	Phase 4 Stereo Sampler	Popular Favorite	6.78
15A 8595S	Phase 4 Popular Music Sampler	Popular Favorite	6.78
15A 8024S	Gems Forever	Manlovani	5.93
15A 8025S	Golden Hits	Manlovani	6.78
15A 8026S	The Manlovani Touch	Manlovani	6.78
15A 8027S	The Sound of Boots	Boots Randolph	5.18
15A 8028S	Bloomin' Hits	Paul Mauriat	6.78
15A 8029S	Mystic Moods of Love	Mystic Moods Orchestra	6.78
15A 8034S	Prevailing Airs	Paul Mauriat	6.78
15A 8037S	Scarborough Fair	Andre Kostelanetz	5.93
15A 8039S	*Academy Award Songs	Henry Mancini	8.59
15A 8695S	*Concert Sound—Encore/More Concert	Henry Mancini	8.59
15A 9043S	Special Request	Jackie Gleason	5.93
15A 8044S	Whipped Cream and Others	Tijuana Brass	6.78
15A 8045S	Going Places	Tijuana Brass	6.78
15A 8075S	Memories	Manlovani	6.78
15A 8076S	Rhapsodies for Young Lovers	Midnight String Quartet	6.78
15A 8091S	Love Rhapsodies	Midnight String Quartet	6.78
15A 8098S	Nashville Saxophones	Billy Vaughn	6.78
15A 8099S	Memories	Lawrence Welk	6.78
15A 8731S	Brazil '66	Sergio Mendes	6.78
15A 8106S	Reach Out	Burt Bacharach	6.78
15A 8110S	Fool on a Hill	Sergio Mendes	6.78
15A 8112S	Beat of the Brass	Tijuana Brass	6.78
15A 8115S	Do You Know the Way to San Jose	Baja Marimba	6.78
15A 8117S	Best of Wes Montgomery	Wes Montgomery	6.78
15A 8119S	Livin' It Up	Jimmy Smith	6.78
15A 8121S	Road Song	Wes Montgomery	6.78

## CLASSICAL

15A 8123S	Beethoven Symphony #3	Van Karajan	6.78
15A 8129S	Beethoven Symphony #4 & 5	Van Karajan	7.63
15A 8132S	Beethoven Symphony #2 & 6	Van Karajan	7.63
15A 8133S	Beethoven Symphony #1 & 7	Van Karajan	7.63
15A 8137S	*Beethoven Symphony #8 & 9	Van Karajan	10.39
15A 8138S	*Brahms Symphony #1 & 2	Van Karajan	10.39
15A 8139S	*Brahms Symphony #3 & 4	Van Karajan	10.39
15A 8162S	Tchikovsky Symphony #5	Van Karajan	6.78
15A 8163S	Yehaikovsky/1812/Nutcracker	London Festival Orch. (Sharples)	6.78
15A 8171S	Gershwin/Rhapsody in Blue/American in Paris	London Festival Orch. (Black)	6.78
15A 8182S	Switched on Bach	Carlos/Folkmen	6.78
15A 8335S	Nine Beethoven Symphonies	London Sympn, Krips	18.95
15A 8191S	Mahler #9	L. Bernstein	10.39

## Popular Stereo Albums pre-recorded on compact Tape Cassettes

### INSTRUMENTALS—EASY LISTENING

Stock No.	Title	Artist	E.A.
15A 8444S	Phase IV Stereo Sampler	Various Artists	5.93
15A 8511S	Golden Hits	Manlovani	5.39
15A 8445S	The Manlovani Sound	Manlovani	5.39
15A 8447S	The Sound of Boots	Boots Randolph	5.39
15A 8448S	Bloomin' Hits	Paul Mauriat	5.39
15A 8449S	Mauriat Magic	Paul Mauriat	5.39
15A 8502S	Whipped Cream & Others	Tijuana Brass	5.39
15A 8503S	Going Places	Tijuana Brass	5.39
15A 8507S	Brazil '66	Sergio Mendes	5.39
15A 8508S	Reach Out	Burt Bacharach	5.39
15A 8515S	Fool on a Hill	Sergio Mendes	5.39
15A 8516S	Beat of the Brass	Tijuana Brass	5.39
15A 8519S	A Day in the Life	Wes Montgomery	5.39
15A 8524S	Down Here on the Ground	Wes Montgomery	5.39

## JAZZ

15A 8526S	Best of Wes Montgomery	Wes Montgomery	5.39
15A 5829S	Livin' It Up	Jimmy Smith	5.39

## CLASSICAL

15A 8530S	Tchikovsky/1812 Overture/Nutcracker	London Festival Orch. (Sharples)	5.39
15A 8544S	Gershwin/Rhapsody in Blue/American in Paris	London Festival Orch. (Black)	5.39

## VOCALS

Stock No.	Title	Artist	E.A.
15A 8201S	Promises, Promises	Dionne Warwick	5.18
15A 8215S	Late Again	Peter, Paul & Mary	6.78
15A 8230S	Sinatra's Greatest Hits	Frank Sinatra	7.63
15A 8237S	Gentle on My Mind	Dean Martin	6.78
15A 8240S	*Who Will Answer/More I Cannot Wish You	Ed Ames	8.59
15A 8250S	Gentle on My Mind	Glen Campbell	5.93
15A 8257S	Wichita Lineman	Glen Campbell	5.93
15A 8258S	Galveston	Glen Campbell	5.93
15A 8259S	A Happening in Central Park	Barbra Streisand	5.93
15A 8260S	Valley of the Dolls	Dionne Warwick	5.18
15A 8261S	Greatest Hits Vol. I	Dean Martin	6.78
15A 8264S	Help Yourself	Tom Jones	5.18
15A 8265S	Goin' Out of My Head	The Lettermen	5.93
15A 8266S	Live	Tom Jones	5.18

## SOUND EFFECTS

15A 8267S	Sound Effects in Super Stereo, Vol. 3	Miscellaneous Effects	6.78
15A 8268S	*Sound Effects in Super Stereo, Vol. 3	USAF Airpower Aboard Carrier Enterprise	8.59
15A 8305S	Sound in the 8th Dimension	Miscellaneous Effects	6.78

## SOUNDTRACKS

15A 8306S	Hair	Original Cast	7.63
15A 8308S	Sound of Music	Original Track	8.59
15A 8401S	Funny Girl	Original Track	8.59
15A 8402S	Finian's Rainbow	Original Track	7.63
15A 8403S	Man of Mission Impossible	Lalo Schiffrin	6.78
15A 8404S	Musik La Mancha	Original Cast	7.63
15A 8405S	Dr. Zhivago	Original Track	6.78
15A 8409S	Space Odyssey 2001	Original Track	7.63
15A 8410S	Camelot	Original Track	7.63

## TEEN FAVORITES

15A 8414S	Beggars Banquet	Rolling Stones	5.18
15A 8478S	TCB	Supremes & Temptations	5.18
15A 8497S	*The Beatles	The Beatles	10.38
15A 8551S	Yellow Submarine	The Beatles	5.93
15A 8555S	Greatest Hits	The Association	6.78
15A 8560S	Ball	Iron Butterfly	5.18
15A 8660S	*Odessa	Bee Gees	8.59
15A 8578S	Jin-A-Gadda-Da-Vida	Iron Butterfly	5.18
15A 8588S	Greatest Hits	Rascals	6.78
15A 8591S	Blood Sweat & Tears	Blood Sweat & Tears	5.93
15A 8593S	Goodbye	Cream	5.18
15A 8594S	Parsley, Sage, Rosemary & Thyme	Simon & Garfunkel	5.93

## VOCALS

Stock No.	Title	Artist	E.A.
15A 8617S	Greatest Hits Vol. I	Dean Martin	5.39
15A 8618S	Galveston	Glen Campbell	5.39
15A 8620S	The Sea	Antia Kerr & The San Sebastian Strings	5.39

## SOUNDTRACKS

15A 8621S	Man of La Mancha	Original Cast	6.29
15A 8513S	Dr. Zhivago	Original Track	6.29
15A 8623S	Space Odyssey 2001	Original Track	6.29
15A 8624S	Finian's Rainbow	Original Track	6.29

## POPULAR

15A 8641S	In-A-Gadda-Da-Vida	Iron Butterfly	5.39
15A 8642S	*Beatles	The Beatles	10.39
15A 8643S	The Second	Steppenwolf	5.39
15A 8646S	Wheels of Fire Vol. II (Live!)	Cream	5.39
15A 8647S	Soul '69	Aretha Franklin	5.39
15A 8648S	Freedom Suite Pt II	The Rascals	5.39
15A 8649S	The Rascals' Greatest Hits/Time Peace	The Rascals	5.39
15A 8656S	Bayou Country	Creedence Clearwater	5.39
15A 8658S	Lovin' Things	Revival	5.39
15A 8668S	TCB	Grassroots	5.39
15A 8669S	Wichita Lineman	Supremes/Temptations	5.39
15A 8669S		Glen Campbell	5.39

\*Indicates twin-pack, equal to two LP's

# Robins Cassette/8-Track Accessories



## Splicers, Lubricants and Cleaning Accessories

**A** TCM-1 Cassette Maintenance and Storage Case. Holds 10 cassettes. With head demagnetizer, three-way head clean and tape test, 240 color-coded index spots, log book. 15 A 8125. Wt., 1 1/4 lbs. . . . . 9.98

**B** TS-115 Cassette Tape Splicer. "Cut-N-Splice" economy model. Cuts at 45° angle. Includes 25 self-sticking splicing patches. 15 A 8135. Wt., 5 oz. . . . . 2.99

**C** TS-215 Cassette Tape Splicing Block. Edits and repairs .150" tapes. Strips in sound effects and passages. Cuts at 45° or 90° angle. Plastic case, cutting blade, and 25 splicing patches. 15 A 8140. Wt., 5 oz. . . . . 5.98

**D** THS-1 Head-Kleen Spray. 4-oz. of cleaning formula in a convenient aerosol container remove oxide and grime from cassette and cartridge heads. Has extension nozzle for hard-to-reach heads. 15 A 8760. Wt., 6 oz. . . . . 1.25

Type TT-15 Tape Splicing Patches. (Not illus.) 100 pre-cut patches. 15 A 8145. Wt., 2 oz. . . . . 99¢

**E** TK-3 Cassette and Cartridge Head-Kleen Kit. 2 oz. bottles of head cleaner and head and guide lubricant. 25 extra-long swabs for cleaning and lubricating hard-to-reach parts of equipment for greatly improved tape fidelity. 15 A 8146. Wt., 8 oz. . . . . 1.49

## Cassette and 8-Track Erasers

**F** TMC-2 Cartridge Eraser. Restores tape in seconds. For 117 VAC. 15 A 8149. Shpg. wt., 5 1/2 lbs. . . . . 17.99

**G** TMC-1 Cassette Eraser. Erases bulk tape faster and better. For 117 VAC. 15 A 8150. Shpg. wt., 3 lbs. . . . . 11.99

TD-15 Auto Cartridge Demagnetizer. (Not illus.) Plugs into car cigarette lighter. 6-12 VDC. 15 A 8152. Shpg. wt., 1 lb. . . . . 9.98

**H** TD-12 Home Cartridge Demagnetizer. Restores tape to original quality. 117 VAC. 15 A 8155. Shpg. wt., 14 oz. . . . . 7.98

**J** TD-10 Cassette Demagnetizer. Has built-in pilot light. 110 V, 50-60 Hz AC. 15 A 8161. Shpg. wt., 8 oz. . . . . 4.98

## Indexing, Mailing and Storage Accessories

**K** TK-35 Cassette & Cartridge Color-Code Kits. Catalog your tapes. 120-page log book, 240 index spots in 2 sets, 120 self-stick title labels in 5 colors, writing pen. 15 A 8167. Wt., 1 1/4 lbs. . . . . 2.98

**L** TJ-12 Plastic Cassette Dust Caps. 10 caps protect tape openings from dust, grime and damage. 15 A 8190. Wt., 4 oz. . . . . 79¢

TJ-10. Above, but for cartridges. 15 A 8192. Wt., 5 oz. . . . . 99¢

**M** TCJ-18 Plastic Cassette Dust Protectors. 20 clear plastic bags protect against dust and grime. 15 A 8193. Wt., 2 oz. . . . . 69¢

TCJ-20. Above, but for cartridges. 15 A 8194. Wt., 3 oz. . . . . 69¢

**N** TCL-20 Cassette Color-Code Replacement Title Labels. Package of 20 labels in 5 basic colors. 15 A 8195. Wt., 4 oz. . . . . 89¢

**P** TCL-30 Cassette Owner-Identification Labels. 30 printed labels: "Property of \_\_\_\_\_" Apply to cassette end for quick identification. Color-coded. 15 A 8202. Wt., 4 oz. . . . . 89¢

**R** TC-3 Deluxe Permanent-Storage Cassette Canisters. 3 break-resistant plastic covers. See-thru cover for quick identification. Built-in stops prevent tape slack, unwinding. 15 A 8238. Wt., 6 oz. . . . . 99¢

**S** TC-4 Reuseable Cassette Mailing Canisters. Package of 3. Impact-resistant plastic. Built-in tape stops. Self-stick address labels. 15 A 8239. Wt., 8 oz. . . . . 79¢

TML-20 Replacement Cassette Mailer Labels. (Not illus.) Package of 20 self-stick labels for addressing TC-4 and other cassette mailers. 15 A 8203. Wt., 4 oz. . . . . 69¢

**T** TCB-18 Cardboard Cassette Mailers. 18 ready-to-address mailers. Stops prevent tape slack, unwinding. 15 A 8235. Wt., 8 oz. . . . . 99¢

**W** TSA-12 Book-Type Cassette Storage Album. Holds 12 cassettes neatly in recessed compartments. 15 A 8204. Wt., 8 oz. . . . . 1.98

**X** TL-80 Cassette or Cartridge Index Spots. 240 self-stick spots. 2 sets, numbered 1-24 in 5 colors. Index tapes and matching canisters. 15 A 8206. Wt., 12 oz. . . . . 89¢

**Y** TCS-6 Modular Cassette Storage Unit. Holds 12 tapes. Mount on wall or place on bookshelf. Stand on end or stack. Walnut grain vinyl. 15 A 8209. Wt., 14 oz. . . . . 1.98

**Z** TSC-8. Above, but for cartridges. 15 A 8219. Wt., 1 lb. . . . . 2.98

**AA** TCC-6 Cassette Carrying & Storage Case. Holds 12 tapes. Log book. 15 A 8299. Wt., 12 oz. . . . . 3.89

## Recorder "Tune-Up" Accessories

**BB** TCW-2 Cassette Tape Tension Winders. Pair. For taking-up slack. 15 A 8326. Wt., 1 oz. . . . . 89¢

**CC** TSC-9 Cassette Test Strobe. Built-in strobe tape and light check recorder's speed. 110 VAC. 15 A 8327. Wt., 5 oz. . . . . 3.69

TSC-8 8-track Cartridge Test Strobe. (Not illus.) As above, 110 VAC. 15 A 8329. Wt., 7 oz. . . . . 4.49

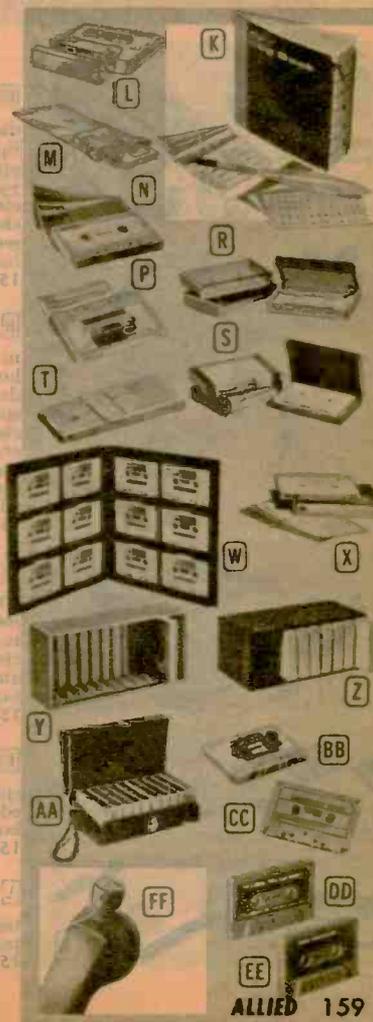
**DD** THC-6 3-way Combination "Test-N-Clean" Cassette. Cleans heads. Tests head alignment and balance. 15 A 8330. Wt., 2 oz. . . . . 1.69

THC-8 3-way 8-Track "Test-N-Clean" Cartridge. (Not illus.) As above. 15 A 8331. Wt., 5 oz. . . . . 1.69

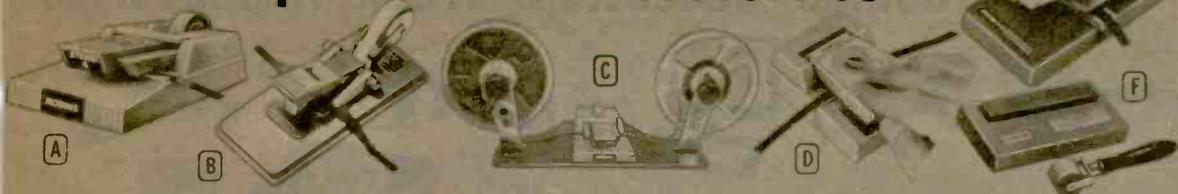
**EE** THC-7 Cassette Head-Kleen Tape. Removes oxide, other particles. 15 A 8333. Wt., 2 oz. . . . . 1.49

## Telephone-pickup Microphone

**FF** TRP-4 Cassette Telephone Pick-Up. Attaches by suction to phone to record talks. Plugs into recorder. 15 A 8334. Wt., 3 oz. . . . . 2.69



# Robins Tape Recorder Accessories



**A** TS-8D Deluxe Stereo Tape Splicer. Cuts diagonally. Trims sides of splices. "See-thru" windows show operating positions. Replaceable cutter, blade centering adjustment. Has integral tape dispenser with 100' roll  $\frac{1}{2}$ " splicing tape. Wt., 1 lb.  
15 A 8142..... 7.99

**B** TS-7S Stereo Tape Splicer. Similar to TS-8D. Dispenser has 100' roll 8" splicing tape. 12 oz.  
15 A 8220..... 5.99

TS-7J Junior Stereo Splicer. (Not illus.) As above, less dispenser, tape.  
15 A 8221. Wt., 8 oz..... 4.99

**C** TK-9 Tape Editing Workshop. Winders for reels to 7". Stereo splicer has calibrated tape timing/editing scale. Splicing tape, editing pencil, guide book included. 7x14x5  $\frac{1}{2}$ ".  
15 A 8348. Wt., 2 lbs..... 14.99

**D** TS-6 Deluxe "Cut-N-Splice". Cuts tape at 30°, 45° or 90°. 25 self-stick patches in splicer tray.  
15 A 8349. Wt., 5 oz..... 2.99

**E** TSV-50 Heavy-Duty Video Tape Splicer. For  $\frac{1}{2}$ " wide tape.  
15 A 8222. Wt., 1  $\frac{3}{4}$  lbs..... 12.95

TSV-100 Heavy-Duty Video Tape Splicer. Same as above, but for 1" wide tape.  
15 A 8223. Wt., 1  $\frac{3}{4}$  lbs..... 12.95

**F** TS-14 Professional-Quality Studio Splicing Blocks. Cut tape at 45° or 90°. Burnishing plate and roller produce well-bonded splices. With cutting blade and 100 patches.  
15 A 8337. Wt., 3 lbs..... 14.98

Splicing Tape. (Not illus.) 2 oz.

Stock No.	Type	Width	Length	Each
15 A 8364	TST-235	$\frac{1}{4}$ "	300'	69¢
15 A 8365	TST-376	$\frac{3}{4}$ "	375'	69¢
15 A 8366	TST-501	$\frac{1}{2}$ "	250'	69¢

## Tape Splicing Patches for Above

15 A 8225. Type TT-247. Pkg. of 60  $\frac{1}{2}$ " patches for TSV-50 splicer. Shpg. wt., 3 oz..... 99¢

15 A 8224. Type TT-248. 48 1' patches for TSV-100 splicer. 3 oz..... 99¢

15 A 8368. Type TST-233. Pkg. of 75 for TS-6 splicer. Wt., 2 oz..... 79¢

TT-16 Color-Coding Leader Tape. (Not illus.) Five 100' rolls in 5 colors: red, blue, green, yellow and white. On  $\frac{2}{3}$ " reels. Wt., 14 oz.  
15 A 8248..... 2.98

TT-101 Economy-Size Professional White Leader Tape. (Not illus.) 1200 ft., 1.5 mil on 7" reel.  
15 A 8753. Wt., 1 lb..... 2.99

## Tape Accessory Kits

**G** TK-8DLX Deluxe Tape Accessory Kit. Has TS-8D stereo splicer that cuts diagonally, trims sides of splices. Splicer's "see-thru" windows show operating positions. Contains roll of  $\frac{1}{2}$ " splicing tape, tape threader, head cleaner, head lubricant, tape cleaning reel, tape clips, title labels for reels, reel holders, and tape splicing guide book. Shpg. wt., 1  $\frac{1}{2}$  lbs.  
15 A 8189 X..... 12.98

**H** TK-12 Professional Tape Accessory Kit. Specially-assembled kit for use in language lab, studio, or serious home tape recording. Contains TS-8D deluxe stereo tape splicer, 6 rolls  $\frac{1}{2}$ " splicing tape, tape threader, tape cleaning cloths, lubricant, head cleaner, tape clips, 150 title labels, tape strobe and light kit. TD-6 demagnetizer, and TM-99 bulk eraser. U.L. Listed. For 117 VAC.  
15 A 8213 X. Wt., 14 lbs..... 52.50

**J** TK-30 Deluxe Tape Editing Kit. Has TS-6 splicer, cuts at 30°, 45°, or 90°. Contains 25 splicing patches, 2  $\frac{1}{2}$ " reel of fully-impregnated white leader tape ( $\frac{1}{4}$ x100"), 12 tape clips, tape cleaning cloth, 3" reel of Tape-Kleen, and 12 color-coding title labels for tapes. Shpg. wt., 8 oz.  
15 A 8341..... 5.98

**K** TK-19 Tape Editing Kit. Contains TS-5 "Cut-N-Splice" metal tape splicing block, 25 splicing patches, 3 editing pencils, and tape editing guide book. Shpg. wt., 5 oz.  
15 A 8229..... 2.98

**L** TK-14 Recorder Maintenance Kit. Contains head demagnetizer, 2 tape-cleaning cloths, and 3" reel of tape cleaner. Wt., 12 oz.  
15 A 8245..... 4.49

## Cleaners and Lubricants

TLA-1 Tape-Kleen/Lubricant Stick. Clean, lubricate both sides.  
15 A 8758. Wt., 5 oz..... 2.99

TLA-2 Tape Lubricant Stick. Lubricates both sides of tape.  
15 A 8759. Wt., 3 oz..... 1.99

TK-6 Tape Head Cleaner/Lubricant. Two oz. bottle of each.  
15 A 8181. Wt., 6 oz..... 1.29

MSW-125 "Swabbies". 125 cotton swabs for cleaning and oiling.  
15 A 8342. Wt., 6 oz..... 79¢

TBB-1 Blower/Brush. Squeeze blower and soft camel-hair brush.  
15 A 8343. Wt., 4 oz..... 1.29

THS-1 Head-Kleen Spry. 4 oz. aerosol spray removes oxide, dirt.  
15 A 8760. Wt., 6 oz..... 1.25

TC-75 Tape Clips. 75 plastic clips prevent tape from unwinding.  
15 A 8376. Wt., 8 oz..... 89¢

Tape-Kleen. Chemical cloth cleans/lubricates heads, guides. 4 oz.

15 A 8205. THC-5. 5" Reel..... 2.19

15 A 8233. THC-3. 3" Reel..... 1.19

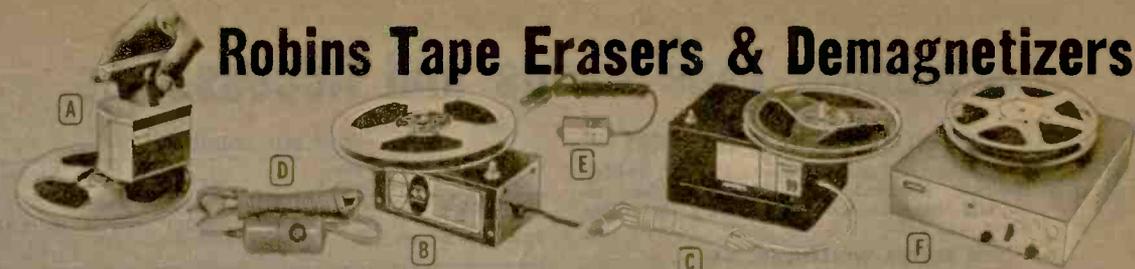
THC-12 Quick-Kleen Felt Pen. Pocket-clip pen cleans oxide, dirt.  
15 A 8347. Wt., 3 oz..... 99¢

TG-18 Disposable Tape-Clean-Lube Cloths. 18 silicone-treated cloths.  
15 A 8351. Wt., 6 oz..... 99¢

TK-7 Recorder Care Kit. Two oz. bottles of head cleaner, head and guide lubricant, tape-drive oil. 50 extra-long cotton swabs.  
15 A 8352. 1  $\frac{1}{2}$  lbs..... 2.49

TK-3 Recorder Head-Kleen Kit. Two oz. bottles of head cleaner and head and guide lubricant. Plus 25 extra-long cleaning swabs.  
15 A 8767. Wt., 8 oz..... 1.49

# Robins Tape Erasers & Demagnetizers



**A** TM-88 Hand-Held Bulk Tape Eraser. For  $\frac{1}{2}$ " tape on any size reel. Erase tape in just seconds by moving unit over each side of reel. Size,  $4\frac{1}{2} \times 2\frac{1}{2} \times 4\frac{1}{4}$ ". 110 VAC. Shpg. wt., 4 lbs. 15 A 8400..... 10.99

**B** TM-44 Bulk Tape Eraser. Erases tapes in seconds to below normal recorder erase head level. Size,  $5\frac{1}{2} \times 2\frac{1}{8} \times 3\frac{1}{8}$ ". For  $\frac{1}{4}$ " tape, reels to 7". 110 V, 50-60 Hz AC. Wt., 4 lbs. 15 A 8242..... 11.49

**C** TM-99 Professional-Quality Bulk Tape Eraser. For tape  $\frac{1}{2}$ " wide, reels to  $10\frac{1}{2}$ ". Erases 3-6 dB below equipment erase head level in just seconds. Also erases sound from magnetic-stripped 8 and 16mm film. Size,  $5\frac{1}{2} \times 6\frac{3}{4} \times 2\frac{1}{4}$ ". U.L. Listed. For 110 V, 50-60 Hz AC. 15 A 8114. Wt.,  $8\frac{1}{2}$  lbs..... 29.95

**D** TD-6 Professional Demagnetizer. Leading manufacturers of tape recording equipment recommend that recorder heads be demagnetized after 15-20 hours of use. During normal use of recorders, tape heads build-up magnetism causing noisy tapes and loss of fidelity. Demagnetizer removes magnetism from heads for improved performance. Size,  $4\frac{1}{2} \times 1\frac{1}{4}$ " diameter. U.L. Listed. For 110 V, 50-60 Hz AC. Shpg. wt., 1 lb. 15 A 8154..... 7.29

**E** Deluxe Head Demagnetizer. Quickly eliminates noisy tapes and fidelity loss due to build-up of magnetism in recorder heads. Should be used after every 15-20 hours of recorder use. Size,  $3\frac{1}{2} \times 1\frac{1}{4}$ " diameter. For 110 V, 50-60 Hz AC. Shpg. wt., 3 oz. 15 A 8127..... 3.99

TM-77 Bulk Tape Eraser. (Not illus.) Designed for  $\frac{1}{2}$ " tape, reels to 7". Erases 2-4 dB below normal recording-equipment erase head levels in just seconds. Rapidly erases sound from magnetic-stripped 8 and 16mm film. Size,  $2\frac{1}{2} \times 3\frac{3}{4} \times 6\frac{1}{4}$ ". For 110 V, 50-60 Hz AC. Shpg. wt., 5 lbs. 15 A 8130..... 16.75

**F** TM-100 Professional Heavy-Duty Bulk Eraser. Specially designed for lab, studio or demanding home use. Handles audio/visual tapes to 1" wide. Erasure: 50-90 dB below saturation level. For reels to  $10\frac{1}{2}$ ". Safety features include: overheat indicator, individually fused circuits, heavy-duty line cord. Duty cycle: 5 min. on/15 min. off. Size,  $3\frac{1}{2} \times 6 \times 8$ ". 110 V, 50-60 Hz AC. Wt., 10 lbs. 15 A 8244..... 63.00

## High-quality Tape Reels, Storage, and Marking Accessories

Empty Plastic Reels for Every Recording Need. Most-popular sizes. Indicators in type column: Y-yellow, B-blue, \*-assorted colors, †-low torque, (V)- $\frac{1}{2}$ " video tape.

Stock No.	Mfr's Type	Size	Qty.	PER PKG.
15 A 8356	TR20-6	2"	6	.69
15 A 8357	TR25-6	2 $\frac{1}{2}$ "	6	.69
15 A 8358	TR30-6	3"	6	.69
15 A 8359	TR32-4	3 $\frac{1}{2}$ "	6	.69
15 A 8382	TR36-6*	3 $\frac{1}{2}$ "	6	.79
15 A 8360	TR40-4	4"	4	.79
15 A 8361	TR50-2	5"	2	.69
15 A 8390	TR51-2Y	5"	2	.79
15 A 8391	TR51-2B	5"	2	.79
15 A 8393	TR53-2†	5"	2	1.05
15 A 8362	TR70-2	7"	2	.75
15 A 8396	TR71-2Y	7"	2	.99
15 A 8397	TR71-2B	7"	2	.99
15 A 8363	TR74-2†	7"	2	1.29
15 A 8762	TRV-75(V)	7"	1	1.49

TCP-12 Deluxe Molded Individual Tape Safes. For 7" tapes. Hinge covers. Safe bottoms have dovetail grooves to fit metal wall-mount bracket included. Set of 12. Less tape, reels. 15 A 8102. Wt., 8 lbs..... 11.89

Tape Storage Vaults. Metal, durable enamel finished. Ribs on cans nest for stacking. Less reels. In pairs. 15 A 8207. TC-7. 7" cans. 1 lb... 2/1.19  
15 A 8208. TC-5. 5" cans. 14 oz... 2/79¢

RMC-6 Plastic Tape Mailing Canisters. High impact, reusable. For reels to  $3\frac{1}{4}$ ". Includes 2-sided address cards. Shpg. wt., 5 oz. 15 A 8255..... Pkg. of 6 for 1.29

TL-5 Color-Coded Tape Box Ends. 30 self-stick, textured book binding strips in 6 colors. Wt., 5 oz. 15 A 8246..... 1.98

TL-240 Color-Coded Title Labels. 240 labels in 6 colors: red, blue, green, orange, yellow and white. Self-stick,  $2\frac{1}{2}$ ". For quick identification of canisters, reels, boxes, etc. 15 A 8249. Wt., 2 oz..... 1.29

TK-1 Tape Log Kit. Color-code and catalog your tapes. Includes 240 title labels, 120-page log book, 72 tape-end tabs, 48 numbered cueing spots, 30 box ends, all self-stick in 6 colors, feather writing pen. 15 A 8247. Wt., 14 oz..... 5.29

TT-246 Color-Coded Index, Cueing Spots. Self-stick spots numbered 1-8. Package of 48 in 6 colors: blue, green, red, orange, yellow and white. Index and color-code recorded subjects on reel for rapid identification. 15 A 8252. Wt., 1 oz..... .99¢



## Recorder Repair Devices and Shut-off Unit

**H** TW-1 Precision Tape Strobe. All-metal, chrome-plated strobe with precision-machined needle bearings. Accurately tests speed of  $7\frac{1}{2}$  and  $3\frac{3}{4}$  ips recorders for reduction of wow and flutter. Shpg. wt., 1 lb. 15 A 8116..... 6.99

**J** TSO-1 Automatic Tape Shut-Off Unit. Attaches to side of recorder. Recorder plugs into unit. Shut-off arm gently contacts tape. When tape end has been played, the unit automatically shuts-off recorder. 3 amp rated. For 110 VAC. 15 A 8353. Wt., 1 lb..... 4.95

**K** TVU-1 Professional VU Meter. Prevents overload or recording at too low level. Two-color scale. Modulation: 0-100%. VU: -20 to +3 dB. 2700 ohms. Use with high or low-Z circuit.  $2 \times 1\frac{1}{16}$ " with  $\frac{1}{8}$ " terminals. 15 A 8761. Wt., 6 oz..... 3.99

**L** TTG-5 Tone Generator-Cueing Device. Mechanically "prints" a continuous tone of any length on tapes. 15 A 8371. Wt., 6 oz..... 19.95

TAT-100 Azimuth Head-Alignment Tape. (Not illus.) 100' tape on  $2\frac{1}{2}$ " reel; 6 kc steady tone for head alignment. 15 A 8373. Wt., 3 oz..... 12.99

## Phone Pick-Up Mikes

**M** TRP-2 Phone Pick-Up. Attaches by suction cup. 5' cable. Less plug. 15 A 8354. Wt., 6 oz..... 2.29

**N** TB-3 Solid-State Beeper and Phone Pick-Up. Integrated circuit. Signal generator/timer and high-efficiency ferrite core induction coil. Injects 1 kc "beeps" into phone line and recorder at 15 second intervals. Has on/off switch and 8' cables to phone and recorder. Fastens to phone by spring. For 110 VAC. Wt., 18 oz. 15 A 8374..... 19.95

# Nortronics Tape Heads and Accessories



## REPLACEMENT HEADS FOR TAPE RECORDERS

In function column R means Record, P-Play, E-Erase. †Indicates mounting kit when required; see Quik-Kit table (right) for prices. Shpg. wt., 1 lb.

### FOR REVERE, WOLLENSAK, 3-M

Stock No.	Mfr's Type	Function	Models	↑	EACH
15 A 8650 S	*RPE-20 or *RPE-23	RPE	10, 11, 15-27, 200, 202, 700, 700D, 750, 752, 762, 800, 800D, 862, 850	18.60	
15 A 8651 S		RPE	852, 900, 905, 925, 926, 1000, 1005, 1025, 1026, 1100, 1105, 1125, 1126, 1200, 1205, 1225, 1226, 1400 (B, C, C, E), 1405, 1425, 1426, 1500, 1520, 1570, 1600, 1700, 1800, 2000, 2005, 2025, 7805, 7000 Series	15.60	
15 A 8651 S	RPE-23	RPE	100, 300, 301, older 2TR mono	15.60	
15 A 8598 S	RPE-21	RPE	1500(SS, AV, D)	22.80	
15 A 8599 S	7601	RP	11-4, 204-4, 1440 (B, C, D, E) 1515-4, 1616-4, 1818	28.50	
15 A 8603 S	6002	RPE	1280, 1281	33.00	
15 A 8599 S	7601	RP	1580, 1780 (B, C, D, E), 1980 (B, C, D, E) 1981 (B, C, D, E), 2200, 2205, 2225	28.50	
15 A 8665 S	6005	RPE	5200, 5250, 5280, 5300	33.00	

\*RPE-20 Replaces original Nortronics head—RPE-23, original Shure.

### FOR SONY

Stock No.	Mfr's Type	Function	Models (May Be Prefixed TC or SSA)	↑	EACH
15 A 8854 S	1000	RP	262 (D, SL), 263 (D, E), 464 (CS, D, SL)	102	21.00
15 A 8854 S	1000	RP	300, 500, 501, 521	119	21.00
15 A 8607 S	1007	RP	200, 250, 260, 350	102	21.00
15 A 8711 S	1202	P	777S-4, 600	102	28.20
15 A 8609 S	1210	R	263-(D, E), 350, 600, 777S-4	102	28.20
15 A 8709 S	1401 E	R	260, 105, 200, 250,	306	12.00
15 A 8610 S	1402 E	R	262 (CS, D, SL), 300, 500, 501, 521, 777S-4	305	12.00
15 A 8610 S	1402 E	R	263, (D, E), 600	306	12.00
15 A 8611 S	2001	RP	101	102	15.90
15 A 8612 S	3602	E	101	305	8.00
15 A 8682 S	3600	E	102	19	8.00
15 A 8613 S	3002	RP	123	.....	8.40
15 A 8706 S	3000	RP	135, 111	.....	8.40
15 A 8697 S	3001	RP	905A, 801A, 102 Cement to mount	.....	8.40
15 A 8613 S	3002	RP	900	21	8.40

### FOR WEBCOR

Stock No.	Mfr's Type	Function	Models; some prefixed CP, EP, LT, PB, TP	↑	EACH
15 A 8066 S	7403	RP	2001-(1, 1A, 1B, 1C), 2002, 2009, 2203, 2206-1, 2800 & 2900 series	.....	10.50
15 A 8280 S	3100	RP	2200 (-1), 2202 (-1), 2300 (-1), 2302 (-1), 2303 (-1), 2400-1, 2402 (-1), 2500 (-1, 10), 2502 (-1, 10) 5400	.....	8.40
15 A 8854 S	1000	RP	2008, 2208, 2323 (-1, 1A)	.....	21.00
15 A 8345 S	7500	E	For all models above	.....	8.00
15 A 8854 S	1000	RP	2007, 2107 (-1), 2150, 2007 (-1), 2208-1, 2250 (-1), 2328 (-1), 2356 (-1, 1A, 1B), 2357 (-1), 2360 (-1), 2366-1B, 2391, 3392, 3393, 4007-1, MUSIC MAN	.....	21.00
15 A 8610 S	1402 E	R	For all models above	18	12.00
15 A 8442 S	6003	RPE	2520-1, 2522-1, 2456 (-1), 2457 (-1), REGENT	.....	33.00
15 A 8474 S	7400	RP	For all models utilizing replaceable pole piece	.....	6.00

### FOR MICHIGAN MAGNETICS

Stock No.	Mfr's Type	Function	Models	↑	EACH
15 A 8697 S	3001	RP	3120-101, 3L205	20	8.40
15 A 8674 S	1800	RP	2835741, 5B20LS, 7B17, 10B20LS	38	23.30
15 A 8665 S	6005	RPE	2N2Q10B-1	38	33.00
15 A 8705 S	1009	RP	69NR2Q-B-1, 300, 5Q08, 5Q8, 5Q2T17 (105, 300), 5P17-300, 7H17, 7H40, 7L17 (-108), 10L17-104	.....	21.00
15 A 8706 S	3000	RP	90E3, 90TEJ, 12ER2Q-1, 12EQ, 18HE6, 9EQ3	20	8.40
15 A 8709 S	1401 E	R	18HE6, 9EQ3	48	12.00
15 A 8733 S	6009	RPE	5AV17, 6AV17-200, 4NV2Q10B-1	38	33.00

### FOR BELL SOUND

Stock No.	Mfr's Type	Function	Models	↑	EACH
15 A 8706 S	3000	RP	171, 200, 201, 202, 203, 205-OB, 206, 207-S, 208, 210	20	8.40
15 A 8734 S	3601	E	All above except 203, 205-OB, 207-S, 208	18	8.00
15 A 8705 S	1009	RP	220, 223, 228, 233, 238, 238-A, 300, 320, 337, 347, 401, 402, 403, 404, 405, 406, 601, 603	38	21.00
15 A 8709 S	1401 E	R	All above except 223, 228	18	12.00
15 A 8603 S	6002	RPE	360, 367 deck with 360 Amp	38	33.00
15 A 8738 S	7600	P	Use with above	20	21.00
15 A 8651 S	RPE-23	RPE	65B, 75, 76, 88, 204, 205-OB, 2260, 2261	.....	15.60

### FOR VIKING

Stock No.	Type	Function	Models	↑	EACH
15 A 8747 S	3101	P	75, 76, 77, 78, 770	21	8.40
15 A 8682 S	3600	E	75, 76, 77, 78, 770	19	8.00
15 A 8749 S	1201	RP	75, 76, 77, 78, 770	66	28.20
15 A 8866 S	1400	E	75, 76, 77, 78, 770	19	12.00
15 A 8769 S	1200	RP	85, 86, 87, 88, 880, 95	.....	28.20
15 A 8770 S	1400L	E	85, 86, 87, 88, 880, 95	.....	12.00
15 A 8773 S	1205	R	85, 86, 87, 88, 880, 95	.....	28.20
15 A 8607 S	1007	RP	423	.....	21.00
15 A 8775 S	1401L	E	423	.....	12.00

### MISCELLANEOUS REPLACEMENT HEADS

Stock No.	Type	Description	↑	EACH
15 A 8854 S	1000	4-Tr. St. R/P; high imp.	.....	21.00
15 A 8984 S	1001	4-Tr. St. R/P; med. imp.	.....	21.00
15 A 8706 S	3000	2-Tr. Mono R/P; high imp.	.....	8.40
15 A 8697 S	3001	2-Tr. Mono R/P; med. imp.	.....	8.40
15 A 8866 S	1400	4-Tr. St. Erase; high imp.	.....	12.00

### QUIK-KIT HARDWARE

Stock No.	Type	Description	↑	EACH
15 A 8683 S	18	Side mount, all erase heads	.....	1.00
15 A 8687 S	19	Base mount, all erase heads	.....	1.00
15 A 8325 S	20	Side Mount R/P	.....	1.00
15 A 8688 S	21	Base mount, R/P 3000 Series	.....	1.00
15 A 8372 S	38	Side Mount	.....	1.00
15 A 8689 S	66	Base mount. R/P all others	.....	1.00
15 A 8690 S	102	Sony R/P mount	.....	1.75
15 A 8673 S	119	Sony R/P mount	.....	1.00
15 A 8729 S	305	Sony erase mount	.....	3.00
15 A 8828 S	306	Sony Erase Mount	.....	1.50

### ADJUSTABLE MOUNT ASSEMBLIES

Full range of adjustments for height, face and azimuth. Can use two TG-7 tape guide posts. Base size, 1 1/16" W x 1 3/16" L with tabs; 1 1/16" L without tabs. 4 oz.

Stock No.	Type	Description	↑	EACH
15 A 8825 S	74	All R/P heads except 3000, 3100	.....	2.25
15 A 8826 S	77	For 3000, 3100 series R/P heads	.....	2.25
15 A 8827 S	78	For all erase heads	.....	2.25

### 8-TRACK HEAD

MODEL 5800. Replacement tape head for automobile stereo tape players, including Buick, Chevrolet, Chrysler, Delco, Ford, Lincoln, Motorola, Orrtronics, Muntz, Ranger, and many others.

15 A 8782 S. Shpg. wt., 8 oz. .... 15.00

### CASSETTE HEADS

15 A 8614 S. Mono cassette record/play head for 0.150 tape in C60, C90 and C120 cartridges. Improved response. Preset tape guide. Wt. 6 oz. .... 15.95

15 A 8615 S. Stereo cassette record/play head for 0.150 tape in C60, C90, C120 cartridges. For improved response. Shpg. wt., 6 oz. .... 21.95

### RECORDER ACCESSORIES

15 A 8111. AT-100 Alignment Tape. Full-track 7 1/2 ips. For head azimuth alignment. NAB testing response of any recorder or tape head. Shpg. wt., 4 oz. .... 4.95

15 A 8795. TG-7 Tape Guide Post. Adjustable height, chrome-plated brass. With hardware, instructions. Wt., 3 oz. 1.00  
Oscillator Transformers. Provide 40-120 volts rms at 60-100 kHz to record, erase heads. Shpg. wt., 6 oz.

15 A 8059 S. T-70-T2. Plug-in PC Board Circuits. .... 4.50

15 A 8895 S. T-60-T2. For Transistor Circuits. .... 4.50

15 A 8719 G. New Tape Head Replacement Guide. Listing by recorder model and original head part number. .... FREE

# Listen to dramatic VHF-FM emergency messages

Here's what you hear on the various bands . .

When listening to VHF, location is important. The closer you are to a highway, airport, harbor, or other source of VHF use, the more messages you will hear. Calls will be of short duration with random elapsed time between calls.  
30-50 MHz. You can receive police calls, fire, civil defense, utilities,

radio telephone, radio dispatched repair vehicles.  
108-140 MHz. Aviation Band.  
152-174 MHz. U.S. Weather Bureau, railroads, cabs, police, fire.  
450-470 MHz. Police, fire, etc.  
Check with local authorities for specific frequencies used by the various services in your area.



## Allied® solid-state hand-held portable VHF-FM Monitor Radios

Wherever you are—beach, park, or home, you can take along this monitor to keep informed of emergencies



Fire calls  
Police calls

Two models cover  
27-50 MHz  
and 146-175 MHz

**1795**  
Each

- Modern solid-state superhet circuit
- Pocket size—carry it anywhere
- Earphone jack for private listening
- Provision for 110 VAC Adapter

Model A-2586 for 27-50 MHz. Now, a VHF-FM handheld superhet monitor at amazingly low cost. Take this battery-powered portable anywhere and monitor local police, fire, civil defense, utilities, radiotelephone, radio-dispatched repair vehicles, and many other services. Solid-state for instant operation. Superhet circuit provides excellent performance.

Self-contained 2 $\frac{3}{8}$ " speaker. Built-in swivel telescoping antenna and provision for external antenna. Earphone jack. Size, 6x3 $\frac{1}{2}$ x1 $\frac{1}{8}$ ". With four "AA" penlight batteries, carrying strap, and earphone. From Japan.  
17 A 6978 S. Shpg. wt., 1 lb. . . . . 17.95

Model A-2587 for 146-175 MHz. Similar to above, but for 146-175 MHz. Monitors many of the same services, plus United States Weather Bureau forecasts, railroads, taxicabs, others.  
17 A 6977 S. Shpg. wt., 1 lb. . . . . 17.95

### ACCESSORIES

17 A 9083. 117 VAC Adapter. Wt., 2 lbs. . . . . 3.95  
18 A 5083 "AA" batteries. Wt., 4 oz. . . . . 2/27¢



# Allied® dual-band VHF-FM Monitor Receiver



**Tunes both 30-50 MHz and 152-174 MHz for dramatic police, fire and emergency calls**

### 30-50 MHz FM Band

Police, fire, civil defense, other emergency services, utilities, radio-telephone service, radio dispatched repair vehicles, radio paging service, industrial highway maintenance.

### 152-174 MHz FM Band

Police, fire, civil defense, other emergency services, United States Weather Bureau forecasts, railroads, taxi-cabs, forestry and conservation, highway trucks, private mobile telephone.

### NOTE

Frequencies used differ in various parts of the country. Check with local authorities for the specific frequencies used by the various services in your own region.

## 79<sup>95</sup>

- Four IF stages provide excellent selectivity
- Stable zener-diode-regulated power supply
- Squelch circuit silences speaker between calls

Model A-2589. Solid-state VHF-FM receiver lets you listen in on the industrial, Land Transportation, Public Safety and Domestic Public Services in your area. Covers both the 30-50 MHz and 152-174 MHz FM bands. Handsomely styled in modern trim case. Has large easy-to-read slide-rule dial for precise tuning. Solid-state circuit offers instant operation, and dependable reception of the FM services. This sensitive receiver is designed to provide clear, static-free reception.

Tuned RF and mixer stages for greater sensitivity and signal pulling power. Four IF stages for greater selectivity in station separation. Powerful push-pull audio output drives a built-in four inch speaker. Automatic Volume Control (AVC) prevents overload or blasting by strong signals and builds up weak signal for best possible reception. Adjustable squelch eliminates background noise during standby operation.

Highly stable regulated power supply. Panel jack for external 8-ohm speaker or headphones. 50-75 ohm antenna input. Order antenna on page 165 for best long-range reception. Gray metal case, 5<sup>1</sup>/<sub>16</sub>x11<sup>7</sup>/<sub>16</sub>x7<sup>3</sup>/<sub>4</sub>". For 117 V, 50-60 Hz AC. From Japan. Shpg. wt., 11 lbs.

17 A 6980 U..... 79.95  
17 A 6226. Dual Headset with Plug and Cord. Wt., 1 lb., ..... 5.95

### SPECIFICATIONS

Range: 30-50 MHz and 152-174 MHz. Sensitivity: Better than 4  $\mu$ V for 20 dB S/N. IF: 10.7 MHz. Power Supply: Full wave, transformer operated; zener diode regulation.



## Portable dual-band VHF-FM receiver

## 29<sup>95</sup>

Featuring tuned RF, four IF stages in top performance solid-state circuit

Midland 10-408. Dual-band solid-state VHF-FM portable radio lets you listen to industrial, Land Transportation, Public Safety, and Public Services in your area. Covers both the 30-50 MHz and 148-174 MHz FM bands. RF stages for greater sensitivity and image rejection.

Boasts four IF stages for great output and selectivity. Has 30" swivel-type telescoping antenna and large built-in 2<sup>3</sup>/<sub>4</sub>" speaker. Jacks for earphone. Complete with earphone, carrying strap, and six "AA" batteries. Olive bronze grained polystyrene cabinet with chrome-color trim, 7x3<sup>1</sup>/<sub>2</sub> x1<sup>1</sup>/<sub>2</sub>". From Japan.

17 A 9800 S. Shpg. wt., 5 lbs..... 29.95

# Electra solid-state battery/AC FM Monitor

Eight-channel FM  
Monitor . . . automatic  
scanning system

Low  
as **139<sup>95</sup>**  
\$7 monthly  
see page 438

Two crystal-controlled models:  
150 to 174 MHz VHF-FM or  
450 to 470 MHz UHF-FM  
. . . both with FET's in front-end

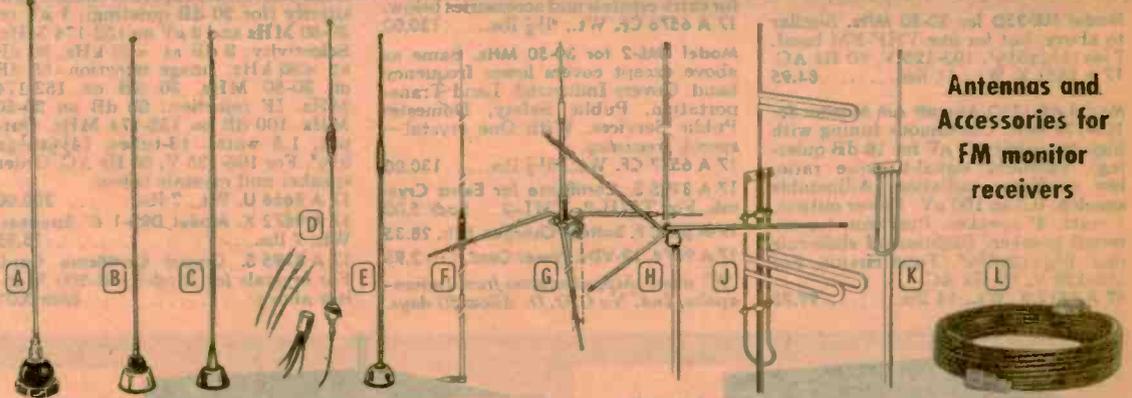


Unique monitor automatically scans up to eight crystal-controlled channels within a 10 MHz spread. Locks in on the first channel to become active, then resumes scanning when that channel becomes inactive. Manual selection also. Channel indicator lamp lights for each channel.

Employs the most recent developments in solid-state circuits. Field-Effect-Transistors are used in front-end for excellent reception of even weak signals. Six integrated circuits in switching and limiter-discriminator circuits assure reliable performance and high selectivity.

Adjustable squelch control for silencing between calls. Built-in telescoping antenna; Motorola-type jack for auto or external antenna. Metal case, 4x9x6". With cables for 117 VAC and 12 VDC negative ground, and mobile mounting bracket. Order crystal card below.

17 A 9216 U. 150-174 MHz. Shpg. wt., 5 lbs. . . . . 139.95  
17 A 9215 U. 450-470 MHz. Shpg. wt., 5 lbs. . . . . 149.95  
Crystal Certificate Card. Required for each frequency. Fill out card, send to mfr. Crystal sent within 30 days.  
17 A 8195 S. . . . . Each 5.00



## Antennas and Accessories for FM monitor receivers

**A** Antenna Specialists MON-1. Universal location mobile antenna covers 118-174 MHz and 450-470 MHz at low cost. Mounts on any flat deck. Pin plug connection plus SO-239 connections. With 15' RG-58/U cable. 17 A 8310 X. Wt., 1½ lbs. . . . . 7.95

**B** Antenna Specialists MON-2. "Quick-Grip" no-hole trunk lid mount. Outstanding performance from 118-470 MHz. Screw-type adapter for field cutting to exact frequency. With 16-ft. RG-58/U coax cable, pin plug plus M-41 adapter for SO-239 connections. 17 A 6150 X. Wt., 2 lbs. . . . . 13.95

**C** Antenna Specialists MON-14. "Quick-Grip" no-hole trunk lid mount. Great reception across entire 25-50 MHz band. With 16' cable, pin plug, M-41 adapter for SO-239 connections. 17 A 8311 X. Wt., 2 lbs. . . . . 16.95

**D** Antenna Specialists MON-10. AM and 25-50, 130-174, 450-470 MHz. Auto use with cable, pin jack. 17 A 8312 X. Shpg. wt., 2½ lbs. . . . . 24.95

**E** Antenna Specialists MON-13. "Quick-Grip" covers 25-174 MHz or adjusts to specific frequency. No holes to drill. With 16' lead, pin plug plus M-41 for SO-239 connections. 17 A 8313 X. Wt., 2 lbs. . . . . 16.95

**F** Antenna Specialists MON-7. High-performance center-loaded portable telescoping whip antenna for 25-50 and 130-174 MHz. Self-supporting. 17 A 9219 X. 12 oz. . . . . 10.95

**G** Antenna Specialists MON-8. Double-loading-coil ground plane antenna. 30-50, 108-174 MHz. Omnidirectional pattern. For masts up to 1½" dia. SO-139 connector. Order coax. 17 A 6716 X. Wt., 6 lbs. . . . . 19.95

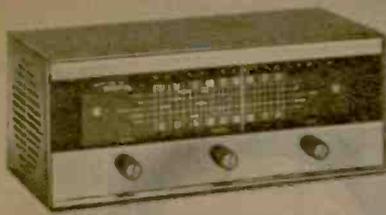
**H** Allied/Knight ¼-Wave Ground Plane Antenna. Good range on 30-50 or 108-174 MHz bands. For masts up to 1½" dia. Order coax cable. 17 A 6714 X. Wt., 3 lbs. . . . . 9.95

**J** Avanti "Interceptor" Base Antenna. Modified "J". Seamless alum. 25-50, 108-174 MHz. Lightning protected. 9" high. 50 ohms. 3 dB gain on 16' mast. SO-239 connector. 17 A 9217 X. 2 lbs. . . . . 21.95

**K** "Tracer" As above but for 440-470 MHz. 40" high. 3 dB gain. Mast. 17 A 9218 X. Wt., 1½ lbs. . . . . 9.95

**L** Coaxial Cable. Foam coax cable with PL-259's. Use RG-58/U for 30-50 MHz; RG-8/U for 108-174 MHz. 17 A 6883. 50' Coil RG-58/U Cable. Shpg. wt., 2 lbs. . . . . 5.50  
17 A 8522. 100' Coil RG-8/U Cable. Shpg. wt., 11 lbs. . . . . 13.95

# Regency VHF FM Monitors for every purpose



Low as  
**84<sup>95</sup>**

Electronic squelch  
and tuned RF

## Continuously tunable Monitors

**Model MR-10D** for 152-174 MHz. A new listening experience, with advanced design and compact styling. Covers local police, fire, emergency weather, railroads, private mobile telephone, utilities, forestry, and much more. Features include: tuned RF stage for best image rejection; 4" speaker; adjustable, squelch; illuminated slide-rule/dial; provision for external speaker, headphones. Sensitivity, 4.0  $\mu$ V for better for 20 dB quieting. Audio output, 1.6 watts (10% distortion). 7 tubes, rectifier.  $7\frac{1}{2} \times 11\frac{1}{4} \times 6\frac{1}{2}$ ". 105-125 V, 60 Hz AC.  
17 A 9650 X. Wt., 11 lbs. .... 84.95

**Model MR-33D** for 30-50 MHz. Similar to above, but for low VHF-FM band.  $7\frac{1}{2} \times 11\frac{1}{4} \times 6\frac{1}{2}$ ". 105-125 V, 60 Hz AC.  
17 A 9651 X. Wt., 11 lbs. .... 84.95

**Model AR-136D Aircraft AM Monitor** for 108-136 MHz. Continuous tuning with high sensitivity (1  $\mu$ V for 10 dB quieting), excellent signal-to-noise ratio, low oscillator radiation. Adjustable squelch, 0.5 to 100  $\mu$ V. Power output, 1 watt. 4" speaker. Provision for external speaker. Illuminated slide-rule dial.  $6\frac{1}{2} \times 12 \times 6\frac{1}{8}$ ". Tube circuit. For 110-120 V, 60 Hz AC.  
17 A 6512 X. Wt., 14 lbs. .... 99.95



**130<sup>00</sup>**

1  $\mu$ V sensitivity  
dual conversion

## Crystal-controlled Monitors

**Model TMH-2** for 150-175 MHz. Solid-state for instant sound. Dual-conversion superhet, with up to 6-channel switching, operates on 117 VAC and 12 VDC (Order cable below). 1  $\mu$ V sensitivity pulls in the weak stations. Electronic squelch silences speaker between stations. Provision for internal 12-volt battery pack (below). Battery will be activated automatically should powerline fail or no power outlet be available. Can also be used in 12-volt vehicle or boat. 24 transistors, 9 diodes. Blue vinyl-laminated steel cabinet,  $4\frac{3}{4} \times 11 \times 7\frac{1}{2}$ ". With one crystal—specify frequency. Certificate for extra crystals and accessories below.  
17 A 6578 CF. Wt., 6 $\frac{1}{2}$  lbs. .... 130.00

**Model TML-2** for 30-50 MHz. Same as above except covers lower frequency band. Covers Industrial, Land Transportation, Public Safety, Domestic Public Services. With One crystal—specify frequency.  
17 A 6577 CF. Wt., 6 $\frac{1}{2}$  lbs. .... 130.00

17 A 8195 S. Certificate for Extra Crystals. For TMH-2, TML-2. . . Each 5.00  
17 A 6580 F. Battery Charger. 1 lb. 28.35  
17 A 9674. 12-VDC Power Cord. 1 lb. 2.95

"P" items shipped express from Indianapolis, Ind. No C. O. D. Allow 30 days.



**200<sup>00</sup>**

Crystal control  
or tunable

## Deluxe dual-band FM Monitor

**Model DR-200** for 30-50 and 152-174 MHz. Highly versatile two-band monitor receiver covers both VHF-FM bands. You hear police, fire, emergency weather broadcasts, railroads and utilities, private mobile telephones, industrial and highway maintenance facilities, radio paging, forestry services, and many more fascinating VHF broadcasts. Combines continuous tuning with stable crystal control. Just flip the switch to select optional crystal control for one frequency on each band, or continuous tuning across the entire frequency range.

Dual-conversion superhet circuit. Sensitivity (for 20 dB quieting), 1  $\mu$ V on 30-50 MHz and 2  $\mu$ V on 152-174 MHz. Selectivity: 3 dB at  $\approx$ 20 kHz, 80 dB at  $\approx$ 30 kHz. Image rejection: 65 dB on 30-50 MHz, 30 dB on 152-174 MHz. IF rejection: 60 dB on 30-50 MHz, 100 dB on 152-174 MHz. Output, 1.5 watts. 13-tubes.  $14\frac{1}{2} \times 8\frac{1}{2} \times 9\frac{1}{2}$ ". For 105-125 V, 60 Hz AC. Order speaker and crystals below.  
17 A 9666 U. Wt., 7 lbs. .... 200.00  
17 A 9672 X. Model DRS-1 6" Speaker. Wt., 7 lbs. .... 15.95

17 A 8195 S. Crystal Certificate Card. For crystals for Model DR-200 Monitor above. .... Each 5.00



Automatic  
scanning of  
up to eight  
channels

**139<sup>00</sup>**

## Automatic-scanning 150-174 MHz Monitorradio

**Model TMR-8.** Automatically scans up to 8 crystal-controlled channels over an 8 MHz range. Locks in on the first active channel, resumes scanning when that channel becomes inactive. Channels can also be selected manually. Solid-state with 5 integrated circuits. 5 watt output, 4" speaker. Telescoping antenna. Jack for external speaker. With cables for 117 VAC and 12 VDC, mounting bracket. Less crystal, order below.  $2\frac{1}{4} \times 8\frac{1}{2} \times 5\frac{1}{2}$ ".  
17 A 9221 X. Shpg. wt., 8 lbs. .... 139.00  
17 A 8195 S. Crystal Certificate. .... Each 5.00



Up to 12  
crystal-  
controlled  
channels

**119<sup>00</sup>**

## Manual-selection 150-174 MHz Monitorradio

**Model TMR-12.** Has crystal sockets for up to 12 channels. Solid-state with 2 integrated circuits. Features balance mixer for superior intermodulation rejection. 5 watt audio output, 4" speaker. Sensitivity of 0.5  $\mu$ V for 20 dB quieting. Selectivity, 50 dB down  $\approx$ 15 kHz. Telescoping antenna. Jack for external speaker. With cables, for 117 VAC and 12 VDC, mounting bracket. Less crystal, order below.  $2\frac{1}{4} \times 8\frac{1}{2} \times 5\frac{1}{2}$ ".  
17 A 9222 X. Shpg. wt., 7 lbs. .... 119.00  
17 A 8195 S. Crystal Certificate. .... Each 5.00

# VHF Monitors, Direction Finder



Continuous tuning for police, fire, weather, CD, more. Two models: 25-50 or 150-175 MHz

**8995**  
Each



Crystal-controlled 150-175 MHz FM for police, fire, utilities, CD, buses, much more

**14000**

Two compact two-channel FM models: 35-50 MHz, 150-175 MHz

**3995**  
Each



## Sonar tunable base Monitors

Model FR-101 for 25-50 MHz. Continuously tunable receiver. Has tuned RF stage, temperature-compensated oscillator, electronic squelch, speaker. 500-ohm line output, external-speaker jack. 4 1/2 x 8 x 10". 115 V, 60 Hz AC. 17 A 9702 U. Wt., 11 lbs. .... 89.95

Model FR-102 for 150-175 MHz. As above, but higher band. 17 A 9701 U. Wt., 11 lbs. .... 89.95

Model FR-101DX for 25-50 MHz. Tunable receiver plus provision for 1 crystal, at right. DC power cord, mobile bracket. 115 VAC/12 VDC neg. gnd. 17 A 9703 U. Wt., 12 lbs. .... 134.95

Model FR-102 DX for 150-175 MHz. Order crystal card at right. 17 A 9704 U. Wt., 12 lbs. .... 134.95

## Sonar mobile/base Monitor

Model FR-105. Sensitive 150-175 MHz FM monitor operates in any 12-V vehicle or from 117 V, 50-60 Hz AC line. Provision for up to six crystal-controlled channels, temperature-compensated noise-free squelch, provision for continuous-tone decoder module. 2x6" built-in speaker, 1 1/2 watt audio output. Solid-state circuit. Aluminum case, 2 1/2 x 6 1/2 x 3 1/2". With AC and DC cables, mounting bracket. Order crystal card below. 17 A 9726 U. Wt., 5 lbs. .... 140.00

Crystal Certificate Card for Sonar FR-101DX, 102DX, 105, 106. For each frequency, Allied mails you a card to send to CTS. CTS ships crystal to you. 17 A 8195 S. .... Each 5.00

## Sonar hand-held Monitors

Model FR-103 for 150-175 MHz Band. Solid-state receiver operates on two crystal-controlled channels. Listen in on industrial, land transportation, public safety, domestic public services (VHF-FM), continuous weather reports at 162.55 MHz; plus regular AM broadcasts wherever you are. Fits inside your pocket—delivers loud, clear reception. Telescoping antenna, battery condition meter. Only 5 1/4 x 2 1/4 x 1 3/16". With battery and earphone. Order crystal certificate card at left for each frequency. From Japan. 17 A 8190 S. Wt., 1 lb. .... 39.95

Model FR-106 for 25-50 MHz. As above, for two channels in 25-50 MHz band. 17 A 8199 S. Wt., 1 lb. .... 39.95



Frequency plug-in cards can cover 2-200 MHz, AM or FM

With certificate for one plug-in card

**6995**

Petersen base/mobile Monitor Receiver

Model RM2-4. Can operate on 2 through 200 MHz, AM or FM, with four-channel capability. Includes certificate for 1 plug-in frequency card to be filled out and sent to factory. Built-in speaker, squelch control. Size, 3 3/8 x 5 3/4 x 7 1/2". For 117 VAC/12 VDC; order 12 V cord below.

17 A 8525 X. Shpg. wt., 4 lbs. .... 69.95  
17 A 8526. Mobile Mounting Bracket. 1 lb. .... 4.25  
17 A 8527. DC Power Cord. Shpg. wt., 8 oz. .... 2.95  
17 A 8528 S. Additional Plug-In Frequency Card. Fill out certificate and mail to Petersen. Petersen will ship to you within 30 days. .... Each 14.95

Nova-Tech "Action" Radio-Direction Finder

**12995**



Solid-state portable tunes standard AM broadcast band and both FM business radio bands, 30-50 MHz and 150-175 MHz; marine weather and beacons on 190-400 kHz; marine shortwave band, 1.5-4.5 MHz. Radio direction finder has rotating antenna for accurate bearings; level control for sharp, clear nulls; null meter; 180° left/right bearing scale; flip-up pelorus sights for visual bearings. Squelch control; dial light; telescoping antenna; headphone jacks; removable bracket/handle. With leather carrying case, batteries, AC adapter. Size, 6 x 9 x 2 1/2". From Japan. 17 A 6541 U. Shpg. wt., 8 lbs. .... 129.95

# Popular marine electronic equipment



**Midland VHF Monitor Converters**

**3995** Each Silicon transistor tuned RF stage



**Hartman Direction Finder**

**5995** Solid-state navigation aid



**Hartman Depth Finder**

**6995** Works like navy's sonar

Add a battery-powered VHF converter to your AM radio and monitor exciting messages from police, fire, CD, emergency services, and mobile telephones. Use in your boat, car, or as a portable. Solid-state. Fine-tuning control. Sensitivity, 2  $\mu$ V for 10 dB S/N. Operates for hours on a single set of batteries (order 8, below). Jacks for external 12-VDC and antenna. Metal case, 4x4x5 $\frac{1}{2}$ ". Japan. Shpg. wt., 4 lbs.  
17 A 8196 S. 13-272. 152-174 MHz. (AM) 39.95  
17 A 8197 S. 13-270. 30-50 MHz. (FM) 39.95  
18 A 5083. Batteries. 4 oz. . . . . Pkg. 2/274

Radio/compass takes bearing on land or sea with only one reading. No calculations to make. Calibrated bearing finder has floating marine compass and level indicator. Luminescent azimuth dial. Null meter shows sound level for navigation fixes. Tunes 540-1600 kHz. Water-tight case. Battery; guidebook lists over 2000 radio stations in U.S. Portable or permanent mtg. 1 $\frac{3}{4}$ x6 $\frac{3}{4}$ x5".  
17 A 9758 S. Wt. 3 lbs. . . . . 59.95

Model DF-303. Completely portable depth sounder locates schools of fish, underwater wrecks, etc. Operates under the same principles as U.S. Navy's sonar equipment. Indicates depths to 120 feet. Ultra-sensitive integrated circuit. Flashing neon indicator; 20 soundings per second. Beam width, 30°. Easy mounting 1" diameter transducer. Use 9 and 1.4-V batteries. Size, 2x5x6 $\frac{1}{2}$ ". Wt., 1 lb.  
17 A 9796 S. . . . . 69.95

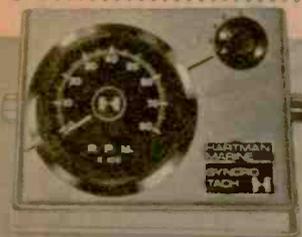
## CTS/KNIGHTS MONITOR CRYSTAL CERTIFICATE

One required for each frequency. Allied mails you the certificate, you fill it out and mail to CTS/KNIGHTS. Within 30 days CTS/KNIGHTS will mail your crystal directly to you, prepaid.

17 A 8195 S. One certificate for each frequency . . . . . Each 5.00

### SOME OF THE UNITS THIS CERTIFICATE COVERS

ELECTRA BEARCAT. LAFAYETTE: PF30, PF50, PB50, PF175 Lo-Band, HA39, HA42, HA45, HA46, PF60, PB150, HA153, HA155, PF175 Hi-band. REALISTIC: Pro-2. REGENCY: "Listen-In," TML and TMH series. SONAR: FR101, FR102 in 70 MHz, FR103, FR104, FR105, FR106, FR107 aircraft. SONIC INDUSTRIES: Eavesdropper Si. SQUIRE: FM Alert # 30, Alert # 152, Lo-band alert. TROJAN: TR100H. UNIMETER: Reporter HA155. SENTRY B20-102.



**Hartman Wireless Tach**

**4995** Battery powered

Model ST-703. Fully portable wireless tachometer is specially designed for testing spark ignition engines. No installation problems because there are no bothersome connections to make. Detects engine trouble, determines highest efficiency. Reads 0-8000 rpm with 3% accuracy. On-off sensitivity control. 2x5x6 $\frac{1}{2}$ ". Use 9-volt battery. Shpg. wt., 1 lb.  
17 A 9797 S. . . . . 49.95

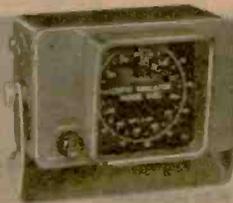


Complete With 8" Trumpet Speaker

**Sonar 2-way Hailer**

**12500** Operates as Hailer or 2-way Intercom

Model HA-1. 16-watt unit lets you hail other boats, persons ashore, swimmers or skiers; can be set for automatic or manual fog horn signals; and operates as a 2-way intercom. Solid-state. Five-position function switch; separate listen and hail volume controls. 2 $\frac{1}{2}$ x6 $\frac{3}{4}$ x5". For 12 VDC. With push-to-talk mike, mtg. bracket, speaker. Shpg. wt., 8 lbs.  
17 A 6335 X. . . . . 125.00



**Sonar Depth Sounder**

**13950** Shows water-depth up to a full 250'

Model D-1208. For commercial or pleasure craft. Warns against running aground. Easy-to-read 360° 4" scale with 1-ft. graduations shows water depth from 1 to 250 feet. Easily installed even while boat is in water. Also indicates schools of fish. With transducer, gimbal mounting bracket and fairing block. Size, 7 $\frac{1}{2}$ x11 $\frac{1}{2}$ x7 $\frac{1}{2}$ ". For 12 VDC. Shpg. wt., 10 lbs.  
17 A 6544 X. . . . . 139.50

# Business Band Radios and Amplifiers



Base/Mobile 2-way Radio

**245<sup>00</sup>** Single-channel,  
27-43 MHz

**Koar IMP II.** For in-plant 12-VDC mobile (or base use with AC supply below). Snap-in shock absorbing mounting for lift truck and other vehicles. Provision for paging, remote speaker and tone squelch. Solid-state. One channel, 27-43 MHz range. 3-watt nominal power (max. permitted under FCC low-power rules). With one pair crystals. Specify Assigned Frequency.  $2\frac{5}{8} \times 6\frac{1}{2} \times 9\frac{1}{4}$ ". Allow 30 days. 7 lbs.  
17 A 6383CF. Not returnable. . . . . 245.00  
17 A 6464 X. AC Supply. 5 lbs. . . . . 34.95

1.6-watt  
Walkie-Talkie

**375<sup>00</sup>**

Single-channel  
132-174 MHz  
VHF-FM



**Sonar 2301.** All-silicon transistors for excellent operating stability. Compatible with VHF 2-way narrow-band systems. Receiver and transmitter usable on independent frequencies. 1.6 watts. Dual conversion. Electronic mode switching. FCC Type Accepted Parts 21, 89, 91, 93. One pr. crystals, 12 penlight batts.  $7\frac{3}{4} \times 3 \times 1\frac{3}{4}$ ". Specify Your Assigned Frequency. *Factory-shipped—allow 30 days for delivery.* Shpg. wt., 2 $\frac{1}{2}$  lbs.  
17 A 6523 F. Not returnable . . . . . 375.00

5-channel  
2.2-watt  
Walkie-Talkie

**550<sup>00</sup>**



**Koar DP15.** Hand-held FM 2-way portable radio provides direct voice contact between the man on foot and base station or other units. Many money-saving applications are possible in industry, commerce, public utilities, transportation and other fields. Plug-in circuit modules. Up to 5 channels in 132-174 MHz high-band range. 2.2 watts output.  $1\frac{3}{4} \times 3\frac{1}{2} \times 8\frac{1}{4}$ ". With one pr. crystals. Specify Assigned Frequency. Allow 30 days. 2 lbs.  
17 A 9850 CF. Not returnable. . . . . 550.00  
17 A 9851 F. Kaar Rechargeable Battery Pack. For above. 11 oz. . . . . 40.00  
17 A 9852 F. Kaar "153" Battery Charger. For above. Wt., 6 oz. . . . . 84.00

AM, FM, SSB  
deluxe Linear  
Amplifiers

**329<sup>00</sup>**



**Contex "500" Series, Model 6904.** Only 3 watts input delivers 300 watts output. Drive/tune/load meter; Frequency range, 25-40 MHz; Pi-network output to match 52-ohm antenna. Internal antenna changeover relay. 6JG6 driver four 6LQ6 tubes. Illegal on 11-meter CB.  $6\frac{1}{2} \times 12 \times 14\frac{1}{2}$ ".  
17 A 6516 U. Shpg. wt., 36 $\frac{1}{2}$  lbs. . . . . 329.00  
17 A 6517 U. Model 6915. (Not illus.) Above, but 150-watt output. No meter.  $4\frac{1}{2} \times 9\frac{1}{2} \times 12$ ". 23 lbs. . . . . 189.00

Mobile and  
base Linear  
Amplifiers

**119<sup>00</sup>**  
Base



**Contex.** Base mobile and AM/SSB amplifiers for 25-40 MHz provide up to 18 dB power gain; operate with less than 1-watt drive. Base unit (117 VAC) gives 100 watts maximum output; mobile unit (12 VDC) gives 60 watts output. Pi-network with double-grounded grid 6JG6A's in output stage. Antenna changeover relay.  $4\frac{1}{2} \times 6\frac{1}{2} \times 9\frac{1}{2}$ ".  
17 A 6953 X. 100-watt Base Model, Wt., 12 lbs. . . . . 119.00  
17 A 6955 X. 60-watt Mobile Model, Wt., 10 lbs. . . . . 129.00



Mobile Linear Amplifier

**99<sup>00</sup>** Operates on  
AM, FM, SSB

**Courier ML-100.** Covers 25-50 MHz. Operates on AM, FM or SSB. One to 15-watt drive required for 100-watt input and up to 60-watt output. Built-in antenna relay. Tuning light. Circuit includes transistors and tubes. Draws less than 2 amps in receive position. No internal connections needed. Chromed case.  $7\frac{1}{4} \times 8\frac{1}{2} \times 2\frac{3}{4}$ ". For 12 VDC. Illegal on Citizens Band Class D. 17 A 6530 X. Shpg. wt., 7 lbs. . . . . 99.00



175-watt Linear Amplifier

**129<sup>00</sup>** Up to 200 watts  
PEP on AM

**Courier BL-100.** Business-band linear amplifier for 25-54 MHz. AM, FM and SSB. One to 15-watt drive input. 60 watts CW, 200 watts PEP on AM. Built-in antenna changeover relay. Semiconductor/tube circuit. Draws 55 watts in standby position. No internal connections to transceiver are needed. Size,  $7\frac{3}{8} \times 7\frac{3}{8} \times 5$ ". For 117 VAC. Illegal on Citizens Band Class D. 17 A 6536 U. Wt., 10 lbs. . . . . 129.00



Mobile Linear Amplifier

**119<sup>95</sup>** For FM-AM  
and SSB-CW

**Hy-Gain Model 404 "Afterburner."** Covers 25-50 MHz business band or Amateur 28 MHz (10-meter band for FM-AM and SSB-CW). With 1-15 watts RF drive power, gives 160 watts PEP output with approximately 80 watts carrier driven with 3.0 watts, 100% mod.  $3\frac{3}{4} \times 7 \times 8$ ". 12 VDC.  
17 A 6520 X. Shpg. wt., 9 lbs. . . . . 119.95  
17 A 6521 X. Base Model 403. As above but for 115 VAC. Wt., 9 lbs. . . . . 97.00

# Allied 5-band Amateur/SWL Receiver

Longwave and shortwave plus Amateur bands and standard AM

## 99<sup>95</sup>

\$5 monthly

See page 438

All solid-state circuit for superior reception and instant operation



Model A-2515. Keep in touch with the world or brighten your Ham shack with this versatile solid-state 5-band SWL/Amateur receiver. Gives you dependable reception of longwave and shortwave on four big bands, plus the standard AM band. Covers 150-400 kHz, 550-1600 kHz, 1.6-4.8 MHz, 4.8-14.5 MHz, 10.5-30 MHz. Receives all Amateur bands from 80 to 10 meters, international shortwave, foreign broadcasts, aircraft and marine broadcasts, more. Choose your listening from AM, CW, or SSB. Calibrated bandspeed for 80 to 10 meters.

Solid-state circuit has two Field-Effect Transistors in the RF stage for high sensitivity without overloading on strong signals. Large illuminated slide-rule dial. Four mechanical filters provide superior selectivity for good station separation. Has receiver muting connections. Dual power supplies—ideal for emergency, mobile, and field-day uses.

Noise limiter and automatic volume control reduce noise, blasting, and fading. Built-in variable BFO and Product Detector give clear reception of code and single-sideband. Illuminated S-meter for easy visual tuning. Push-pull audio output stage with thermistor for low distortion. Handsome gray metal cabinet, 7 $\frac{1}{2}$  x 15 x 10". Vinyl cover. For 117 VAC or 12 VDC, negative ground. Order speaker, headphones, antenna below. From Japan.

17 A 6985 U. Shpg. wt., 20 lbs. . . . . 99.95

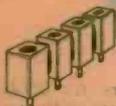
### SPECIFICATIONS

Ranges: Band A, 150 to 400 kHz; Band B, 550 to 1600 kHz; Band C, 1.6 to 4.8 MHz; Band D, 4.8 to 14.5 MHz; Band E, 10.5 to 30 MHz. Sensitivity: 2  $\mu$ V for 10-dB S/N, 3.2  $\mu$ V on standard AM broadcast band. Selectivity: 1.5 kHz bandwidth at 6-dB down; 5 kHz at 50-

dB down. Signal-to-Noise Ratio: 30-dB down. IF Rejection: 40 dB. Intermediate Frequency: 455 kHz. Audio Power Output: 1.3 watts. Power Sources: 117 VAC, 12 VDC (negative ground). Power Consumption: 10 watts. Semiconductors: 11 transistors, 12 diodes, zener diode.



Two FET's in front end . . . high sensitivity with no crosstalk



Four mechanical filters for best selectivity with adequate bandpass



Dual power supplies for 117 VAC/12 VDC for base or mobile operation



## 11650

Receiver Outfit with everything

you need for a complete listening post

Separately, \$122.80. Save \$6.30 on this complete, sensitive receiving station for international and domestic listening. Contains everything needed for outstanding reception. Antenna system included builds up signal strength to help the sensitive receiver superbly capture the weak signals. Outfit consists of Allied A-2515 Solid-State 5-Band Amateur/SWL Receiver; Vinyl Cover (not shown); Matching Speaker; Deluxe Dual Headphones; Assembled Shortwave Antenna. All are matching components designed to provide stable, clear reception of longwave, shortwave, and standard broadcasts.

0024 L40. Shpg. wt., 27 lbs. . . . . 116.50

### Speaker and Accessories

Allied Matching Speaker. 3x5" permanent-magnet dynamic speaker for crisp, clear sound reproduction. Ruggedly constructed for long life; sturdy steel case. Non-marring vinyl feet protect surfaces. Impedance, 8 ohms. Housed in handsomely styled cabinet. Size, 7 $\frac{1}{2}$  x 3 $\frac{1}{2}$  x 5 $\frac{1}{16}$ ". 17 A 6986 X. Shpg. wt., 3 lbs. . . . . 9.95



17 A 6226. Deluxe Dual Headphones. Lightweight. Adjustable vinyl-covered headband. 8 ohms. Phone plug. Shpg. wt., 1 lb. . . . . 5.95

17 A 9497 X. Deluxe Shortwave Antenna Kit. Easy-to-assemble Mosley trap dipole. 39" 10" long. With 100-ft. 75-ohm twin lead. 3 lbs. . . . . 26.79

17 A 8424 X. Low-Cost Fully-Assembled Shortwave Antenna. Covers 1.8-30 MHz range. 2 $\frac{1}{2}$  lbs. 6.95

17 A 8625 X. Hy-Gain Window Antenna. 2 $\frac{1}{2}$  lbs. 9.95

ALLIED

BEA 8004

SHIPPING NOTE:

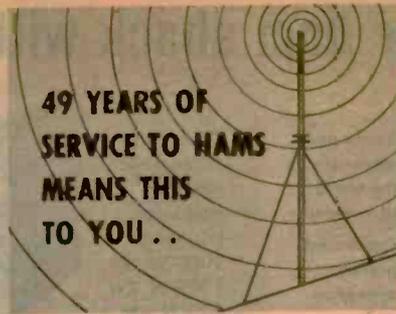
Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages

## You get expert service

Allied has served Amateurs with the finest equipment at economical prices since the earliest days of Ham radio. To be sure that you get the right station equipment, call or write us for advice.

## You get special low prices

Write Allied's Mail Order Amateur Sales Department for a money-saving quotation on your Amateur station or shortwave listening outfit (two or more items).



## Choose from the finest

Allied offers the best equipment available, outstanding both in performance and style, designed for rugged service and long life. All this and priced for top value to save you money.

## \*Buy with no money down

There is no need to wait for your equipment until you "save up" for it. Outfit your station on Allied's convenient Credit Fund Plan. \*Full details on page 438.

# Allied professional 80-10 meter Ham Receiver



**169<sup>95</sup>**

- Dual conversion • Crystal oscillator
- Solid-state VFO • Mechanical IF filter
- Product detector for excellent SSB
- Highly stable crystal-controlled BFO
- Preselector for sharp selectivity
- Double-gear antibacklash dial

Model A-2516. High-performance, plus the look and feel of quality and elegance, combine to make this 80-10 meter receiver a welcome addition to any Ham shack. Improves the dependability of your contacts over longer distances—an efficient receiver can make the big difference in reliability of communications.

Designed to give top performance on all Ham bands between 3.5 and 29.7 MHz, plus the frequency-standard signal on 10 MHz, AM, SSB, CW modes. Superior frequency stability is assured by a crystal-controlled first local oscillator, and a solid-state VFO-type second oscillator having negligible frequency drift. VFO has output terminals to allow its use as a transmitter VFO.

Accurate antibacklash double-gear tuning dial reads directly down to 1 kHz; 28:1 dial-speed ratio makes tuning precise and velvet smooth. Mechanical IF filter provides

an excellent 1.5-kHz bandwidth at 6-dB down, 6-kHz at 60-dB. Sensitivity is 1.5  $\mu$ V for 10-dB S/N ratio at 14 MHz. Image ratio and IF rejection are better than 40 dB at 14 MHz. Product detector gives excellent SSB and CW reception. BFO is crystal-controlled for high stability and superior performance.

Has 8-ohm output terminals for external speaker; 500-ohm phone jack; 500-ohm output terminals for recording and RTTY. AVC and ANL give constant-level audio and quiet reception. Built-in S-meter calibrated in dB allows signal-strength evaluation and serves as tuning indicator. Built-in on-off switch for external calibrator.

Remote-control terminals provide easy connection to transmitter. One-watt audio power output gives good, solid reproduction. Size, 7x13x10". For 117 VAC. Japan. 17 A 6987 U. Shpg. wt., 18 lbs. . . . . 169.95

## Matching Accessories & Amateur Receiver Outfit

Allied A-2514 Matching 5" Speaker. Designed Specially for reproducing voice frequencies. 7 $\frac{1}{4}$ x7 $\frac{1}{4}$ x7 $\frac{1}{2}$ ". 17 A 6988 X. Wt., 6 lbs. . . . . 19.95

Deluxe Dual Headphones. Lightweight, vinyl covered headband for comfort. Adjustable earpieces. Ear-cushions remove for easy cleaning. Include heavy-duty 5-foot cord,  $\frac{1}{4}$ " phone plug, 8 ohms. Gray. 17 A 6226. Shpg. wt., 1 lb. . . . . 5.95

Hy-Gain 5BDQ 80-10 Meter Meter Doublet Antenna. Rated 1 kilowatt. 17 A 8774 X. Wt., 10 lbs. . . . . 44.50

Separately, \$240.35. Save \$40.40 on this complete Amateur receiving station. Contains everything needed to receive Amateur radio stations with superb clarity. Outfit consists of Allied A-2516 Professional-Quality 80-10 Meter Receiver; A-2514 Matching Speaker; Dual Headphones; Hy-Gain 5BDQ 80-10 Meter Doublet Antenna—this antenna assures excellent sensitivity for outstanding reception. All are matching components designed to work together for best performance. 17 A 0400 L4U. Wt., 35 lbs. . . . 199.95

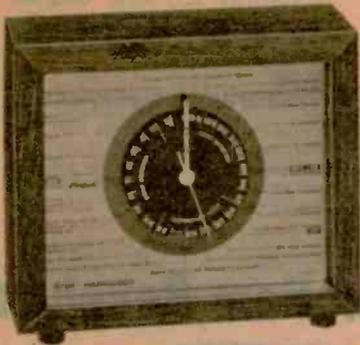


Complete A-2516 Outfit  
**Save \$40.40 199<sup>95</sup>** \$10 monthly\*

Buy now with Allied's convenient Credit Fund Plan

**ALLIED**

# Upgrade your Ham shack with this gear



Shows time anywhere in the world at a glance  
Convenient battery operation  
Walnut-veneered wood cabinet

Allied Hamclock for world time

**19<sup>95</sup>** Operates for months on a single battery

Model A-2527. Hamclock is a handsome as well as useful addition to any Ham shack. Gives you the exact local time, plus the time in any call-area or section of the world at a glance. Call areas and major cities are clearly marked on the clock face. Wood cabinet, 7<sup>1</sup>/<sub>16</sub> x 6<sup>1</sup>/<sub>2</sub> x 1<sup>15</sup>/<sub>16</sub>". Uses one "D" battery (order below). Japan.  
17 A 6989 X. Shpg. wt., 1<sup>1</sup>/<sub>2</sub> lbs. .... 19.95  
18 A 5128. Alkaline "D" Battery, 10 oz. .... 63¢



Covers 80-10 meters with the most watts per dollar:  
2000-W PEP  
1000-W CW  
600-W AM

**495<sup>00</sup>** Gonset Linear Amplifier puts you on the air with power to spare

Model GSB 201 MK IIIA. Put this powerhouse in your Ham shack for performance to "beat the band". Compact and self-contained to allow easy placement on desk or table top. Built-in power supply. Provides 2000 watts PEP for SSB; 1000 watts input for CW; 600 watts input linear for AM. Can be driven by exciter from 65 to 150 watts. Stable, efficient grounded-grid circuitry. Features full bandswitching with pi-network output for 80, 40, 20, 15 and 10 meters. Panel switch allows tuneup at low power. Large panel meter reads plate current or relative RF output—simplifies loading, monitors output. Built-in antenna relay. 50-ohm nominal output impedance with SWR less than 3:1. Uses four 572B triodes; silicon diode rectifiers. Metal cabinet, 12<sup>5</sup>/<sub>8</sub> x 8<sup>1</sup>/<sub>2</sub> x 12". 110/220 VAC.  
17 A 6844 Z. Shpg. wt., 73 lbs. .... 495.00

## Hammarlund Receivers for Hams and serious SWL's



General coverage Shortwave Receiver

**249<sup>95</sup>** Continuously tunable from 540 kHz to 30 MHz in 5 ranges

Model HQ-200. Excellent communications receiver offers better than 0.5  $\mu$ V sensitivity on CW and SSB; 1.0  $\mu$ V on AM. 10 dB S/N. Tunes 540 kHz to 30 MHz in five bandswitched ranges; plus calibrated electrical bandspread for all amateur bands from 80 to 10 meters. Continuously variable selectivity from 12 kHz (AM), to 2.9 kHz (SSB) and 100 Hz (CW). Product detector with variable BFO. Q-multiplier operates independently of BFO. Accurate "S" meter, antenna compensator, AVC, noise limiter, headphone jack. Terminals for antenna, ground and speaker (order below). 8x16<sup>1</sup>/<sub>2</sub> x 9<sup>1</sup>/<sub>8</sub>". For 117/230 VAC, 50-60 Hz.  
17 A 9559 U. Shpg. wt., 26 lbs. .... 249.95  
17 A 9560 X. S-101 Matching Speaker, 12 lbs. .... 19.95



Deluxe Receiver with crystal calibrator

**519<sup>95</sup>** Built-in 24-hour clock-timer and 100-kHz crystal calibrator

Model HQ-180AC. Professional-quality receiver provides superb AM/CW/SSB reception from 540 kHz through 30 MHz in 6 bands. Bandspread for 80-10 meter Ham bands. Linear product detector, selectable sidebands. Operates triple conversion above 7.85 MHz, dual conversion below. Crystal-controlled 2nd converter. Selectivity adjusts from 500 Hz to 6 kHz. Crystal filter. Tunable slot filter for up to 60 dB attenuation. Sensitivity, 0.5  $\mu$ V for 10:1 S/N ratio. Separate filament and accessory power supplies. Built-in 24-hour clock-timer. Illuminated "S" meter. 10<sup>3</sup>/<sub>8</sub> x 19 x 13". Order speaker below. 117/230 VAC, 50-60 Hz.  
17 A 9554 U. Shpg. wt., 48<sup>3</sup>/<sub>4</sub> lbs. .... 519.95  
17 A 9656 X. S-200 Matching Speaker, 12 lbs. .... 24.95

ALLIED

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

# Communications Receivers by Midland



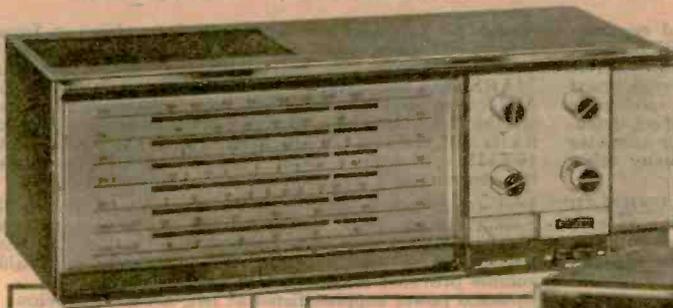
Solid-state 4-band  
general coverage  
Shortwave Receiver  
tunes the world

## 49<sup>95</sup>

\$5 monthly\*

Model 11-500. Attractive appearance and good performance make this general coverage shortwave receiver the ideal choice for beginners or casual shortwave listeners. Provides complete communications coverage on four bands: standard AM broadcast band and three shortwave bands; 2 to 5 MHz, 4.8 to 11.5 MHz and 11.0 to 30 MHz. You can listen to broadcasts from all over the world including Hams on 80, 40, 20, 15 and 10 meters and Citizens Band. Performance-engineered solid-state circuit comes on instantly, no waiting for warmup. Large, easy-to-read slide-rule tuning dial is lighted for ease and convenience in station selection. Bandspread lets you separate stations on crowded portions of the Ham or shortwave bands. BFO aids in listening to stations transmitting code. Receive/standby switch. Ferrite bar AM, wire SW antenna; terminals for external SW antenna. Headphone jack. Built-in 4" speaker. Black metal cabinet, 5 $\frac{3}{8}$ x12x4 $\frac{3}{4}$ ". 117 VAC. From Japan. 17 A 6686 X. Shpg. wt., 5 lbs. . . . . 49.95

- Tunes AM plus 2-30 MHz shortwave in 4 bands
- Lighted slide-rule dial
- BFO for code reception
- 9 transistors; 3 diodes
- Handsome black metal cabinet; has silver trim
- Built-in 4" PM speaker
- Modern rocker switches



Put the world at  
your fingertips with  
these fine receivers

7-band  
Receiver

## 99<sup>95</sup>

\$5 monthly\*

5-band  
Receiver

## 79<sup>95</sup>

\$5 monthly\*



### 7-band FM-AM-SW-Aircraft-Police Receiver

Model 11-530. Deluxe 7-band receiver provides extraordinarily wide frequency coverage. Tunes standard FM and AM, 4-12 MHz and 12-22 MHz international shortwave, plus 108-137 MHz VHF aircraft band and both 30-50 MHz and 144-174 MHz VHF police/public service bands. Lighted slide-rule dial; fine-tuning control. Band indicator lights, power light. AFC prevents FM drift. Tone control. Built-in 5" speaker delivers crisp, clear sound. Dual headphone jacks. Terminals for external antenna. Black vinyl-covered metal cabinet with chrome trim. 5x13x8". 117 VAC. From Japan. 17 A 6687 X. Shpg. wt., 13 lbs. . . . . 99.95

### Solid-state 5-band FM-AM-SW Receiver

Model 11-520. Feature-packed communications receiver tunes FM, AM and three SW bands: 2-5 MHz, 4.8-12 MHz, 11-30 MHz. Brings you exciting coverage of foreign broadcasts, Hams and CB'ers, as well as local FM and AM stations. Has lighted slide-rule dial, fine-tuning. BFO for code reception, AFC, tone control. Tuning meter helps pinpoint stations. Ferrite AM, line cord FM, wire SW antennas; terminals for external antenna. Jack for headphone or speaker. Tuner output; phono input. Black vinyl-covered cabinet, 7x14x8". 11 transistors, 6 diodes. 117 VAC. From Japan. 17 A 6688 X. Shpg. wt., 15 lbs. . . . . 79.95

# Drake high-performance Ham Transceivers



**599<sup>95</sup>**

\$25  
monthly  
see page 438

Includes crystals  
for full  
5-band coverage

**599<sup>95</sup>**

\$25  
monthly  
see page 438

Four IF bandwidths  
all selectable with  
front panel switch

## Outstanding five-band SSB/AM/CW Transceiver covers the full 80-10 meter Ham bands

- Instant USB/LSB selection on all 5 bands
- Automatic TR switching on CW for semi-break-in

Model TR-4. High-performance, full Ham band coverage transceiver. Communication power 300 watts PEP on SSB, 260 watts shift carrier CW, 260 watts PEP on AM. Offers built-in VOX or PTT facilities, solid-state VFO with linear permeability tuning, controlled-carrier screen modulator for AM, CW sidetone oscillator, diode and product detectors, 100-MHz crystal calibrator, separate plate ammeter and S-meter, dial accuracy of 1 kHz, plus many other high-performance, quality features.

Two special 9-MHz crystal filters give instant USB/LSB selection on all 5 bands. Automatic transmit/receive switching on CW for semi-break-in. Impedance: 50 ohms pi-network output. Size:  $5\frac{1}{2} \times 10\frac{3}{4} \times 14\frac{3}{8}$ ". Power supplies and accessories below.

17 A 9473 U. Shpg. wt., 19 $\frac{1}{2}$ lbs. ....	599.95
17 A 9474 U. AC-4 115-VAC Supply. Wt., 16 lbs. ....	99.95
17 A 9475 U. DC-4 12-VDC Supply. Wt., 9 lbs. ....	125.00
17 A 9476 U. RV-4 Remote VFO/5" Speaker. 11 $\frac{1}{2}$ lbs. ....	99.95
17 A 9487 U. MS-4 5x7" Matching Speaker. 9 lbs. ....	19.95
17 A 9478 X. MKK-3 Mobile Mount. Wt., 1 lb. ....	6.95

## Compact 6-Meter Sideband Transceiver offers full coverage of 6-meter band plus MARS

- Built-in PTT, VOX, ANTI-VOX, 100 kHz calibrator
- Excellent choice for any mobile application

Model TR-6. Compact and lightweight for mobile use. Input power: 300 watts minimum PEP on SSB, 300 watts PEP on AM, 300 watts CW. Full coverage of 6 meter band plus MARS: 49.4 to 54 MHz with accessory crystals; 49.9 to 51 MHz with crystals supplied. Four selectable IF band widths: 2.4 kHz upper sideband, 2.4 kHz lower sideband, 6 kHz AM, 0.3 kHz CW. Built-in PTT, VOX, ANTI-VOX, 100 kHz calibrator, S-meter. Fast or slow AGC for receiving. Automatic T/R switching. Dial calibration 1 kHz.

FET front end, sensitivity of less than 0.1  $\mu$ V for 10 dB S/N ratio on SSB. On-off switch for accessory noise blanker. Meters read plate current, AGC action, and relative power output. Sidetone with separately adjustable volume provided for keyed CW.  $5\frac{1}{2} \times 10\frac{3}{4} \times 16\frac{1}{6}$ ".

Optional power supplies listed at left, accessories below.

17 A 9200 U. Shpg. wt., 16 lbs. ....	599.95
17 A 9201 U. RV6 Remote VFO. Shpg. wt., 11 lbs. ....	99.95
17 A 9744 S. CW Filter. Shpg. wt., 3 oz. ....	35.00
17 A 9745 S. LSB Filter. Shpg. wt., 3 oz. ....	35.00
17 A 9620. 9-NB Noise Blanker. Shpg. wt., 1 lb. ....	95.00

## Add the convenience of this Station Console to your shack



**299<sup>95</sup>**

\$15  
monthly  
see page 438

Built-in essentials and extras  
for versatile station operation . .  
includes digital clock and timer

Model C-4. Station control console coordinates operations. Provides a welcome addition to the up-to-date Amateur station. Includes digital clock, timer which signals identification intervals, phone patch (with volume compression), unique equipment control switching function, thru-line wattmeter, and rotor control compatible with Ham-M motors. Includes remote antenna switch (5-antenna capability) and power master for complete station power control from front panel. (Antenna switch, power master not illus.)  $5\frac{1}{2} \times 10\frac{3}{4} \times 12\frac{3}{4}$ ".

17 A 9202 U. Shpg. wt., 30 lbs. ....	299.95
--------------------------------------	--------

ALLIED

### SHIPPING NOTE:

Items with suffix U, W, or Z in stock no. sent truck or express. See Ordering Information pages.

# Drake Ham Equipment and SW Receivers



**229<sup>00</sup>** Low-cost SSB, AM and CW Receiver  
\$12 monthly\*

### Triple-conversion Receiver

Model 2-C. Sensitive SSB, AM and CW triple-conversion receiver for Hams or more critical shortwave listeners. Covers 80, 40, 20, 15, 10 meters in 500 kHz ranges. VFO tuning; three bandwidths of selectivity are available (equivalent to three filters): 0.4, 2.4, 4.8 kHz at 6 dB.

Has solid-state audio product and AM detectors; crystal oscillator; AVC switch (fast, slow, off); "S" meter; 19 tubes and semiconductors. Rear-panel jacks for antenna, speaker, external muting and sidetone. 7x12x8", 117 VAC. Matching speaker below.

17 A 9600 U. Wt., 13½ lbs. . . . 229.00  
17 A 9602 U. 2-CS Speaker. 7x10x8". Shpg. wt., 6 lbs. . . . 19.95

**289<sup>00</sup>** International shortwave coverage  
\$15 monthly\*



### Deluxe Shortwave Receiver

Model SW-4A. Dual-conversion receiver with ultra-precision tuning; crystal lattice filter; solid-state VFO, AF output, and power supply; crystal oscillator; amplified AVC; "S" meter; VU meter; phone jack.

Covers 0.15-1.5, 6-6.5, 7-7.5, 9.5-10, 11.5-12, 15-15.5, 17.5-18, 21.6-22, 25.5-26 MHz. Crystals supplied. Frequency coverage includes European LF, American MF, and International SW broadcast bands. Size: 5½x10¾x12¼". For 120/240 volts, 50-60 cycle Hz AC. Shpg. wt., 19 lbs. Order matching speaker below.

17 A 9537 U. . . . 289.00  
17 A 9487 U. Model MS-4 Speaker. 5½x11x11". 8¾ lbs. . . . 19.95



**149<sup>00</sup>** Ideal for novices and upper-class operators  
\$8 monthly\*

### 100-watt CW Transmitter

Model 2-NT. Quality constructed, easy-to-tune CW transmitter puts you on the air in style. Covers 3.5-3.8, 7-7.2, 14-14.25, 21-21.25, 28-28.5 MHz, crystal or separate VFO. Operates break-in, semi-break-in, or manual. Input, variable to 100 watts.

Automatic transmit switching puts transmitter on the air by closing key. Receiver-mute automatically silences receiver while you are transmitting. Spotting function lets you tune transmitter to receiver while not on the air. Low-pass TVI filter. Output impedance, 52 ohms. Size: 6½x9¼x9¾". For 120 volts, 50-60 cycle Hz AC. Shpg. wt., 15 lbs.

17 A 9480 U. . . . 149.00



**750<sup>00</sup>** \$31 monthly\*

Adds power for serious DX work in your shack

**850<sup>00</sup>** \$35 monthly\*

Combination unit offers convenient operation



### Linear Amplifier for 80-10 meter bands

Model L-48. 2000 watts PEP on SSB; 1000-W DC on CW, AM, RTTY. Drive: 100-W PEP on SSB; 75-W on CW, AM, RTTY. AGC. Internal antenna change-over relay. Built-in blower. Vernier-drive plate tuning-control. Two taut-band meters read plate current, grid current, plate voltage, forward, reflected RF power. Input/output impedance: 50 ohms, adjustable pi-network output. Two 3-500Z tubes. 7½x14x14½". With separate solid-state power supply, 7½x6½x11". 115/230 V, 50-60 Hz AC.

17 A 9605 Z. Shpg. wt., 85 lbs. . . . 750.00

### R-4B Receiver, T-4B Transmitter in one case

Model TR-4B. Tunes 3-30 MHz, except 5-6 MHz; Transmitter must be crystal-controlled at 11-11.5 MHz; Receiver tunes 1.5-30 MHz. Provision for ten crystal-controlled channels, ten 500 kHz tunable ranges with 1-kHz accuracy. Power input: 120-W PEP on SSB and AM, 120-W DC on CW. 0.5 µV at 10 dB S/N. Amplified fast, slow AVC. Antenna impedance: 52 ohms. 11½x10¾x12¼".

17 A 9471 U. Shpg. wt., 30 lbs. . . . 850.00  
17 A 9474 U. Model AC-4 110/220 VAC Supply. 16 lbs. 99.95  
17 A 9475 U. Model DC-4 12 VDC Supply. 9 lbs. . . . 125.00

\*See page 438 for full Credit details

# Drake pace-setting Amateur Equipment



## 200-watt Transmitter

**449<sup>00</sup>** • 160-10 meters  
• SSB, AM, CW, RTTY  
• Transceive switch

Model T-4XB. Get great performance with this fine transmitter. Covers 80, 40, 20, 15 meters, 28.5-29 MHz of 10-meter band, and 160 meters with accessory crystal. Also available are 500 kHz ranges between 1.8-30 MHz. Power Input: 200 watts PEP on SSB and AM, 200 watts DC on CW. Has solid-state VFO. USB/LSB selection. Semi-break-in on CW; sidetone. AGC, VOX, PTT. Relative output/plate-current meter. High-impedance mike input. 52-ohm adjustable pi-network. Size, 5½x10¼x11¾". Takes power supplies below. Shpg. wt., 20 lbs.  
17 A 9231 U. .... 449.00  
17 A 9474 U. 110/220 V, 50-60 Hz AC Power Supply. Shpg. wt., 22 lbs. 99.95  
17 A 9475 U. 12-VDC Power Supply. Shpg. wt., 9 lbs. .... 125.00

## Dual-conversion Receiver

**430<sup>00</sup>** • 160-10 meters  
• SSB, AM, CW, RTTY  
• Transceive capability

Model R-4B. Designed for top performance, this dual-conversion receiver boasts excellent sensitivity. Covers 80, 40, 20, 15 meters, 28.5-29 MHz of 10-meter band, 160 meters, and any ten 500-kHz ranges between 1.5 and 30 MHz with accessory crystals. Solid-state VFO. Four bandwidths of 0.4, 1.2, 2.4, and 4.8 kHz. Off/on, fast, slow AVC. Transceive capability. 25-kHz calibrator allows you to work closer to band edges. Sensitivity: 0.5 µV for 10 dB quieting. Input Impedance: 52 ohms. Size, 6x11x11". For 120/240 VAC. Takes speaker below.  
17 A 9498 U. Wt., 19¾ lbs. .... 430.00  
17 A 9487 X. MS-4 Matching 5x7" Speaker. Shpg. wt., 8¾ lbs. .... 19.95  
17 A 9232 U. T-4B Transmitter. Transceives with R-4B. 6x11x11" .... 395.00



## Two-meter 180-watt-input Transmitting Converter

Model TC-2. For use with any Drake exciter without requiring additional power. Usable with other exciters when powered by an AC-3 or AC-4 supply. Covers 143.9-148 MHz. Requires only 0.25-volt drive at 13.9-18 MHz. Operates SSB, CW, AM, RTTY, depending on exciter modes. 180 watts PEP input on SSB and AM, 180 watts DC on CW and RTTY. Has final-plate-current/relative-power output meter and built-in antenna relay. Output Impedance: 52 ohms, adjustable output network; SWR 2:1. Plate, load, function, range, meter controls on panel. 5½x7½x11¾".  
17 A 6697 U. Shpg. wt., 9 lbs. .... 300.00  
17 A 6698 U. TC-6 Six-Meter Transmitting Converter. Shpg. wt., 9 lbs. 250.00

**300<sup>00</sup>**



## Solid-state two-meter Receiving Converter

Model SC-2. Converts any general-coverage receiver to 2 meters. Covers 144-148 MHz. IF, 14-18 MHz. Two switch-selected crystals for reception of 144, 145 MHz segments of band for limited-coverage receivers. Impedances, 50 ohms. Gain, nominally 20 dB. Output for transceive operation. Calibrator input. Needs 18 VDC at 40 mA. 6¾x4¾x2½".  
17 A 9610. Shpg. wt., 2 lbs. .... 69.00  
17 A 9615. SC-6 Converter. Above, but covers 6 meters. Wt., 2 lbs. .... 64.50  
17 A 9619. Power Supply. Delivers 18 VDC at 100 mA. Wt., 1½ lbs. .... 17.95  
17 A 9622. SCC-1 100-kHz Crystal Calibrator. Usable to 432 MHz. Requires 18 VDC at 20 mA. Wt., 1 lb. .... 24.50  
17 A 9623. CC-1 Console. 6 lbs. .... 24.50

**69<sup>00</sup>**

## Ameco Ham Equipment for novice or old timer



## 6- and 2-meter Transmitter

**159<sup>95</sup>** • 75 watts input  
• Uses 621 VFO

Model TX-62. Get in on the 6, 2-meter fun with this 2-band transmitter. Covers 50-54 and 144-148 MHz. 75-watt CW, peak AM input. Broad-banded, tunable final plate; tunable loading capacitors. Solid-state supply. Meter for final cathode and grid currents, relative RF output. Audio gain control. Jack for mike, key; connections for key and relay. Takes 8-MHz crystals or VFO. 6x11½x9½". 117 VAC. Shpg. wt., 21 lbs.  
17 A 6321 U. .... 159.95



## General-coverage Receiver

**99<sup>95</sup>** • Solid-state  
• 540kHz-54 MHz

Model R5A. Excellent broad-coverage receiver for shortwave listener or Ham. Continuously tunes 540 kHz-54 MHz in 5 bands. Covers standard AM broadcast, Amateur, and foreign bands; 27-MHz CB channels; 2-way radio from 30-50 MHz, including police and fire broadcasts. Bandspread tuning. ANL and BFO. Size, 6x12x9". For 117 V, 60 Hz AC. Shpg. wt., 12 lbs.  
17 A 6328 U. .... 99.95

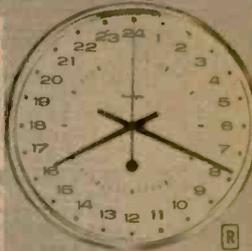
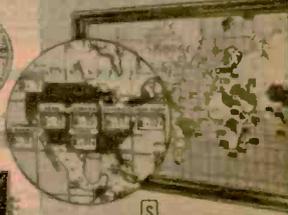


VFO for  
6, 2, 1.4  
meters

**64<sup>50</sup>**

Model 621. Solid-as-a-rock VFO for quick frequency changes with excellent stability. Covers 50, 144, 220 MHz. For transmitter using 8-MHz crystals. 6x5x7½". 117 VAC. Shpg. wt., 7 lbs.  
17 A 9046. .... 64.50

# Values in Amateur Station Accessories

<p><b>59<sup>50</sup></b> \$5 monthly*</p>  <p>A</p>	<p><b>8<sup>95</sup></b></p>  <p>B</p>	<p><b>15<sup>00</sup></b></p>  <p>C</p>	 <p>R</p>
<p>Pkg. of 4 <b>17<sup>5</sup></b></p>  <p>D</p>	<p><b>24<sup>25</sup></b> \$5 monthly*</p>  <p>E</p>	<p><b>9<sup>45</sup></b></p>  <p>F</p>	<p><b>19<sup>95</sup></b> \$5 monthly*</p>  <p>G</p>
<p><b>34<sup>95</sup></b> Model TE 7-02</p>  <p>H</p>	<p><b>12<sup>5</sup></b></p>  <p>J</p>	<p><b>79¢</b></p>  <p>K</p>	<p><b>150</b></p>  <p>L</p>
<p><b>135<sup>00</sup></b> \$7 monthly*</p>  <p>M</p>	<p><b>14<sup>50</sup></b></p>  <p>N</p>	<p><b>16<sup>95</sup></b></p>  <p>P</p>	<p><b>59<sup>95</sup></b> \$5 monthly*</p>  <p>S</p>

**A** Seiko World-Time Calendar Watch. Stainless steel, 17-jewel, automatic-winding wrist watch with link bracelet. Waterproof. Shows GMT, local, world time. Has second hand, 24 and 12-hour dials. Japan.  
17 A 9413 S. Shpg. wt., 3 oz. . . . 59.50

**B** Mastercrafters 191 Clock. 24-hour dial. 8" chrome case. Shows world time. For 110 V, 60 Hz AC.  
17 A 8472. Shpg. wt., 1½ lbs. . . . 8.95  
17 A 8475. Walnut-grain metal. . . 8.95

**C** Pennwood 100-24H Direct-Reading 24-Hour Clock. Digital-readout dial shows hours and minutes. Ideal for accurate log-keeping. Ebony. 4x7¼x4". 110 V, 60 Hz AC operation.  
17 A 8474. Shpg. wt., 5 lbs. . . . 15.00

**D** Four PL-259 Coaxial Connectors MIL type. New—not replated. 8 oz.  
17 A 6643. . . . Pkg. of 4 for 1.75

**E** Hy-Gain LA-1 Coaxial Lightning Arrester. Has SO-239 fittings; flange. For 52 or 72 ohms. Needs ground. 1 lb.  
17 A 6566. . . . . 24.25

**F** Tunable Car Alternator Noise Filter. Attenuates noise in alternator-equipped cars. Body, 3x1½" dia.; has ½" mtg. holes on 2½" ctrs. 8 oz.  
17 A 8980. . . . . 9.45

**G** Hy-Gain BN86 Balun. Takes up to 2 kW PEP, from 3-30 MHz. 1:1 transformation ratio. For any 52-ohm balanced antenna system. Weather sealed. Mounting hardware for 1½" to 2½" dia. boom or mast. 2 lbs.  
17 A 8240. . . . . 14.95

**H** Omega-1 Model TE 7-02 Antenna Noise Bridge. 1-300 MHz. Measures impedance, frequency with receiver. Battery.  
17 A 6678. Shpg. wt., 8 oz. . . . . 34.95  
17 A 6679. TE 7-01. 1-100 MHz. . . 24.95

**J** Ameco HP-45 High-Pass TVI Filter. Rejects everything below 45 MHz. For 300 ohms. Shpg. wt., 3 oz.  
17 A 8463. . . . . 1.25

**K** Magnetic Mike Clip. Mobile use.  
17 A 6461. Shpg. wt., 3 oz. . . . . 79¢

**L** Electro-Voice DX Calculator. Circular calculator puts DX data at your fingertips. Shows time differences, beam headings, postal rates, DX zones, much more. 10½". Wt., ¼ oz.  
17 A 8650. . . . . 1.50

**M** Waters 334A Dummy Load/Wattmeter. 2-230 MHz. VSWR, 1.3:1. 52 ohms. 0-1000W. 4¼"x9x10¼".  
17 A 6891 X. Shpg. wt., 15 lbs. . . 135.00  
17 A 6892 X. 384 Dummy Load. 50W. 52 ohms. 4¾"x9x10½". . . . . 65.00

**N** Waters Protax 375 Coaxial Switch. 6-position. VSWR, 1.2:1. Negligible insertion loss. Grounds antenna when not in use. Mounts behind panel. Escutcheon has provision for erasable markings. Hardware, knob.  
17 A 6875. Shpg. wt., 2 lbs. . . . . 14.50  
17 A 6876. 376. Above. 5-position. 13.95

**P** Petersen Radio PR-100A Precision 100-kHz Transistor Oscillator. Checks harmonics at 100-kHz intervals through 54 MHz. Requires 6 or 12 VDC at 4-6 mA. Plug-in socket.  
17 A 6458. Shpg. wt., 1 lb. . . . . 16.95

**R** Mastercrafters 2405C Electric 24-Hour Clock. White 12" dial; black hands, numerals; red sweep hand. 13½" dia. chrome-finish case. Self-starting. 117 VAC. U.L. Listed.  
17 A 8470 X. Shpg. wt., 5 lbs. . . . . 19.95  
17 A 8471 X. Mastercrafters 2405G Clock. Similar to above, but gray case. Shpg. wt., 5 lbs. . . . . 17.95

**S** Wall World-Map/Clock. Combines clock and world map in walnut frame. Checks time in 70 of the world's major cities. Adjustable, enlarged indicator for local-standard and daylight time. 15x22½". 110-115 volts, 60 Hz AC. Wt., 5 lbs.  
17 A 9412 U. . . . . 59.95

## Mobile or Indoor Speaker Assembly

Swivel gimbal-type mounting bracket

**15<sup>00</sup>**

Efficient 4x6" speaker in compact aluminum cabinet. Peaked for 300-3000 Hz; provides crisp response. Impedance, 3.2 ohms. Swivel gimbal-type mounting bracket. Screw terminals. With mounting hardware.  
17 A 9078. Wt., 3 lbs. . . . . 15.00



## 572B/T160L SSB Power Triode

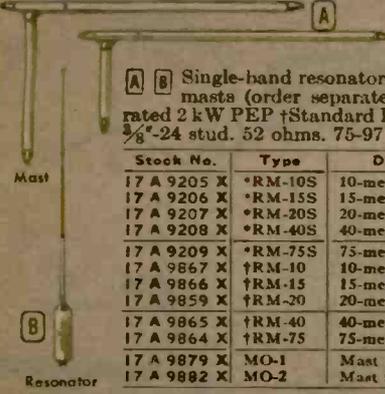
Replaces 811A, but dissipates 2½ times more plate power

**17<sup>95</sup>**

Ideally suited for grounded-grid instant-on, no-warmup linear amplifiers. As replacement for 811A it provides greater peak power capability, longer life. Compact envelope, rugged graphite anode, durable bonded thoriated tungsten filament. Zero bias, low voltage.  
17 A 9079. Shpg. wt., 1 lb. . . . . 17.95



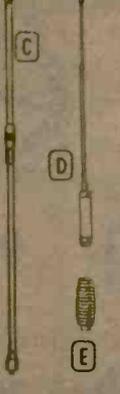
# Mobile Ham Antennas and Station Accessories



## New-Tronics Hustler Mobiles

**A B** Single-hand resonators and foldover 54-in. masts (order separately). \*Super Hustler rated 2 kW PEP †Standard Hustler, 400 W PEP.  $\frac{3}{8}$ "-24 stud. 52 ohms. 75-97" high. Wt., 1 $\frac{1}{2}$  lbs.

Stock No.	Type	Description	EACH
17 A 9205 X	*RM-10S	10-meter resonator	11.50
17 A 9206 X	*RM-15S	15-meter resonator	13.50
17 A 9207 X	*RM-20S	20-meter resonator	15.50
17 A 9208 X	*RM-40S	40-meter resonator	19.50
17 A 9209 X	*RM-75S	75-meter resonator	24.50
17 A 9857 X	†RM-10	10-meter resonator	7.95
17 A 9866 X	†RM-15	15-meter resonator	8.95
17 A 9859 X	†RM-20	20-meter resonator	9.95
17 A 9865 X	†RM-40	40-meter resonator	11.95
17 A 9864 X	†RM-75	75-meter resonator	13.95
17 A 9879 X	MO-1	Mast for fender mtg.	10.75
17 A 9882 X	MO-2	Mast for bumper mtg.	10.95



## Hy-Gain Hamcat Antenna and "Quick Changers" Coil and Tip-Rod Assemblies

- C** 257 Hamcat Antenna. High Q, wide-band. Rated to handle the power of any mobile Ham transceiver. Features foldover hinge, swivel base,  $\frac{3}{8}$ "-24 thread. Impedance, 52 ohms.  
17 A 8290 X. Shpg. wt., 5 $\frac{1}{2}$  lbs. . . . 12.95
- D** Coil and Tip-Rod Assemblies. One-piece. Coils sealed in epoxy fiberglass sleeve. For Hamcat antenna. Wt., 3 $\frac{1}{2}$  lbs.  
17 A 8291 X. Model 252, 75 Meters. . . 14.95  
17 A 8292 X. Model 256, 40 Meters. . . 12.95  
17 A 8293 X. Model 255, 20 Meters. . . 10.95  
17 A 8294 X. Model 254, 15 Meters. . . 9.95  
17 A 8295 X. Model 253, 10 Meters. . . 8.95
- E** Model 492 Spring. For above.  
17 A 8296 X. Shpg. wt., 6 oz. . . . 2.80



**Squalo half-wave Antenna**  
On car top  
On mast  
Out window

Cush-Craft ASQ-6. Full half-wave, horizontally-polarized, omnidirectional 6-meter antenna. The square shape allows full electrical length in compact dimensions. Only 30" square. Direct 52-ohm Reddi Match feed. Complete with rubber suction cups for car top and support for mast.  
17 A 8286 X. Wt., 6 lbs. 15.95  
17 A 8287 X. ASQ-2. 2 meters. 10" square. 2 $\frac{1}{2}$  lbs. . . 11.95

**Certificates for Amateur and special-purpose Crystals**  
FT-243/29C Type. Pin spacing, 0.486". Pin diameter, 0.093". Tol.  $\pm 0.002\%$ . Supplied within  $\pm 5$  kHz.  
Frequencies available: 1800-2000 kHz, 3500-4000 kHz, 6740-6800 kHz, 7000-7334 kHz, 8000-8229 kHz, 8330-8449 kHz.  
17 A 8175 S. Crystal Certificate. . . Ea. 2.95

Type HC6/U. Low-current types. Pin spacing, 0.486". Pin diameter, 0.050". 1.8-54 MHz.  $\pm 0.002\%$   
17 A 8176 S. Crystal Certificate. . . Ea. 4.95

Allied mails you a Crystal Certificate card to fill out for each frequency. Return completed card, and crystal will be shipped to you within 30 days.

Frequency-Standard Crystals. Wt., 3 oz.  
17 A 9384 S. Type HC13/U. 100 kHz. . . 6.95  
17 A 9385 S. Type HC6/U. 1000 kHz. . . 7.95



**Ameco nuvistor Converters and Preamplifiers**

**S** 14.95  
**W** 34.95  
**T** 59.95

**S** Ameco PV-50 Nuvistor 6-Meter Preamp. Boosts gain and reduces noise when used ahead of your converter, receiver, or transceiver. Uses 6CW4 high-gain nuvistor. Two tuned circuits for good image and spurious-signal rejection. Gain, over 20 dB. Requires 100-150 V at 10 mA, 6.3 V at 150 mA. 2 $\frac{1}{2}$ "x2x3 $\frac{1}{4}$ ". Shpg. wt., 1 lb.  
17 A 9692. . . . 14.95

Ameco PS-1W Power Supply. (Not illus.) 110 VAC. For PV-50, CN-144 W. 2 $\frac{1}{2}$ "x4 $\frac{1}{2}$ "x4 $\frac{1}{2}$ ". Wt., 4 lbs.  
17 A 9695. . . . 13.95

**T** Ameco PT All-Band Frame-Grid Preamp. A 6-160 meter preamp for use with transceivers. Continuous tuning. Frame-grid pentode handles strong signals, maintains low noise level. Greatly improves receiver sensitivity. Transfer circuit bypasses preamp during transmission. Provision for feeding antenna input of, and muting, a second receiver. 5 $\frac{1}{2}$ "x3 $\frac{1}{4}$ "x3". 110-120 V, 50-60 Hz AC. Wt., 5 lbs.  
17 A 9689. . . . 59.95

**W** Ameco PCL-P Nuvistor All-Band Preamp for 6 Through 160 Meters. Two nuvistors in cascade for noise figures of 1.5 to 3.4 dB, depending on band. Boosts weak-signal performance of any receiver. Overall gain, better than 20 dB. Built-in power supply for 110-120 V, 50-60 Hz AC. Size, a compact 5 $\frac{1}{2}$ "x3 $\frac{1}{4}$ "x3". Shpg. wt., 2 lbs.  
17 A 6612. . . . 34.95

## Useful Amateur station and antenna Accessories



- F** Hy-gain C1 Center Insulator. For doublet antennas. Takes  $\frac{1}{4}$ -in. or  $\frac{3}{8}$ -in. coax. Less insulators below.  
17 A 8351. Shpg. wt., 1 lb. . . . 4.95
- F** 17 A 6249. End Insulators. 7-in. long. Less C1 above. 1 lb. . . . Pair 2.95
- G** Johnson 250-23-3 Matchbox. 52 ohms to 25-1500 ohms balanced, 25-3000 ohms unbalanced. SWR meter. TR relay. Rated 750 W PEP. Wt., 15 lbs.  
17 A 9527 X. . . . 94.95
- H** Bud LF-601A Low-Pass Filter. Rated 1 kW, 80-10 meters. Cutoff at 42 MHz. 52-72 ohms.  
17 A 8457. Shpg. wt., 3 lbs. . . . 23.60
- J** Cush-Craft "Blitz-Bug" Coax Lightning Arrestor. Type 83 connectors.  
17 A 8044. Shpg. wt., 4 oz. . . . 3.95
- K** Drake TV-1000-LP Low-Pass Filter. Rated 1 kW, 80-10m; 200 watts on 6m. Cutoff at 52 MHz. 52-ohms.  
17 A 8455. Shpg. wt., 2 lbs. . . . 16.95
- L** Johnson 250-20 Low-Pass Filter. Rated 1 kW, 80-10 meters. 4 lbs.  
17 A 9525. . . . 14.95
- M** Johnson 250-39 TR Switch. Switches antenna between receiver and transmitter. Rated 4 kW. Needs no tuning. Coax fittings. For 115 V, 50-60 Hz AC. Shpg. wt., 5 lbs.  
17 A 8305. . . . 29.95
- N** Bumper Mount. Stainless steel. Fits any size bumper. No holes to drill. Shpg. wt., 3 lbs.  
17 A 6606X. . . . 7.50
- P** Body Mount. Durable stainless steel mounting with standard  $\frac{3}{8}$ "-24 fitting. Shpg. wt., 3 lbs.  
17 A 6607. . . . 8.50
- R** Heavy-Duty Stainless Steel Whip Spring. For any size whip antenna. Standard  $\frac{3}{8}$ "-24 fittings. Will keep its tension with the roughest use.  
17 A 6609. Shpg. wt., 2 lbs. . . . 7.50

# Fixed Ham Antennas and Station Accessories



**A**  
Drake W-4  
2 kW RF  
Wattmeter

49<sup>50</sup>



**B**  
Drake MN-4  
Coupler

90<sup>00</sup>

Get maximum power into your antenna with these quality Accessories

**A** Drake W-4 RF Wattmeter. Measures forward and reflected power, and reads it in watts. Conversion to VSWR from nomogram. Has two scales in each direction: 200 and 2000 watts full scale. Accuracy, 5%. Impedance, 50 ohms; negligible insertion loss.  $5\frac{1}{2} \times 3\frac{3}{4} \times 4$ ".

17 A 8245 X. Shpg. wt., 4 lbs. . . . . 49.50  
17 A 8248 X, WV4, 100 and 1000-W VHF. . . . . 73.50

**B** Drake MN-4 Matching Network. Matches transmitter to your antenna for low SWR and more power. Has built-in VSWR meter and RF wattmeter. Covers 10-80 meter Ham bands. Handles 200 watts.  $5\frac{1}{2} \times 10\frac{3}{4} \times 8$ ".

17 A 8246 U. Shpg. wt., 5 lbs. . . . . 90.00  
17 A 8247 U. Above, but 2000 watts PEP. 10 lbs. . . . . 175.00

## Ameco BIU Bridge Indicator Unit

SWR, percentage of power, percentage of voltage on 3 scales when used with Model SWB below or other bridge. 100- $\mu$ A,  $2\frac{1}{2} \times 6$ " square meter.  $3\frac{1}{2} \times 2\frac{1}{4}$ ".

17 A 9082. Shpg. wt., 1 lb. . . . . 17.95



11<sup>95</sup>

17<sup>95</sup>

## Ameco SWB Standing Wave Bridge

SWR from 1.8-225 MHz. 1 kW. Can be left in line. No line loss. With two 80-239 connectors.  $2\frac{1}{4} \times 4\frac{1}{2} \times 1\frac{1}{2}$ ".

17 A 9081. Shpg. wt., 1 lb. . . . . 11.95



## Low-loss Coaxial Cable . . . foam polyethylene dielectric

High-quality RG-8/U cable at exceptionally low cost. Ideal for Ham or CB'er. Features low-loss foam polyethylene insulation for minimum attenuation at high frequencies; premium Type II, noncontaminating PVC jacket that even allows burial. You'll get more power to your antenna and better performance by replacing your old, higher loss line. 50-ohm impedance; handles up to 2000 watts of RF below 30 MHz. Tough, long-life weather-resistant black vinyl jacket. Amphenol PL-259 connector at each end.

17 A 8519. 50-ft. Coil. Wt., 7 lbs. . . . . 8.50  
17 A 8522. 100-ft. Coil. 14 lbs. . . . . 13.95



8<sup>50</sup>

50'  
Coil

Handles up to 2 kW  
PL-259's each end

## Hermetically sealed nonreactive Dummy Antennas

**C** Genlec 525 Dummy Antenna. Allows transmitter adjustment under conditions duplicating actual antenna load. Dissipates transmitter output power as heat. Prevents radiation and eliminates TVI, QRM, and other such problems while transmitter is being tuned. Transmitter can readily be peaked for top DX operation. Nominal impedance 50 ohms. Covers 0-220 MHz with SWR of less than 1.1:1. Rated 125 watts steady state, 250 watts ICAS. Mounting brackets designed for negligible heat transfer. Fins and ribs limit surface temperature.  $5\frac{1}{4} \times 4\frac{1}{2} \times 2$ ". 80-239 connector.

17 A 9436 X. Shpg. wt.,  $1\frac{1}{4}$  lbs. . . . . 14.95

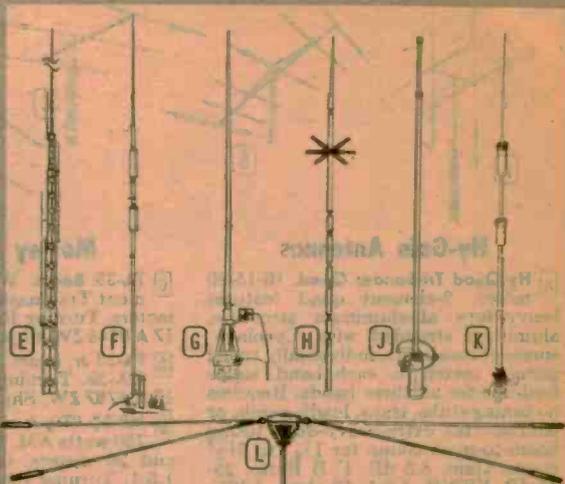
**D** 17 A 9437 X. Genlec 510U. Above, but 500 watts steady state. 1000 watts ICAS.  $6\frac{1}{4} \times 5\frac{1}{4} \times 6\frac{1}{2}$ ". Wt., 4 lbs. . . . . 24.95



14<sup>95</sup>



24<sup>95</sup>



## Popular Multiband Antennas

**E** Hy-Gain 18-HT "Hy-Tower" for 10-80 Meters. 50-foot high. Power rating well over legal limit. X-braced. Stub decoupling. Impedance, 52 ohms. With base insulators. Requires coax and ground rod.

17 A 8769 ZW. Shpg. wt., 108 lbs. . . . . 164.95

**F** Hy-Gain 14AVQ Trap Vertical for 10-40 Meters. Improved successor to the popular 14AVS. Has low-angle radiation pattern for outstanding DX performance. Traps are encased in solid-aluminum housings. Heavy-gauge seamless aluminum radiator; noncorrosive full-circumference clamps at tubing joints; 12" double-grip mast bracket assures maximum rigidity whether rooftop or ground mounted. Antenna is at DC ground for low noise, positive lightning protection. 1 kW. 52 ohms. Height 18 feet. Needs coax, ground rod.

17 A 8765 ZW. Shpg. wt., 10 lbs. . . . . 35.95

**F** Hy-Gain 18-AVQ Trap Vertical for 10-80 Meters. Easily-erected 32-ft. vertical gives outstanding DX performance. Has four separate tuned traps, factory peaked for top coverage. One kW AM, two kW PEP. 52 ohms. Requires coax, ground rod.

17 A 9295 ZW. Shpg. wt., 15 lbs. . . . . 67.50

**G** Hy-Gain 18-V Trapless Vertical for 10-80 Meters. Low-cost 18-ft. vertical tunes 10-80 meters by changing coil taps. Heavy aluminum-tubing radiator, heavy base insulator. 52 ohms. Requires coax.

17 A 6043 X. Shpg. wt., 5 lbs. . . . . 19.95

**H** New-Tronics 48TV Vertical for \*80-10 Meters. Aluminum. Precisely tuned hi-Q traps. Rated 1 kW. Tunable. 19 $\frac{1}{8}$ " high. 52 ohms. SWR 1.5:1. \*80 meters with RM-75S resonator, facing page. Requires coax.

17 A 9489 ZW. Shpg. wt., 15 lbs. . . . . 42.95

**J** Cush Craft AR-2 Vertical for 135-175 MHz. Perfect for monitor receivers. Gain, 3.75 dB. Preassembled of heavy-wall aluminum tubing; fitting for standard coax connector. Fits up to 1 $\frac{3}{8}$ " masts. Chart for adjusting to frequency. Requires 52-ohm coax.

17 A 8288 X. Shpg. wt., 5 lbs. . . . . 12.50

**K** Mosley RV-4C Trap Vertical for 10-40 Meters. Features heavy-duty aluminum construction. Includes radials. Easily handles full kilowatt of power. Height, 22 feet. Impedance, 52 ohms. Requires coax.

17 A 9488 ZW. Shpg. wt., 10 $\frac{1}{4}$  lbs. . . . . 38.23

17 A 9495 X, RKV-345 Roof Mounting Kit. 3 lbs. . . . . 4.21

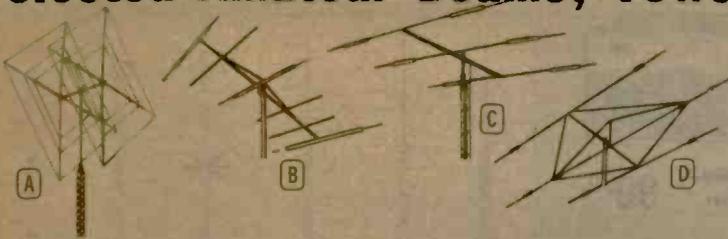
**L** Hy-Gain HD-4 Single-Band Doublet, 80-meter doublet with cutting instructions for 10-40 meters. Rated 500 watts. With copper-clad wire, insulators, hardware, 50 ft. of RG-58/U coaxial cable.

17 A 6171 X. Shpg. wt., 3 $\frac{1}{2}$  lbs. . . . . 9.95

Hy-Gain 58DQ Multiband Doublet for 10-80 Meters. (Not illus.) Rated 1 kW. Requires coax.

17 A 8774 X. Shpg. wt., 10 lbs. . . . . 46.50

# Selected Amateur Beams, Towers, Accessories



## Hy-Gain Antennas

- A** Hy-Quad Tri-Bander Quad. 10-15-20 meter, 2-element quad features heavy-duty all-aluminum structure, aluminum stranded wire, Cyclocac® spreader insulators, individually tuned gamma match on each band, single feed-line for all three bands. Requires no tuning stubs, traps, loading coils, or baluns. Has extra-heavy-duty tilting boom-to-mast clamp for  $1\frac{1}{4}$ " to  $2\frac{1}{2}$ " masts. Gain, 8.5 dB. F/B Ratio, 25-35 dB. VSWR, 1.2:1. 52 ohms. 1 kW. Spreader Length, 25'5". Boom Diameter, 2". Turning Radius, 13'6".  
17 A 8343 ZW. Shpg. wt., 42 lbs. 99.95
- B** TH-6DXX "Super Thunderbird Tri-Bander." 1-kW beam. Improved version of TH-6DX. Gain, 8.7 dB on 10, 15, and 20 meters. "HY-Q" traps. Boom, 24 ft. Longest element, 31 ft. Turning Radius, 26 ft. Requires CDR HAM-M Rotator (right). 60 lbs.  
17 A 6605 ZW ..... 164.95
- TH3MK3** "Thunderbird Tri-Bander." (Not illus.) Three-element beam for 10, 15, and 20 meters. Improved version of TH3MK2. Handles maximum legal power. 14-ft. boom; longest element 28 ft. Turning radius 14'8". 36 lbs.  
17 A 8755 ZW ..... 132.95

## Mosley Antennas

- C** TA-33 Beam. World famous 3-element Trapmaster for 10, 15, and 20 meters. Turning Radius, 15' 6". 1 kW. 17 A 8348 ZW. Shpg. wt., 41 lbs. 133.10
- C** TA-33 Jr. Beam. 300-watt version of TA-33. Turning Radius, 14' 9". 17 A 8787 ZW. Shpg. wt., 28 lbs. 92.75
- D** MP-33 "Tig-Array" 3-Element Beam. 750 watts AM, 2 kW PEP on 10, 15, and 20 meters. Gain, 8 dB. SWR, 1.5:1. Turning Radius, 15 ft. 17 A 8330 ZW. Shpg. wt., 28 lbs. 105.45  
17 A 8328 X. TA-40KR 40-Meter Converter Kit. For MP-33, Classic 33. Shpg. wt., 10 lbs. .... 56.90

## CLASSIC BEAMS

- All the features of famous Mosley Trapmasters plus new CLASSIC balanced capacitive matching feed system. 1 kW on 10, 15, and 20 meters. Require CDR HAM-M Rotator.
- C** Classic 33 Beam. Three elements. Boom, 18 ft. Longest Element, 27 ft. Turning Radius, 16 ft. 17 A 9496 ZW. Shpg. wt., 47 lbs. 145.15  
Classic 36 Beam. (Not illus.) Six elements. Boom, 24 ft. Longest Element, 29 $\frac{1}{2}$  ft. Turning Radius, 19 $\frac{1}{4}$  ft. 17 A 8349 ZW. Shpg. wt., 71 lbs. 171.92

## CDR Beam Antenna Rotator Systems



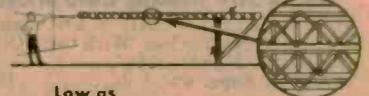
TR-44  
Series III  
Rotator

**69.95**

CDR TR-44. Rotator has 48 heavy-duty bearings in two 6 $\frac{1}{2}$ " ball races. Average torque 450 inch-pounds. Indicator calibrated in compass points and 3° increments. Readable with motor off. For masts up to 2 $\frac{1}{4}$ " O.D. Order 8-conductor cable below. For 110-120 V, 50-60 Hz AC. Shpg. wt., 19 lbs.  
17 A 9481 X. .... 69.95

CDR HAM-M. (Not illus.) Extra-heavy-duty rotator, supports over 1000 lbs. Same indicator as above. Order 8-conductor cable below. Shpg. wt., 25 $\frac{1}{4}$  lbs.  
17 A 8025 X. .... 129.59  
55 A 7536. Belden 8448 8-Conductor Rotator Cable. 100-ft. coil. Shpg. wt., 5 lbs. .... 8.55

## E-Z Way heavy-duty crank-up Towers with Mounting Kit



Low as

**320.00**

- Galvanized steel
- Telescoping type

Towers for the Ham and his beam. Simple to install—and they tilt over for easy antenna adjustment. Require no guy wires. Include "Wonder Ground Post" attachment kit. Installs with post-hole digger—no concrete needed (except 72, 75-ft. models). Specify rotator (not incl.). Sent prepaid from Florida. Send remittance with cash orders—no C.O.D. Free literature—Stock No. 17 A 8829.

### Towers with Wonder Post for Tiltover

Stock No.	Type	Ht.	*Ant.	EACH
17A 8844 ZF	WRBS-40	41'	12.0	320.00
17A 8830 ZF	WRBX-40	42'	33.5	503.50
17A 8845 ZF	WRBS-50	51'	12.0	438.00
17A 8831 ZF	WRBX-50	52'	28.8	576.50
17A 8847 ZF	WRBX-60	60'	11.0	596.50
17A 8832 ZF	WRBX-70	72'	12.0	871.50
17A 8833 ZF	WRBZ-75	75'	22.7	1426.00

\*Maximum square feet in 50-mph wind with no guy wires.

## Cush-Craft high performance VHF Antennas

- E** 20-Element DX Arrays. Combine the best of yagi and collinear features to give you advanced-design VHF and UHF antenna arrays for 2, 1 $\frac{1}{4}$ , or  $\frac{3}{4}$  meters. Feature broadband coverage and low-angle radiation. Excellent forward gain of 14.2 dB; front-to-back ratio of 20 dB. VSWR at frequency, 1:1. Full kW (2 kW PEP). Installs on up to 1 $\frac{1}{2}$ " masts.  
17 A 8550 X. Model DX-120. Covers 2 meters (144 MHz). 118x75x30". Turning Radius, 48". Wt., 8 lbs. .... 29.50  
17 A 8551 X. Model DX-220. Covers 1 $\frac{1}{4}$  meters (220 MHz). 78x53x20". Turning Radius, 32". Wt., 7 lbs. .... 22.50  
17 A 8552 X. Model DX-420. Covers  $\frac{3}{4}$  meter (432 MHz). 42x29x11". Turning Radius, 18". Wt., 6 lbs. .... 17.50

**E** DX Arrays for 2, 1 $\frac{1}{4}$ ,  $\frac{3}{4}$  meters

**F** 5-element 6-meter Beam

- F** A50-5 6-Meter Beam. Five-element, all-aluminum 50-MHz beam provides 9.5 dB gain, excellent pattern control, and high F/B ratio. Mounts horizontally or vertically. Boom, 12', 52 or 72 ohms. For masts up to 1 $\frac{5}{8}$ ". 17 A 9572 ZW. Shpg. wt., 14 lbs. 29.50  
17 A 9573 X. A55-SK Stacking Kit. For stacking two A50-5 beams. Adds 3 dB. Shpg. wt., 2 lbs. .... 11.95
- G** A144-11 2-Meter Beam. Eleven-element aluminum array provides 13 dB gain, 28 dB F/B ratio. Can be mounted horizontally or vertically. Boom, 12'. Solid elements. Driven element for direct 52 or 72-ohm coaxial feed. For masts to 1 $\frac{1}{2}$ ".  
17 A 9574 ZW. Shpg. wt., 8 lbs. .... 16.95  
17 A 9575 X. All-SK Stacking Kit. For stacking two A-144-11's. 2 lbs. .... 11.95

**G** 11-element 2-meter Beam



## 5-position 1-kW Coax Switch

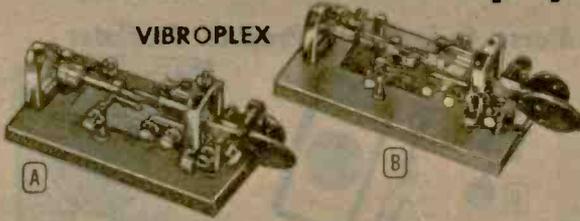
**8.95** • 80-10 meters  
• Five positions

One-pole, 5-position coax switch rated 1 kilowatt, 80 through 10 meters. Wt., 3 lbs.

17 A 6444. .... 8.95

# Values in Code Equipment and Accessories

## VIBROPLEX



### Vibroplex Semi-Automatic Keys

**A** Deluxe "Original" Semi-Automatic Key. Easy-working "bug" of exceptional design and quality. Performance-tested, tough and durable, it will give you years of faultless service. For speeds from 10 wpm on up. Used by many veteran operators. Jeweled bearings, chrome-plated mechanism and base. Slip-proof rubber feet prevent marring of finished surfaces. Shpg. wt., 5 lbs.  
17 A 8940..... 32.95

**B** "Presentation" Semi-Automatic Key. Beautifully crafted key with adjustable mainspring for wide speed range. Jeweled movement resists friction, prolongs life. Chromium parts, mounted on 24K gold-plated base top. Red knob, finger and thumb pieces. Rubber feet on bottom prevent slipping, preserve surface finishes. Wt., 5 lbs.  
17 A 8942..... 43.95

**Carrying Case.** (Not illus.) For all Vibroplex keys listed above. Protective cloth lining. Includes lock key and handle. Shpg. wt., 2 lbs.  
17 A 8944..... 8.00

**Cord and Wedge Set.** For above keys. Shpg. wt., 3 oz.  
17 A 8945..... 2.75

**Vibroplex "Vibro-Keyer" Keying Mechanism.** (Not illus.) Has trunion lever for fast, effortless sending; adjustable contact spacing and tension for individual preference. Contacts are designed for dependable long-life operation. Attractive chrome finished parts. Beige-colored base has rubber feet, stays stable. Shpg. wt., 3 lbs.  
17 A 8946..... 20.95  
17 A 8947. Deluxe "Vibro-Keyer". Chrome-plated base. 27.50



Kit  
**59.95**

Assembled  
**89.95**



Vibroplex "Vibro-Keyer" keying mechanism

**Save Up to \$4.95**  
on 717 Kit and "Vibro-Keyer"

**Save Up to \$5.95**  
on Wired 717 and "Vibro-Keyer"

### Eico Model 717 Electronic Keyer

- Sharp, self-completing dots, dashes
- Monitoring oscillator • 3x5" speaker

Features four overlapping ranges from 3 to 75 wpm; sharp, self-completing dots and dashes. Monitoring oscillator, 3x5" PM speaker. Five tubes, 2 silicon rectifiers. Controls: function, off/tune/operate, 4-position speed range, speed vernier, monitor tone. volume.  $5\frac{1}{2} \times 8 \times 8\frac{1}{4}$ ". 100-130 VAC.  
17 A 9492 X. Kit Form. 10 lbs..... 59.95  
17 A 9120 X. Factory Assembled. 10 lbs..... 89.95  
17 A 9022 L2X. 717 Kit and "Vibro-Keyer." Save \$4.95. Shpg. wt., 13 lbs..... 75.95  
17 A 0375 L2U. Wired 717 and "Vibro-Keyer." Save \$5.95. Shpg. wt., 13 lbs..... 104.95



## JOHNSON

### Johnson Speed-X Code Keys

**C** 114-320 Standard Key. You'll get dependable service from this sturdy, quality hand key. Chrome-plated key arm suspended from hardened steel bearings. Navy-type knob.  $\frac{1}{4}$ " coin-silver contacts. Adjustable contact spacing and spring tension. Black base. Shpg. wt., 2 lbs.  
17 A 8920..... 5.95

**D** 114-100-3 Deluxe Hand Key. Precision-made key has carefully tempered spring and hardened fine-point pivots for smoothest sending. Spring tension, contact spacing and bearing pressure are adjustable. Contact diameter, .072". Satin-brass finish. Shorting switch.  
17 A 8912. Shpg. wt., 2 lbs..... 10.50

**E** 114-520 Semi-Automatic Key. Add lasting excitement to your shack with this beautifully designed key. You'll like its steady-as-a-heartbeat performance, sturdy construction, and feel of quality. Contact spacing and sliding weight easily adjust to desired speed. Has circuit-closing switch and  $\frac{1}{8}$ " coin-silver contacts. Rubber feet prevent marring finished surfaces. Heavily chrome-plated hardware. Black die-cast base. Shpg. wt., 4 lbs.  
17 A 8921..... 20.95



## MIDLAND

### Wireless Code-practice Oscillator and Key

**5.95** Transistorized oscillator works through AM radio

Model 25-110. Excellent way to learn or improve your code. Makes your radio sound like a code broadcasting station. Transistorized wireless code-practice oscillator is designed for use with any 535-1605 kHz AM radio. Ideal for schools, scouting groups, hobbyists, or Amateurs. Learn code quickly and easily, and practice sending code with rugged hand code-key. You get oscillator-transmitter, code key, and 9-volt battery. Easy to operate—just connect oscillator to the screw terminals on code key, adjust your radio to oscillator frequency, and start sending code with hand-key. Size of oscillator,  $1\frac{1}{4} \times 3\frac{1}{4} \times 2\frac{1}{8}$ ". Japan. Shpg. wt., 5 lbs.  
17 A 9084..... 5.95

# Code Keys, Courses, and Practice Aids

Learn or improve your Morse Code with a Practice Oscillator

## 995 Code Oscillator Kit

**A** Eico 706. Easy to assemble and so useful when it's finished. All-transistor unit has built-in  $2\frac{1}{2}$ " speaker, pitch control, headphone jack. Switch selects tone, flashing light, or both. Size,  $6\frac{1}{2} \times 3\frac{3}{4} \times 2\frac{3}{4}$ ". With battery. Shpg. wt., 2 lbs.  
17 A 8627. Kit Form..... 9.95  
17 A 8621. Factory Assembled.... 14.95

## 1250 Oscillator/Monitor

**B** Ameco OM Oscillator/Monitor. Transistorized monitor with built-in speaker, tone control, headphone jack for private listening. Monitors RF output without connection to transmitter. With detailed instructions. Requires 2 "A" Batteries. Size,  $6\frac{1}{4} \times 3\frac{3}{4} \times 2\frac{1}{2}$ ". Shpg. wt., 2 lbs.  
17 A 9077. Factory Assembled.... 12.50

## 995 Three-way Oscillator

**C** Midland 25-109. Fully assembled, battery-powered code practice oscillator. Has variable pitch control. Three-way selector switch for tone, light or combination tone/light operation. Includes standard phone jack monitor. Screw terminals. Size,  $6\frac{1}{4} \times 3\frac{1}{2} \times 2\frac{5}{8}$ ". Less batteries.  
17 A 6888. Shpg. wt., 4 lbs..... 9.95



995 Ready for easy code practice



E 1495

## Beginner's Morse Code Practice Outfit

**D** Hallicrafters HA-18A. Completely factory-assembled and ready for use. Specially designed for anyone desiring to learn Morse code. Outfit includes a portable solid-state battery-operated code oscillator, two penlight batteries, code practice key, and connecting wire. Features variable pitch control, built-in speaker, standard  $\frac{1}{4}$ " headphone jack. Compact polystyrene case.  
17 A 9080. Shpg. wt., 1 lb..... 9.95

## Code Practice Oscillator with 4" speaker

**E** Ameco CPS-WT Oscillator. Completely factory-assembled code practice oscillator is perfect for the learning beginner, or the professional who wants to keep in practice. Features built-in 4" speaker, volume and tone controls for good sound. Can also be used as a keying monitor. Rugged construction, compact design. Overall size,  $6\frac{1}{2} \times 5 \times 3\frac{1}{2}$ ". For 110-120 V, AC or DC.  
17 A 8722. Shpg. wt., 4 lbs..... 14.95



A



B



C



## Allied Code Course

449 A sure-fire way to learn or improve your code

Ten easy code lessons on one 12",  $33\frac{1}{3}$  rpm LP record—calculated to advance you quickly to a speed of 15 words per minute. Table of International Morse Code is included on back of jacket. With instruction booklet containing lessons identical to those on record.  
17 A 8573. Shpg. wt., 1 lb..... 4.49

## Rider Code Courses

"Sight 'N' Sound" courses on 10"  $33\frac{1}{3}$  rpm LP records.  
17 A 8558. Novice Course. (0-8 wpm.) Three 10-inch LP's, 47 cards, and book. Shpg. wt., 2 lbs..... 9.50  
17 A 8564. Advanced Course. (9-20 wpm.) Three 10-inch LP records and book. Shpg. wt., 2 lbs..... 8.95  
17 A 8565. Complete Course. (0-20 wpm.) Six 10-inch LP's, 47 cards, and book. Shpg. wt., 6 lbs..... 15.95



F

## Quality Code Practice Aids

375 Low-cost hand key is fully adjustable

**F** Johnson 114-310 Standard Key. Excellent for the beginner or the experienced operator. Designed for clear, easy sending. Made for hard usage, will last for years. Tension adjustment sets touch to a wide variety of tastes. Smooth adjustable bearings and "cushion contact" design provide smooth keying action. Mechanical parts are nickel-plated;  $\frac{1}{8}$ " silver contacts. Heavy die-cast base. Accepts semi-automatic key.  
17 A 8903. Shpg. wt., 2 lbs..... 3.75

**G** Johnson 114-400 Buzzer. Practice code under ideal conditions. Learn to send properly made characters and to read code expertly. Constant-frequency buzzer with screw adjustment to vary high-frequency tone to your particular preference. Requires two  $1\frac{1}{2}$ -V batteries (elsewhere in this Catalog). Shpg. wt., 5 oz.  
17 A 8911..... 2.00



H

## H J Key with Buzzer

299 Save 16%

**H J** Purchased Separately, \$3.50. Learn to send clear and understandable code and to receive it easily. Practice will make your code perfect with this low-cost key and buzzer outfit. Ideally suited for novice code study. And our outfit price saves you 51¢. Quality constructed, durably made key has handsome polished solid-brass base, heavy silver contacts, nickel-plated hardware, shorting bar to take key out of the circuit, and black knob. Fully adjustable tension and spacing allows you to adjust touch. Requires two  $1\frac{1}{2}$ -V batteries. Japan. Shpg. wt.,  $2\frac{1}{2}$  lbs.  
17 A 9025..... Both for 2.99  
**H** 17 A 6656. Key Alone. 1 lb..... 2.50  
**J** 17 A 9018. Buzzer Alone. Well constructed buzzer has screw adjustment to vary tone. Molded base and cap. Requires two  $1\frac{1}{2}$ -V batteries. Japan. Shpg. wt., 6 oz..... 1.00

# 6 pages of values in Allied® CB 2-way Radios

Any U.S. citizen, 18 years of age or older, can use the Citizens Band license application enclosed with each unit—no test required

Choose from Allied's own extra-value line, plus other most-wanted brands.

Use Allied's Credit Fund Plan to outfit your CB station. See page 438 for details.

You can have two-way radio communications, for business or personal use, from your home to your car or boat, from your office to vehicles on the road, between vehicles, or between your office and warehouse. CB is useful anywhere. It's the fast, easy and convenient way to keep in touch.

## Allied solid-state 23-channel mobile 2-way Radio



Our best mobile model . . . has every big feature necessary for finest two-way communications from car or boat

# 149<sup>95</sup>

\$8 monthly  
see page 438

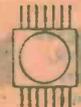
Model A-2564. Only Allied could bring you this full-feature mobile two-way Citizens Band radio at such a low price! Two integrated circuits, one in squelch circuit and one in audio circuit, assure exceptional performance from an ultracompact unit that easily installs in car or boat. Operates on 12 VDC. Incorporates 23-channel frequency synthesizer—no additional crystals to buy. Utilizes FET in RF amplifier stage for low noise and top sensitivity. Dual conversion and ceramic filters for maximum selectivity and image rejection. Audio output circuit provides maximum power output with minimum distortion.

Noise blanker reduces ignition and similar impulse noises with negligible loss of desired signal intelligibility. Self-adjusting automatic noise limiter switches in whenever noise blanker switches out. Combination S/RF power output meter. Has built-in 3" speaker. Adjustable squelch. Built-in full-time speech compression. Built-in 3-watt PA system requires only external speaker. Has jacks for external and PA speakers. Size, only 8¼x3¼x8". With push-to-talk ceramic mike and mounting bracket for simplified installation in car or boat. For 12 VDC neg. ground. 17 A 6966 U. Shpg. wt., 4 lbs. . . . . 149.95

### SPECIFICATIONS

Receiver Circuit. *Sensitivity:* Less than 0.75  $\mu$ V for 10 dB S+N/N ratio. *Selectivity:* 6 kHz at -6 dB. *Adjacent Channel:* Better than 50 dB rejection. *Image Rejection:* Better than 50 dB. *IF Rejection:* First IF, 80 dB; second IF, 100 dB. *Squelch:* 1-150  $\mu$ V adjustable. *Audio Output:* 3 watts. *Transmitter Circuit. RF Output Power:* 3.5 watts. *Modulation Capability:* 100%. *General. Antenna Impedance:* 50 ohms. *Semiconductors:* 19 diodes, 24 transistors, 2 integrated circuits, 1 Field-Effect Transistor.

Includes the latest advances in solid-state circuits for lasting reliability and superior performance



Two integrated circuits for small size and better reception



Field-Effect Transistor for low noise and maximum sensitivity



Ceramic filters, dual conversion for top image rejection and selectivity



Built-in 3-watt PA system—requires only external speaker



Incorporates both automatic noise limiter and noise blanker circuit



No crystals to buy—uses a highly stable frequency synthesizer

# Allied 23-channel base/mobile Citizens Band Two-way Radio with range-expander for extra "talk power"



# 179<sup>95</sup>

\$9 monthly  
see page 438

Built-in meter and SWR bridge circuit let you measure SWR for optimum antenna tuning . . . illuminated-scale meter reads SWR, forward/reverse reflected power, "S" units

**Frequency-synthesis circuit gives you crystal-controlled transmit and receive . . . no extra crystals to buy**



Specially designed three-scale SWR/Power/"S" units illuminated meter



Set-calibrate meter control  
Meter-function selector switch



Range-expander boosts modulation for more "talk power"



Handy front panel switch lets you select either CB or PA mode

Model A-2567. This two-way radio features built-in solid-state power supply for both 115 VAC base and 12 VDC mobile operation. A masterpiece in design and operation, with performance that beats many models priced much higher. Frequency-synthesis circuit gives you crystal-controlled transmit and receive on all 23 channels . . . no extra crystals to buy. Just turn the selector to any desired channel, and the illuminated numerals show the channel in use.

Full-power 5-watt transmitter offers 100% modulation. Range-Expander boosts "talk power" to increase transmitter range. Pi-network output matches any CB antenna. Specially designed SWR bridge circuit lets you measure SWR for optimum antenna tuning. Illuminated three-scale meter reads SWR, forward/reverse reflected power output, and serves as "S" meter. Dual-conversion superhet receiver has excellent selectivity and gain, with delta tuning circuit to pull in signals from stations operating up to 3 kHz off-frequency.

Serves as 2.5-watt PA amplifier, with an external speaker. Modulation indicator doubles as monitor to prevent missed calls during PA use. Adjustable squelch; standby switch; built-in 4" speaker; headphone jack; noise limiter.  $7\frac{1}{2} \times 13\frac{3}{8} \times 5\frac{1}{2}$ ". With all crystals, AC and DC power cords, noise-canceling push-to-talk mike with coiled cord, universal mounting clips.

17 A 6435 U. Shpg. wt., 19 lbs. . . . . 179.95

## SPECIFICATIONS

Receiver Circuit. *Sensitivity:* 0.5  $\mu$ V or better for 10 dB S/N ratio. *Selectivity:*  $\pm 3$  kHz at -6 dB. *Audio Output:* 2.5 watts. *IF:* Two stages, dual conversion. Transmitter Circuit. *Power Input:* 5 watts. *Modulation:* 100% capability; range-expander circuit. *Output:* Pi-network; matches any antenna type. *General Controls:* Channel Selector Switch with illuminated channel indicator; Delta Tune; On/Off Volume; Squelch; PA/Receive Switch; Range Expander Switch; Meter Function Switch; Set-Calibrate. *Active Circuit Elements:* 10 tubes, 13 diodes, 2 transistors. *Overall Size:*  $7\frac{1}{2} \times 13\frac{3}{8} \times 5\frac{1}{2}$ ". *Power Requirements:* 115 volts AC, 50-60 Hz or 12-volt DC, negative ground.

# Step up to the finest . . . Allied's best 23-channel base/mobile solid-state Citizens Band Two-way Radio



Operates on either 12 VDC for mobile or 117 VAC base from built-in power supplies electronically regulated to provide maximum stability over a wide variation in input voltages

# 199<sup>95</sup>

\$10 monthly  
see page 438

Model A-2568. Outstanding in every way! Operates on 117 VAC from built-in power supply electronically regulated to provide maximum stability over a wide variation of input voltages—an ideal choice for base station operation. It also includes facilities for operation on 12 VDC in cases of emergency or for mobile or boat use. AC and DC supplies are separately fused for added circuit protection. Incorporates 23-channel frequency synthesizer—no extra crystals to buy.

Two integrated circuits, one in squelch circuit and one in audio circuit, assure the exceptional performance you would expect to find only in expensive models. Has FET in RF amplifier stage for low noise and high sensitivity. Dual conversion and ceramic filters assure maximum selectivity and image rejection. Audio output circuit provides maximum power output with minimum distortion. Has 100% modulation capability. Solid-state transmit/receive switching and transmit indicator light are activated by push-to-talk switch on mike.

Noise blanker reduces ignition and similar impulse noises with negligible loss of desired signal intelligibility. ANL switches in when noise blanker switches out. Has built-in 4" speaker. Combination S/RF power output meter. Built-in 3-watt PA system requires only ext. speaker. Takes 50-ohm antenna. Jacks for external and PA speakers. 4 3/4 x 11 1/4 x 4". Mike, mounting bracket. 17 A 6965 U. Shpg. wt., 3 lbs. . . . 199.95

## SPECIFICATIONS

Receiver Circuit. *Sensitivity:* Less than 0.75  $\mu$ V for 10 dB S+N/N ratio. *Selectivity:* 6 kHz at -6 dB. *Adjacent Channel:* Better than 50 dB rejection. *Image Rejection:* Better than 50 dB. *IF Rejection:* First IF, 80 dB; second IF, 100 dB. *Squelch:* 1-150  $\mu$ V adjustable. *Audio Output:* 3 watts. *Transmitter Circuit. RF Output Power:* 3.5 watts. *Modulation Capability:* 100%. *General Power Consumption:* Receive, 13.8 VDC nominal, 117 VAC nominal; 120 mA stand-by current. Transmit, 13.8 VDC nominal, 117 VAC nominal; 1.4 amps at 100% modulation. *Antenna Impedance:* 50 ohms. *Overall Size:* 4 3/4 x 11 1/4 x 4". *Semiconductors:* 23 diodes, 24 transistors, 2 integrated circuits, one FET.

Includes the latest advances in solid-state circuits, and reflects the best features of 2-way radio design



2 integrated circuits for small size and exceptional performance



Field-effect transistor for low noise and maximum sensitivity



Ceramic filters and dual conversion for sharp selectivity



Built-in 3-watt PA system—requires only external speaker



Automatic noise limiter and noise blanker for high intelligibility



No crystals to buy—uses a highly stable frequency synthesizer

# 23-channel CB Two-way Radio-and-Antenna



Base-loaded Antenna

Deluxe 102" Whip Antenna

Save \$8.45 **159<sup>00</sup>**

Save \$8.45 **159<sup>00</sup>**

## Allied A-2564 Two-way Radio with trunk mount base-loaded Antenna

## Allied A-2564 Two-way Radio with full-length 102" whip Antenna

Radio has speech compression for high intelligibility . . . antenna whip and shock-spring are stainless steel

Fine mobile radio features dual conversion for high selectivity . . . antenna includes stainless steel spring

Separately, \$167.45. Deluxe mobile CB station outfit includes Allied A-2564 23-channel Two-way Radio and Allied A-2581 base-loaded Antenna. Radio has ANL, PA facility, built-in speaker. Antenna has no-hole "Quick-Grip" trunk mount; heavy-duty stainless-steel shock-spring; tapered stainless-steel whip with fine-tuning adjustment for perfect match to 50-ohm output, and solderless 16-ft. coaxial cable and PL-259 connector. Trunk mount installs without leaving marks. Antenna has omnidirectional pattern for uniform signal strength. 17 A 0432 L2U. Shpg. wt., 5<sup>3</sup>/<sub>4</sub> lbs. . . . . 159.00

Separately, \$167.45. Mobile CB station outfit includes Allied A-2564 23-channel Two-way Radio and Allied A-2582 deluxe 102"-whip Antenna. Radio has everything you would want for top mobile performance, including ceramic filters, FET RF stage, and integrated circuits in audio and squelch circuits. Antenna has no-hole bumper mount, gutter clip, heavy-duty stainless steel spring, solderless 20-ft. coaxial cable and PL-259 connector. No-hole bumper mount makes installation easy and does not mar car finish. Spring prevents damage to antenna. 17 A 0431 L2U. Shpg. wt., 9 lbs. . . . . 159.00



Outstanding CB/AM/FM Antenna

Powerful 23" car-top Antenna

Save \$8.30 **154<sup>60</sup>**

Save \$9.05 **151<sup>85</sup>**

## Allied A-2564 Two-way Radio with combination CB/AM/FM Antenna

## Allied A-2564 Two-way Radio with loaded 23" car-top Antenna

Feature-packed radio has sensitive, stable FET front-end . . . antenna has loading coil, telescopes 50 to 28 inches

Great combination for a hot signal—full-feature radio and high-efficiency, short length car-top antenna

Separately, \$162.90. Mobile CB station outfit includes Allied A-2564 23-channel Two-way Radio and Allied A-2583 CB/AM/FM Antenna. Superb radio has dual conversion and ceramic filters for high selectivity and image rejection. Antenna has chrome-plated brass whip, high-performance loading coil, lifetime stainless steel adjustable tuning rod, isolating coupler. With 22-ft. coax and PL-259 plug. Extends to 50 inches, telescopes to 28 inches for low garaging. Single-hole mounting. Isolating coupler is adjustable for best AM/FM reception. 17 A 0430 L2U. Shpg. wt., 7 lbs. . . . . 154.60

Separately, \$160.90. Power-packed mobile CB station outfit includes Allied A-2564 23-channel Two-way Radio and Allied A-2598 23" car-top Antenna. Radio features dual conversion, speech compression, PA facility. Antenna has special etched-copper loading coil, claw mount, 22-ft. coaxial cable and PL-259 connector. Loading coil gives high efficiency in spite of antenna's short length. You get a short antenna with big performance—lets you go under any cover. Claw mount fits into any 3/8"-3/4" hole with a positive grip. Rugged construction for long life. 17 A 0429 L2U. Shpg. wt., 6 lbs. . . . . 151.85

# Outfits with Allied A-2564 and A-2567



**Versatile CB/AM/FM Antenna**

**Deluxe 102" whip Antenna**

Save \$10.15 **182<sup>75</sup>**

Save \$10.70 **186<sup>75</sup>**

## Allied high-performance A-2567 Two-way Radio with all-purpose mobile CB/AM/FM Antenna

High-performance radio has Range Expander for stronger signals . . . antenna telescopes from 50-28 inches

Separately, \$192.90. Mobile CB station outfit includes Allied A-2567 23-channel 2-way Radio and Allied A-2583 CB/AM/FM Mobile Antenna. Radio has frequency synthesis for all 23 channels, and 115 VAC/12 VDC power supply. Antenna has chrome plated brass whip, high-performance loading coil, lifetime stainless steel adjustable tuning rod, isolating coupler. Extends to 50 inches, telescopes down to 28 inches for low garages. Isolating coupler assures fine performance on CB and is adjustable for best AM/FM reception. With 22-ft. coax, PL-259 plug. 17 A 0437 L2U. Shpg. wt., 21<sup>3</sup>/<sub>4</sub> lbs. . . . . 182.75

## Feature-packed Allied A-2567 two-way Radio with 102"-whip mobile Antenna

Superb radio has Range Expander and dual conversion . . . top-quality whip with stainless steel spring

Separately, \$197.45. Top-quality mobile CB station outfit includes Allied A-2567 23-channel 2-way Radio and Allied A-2582 deluxe 102"-whip mobile Antenna. Radio has advanced circuit, squelch circuit, dual conversion, 115 VAC/12 VDC power supply. Antenna has no-hole bumper mount, gutter clip, heavy-duty stainless steel spring, solderless 20-ft. coaxial cable and PL-259 connector. The no-hole bumper mount installs without special tools and does not mar car finish. Stainless-steel shock-spring prevents damage to antenna. 17 A 0436 L2U. Shpg. wt., 23<sup>3</sup>/<sub>4</sub> lbs. . . . . 186.75



**Colinear Antenna and Cable**

**Allied Beam Antenna**

**Coaxial Cable**

Save \$10.45 **199<sup>95</sup>**

Save \$10.45 **214<sup>95</sup>**

## Allied A-2567 Two-way Radio with 19-ft. omnidirectional colinear base Antenna

One of our best 23-channel radios . . . has SWR meter, dual power supply . . . with complete antenna outfit

Separately, \$210.40. Base station outfit includes Allied A-2567 23-channel Two-way Radio and Allied A-2572 colinear Antenna. Radio has range expander to provide good intelligibility at greater distances, SWR meter, 115 VAC/12 VDC power supply. Antenna has 19' 10" aluminum radiator, solid-state matching coupler for maximum signal transfer, clover-leaf top hat, center skirt. With 50 feet of RG-58/U foam-dielectric coaxial cable. 5/8"-wavelength provides superior performance. VSWR 1.04:1 or less. DC grounded for lightning protection. 17 A 0434 L3U. Shpg. wt., 28<sup>3</sup>/<sub>4</sub> lbs. . . . . 199.95

## Allied A-2567 two-way radio with base station 24-ft. five-element beam Antenna

Radio provides maximum signal and intelligibility . . . directional antenna aims signal where you need it

Separately, \$225.40. Base station outfit includes Allied A-2567 23-channel Two-way Radio and Allied A-2599 base-station 5-element Beam Antenna. Radio has dual conversion, PA facility, SWR meter, 115 VAC/12 VDC power supply. Antenna has 24-ft. boom and 18' 8<sup>3</sup>/<sub>4</sub>" elements. With 50 ft. of RG-58/U foam-dielectric coaxial cable. The big 24-ft. boom allows proper spacing of elements for maximum gain. Forward gain of 12.3 dB and front-to-back ratio of 24 dB. Highly directional pattern puts your signal where you want it. For 1<sup>1</sup>/<sub>2</sub>" mast. 17.A 0433 L3Z. Shpg. wt., 44<sup>3</sup>/<sub>4</sub> lbs. . . . . 214.95

# Our best 23-channel CB Radio-Antenna Outfits



Base-loaded Antenna

Deluxe 102" whip Antenna

Save \$12.95 204<sup>50</sup>

Save \$12.95 204<sup>50</sup>

## Allied A-2568 solid-state Two-way Radio with base-loaded mobile whip Antenna

Superb CB radio has dual conversion, ceramic filters, FET RF stage, and more . . . with stainless steel antenna

Separately, \$217.45. Mobile station includes Allied A-2568 23-channel Two-way Radio and Allied A-2581 base-loaded Antenna. Radio has frequency synthesis for all 23 channels, 115 VAC/12 VDC power supply. Antenna has stainless-steel shock spring, no-hole "quick-grip" trunk mount, tapered stainless-steel whip with fine-tuning adjustment for perfect match to 50-ohm output, and solderless 16-ft. coaxial cable with PL-259 connector. Omnidirectional radiation pattern. Trunk mount makes installation easy and can be removed without leaving scratches.

17 A 0427 L2U. Shpg. wt., 9<sup>3</sup>/<sub>4</sub> lbs. . . . . 204.50

## Allied A-2568 solid-state Two-way Radio with full-length 102" mobile whip antenna

Integrated circuits in audio and squelch circuits . . . antenna has strong stainless-steel spring

Separately, \$217.45. Low price for top-quality outfit with Allied A-2568 23-channel Two-way Radio and Allied A-2582 deluxe 102" Whip Antenna. Radio has ceramic filters, solid-state transmit/receive switching, 115 VAC/12 VDC power supply. Antenna has no-hole bumper mount, gutter clip, heavy-duty stainless-steel spring, and solderless 20-ft. coaxial cable with PL-259 connector. This is a full-size antenna system of the type used by law-enforcement agencies. The bumper mount is easy to install without special tools. Spring prevents antenna damage.

17 A 0428 L2U. Shpg. wt., 13 lbs. . . . . 204.50



Colinear Antenna and Cable

Five-element Beam Antenna

Save \$20.45 209<sup>95</sup>

Save \$25.45 219<sup>95</sup>

## Allied A-2568 solid-state Two-way Radio with 19-ft. colinear base-station Antenna

Radio has every feature for top performance including solid-state switching . . . antenna delivers long range

Separately, \$230.40. Base station outfit includes Allied A-2568 23-channel Two-way Radio and Allied A-2572 base-station colinear Antenna. Radio has FET RF stage, integrated circuits, 115 VAC/12 VDC power supply. Antenna has 19' 10" aluminum radiator, solid-state matching coupler, clover leaf top-hat, center skirt, 50 feet of RG-58/U foam-dielectric coaxial cable. Omnidirectional pattern with <sup>3</sup>/<sub>8</sub>-wavelength radiator for superior performance. Solid-state matching coupler for best signal transfer. VSWR of 1.04:1 or less. DC grounded.

17 A 0426 L3U. Shpg. wt., 17<sup>1</sup>/<sub>2</sub> lbs. . . . . 209.95

## Allied A-2568 solid-state Two-way Radio with base-station 5-element beam Antenna

Dual conversion radio has base/mobile power supply . . . directive antenna beams signal where you want it

Separately, \$245.40. Highly efficient CB base station outfit includes Allied A-2568 23-channel Two-way Radio and Allied A-2599 base-station 5-element Beam Antenna. Radio has FET RF stage and integrated circuits in audio and squelch circuits. Antenna has 24-ft. boom and 18-ft. 8<sup>3</sup>/<sub>4</sub>-inch elements; With 50-ft. of RG-58/U foam-dielectric coaxial cable. Radiates a near-perfect directional pattern. Forward gain of 12.3 dB and an excellent front-to-back ratio of 24 dB. Directivity reduces interference from other stations. For 1<sup>1</sup>/<sub>2</sub>" mast.

17 A 0425 L3Z. Shpg. wt., 34 lbs. . . . . 219.95

# Values in 5-watt mobile CB 2-Way Radios



MIDLAND

6 channels . . . high sensitivity  
**7450** Sensitive combination speaker/microphone

Model 13-855. High-performance solid-state circuit with excellent receiving sensitivity of 0.5  $\mu$ V for 10-dB S/N. Captures those hard-to-receive signals. Full-power transmitter gives maximum range and clarity. Very compact for easy installation in virtually any car or boat. Combination speaker/microphone. Transmit indicator light. Vinyl-clad cabinet, 4 $\frac{3}{4}$ "x6 $\frac{1}{2}$ "x2". Channel 11 crystals. 12 VDC. Japan. 17 A 6993 X. Shpg. wt., 3 lbs. . . . 74.50



JOHNSON

5 channels . . . ultracompact  
**9995** With microphone and coiled cord

Messenger 125. Has every feature necessary for fine communications. Solid-state circuit with 0.5- $\mu$ V sensitivity for 10-dB S/N. Selectivity, 6 kHz at 6-dB down. High-level modulation and speech compression for increased talk-power and range. ANL for quiet operation. Pushbutton channel selector and on-off switch. Illuminated channel numbers: Only 1 $\frac{1}{2}$ "x4 $\frac{1}{2}$ "x7". Channel 9 crystals. 12 VDC. 17 A 6504 X. Shpg. wt., 6 lbs. . . . 99.95



REGENCY

12 channels . . . special styling  
**9995** Front panel has only 3 controls

Model 500. Designed with racing stripes in American red-white-and-blue. Full-power transmitter. Superhet receiver has better than 1- $\mu$ V sensitivity for 10-dB S/N. Adjustable squelch silences speaker during standby operation. Selectivity is 10 kHz at 3-dB. Modern, solid-state circuit. PA and external-speaker facilities. 2 $\frac{1}{2}$ "x5 $\frac{1}{2}$ "x7 $\frac{1}{2}$ ". With push-to-talk ceramic mike, Channel 11 crystals. 12 VDC. 17 A 6592 X. Shpg. wt., 6 lbs. . . . 99.95



JOHNSON

5 channels . . . speech compressor  
**10995** Adjustable squelch for quiet operation

Messenger 110. Famous Johnson dependability at low cost. Sensitive, superhet receiver has built-in automatic noise limiter and adjustable squelch for quiet operation. Full-power transmitter with speech compressor provides greater talk power and extended transmitting range. Solid-state, 2 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "x8 $\frac{3}{4}$ ". Complete with push-to-talk mike and Channel 9 crystals. For 12 VDC negative ground. 17 A 6490 X. Shpg. wt., 6 lbs. . . . 109.95



FANON

12 channels . . . base/mobile  
**10995** Two selective ceramic filters

Fanon SFT-600. Modern solid-state circuit and full power assure dependable communications. Dual-conversion with 1- $\mu$ V sensitivity for 10-dB S/N. Ceramic IF filters give 3-kHz bandwidth at 6-dB down; adjacent-channel rejection, 45 dB. ANL and squelch. AC/DC selector; battery-polarity reversing plug. Signal-strength meter. 9 $\frac{1}{2}$ "x5x2 $\frac{1}{2}$ ". Mounting bracket, Channel 9 crystals. 117 VAC/12 VDC. 17 A 6998 X. Japan. 6 lbs. . . . 109.95



JOHNSON

5 channels . . . base/mobile  
**12495** Two function-indicator lights

Messenger I. Provides a clear, penetrating signal with excellent readability. Built-in base/mobile supply. Full-power transmitter with 100% modulation. Easy switch-selection of up to five channels. Squelch, ANL. Two function indicator lights. 10-tube circuit. Chrome-trimmed case, 5 $\frac{1}{2}$ "x7x11 $\frac{3}{8}$ ". AC, DC cords; mike; Channel 9 crystals. 115 VAC/12 VDC. 17 A 9414 U. Shpg. wt., 17 lbs. . . . 124.95  
17 A 9416. Mobile Mount, 1 $\frac{1}{4}$  lbs. . . . 2.50

## 12-channels . . . solid-state circuit with dual conversion and 100% modulation

Messenger III. Offers everything needed for outstanding communications. Provides excellent readability—cuts through interference to get your messages through. Deluxe solid-state circuit with up to 12 crystal-controlled transmit and receive channels. Full-power 100%-modulated transmitter for maximum-range communications. Sensitive dual-conversion superhet receiver has adjustable squelch for silent standby operation. 2 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "x8 $\frac{3}{4}$ ". Mike, mounting bracket, Channel 9 crystals. 12 VDC, negative ground. 17 A 6500 U. Shpg. wt., 8 lbs. . . . 149.95

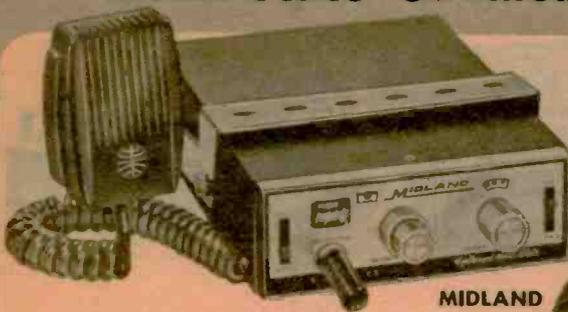


JOHNSON

Cut \$10.00  
**14995**  
Was \$159.95 in Last Year's Catalog

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

# Solid-state CB mobile 2-Way Radios with



MIDLAND

**Mechanical filter for super-selectivity**

**13995**

Dual-conversion for top sensitivity, extra selectivity

Model 13-870C. Offers 2-way radio performance you'd never expect at this low price. Frequency-synthesized crystal-controlled transmit/receive. Dual-conversion receiver with mechanical filter for super-selectivity. Sensitivity better than 1  $\mu$ V for 10-dB S/N. RF/SWR meter. Illuminated channel selector; built-in speaker; PA facility; push on-off switch. Metal case, 2 $\frac{1}{2}$  x 6 x 3 $\frac{1}{2}$ ". Solid-state circuit. Mounting bracket, power cord, mike, all crystals. 12 VDC. Japan.

17 A 9721 U. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 139.95



COURIER

**Compact easy to install model**

**15900**

Panel light shows S6 or stronger signals

Courier "Traveller." A compact model designed for easy installation in car or boat. You'll like its versatility, solid-state design, and quality. Offers full-power 5-watt-input transmitter. Frequency synthesized 23-channel crystal-controlled transmit/receive—all crystals supplied. Has panel light to show S6 or better signal; transmit and modulation indicator; external speaker jack. Only 1 $\frac{1}{8}$  x 5 $\frac{1}{2}$  x 6 $\frac{1}{2}$ ". Mounting bracket, mike, cables, all crystals. 12 VDC.

17 A 6528 U. Shpg. wt., 6 lbs. . . . . 159.00



MIDLAND

**Solid-state integrated-circuit model**

**14995**

Digital readout SWR/RF meter for more accurate readings

Model 13-872. Presents a handsome, modern appearance, and performs as well as it looks. Frequency-synthesized crystal-controlled transmit/receive. Solid-state design with integrated circuit. Dual-conversion superhet receiver with excellent sensitivity of 0.5  $\mu$ V for 10-dB S/N. Delta tuning for off-frequency stations. Transmit and modulation indicators. Vinyl-trimmed wood-grain cabinet, 3 $\frac{1}{2}$  x 10 x 12". With mike, all crystals. 12 VDC. Japan.

17 A 6992 U. Shpg. wt., 8 lbs. . . . . 149.95



JOHNSON

**Speech compressor for greater talk power**

**17995**

Speech Compressor circuit boosts effective transmitting range

Messenger 123. Full-power transmitter with speech compressor gives maximum-range communications. Excellent 0.5- $\mu$ V sensitivity (for 10-dB S+N/N) and noise limiter let you bring in weak stations with greater readability. Squelch eliminates noise during standby operation. Temperature compensated from -20° to +140°F. Illuminated S/Relative Output meter. 3-watt audio output for good, solid reproduction. With mike, all crystals. 2 $\frac{1}{2}$  x 6 $\frac{1}{2}$  x 8 $\frac{1}{2}$ ". 12 VDC.

17 A 6454 U. Shpg. wt., 5 lbs. . . . . 179.95

**Deluxe model by Regency with Collins mechanical filter**



Model GT-523. Racing stripes in American red-white-and-blue highlight the handsome design of this 2-way radio. Modern solid-state circuit, full-power transmitter, and superhet receiver with better than 1- $\mu$ V sensitivity (for 10-dB S+N/N) for maximum-range communications. Adjustable squelch for quiet standby operation. Excellent 8-kHz bandwidth at 6-dB down for good adjacent-channel rejection. Full 2-watt audio output. PA facility and provision for external speaker. 2 $\frac{1}{4}$  x 5 $\frac{1}{2}$  x 7 $\frac{1}{2}$ ". With push-to-talk ceramic mike, all crystals. 12 VDC.

17 A 6593 U. Shpg. wt., 6 lbs. . . . . 189.00

Specially styled for mobile use

**18900**

\$10 monthly

See page 438

# 5-watt power and crystals for all 23 channels



**JOHNSON**



**PACE**

**Speech Compressor gives greater talk power**

**19995** Highly sensitive dual-conversion receiver

Messenger 320. Excellent 0.5- $\mu$ V sensitivity (for 10-dB S/N), full transmitting power, and speech compressor assure top-notch performance. Squelch for quiet standby operation; S/RF-Output meter. Modern solid-state circuit. Built-in 3-watt PA system—needs only external speaker. 2 $\frac{1}{2}$ "x8x9". Mounting bracket, ceramic mike, all crystals. FCC type accepted, DOT approved. 12 VDC, negative ground.  
 17 A 6271 U. Shpg. wt., 8 lbs. . . . . 199.95  
 17 A 6471 X. 117-VAC Power Supply. Wt., 5 lbs. . . . . 32.95

**Deluxe model with all silicon transistors**

**19995** Full 100% modulation capability for punching out a strong signal

Model 2300. Features silicon transistor solid-state design for high stability and best performance. Sensitive dual-conversion superhet receiver. Top-power transmitter with 100% modulation capability for maximum range. S-meter; PA and loud-hailer facilities. Diode protection system. Illuminated channel selector; squelch and volume controls. Walnut-grain metal case, 2 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "x8 $\frac{1}{2}$ ". Complete with ceramic mike, all crystals. For 12 VDC, negative ground.  
 17 A 6716 U. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 199.95



**KAAR**

**Hi-Q circuits for top-notch selectivity**

**22995** Illuminated signal-level and dynamic-modulation meter

Skyhawk II IR-337. Features selective superhet receiver with excellent sensitivity of 0.4- $\mu$ V for 10-dB S/N; AGC, ANL, adjustable squelch. Illuminated signal-level/dynamic-modulation meter. PA facility; external-speaker jack; enclosed plug-in transmit/receive relay. Zener-diode stabilized. Wood-grain front panel. 2 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "x9 $\frac{1}{2}$ ". Ceramic mike, mounting bracket, all crystals. 12 VDC, negative ground.  
 17 A 6462 U. Shpg. wt., 11 lbs. . . . . 229.95  
 17 A 6464 X. Model P336 117 VAC Supply. 5 lbs. . . . . 34.95



**JOHNSON**

**Crystal filter for razor-sharp selectivity**

**23995** Highly stable temperature-compensated circuit

Messenger 323. Fingertip selection of 23 crystal-controlled channels. Crystal filter that virtually eliminates adjacent-channel interference. Adjustable squelch; ANL. Speech compressor for greater talk power. Temperature compensation. Illuminated S/Power-Output meter. PA facility. 2 $\frac{1}{2}$ "x8x9 $\frac{1}{2}$ ". Ceramic mike, all crystals. 12 VDC, positive or negative ground. FCC Type Accepted, DOT Approved.  
 17 A 6890 U. Shpg. wt., 8 lbs. . . . . 239.95  
 17 A 6471 X. 117-VAC Power Supply. Wt., 5 lbs. . . . . 32.95

**Sonar professional model with dual-conversion receiver and triple amplified AGC**

Model J-23. Designed for top performance. Full-power transmitter with final output transistor-collector rated 7 watts dissipation; high-level Class B modulation. Dual-conversion superhet receiver with excellent 0.7- $\mu$ V sensitivity for 10-dB S+N/N; voltage regulation; series-gate limiter for positive noise elimination; triple-amplified AGC; noise-immune adjustable squelch. Big 2x6" speaker; 2.5-watt PA facility, needs only external speaker. Mounting bracket, power cable, mike, all crystals. Size 2 $\frac{1}{2}$ "x6 $\frac{1}{2}$ "x8 $\frac{1}{2}$ ". For 12 VDC, negative ground.  
 17 A 6505 U. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 239.95

Built for use where others may fail

**23995**

\$12 monthly  
See page 438



Buy your 2-way radio with low monthly payments . . . see page 438

# Citizens Band 5-watt 23-channel 2-Way Radios



MIDLAND

Full-feature base model at a low price

**139<sup>95</sup>** Even at this low price you get crystals for all 23 channels

Model 13-890. Priced surprisingly low for a 2-way radio ready to use on all CB channels. Receiver features delta tuning to bring in stations that may be operating off-frequency, plus noise limiter to cut interference. Squelch control. Transmit indicator light. Standby switch. Full 5-watt DC input. Sensitivity is 0.75  $\mu$ V for 10 dB signal-to-noise ratio. Deluxe tube-type circuit. With mike, all crystals. Vinyl-clad steel case. 7 $\frac{1}{2}$ x16x13". For 115 VAC. Japan.

17 A 8701 U. Shpg. wt., 18 $\frac{1}{2}$  lbs. .... 139.95



MIDLAND

Silicon-transistor base unit with IC's

**179<sup>95</sup>** Dual-conversion plus IC's for superior overall performance

Model 13-876. All silicon transistors for extra-dependable 2-way communications. Integrated circuits, and mechanical filter for sharp selectivity in receiver. Sensitivity is better than 1  $\mu$ V for 10 dB signal-to-noise ratio. Squelch control, RF-Standing Wave meter. Delta tuning brings in even off-frequency stations. Features PA switch with volume control. 8 $\frac{3}{4}$ x14 $\frac{1}{2}$ x13". Wood-grain vinyl-clad steel case. With mike, all crystals. For 117 VAC. Japan.

17 A 8702 U. Shpg. wt., 13 $\frac{1}{2}$  lbs. .... 179.95



COURIER

Deluxe base mobile unit for 117 VAC/12 VDC

**199<sup>00</sup>** Built-in Range Expander circuit boosts transmitting range

Courier 23. This popular CB 2-way radio puts out a strong, clear signal. Features single-knob bandspread tuning; switches for standby, PA and CB; automatic noise limiter; S/RF meter; modulation indicator; AVC; squelch. Jack for headphone or external speaker. Pi-network output for 30-100 ohm antennas. Sensitivity, 0.25  $\mu$ V for 6 dB signal-to-noise ratio. Deluxe tube circuit. For 117 VAC and 12 VDC. 5x12 $\frac{1}{2}$ x7 $\frac{3}{4}$ ". With mike, all crystals, mobile mtg. bracket.

17 A 6526 U. Shpg. wt., 16 lbs. .... 199.00



MIDLAND

Base model with IC's and digital clock

**214<sup>95</sup>** Field-effect-transistor front end and 4 IC's for finest performance

Model 13-877. Has latest circuits for premium-quality performance, plus a built-in digital-readout electric clock. Super-sensitive receiver has FET's for 10-dB signal-to-noise ratio. Delta tuning for off-frequency stations. Squelch and noise limiter. SWR meter reads forward and reflected power. RF meter; power, transmit and modulation indicators. Mechanical filter for sharp selectivity. Tilt-up base stand, 7x19x11". With mike, all crystals. 117 VAC. Japan.

17 A 8703 U. Shpg. wt., 15 lbs. .... 214.95

## Johnson base model with speech compression and deluxe desk mike



**224<sup>95</sup>** Specially designed for base stations ... easy-to-use press-to-talk mike

Messenger 223. Designed by same engineering team that developed the famous Messenger I and II. Simplified front panel for easy operation by anyone. Receiver pulls in hard-to-get signals with its 0.05  $\mu$ V sensitivity for 11 dB signal-to-noise ratio. Full 3-watt audio output for high-quality reception. Illuminated S-meter and relative RF power output meter, with adjustment control. Lighted full-view channel selector, too. On-off indicator light. Frequency stability, 0.005%. Squelch control. Advanced tube and transistor circuit. 5 $\frac{1}{8}$ x11x9 $\frac{1}{8}$ ". With all crystals. For 117 VAC.

17 A 6473 U. Shpg. wt., 13 lbs. .... 224.95

# choose from base and base/mobile models



**JOHNSON** Superb solid-state base/mobile model

**289<sup>95</sup>** All the latest circuit extras for professional performance

Messenger 124. Built for superior communications. Built-in SWR bridge, modulation indicator, S-meter, power output meter. Even has tone and audio gain controls, plus volume control. Vernier tuning and squelch controls. Crystal filter for super-selectivity. Audio output exceeds 3 watts. Sensitivity is 0.04  $\mu$ V for a high signal-to-noise ratio. 16 tuned circuits. With deluxe desk mike, all crystals. 5 $\frac{1}{2}$ "x11 $\frac{1}{2}$ "x9 $\frac{1}{4}$ ". For 117 VAC/12 VDC. 17 A 6501 U. Shpg. wt., 10 lbs. . . . . 289.95



**SONAR** Base/mobile unit with nuvistor front end

**299<sup>95</sup>** Deluxe circuit combines best features of tubes and transistors

Model FS-23. Low-noise nuvistor in front end pulls in signals even from weakest stations. Sensitivity is 0.04  $\mu$ V for 10 dB S+N/N. Has AGC, ANL and squelch for reliable reception. Audio power is a full 2 $\frac{1}{2}$  watts. Illuminated S-meter. Audio gain and fine-tuning controls. Ruggedly built, excellent for mobile use. With mike, all crystals, mobile mounting bracket, AC-DC power cords, 13 tubes, 7 solid-state diodes, 2 transistors. 5 $\frac{1}{2}$ "x11 $\frac{1}{2}$ "x11 $\frac{1}{4}$ ". For 117 VAC/12 VDC. 17 A 6474 U. Shpg. wt., 15 lbs. . . . . 299.95



**REGENCY** Compatible sideband-AM base/mobile model

**329<sup>00</sup>** Receives AM, upper and lower sidebands, transmits double sideband

Regency "Imperial." Usable with all CB 2-way radios, but gives you the extra range of double-sideband suppressed carrier and balanced modulation. Receives upper or lower sideband. Conventional AM operation, too. Double-conversion receiver. Sensitivity, 0.05  $\mu$ V for 6 dB S+N/N on AM, and 0.15  $\mu$ V for 10 dB S/N on SSB. S-meter also reads plate voltage and current. Full array of controls. Tube circuit. 5 $\frac{1}{2}$ "x11 $\frac{1}{2}$ "x9 $\frac{1}{4}$ ". With mike, all crystals. 117 VAC/12 VDC. 17 A 6840 U. Shpg. wt., 23 lbs. . . . . 329.00



**PACE** Silicon-transistor base unit with desk mike

**330<sup>00</sup>** Super-deluxe . . . one of the best base station models we've ever offered

Base Model. A professional performer. All silicon transistor circuit, with double conversion receiver, for sensitivity of 0.03  $\mu$ V for 10 dB S+N/N. SWR bridge and meter/IF wattmeter, plus S-meter. Speaker switch and headphone jack. RF gain control. Modulation limiter/compression amplifier for extra range. Desk mike has built-in preamp with variable output. Regulated power supply. Wood-grained case. 6x22x10". For 117 VAC. Provision for 12 VDC. With all crystals. 17 A 6442 U. Shpg. wt., 18 lbs. . . . . 330.00

## Midland solid-state sideband-AM base/mobile model with 10-watt PEP on SSB

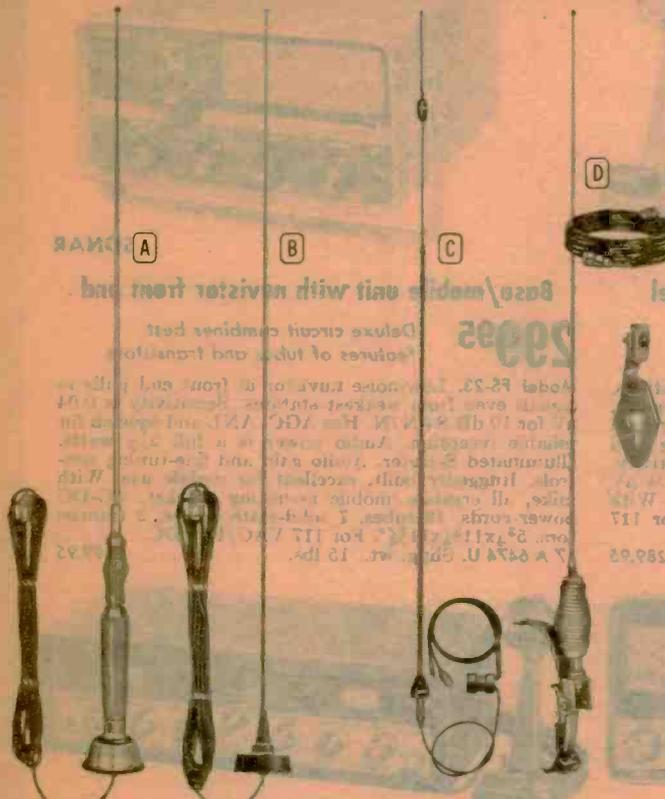
Fully compatible! Features FET's, IC, built-in digital clock

**349<sup>95</sup>**

Model 13-880. Midland's best! Has every feature for finest performance. Field-effect-transistors in front end for super-sensitivity. One integrated circuit. Upper or lower sideband selectable on SSB. Regular 5-watt AM too, for use with ordinary units. RF gain control, noise blanker, SWR/RFO meters, tape jack. Clarifier circuit. Rocker switches for PA-CB, speaker off-on. 13x5x9 $\frac{5}{8}$ ". 117 VAC/12 VDC. Mike, all crystals, Japan. 17 A 8700 U. Shpg. wt., 17 lbs. . . . . 349.95



# Allied® Mobile CB Antennas make the most of your operating power to give you longest range possible



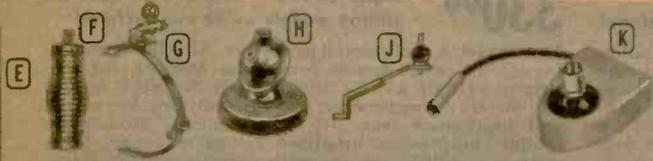
**A** Base-Loaded Antenna **750**  
**B** 23° Rooftop Antenna **1095**  
**C** CB/AM/FM Antenna **1295**  
**D** Deluxe Whip Package **1750**

**A** A-2581 Base-Loaded Antenna. Easy-mounting antenna with stainless-steel shock-spring for low garaging. Triple-chromed dress cup and no-hole "Quick-Grip" trunk mount. Easily removed—leaves no scars. Tapered stainless-steel whip with fine-tuning adjustment for perfect match to 50-ohm output. Height, 45". Solderless 16-ft. coax cable and PL-259 connector.  
 17 A 6683 X. Shpg. wt., 1¾ lbs. . . . . 17.50

**B** A-2598 23° Rooftop Antenna. Short antenna with big performance—lets you go under any cover. Special etched-copper loading coil gives high efficiency while allowing sleek, low-profile look. Claw-mount fits into any 3/8" hole. 52 ohms. Excellent receiving sensitivity and transmitting efficiency for more effective communications. Constructed for long service and extra dependability. With claw mount, 22-ft. coax cable with connector.  
 17 A 6684 X. Shpg. wt., 2 lbs. . . . . 10.95

**C** A-2583 CB/AM/FM Antenna. Replaces your existing AM/FM whip antenna. Delivers outstanding performance on CB as well as on AM and FM. Extends to 50 inches, telescopes down to 28 inches for low garaging. Chrome-plated brass whip topped with high-performance loading coil and lifetime stainless-steel adjustable tuning rod. Isolating coupler for best CB performance, adjustable for best AM/FM. Single-hole mount, PL-259 plug, 22-ft. coax cable.  
 17 A 6751 X. Shpg. wt., 3 lbs. . . . . 12.95

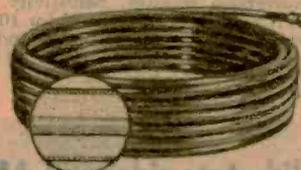
**D** A-2582 Deluxe 102" Whip-Antenna Package. Full-size antenna system of the type used by law-enforcement agencies. No-hole bumper mount for quick, easy installation without marring car finish. Includes gutter-clip to keep whip below height of car when not in use. Heavy-duty stainless-steel spring prevents damage to antenna. With 20 ft. of solderless coax cable and a PL-259 connector. Antenna system installs without the use of special tools.  
 17 A 6760 X. Shpg. wt., 5 lbs. . . . . 17.50



## Whip Antenna and selected antenna Accessories

- E** 102" Stainless-Steel Whip. Fine taper-ground stainless-steel whip. Consists of two sections. With 3/8"-24 stud for mounting. Shpg. wt., 2 lbs.  
 17 A 6610 X . . . . . 5.50
- F** Heavy-Duty Stainless-Steel Spring. Offers superior strength and durability. 3/8"-24 threads. Shpg. wt., 2 lbs.  
 17 A 6609 . . . . . 7.50
- G** Bumper Mount. Solid, permanent antenna mounting. Stainless-steel strap, chrome ball. Won't rust or break. Will give years of service. Shpg. wt., 3 lbs.  
 17 A 6606 X . . . . . 7.50
- H** Body Mount. Stainless-steel ball adjustable 180°; steel back-up plate. Easy to adjust; won't loosen under vibration.  
 17 A 6607. Wt., 3 lbs. . . . . 8.50
- J** Trunk Mount. Installs in a jiffy. No holes to drill. Mounts in trunk groove. Chrome-plated steel.  
 17 A 8955 X. Wt., 12 oz. 3.95
- K** Trunk Mount. No drilling. Weatherproof triple plating. Top-cover of Cyclocac® high-impact plastic. 3/8"-24 thread. With 17-ft., 50-ohm solderless coax.  
 17 A 6685 X. Wt., 3 lbs. . . . . 8.95

## Dearborn low-loss foam-dielectric Coaxial Cable Assemblies



20-ft.  
 RG-58/U  
 Low as  
**295**

Premium ready-to-use coaxial cable assemblies with connectors attached. Polyethylene foam-dielectric and non-contaminating-PVC jacket. Cuts line loss, increases system efficiency.

**RG-8/U 50-Ohm Coax Cable.** Has PL-259 plugs at both ends for quick, easy installation.  
 17 A 8519. 50-ft. Coil. Shpg. wt., 7 lbs. . . . . 8.50  
 17 A 8522. 100-ft. Coil. Shpg. wt., 14 lbs. . . . . 13.95

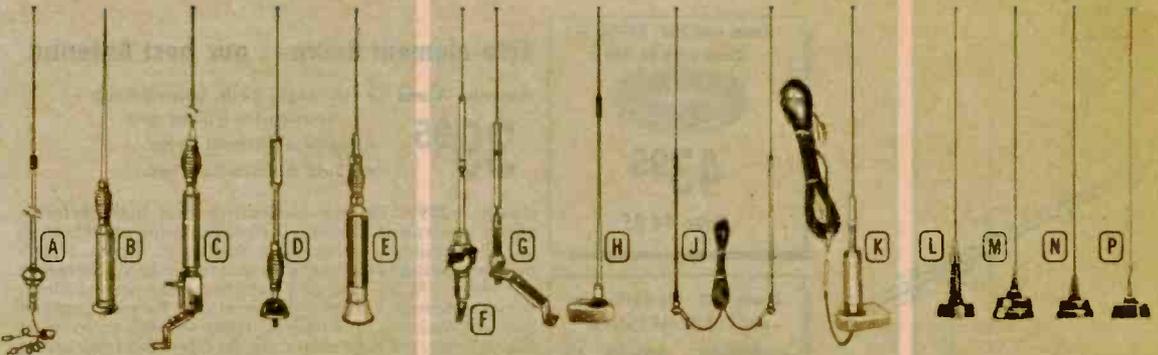
**RG-58/U 53.5-Ohm Coax Cable.** PL-259 each end, except \*PL-259 one end, split lugs other end.  
 17 A 8530. 20-ft. Coil.\* Shpg. wt., 1 lb. . . . . 2.95  
 17 A 6883. 50-ft. Coil. Shpg. wt., 2 lbs. . . . . 5.50  
 17 A 6884. 100-ft. Coil. Shpg. wt., 4 lbs. . . . . 8.95

# Antennas for all mobile CB two-way radios

## ANTENNA SPECIALISTS

## NEW-TRONICS

## HY-GAIN



**A** M-103 Combination CB/Broadcast-Band Antenna. Center-loaded telescoping antenna. Chrome-plated. Single-hole body mount. Includes divider, all cables, plugs. 4 lbs.  
17 A 9459 X ..... 16.95

**B** M-125 Roof Mount Antenna. 40" base-loaded stainless steel antenna, stainless steel spring. Snap-in  $\frac{3}{8}$ " hole mounting. 16' RG58/U cable, PL-259. Shpg. wt., 2 lbs.  
17 A 6631 X ..... 16.95

**C** M-127 Trunk-Groove-Mount Antenna. 40" base-loaded stainless steel antenna and spring. Snap-in  $\frac{3}{8}$ " hole mount. With 16' RG58/U cable, PL-259. Shpg. wt., 3 lbs.  
17 A 8340 X ..... 19.95

**D** M-130 18" Car-Top Antenna. Center-loaded antenna with tuning adjustment. Low VSWR.  $2\frac{1}{2}$ " stainless steel spring. 16' RG58/U, PL-259.  $\frac{3}{8}$ " snap-in mount. 2 lbs.  
17 A 8339 X ..... 13.95

**E** M-176 Trunk Mount Antenna. "Quick-Grip" mount—no holes to drill. Base loaded. Stainless steel antenna spring. VSWR 1.5:1 or better. 16' RG58/U, PL-259. 3 lbs.  
17 A 8645 X ..... 21.95

**F** TCS-27-M CB/AM/FM Whip. 2 telescoping sections. No AM or FM degradation. Weatherproof, tunable resonator. With automotive ball base and matching harness. Wt., 2 lbs.  
17 A 8392 X ..... 16.50

**G** TGF-27-L Trunk-Groove Mount Antenna. Strong, flexible fiberglass antenna, 48" long. With mounting hardware. 16' coax, PL-259.  $1\frac{1}{2}$  lbs.  
17 A 8395 X ..... 12.50

**H** TLA-27-L Fiberglass Trunk-Lip Mount Antenna. Fiberglass antenna armored with copper-braid and completely weatherproofed. Includes no-hole trunk-lip mount, triple-plated for weather protection; top-cover is of high-impact Cycloac plastic. With 17-ft. coax and PL-259 plug.  
17 A 8380 X. Shpg. wt., 4 lbs. .... 14.95

**J** SDT Super Deluxe "Double Talk" Antenna. Consists of two FG-27 fiberglass antennas, two TGM-1 trunk-groove mounts, 18-ft. matching harness. Shpg. wt., 4 lbs.  
17 A 8394 X ..... 24.95

**K** XBLT Deluxe Base-Loaded Antenna. Features rod of finest quality and weatherproof no-hole trunk mount. With 17-ft. coax and PL-259 plug.  
17 A 8381 X. Shpg. wt., 2 lbs. .... 19.95

**L** Helicat 1 Rooftop Antenna. Stainless steel tip rod, chrome-plated brass fittings. 48-in. high. With 22 ft. of coax, connector. Claw mounting. Shpg. wt., 3 lbs.  
17 A 6160 X ..... 17.50

**M** Helicat 2 Shorty Rooftop Antenna. (Not illus.) 23-in. high. Claw mtg. 2 lbs.  
17 A 6161 X ..... 14.95

**N** Helicat 3 Magnetically Mounted Antenna. No holes to drill—no tools needed. Installs easily and quickly with magnetic mounting.  $34\frac{5}{8}$ " high. With 16 ft. of coax, connector. 4 lbs.  
17 A 6172 X ..... 16.95

**O** Helicat 4 Trunk-Lip Antenna. Mounts quickly and easily on lip of trunk lid. 47-in. high. With 22 ft. of coax, connector. Shpg. wt., 4 lbs.  
17 A 6152 X ..... 19.95

**P** Helicat Rooftop Claw-Mount Antenna. Pretuned and factory-assembled for easy installation and top performance. Special etched-copper loading coil provides low VSWR and increased efficiency on all 23 channels. Low noise-level circuit for quieter operation. Having no spring, antenna stands straight up even on the road. Height, 47 inches. Shpg. wt., 3 lbs.  
17 A 8382 X ..... 14.95

## NEW-TRONICS • HY-GAIN

**R** New-Tronics CB-211 Bumper-Mount Antenna.  $\frac{1}{2}$ " aluminum and brass tubing, with 54" height, 83". Mast folds over at 27" above base.  $\frac{3}{8}$ -24 thread. Mount on facing page.  
17 A 8383 X. Shpg. wt.,  $2\frac{3}{4}$  lbs. .... 16.75

**S** New-Tronics CB-111 Fender-Mount Antenna. Above, but folds over at 15" above base. Mount on facing page.  
17 A 8384 X. Shpg. wt.,  $2\frac{3}{4}$  lbs. .... 16.50

**S** Hy-Gain DX Cat Topper Antenna. Offers stainless-steel radiator. Lifetime adjustable tuning rod, and exclusive high-performance Hy-Q loading coil. Reversible mast for bumper or body mount. Order mount, cable from page 194.  
17 A 8385 X. Shpg. wt., 3 lbs. .... 21.95

## GOLD-LINE

**CB Signal-Hunter Direction-Finding Antenna.** Mounts easily with suction-cup and bracket. Tuning knob on loop. Loop is rotated for strongest signal in receiver. 8-ft. coax, PL-259 plug.  
17 A 6163 X. Wt.,  $4\frac{1}{2}$  lbs. .... 12.95



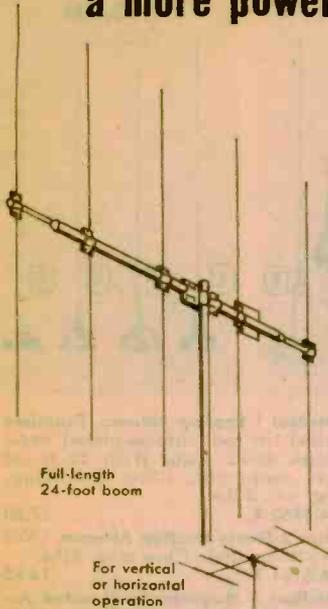
## SHAKESPEARE

**T** 10-3 "The Whip" Fiberglass Antenna. Quarter-wave whip installs with standard ball, cowl, or bumper mount. High flex-strength eliminates spring, lets antenna stand up straighter. 96-in. high, 102-in. performance with dielectric loading. Fiberglass sheath forms a protective barrier against precipitation static. SWR, 1.5:1.  $\frac{3}{8}$ -24 thread.  
17 A 8690 ZW. Shpg. wt., 1 lb. .... 8.65

**W** 345-1 "Perfect 36" Fiberglass Trunk-Mount Antenna. Non-corrosive, high flex-strength antenna for long life and fine performance. Tapered pitch helical load, capacitor matching, anodized aluminum mount. 50 watts. SWR less than 2. Extends 36 in. above mount. Mounts on trunk lid by tightening two screws (wrench included). No soldering.  
17 A 8686 X. Shpg. wt., 2 lbs. .... 21.95  
17 A 8685 X. Model 345. Above less mount. Needs  $\frac{3}{4}$ " hole.  $1\frac{1}{2}$  lbs. .... 14.95



# Allied® Citizens Band base station Antennas give you a more powerful signal . . . Priced for more value, too



Beam and 100' RG-58/U Coax with PL-259's



**43<sup>95</sup>**

Save \$4.95

Beam, 100' RG-58/U Coax and CDE TR-44 Rotator



**110<sup>00</sup>**

Save \$8.85

## Five-element Beam . . . our best Antenna

- Antenna Alone
- Full-length 24-ft. boom permits spacing for highest gain
  - Highly directional beam
  - 2.5-dB front-to-back ratio

**39<sup>95</sup>**

Model A-2599. Feature-for-feature this high-performance five-element antenna is the best value anywhere in an all-aluminum beam. The full 24-ft. boom allows proper spacing of elements for maximum gain. Elements are 18-ft., 8<sup>3</sup>/<sub>4</sub> in. long and radiate a near-perfect directional pattern. Antenna delivers high forward gain of 12.3 dB and has an excellent front-to-back ratio of 24 dB or better to help eliminate interference from other stations. Features Beta matching for low VSWR with 52-ohm coaxial cable. Can be used vertically or horizontally. Wind load, 62 lbs. Mounts on any 1<sup>1</sup>/<sub>2</sub>" diameter mast. Shpg. wt., 28 lbs.

17 A 0180 L2ZW. With 100-ft. Coax . . . . . 43.95

17 A 9399 ZW. Antenna Alone. Shpg. wt., 24 lbs. . . . . 39.95

17 A 0181 L3ZW. Beam Antenna, 100-ft. Coax and CDE TR-44 Rotator. Shpg. wt., 36 lbs. . . . . 110.00

55 A 7536. 8-Conductor Rotator Cable for Above. 100-ft. coil. Shpg. wt., 3 lbs. . . . . 8.55

Antenna Alone

**9<sup>95</sup>**

With 50' Coax



**12<sup>95</sup>**

Save \$2.50

Antenna Alone

**16<sup>95</sup>**

With 50' Coax



**19<sup>95</sup>**

Save \$2.50

Antenna Alone

**24<sup>95</sup>**

With 100' Coax



**28<sup>95</sup>**

Save \$4.95

### Special-value Ground Plane

- Omnidirectional radiation
- Three radials for wide pattern
- Seamless aluminum tubing

### Our most popular Antenna

- Top hat for low noise level
- DC ground lightning protection
- 3.8-dB circuit gain • Low VSWR

### Deluxe Colinear Antenna

- 3/8-wave for longest range
- Solid-state matching coupler
- Excellent radiation pattern

Model A2505A. This low-priced antenna provides long-range omnidirectional coverage. Radiator and radials are of seamless aluminum tubing. Has unity gain. Impedance, 52 ohms. Beta-match insures correct impedance match; DC ground removes static and protects against lightning. Easy to install—can be mounted against a chimney or on a 1" to 1<sup>5</sup>/<sub>8</sub>" diameter mast. Everything needed for immediate installation on your mast. Rust-resistant hardware. Includes 50 feet of RG58/U coaxial cable with PL-259 connectors. Shpg. wt., 5 lbs.

17 A 0025 L2X. With Coax. . . . . 12.95

17 A 6714 X. Antenna Alone. 3 lbs. 9.95

Model A-2570. Quality 1/2-wave end-fed antenna outperforms many CB antennas that cost much more. Has exclusive clover-leaf top hat for lowest possible noise level. Engineering design places entire antenna at DC ground for protection from lightning. 52-ohms. 3.8-dB circuit gain. 1.25:1 VSWR. 17-foot seamless aluminum radiator, three 52" durable-aluminum radials. For masts 1<sup>1</sup>/<sub>4</sub> to 1<sup>9</sup>/<sub>8</sub>" diameter. Complete, ready to install. Rust-resistant hardware. Includes 50' of RG58/U coaxial cable with PL-259 connectors attached. 8 lbs.

17 A 0341 L2X. With Coax. . . . . 19.95

17 A 6700 X. Antenna Alone. 6 lbs. 16.95

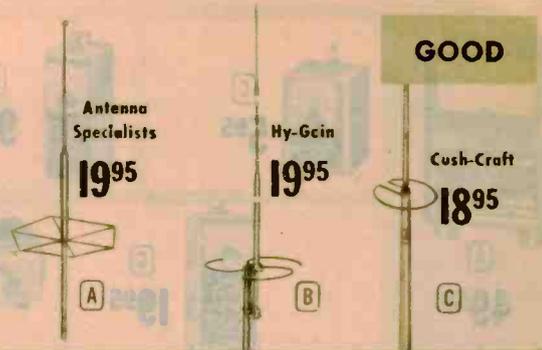
Model A-2572. Get full-range communications with our finest omnidirectional antenna. 19' 10" aluminum radiator is 5/8-wave for superior performance. Solid-state matching coupler for maximum transfer of signal. 4-dB circuit gain; 1.04:1 or less VSWR. Clover-leaf top hat discharges static. Center skirt for broadband operation. DC ground for lightning protection. Three 9-ft radials. For masts 1<sup>1</sup>/<sub>4</sub>-1<sup>5</sup>/<sub>8</sub>" diameter. Complete, ready to install. Rust-resistant hardware. Includes 50' of RG58/U coaxial cable with PL-259 connectors attached. 9<sup>1</sup>/<sub>2</sub> lbs.

17 A 0122 L2X. With Coax. . . . . 28.95

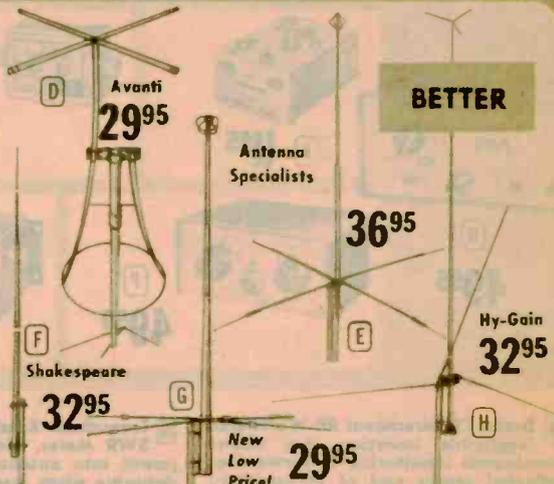
17 A6702X. Antenna Alone. 7<sup>1</sup>/<sub>2</sub> lbs. 24.95

# Values in high-performance CB Base Antennas

- A** Antenna Specialists Mini-Skirt. Polished aluminum antenna has low-angle radiation and excellent 3-dB gain. VSWR less than 1.5:1. 50 ohms. Height, 12'6". Skirt radius only 32". Fits 3/4" or 1" masts.  
17 A 6794 X. Shpg. wt., 5 1/2 lbs. .... 19.95
- B** Hy-Gain Goldenrod. Full 1/2-wave with short radials for installation virtually anywhere. Gold-iridite treated. 52 ohms. DC ground for low noise and lightning protection. Height, 17'8". For masts up to 1 5/8".  
17 A 6926 X. Shpg. wt., 6 lbs. .... 19.95
- C** Cush-Craft CR-1 "Ringo." Excellent-performing 1/2-wave antenna with "Power-Ring" tuning. Impedance, 52 ohms. Rugged seamless aluminum tubing. Height, 17'10". Telescope clamps. Phenolic base insulator.  
17 A 8662 X. Shpg. wt., 6 lbs. .... 18.95



- D** Avanti Astro-Plane Antenna. SWR less than 1.4:1. Gain, 4 dB. 50 ohms. Rated 1 kW. Height, 12 ft. Heavy-duty aluminum tubing. Resists 150-mph wind. For 1 1/2" mast.  
17 A 0027 L2X. With Coax bonus. Shpg. wt., 6 lbs. .... 32.95  
17 A 8335 X. Antenna Alone. Shpg. wt., 4 lbs. .... 29.95
- E** Antenna Specialists Mighty-Magnum III. 1/2-wave antenna with 1/4-wave radials only 60" long. Height, 17'6". 4-dB gain. 1.4:1. VSWR. Seamless aluminum.  
17 A 0190 L2U. With Coax Bonus. Shpg. wt., 12 lbs. .... 39.95  
17 A 6927 X. Antenna Alone. Shpg. wt., 10 lbs. .... 36.95
- F** Shakespeare 176 "Big Stick." 1/2-wave, 2-section, fiber-glass. Center-fed. Choke-stub in base. Height, 18 1/2"-ft. For 1 1/2" mast. 50 ohms. Accepts PL-259.  
17 A 0191 L2ZW. With Coax Bonus. Wt. 10 1/2 lbs. .... 35.95  
17 A 6368 ZW. Antenna Alone. Shpg. wt., 8 1/2 lbs. .... 32.95
- G** Antenna Specialists Super Magnum. 6-dB S/N improvement. 3.75-dB gain. Ball reduces static. High-Q phasing. 52 ohms. Low-angle radiation. For up to 1 1/2" masts.  
17 A 0939 L2X. With Coax Bonus. Shpg. wt., 9 lbs. .... 32.95  
17 A 6496 X. Antenna Alone. Shpg. wt., 7 lbs. .... 29.95
- H** Hy-Gain CLR-II. 5/8-wave ground-plane. 4-dB gain—8-dB circuit gain. SWR, 1.2:1. 52 ohms. 19'10" radiator; three 9-ft. radials. Aluminum. For 1 1/4"-1 3/4" masts.  
17 A 0936 L2X. With Coax Bonus. Shpg. wt., 9 lbs. .... 35.95  
17 A 6422 X. Antenna Alone. Shpg. wt., 7 lbs. .... 32.95

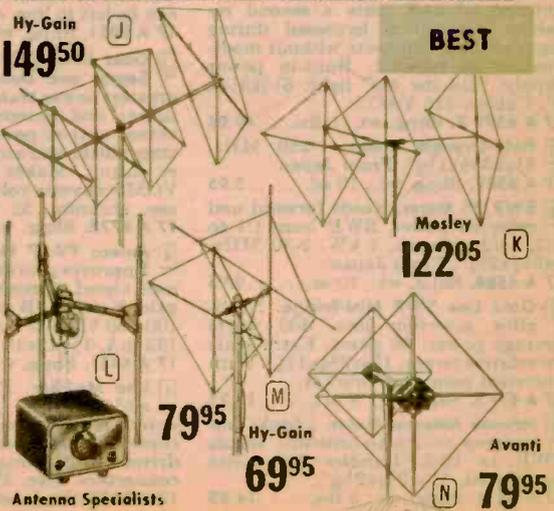


**BONUS OFFER! SAVE \$2.50**



only \$3 more  
Reg. \$5.50 Value  
50 ft. RG-58/U  
with 2 PL-259's

- J** Hy-Gain "Big Gun." Selectable polarity. 4-element quad. 14.2-dB gain. Front-to-back, 38.7-dB. SWR, 1.24:1. 52 ohms. Boom Length, 20-ft.; Diameter, 2".  
17 A 0192 L2ZW. With Coax Bonus. Shpg. wt., 54 lbs. 152.50  
17 A 6946 ZW. Antenna Alone. Shpg. wt., 52 lbs. .... 149.50
- K** Mosley MCQ-27VH. Selectable polarity, 3-element quad. 9-dB gain. Front-to-Back, 25 dB. Gamma match. Impedance, 52 ohms. Includes polarity switch.  
17 A 0193 L2ZW. With Coax Bonus. Shpg. wt., 30 lbs. 125.05  
17 A 6947 ZW. Antenna Alone with Switch. Wt., 28 lbs. 122.05
- L** Antenna Specialists MR-119. Rotates signal electronically; also omnidirectional position. 7.5-dB gain. 23-dB F/B. 52 ohms. For 1 1/2"-2" masts. Needs 4-wire rotator cable.  
17 A 0194 L2ZW. With Coax Bonus. Shpg. wt., 20 lbs. 82.95  
17 A 6948 ZW. Antenna Alone. Shpg. wt., 18 lbs. .... 79.95
- M** Hy-Gain Quad Antenna. Selectable polarity, 2-element quad. Directivity and high front-to-back ratio of a beam, but smaller and lighter. Reduces interference.  
17 A 0026 L2ZW. With Coax Bonus. Shpg. wt., 19 lbs. 72.95  
17 A 8345 ZW. Antenna Alone. Shpg. wt., 17 lbs. .... 69.95
- N** Avanti PDL-27A. Selectable polarity, 2-element quad. 11-dB gain. Front-to-back, 30 dB. VSWR, 1.2:1. 50 ohms. Power Capacity, 1000 watts. For up to 1 1/2" masts.  
17 A 0195 L2ZW. With Coax Bonus. Shpg. wt., 17 lbs. 82.95  
17 A 6729 ZW. Antenna Alone. Shpg. wt., 15 lbs. .... 79.95



**SHIPPING NOTE:** Items with suffix U, W, or Z in stock no. sent truck or express. See Ordering Information pages.

# Big values in popular Station Accessories



**A**  
49<sup>50</sup>



**C**  
5<sup>95</sup>



**D**  
9<sup>95</sup>



**E**  
13<sup>25</sup>



**F**  
14<sup>95</sup>



**G**  
19<sup>95</sup>



**H**  
21<sup>95</sup>



**J**  
9<sup>95</sup>



**B**  
49<sup>95</sup>



**K**  
11<sup>95</sup>



**L**  
8<sup>95</sup>



**M**  
2<sup>50</sup>



**N**  
8<sup>95</sup>



**P**  
49<sup>50</sup>



**R**  
15<sup>95</sup>



**S**  
5<sup>95</sup>

**A** Drake CB Directional RF Wattmeter. Negligible insertion loss allows continuous monitoring of forward or reflected power and of transmitter/antenna performance. Impedance, 50 ohms. Accuracy,  $\pm 5\%$ . Rated 10 watts. With SO-239 jacks.  $6\frac{3}{4} \times 3\frac{1}{2} \times 4\frac{1}{2}$ ". 17 A 6784 X. Shpg. wt., 3 lbs. . . . 49.50

**B** Ameco PCB CB Receiver Preamp. Solid-state preamp increases receiving gain and sensitivity of any CB individual or 2-way radio receiver. Built-in transfer-relay lets you feed antenna of and mute a second receiver. Preamp is bypassed during transmission. Connects without modification of receiver. Built-in power supply, "On the Air" light.  $5\frac{1}{2} \times 3\frac{1}{4} \times 3$ ". Cables, 115 VAC. 17 A 6599 X. Shpg. wt., 5 lbs. . . . 49.95

**C** Field-Strength Meter. 1-250 MHz.  $3\frac{1}{4} \times 3\frac{1}{2} \times 1\frac{1}{2}$ ". From Japan. 17 A 6589. Shpg. wt., 10 oz. . . . 5.95

**D** SWR/FS Meter. Reads forward and reflected power, SWR from 1:1 to 1:3, field strength. 1 kW. 2-30 MHz.  $6\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{3}{4}$ ". From Japan. 17 A 6588. Shpg. wt., 10 oz. . . . 9.95

**E** Gold Line SWR Mini-Bridge. Negligible insertion loss. 500 watts average power. 50 ohms. Extra scale for relative power.  $1\frac{1}{2} \times 2\frac{3}{4} \times 1\frac{1}{4}$ ". With universal mounting bracket. 17 A 6775. Shpg. wt., 8 oz. . . . 13.25

**F** Johnson Antenna Meter. Checks impedance match to antenna. Reads SWR to 10:1. Handles 500 watts modulated.  $4\frac{1}{2} \times 2\frac{3}{4} \times 2\frac{1}{2}$ ". 17 A 8954. Shpg. wt., 3 lbs. . . . 14.95

**G** Transcheck Relative Power Output/SWR Meter. Helps you get more power into antenna. No line-loss or detuning when inserted in feed line; can be left in line. Accurately balanced; calibrated in SWR. 52 ohms. Microammeter.  $5\frac{1}{2} \times 2\frac{1}{4} \times 2\frac{1}{2}$ ". 17 A 8160. Shpg. wt.,  $2\frac{1}{4}$  lbs. . . . 19.95

**H** Dualmeter for SWR and Power. Accurate, simultaneous readings of RF output and reflected power with dual  $1\text{-}\mu\text{A}$  movement. Handles up to 2000 watts, 175 MHz. Low insertion loss; can be left in line.  $4\frac{1}{4} \times 2\frac{1}{4} \times 2\frac{1}{2}$ ". 17 A 9821. Shpg. wt., 2 lbs. . . . 21.95

**J** Gold Line GLC 1050 Output Power Sensor and Dummy Load. Get the greatest power transfer between transmitter and antenna. Knowing your actual output power, you can adjust transmitter and antenna for best power output. Makes use of any handy VOM, converts volts to watts. Easy to use, accurate. 52 ohms.  $4\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ". 17 A 6776. Shpg. wt., 6 oz. . . . 9.95

**K** Ameco PV-27 Nuvistar Preamp. Improves gain and noise figure when used ahead of receiver converter. High gain. Noise, 2 dB at 27 MHz. Requires 100-150 VDC at 8 mA and 6.3 volts at 135 mA.  $1\frac{1}{2} \times 2 \times 3$ ". 17 A 6421. Shpg. wt., 1 lb. . . . 11.95

**L** Line Matcher. Provides low SWR and excellent power transfer to antenna. Features 100-watt power capacity, broadband tuning, screw-driver adjustments. Has two SO-239 connectors. Size,  $3\frac{3}{4} \times 1\frac{1}{2} \times 2$ ". 17 A 8375. Shpg. wt., 4 oz. . . . 8.95

**M** Cesco "Phantom" Dummy Load. Lets you tune your transmitter without causing interference. Replaces antenna. (FCC regulations prohibit tuning or other adjustments with an antenna connected.) 52 ohms. With standard UHF connector. Power rating ample for any CB 2-way radio. 17 A 8505. Shpg. wt., 6 oz. . . . 2.50

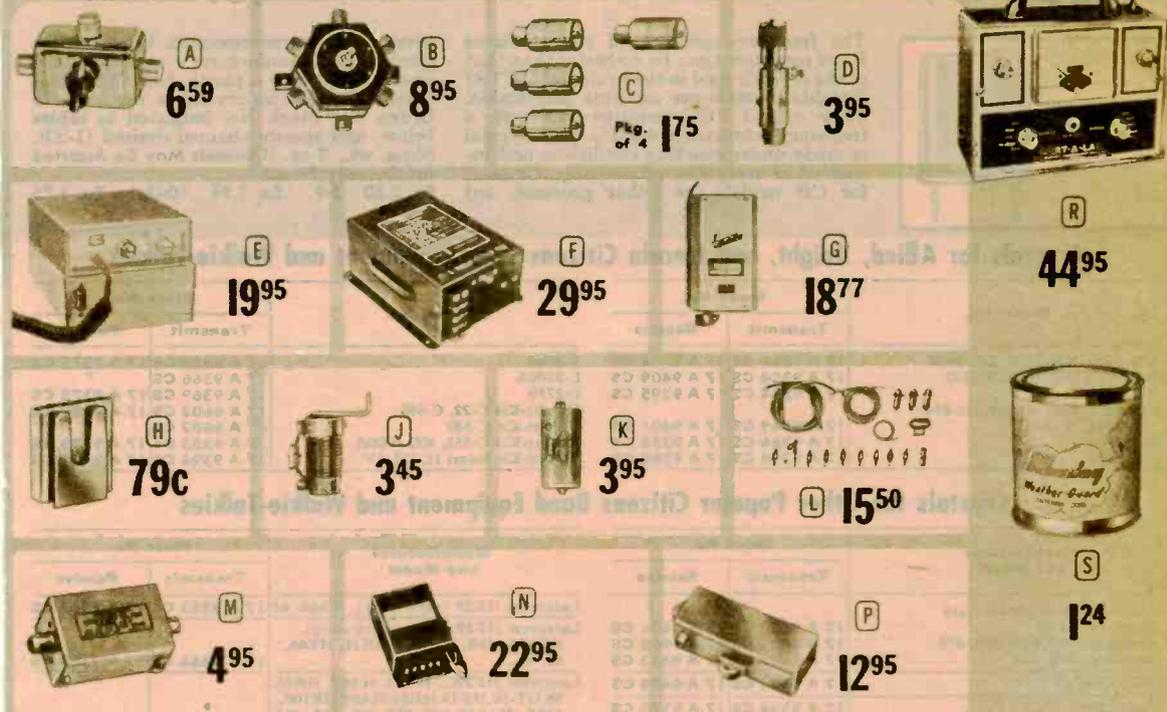
**N** Mastercrafters 191 Clock. 24-hour dial. 8" chrome case. Shows world time. For 110 V, 60 Hz AC. 17 A 8472. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . 8.95

**P** Demco VM-12-20 Power Modulator. Increases talk-power of any transmitter. Rated 1 kW. With 110-120 VAC cable. Size,  $8\frac{1}{2} \times 6\frac{1}{4} \times 8\frac{1}{4}$ ". 17 A 8347 X. Shpg. wt., 12 lbs. . . . 49.50  
17 A 6406. DC Cable. Wt., 1 lb. . . . 3.00

**R** Johnson Antenna Matchbox. Provides a nearly perfect match between transmitter and antenna system. Just place it in the antenna transmission line, and leave it there. Corrects SWR of up to 5:1, reducing it to 1:1 or better. Handles up to 15 watts. 26.5-30 MHz.  $4\frac{3}{4} \times 3\frac{1}{4} \times 2\frac{3}{8}$ ". 17 A 6802. Shpg. wt., 3 lbs. . . . 15.95

**S** Gold Line GLC 1051 TVI Filter. Eliminates TV interference caused by CB transmissions. Harmonic rejection minimum of 40 dB. Features tuning-control knob allowing maximum TVI rejection—lets you solve your unusual TVI problems. Installs between your antenna and transmitter. Just adjust filter tuning knob until TVI is corrected. Size,  $2\frac{3}{4} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ". 17 A 6777. Shpg. wt., 6 oz. . . . 5.95

# for improved performance on Citizens Band



**A** Gold Line GIC 1048 2-Position Coaxial Switch. No need to switch antenna leads—just turn knob of this quality coaxial switch and instantly change from one antenna to another. Size,  $2\frac{1}{2} \times 1\frac{1}{4}$ ".  
17 A 6778. Shpg. wt., 1 lb. . . . . 6.59

**B** 5-Position Coaxial Switch. 2-pole, 5-position switch rated 1 kW. For 80-10 meters, including 11-meter CB.  
17 A 6444. Shpg. wt., 3 lbs. . . . . 8.95

**C** PL-259 Coaxial Connectors. Meet military specifications. Completely new, not replated. Pkg. of 4.  
17 A 6643. Wt., 8 oz. . . . . Pkg. 4/1.75

**D** "Blitz-Bug" Lightning Arrester. Has Type 83 connectors.  
17 A 8044. Shpg. wt., 4 oz. . . . . 3.95

**E** Midland 18-805 Regulated AC Adapter. Specifically designed as power supply for Midland Models 13-850, 13-860, and 13-870 two-way radios. Can be used with any base station requiring a well-regulated 12-VDC, 2-amp supply. Size,  $7\frac{3}{4} \times 6\frac{1}{2} \times 2\frac{1}{2}$ ". 115 VAC.  
17 A 6991 X. Shpg. wt., 3 lbs. . . . . 19.95

**F** Mark BBR-1216 Solid-State Battery-Boost Regulator. Provides stable, constant 15.5 VDC to mobile CB and Business Band 2-way radios. Boosts battery voltage to a higher value when the battery voltage varies. Internally adjustable to 12-16 volts. Excellent regulation from no-load to full rated output of 2 amps. Protects against surges. Input 11-16 VDC. On-off switch. Screw terminals.  $4 \times 6\frac{1}{2} \times 2\frac{5}{8}$ ".  
17 A 6744 X. Shpg. wt.,  $2\frac{1}{2}$  lbs. . . . . 29.95

**G** Terado 50-150 AC Line Monitor-Regulator. A welcome addition to the CB base station. Lets you increase 117-volt line to 140 volts or decrease it to 80 volts. Permits continuous power-line monitoring. Reduces frequency drift. Capacity, 300-500 watts. Six-position switch and built-in AC voltmeter. Size  $5\frac{1}{2} \times 3 \times 2\frac{1}{4}$ ".  
17 A 6788 X. Shpg. wt.,  $3\frac{1}{2}$  lbs. . . . . 18.77

**H** Magnetic Mike Clip. A real convenience for mobile use.  
17 A 6461. Shpg. wt., 3 oz. . . . . 79¢

**J** Generator Noise Filter. Eliminates radio interference caused by annoying whine and grinding noises created by generator brushes. Tunable from 3 to 30 MHz. With mounting bracket.  
17 A 8512. Shpg. wt., 5 oz. . . . . 3.45

**K** Alternator Noise Filter. Nontunable filter designed to effectively eliminate receiver noises caused by car alternator systems. Not critical as to frequency or voltage—operates on any voltage up to 32 volts.  
17 A 8410. Shpg. wt., 2 oz. . . . . 3.95

**L** Johnson Noise Suppressor Kit. Eliminates ignition and other electrical interference originating in the vehicle. A complete kit including all capacitors, resistors, and wire.  
17 A 6010. Shpg. wt., 2 lbs. . . . . 15.50

**M** Ameco LN-2 TVI Filter. Reduces TV/FM interference. Suppresses radiation of spurious signals above 40 MHz. Negligible insertion loss. 200 watts. 10-160 meters. 52-75 ohm lines. SO-239 connectors, bracket.  
17 A 8454. Shpg. wt., 1 lb. . . . . 4.95

**N** Johnson Solid-State In-Converter. Handy compact unit for converting 6 VDC to 12 VDC (1.1A), 12 VDC to 24 VDC (0.5A), etc. Also changes negative ground to positive, positive ground to negative.  $6 \times 2\frac{1}{2} \times 3\frac{3}{4}$ ".  
17 A 6803. Shpg. wt., 3 lbs. . . . . 22.95

**P** Hy-Gain Ferrite Balun BN-27A. Makes the big difference in antenna system performance. Couples 52-ohm unbalanced transmission line into 52-ohm balanced system (beam antenna). Improves power transfer to antenna and eliminates stray RF from feedline and tower. Covers all CB channels. Mounts easily on boom or mast.  
17 A 8241. Shpg. wt., 1 lb. . . . . 12.95

**R** Courier Port-a-Lab Ham-CB Tester. Monitors transmitter and helps assure proper operation. Completely portable for use at base or field location. Lets you test significant operating factors that previously required two or more separate instruments. Measures SWR, true RF power to 50 watts, modulation percentage, relative field strength. Audibly checks modulation distortion.  $6 \times 8 \times 3\frac{3}{4}$ ".  
17 A 6532 X. Shpg. wt., 5 lbs. . . . . 44.95

**S** Mosley Weather-Guard Antenna Coat. Weatherproof your antenna and assure extra years of service at top performance. Fast-drying, clear-coating compound protects against corrosive action of salt, water, moisture, and ultra-violet radiation. Will not discolor antenna. Applies easily and quickly with a brush. 8 ounces, net.  
17 A 8243. Shpg. wt., 1 lb. . . . . 1.24

# CTS/Knights Citizens Band Crystals . . precision-ground to 0.003% tolerance that exceeds FCC requirements

Each crystal comes in protective plastic box



The frequency-accuracy of your Citizens Band equipment can be no better than that of the crystals used in the equipment. CTS/Knights crystals are accurate and stable. They exceed FCC requirements with a frequency-tolerance of 0.003%. Each crystal is made under exacting conditions and inspected at every step of assembly. Crystals for CB models are either precision 3rd

overtone or series-resonant types as indicated in manufacturer's specifications. Each crystal is in a plastic box. \*In tables below indicates no crystal is required. To Order Use Stock No. indicated in tables below, and specify channel desired (1-23). Shpg. wt., 3 oz. (Channels May Be Assorted for Quantity Price.) Ea. 2.50 3-9...Ea. 1.94 10-Up...Ea. 1.75

## Crystals for Allied, Knight, and Lincoln Citizens Band Equipment and Walkie-Talkies

Model No.	Stock No.	
	Transmit	Receive
KN-2500, KN-2550, KN-2580	17 A 9366 CS	17 A 9358 CS
A-2507, KN-2520, KN-2522	17 A 9394 CS	17 A 9409 CS
A-2530	17 A 9394 CS	17 A 9395 CS
L-2540, L-2541, L-2542, A-2543, A-2544, A-2545	17 A 9369 CS	17 A 9401 CS
KN-2585	17 A 9366 CS	17 A 9358 CS
KN-2590	17 A 9354 CS	17 A 9360 CS

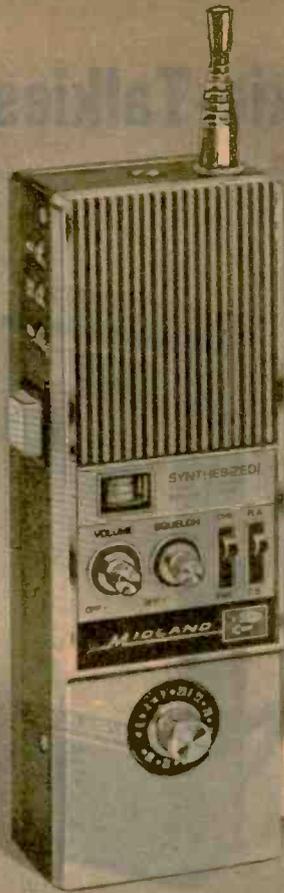
Model No.	Stock No.	
	Transmit	Receive
L-2700	17 A 9353 CS	17 A 9375 CS
L-2700A	17 A 9366 CS	*
L-2710	17 A 9369 CS	17 A 9375 CS
Knight-Kit C-22, C-560	17 A 6602 CS	17 A 9358 CS
Knight-Kit C-540	17 A 6602 CS	*
Knight-Kit C-555, KG-4000A	17 A 9353 CS	17 A 9375 CS
Knight-Kit Safari II, III, IV	17 A 9394 CS	17 A 9409 CS

## Crystals for Other Popular Citizens Band Equipment and Walkie-Talkies

Manufacturer and Model	Stock No.	
	Transmit	Receive
Allstate—see Sears-Roebuck		
Amphenol 510B	17 A 6600 CS	17 A 6601 CS
Amphenol 600, 625, 650, 675	17 A 6600 CS	17 A 9963 CS
Amphenol 750, 725	17 A 6600 CS	17 A 9343 CS
B&K Cobra 5	17 A 9394 CS	17 A 9409 CS
Cadre 500	17 A 9394 CS	17 A 9370 CS
Cadre 510, 510A, 515, 520	17 A 6600 CS	17 A 6601 CS
Citifone 5A, 6, 7, 11, 99	17 A 9371 CS	17 A 9372 CS
Claricon Century	17 A 9369 CS	17 A 9401 CS
Courier AGS200	17 A 9366 CS	17 A 9358 CS
Courier Fleet, A-58	17 A 9354 CS	17 A 9363 CS
Courier TR-5, TR-6	17 A 6600 CS	17 A 9401 CS
Courier 12	17 A 9366 CS	17 A 9363 CS
Demco Satellite	17 A 6604 CS	*
Demco Chalet	17 A 9369 CS	17 A 9401 CS
Demco Ravelle	17 A 6604 CS	17 A 9378 CS
Dewald TR1000, R1050, F1050	17 A 9366 CS	17 A 9358 CS
E.C.I.—see Courier		
E. F. Johnson Personal Messenger	17 A 9353 CS	17 A 9375 CS
E. F. Johnson Messenger I, II	17 A 9352 CS	17 A 9362 CS
E. F. Johnson Messenger 100, 109, 110	17 A 9394 CS	17 A 9401 CS
E. F. Johnson Messenger III, 300	17 A 9394 CS	17 A 9963 CS
Eico 770-772, 777	17 A 9371 CS	17 A 9356 CS
Eico Seatline 12, 712	17 A 9366 CS	17 A 9360 CS
Fanon DCI-50, RCB-10, FCB 11, 12, 13, 55, 90, 91, L-1000, L-2000	17 A 9394 CS	17 A 9401 CS
Fanon IC-10, IC-1000, IC-3000, IC-5000	17 A 6600 CS	17 A 9401 CS
Fanon SFT-600	17 A 9394 CS	17 A 9963 CS
General MC1, MC2, MC3	17 A 9366 CS	17 A 9363 CS
General MC4, MC5, MC6, EM5, EM6	17 A 9354 CS	17 A 9363 CS
General Echo 9	17 A 9369 CS	17 A 9401 CS
Globe CB100	17 A 9366 CS	17 A 9357 CS
Globe CB100A	17 A 9366 CS	17 A 9363 CS
Globe CB200	17 A 9350 CS	17 A 9357 CS
Hallcrafters CB2, CB3A, CB5A, CB7, CB9, CB10, CB17, CB27	17 A 9352 CS	17 A 9359 CS
Hallcrafters CB12, CB19, CB21	17 A 6600 CS	17 A 9407 CS
Hallcrafters CB6	17 A 9353 CS	17 A 9375 CS
Hallcrafters CB20	17 A 6600 CS	17 A 6603 CS
Heath CB2, GW10, 11, 12, 22, 32, 34, 42, MW30, MW33	17 A 9366 CS	17 A 9360 CS
Heath G14, GW21, GW52, GRS-65A	17 A 9353 CS	17 A 9365 CS
Int'l Executive 50, 100, 100A, 100C, 100D, CTZ-50, CTZ-5A2, CTZ-5B2	17 A 9354 CS	17 A 9374 CS
Karr Sky Hawk (Crystal for Transmit and Receive)	17 A 9345 CS	17 A 9345 CS
Karr Sky Lark	17 A 6600 CS	17 A 9345 CS
Knight and Knight-Kit—see table above		
Lafayette HE15, 15B, HB115, 115A	17 A 9366 CS	*
Lafayette HE20, 20A, 20B, 20C, 23, 24, 43B, 43C, 65, 90	17 A 9366 CS	17 A 9358 CS
Lafayette HE20J, IIA450, Dynacom 5, 6	17 A 9394 CS	17 A 9401 CS

Manufacturer and Model	Stock No.	
	Transmit	Receive
Lafayette HE29 (very early), HA64, 65	17 A 9353 CS	17 A 9363 CS
Lafayette HE29 (except very early), HE29A, 29B, H10TC, HE31, HE66, 82, 83	17 A 9366 CS	17 A 9363 CS
Lafayette HE29C, HA60, HA62, HE85, 86, GT-50, HE75, HE88, HA99, HE100, 100A, HA130, 135, 150, 210, 295, 303, 711, Dynacom 2, 3	17 A 9354 CS	17 A 9358 CS
Lafayette HB111, HB200	17 A 9354 CS	17 A 9358 CS
Lafayette Comstat 9, 19	17 A 9354 CS	17 A 9363 CS
Lincoln—see table above		
Lloyds 7A08, 7A11, 8A22	17 A 9369 CS	17 A 9401 CS
Metrotek "Colt 23"	17 A 9408 CS	*
Metrotek "Mustang," 65 & II, "Pacer"	17 A 9354 CS	17 A 9360 CS
Metrotek "Pacer II"	17 A 9408 CS	17 A 9409 CS
Midland 13-042, 13-105, 13-106, 13-108, 13-110, 13-111, 13-113, 13-113B, 13-120, 13-124, 13-124C, 13-125, 13-132, 13-133, 13-143, 13-150, 13-410, 13-425, 13-428, 13-430, 13-700, 13-710, 13-722, 13-724, 13-730, 13-732, 13-760, 13-765, 13-770, 13-772, 13-775, 13-775B, 13-855	17 A 9369 CS	17 A 9401 CS
Monarch TC900, TC66	17 A 9369 CS	17 A 9401 CS
Olson Spotter 1, 2, RA530	17 A 9366 CS	*
Olson RA396, RA442	17 A 9366 CS	17 A 9358 CS
Olson RA440	17 A 9369 CS	17 A 9401 CS
Olson RA482, RA52	17 A 9366 CS	17 A 9363 CS
Olson 717	17 A 9354 CS	17 A 9360 CS
Page I, II, IIs, 5000	17 A 6600 CS	17 A 9406 CS
Pearce Simpson Companion III	17 A 9394 CS	17 A 9401 CS
Polytronics Poly Pup	17 A 6600 CS	17 A 9409 CS
Raytheon TWR5, 6, 7, 8, 9, 41	17 A 6600 CS	17 A 6603 CS
RCA Mark VIII, IX	17 A 6602 CS	17 A 9359 CS
RCA Mark X	17 A 6600 CS	17 A 9406 CS
Realistic CBK1, TRC27A	17 A 9366 CS	17 A 9363 CS
Radio Shack—see Realistic		
Regency 500, Bronco, Charger	17 A 6600 CS	17 A 9409 CS
Regency Ranger	17 A 6600 CS	17 A 9411 CS
Regency—see Metrotek		
Sears-Roebuck Cat. No. 6450, 6455	17 A 9369 CS	17 A 9401 CS
Sears-Roebuck Cat. No. 6550	17 A 9352 CS	17 A 9359 CS
Sears-Roebuck Cat. No. 6552	17 A 6600 CS	17 A 9407 CS
Sears-Roebuck Cat. No. 6556	17 A 9394 CS	17 A 9401 CS
Sears-Roebuck Cat. No. 6558	17 A 9394 CS	17 A 9963 CS
Sonar E (below serial no. 915)	17 A 9377 CS	17 A 9363 CS
Sonar E (above serial no. 915)	17 A 9377 CS	17 A 9378 CS
Sonar G	17 A 6604 CS	17 A 9378 CS
Sonar H	17 A 9368 CS	17 A 9378 CS
Squires Sanders S55	17 A 6600 CS	17 A 9344 CS
USL TR1000, TR1050, Contact 6	17 A 9366 CS	17 A 9358 CS
USL Contact 8	17 A 9354 CS	17 A 9358 CS

# Full-power 5-watt Walkie-Talkies with integrated circuits



**23 Channels**  
**149<sup>95</sup>**  
\$8 monthly  
See page 438  
Crystal-controlled  
transmit and  
receive on all  
23 channels—no  
crystals to buy

**12 Channels**  
**99<sup>95</sup>**  
\$5 monthly  
See page 438  
High sensitivity  
tuned RF stage,  
plus Call Signal  
and handsome  
leather case



**Deluxe model has dual conversion and six IF stages for high selectivity and sensitivity**

**With Call Signal that announces your incoming message to other units . . . IC's in IF, too**

Midland 13-790. Now in a walkie-talkie, frequency synthesized transmit and receive on all 23 Citizens Band channels. And you get full 5-watt RF input for maximum range. Superhet receiver has integrated circuit, dual conversion and six IF stages for high selectivity and good image rejection to prevent inter-channel interference. Combination speaker/mike with push-to-talk switch; RF output/signal strength/battery meter, on-off/volume control; squelch control; Charge/Power switch; PA/CB switch; channel selector. Noise limiter. Jacks for PA speaker, earphone, external mike, battery charger and AC adapter. 15 transistors, zener diode. Metal cabinet with die-cast grille. 14x7 1/4x4". With leather case, security strap. Order 8 "AA" alkaline or rechargeable Ni-cad batteries, below. Japan.  
17 A 9811 S. Shpg. wt., 7 lbs. . . . . 149.95

Midland 13-772. Powerful 5-watt RF input for maximum-range two-way CB communications. Versatile 12-channel capability. Superhet receiver has tuned RF stage for high sensitivity and reliable integrated circuit IF. Combination speaker/mike with push-to-talk switch. RF output/signal strength/battery meter. Call signal alerts other units of this model. On-off/volume control; squelch control; Charge/Power switch; PA switch; channel selector; AGC. Jacks for AC adapter, battery charger, external antenna, mike, PA speaker, earphone. Metal cabinet, 9 3/4 x 2 3/4 x 3". With leather case, carrying strap, earphone, Channel 7 crystals. Order 8 "AA" alkaline cells or nickel-cadmium pack below. Extra crystals on page 200. From Japan.  
17 A 9812 S. Shpg. wt., 6 lbs. . . . . 99.95  
17 A 9813 S. Midland 13-770. Above, 6 channels. . . . . 89.95

## Get the most from your walkie-talkie with these accessories

- A** Midland 18-137 Battery Pack. For 1-watt units and up. Strap. Req. 8' long-life "D" batteries, at right.  
17 A 9819. Wt., 11 oz. . . . . 6.95
- B** Midland 18-143C 117 VAC Power Supply/Charger. Makes walkie-talkies 117 VAC base station. Recharges nickel-cadmium batteries.  
17 A 9712 S. Wt., 2 lbs. . . . . 22.95
- C** Midland 20-112 Rechargeable pack with Ni-Cadmium Batteries.  
17 A 9769 S. Wt., 11 oz. . . . . 14.95
- D** Midland 20-212 Ni-cad Batt. charger.  
17 A 9643. Wt., 6 oz. . . . . 5.95

- E** Midland 18-141. 12-VDC Auto Cable. Plugs in cigarette lighter socket.  
17 A 9645. Wt., 4 oz. . . . . 1.95
  - F** Alkaline "D" cells. Wt., 10 oz.  
18 A 5346. . . . . Pkg. of 2 for 1.27
  - G** Alkaline "AA" Batteries. Wt., 4 oz.  
18 A 5131. . . . . Pkg. of 2 for 79¢
  - H** Replacement Antenna. Ideal for replacement of broken antenna or where full antenna length is not satisfactory. Shpg. wt. 2 lb.  
17 A 6371. . . . . 3.95
- Extra Rechargeable Ni-cad Batteries.  
18 A 5636. Wt. 3 oz. . . . . Each 1.95



# High-power Walkie-Talkies



5 watt  
6 channel

**99<sup>95</sup>**

**A**

5 watt  
6 channel

**89<sup>95</sup>**

**B**

3 watt  
6 channel

**79<sup>95</sup>**

**C**

3 watt  
3 channel

**69<sup>95</sup>**

**D**

## **A** Integrated circuits plus power-boost

Fanon IC-5000. Five-watt input power and up to six channels. Antenna has power boost loading coil. Superhet receiver, high selectivity ceramic filter; integrated circuits for high reliability. Noise limiter; automatic gain control; battery indicator/RF meter; PA facility. Jacks for external antenna, external speaker, battery charger. Hand strap, shoulder strap. Channel 9 crystals. Metal case, 10 $\frac{1}{2}$ "x1 $\frac{3}{4}$ "x1 $\frac{5}{8}$ ". Order 10 alkaline batteries below. Japan.

17 A 9861 S. Shpg. wt., 4 lbs. . . . . 99.95

## **B** Integrated circuits and four IF stages

Midland 13-775B. Five-watt input power and up to six channels. Tuned RF stage. Speaker/mike; push-to-talk switch; RF output/signal strength meter; squelch control; PA facility; automatic gain control. Battery saver switch. Jacks for ext. antenna, earphone, ext. speaker, mike, PA speaker, battery charger. Metal case, 9 $\frac{3}{4}$ "x4 $\frac{1}{4}$ "x2 $\frac{3}{16}$ ". Case carrying strap, Channel 7 crystals. Order 8 alkaline batteries (below) or 10 rechargeable ni-cad batteries (pg. 201).

17 A 9825 S. Japan. Shpg. wt., 5 lbs. . . . . 89.95

## **C** Integrated circuits, power-boost antenna

Fanon IC-3000. Three-watt input power and up to six channels. Three integrated circuits for superb performance. Automatic noise limiter; automatic gain control; battery strength indicator/RF power meter; separate speaker and mike. Controls include: on-off/volume, squelch, channel selector push-to-talk button. Has hand strap and shoulder strap. 10 $\frac{1}{2}$ "x1 $\frac{3}{4}$ "x1 $\frac{5}{8}$ ". Channel 9 crystals installed. Order 10 alkaline batteries below. Japan.

17 A 9862 S. Shpg. wt., 4 lbs. . . . . 79.95

## **D** Tuned RF stage improves image rejection

Midland 13-730. Three-watt input power and up to three channels. Tuned RF stage; four IF stages. High level 3 push-pull audio modulation. AGC. On-off/volume, variable squelch, battery charger, channel selector, push-to-talk. Accessory jacks for AC adapter, battery charger, external antenna, earphone. Combination battery condition/power meter. Metal case, 9 $\frac{3}{4}$ "x3 $\frac{1}{2}$ "x2 $\frac{1}{2}$ ". With carrying strap, Channel 11 crystals. Order 8 alkaline batteries. Japan.

17 A 9826 S. Shpg. wt., 4 lbs. . . . . 69.95

## ACCESSORIES

18 A 5134. "AA" Alkaline Batteries. Wt., 4 oz. . . . . Pkg. of 2/79¢  
AC Adapter/12-V Battery Charger. (For Midland units only) . . . . . 22.95  
17 A 9712 S. Shpg. wt., 2 lbs. . . . .

Fanon CHB-4. AC Adapter/Battery Charger. Only for Fanon models IC-5000 and IC-3000! Shpg. wt., 3 lbs. . . . . 26.95  
17 A 9816 . . . . .

# up to 5 watts, 6 channels



**E**  
2 watt  
3 channel

**59<sup>95</sup>**

**F**  
2 watt  
3 channel

**49<sup>95</sup>**

**G**  
1 watt  
3 channel

**39<sup>95</sup>**

**H**  
1 watt  
2 channel

**29<sup>95</sup>**

## **E** Push-pull audio and Call Signal

Midland 13-732. Two-watt input power and up to three crystal-controlled channels. Sensitive superhet receiver with push-pull Class B high-level modulation. Separate speaker and mike. Battery-condition meter. 48-inch telescoping antenna. Input jacks for optional AC adapter, battery charger, and earphone. Diecast metal case, 10<sup>1</sup>/<sub>2</sub> x 3 x 2<sup>1</sup>/<sub>4</sub>". Earphone, strap. Ch. 11 crystals. Order 8 "AA" alkaline batteries or Ni-Cad. battery pack (pg. 201).  
17 A 9807 S. Japan. Shpg. wt., 3 lbs. .... 59.95

## **F** Features separate speaker and mike

Midland 13-724. Two-watt input power and up to three channels. Superhet receiver with tuned RF stage improves sensitivity and image rejection. Integrated circuit; push-pull audio; automatic gain control. Call Signal. Battery meter. On-off/volume, variable squelch, channel selector, push-to-talk. Jacks for battery charger, AC adapter, earphone. Metal case, 7<sup>1</sup>/<sub>2</sub> x 2<sup>3</sup>/<sub>4</sub> x 2<sup>1</sup>/<sub>8</sub>". Earphone, case, strap. Ch. 11 crystals. Order 8 "AA" alkaline batteries.  
17 A 9827 S. Japan. Shpg. wt. 3 lbs. .... 49.95

## **G** Features RF stage and Call Signal

Midland 13-710. One-watt input power and up to three channels. Superhet receiver with tuned RF stage. Automatic volume control reduces blasting and fading. Adjustable squelch circuit silences speaker between calls. Call Signal for alerting other units of this model. Battery-condition meter; jacks for optional AC adapter, battery charger, earphone. Metal case, 7<sup>3</sup>/<sub>4</sub> x 2<sup>3</sup>/<sub>4</sub> x 2". Carrying strap, Ch. 11 crystals. Order 8 "AA" alkaline batteries.  
17 A 9805 S. Japan. Shpg. wt., 4 lbs. .... 39.95

## **H** Tuned RF stage and three IF's

Midland 13-700. One watt input power and up to two channels. Superhet receiver with tuned RF, automatic gain control, and three IF stages for high selectivity. High-level class B push-pull audio modulation. Call Signal alerts other units of this model. Controls include: on-off/volume, variable squelch, channel selector, push-to-talk button. Jacks for AC adapter/battery charger, earphone. Metal. 7 x 2<sup>1</sup>/<sub>2</sub> x 2". Strap, Channel 11 crystals. Order 8 "AA" batteries.  
17 A 9828 S. Japan. Shpg. wt., 2 lbs. .... 29.95

## ACCESSORIES

Midland 18-140 AC Power Supply. For Midland walkie-talkies up to three watts only.  
17 A 9818. Shpg. wt., 3 lbs. .... 18.95

For extra crystals for walkie-talkies on these pages, see crystal listings on page 200

# 100-mW Walkie-Talkies for all uses

16<sup>50</sup>

19<sup>95</sup>

Our lowest  
price for any  
superhet  
Walkie-Talkie

11<sup>95</sup>

## 3-channel with Call Signal

Midland 13-428. An amazing low price for a 3-channel walkie-talkie. Superhet receiver has two IF stages for good selectivity. Push-pull output. Special Call Signal circuit alerts other units of this model. On-off switch/volume control; channel selector; push-to-talk; external jacks for AC adapter, earphone. 2 1/4" speaker. 44" telescoping antenna. 9 transistors. High-impact black polystyrene case with metal grille. 5 3/4" x 2 5/8" x 1 3/8". With case, Channel 11 crystals, earphone, 9-V battery. Japan. Shpg. wt., 1 1/4 lbs. 17 A 9814 S. . . . . 16.50

## Deluxe 2-channel . . Call Signal

Midland 13-430. High-performance model has 2 channels, plus Call Signal for selective communication. Extra-sensitive superhet receiver and high-efficiency 100-mW transmitter give you performance not expected at this low price. Dynamic speaker/mike for excellent voice clarity. Battery charger jack, AC adapter jack, earphone jack. Volume control, push-to-talk switch, telescoping antenna. Heavy-duty metal case, 5 1/2" x 2 1/4" x 1 3/8". With carrying strap, 9-volt battery, Channel 11 crystals. Japan. Shpg. wt., 1 lb. 17 A 9718 S. . . . . 19.95

## 1-channel with Call Signal

Midland 13-425. Sensational low price for a walkie-talkie with superhet receiver for good reception, plus a Call Signal to alert other units of this model. An unbeatable value! 100-mW transmitter. Controls include on-off switch/volume control, push-to-talk switch, call signal switch. 6 transistors. Ten-section 44" telescoping antenna really gets your signal out. High-impact case, 6 x 2 1/2 x 1 1/2". No license or age limit. With Channel 11 crystals, 9-volt battery, carrying strap. From Japan. Shpg. wt., 1 lb. 17 A 9815 S. . . . . 11.95

## 3-channel 100-mW with separate mike and speaker

With IC's and Call Signal

29<sup>95</sup>

Integrated circuit  
IF to give you  
maximum performance

Fanon IC-10. Up to 3-channel crystal-controlled transmit and receive. Solid-state circuit. Built-in Call Signal to alert other units of this model. Separate mike and speaker; squelch control for quiet standby operation; battery life meter; earphone and external power jacks. 10 1/2" x 2 3/4" x 1 5/8". With hand strap, shoulder strap, earphone. Ch. 9 crystals. Japan. Order 8 "AA" batteries or rechargeable pack. 17 A 9786 S. Shpg. wt., 2 lbs. . . . . 29.95

With Call Signal and tuned RF

29<sup>95</sup>

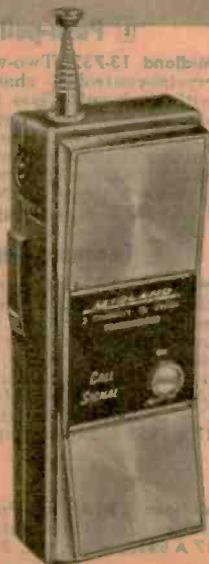
Call Signal  
alerts other units  
of this model

Midland 13-124C. Features three crystal-controlled channels and Call Signal. Also, separate speaker and push-to-talk mike for improved modulation. Sensitive superhet receiver has tuned RF stage; fully variable squelch. Input jacks for AC adapter, battery charger, earphone. Metal case, 7 1/2" x 2 3/4" x 2 1/8". With leather carrying case; Channel 11 crystals, battery holder. Order eight "AA" batteries below. Japan. 17 A 9810 S. Shpg. wt., 1 1/2 lbs. 29.95

### WALKIE-TALKIE ACCESSORIES

17 A 9767 S. 9-VAC Adapter. 12 oz. 4.95  
17 A 9640. 12-VAC Adapter. 12 oz. 4.95  
18 A 5980. 9-V Battery. 4 oz. . . . . 2/59¢

18 A 5083. "AA" Battery, 4 oz. . . . . 2/27¢  
17 A 9820. Ni. Cad. Pack and Charger  
(for IC-10 only). 11 oz. . . . . 22.25



# Fanon solid-state wireless Intercoms



**Extra-powerful 2-channel Intercom System . . . 1-watt output**

2-station System **66<sup>50</sup>**

Features two separate talk channels to permit simultaneous conversations

Model F1W-2. Pushbutton system has 1-watt output for full volume, clear tone. No wires needed, just plug into 110 VAC. Two pair can carry on simultaneous conversations without interfering with each other. Volume, talk/listen, squelch controls. Two-tone gray. 9½x4x3". Wt., 5 lbs.

12 A 8234 X. . . . . 66.50  
12 A 8235 X. Extra Station. 2½ lbs. 34.65



**Lowest priced wireless System . . . ideal for homes**

2-station System **24<sup>95</sup>**

Operates room-to-room or between buildings on same power line

Model EW3A. No installation, just plug units into 110 VAC outlets and start talking. Ideal "babysitter." Quieting circuit cuts noise. Each unit has press-to-talk bar with lock position for monitoring; on/off switch and volume control. High-impact beige styrene case, 3½x4½x2". Japan. Shpg. wt., 1½ lbs.

12 A 8211. . . . . 24.95



**Thrifty-priced 2-channel System for home or office**

3-station System **33<sup>95</sup>**

Two separate talk channels with quieting circuit to cut noise

Model 1642. Two separate talk channels. No installation—just plug into 110 VAC outlets and talk. Operates room-to-room or between buildings on same line. Units have pilot lights, on/off volume control, talk/listen switch. Beige/Brown. 5x4¼x1¾". From Japan. Shpg. wt., 3 lbs.

12 A 8212. . . . . 33.95  
12 A 8286 X. Extra Station. 1 lb. . . 17.95

## NuTone "Commu-Ni-Com" wire-type 4-station Intercom/Door-Answering System



**69<sup>49</sup>**  
System

Solid-state system features talk/listen switch and monitor position on indoor stations. Any station can talk to any other station. Easy wall surface mounting or flush mounting with "A" Frame below. Includes Central Amplifier, plus 3 Indoor Stations; Door Station; 16-volt Step-Down Transformer; 50-ft. Cable. For 110-120 volts, 60 Hz AC.

12 A 8177 X. Shpg. wt., 10½ lbs. . . . . 69.49  
12 A 8186. Extra 472B Indoor Station. 6¾x4½x1½". 1½ lbs. 8.24  
12 A 8187. Extra 471 Door Station. 4½x3¾x1½". 1½ lbs. . . 7.24  
12 A 8195. Electric Door Chime. Model L-74 (Not illustrated). For use with above. 7½x8x2½". Shpg. wt., 3¾ lbs. . . . . 14.49  
12 A 8185. 250' 8-Conductor Cable. Wt., 8 lbs. . . . . 17.95  
12 A 8191. Type 472-A "A" Frame. 6½x4½". Wt., 6 oz. . . . . 94¢



Low as  
**46<sup>00</sup>**  
Per Master

### Talk-A-Phone solid-state all-master Intercoms

Each station can originate a call. Separate conversations can be handled simultaneously. With press-to-talk bar, volume control. Finished in leather-like gray vinyl and chrome. 3¾x10½x8¾". For 110-120 volts, 50-60 Hz AC, or DC. U.L. Listed.

Model K-LS-5. For up to 5 stations. Uses Type 5506 6-conductor cable, see page 378.  
12 A 8079 X. Shpg. wt., 7 lbs. . . . . 46.00  
Model K-LS-10. For up to 10 stations. Uses Type 9911 11-conductor cable, see page 378.  
12 A 8084 X. Shpg. wt., 7 lbs. . . . . 56.40

Entire Talk-A-Phone Line Available from Allied



Low as  
**46<sup>00</sup>**  
Per Master



K-LR-3 K-LR-3R

### Talk-A-Phone solid-state Master-Substations

Substations can call Master, but not each other. Master has press-to-talk, volume. U.L. List. 120 VAC.

K-ML-5 Master. For up to 5 Subs. Shpg. wt., 7 lbs.  
12 A 8085 X. Size, 10½x8¾x3½". . . . . Each 46.00  
K-ML-10 Master. For up to 10 Subs. Shpg. wt., 7 lbs.  
12 A 8086 X. Size, 10½x8¾x4x3½". . . . . Each 56.40  
K-LR-3. Substation. Deluxe finish front. Wt., 4½ lbs.  
12 A 8088 X. Size, 7½x8¾x2½". . . . . Each 20.40  
12 A 8089. K-LR-3R Substation. Above, but for flush wall mtg. Size, 4½x7¾". Wall opening, 4½x6½x2" deep. Gray, chrome. Shpg. wt., 4 lbs. . . . . Each 15.80  
12 A 8090. K-LR-3M. Substation. Same as K-LR-3R, but grain, baked enamel. Shpg. wt., 4½ lbs. . . . . Each 15.80

# Solid-state Radio-Intercoms deliver music to any room



Master Station **126<sup>95</sup>**

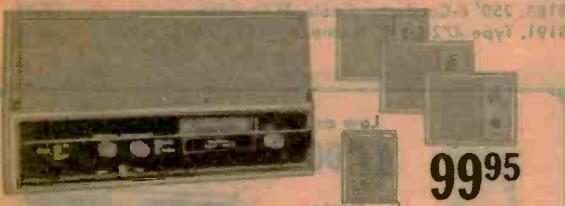
## Nutone Master Station FM-AM/Intercom

Model 2090. Master Station accepts up to 8 Remote Stations. Offers hi-fi FM, AM, plus intercom. Boasts "All-Call" talk/listen lever for paging through all Remote Stations; slide-rule dial; AFC on FM. Walnut finish. 8<sup>3</sup>/<sub>4</sub> x 16 x 1<sup>3</sup>/<sub>4</sub>" (projects 1<sup>5</sup>/<sub>8</sub>" from wall). 115 VAC. 60-Hz transformer. Remote stations, 3-cond. cable below.  
 12 A 7991 X. Shpg. wt., 9<sup>1</sup>/<sub>2</sub> lbs. . . . . 126.95  
 12 A 7990 X. Model 2091. White, beige. 9<sup>1</sup>/<sub>2</sub> lbs. . . . . 126.95



## Remote-Stations and Cable for 2090 and 2091

- A** 12 A 7992 X. N202J Indoor Remote Station. 8" speaker, volume, talk/listen controls, detachable control panel. 12x12x2<sup>1</sup>/<sub>8</sub>". Eggshell white finish. 3<sup>3</sup>/<sub>4</sub> lbs. . . . . 16.95
- 12 A 8042. 2411 A "A" Frame. 12<sup>1</sup>/<sub>2</sub>x11". Wt., 1<sup>3</sup>/<sub>4</sub> lbs. . . . . 1.95
- B** 12 A 8033. N2027 Indoor Remote Station. 5" speaker, volume, talk/listen controls. Egg shell white. With rough-in frame, 5<sup>1</sup>/<sub>4</sub>x8<sup>3</sup>/<sub>8</sub>x1<sup>1</sup>/<sub>4</sub>". 1<sup>1</sup>/<sub>2</sub> lbs. . . . . 7.95
- C** 12 A 8193. 412 Door Remote Station. 3" speaker, talk/listen switch. 3<sup>3</sup>/<sub>4</sub>x4<sup>5</sup>/<sub>8</sub>". Surface mounting. Projects 1<sup>5</sup>/<sub>8</sub>" from wall. Gold finish. 1<sup>1</sup>/<sub>2</sub> lbs. . . . . 11.49
- 12 A 8039. 200' Roll 3-Cond. Cable. 2<sup>3</sup>/<sub>4</sub> lbs. . . . . 5.95
- 12 A 8040 X. 1000' Roll 3-Cond. Cable. 13 lbs. . . . . 21.95



## Nutone 5-station AM Radio/Intercom

Delivers AM radio programs to any room desired. Consists of: Model 2034 Master Station; 3 Model 2028 Indoor Remote Stations with Frames; Model N2006 Door Remote Stations; 200' 3-Cond. Cable. Inside Remote Stations have "latching" talk/listen switch for continuous monitoring. Master Station has jack for record changer; intercom override and independent "on-off" pilot lights. "All-Call" lever permits paging through all Remote Stations—persons can answer without using controls. Door-switch permits answering door from any station. Remote or Master. Beige finish Master Station, 8<sup>3</sup>/<sub>4</sub> x 16 x 1<sup>3</sup>/<sub>4</sub>". Projects 1<sup>5</sup>/<sub>8</sub>" from wall. White inside Remote Station, 6<sup>3</sup>/<sub>8</sub> x 8<sup>1</sup>/<sub>2</sub> x 2<sup>5</sup>/<sub>8</sub>". Projects 1<sup>1</sup>/<sub>2</sub>". Gold finish door Remote Station, 5<sup>1</sup>/<sub>4</sub> x 4<sup>5</sup>/<sub>8</sub> x 1<sup>3</sup>/<sub>4</sub>". Projects only 1<sup>1</sup>/<sub>4</sub>" from wall. With 115-volt AC transformer. Shpg. wt., 14 lbs. . . . . 99.95  
 12 A 7993 X. . . . . 99.95  
 12 A 7994 X. Extra 2028 Indoor Remote Station, 1<sup>1</sup>/<sub>2</sub> lbs. 7.69

## Nutone deluxe FM-AM/Intercom



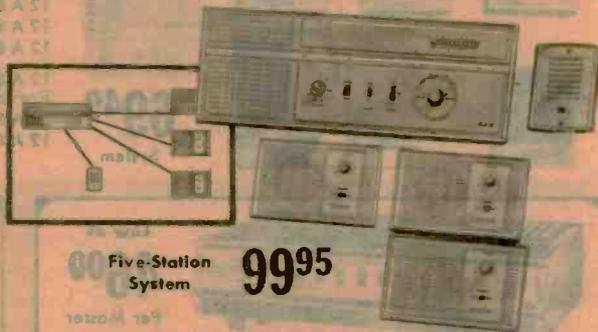
Master Station **154<sup>95</sup>**

## FM-AM Master Station

Model N2561. For room-to-room intercom, door answering from any Remote Station, plus FM-AM. Turn radio off at any Remote Station, still send and receive calls. Intercom mutes radio. Accepts up to 16 Remote Stations. 6x9" speaker, AFC. Antenna, transformers, rough-in frame, 7<sup>3</sup>/<sub>8</sub> x 14<sup>1</sup>/<sub>4</sub> x 1<sup>3</sup>/<sub>4</sub>", hardware. Walnut with silver trim. 17<sup>3</sup>/<sub>8</sub> x 9<sup>5</sup>/<sub>8</sub>". Projects 2" from wall. 115 VAC.  
 12 A 8180 X. Shpg. wt., 14<sup>1</sup>/<sub>4</sub> lbs. . . . . 154.95  
 12 A 8181 X. Model N2562. Above, copper finish. 154.95

## Remote Stations and Cable for above

- E** 12 A 7996 X. N2572 Hi-Fi Indoor Remote Station. 8" speaker. Volume/function controls, 2 talk/listen levers. 12x12x2<sup>1</sup>/<sub>8</sub>". Projects 1<sup>1</sup>/<sub>2</sub>". White. 5<sup>1</sup>/<sub>4</sub> lbs. 22.95
- F** 12 A 7997 X. N2570 Indoor Remote Station. Above 5" speaker. 6<sup>1</sup>/<sub>2</sub>x9<sup>1</sup>/<sub>4</sub>x1<sup>1</sup>/<sub>2</sub>". Projects 7<sup>1</sup>/<sub>8</sub>". 2<sup>1</sup>/<sub>2</sub> lbs. 14.95
- G** 12 A 8183. 2571 Door Remote Station. 6<sup>1</sup>/<sub>8</sub>x4<sup>5</sup>/<sub>8</sub>". Black/gold. Frame, 5<sup>1</sup>/<sub>8</sub>x3<sup>5</sup>/<sub>8</sub>x1<sup>3</sup>/<sub>4</sub>". 1<sup>1</sup>/<sub>2</sub> lbs. . . . . 10.49
- 12 A 8083. 50' Roll 8-Cond. Cable. Wt., 2 lbs. . . . . 5.24
- 12 A 8185. 250' Roll 8-Cond. Cable. Wt., 8 lbs. . . . . 17.95

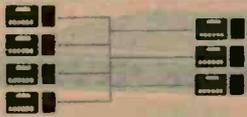


Five-Station System **99<sup>95</sup>**

## Emerson FM-AM Radio/Intercom System

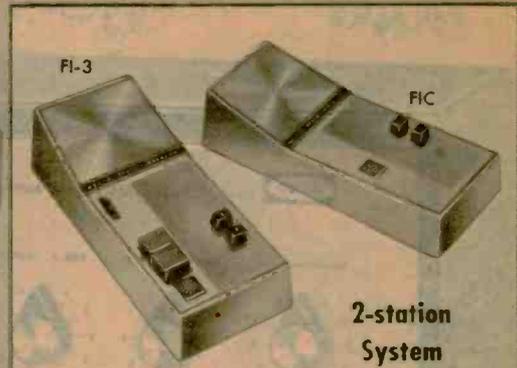
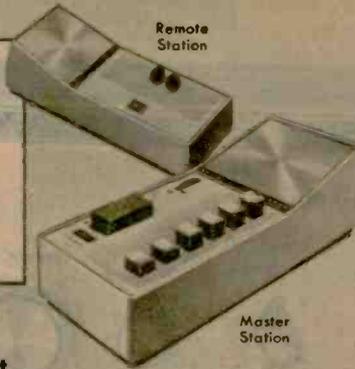
Model RM-16. Complete 5-station FM-AM system delivers FM-AM radio to any desired room, plus intercom convenience between stations. Includes: FM-AM Master Station; 3 Indoor Remote Stations; Door Remote Station; 165' 3-Wire Interconnecting Cable; Master Station has talk/listen switch, system volume control; AM-Off-FM switch; vernier tuning dial. Remote Stations have talk/listen switch; volume control with "off" position. Weather-proof door station lets you identify callers from any room in the house. Solid-state; tuned RF stage for excellent FM reception. Radio is automatically silenced when intercom is used. Units flush-mount in walls 2 or more inches thick. Master Station, 14<sup>1</sup>/<sub>2</sub>x5<sup>1</sup>/<sub>2</sub>"; Indoor Remote Stations; 7<sup>3</sup>/<sub>4</sub>x4<sup>1</sup>/<sub>2</sub>"; Door Station, 3<sup>3</sup>/<sub>8</sub>x5<sup>3</sup>/<sub>8</sub>". Master, off-white, gold trim; Remotes, off-white. Door station gold-anodized aluminum. With transformer, 4 plaster intg. rings. 115 VAC.  
 12 A 8099 X. Wt., 14 lbs. . . . . 99.95

# Fanon deluxe solid-state Intercoms



Accepts 6 additional Master Stations for a 7-station Master System . . . or 6 Remotes for a Master Remote system

## 7-station pushbutton Master/Intercom unit



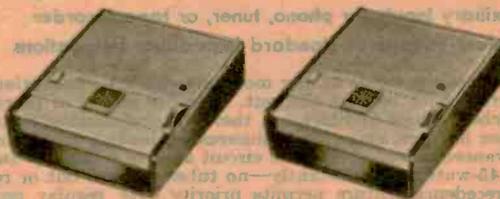
## 2-station System

**Model FI-7.** Features solid-state circuit; full one-watt power output; volume control; talk/listen switch. Connects to any PA system for paging and hands-free reply. When used in all-Master system, all units can call one or more Masters; up to three simultaneous conversations. Stations can be used up to 500 feet apart. High impact styrene case, 9½x4x3¼". Gray/charcoal finish. Requires cable with one more conductor than No. of stations. 110-130 VAC.

- 12 A 8232 X. Shpg. wt., 3 lbs. . . . . Each 34.65
- 12 A 8233 X. Model FI-13 Master Unit. As above, with 13 stations, two paging buttons for PR-15 or FIR. 4 lbs. . . . . Each 47.75
- 12 A 8228 X. Model FIR Remote Station. For above models. Shpg. wt., 2 lbs. . . . . Each 11.25
- 12 A 8229 X. Model PR-15 Paging/Talkback Relay. Links FI-7, FI-13 to PA systems for paging/talkback. Add one shielded wire for each PR-15. Shpg. wt., 1 lb. . . . . Each 22.25

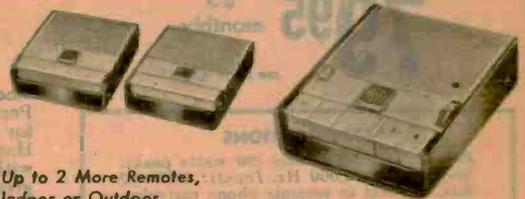
- 12 A 8231 X. Model FIC-3 Indoor System. FI-3 Master Sta., FIC Rem. Sta. 50' 3-cond. cable. Master has 2 selector buttons. Remote, "beep," privacy buttons. Size, 9½x4x3¼". 115 VAC. Shpg. wt., 5 lbs. . . . . 38.50
- 12 A 8237 X. FIC Indoor Rem. Sta. 2 lbs. Ea. 12.25
- 12 A 8238 X. FID Outdoor Rem. Sta. 2 lbs. Ea. 8.55
- 12 A 8236 X. FIS Staff Sta. Rem. or Master Sta. with above. Less cable, 2½ lbs. . . . . Each 30.85
- 12 A 8208 X. WC-1 Walnut Cabinet. For all "FI" units. Hand-rubbed finish. 1 lb. . . . . Each 6.15

**CABLE REQUIREMENTS:** FI-13, FI-7, or FI-3 systems require cable having one more conductor than number of stations. Ex: 13 station system uses 14-conductor cable. For paging, use two more wires than number of stations, plus one shielded cable for each PR-15 paging relay used. Cable, page 374.



## Popular two-station Intercom System

**Model 1600.** Features push-pull amplifier for fine sound quality. Master Station has press-to-talk bar with lock for hands-free conversations, on-off switch, volume control. Remote Station can "beep" Master even when system is "off." Accepts one additional indoor or outdoor Remote Station. With 50' cable. 1¾x4¼x5". 110-130 VAC. 12 A 8213 X. Japan. Shpg. wt., 3 lbs. . . . . 21.75



Add Up to 2 More Remotes, Indoor or Outdoor

## "Starter Set" three-station Intercom System

**Model 165Y.** Versatile system features Model 1605 Master Station; two Model 162 Indoor Remote Stations; two lengths 50' cable; plug terminals. Master unit accepts up to 4 remote Stations, indoor or outdoor. Calls any room desired or all together. Remotes have "beep call" signal. Each station 1¾x4¼x5". 110-130 VAC. 12 A 8215 X. Shpg. wt., 3½ lbs. . . . . 33.75

### ACCESSORIES FOR 1600, 165Y

- 12 A 8218. Model 162 Indoor Remote Sto. 1½ lbs. Ea. 5.95
- 12 A 8221. Model 161 Outdoor Remote Sta. 1 lb. Ea. 5.95
- 12 A 8222 X. 50' Cable. Plug-in connectors. ½ lb. 2.25
- 12 A 8223 X. 100' Cable. Plug-in connectors. 1 lb. . . . 3.75

## Low-cost two-station Intercom System

**A "Echo 2A" Battery-Operated System.** Great for outdoors and campers. Features sensitive push-pull amplifier; 2½" speakers. "Beep" button allows signaling even with Master Station "off." Master Station has press-to-talk contour switch, volume control. Requires one 9-volt battery, order below. With 50' cable. Each unit, 2x3x4". Japan. Shpg. wt., 1½ lbs.

- 12 A 8219. . . . . 9.95
- 18 A 5650. 9-Volt Battery. Shpg. wt., 4 oz. . . . . Each 48¢

**B "Echo 3A" AC Operated System.** Same features as above, but system operates from external 117 VAC power supply. For home, office, etc. With 50' cable. Japan. 1½ lbs.

- 12 A 8220. . . . . 14.50



Allied can fill all your Intercom needs



## Allied® 45-watt solid-state PA Amplifier

**79<sup>95</sup>** \$5  
monthly  
see page 438

- All silicon solid-state circuit delivers full power instantly
- Two auxiliary inputs for phono, tuner, or tape recorder
- For constant-voltage or standard impedance installations

### SPECIFICATIONS

**Power Output:** 45 watts (90 watts peak).  
**Response:** 40-10,000 Hz. **Inputs:** 2 Mic; 2 Aux. (crystal or ceramic phono cartridge, tuner, tape recorder). **Controls:** Mic (2); Aux.; Bass; Treble; Master Gain; Anti-Feedback; On-Off. **Outputs:** 4 and 8 ohms, plus 25- and 70.7 V; AC Convenience Outlet. **Semiconductors:** 8 silicon transistors; 3 diodes. **Power Consumption:** 65 watts at 120 VAC.

### INSTALLATION NOTES

**Mike Connector:** Amphenol 75MC1F or Switchcraft 2501F (takes 2, 1 supplied). **Aux. Conn.:** Phono plug (takes 2, 1 supplied). **Speaker Conn.:** Screw terminals; spkr. jacks, use Amph. 91MPM3S plugs, not supplied. **Speaker Cable:** Use 2-cond. (not included). **Line Cord:** 7' 2-wire with plug. **Ventilation, Mike Plug Space Required Behind Cabinet:** 3". **Ventilation Space Required Above Cabinet:** 5". **Power:** 105-130 V, 50-60 Hz AC; optional Phono Top for 60 Hz AC.

**Model 3246T.** Meets the needs of any moderate-size PA application. Performs superbly both indoors and out. Provides plenty of power for halls, churches, school auditoriums, theaters, and skating rinks. Handles outdoor lectures, stage performances, or loading platforms with ease. Advanced silicon solid-state circuit assures reliability and gives you full 45-watt power instantly—no tubes to burn out or replace. Mike precedence feature permits priority over regular programs. AC convenience outlet on rear of chassis. Low-frequency filter may be switched in to cut feedback and protect speakers from overload.

Mike inputs switch-controlled for high or low impedance. Two auxiliary inputs for distributing music from a phono, tuner or tape recorder. Can be used in either constant-voltage or standard impedance installations. Separate, calibrated bass and treble controls. Gain controls for mike and auxiliary inputs, plus extra-large master gain control. Has both screw type and quick-disconnect speaker connections. 5 $\frac{1}{16}$  x 15 $\frac{1}{4}$  x 9 $\frac{1}{2}$ ". Handsomely styled in gray case with brushed aluminum front. For 105-130 V, 50-60 Hz AC.

12 A 7042 U. Shpg. wt., 10 lbs. . . . . 79.95

### SPECIAL PA SYSTEM PRICES

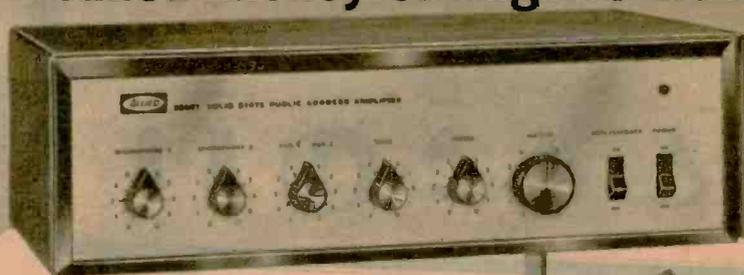
Choose one of the PA Systems in this catalog or write for a special System Price on components of your own choice

### ACCESSORIES FOR ALLIED PA SYSTEMS

- A** Carrying Case. For amplifiers up to 17x11 $\frac{1}{4}$ x7", plus two 12" speakers. Size, 21 $\frac{1}{2}$ x17 $\frac{1}{2}$ x12".  
12 A 7978 U. Shpg. wt., 19 lbs. . . . . 21.95  
12 A 0027 D3U. Carrying Case with Speakers. Wt., 29 lbs. . . . . 31.95
- B** Speaker Cable. Two-conductor POSJ cord, nominal #20. Stripped and tinned. In 50-ft. roll.  
12 A 7982. Shpg. wt., 8 oz. . . . . Roll 1.79
- C** Allied 3201A. Four-Speed Manual Phono. Mounts atop Allied 3246T. 3281T. With cartridge. For 110 V, 60 Hz AC.  
12 A 7983 X. Shpg. wt., 6 lbs. . . . . 24.95



# Allied money-saving 45-watt PA Systems



Save up to \$43.56 on the PA System you want with Allied's low system prices

## A Indoor sound-column System

Separately, \$177.98. For medium-size halls, churches, theaters, lecture rooms, etc. Includes: Allied 3246T Amplifier; Allied 3311 Mike; Atlas MS10C Stand; Two Allied 3300 Sound Columns. Each column, 41x11x8". Order cable below.  
12 A 0021 15Z. Wt., 96 lbs. .... 159.95  
12 A 7982. Speaker Cable. 2-cond., 50-ft. roll. Shpg. wt., 8 oz. .... Roll 1.79

Save \$18.01

159<sup>95</sup>

## B Deluxe indoor sound-column System

Separately, \$227.61. Fine system for larger churches and auditoriums. Includes: Allied 3246T Amplifier; Electro-Voice 664 Cardinal Mike; Atlas MS10C Stand; Two Argos SD1064 Sound Columns. Each column, 30 1/2 x 7 x 3 1/2". Order speaker cable above. Shpg. wt., 62 lbs.  
12 A 0011 15X. .... 199.95

Save \$27.66

199<sup>95</sup>

## C Our best 45-watt indoor sound-column System

Separately, \$343.51. Large system for covering theaters, skating rinks, gyms, large auditoriums. Includes: Allied 3246T Amplifier; Two Electro-Voice 664 Cardinal Mikes; Two Atlas MS10C Stands; Four Allied 3300 Sound Columns. Each column, 41x11x8". Order cable above.  
12 A 0036 18Z. Shpg. wt., 184 lbs. 299.95

Save \$43.56

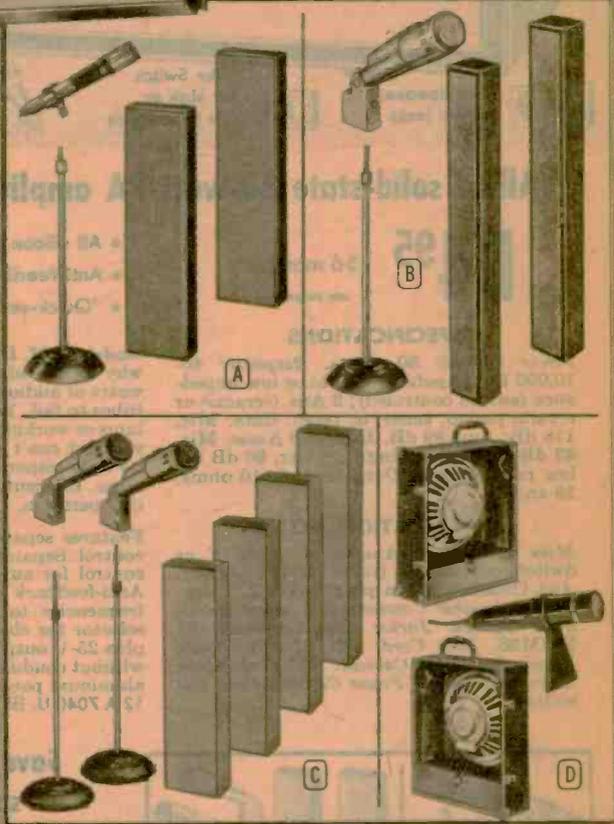
299<sup>95</sup>

## D Compact easy-to-carry portable System

Separately, \$151.26. Packs into speaker case for easy portability. Ideal for halls, studios, outdoor lectures, loading platforms. Includes: Allied 3246T Amplifier; Allied 4525S Microphone with switch; Two 12" Wide-Range Speakers; Portable Carrying Case. Order cable above.  
12 A 0015 15U. Shpg. wt., 39 lbs. .... 119.95

Save \$11.30

119<sup>95</sup>



## Allied 20-watt PA Amplifier features silicon solid-state circuit for high reliability

- Medium-size area coverage
- Excellent sound quality
- Outputs for all type systems

59<sup>95</sup>

Model 3221T. Excellent PA amplifier choice for use where clear, medium-size area coverage is required at lowest cost. Ideal for small halls or lecture rooms. Reliable silicon solid-state circuit gives you full power output, instantly, every time you need it. Inverse feedback reduces hum and distortion. Fine for both voice and music in standard impedance or constant-voltage installations. AC convenience outlet on back of chassis. Use with hi or lo Z mikes. Gray metal case, brushed aluminum front, 4 1/2 x 13 x 7 1/8".  
12 A 7041 U. Shpg. wt., 8 lbs. .... 59.95

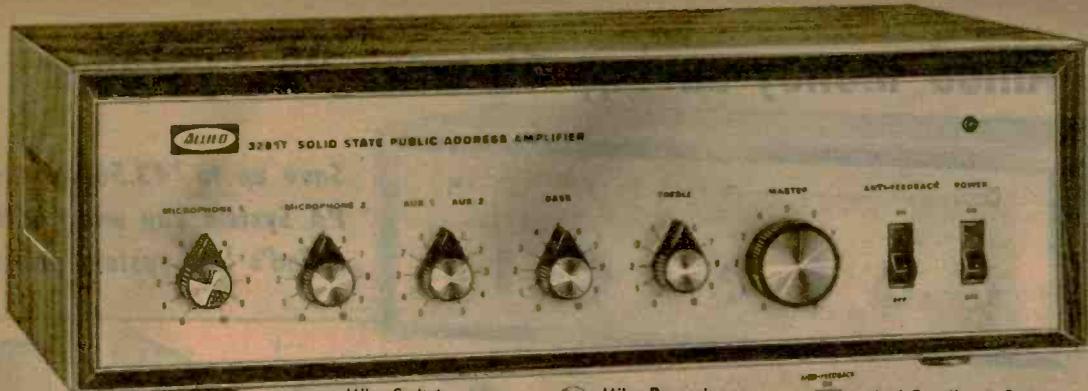


### SPECIFICATIONS

Power Output: 20 watts (40 watts peak). Response: 40-10,000 Hz. Inputs: 1 Mic, 2 Aux. Controls: Mic and Aux faders; Master tone; on-off switch. Gain: Mic, 26 dB; Aux, 83 dB. Outputs: 4, 8, 16 ohms; 25, 70, 7 V. Semiconductors: 6 transistors; 2 diodes.

### INSTALLATION NOTES

Connectors: Mic, Amphenol 75MC1F (one supplied); Aux, pin plug (takes 2, 1 supplied). Speakers: Screw terminals; speaker jacks, use Amphenol 91MPM38 plugs, (not supplied). Space Required: 3" behind, 5" above. Power Requirements: 105-130 V 50-60 Hz AC.



Two Speaker output jacks



Mike Switch for high or low impedance



Mike Precedence feature for paging use



Anti-Feedback Switch prevents howl, protects speakers

## Allied solid-state 80-watt PA amplifier . . . our most powerful model

**114<sup>95</sup>**

\$6 monthly

see page 438

- All silicon transistors for highest reliability and stability
- Anti-feedback control allows higher volume without feedback
- "Quick-set" selector for instant choice of desired impedance

### SPECIFICATIONS

**Power Output:** 80 watts. **Response:** 40-10,000 Hz. **Inputs:** 2 Mic, hi or low impedance (switch controlled); 2 Aux (ceramic or crystal phono, tuner, or tape). **Gain:** Mic, 118 dB; Aux, 89 dB. **Hum and Noise:** Mic, 43 dB below rated output; Aux, 66 dB below rated output. **Outputs:** 4, 8, 16 ohms; 25 and 70.7 V.

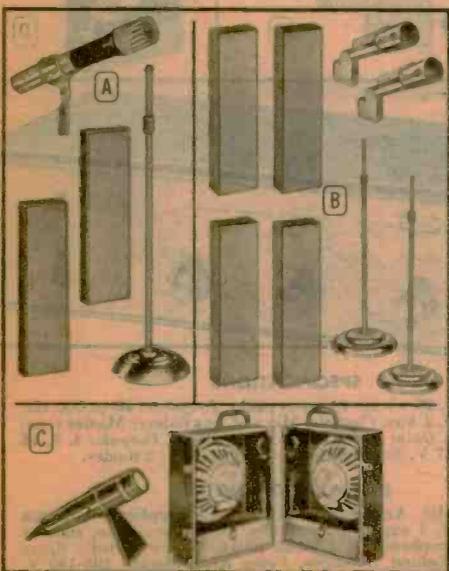
### INSTALLATION NOTES

**Mike Connectors:** Amphenol 75MC1F or Switchcraft 2501F (takes 2, 1 supplied). **Aux Connectors:** Pin plug (takes 2, 1 supplied). **Speaker Connectors:** 2 screw terminals. **Speaker Jacks:** use Amphenol 91 MPM3S. **Line Cord:** 7-ft., 2-wire. **Space Required Behind Cabinet:** 3". **Vent Space Above Cabinet:** 5". **Power Consumption:** 150 watts.

Model 3281T. It takes plenty of power to do the really big jobs. That's why this all-silicon-transistor amplifier was designed to deliver a full 80 watts of audio output, instantly, every time you need it. There are no tubes to fail. You can rely on it for excellent coverage of large auditoriums or working areas. Yet it's priced surprisingly low. Dollar for dollar, you just can't get more in an 80-watt amplifier. Designed to maintain its wide response even at full power, it delivers better sound over wide areas. Efficient solid-state circuit draws minimum current for economical operation.

Features separate bass and treble controls, plus a large master gain control. Separate mixer controls and inputs for 2 mikes. Common mixer control for auxiliary inputs accommodates phono, tuner or recorder. Anti-feedback circuit with front panel switch diminishes the lower frequencies to allow higher volume without feedback. "Quick-Set" selector for choice of impedance—4, 8, 16 ohm and 70.7-V outputs, plus 25-V output that permits installation of constant voltage system without conduit for speaker wires. Pilot light. Gray metal case, brushed aluminum panel. 5<sup>3</sup>/<sub>16</sub> x 15<sup>1</sup>/<sub>2</sub> x 11<sup>1</sup>/<sub>2</sub>". For 105-130 V, 50-60 Hz AC. 12 A 7040 U. Shpg. wt., 27 lbs. . . . . 114.95

## Save up to \$78.56 on powerful 80-watt solid-state Public Address Systems



Save  
**\$26.01**

### A Quality indoor sound-column System

**186<sup>95</sup>**

Separately, \$212.96. Allied 3281T Amplifier; Allied 3311 Mike; Atlas MS10C Stand; Two Allied 3300 Sound-Columns. Columns, 41x11x6". Order speaker cable below. 12 A 0025 L5Z. Shpg. wt., 206 lbs. . . . . 186.95

Save  
**\$78.56**

### B Deluxe four sound-column System

**419<sup>95</sup>**

Separately, \$498.51. Allied 3281T Amplifier; Two Electro-Voice 664 Mikes; Two Atlas MS10C Stands; Four Allied 3350 Sound-Columns. Columns, 41x11x6". Order speaker cable below. 12 A 0038 L4U. Shpg. wt., 219 lbs. . . . . 419.95

Save  
**\$13.84**

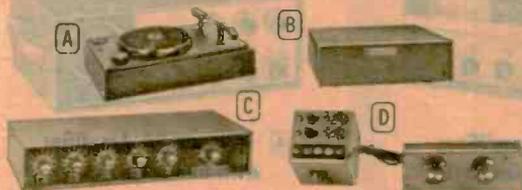
### C Portable indoor/outdoor System

**154<sup>95</sup>**

Separately, \$188.79. Packs into single carrying case. Allied 3281T Amplifier; Allied 45258 Mike; Two 12" Wide-Range Speakers; Portable Carrying Case. Order speaker cable below. 12 A 0026 L5Z. Shpg. wt., 46 lbs. . . . . 154.95  
12 A 7982. Speaker Cable. 2-conductor. 50-ft. roll. Shpg. wt., 8 oz. . . . . Per roll 1.79

# Solid-state PA Amplifiers and Systems

## UNIVERSITY "Power-Line" Accessories

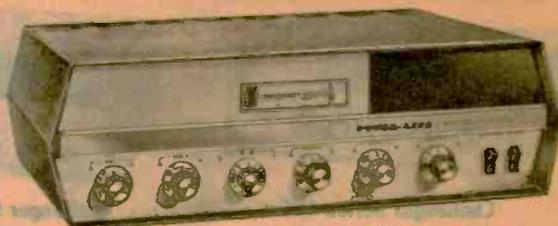


**A** Model PT-210 Phono Top. Three-speed monophonic phono player for top-mounting onto the Power-Line amplifier. Has dual stylus (stereo microgroove, 78 rpm) flip-over sapphire cartridge for playing any stereo or mono record.  $4\frac{3}{4} \times 14\frac{1}{4} \times 8\frac{3}{4}$ ". 117 VAC. 12 A 7988 X. Shpg. wt., 6 lbs. 32.97

**B** Model UPB-100T 100-Watt Booster Amplifier. Boasts solid-state circuit for dependable operation. Ideal for use wherever undistorted high power is required. Built-in feedback suppression circuitry with high-fidelity response characteristics. Master gain control; on-off switch. Computer type logic circuits assure maximum protection. Thermal protection. Response:  $\pm 1\frac{1}{2}$  dB, 50-15,000 Hz. Inputs: lo Z transformer; hi Z 50,000 ohms. Outputs: 25, 70 V isolated line; 4 ohms with screw terminals.  $5 \times 15\frac{1}{2} \times 10\frac{1}{2}$ ". 117 VAC. 12 A 8239 U. Shpg. wt., 18 lbs. 254.95

**C** Model UMX5 Solid-State Mixer Preamp. All silicon transistors. Five channels: 4 mike (hi or lo Z with optional transformer), 1 combination lo Z (transformer) or hi Z aux. Master gain control, on-off switch with pilot, on-off audio switch for each input. Connectors for paralleling up to 3 units. Response:  $\pm 2$  dB, 25-50,000 Hz.  $13\frac{1}{2} \times 2\frac{1}{2} \times 4\frac{5}{8}$ ". 120 VAC. 12 A 8240 U. Shpg. wt., 6 lbs. 129.95

**D** Model MPA-1 Two-Channel Mike Preamp. Adds 2 additional mike inputs to UPL amplifier. Has full level controls, hi-lo impedance switch, facilities for remote and precedence controls.  $3 \times 4 \times 1\frac{1}{2}$ ". 117 VAC. 12 A 8241 X. Shpg. wt., 1 lb. 41.97



## University Power-Line 100-watt solid-state PA Amplifier with true hi-fi performance

Direct-coupled solid-state circuit eliminates transformer with 4 to 20-ohm loads

**159<sup>00</sup>** \$8 monthly\*

Model UPL-100T. Professional, high-fidelity sound at moderate cost. All-silicon-transistor circuits eliminate need for Constant-Voltage systems in virtually all small to moderate-sized installations, but has output autoformer for Constant-Voltage output use when required. Direct-coupled circuits, from input to speaker, end insertion losses and give you a 20 to 25% increase in available power at the speakers. Controls, mixes and amplifies 3 or more input signals.

Features computer logic circuit for overload protection. Separate bass, treble, and master gain controls. Pilot light. Has hi or lo Z input selection; switched AC outlet; speaker protection circuit; fused AC line. Response: 40-20,000 Hz. Outputs: 25 and isolated 70.7 V line; 4, 8 16 ohms. Inputs: 2 mike, hi or lo Z unbalanced, aux, bridging hi Z. For 117 VAC.

12 A 7984 U. Shpg. wt., 29 lbs. 159.00  
12 A 7985 U. Model UPL-60T. As above, but 60 watts. Shpg. wt., 20 lbs. 129.00  
12 A 7986 U. Model UPL-35T. As above, but 35 watts. No logic circuit. Response, 50-15,000 Hz. Wt., 17 lbs. 104.97  
12 A 7987 U. Model UPL-20T. As above, but 20 watts. No logic circuit. Response, 50-15,000 Hz. One mike input, not 2. Shpg. wt., 17 lbs. 92.37

## Solid-state 35-watt Paging System

Separately, \$170.15. Includes Ampli-Vox SA-402 35-watt Amplifier; Two Electro-Voice P-30A Paging Horns; E-V 600E Push-to-Talk Mike. Amplifier has separate controls to allow background music while paging. Mike, aux inputs. Impedance: 4, 8, 16 ohms; 25, 70.7 V.  $8\frac{3}{4} \times 3\frac{1}{4} \times 8\frac{3}{4}$ ". For 110 VAC/12 VDC. Order cable below. 12 A 0037 L4X. Paging System. Wt., 15 lbs. 149.95  
12 A 7056 X. Amplifier Alone.  $8\frac{3}{4}$  lbs. 99.95  
12 A 7982. Speaker Cable, 2-conductor, 50-ft. roll. Shpg. wt., 8 oz. Per roll 1.79



Amplifier Alone **99<sup>95</sup>**

Save \$20.20  
Complete System **149<sup>95</sup>**

## Solid-state 16-watt Mobile PA System

Separately, \$61.99. Includes: Midland Amplifier, Two University DLC-8 Speakers, Electro-Voice 714 Push-to-Talk Mike with 5-ft. cord, bracket. Amplifier is ideal for any mobile PA use. Response: 40-16,000 Hz. Inputs: 600 ohms mike; high impedance mike/tape. Outputs: 8, 16 ohms. For 12 VDC, neg. or pos. gnd. With mounting brackets, plug, spare pilot lamp, fuse, lead wires.  $1\frac{1}{2} \times 3\frac{1}{4} \times 5\frac{1}{8}$ ". Amplifier from Japan 12 A 0035 L4X. Mobile PA System. 13 lbs. 56.95  
12 A 7375 X. PA Amplifier Alone. 2 lbs. 29.95



Amplifier Alone **29<sup>95</sup>**

Save \$5.04  
Complete System **56<sup>95</sup>**

\*Buy with no money down . . . full Credit details on page 438

# Bogen Public Address Equipment



**Challenger series CHS  
solid-state PA Amplifiers**

**Model CHS100.** Powerful 100-watt all silicon-transistor amplifier featuring 2 high or low-impedance mike inputs with faders; auxiliary and bridging inputs. Master volume; bass, treble controls. Protection against damage from accidental shorting or disconnecting of speaker lines. Remote volume control circuit. "Memory markers" for easy resetting of controls. Provision for microphone precedence. Frequency response:  $\pm 2$  dB, 40-20,000 Hz. Impedance: 2, 8 and 16 ohms; 25 and 70-volt balanced lines.  $5\frac{1}{2} \times 10\frac{1}{2} \times 15\frac{1}{4}$ ". For 105-125 V, 50-60 Hz AC. Shpg. wt., 24 lbs.  
12 A 7311 U. .... 157.15

**Model CHS50.** As above, but 50-watt power, 4-ohm instead of 2-ohm output impedance.  
12 A 7312 X, 21 lbs. .... 127.45

**Model CHS35.** Same as CHS50, but 35 watts. Non-silicon output stage. Provision for 12 VDC operation.  
12 A 7313 X, 17 lbs. .... 104.95

**Model PMA-2 Preamplifier.** Mounts into front panel of CHS amplifiers to give 2 more hi or lo-Z mike inputs, controls.  $1\frac{1}{8} \times 4\frac{3}{4} \times 3\frac{5}{8}$ ".  
12 A 8262, 3 lbs. .... 32.95



**Challenger tube Amplifiers  
—fine quality, lower cost**

**Model CHB100.** Tube equivalent of CHS100 described at left. 100-watt amplifier has 2 high impedance mike inputs (no low-impedance) with separate controls, 2 auxiliary inputs with fader, and magnetic phono input. Master volume, bass and treble controls. "Memory markers" for resetting controls. Protected against damage by shorting of speaker lines. High input sensitivity, with low hum and noise ( $-70$  dB mike,  $-80$  dB aux.). Reserve power for volume peaks.

Response:  $\pm 2$  dB, 40-20,000 Hz. Impedance: 4, 8, 16 ohms; 25 and 70-volt balanced lines.  $6\frac{3}{4} \times 15\frac{1}{4} \times 10$ ". For 105-125 volts, 50-60 Hz AC. Optional phono-top below.  
12 A 7348 U, 25 lbs. .... 133.50

**Model CHB50.** Same as CHB100 amplifier above, but 50 watts power.  
12 A 7347 U, 22 lbs. .... 103.50

**Model CHB35A.** Same as CHB100 amplifier above, but 35 watt power.  
12 A 7346 U, 20 lbs. .... 85.50

**LPC4 4-Speed Phono-Top for Bogen PA Amplifiers.** With cartridge, mounting brackets. Size,  $5 \times 13 \times 9\frac{1}{2}$ ". For 117 V, 60 Hz AC.  
12 A 7373 X, 7 lbs. .... 27.75



**A 60-watt PA Amplifier  
with five mike inputs**

**Model MX60A.** Five mike inputs (4 convert to lo-Z with T200 transformer, below; one to magnetic phono/tape head) plus 2 auxiliary inputs. Mix, fade 6 inputs. Master gain; bass, treble controls. Level markers.  $\pm 1\frac{1}{2}$  dB, 10-38,000 Hz. Distortion: under 2% at 60 watts. Outputs: 4, 8, 16 ohms; balanced 25 and 70 V (83 ohms) line.  $4\frac{3}{4} \times 16\frac{1}{2} \times 12$ ". For 117 VAC.  
12 A 7379 U, Wt., 37 lbs. .... 229.50  
**MX30A 30-watt Amplifier.** Above, but 163-ohm output instead of 83.  
12 A 7380 U, Wt., 34 lbs. .... 187.50

**B 60-watt PA Amplifier  
with three mike inputs**

**Model M60A.** Three mike inputs (1 converts to phono), plus auxiliary. Master gain control, separate bass and treble controls. Level markers. Frequency response:  $\pm 2$  dB, 20-20,000 Hz. Output: 4, 8, 16 ohms; balanced 25, 70 V (83 ohms) line. Less than 2% distortion at 60 watts.  $5\frac{1}{4} \times 14\frac{1}{8} \times 9\frac{1}{8}$ ". 105-125 V, 50-60 Hz AC.  
12 A 7369 U, Wt., 29 lbs. .... 165.00  
**M330A 30-watt Amplifier.** Above, but 163-ohm output instead of 83.  
12 A 7382 U, Wt., 20 lbs. .... 126.00



**C**

**D**



**E**

**40-watt  
Mobile  
Amplifier**

**Model BT35A.** Solid-state. One mike, 2 auxiliary inputs. Under 10% distortion at 40 watts.  $\pm 3$  dB, 150-15,000 Hz. Impedance: 4, 8, 16 ohms.  $3 \times 8 \times 6\frac{1}{4}$ ". For 12 VDC.  
12 A 7393 X, 8 lbs. .... 90.00



**19505**

**20-watt Transcription Player**

**Model VP25A.** One side of case is amplifier/player; other side is 12" speaker with 25' cable. Automatic cuing. Variable 29-86 rpm. 45-18,000 Hz. 20 watts. Inputs: 2 mike, phono.  $15\frac{1}{4} \times 16\frac{1}{2} \times 10\frac{3}{4}$ ". 115 VAC.  
12 A 7322 U, Wt., 40 lbs. .... 195.05  
**VP50-ADS.** 40 watts. Two 12" speakers. 4, 8, 16 ohms; 25/70 V outputs.  $7 \times 15\frac{1}{2} \times 16\frac{1}{2}$ "; speaker case,  $16\frac{1}{2} \times 15\frac{1}{4} \times 11\frac{1}{2}$ ".  
12 A 7378 LZ, Wt., 60 lbs. .... 265.55

# Allied® dynamic Microphones and Outfits

Each **12<sup>95</sup>**



Pair in Case **33<sup>75</sup>**

## Allied general-purpose Mike

Model 4525. Perfect for recording. Low-cost, omnidirectional dynamic mic may be hand-held or used with stand (included). Constructed with hi-impact Cyclocac<sup>®</sup> chrome-trimmed housing. 70-12,000 Hz response; -63 dB output. High impedance. 4 3/4" x 1" dia. With 12-ft. cable and molded phone plug.  
 12 A 7162. Wt., 1 lb. . . . . 12.95  
 Model 4525S. Similar to above, but includes a convenient on-off switch. Wt., 1 lb.  
 12 A 7015. . . . . 13.95

### Save \$2.00 on a pair for stereo

Model 4525P. Sep., \$35.75. Pair of 4525 dynamic microphones with desk stands and cable. Carrying case, 8x10 1/2 x 3". Wt., 3 lbs.  
 12 A 7164. . . . . 33.75  
 12 A 7163. Case Alone. 1 lb. . . . . 9.85

Each **19<sup>95</sup>**



Pair in Case **49<sup>95</sup>**

## Allied omnidirectional Mike

Model 3311. Handsomely styled and quality-constructed dynamic mic gives high performance. Comfortable hand-held design; may be used as desk mic with stand included. Excellent 45-15,000 Hz response. Impedance, 10,000 ohms. Output, -65 dB. On-off switch. 10 1/8 x 1 3/8" dia. Chrome/black zinc die-cast housing. With 5-ft. 1-cond. cable, phone plug, stand, mike holder, stand coupler, swivel mount. Japan.  
 12 A 7156. Wt., 1 1/2 lbs. . . . . 19.95

### Save \$2.90 on a pair for stereo

Model 3311P. Sep., \$52.85. Two 3311 mikes in form-fitted carrying case. Velvetine lined. Beige polystyrene. 13 1/2 x 11 1/2 x 2 1/2".  
 12 A 7155. Wt., 6 lbs. . . . . 49.95  
 12 A 7157. Case Alone. 3 lbs. . . . . 21.95

Each **24<sup>95</sup>**



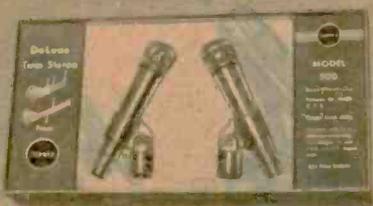
Pair in Case **59<sup>95</sup>**

## Allied cardioid dynamic Mike

Model 3310. Ideal for entertainers. Highly effective unidirectional cardioid pattern suppresses noises, reverb, feedback. Hand-held, or can be mounted on standard 5/8"-27 stand, or used with desk stand (included). 40-16,000 Hz. Impedance, 10,000 ohms. Output, -63 dB. 7 27/32 x 1 13/16" dia. Satin-chrome housing. With 5-ft. 1-cond. cable, phone plug, stand coupler, swivel mount, desk stand. Japan. Shp. wt., 1 1/2 lbs.  
 42 A 7159. . . . . 24.95

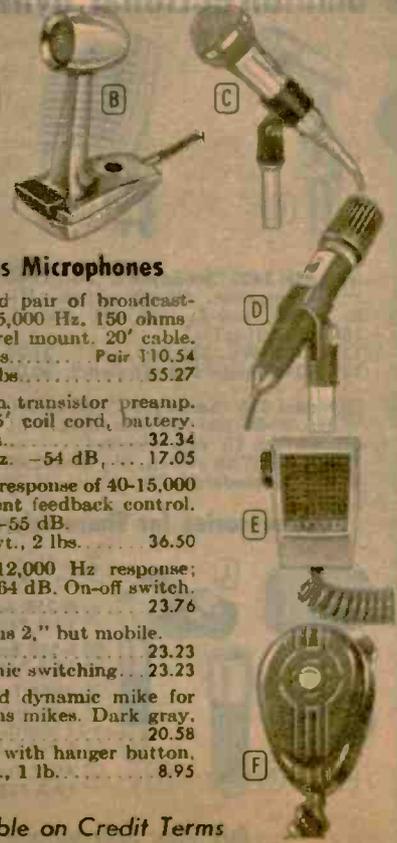
### Save \$2.90 on a pair for stereo

Model 3310P. Sep., \$62.85. Two 3310 mikes in mar-resistant beige polystyrene case. Velvetine lined. Steel latch. 13 1/2 x 11 1/2 x 2 1/2".  
 12 A 7158. Wt., 6 lbs. . . . . 52.95  
 12 A 7160. Case Alone. 3 lbs. . . . . 12.95

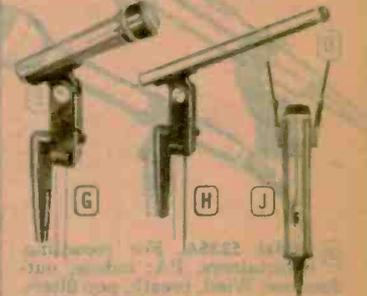


## Turner hi-fi and communications Microphones

- A** Model 500-06 "Stereo Twins". Matched pair of broadcast-quality cardioid dynamic mikes. 40-15,000 Hz. 150 ohms hi-Z; -55 dB. Windscreens, switch, swivel mount. 20' cable.  
 12 A 7221. 6 1/2 x 1 1/2" dia. Shpg. wt., 6 lbs. . . . . Pair 110.54  
 12 A 7029. Single mike only. Shpg. wt., 3 lbs. . . . . 55.27
- B** "Plus 2" base CB Mike. Ceramic, with transistor preamp. 300-3500 Hz. 5000 ohms; -27 dB. 5' coil cord, battery.  
 12 A 7084. 7 3/4 x 3 3/4 x 5 1/2". Shpg. wt., 3 lbs. . . . . 32.34  
 12 A 7165. 254C. No preamp. 100-8000 Hz. -54 dB. . . . . 17.05
- C** Model 701 unidirectional Mike. Uniform response of 40-15,000 Hz at maximum volume, with excellent feedback control. 4-stage blast filter, windscreens, switch. -55 dB.  
 12 A 7224. 12' cable, phone plug. Shpg. wt., 2 lbs. . . . . 36.50
- D** Model 52850 unidirectional Mike. 70-12,000 Hz response; 15 dB F/B ratio. Hi-Z or 150 ohm; -64 dB. On-off switch.  
 12 A 7229. Shpg. wt., 1/2 lb. . . . . 23.76
- E** "M +2U" mobile CB Mike. Same as "Plus 2," but mobile.  
 12 A 7032. 5' cord, battery. Wt., 2 lbs. . . . . 23.23  
 12 A 7034. "JM +2/U." Above, for electronic switching. . . . . 23.23
- F** "Plus 350" mobile Mike. Transistorized dynamic mike for replacement of carbon communications mikes. Dark gray.  
 12 A 7230. Shpg. wt., 3 lbs. . . . . 20.58  
 12 A 7288. 350C. Standard ceramic mike with hanger button, dash brackets. 80-7000 Hz. -54 dB. Wt., 1 lb. . . . . 8.95



## Astatic dynamic Mikes



- G** Model 810S ultra-cardioid Mike. Positive anti-feedback with 25 dB front-to-back ratio. Wind filter, on-off switch. 40-15,000 Hz. Hi-Z/150 ohms; -50 dB hi-Z, -54 dB low-Z. 5 1/2 x 1 1/2" dia. 18-ft. cable.  
 12 A 7289. Wt., 3 lbs. . . . . 53.40
- H** Model 820S omnidirectional probe Mike. Balanced sound, indoors or out. 40-18,000 Hz. Hi-Z/150 ohms. -60 dB low-Z. -61 dB hi-Z. 9 x 3/4". On-off switch, swivel adapter 18' shielded cable, conn.  
 12 A 7290. Wt., 2 3/4 lbs. . . . . 51.00
- J** Model 840S lavalier Mike. Lapel clip, neck cord. 50-12,000 Hz as lavalier, 50-16,000 Hz hand-held. 150 ohms; -59 dB. Switch. 3 3/4 x 3/4". 30-ft. shielded cable.  
 12 A 7291. Wt., 1 lb. . . . . 54.00

# SHURE

## Unisphere ball-type cardioid Mikes

"Unisphere B" dynamic Microphone

36<sup>00</sup>

**A** Model 588SA "Unisphere B." Unidirectional dynamic microphone with popular ball-type styling, at a modest price. Loaded with extras for excellent performance, indoors or out. Feedback-free cardioid pickup; shock-mounted cartridge; wind and pop filters. 50-13,000 Hz. Hi-Z. Output, -58 dB. Lockable on-off switch. Cannon connector with 15' 1-cond. detachable cable. Swivel adapter. Satin chrome.  $6\frac{1}{2} \times 2"$  dia. Wt.,  $1\frac{1}{2}$  lbs. 12 A 7276. . . . . 36.00

12 A 7277. Model 588SAC. Above, but wired plug end assembly for use as MC1F, MC1M or phone plug. . . 37.20

12 A 7278. Model 588SB. Like 588SA, but low-Z, -59.5 dB output. 15' 2-conductor cable. . . . . 36.00



Unisphere I  
63<sup>00</sup>

**B** Model 565S "Unisphere I." Feedback-free, dynamic cardioid ball-type mike for quality hi-fi recording and PA use, indoors or out. Wire-mesh screen protects from breath blasts and wind. 50-15,000 Hz. Outputs: 50-250 ohms, -57 dB; hi-Z, -54.5 dB. 15-ft. cable, on-off switch, swivel mount. Chrome, black.  $6\frac{1}{4} \times 2"$ . 12 A 7211. Wt.,  $2\frac{1}{2}$  lbs., . . . . . 63.00

12 A 7303. Model 565. No on-off switch, Swivel adapter.  $2\frac{1}{2}$  lbs. . . . . 60.00

12 A 7216. Model 566. Deluxe version of 565S. 40-15,000 Hz. . . . . 88.20



Unisphere A  
40<sup>80</sup>

**C** Model 585SA "Unisphere A." Ball-type unidirectional dynamic mike with anti-feedback feature plus a special filter for undistorted voice and music, indoors or outdoors. For use with good-quality sound systems or hi-fi recording systems in auditoriums, theaters, churches, night clubs, picnic areas, ball parks—anywhere good voice or music transmission is needed. 50-13,000 Hz response. Hi-Z only. -56.5 dB. Shock mounted replaceable cartridge. One-conductor, 15-ft. detachable shielded cable.  $6\frac{3}{4} \times 2\frac{1}{16}"$  dia. Shpg. wt.,  $2\frac{1}{4}$  lbs. 12 A 7304. . . . . 40.80

12 A 7231. Model 585SAC. Above, with wired plug end assembly for use as MC1F, MC1M or phone plug. . . 42.00

12 A 7305. Model 585SB. 585SA above, low-Z, 2-cond. 15' cable. . . . . 40.80

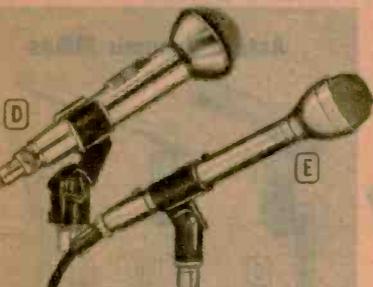
12 A 7232. Model 585SAV. Same as 585SA above, but with volume control to regulate amplifier output at microphone. . . . . 45.60

12 A 7266. Model 585SAVC. Same as 585SAV above, with pre-wired plug end assembly for use as MC1F, MC1M or phone plug. . . . . 46.80

12 A 7274. Model 585SBV. 585SA V above, but low-Z only. . . . . 45.60



## General-purpose omnidirectional dynamic Microphones



**D** Model 533SA. For recording, entertainers, PA; indoor, outdoor use. Wind, breath, pop filters. On-off switch. 40-11,000 Hz. Hi-Z. -55 dB. 1-cond. 15' cable. Swive adapter. Chrome.  $6\frac{5}{8} \times 2\frac{1}{16}"$ . 12 A 7309. Wt.,  $1\frac{1}{4}$  lbs. . . . . 31.80

12 A 7318. Model 533SAC. Above, with prewired plug end for use as MC1F, MC1M or phone plug 33.00

12 A 7338. Model 533SB. 533SA above, but low-Z, -55.5 dB. 31.80

12 A 7279. Model 533SAV. 533SA, above, with volume control. . 36.00

12 A 7280. Model 533SAVC. 533SAC, with volume control. . 37.20

**E** Model 579SB "Vocal Sphere." Natural sound for field or stud. o. Wind, breath filters. Lockable on-off switch. 50-15,000 Hz. Low-Z, -59 dB. Swivel adapter. 20' 2-cond. cable.  $6\frac{3}{8} \times 1\frac{3}{16}"$ . 12 A 7281. Wt., 2 lbs. . . . . 45.00



**F** Model 540S "Sonodyne II." 50-13,000 Hz response. On-off switch. Hi-Z, -53.5; low-Z, -56 dB. Swivel. 15' cable.  $3\frac{1}{2} \times 1\frac{1}{8}"$ . 12 A 7132. Wt.,  $3\frac{1}{2}$  lbs. . . . . 31.20

12 A 7395. Model 540. No switch. 30.00



**G** Model 51S "Sonodyne I." 60-10,000 Hz. 30-50/150-250 ohm/Hi-Z. -51 dB. Swivel. 15' cab.  $4\frac{1}{2} \times 3 \times 4"$ . 12 A 7136. With switch.  $3\frac{1}{2}$  lbs. 32.40

12 A 7228. Model 51. No switch. 31.20



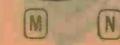
**H** Model 575S. 40-15,000 Hz. Hi-Z -56 dB. On-off switch, stand adapter, lavalier cord. 7' cable. Less base.  $4\frac{3}{4} \times 1\frac{1}{8}"$  dia. 12 A 7462. Wt., 1 lb. . . . . 15.00

12 A 7471. Model 575SB. Low-Z. 13.20



**J** Model 430. Controlled magnetic. 60-10,000 Hz. 150-250 ohms/Hi-Z. -52 dB. On-off switch, swivel adapter. 15' cable. Less base.  $6\frac{3}{4} \times 1\frac{3}{4}"$ . 12 A 7213. Wt.,  $2\frac{1}{2}$  lbs. . . . . 24.00

### Accessories for Shure microphones on these two pages



- L** A-2WS Windscreen. For 545S, 578S, 546, 545L. 12 A 7308.  $4 \times 2\frac{1}{4}"$ . Shpg. wt., 5 oz. . . . . 4.20
- K** A-25B Adapter. 90° swivel adapter;  $9/16" \times 27$  thd. 12 A 7446. Shpg. wt.,  $\frac{1}{2}$  lb. . . . . 3.60
- M** S-38B Base. For mikes with stand adapter. 12 A 7445. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 3.00
- N** A95A Transformer. Matches 35-50 or 150-250 ohm microphone to hi-Z, input. MC1F output, XL-3-11 input. 20-20,000 Hz.  $\pm 1$  dB.  $2\frac{1}{2} \times 1\frac{3}{4}"$  dia. 12 A 7466. Shpg. wt., 9 oz. . . . . 11.40
- P** A95P Transformer. A95A, but phone plug output. 12 A 7282. Shpg. wt., 10 oz. . . . . 12.60

## SHURE Unidyne dynamic cardioid Mikes



**A** Model 545S "Unidyne III." Unidirectional dynamic microphone for feedback-free use by entertainers and speakers and in hi-fi recording and public address work. On-off switch. Swivel mount permits aiming it in any direction. Wind and "pop" filter reduces breath and wind noises for clear voice and music reproduction. 50-15,000 Hz response. Outputs: low-Z, 50-250 ohms, -57 dB; hi-Z, -55 dB. 15' detachable cable.  $5\frac{1}{2} \times 1\frac{1}{4}$ " dia. 12 A 7133. Shpg. wt., 3 lbs. .... 56.40

12 A 7161. Model 545. Above, but no on-off switch. Swivel adapter. ... 53.40

12 A 7458. Model 546. Deluxe version 545S. shock-mounted  $3\frac{3}{4}$  lbs. ... 85.20

**B** 555W. "Unidyne II." Multi-impedance unidirectional dynamic microphone offers feedback-free performance for PA, recording, entertainment. 50-15,000 Hz response. Outputs: low-Z, 35-50 ohms, -55.5 dB; hi-Z, -55.5 dB. On-off switch, swivel mount and 15-ft. 2-cond. cable.  $4\frac{1}{2} \times 2\frac{1}{2} \times 3\frac{3}{4}$ ". 12 A 7135. Wt.,  $3\frac{1}{8}$  lbs. .... 53.40

12 A 7234. Model 555 "Unidyne II." Same as Model 555W, but no on-off switch. Shpg. wt.,  $3\frac{1}{8}$  lbs. .... 52.20

12 A 7235. Model 556S. Deluxe version of 555W. Frequency response, 40-15,000 Hz. Shock-mounted. .... 85.20

**C** 5155A "Unidyne B." Low-cost dynamic unidirectional microphone solves sound system feedback and "boominess" problems. Provides excellent performance for low-budget sound systems and general purpose use. Unidirectional pickup pattern. Frequency response, 80-13,000 Hz. Hi-Z output, -58 dB. On-off switch and swivel adapter for stand or hand-held use. With 15-ft. 1-conductor, non-detachable shielded cable. Smart modern styling, with chrome and black housing.  $6\frac{1}{2} \times 1\frac{1}{2}$ " dia.  $1\frac{1}{2}$  lbs. 12 A 7217. .... 25.20

12 A 7283. Model 5155AC. Above, but pre-wired plug end assembly for use as MC1F, MC1M or phone plug. ... 26.40

12 A 7227. Model 5155B. Low-Z version of 5155A, -59.5 dB. With 15-ft. 2-conductor cable. .... 25.20



Ideal for PA, entertainers and recording

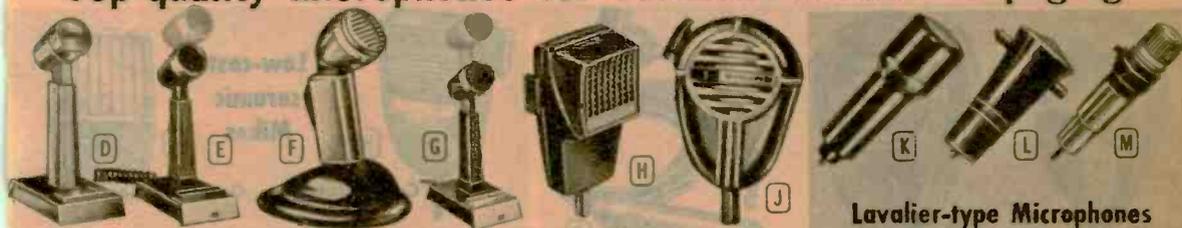
**66<sup>00</sup>**

**Model 548S  
'Unidyne IV'**

Rugged, feedback-free unidirectional dynamic microphone for entertainers, PA systems and high-fidelity recording. Features improved shock mounting; wind, pop and blast filters; on-off switch and swivel mount. 40-15,000 Hz response. Dual impedance: low-Z, -57 dB; hi-Z, -55 dB. 15-ft. 2-conductor detachable cable with broadcast-type Cannon connector. Smart chrome and black housing. Size,  $5\frac{1}{2} \times 1\frac{1}{8}$ " dia. Shpg. wt.,  $2\frac{1}{4}$  lbs. 12 A 7200. .... 66.00

12 A 7203. Model 548. Above, but no on-off switch or swivel mount. With swivel adapter. Wt., 2 lbs. .... 63.00

## Top-quality Microphones for communications and paging



**D** Model 450. Controlled magnetic mike with adjustable stand, lockable push-to-talk bar. Mike relay. 100-10,000 Hz response. Hi-Z, -54 dB; low-Z, -55 dB; "Armo-Dur" housing. 7' cable.  $10\frac{1}{2} \times 5\frac{3}{4} \times 4$ ". 12 A 7444. Wt.,  $2\frac{1}{2}$  lbs. .... 31.20

**E** Model 444T. Controlled magnetic mike with solid-state preamp and volume control. Output, 2-45 mV. Adjustable height, lockable push-to-talk bar. With self-contained battery. 200-6000 Hz! Less than 1000 ohms.  $10\frac{1}{2} \text{ (adj.)} \times 4 \times 5\frac{3}{4}$ ". 12 A 7449. Wt.,  $2\frac{1}{8}$  lbs. .... 31.20

12 A 7441. Model 444. Above, but no preamp. Hi-Z only. ... 27.00

**F** Model 5205L. Controlled magnetic. Lockable grip-to-talk bar. 100-9000 Hz. Hi-Z, -52.5 dB. 7' cable. Chrome/green,  $9\frac{1}{2} \times 5 \times 7$ ". 5 lbs. 12 A 7233. .... 28.20

**G** Model 522 "Uni-Com." Unidirectional base station mike suppresses background noise and feedback. Adj. height; press-to-talk bar. 60-11,000 Hz. Output: hi-Z, -56.5 dB; low-Z, -57 dB. 7' 4-cond. cable. "Armo-Dur" housing.  $12\frac{1}{2} \text{ (adj.)} \times 4 \times 5\frac{3}{4}$ ". 12 A 7287. Wt.,  $2\frac{1}{4}$  lbs. .... 39.60

**H** Model 202. Ceramic noise-reducing microphone. 200-4000 Hz response. Hi-Z, -50.5 dB output. Press-to-talk. Bracket. 5' coiled cable. 12 A 7465. Wt., 1 lb. .... 12.60

**J** Model 404C. Controlled magnetic microphone for communications use. Hi-Z, -54 dB output. 400-4000 Hz response. Push-to-talk. Bracket.  $5\frac{1}{2}$ " coiled cable.  $3\frac{3}{4} \times 2\frac{3}{4} \times 2\frac{1}{2}$ ". 12 A 7141. Wt., 1 lb. .... 21.00

12 A 7140. Model 404B. As above, but 150-250 ohm impedance. Output level, -52 dB. .... 21.00

### Lavalier-type Microphones

**K** Model 560. Dynamic omnidirectional mike for lavalier or hand-held use. With lavalier for lectures, demonstrations where hands must be free. 40-10,000 Hz. Dual output: 150-250 ohms or hi-Z, -56.5 dB. 18' cable.  $4 \times 1\frac{1}{2}$ " dia. 12 A 7461. Wt., 1 lb. .... 27.00

**L** Model 420. Controlled magnetic omnidirectional, with lavalier assembly for PA uses and lectures, where hands must be free. Also for hand-held use. 60-10,000 Hz. 150-250 ohms or hi-Z, -52 dB. 20' cable.  $3\frac{3}{4} \times 1\frac{1}{4}$ ". 12 A 7212. Wt., 12 oz. .... 19.20

**M** Model 545L. "Unidyne III." Broadcast-quality dynamic cardioid. For lavalier or gooseneck use in PA, hi-fi recording. 50-15,000 Hz response. Low-Z, -57.5 dB. 20' cable; lavalier.  $5\frac{1}{2} \times 1\frac{1}{4}$ ". 12 A 7339. Wt., 2 lbs. .... 44.40



Model 674  
**Variable-D cardioid dynamic Microphone**  
**5340** \$5  
 monthly\*

**Model 674.** Continuously "Variable-D" feature assures symmetrical cardioid pattern at all frequencies. Provides maximum front-to-back ratio with uniform response. Three-position bass-tilt switch adjusts for feedback control in public address and recording; 60-15,000 Hz response makes it an ideal mike for tape recording, musical entertainment, public speaking, paging and communications use.

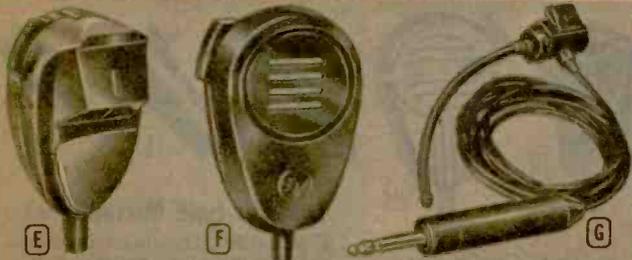
Dual impedance: 150 ohms and hi-Z. Output: -57 dB. On-off switch. QC-4M connector for quick impedance changes without tools. 15' two-conductor cable. Satin chrome finish. 7 1/2" x 1 1/4" dia. 5/8"-27 stud mount. 12 A 7098. Wt., 2 lbs. 53.40

**A** Model 676 Variable-D Cardioid Dynamic Mike. Continuously Variable-D assures symmetrical cardioid pattern at all frequencies. Three-position switch selects flat response for small rooms; or low-frequency attenuation of 5 or 10 dB at 100 Hz for big rooms. 60-15,000 Hz response. Impedance: 150 ohms/hi-Z. Output: -57 dB. 15' two-conductor cable. QC-4M connector, 300 stand adapter. 3/8"-27 thread. Satin chrome finish. 7 3/8" x 1 1/4" dia. 12 A 7432. Wt., 2 lbs. 53.40

**B** Model RE15 Professional Super-cardioid Dynamic Mike. Provides maximum rejection of unwanted off-axis noise. Off-axis response is symmetrical with front response to eliminate coloration. Bass-tilt switch restores spectrum balance for longer reach. 80-15,000 Hz. 150 ohms. -56 dB. 18" cable. Matte nickel finish. 6 1/2" x 1 3/8". Metal case, stand adapter. 12 A 7252. Wt., 4 lbs. 153.00  
 Model RE10. As above, for less demanding uses. 80-13,000 Hz. -55 dB. 12 A 7396. Wt., 3 lbs. 90.00

**C** Model 627 Entertainers' Cardioid Dynamic Mike. Excellent moderately priced mike for vocalists. Single-D cardioid pickup pattern rejects sound from rear and sides. Bass response is accentuated as working distance is reduced. Breath/pop filter. Weighs only 8 oz. (less cable). 80-11,000 Hz response. Impedance: 150 ohms and Hi-Z. Output: -58 dB. 15' two-conductor cable. 6" long, 1 1/8" dia. head, 3/4" shank. 5/8"-27 thread. Chromed. 12 A 7099. Wt., 1 1/2 lbs. 37.80

**D** Model 664 Variable-D Cardioid Mike. Popular dynamic mike for recording, communications and PA use. Variable-D cardioid pickup pattern for rejection of unwanted background noise. Pop-proof wire mesh grille minimizes breath blasts to allow close talking without boominess. Shielded Acoustalloy diaphragm. 80-15,000 Hz. Dual imp., 150 ohms/Hi-Z. Output: -58 dB. On-off switch. 15' cable, 5/8"-27 thread. Chromed. Less stand (Model 418 below). 7 1/4" x 1 1/8". 12 A 7241. Wt., 3 lbs. 53.40



**Electro-Voice communications Mikes**

**E** Model 205STCKK Differential Carbon Mike. Close-talking, noise-canceling mike for aircraft and emergency communications with high intelligibility under severe noise. Blast-proof, waterproof, shock-resistant Press-to-talk. 50 dB output at 1/4". FAA approved. Black. 5' coiled cord. 4 x 2 1/4" x 2". 12 A 7035. Shpg. wt., 1 lb. 31.50

**F** Model 600E Dynamic Mike. Mobile mike with press-to-talk button. 100-7,000 Hz response; -55 dB. Hi-Z type is wired straight through for VOX; balanced low-Z is wired for open circuit paging. 6' coiled cord. Bracket. Gray. 2 1/2" x 4 x 1 1/2". 12 A 7483. Hi-Z type. Shpg. wt., 1 lb. 24.60  
 12 A 7485. Balanced Low-Z type. Shpg. wt., 1 lb. 24.60

**G** Model 967M Transistorized Aircraft Mike. Provides background noise reduction equivalent to true noise-canceling mike. For connection to carbon input circuits with 12 to 24 V supply. Output, 40 dB. Press-to-talk. 250 ohms. FAA approved. Attache to headphones. Black. 4 1/2' coiled cord. Overall, 5 1/2" long. 12 A 7583. Shpg. wt., 2 lbs. 85.50



**Low-cost ceramic Mikes**

**H** Electro-Voice Model 714 Ceramic. Omnidirectional. 100-7000 Hz. Hi-Z; -55 dB. Push-to-talk. Blue. 3 3/8" x 2 1/2" x 1 1/8". 5' cord. bracket. 12 A 7259. Shpg. wt., 1 lb. 10.50  
 Electro-Voice 717. As above, but noise-canceling. 12 A 7433. Shpg. wt., 1 lb. 12.30

**J** Electro-Voice Model 721 Ceramic. For general use. 100-5000 Hz. Hi-Z; -52 dB. 3 3/8" x 2 1/4" x 1". Integral fold-out stand, 5' cable. 12 A 7255. Shpg. wt., 1 lb. 4.08

**Accessories for Electro-Voice Mikes**

12 A 7146. Model 418 Desk Stand. For 611, 623, 630, 641, 636, 674; latest 644, 664 with small studs. Gray. 2 1/16" x 4 1/16" x 5 1/2". 3 lbs. 8.10  
 12 A 7397. Model 422 Desk Stand. Accepts 1" and 3/4" stand clamps. Protective rubber shock mount. Shpg. wt., 3 lbs. 10.50  
 12 A 7340. Type 502B Transformer. Matches low-Z mike to hi-Z input. 30" cable. 1 lb. 9.90  
 12 A 7332. Type 376 Windscreen. For model 676 and 674 microphones. 1/2 lb. 9.30



## Electro-Voice omnidirectional Mikes

**A** Model RE55 Professional Dynamic Mike. Omnidirectional response mike especially suited to full-range music recording and other exacting professional applications. For hand and stand use. Pop-proof; built-in blast filter. Response is extremely stable; mike can be calibrated for use as secondary lab standard. 40-20,000 Hz. 150 ohms. Output: -55 dB. 18' three-conductor cable. Satin nickel finish.  $10\frac{1}{2} \times 1\frac{1}{2}$ " dia.  $1\frac{3}{4}$ " shank. 12 A 7250. Wt., 1  $\frac{1}{4}$  lbs. . . . . 126.00

**B** Model 654A All-Purpose Dynamic Mike. "Slim-trim" broadcast-quality mike may be used with a stand, hand-held or as a lavalier. Ideal for announcers, interviewers, other demanding applications. Wide response of 50-15,000 Hz. Excellent voice reproduction. Low impedance. Output: -57 dB. Built-in Cannon XLR-3 connector. Non-reflecting gray finish.  $6\frac{1}{2} \times 1\frac{1}{8}$ " dia. 18' three-conductor cable. With standard  $\frac{3}{8}$ "-27 stand clamp, lavalier neck cord. 12 A 7117. Wt., 3 lbs. . . . . 63.00

**C** Model 635A Performers' Dynamic Mike. Widely accepted professional omnidirectional mike for hand or stand use. Four-stage pop and blast filter eliminates need for external windscreen. Smooth, shaped response; 80-13,000 Hz. Low impedance. Output: -55 dB. Magnetically shielded diaphragm, turned-steel case. Cannon XLR-3-11 connectors. Non-reflecting nickel finish.  $6 \times 1\frac{3}{8}$ " dia. 18' three-conductor cable. Stand adapter. 12 A 7481. Wt., 1 lb. . . . . 49.20

**D** Model 636 Dynamic Microphone. Deluxe omnidirectional dynamic mike for PA, recording and general use. Pop-proof head, wide pickup range, 60-13,000 Hz response. Dual selectable impedance: 150 ohms or hi-Z. Output: -58 dB. On-off switch in stand mounting. Swivel base has standard  $\frac{3}{8}$ "-27 thread. Satin chrome finish.  $10\frac{1}{4}$ " long, including stud;  $1\frac{1}{4}$ " diameter. Nearly impervious to damage from mechanical shock. With 15' two-conductor cable, QC-4M connector. 12 A 7244. Wt., 2 lbs. . . . . 45.60

### Hand-size dynamic vocal mike

**3780** \$5 monthly\* Ideal for entertainers\*

Model 631. Hand-size microphone is ideal for vocal and instrumental entertaining, PA and recording. Silent, magnetic on-off switch has removable actuator button; mike can be left on when button is removed. Lightweight, rugged and shockproof, for hand or stand use. Four-stage filter permits close-up use without blasting, "pop" or distortion. Virtually unaffected by breath or wind. Omnidirectional pickup pattern, with 80-13,000 Hz response. Hi or low impedance. Output: -55 dB.  $6\frac{1}{2} \times 1\frac{1}{8}$ " dia. 16' cord. 12 A 7251. Low-Z. 3 lbs. . . . . 37.80  
12 A 7247. Hi-Z. 3 lbs. . . . . 37.80

## Miniature lavalier Microphones

**E** Model 649B Miniature Lavalier. A favorite for TV use. "walk-about" applications. Weighs only 31 grams (less cable). 70-10,000 Hz response. Low-Z. -61 dB. "Pop-proof" wire mesh grille. Non-reflecting gray finish. With lavalier neck cord, belt, clamp, 30' cable, stand clamp,  $2\frac{1}{4} \times 3\frac{1}{4}$ " dia. 12 A 7118. Wt., 1 lb. . . . . 66.00

**F** Model 647A Dynamic Lavalier. Weighs only 2 ounces. Ideal for public speaking or reading, sales demonstrations—any PA use requiring freedom of hands. 70-10,000 Hz response. -60 dB. Gray 18' cable, lavalier assembly, stand adapter.  $3\frac{1}{2} \times 3\frac{1}{4}$ " dia. 12 A 7264. Hi-Z. 1 lb. . . . . 51.90  
12 A 7125. Low-Z. 1 lb. . . . . 51.90



## Automatic Telephone Dialer

Prestodial. Automatic dialing system lets you make telephone calls by pressing a button! You get fast and foolproof connections with emergency numbers, friends, relatives—even long distance or inter-office calls. No cards or tapes. Up to 36 phone numbers are stored in a "memory bank" consisting of 36 unbreakable plastic disks. To dial, just slide a pointer on the visual index to the name you wish to call, pick up the receiver, and press a single button. Prestodial then dials the call automatically—and correctly. Works with any phone. Easily installed; no additional wiring needed. Comes with programmer for cutting disks, and 42 memory disks. Size,  $8\frac{1}{2} \times 4 \times 3\frac{1}{4}$ ". For 110 V. 60 Hz AC. 12 A 7413 S. Shpg. wt., 6 lbs. . . . . 99.95  
Extra Memory Disks. Package of 12. 12 A 7414. Shpg. wt., 6 oz. . . . . Pkg. 3.95  
Wall Mounting Bracket. For memory bank. 12 A 7415. Shpg. wt., 2 oz. . . . . 1.00



With programmer, 42 memory disks

**NO MORE**  
looking up  
telephone  
numbers

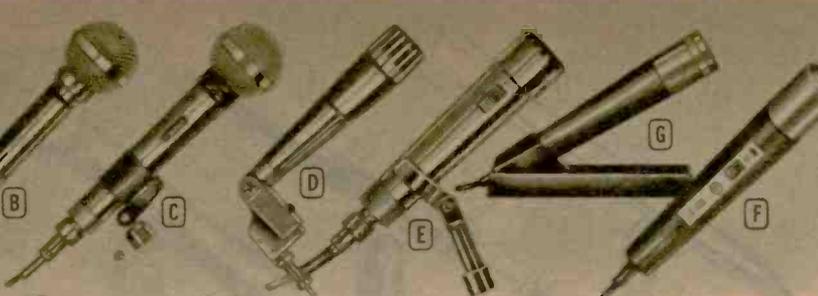
Automatic dialing at the touch of a button—computerized memory bank stores 36 phone nos.

**9995**

\$5 monthly\*

Citizens Band  
base station  
dynamic Mike

29<sup>95</sup>



## Fanon multi-purpose dynamic Microphones

**A** Model MKM-21 Cardioid Mike with Preamp. Built-in 2-transistor pre-amp helps boost range of CB and Ham transmitters. Variable output, 2-100 mV. Talk-listen bar with lock, plus switch in base. Electronic or relay switching. Adjustable head. 100-8000 Hz. 1000 ohms. Die-cast aluminum, 7<sup>3</sup>/<sub>4</sub>x3<sup>3</sup>/<sub>8</sub>x5<sup>1</sup>/<sub>2</sub>". 6-ft. cord, battery. 12 A 7360. Japan. Wt., 3 lbs. .... 29.95

**B** Model MKC-52 Cardioid Mike: Excellent for entertainers. Volume control, on-off switch, mesh-screen wind and pop filter. 50-13,000 Hz. Dual impedance: 150 and 50K ohms. Output: high, -52 dB; low, -71 dB. Satin chrome. Mike holder/floor stand adapter. 5<sup>3</sup>/<sub>4</sub>x1<sup>3</sup>/<sub>4</sub>". 20-ft. cable. 12 A 7361. Japan. Wt., 2 lbs. .... 19.95

**C** Model MKC-54 Cardioid Mike. Another favorite with entertainers. Has wind and "pop" filter, on-off switch, switchable dual impedance, 50 and 50,000 ohms. Frequency response: 60-12,000 Hz. Output: high, -60 dB; low, -66 dB. Satin chrome finish. With mike holder/floor stand adapter, 20-ft. cable, 7<sup>7</sup>/<sub>8</sub>x2". Japan. 12 A 7362. Wt., 2<sup>1</sup>/<sub>2</sub> lbs. .... 17.95

**D** Model MKO-42 Omnidirectional Mike. Big value in a general-purpose PA mike. Mesh-screen wind and pop filter. On-off switch. Head tilts 90°. Response: 50-14,000 Hz. Dual impedance: 150 and 50K ohms. Output: high, -58 dB; low, -72 dB. Satin chrome, 8<sup>3</sup>/<sub>4</sub>x1<sup>1</sup>/<sub>2</sub>". From Japan. 12 A 7363. Wt., 3 lbs. .... 11.95

**E** Fanon MKX-32 Omnidirectional Crystal Mike. Use it 3 ways: hand, stand, or lavalier. Response, 90-10,000 Hz. High impedance. Output: -55 dB. On-off switch. Mike holder, lavalier cord, 8-ft. cable. 7x1<sup>1</sup>/<sub>4</sub>". 12 A 7364. Japan. Wt., 1 lb. .... 3.95

**F** Model MKO-46 Omnidirectional Mike. Miniature model for tape recorders. Response, 120-10,000 Hz. High impedance. Output, -57 dB. With 8-ft. cable and <sup>1</sup>/<sub>8</sub>" plug, 5<sup>3</sup>/<sub>8</sub>x7<sup>3</sup>/<sub>8</sub>". Japan. 12 A 7366. Wt., 1<sup>1</sup>/<sub>2</sub> lbs. .... 5.50

**G** Thoro Test Mike. For cassette recorders. On-off switch, 6-ft. cord, remote control cord and plug, stand and lavalier. 100-12,000 Hz. Miniature, subminiature plugs. 200 ohms. 12 A 7365. Japan. Wt., 1 lb. .... 4.95

## Mike Accessories by Switchcraft and Shure



**H** Switchcraft 306 Stereo Mixer. Four monophonic channels to two stereo. Four input jacks. Hi-Z. Two phono jack outputs. "Tiny-Jax adapter plug. 2x3x6". 12 A 7171. Shpg. wt., 1<sup>1</sup>/<sub>2</sub> lbs. .... 15.00  
12 A 7172. 306TR Mixer. Above, with battery-powered solid-state stereo amplifier. With battery. 1<sup>1</sup>/<sub>2</sub> lbs. .... 24.00

**J** Switchcraft 503 Mike Preamp. Matches solid-state inputs. 40K/2K ohms input, 2K output. 6-25 dB gain. Battery, 12" cable. <sup>1</sup>/<sub>4</sub>" mini-jack/plugs, adapter. 2x2x1". 12 A 7052. Shpg. wt., 4 oz. .... 9.90



Switchcraft 307TR. Inputs: 4 low-level mike, 60 dB gain; 2 phono, 40 dB; 4 aux., 20 dB. Up to 2-V rms output. 20-20,000 Hz. 3<sup>1</sup>/<sub>4</sub>x12x7<sup>1</sup>/<sub>4</sub>". Requires 2 "D" batteries. 12 A 7437. Shpg. wt., 4<sup>1</sup>/<sub>2</sub> lbs. .... 87.00  
12 A 7438. Model 308TR. Above, for 115 VAC. 5 lbs. .... 96.00



Shure M62. Keeps output constant for wide variations of input. Dual-impedance input and output: 500/100,000 ohms and 10/500 ohms respectively. 20-20,000 Hz. Cannon receptacles. With 9-volt battery. 2<sup>5</sup>/<sub>8</sub>x11<sup>3</sup>/<sub>8</sub>x5<sup>1</sup>/<sub>4</sub>". 12 A 7143. Shpg. wt., 3 lbs. .... 57.00

### Mono-to-stereo Mixer



### 4-Channel solid-state stereo Mixer Amplifier

### Solid-state audio level Controller

### Switchcraft mike Connectors



For positive contact. One-contact 2501's fit Allied PA amplifiers. To splice 2 cords use one Type 2501F and one Type 2501M. Types A3F, A4F, A3M, A4M are quick-ground 2 and 4-contact insulated types. Type 05BL3M, miniature 3-pin plug, contact friction coupling. Type 12 BLM5M is same, 5 pins. Type 01QK2M is 2 pin. Shpg. wt., 4 oz.

Stock No.	Type	Fig.	Description	EA.
12 A 7405	2501F	K	Plug or Jack	.45
12 A 7406	2501M	L	Plug	.36
12 A 7417	A3F	M	Fem. Conn.	1.47
12 A 7418	A4F	M	Fem. Conn.	1.83
12 A 7419	A3M	N	Male Conn.	1.26
12 A 7420	A4M	N	Male Conn.	1.35
12 A 7390	05BL3M	P	Plug	1.08
12 A 7391	12BL5M	P	Plug	1.11
12 A 7008	05BL5M	P	Plug	1.20
12 A 7009	01QK2M	R	Plug	.33

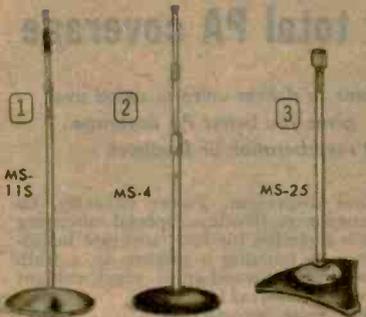


### 5-channel solid-state monophonic Mixer

Shure M68. Has 4 inputs for dynamic or ribbon mikes. Switch-selected low or high-impedance mike in/output; high-impedance, high-level auxiliary input/output. 28-VDC jack. Frequency response: 30-20,000 Hz. 2<sup>5</sup>/<sub>8</sub>x11<sup>3</sup>/<sub>8</sub>x5<sup>1</sup>/<sub>4</sub>". Male Cannon XLR-3-14 type input receptacles. For 105-130 volts, 50-60 Hz AC. Shpg. wt., 4 lbs. 12 A 7142. .... 78.60

12 A 7368. Shure M68FC. Above, with female Cannon type input receptacle. Shpg. wt., 4 lbs. .... 85.20  
12 A 7377. Shure M68P. Above, with Hi-Z input only. Low-Z Hi-Z output. Shpg. wt., 4 lbs. .... 63.00  
12 A 7384. Shure LM68RM. As M68FC above, but with built-in adjustable reverberation. Shpg. wt., 5<sup>1</sup>/<sub>2</sub> lbs. .... 108.00

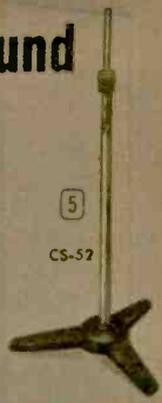
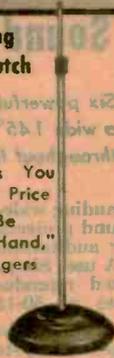
# Mike Stands, Accessories by Atlas Sound



Stand has long  
"Full Grip" clutch

## 816

- Full of Features You Want, Low in Price
- Long Clutch Can Be Gripped by "Hand," Not Just by Fingers
- Velvet-Quiet Slide Action



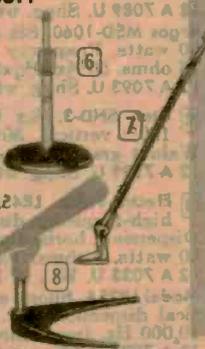
- 1** MS-115 Automatic Floor Stand. Pressure control, tube lowers. Adjusts 39-62". All chromed. 10" base;  $\frac{1}{8}$ "-27 thread. Shpg. wt., 13 lbs. 12 A 7271 L2X. 18.66
- 2** MS-4 Telescoping Floor Stand. Adjusts 25-65". 3 sections, Chromed. 10" gray wrinkle base.  $\frac{5}{8}$ "-27 thread. 12 A 7270 L2X. Wt., 10 lbs. 12.33
- 3** MS-25 Professional Floor Stand. "Air Lock Cushion" controls drop of tube. Adjusts 38-67". 17" chromed and gray base. Chromed tube.  $\frac{3}{8}$ "-27 thread. Shpg. wt., 22 lbs. 12 A 7330 L2U. 27.66

- MS-10C. Deluxe mike stand inner-lined with bakelite to prevent jamming, sudden dropping. 2-section chromed tube adjusts 35-63", 10" gray base; self-leveling shock-absorbing pads. With standard  $\frac{5}{8}$ "-27 thread. Shpg. wt., 10 lbs. 12 A 7325 L2X. 8.16
- MS-11C. Above, but with all-chromed base. Wt., 13 lbs. 12 A 7326 L2X. 10.68

- 4** CS-33 Take-Apart Floor Stand. Collapsible to 22 $\frac{1}{2}$ ". Adjusts 26-64". Chromed, 20" base dia.; rubber feet.  $\frac{5}{8}$ "-27 thread. Shpg. wt., 4 lbs. 12 A 7327 X. 11.52
  - 5** CS-52 Floor Stand. Portable unit adjusts 34-62". Chromed tube. 2-piece gray shrivel 15" dia. base.  $\frac{5}{8}$ "-27 thread. Shpg. wt., 9 lbs. 12 A 7450 X. 9.33
- BB-1 "Boby Boom" Stand Attachment. (Not illus.) Converts any floor stand with  $\frac{5}{8}$ "-27 thread to boom type. Adjustable counter balance. 31" long. 12 A 7328 X. Wt., 3 $\frac{1}{2}$  lbs. 6.51

## Desk Microphone Stands and multipurpose Support

- 6** DS-7 Adjustable Desk Stand. Adjusts 8-13". With "Velvet Action" clutch adjustment. 4" high, chromed tube. Gray 6" dia. base. Standard  $\frac{5}{8}$ "-27 thread. Shpg. wt., 3 lbs. 12 A 7186. 4.35
- 7** US-2 Multipurpose Support. Vertical swivel, 180°; horiz., 360°. 12 $\frac{1}{4}$ " arm. 2 $\frac{5}{8}$ " base. Chromed. Standard  $\frac{5}{8}$ "-27 thread. Shpg. wt., 2 lbs. 12 A 7273. 7.02
- 8** DS-14 Contemporary Desk Stand. Has 3" chromed tube. Handsome gray shrivel base. Standard  $\frac{3}{8}$ "-27 thread. Shpg. wt., 2 lbs. 12 A 7109. 3.33



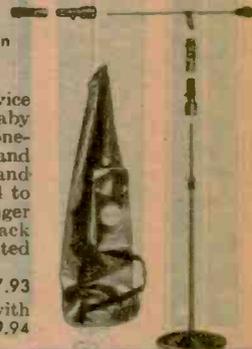
## Combination Stand, Boom, Hanger

# 2793

With 2 Lock-On Attachments

"Parlo-Stand" PS12C. Unique device incorporates mike stand, baby boom and cable hanger in one easy-to-assemble unit. Mike and boom disconnect in seconds and fold away into case. Height: 34 to 62"; 10" dia. base. Cable hanger for tubes  $\frac{1}{8}$  to  $1\frac{1}{4}$ " dia. Black vinyl carrying case with fitted compartments. Wt., 19 lbs. 12 A 7336 X. 27.93

12 A 7345 X. PS11C. Above, with chromed base. 20 lbs. 29.94



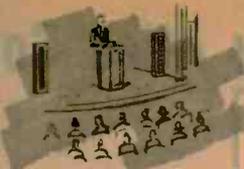
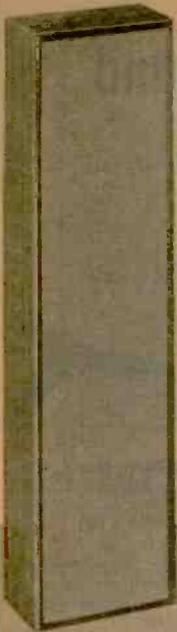
## Microphone and Stand Accessories



Stock No.	Fig.	Description	Wt.	EACH
12 A 7110	9	Lock-on Mike Attachment	4 oz.	2.85
47 A 1996	10	"Y" Mike Connector	2 oz.	1.38
12 A 7189	11	Flexible 13" Gooseneck	1 lb.	2.10
12 A 7206 X	13	As above. 19" long	1 $\frac{1}{2}$ lbs.	3.00
12 A 7187	12	Snap-on Mike Attachment	1 lb.	2.34
47 A 1946	4	Mike Volume Control; Hi-imp.	6 oz.	4.08
12 A 7207	14	Cable-Hanger; for $\frac{3}{8}$ - $1\frac{1}{4}$ " stems.	$\frac{1}{2}$ lb.	2.10
12 A 7190	15	Bracket Clamp; 6" stem	1 lb.	3.00
12 A 7106	16	3" Extension Rod; $\frac{5}{8}$ "-27 ends	3 oz.	.74
12 A 7105	16	As above, 6" long	4 oz.	.74
47 A 1950	1	Push-to-Talk Switch with lock	6 oz.	2.32
12 A 7204	1	Gyromatic Mike Lock Swivel	1 $\frac{1}{2}$ lbs.	4.02

**Mike Stand Adapters.** Ideal for use with most desk and floor-type microphone stands. All adapters are heavy-duty chrome-plated units. Shpg. wt.: Models AD1, AD2, AD3, AD4 and AD5, 2 oz.; AD11 and AD12, 6 oz.

Stock No.	Type	Fig.	Description	EACH
12 A 7108	AD1	19	For adapting RCA mikes. $\frac{1}{2}$ " male to $\frac{3}{4}$ "-27 female	.75
12 A 7198	AD2	20	$\frac{1}{4}$ " pipe female to $\frac{3}{4}$ "-27 male.	.54
12 A 7199	AD3	18	$\frac{1}{4}$ " pipe female to $\frac{3}{4}$ "-27 female.	.59
12 A 7201	AD4	18	$\frac{1}{4}$ " long, $\frac{3}{4}$ "-27 male coupling.	.44
12 A 7202	AD5	18	$\frac{1}{4}$ "-27 to $\frac{3}{4}$ "-27 female coupling.	.59
12 A 7103	AD11	21	Mike base flange. Male. $\frac{3}{4}$ "-27.	.80
12 A 7104	AD12	22	Mike base flange. Female. $\frac{3}{4}$ "-27.	.80



## Allied® wide-dispersion 6-speaker Sound-Column for total PA coverage

**64<sup>95</sup>**

Six powerful 6-inch speakers combine to deliver uniform sound over a wide 145° horizontal pattern . . . gives you better PA coverage throughout the entire room without reverberation or feedback

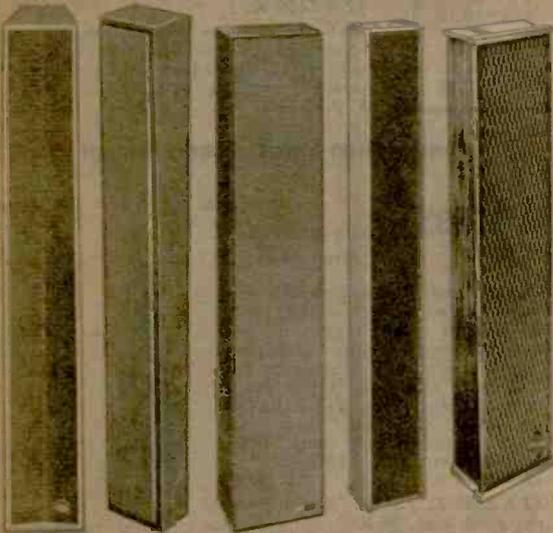
**Model 3350.** Offers outstanding wide-angle dispersion and excellent sound projection for top PA coverage. Great for auditoriums, lecture rooms, theaters—any PA use. Six powerful 6" speakers offer fine sound reproduction and wide frequency response of 50-15,000 Hz.

Overall sound projection up to 250 feet (in-door). Completely ruggedized system. Voice coil of each speaker has aluminum nomax bobbin to handle high power at wide response without distortion. Extra-wide 145° horizontal,

30° vertical dispersion. Power capacity, 60 watts. Impedance, 16 ohms. Special mounting hardware is included for fast, accurate installation—easy as hanging a picture on a wall. Handsome walnut wood-grain vinyl cabinet adds to any decor. 41x11x6".  
12 A 8002 U. Shpg. wt., 44 lbs. . . . . 64.95

**Model 3300.** Four 8" speakers. 25-watt cap. Dispersion: horiz., 140°; vert., 45°. 60-11,000 Hz. 8 ohms. Walnut wood-grain vinyl cabinet. 12 A 8001 U. 41x11x6". Wt., 37 lbs. . . . . 34.95

### Popular Sound-Columns for every purpose and budget



**A**  
University  
Sound  
CS-2

**B**  
Argos  
SD-1064  
ESD-1061  
MSD-1060

**C**  
Utah  
SND-3

**D**  
Electro-  
Voice  
LR4SA  
LR2SA

**E**  
Atlas  
C-80

**A** University Sound CS-2. Six 5" speakers. Dispersion: horizontal, 165°; vertical, 25°. 30 watts. 175-12,000 Hz. 8 ohms. 31x5 $\frac{1}{2}$ x5". Neutral finish.  
12 A 7421 U. Shpg. wt., 14 lbs. . . . . 59.70

**B** Argos SD-1064. Six 5" speakers. Dispersion: horizontal, 120°; vertical, 30°. 30 watts. 200-10,000 Hz. 16 ohms. Walnut clear-guard vinyl cabinet, 30 $\frac{1}{4}$ x7x3 $\frac{3}{8}$ ".  
12 A 7880 X. Shpg. wt., 10 lbs. . . . . 43.05

Argos ESD-1061. Six 5" speakers. Dispersion: horizontal, 120°; vertical, 30°. 30 watts. 100-12,000 Hz. 16 ohms. Beautiful walnut "art frame" cabinet, 33 $\frac{1}{4}$ x10 $\frac{1}{2}$ x4".  
12 A 7089 U. Shpg. wt., 16 lbs. . . . . 54.50

Argos MSD-1060. Six 8" speakers. Vertical dispersion, 30°. 60 watts. Frequency response, 70-15,000 Hz. Impedance, 16 ohms. 50 $\frac{1}{2}$ x10 $\frac{3}{4}$ x8 $\frac{1}{4}$ ".  
12 A 7093 U. Shpg. wt., 40 lbs. . . . . 83.65

**C** Utah SND-3. Six 8" speakers. Dispersion: horizontal, 120°; vertical, 30°. 72 watts. 50-15,000 Hz. 8 ohms. Walnut grain plastic-impregnated finish. 51x11x7 $\frac{3}{4}$ ".  
12 A 7529 U. Shpg. wt., 42 lbs. . . . . 79.95

**D** Electro-Voice LR4SA Straight Line Radiator. Restricts high-frequency dispersion to simplify feedback control. Dispersion: horizontal, 160°; vertical, 30°. 200-10,000 Hz. 40 watts. 8 ohms. Tan aluminum cab. 48 $\frac{3}{4}$ x6 $\frac{3}{16}$ x4 $\frac{1}{2}$ ".  
12 A 7033 U. Wt., 27 lbs. . . . . 99.90

Model LR2SA. Short, easily handled version of LR4SA. Vertical dispersion, 45°. 20 watts. Frequency response, 200-10,000 Hz. Impedance, 8 ohms. 24 $\frac{1}{2}$ x6 $\frac{3}{8}$ x4 $\frac{7}{8}$ ".  
12 A 7031 U. Shpg. wt., 16 lbs. . . . . 55.50

**E** Atlas C-80. Six 6" speakers. Dispersion: horizontal, 120°; vertical, 36°. 80 watts. 100-15,000 Hz. 16 ohms. Vinyl-clad metal, wood-grain finish. 45 $\frac{1}{2}$ x8 $\frac{3}{4}$ x6 $\frac{3}{8}$ ".  
12 A 7037 U. Shpg. wt., 28 lbs. . . . . 88.20

### Solid-state battery-powered Megaphones



**F** Fanon MV-45. Volume control. 300-yd. range. 4 watts (6 peak). Built-in siren. 7 $\frac{1}{4}$ " bell. Uses 4 "D" batteries, below.  
12 A 7333 X. Shpg. wt., 4 lbs. . . . . 49.50

**G** Fanon MV-3. Hi-lo vol. switch. 200-yd. range. 8 $\frac{3}{4}$ " bell. 13 $\frac{1}{4}$ " long. With carrying strap. Uses 4 "D" batts., below.  
12 A 7324 X. Shpg. wt., 4 lbs. . . . . 32.95  
18 A 5779 "D" Batteries. 10 oz. . . . . Pkg. 2/33¢

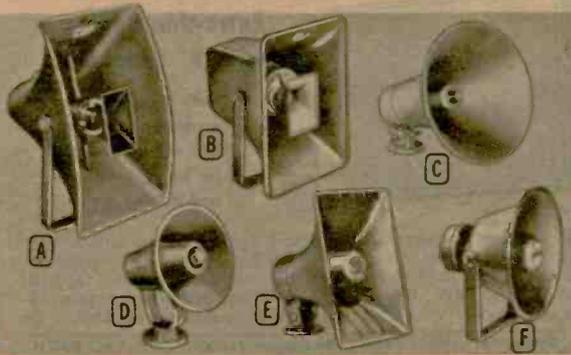
**H** Fanon MV-85. Vol. control. 600-yd. range. 8 watts (10 peak). Built-in siren. 9" bell. Strap. Uses 6 "C" batts., below.  
12 A 7359 X. Shpg. wt., 5 lbs. . . . . 65.95  
18 A 5865. "C" Batteries. 10 oz. . . . . Pkg. 2/33¢



**J** Federal A-12 Voice Gun. Press-to-talk switch. 500-yd. range. Horn diameter, 7 $\frac{1}{4}$ ". With strap. Uses 8 "AA" batteries, below.  
12 A 7319 X. Wt., 5 $\frac{1}{4}$  lbs. . . . . 90.00  
18 A 5083 "AA" Batteries. Shpg. wt., 10 oz. . . . . Pkg. 2/27¢

**K** Electro-Voice PM16EAC. Has external noise-canceling mike with on/off switch, volume control, coiled cord. 650-yd. range. 10 watts (16 watts peak). Siren. Bell diameter, 11 $\frac{1}{2}$ ". With carrying strap. Uses 8 "C" batteries, at left.  
12 A 7355 X. Wt., 6 lbs. . . . . 78.95

# Indoor and outdoor Projectors and Speakers



## ELECTRO-VOICE

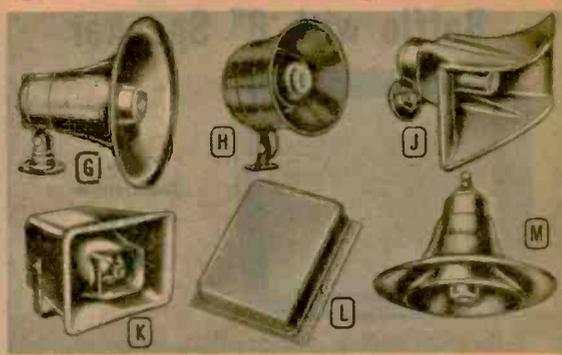
### Weatherproof Projectors and Speakers

Fiber-polyester horns. Virtually indestructible, absolutely waterproof. Types 848ACDP and 847ACDP. Compound-Diffraction design with two diffraction horns for higher articulation without peaking response. Type 844A. General-purpose paging speaker. Type PA-12. For paging use where durability is a prime factor. Special diaphragm eliminates loading for clean response. Type PA30A. Rectangular paging horn with ultra-smooth response for both voice and music. Type PA30AT-7. Same as PA30A, but with 70.7 volt transformer. Type PA30R. Same design as PA30A, but with round horn. Type PA30RT-7. PA30R with 70.7 volt transformer. Type PA30R-45. PA30R with 45-ohm voice coil. All have 120° dispersion, except Type 844A, 90°. All are 8 ohms impedance and 30 watts power capacity except Type 847CDP, 25 watts. Battleship gray finish.

Stock No.	Mfr's Type	Fig.	Response	Size in inches	Wt. Lbs.	EACH
12 A 7540 U	848ACDP	A	150-10K	20½x10½x20	16¾	54.60
12 A 7617 X	847ACDP	B	250-10K	11¾x7¼x10½	10	37.20
12 A 7475 X	844A	C	250-13K	7½x9½ dia.	13	24.00
12 A 7476 X	PA12	D	325-14K	7½x6½	5	16.20
12 A 7616 X	PA30A	E	250-14K	11x6½x8½	3½	22.80
12 A 7486 X	PA30AT-7	E	250-14K	11x6½x8½	7½	30.00
12 A 7487 X	PA30R	F	250-14K	9¾x10 dia.	6¾	24.00
12 A 7499 X	PA30RT-7	F	250-14K	9¾x10 dia.	7½	30.60
12 A 7488 X	PA30R-45	F	250-14K	9¾x10 dia.	7½	25.20

TR7-2 Line Transformer. 7½-watts, 25 volts. Primary taps; 83, 156, 312, 624, 1248 ohms. Secondary: 8 ohms. Power taps at 7.5, 4, 2, 1.5 watts. For PA-12 above.  
12 A 7489. Shpg. wt., 1½ lbs. . . . . 6.60

TR7-7 Line Transformer. Above for 70.7 volt uses. Primary taps: 660, 1250, 2500, 5000, 10,000 ohms. Secondary: 8 ohms. Power taps at 7.5, 4, 2, 1.5 watts.  
12 A 7468. Shpg. wt., 1½ lbs. . . . . 6.60



## UNIVERSITY SOUND

### Weatherproof PA and Intercom Speakers

For "talk-back" microphones, PA speaker applications. All have weatherproof phenolic diaphragms for outdoor use under any conditions. Ideal for two-way intercom systems. Types IB-A3 and IB-T. Medium-power paging and talk-back speakers. Types MIL-A8 and MIL-T. For medium and low-power systems. Type DLC-8. Compact horn for low-power uses. Types CIB-A8, CMIL-A8, and CMIL-T. For wide area coverage in low-power systems where moderate noise levels are present. Type MLC. Two-speaker system providing high-frequency response for outdoor uses. Type DW-30. Specially designed wall or ceiling-mounted speaker for low-level voice and music reproduction. Newly developed coupling system requires only 1¼" mounting depth, yet provides full response. 6¾x6½x1¼" deep. Type IBR-A8. For wide-area coverage using only a few speakers. All have 8 ohms impedance except those with \*built-in line matching transformer for 70.7 and 25-volt systems. †indicates power handling capacity in watts. †swivel mounting, also fastens to ½" pipe. Av. shpg. wt., 5 lbs.

Stock No.	Mfr's Type	Fig.	†	Resp.	Dispersion	Lx Dia. in.	EACH
12 A 7504 X	IB-A8	G	30	250-13K	105°	19x10¼	23.97
12 A 7059 X	IB-T*	G	30	250-13K	105°	11½x10¼	30.60
12 A 7569	MIL-A8	G	10	350-13K	120°	16¾x6½	19.77
12 A 7060 X	MIL-T*	G	10	350-13K	120°	10x7½	28.77
12 A 7398	DLC-8	H	7½	400-10K	120°	5¾x4	11.97
12 A 7515 X	CIB-A8	J	30	250-13K	120°x60°	17¾x14	28.17
12 A 7572	CMIL-AR	J	10	250-13K	120°x60°	16¼x9½	22.77
12 A 7061 X	CMIL-T*	J	10	250-13K	120°x60°	16¼x9½	30.90
12 A 7998 X	MLC	K	15	150-15K	120°	10¾x12¾	40.95
12 A 7194 X	DW-30	L	30	100-13K	120°	10¾x13	23.97
12 A 7516 X	IBR-A8	M	30	300-10K	360°	10¾x13	32.10

### Paging/talk-back Speakers with deflector

Low as **26<sup>97</sup>**

360° adjustable hood "directs" sound

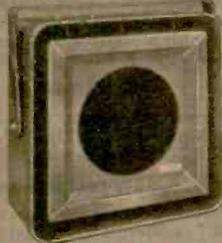


Model UH-8. Special-design paging/talk-back speaker has variable dispersion for full control of sound pattern. 360° adjustable sound deflector increases sound in desired areas, diminishes it in other areas. Frequency response of 220-16,000 Hz for accurate reproduction of both voice and music. Power capacity, 32 watts. Impedance 8 ohms. 10½" dia. x 10½" (10¼" dia. x 14½" with hood).  
12 A 7540 X. Shpg. wt., 5 lbs. . . . . 26.97  
12 A 7938 X. Model UH-45. Above; 45 ohms. . . . . 28.17  
12 A 7939 X. UHT. 70.7, 25 V unit; taps. 6 lbs. . . . . 35.37

### Compact wide-range weatherproof Speaker

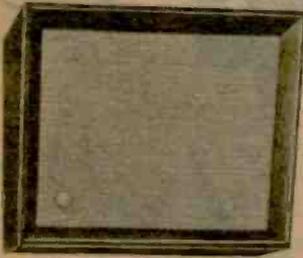
**69<sup>90</sup>**

One-piece compression molded housing of highly resilient glass-filled polyester



Musicaster 1A. All-weather speaker for outdoor PA or extension uses. Has 12" wide-range driver for good bass response; Radax dual-cone driver assembly for crisp highs. Compression molded housing. Universal "U" bracket for easy mounting. 80-10,000 Hz. Dispersion: 120°. Power capacity: 30 watts (60 watts peak). Impedance: 8 ohms. Mechanical crossover, 4000 Hz. 21¾x21¾x8½".  
12 A 7044 U. Shpg. wt., 29 lbs. . . . . 69.90

# Value-priced hi-impact Baffle with 8" Speaker



With Transformer

**10<sup>95</sup>**

Model UL8AW. Low, low price for a complete speaker-baffle with L-pad volume control. Pre-wired, ready to hang on the wall to complete your music/paging system. Tough and attractive hi-impact styrene, with molded-in walnut-grain finish for long-lasting beauty. 8-ohm speaker has Alnico V magnet, screw terminals. Built-in 70.7-volt transformer has taps at 5, 2.5, 1.25, .62, .31 watts. Size, 9 1/2 x 12 x 6". 12 A 7530 X. Shpg. wt., 3 1/4 lbs. . . . . 10.95

Model UL8BW. Same as above, but without transformer. Includes L-pad volume control. 12 A 7531 X. Shpg. wt., 3 lbs. . . . . 8.95



Tapered Baffle with 8" Speaker

Low as **13<sup>95</sup>**

Walnut Finish, with L-Pad Volume Control

Wall-mounting speaker is tastefully designed to fit well with any modern decor. Perfect for music or paging in the home or office. 8" speaker features smooth bass response, convenient L-pad volume control to adjust level at speaker as well as at amplifier. 8-ohm impedance. Highly efficient barium-ferrite magnet with 10-watt power handling capacity. Completely wired, easy to install. Rugged construction, with walnut finish. 9 1/2 x 12 x 6". 12 A 7552 X. Shpg. wt., 5 1/2 lbs. . . . . 13.95

12 A 7553 X. As above, with 70.7 volt transformer tapped at 10, 5, 2.5, 1.25 and .62 watts. 6 1/2 lbs. . . . . 15.95

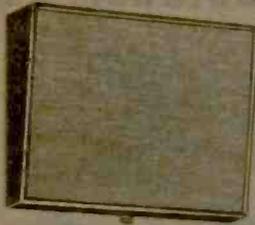
## Space-saving thin Speakers

All have internal dust seals. Number in Mfr's Type indicates speaker diameter. PA8J speaker has Alnico V magnet, others have ceramic magnet. Impedance, 8 ohms. Screw terminals. Suffix "W" below indicates dual cones for wider frequency response.



Stock No.	Mfr's Type	Watts	Mag. Oz.	Depth In.	Wt. Lbs.	EACH		
						1-2	3-5	6-Up
12 A 7907	PA8EC	8	3.0	1 1/4	1 1/2	5.37	5.10	4.83
12 A 7908	PA8FC	10	5.5	2 1/4	1 3/4	4.98	4.73	4.48
12 A 7909	PA8FC-W	10	5.5	2 1/4	1 3/4	5.28	5.02	4.75
12 A 7872	PA8HC	12	6.0	2 1/4	2 1/2	6.30	5.99	5.67
12 A 7873	PA8HC-W	12	6.0	2 1/4	2 1/2	6.75	6.41	6.08
12 A 7916	PA8J	15	6.8	4 1/8	3	6.90	6.56	6.21
12 A 7874	PA8J	15	10.0	3	3	6.90	6.56	6.21
12 A 7913	PA8JC-W	15	10.0	3	2 1/2	7.35	6.98	6.61
12 A 7914 X	PA12JC	18	10.0	4 3/8	4	8.97	8.52	8.07

# Utah Baffles and Speakers

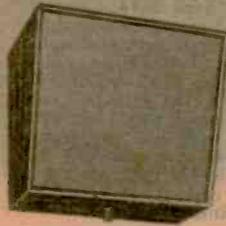


Extra-thin Baffles with 8" Speakers

Only 4" deep, yet provide all the range and volume you need for background music and paging systems

8" shallow speaker has internal dust seal, barium-ferrite magnet, 8 ohms. 9x12x4". With hardware. "T" suffix in Mfr's Type indicates with 70.7 volt transformer, tapped at 5, 2.5, 1.25, .62, .31 watts. Transformerless types, 15 watts peak. "V" suffix indicates with volume control.

Stock No.	Mfr's Type	Enclosure Finish	Wt. Lbs.	EACH
12 A 7869 X	TP8A-VT	Walnut-Finished Wood	4	15.95
12 A 7871 X	TP8D-T	Walnut-Finished Wood	4	14.50
12 A 7842 X	TP8B-V	Walnut-Finished Wood	3 1/2	12.95
12 A 7870 X	TP8C	Walnut-Finished Wood	3 1/4	10.95
12 A 7581 X	TS8A-VT	Walnut-Textured Vinyl	3 1/2	13.95
12 A 7013 X	TS8D-T	Walnut-Textured Vinyl	3 1/2	11.95
12 A 7012 X	TS8B-V	Walnut-Textured Vinyl	3	10.95
12 A 7562 X	TS8C	Walnut-Textured Vinyl	3	9.95

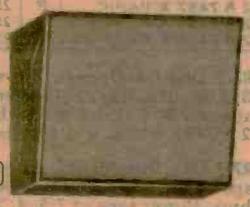


Stylish tapered Baffle with 8" Speaker

**13<sup>95</sup>** With Volume Control

Contemporary-styled Baffle with powerful 8" Speaker

For paging or background music. Speaker has 3-oz. high-efficiency ceramic magnet, 70.7-volt constant voltage transformer. Taps at 5, 2 1/2, 1.25, .62, .31 watts. Built-in L-pad volume control. Screw terminals. Walnut-stained birch veneer. 9x11x5 3/8" deep. 12 A 7878 X. Shpg. wt., 5 lbs. . . . . 13.95



### A Sloping Baffle with 9-watt 8" Speaker

Designed for best dispersion angle. 8-ohm speaker has 1.47-oz. Alnico V magnet. Screw terminals. Covered with durable walnut wood-grained fabric. Size, 9x11x6". 12 A 7091 X. Shpg. wt., 4 lbs. . . . . 7.50

### B Low-cost Baffle for 8" Speaker

Perfect for economy PA and music systems. Birch veneer; walnut finish. 9x11x5 3/8". Less speaker. With hardware. 12 A 7092 X. Shpg. wt., 3 lbs. . . . . 5.50

### Low-cost line-to-voice-coil Transformers

Permit driving speakers at various power levels from same 70.7 or 25-volt line. Select desired power tap on transformer — does not affect other speakers in same system. Impedance and wattage figures printed on coil. Solder terminals. 2" mounting centers except 2 3/4". Wt., 1 lb.

Stock No.	Watt Taps	Line Volts	Imp. Ohms	EACH	
				1-11	12-Up
12 A 7088	5, 2.5, 1.25, .62, .31	70.7	8, 4	1.69	1.57
12 A 7821	10, 5, 2.5, 1.25, .62, .31	70.7	16, 8, 4	1.99	1.87
12 A 7822	5, 2.5, 1.25, .62, .31	25	8, 4	1.79	1.67
12 A 7823	10, 5, 2.5, 1.25, .62, .31	25	16, 8, 4	2.49	2.29

# Argos decorator-styled Baffles and Outfits

## A Baffles with 8" or 12" Speakers installed

For PA paging or background music. Walnut wood-grain vinyl covering, screw terminals. "L" in Model No. L-pad; "V", volume control; "T", 70.7-V transformer. 8 ohms, except 70.7-V types. Series 108. 8" speaker, 1-oz. magnet, 6-watt capacity. Series 408. 8" speaker, 4.8-oz. magnet, 10-watt capacity. Series 212. 12" speaker, 10-oz. magnet, 20-watt capacity.

Stock No.	Model	Baffle Size	Wt. Lbs.	EACH	
				1-5	6-Up
12 A 7883 X	108CS	9½x12x4¼"	4	7.87	7.48
12 A 7342 X	108CSV	9½x12x4¼"	5	9.90	9.41
12 A 7344 X	408CS	9½x12x4¼"	5	9.85	9.36
12 A 7350 X	408CSL	9½x12x4¼"	6	12.08	11.48
12 A 7351 X	408CSL.T	9½x12x4¼"	6	14.60	13.87
12 A 7888 X	212CSL	13¼x16x6¼"	10	17.77	16.88

## B Prestige Baffles with 8" Speakers installed

Series 508. Baffles with heavy-duty 8" speakers. 6-oz. magnet, 15-watt capacity. 8 ohms. "L", L-pad; "T", 70.7-V transformer. Walnut wood-veneer finish.

Stock No.	Model	Size	For	Wt. Lbs.	EACH	
					1-5	6-Up
12 A 7352 X	508CS	9¾x11x5½"	6	11.83	11.24	
12 A 7353 X	508CSL	9¾x11x5½"	7	14.06	13.36	
12 A 7354 X	508CSL.T	9¾x11x5½"	7	16.67	15.84	

## C Wall-mount birch Baffles

Durable cane grille for smart appearance. Walnut finish enhances any setting. Includes all necessary mounting hardware. Less speaker; order from page 222.

Stock No.	Model	Size	For	Wt. Lbs.	EACH	
					1-5	6-Up
12 A 7523 X	DWB-8A	10½x9¾x6½"	8"	3¾	5.94	5.64
12 A 7524 X	DWB-12A	14x13¾x9½"	12"	5	8.32	7.90

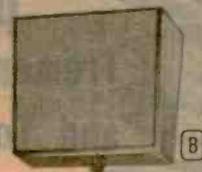
## D Slant-front corner-mount Baffles

Easy-on "Clip-In" front. Mounting clips; screw terminals. Acoustic-padded bass reflex design. Cane grille; walnut-grained vinyl. Less speaker; order from pg. 222.

Stock No.	Model	Size	For	Wt. Lbs.	EACH	
					1-5	6-Up
12 A 7510 X	SCB-8D	15x17¾x9"	8"	5¼	9.36	8.89
12 A 7511 X	SCB-12D	20x20¾x10½"	12"	8	12.82	12.18



A



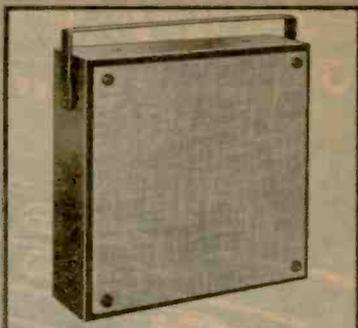
B



C



D



"Hallmark" Pager

Low as **14.06** Bi-directional Speaker

Model TCB-8S. Gives the same corridor paging coverage as two ordinary "single-faced" speakers. 8" dual cone speaker disperses plenty of clear sound in both directions. Provides coverage of extended hallway distances or factory areas.

Installation is simple... no need to remove bracket for wall or ceiling mounting. With 4.8-oz. magnet, 10-watt power capacity. Deep-dusk walnut finish. 8 ohms. Size, 10¾x10¾x3½". Shpg. wt., 5½ lbs.  
 12 A 7521 X, 1-5... Each 14.80  
 6-Up... Each 14.06

# Soundolier Ceiling Baffles and Enclosures for 8" speakers



E



F



G



H



J

**E** 67-8 Baffle. Flush-mounting lowered ceiling baffle. Welded construction prevents vibration or rattle. Aluminum finish. Fits 10¼" hole. 12" dia. Use 95-8 enclosure. Wt., 2 lbs. 12 A 7546 X, 1-4 Ea. 4.53 5-Up Ea. 3.98

**F** 61-8 Trim Ring Baffle. Highly polished, simulated stainless, flush-mounting trim ring. Vibration- and rattle-free 20-gauge steel construction. Fits 8½" hole. 12¾" dia. Use 95-8 enclosure. Wt., 1¾ lbs. 12 A 7548 X, 1-4 Ea. 2.95 5-Up Ea. 2.59

**G** 68-8 Low-Ceiling Baffle. Satin-brushed aluminum; fits 8½" hole; 12¾" dia. Use 95-8 encl. 1¼ lbs. 12 A 7547 X, 1-4 Ea. 6.93 5-Up Ea. 6.07

**H** 169-8 Square Baffle. (Illus. with 193-8 encl.) 24-ga. steel; white; fits 9⅝" hole; 10½" square. 1 lb. 12 A 7554 X, 1-4 Ea. 2.37 5-Up Ea. 2.08

**J** 193-8 Enclosure. (Illus. with 169-8 baffle.) Welded 20-gauge steel. 3¾x9⅝" square. Wt., 1¼ lbs. 12 A 7555, 1-4 Ea. 3.96 5-Up Ea. 3.47

**J** 51-8 Trim Ring Baffles. Quick simple flush mounting. White 24-gauge steel. Fit 8½" diameter hole. 12¾" outer diameter. Use type 95-8 round enclosure below. Package of 5 baffles. Shpg. wt., 6¼ lbs. 12 A 7502 X, Pkg. of 5 for 7.95

95-8 Round Enclosure. (Not illus.) 20-gauge steel, for use with any round baffle shown above. Jute lining cuts resonance. Size, 4¼x9⅞" diam. 3lbs. 12 A 7550 X, 1-4 Ea. 4.86 5-Up... Ea. 4.26

## Soundolier Baffles complete with 8-inch Speakers

Fully assembled speaker-baffles consist of top quality 8-inch speaker and transformer, mounted in your choice of above baffles. Packaged units save you both money and time. Stripped leads and wire nuts make installation fast and easy.

Speakers have 3.16-oz. Alnico V magnet, handle 10 watts. Frequency response, 40-15,000 Hz. Impedance, 8 ohms. Maximum diameter, 8½"; depth, 3¼". Mounted 70.7-volt transformer has taps for 0.5, 1, 2 and 4 watts. Color-coded leads.

Each model includes speaker and transformer described at left, mounted in baffle indicated. (Baffles also available separately, above.)

Stock No.	Model	Baffle Type	Wt. Lbs.	EACH	
				1-4	5-Up
12 A 7501 X	B67-8	67-8	4	11.49	10.89
12 A 7500 X	B61-8	61-8	4	9.94	8.56
12 A 7503 X	B68-8	68-8	4	12.89	11.59
12 A 7514 X	B169-8	169-8	4	9.21	8.43
12 A 7522 X	B51-8	51-8	3½	9.18	8.05



# SPECIAL PURCHASE!

**194  
pieces  
Tremendous Socket  
and Tool Set Offer**

**39<sup>99</sup>**  
\$5  
monthly\*

## Husky 194-piece professional-quality Socket Wrench and Tool Set

- Husky tools forged from tough alloy steel
- Sockets are protected with triple-plated chrome finish
- Set includes 50 sockets and accessories for every job

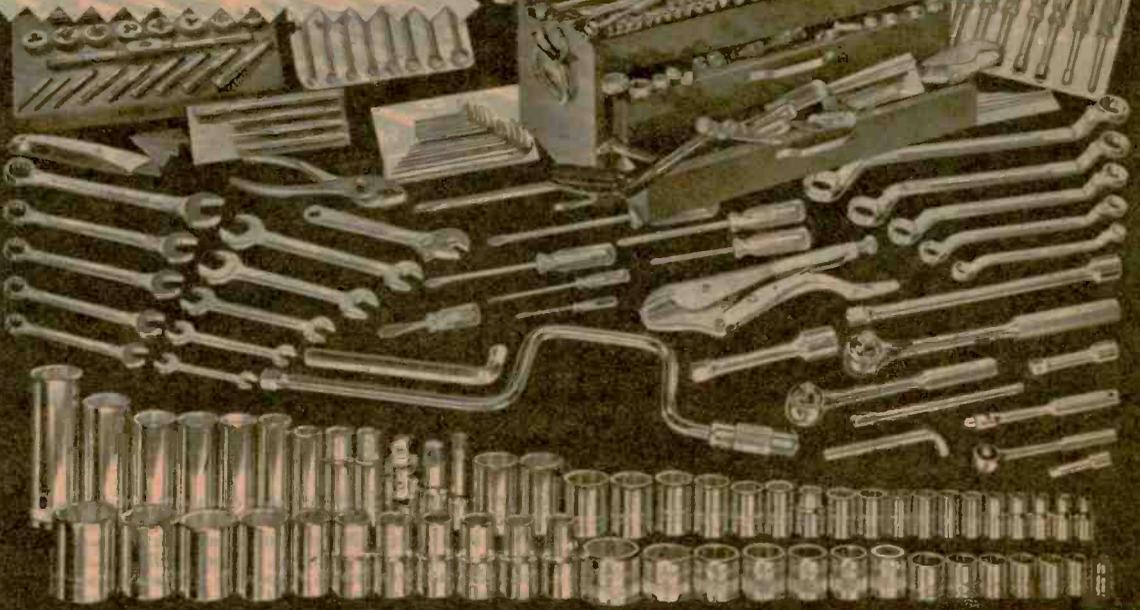
- Includes metric socket set for working on foreign cars
- Automotive ignition sets for complete ignition overhaul
- Large steel tool box with convenient removable tray

Pay less than 21¢ each for these finest-quality tools—the value of the year! With the correct tool on hand for every mechanical job, you'll find the job easier and faster to do, and you'll do it better! This professional-quality, low-cost 194-piece tool set offers the perfect selection of precisely-made tools for virtually any mechanical job requirements. *Alloy sockets and handles:* ½" drive—ten sockets (¼" to 1"), ratchet, 19" speeder, 5" extension; ¾" drive—seven sockets (⅜" to ¾"), ½" to ⅜" adapter; ¼" drive—eight 6-point sockets (⅜" to ⅛"), three 8-point sockets (¼" to ⅜"), 6" extension, 6" flex handle. *Carbon sockets and tools:* ½" drive—seven sockets (⅛" to ⅜"),

"L" handle, metric drive—seven sockets (7mm to 14mm), "L" handle; ¼" drive—seven sockets (¼" to ½") with "L" handle and rack; 1⅜" spark plug socket and bar. *Other tools included:* 5-piece open-end wrench set (⅜" to ¾"); 24-piece automotive ignition set; 8-piece ignition wrench set; 18-piece hex key set; hacksaw frame with 24 extra blades; 17-piece screwdriver set; 13-piece drill set; ⅜" tempered steel cold chisel; 6" combination plier; shop knife and five blades; fine and medium armature paper for "turning" armatures. Rugged metal tool box with tote tray holds complete socket and tool set.

26 A 2412 X. Shpg. wt. 30 lbs. . . . . 39.99

## Husky forged alloy steel Tool Sets



### Complete quality-made 223-piece deluxe Socket and Tool Set

An unbeatable value for mechanics and home owners. Includes 3 drive sets with thin-wall sockets plus many more necessary items. Husky tools have triple-plated mirror chrome finish.  $\frac{1}{2}$ " Drive Set: ratchet, 10", 5" exten., speeder, spark plug skt., ten 12-pt. skts. ( $\frac{1}{16}$ "-1"), three 6-pt. skts. ( $\frac{1}{16}$ "- $\frac{3}{16}$ ").  $\frac{3}{8}$ " Drive Set: seven 12-pt. skts. ( $\frac{3}{8}$ "- $\frac{3}{4}$ "), 8-pc.  $\frac{3}{8}$ " deep skt. set ( $\frac{3}{8}$ "- $\frac{1}{2}$ "), 1 $\frac{1}{2}$ ", 3" extensions, ratchet, univer. joint.  $\frac{1}{4}$ " Drive Set: Eight 6-pt. skts. ( $\frac{1}{32}$ "- $\frac{1}{16}$ "), three 8-pt. skts. ( $\frac{1}{4}$ "- $\frac{3}{8}$ "), flex handle, ratchet, 2", 6" extensions. Also included: 8-pc. metric skt. set (7 mm-14 mm);

8-pc.  $\frac{1}{2}$ " drive hex skt. set ( $\frac{1}{16}$ "- $\frac{1}{8}$ "); 5-pc. box end wrench set; 5-pc. open-end wrench set; 5-pc. comb. set; 24-pc. ignition wrench set; 8-pc. comb. ignition wrench set; hacksaw frame w/24 blades; 18-pc. hex key set; 10-pc. screwdriver set; 7-pc. nut runner set. Also, 6 fine and 6 extra-fine abrasive sheets; 5-pc. punch and chisel set; utility knife w/5 blades; grip wrench; 6" combination pliers; 20-pc. tap and die set; 6" adjustable open-end wrench; rugged 2-drawer steel tool chest with lid. Shpg. wt., 65 lbs. 26 A 2771 Z..... 99.95

223 pieces  
**99<sup>95</sup>**  
\$5 monthly  
see page 438



### 156-piece Tool Set featuring thin-wall sockets and mirror-chrome finish

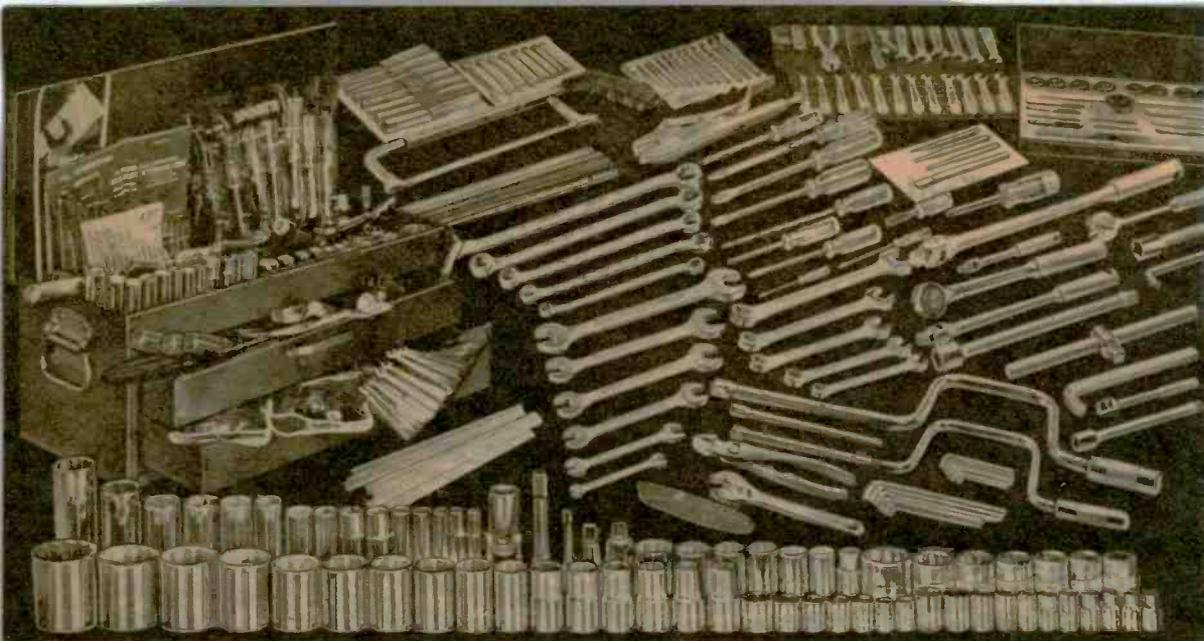
$\frac{1}{2}$ " Drive Alloy-Steel Set: reversible ratchet, 10", 5" ext.,  $\frac{1}{16}$ " spark plug skt., ten 12-pt. skts. ( $\frac{1}{16}$ "-1").  $\frac{3}{8}$ " Drive Alloy-Steel Set: seven 12-pt. skts. ( $\frac{3}{8}$ "- $\frac{3}{4}$ "),  $\frac{1}{2}$ "- $\frac{3}{4}$ " adapter.  $\frac{1}{2}$ " Drive Carbon Set: 7 skts. ( $\frac{1}{16}$ "- $\frac{1}{8}$ "), L handle.  $\frac{1}{4}$ " Drive Carbon Set: 6 skts. ( $\frac{1}{16}$ "- $\frac{1}{8}$ "), L handle, rack. Other Tools: 5-pc. open end wrench

set ( $\frac{3}{16}$ "- $\frac{3}{4}$ "); 5-pc. punch, chisel set; 10-pc. screwdriver set; 18-pc. hex key set; hacksaw frame, 25 blades; 8-pc. ignition set; 24-pc. ignition set; metric set (7-14mm), L handle; fine and extra-fine ignition paper. Complete with metal case. 26 A 1414 X. Shpg. wt., 19 $\frac{1}{2}$  lbs. .... 49.95

Complete set  
**49<sup>95</sup>** \$5 monthly  
see pg. 438

#### SHIPPING NOTE:

Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

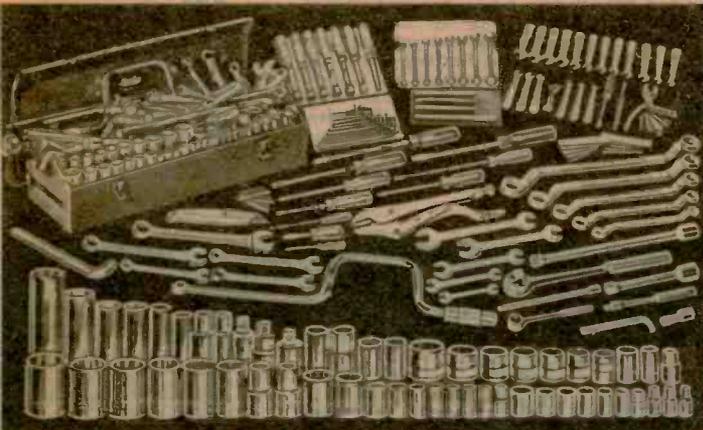


## Husky 253-piece Socket and Tool Set

**149<sup>95</sup>** \$8  
monthly\*

Versatile tool set will give you years of fine service. You get:  $\frac{1}{4}$ " drive—eight 6-pt. sockets ( $\frac{1}{2}$ x $\frac{1}{16}$ "), three 8-pt. sockets ( $\frac{1}{4}$ - $\frac{3}{8}$ "), 6 deep-wall sockets ( $\frac{1}{4}$ - $\frac{1}{16}$ "), flex handle, ratchet, 2", 6" extensions, 6" spinner handle;  $\frac{1}{2}$ " drive—5", 10" extensions, ratchet, speeder, spark-plug socket, thirteen 12-pt. sockets ( $\frac{3}{8}$ -1 $\frac{1}{4}$ "), three 6-pt. sockets ( $\frac{1}{16}$ - $\frac{3}{16}$ "), sliding T, 15" flex handles, universal joint;  $\frac{3}{4}$ " drive—seven 12-pt. sockets ( $\frac{3}{8}$ - $\frac{3}{4}$ "), 8 deep-wall sockets ( $\frac{3}{8}$ - $\frac{3}{16}$ "), 1 $\frac{1}{4}$ ", 3", 6" extensions, universal joint, 16" speeder, 10" flex handle, ratchet; 8-pt. metric socket set (7mm-14mm), 8-pc.

$\frac{1}{2}$ " hex drive set ( $\frac{1}{16}$ - $\frac{7}{8}$ "), 6-pc. open-end wrench set  $\frac{1}{4}$ - $\frac{3}{8}$ "), 5-pc. box-end wrench set ( $\frac{3}{8}$ - $\frac{7}{8}$ "), 5-pc. combination wrench set ( $\frac{1}{16}$ - $\frac{3}{4}$ "), 24-pc. ignition wrench set, 8-pc. combination ignition wrench set, 13-pc. drill set, hacksaw frame, 24 hacksaw blades, 18-pc. hex key set, 10-pc. screwdriver set, 7-pc. nut runner set, 12 abrasive sheets (6 fine, 6 extra-fine). 5-pc. punch and chisel set, utility knife with 5 blades, grip wrench, 6" combination pliers, 20-pc. tap and die set, 6" adj. open-end wrench, 2-drawer tool chest. 26 A 1708 Z. Shpg. wt., 75 lbs. 149.95



## 69<sup>95</sup> \$5 Husky 189-pc. forged alloy-steel Tool Set

monthly\*

Tough, durable, quality-constructed, highly versatile Husky tools. Include:  $\frac{1}{2}$ " drive—ten 12-pt. skts. ( $\frac{1}{16}$ -1"), extra-deep spark plug skt., ratchet, speeder, 5" and 10" extensions;  $\frac{3}{4}$ " drive—seven 12-pt. skts. ( $\frac{3}{8}$ - $\frac{3}{4}$ "), 8-pc. deep skt. set ( $\frac{3}{8}$ -1 $\frac{1}{16}$ "),  $\frac{1}{2}$ - $\frac{3}{8}$ " reducing adapter, 1 $\frac{1}{4}$ " drive exten., universal joint;  $\frac{1}{4}$ " drive—eight 6-pt. skts. ( $\frac{1}{16}$ - $\frac{1}{16}$ "), three 8-pt. skts. ( $\frac{1}{4}$ - $\frac{3}{8}$ "), flex hdl., 6" exten., ratchet. Also: 8-pc. hex skt. set ( $\frac{1}{16}$ - $\frac{7}{16}$ "); 8-pc. metric skt. set; 5-pc. comb. wrench set; 5-pc. open end and 5-pc. box-end wrench set; 24-pc. ignition set; 8-pc. ignition wrench set; hacksaw frame, 24 blades; 18-pc. hex key set; 10-pc. screwdriver set; 7-pc. nut runner set; 6 fine, 6 extra-fine abrasives; 5-pc. punch, chisel set; knife w/5 blades; grip wrench; tool box, tray. Shpg. wt., 54 lbs. 26 C 2781 Z. 69.95



## 34<sup>95</sup> \$5 Husky 55-piece Metric Tool Set

monthly\*

Well-designed, rugged, long-wearing tool set. Includes:  $\frac{3}{4}$ " drive—3", 6" socket extensions, reversible ratchet;  $\frac{3}{4}$ " drive metric sockets—9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 17mm, 19mm; spark-plug socket; metric combination wrenches—9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 17mm, 19mm; 7-pc. metric hex key wrench set, 10-pc. screwdriver set, hacksaw frame and blade, 12 hacksaw blades, offset screwdriver; box. Shpg. wt., 15 lbs. 26 A 1709 X. 34.95

# Vacuum Cleaners.. extra power for big jobs

## "Shop Vac" all-purpose vacuum cleaners

Husky heavy-duty motor and long-life construction

Low as **26<sup>95</sup>** \$5 monthly\*

**A** 10-Gallon 1-hp Model. Makes short work of the rough clean-up jobs that would ruin an ordinary vacuum cleaner. Large 6" nozzle picks up sawdust, chips, sticks, stones. Attaches to power tools for chip removal. Oversize 2½" diameter hose, compared to 1¼" for most home vacuums. Drum is easily emptied by unlamping top. Has carrying handle, 6-ft. hose, 1-hp motor, two-wire cord, 2½" to 1¼" adapter. Drum is finished in glossy gold-color enamel. 19" high, 15" diameter. U.L. Listed. For 110-120 volts, 50-60 Hz AC.

26 A 3101 X. Shpg. wt., 20 lbs. .... 29.95

**B** 5-Gallon 1-hp Model. Above with drum 18" high, 12" diameter. 26 A 2515 X. Shpg. wt., 15½ lbs. .... 26.95

**C** 1¼" Accessory Kit. Includes 10" floor nozzle, round brush, 5" nozzle, crevice tool, 6' hose, two 20" extension tubes, oval nozzle and brush, conversion coupler for Shop-Vac. 26 A 1250 X. Shpg. wt., 4 lbs. .... 19.50

**D** 2½" Accessory Kit. Extra-long 14" floor nozzle with brush, two 23" extension handles, coupler for other cleaners. 26 A 3103 X. Shpg. wt., 3 lbs. .... 9.95

Set of Four Casters for Above Cleaners. 26 A 3104 X. For 5-Gallon Vacuum. Shpg. wt., 1¾ lbs. .... 3.39

26 A 3105 X. For 10-Gallon Vacuum. Shpg. wt., 1¼ lbs. .... 3.39

26 A 3636 X. 6' Hose Extension. Shpg. wt., 1½ lbs. .... 6.95

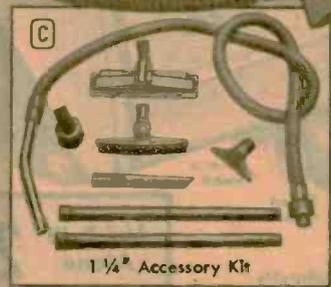
26 A 3637. Crevice Tool. Shpg. wt., 8 oz. .... 3.75

26 A 3638. Paper Filter Bags. Shpg. wt., 4 oz. .... Pkg. of 5/98¢



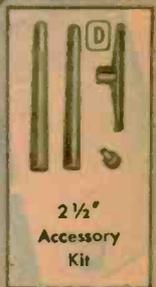
**A**  
Power  
Cleaner

**B**



**C**

1¼" Accessory Kit



**D**

2½" Accessory Kit

## Hippo-Vac powerful portable gobbles up dirt

Specially-designed dual filters for cleanest possible air exhaust

**32<sup>95</sup>** \$5 monthly\*

**E** Hand Vacuum. Power with lightweight portability (6 lbs.). Double pickup-power of hand vacuums—holds three times more! Picks up all kinds of dirt and debris. With 18-ft. cord, 2½" to 1¼" adapter, 2½" to 2½" coupling, 6" rectangular nozzle and brush. 2½x14" crevice tool, two 2½x23" extension tubes, 36"x2½" hose, adjustable shoulder strap. For 120VAC/DC. Order accessories below.

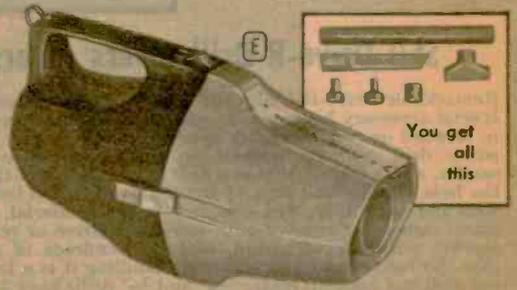
26 A 1670. Shpg. wt., 12 lbs. .... 32.95

26 A 1671. 14-inch Floor Nozzle. Shpg. wt., 1 lb. .... 4.95

26 A 1672. Fishtail Nozzle. Shpg. wt., ½ lb. .... 2.95

26 A 1674. Paper Filter Bags. Shpg. wt., ½ lb. .... Pkg. of 5/85¢

26 A 1675. Cloth Filter Bag. Shpg. wt., ½ lb. .... 1.19



**E**

You get all this

## POW-r-VAC does jobs house vacuums can't

Big wheels roll over cracks, bumps, uneven surfaces without balking

**32<sup>95</sup>** \$5 monthly\*

**F** 5-Gallon, 4/5-hp Model. Versatile vacuum rides on wheels for easy portability, or stands on end for stationary jobs. Heavy-gauge 15" high, 12" diameter steel drum handsomely finished in avocado with wood-grain trim. Clamp-on cover holds tight, releases easily. Full-length clamp-on handle makes stand-up jobs easy and comfortable. Big 6-foot hose carries large debris without clogging. Can also be used as powerful blower. With adapter for household vacuum accessories; cloth filter bag plus two paper bags. For 110-120 VAC/DC.

26 A 1546 X. Shpg. wt., 19 lbs. .... 32.95

10-Gallon, 1½-hp Model. Above with drum 16" high, 14" diam.

26 A 1547 X. Shpg. wt., 26 lbs. .... 39.95

**G** Accessories for special cleaning jobs—fits 2½" hose.

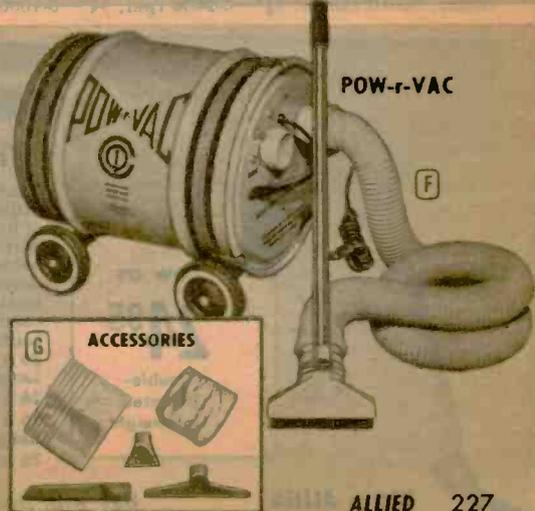
26 A 1548. 14-inch Floor Nozzle with Brush. Wt., 1 lb. .... 4.50

26 A 1550. Fishtail Nozzle. Shpg. wt., 1 lb. .... 2.75

26 A 1549. Large Crevice Tool. Shpg. wt., 1 lb. .... 2.75

26 A 1552. Paper Filter Bags. Wt., 1 lb. .... Pkg. of 6/85¢

26 A 1551. Cloth Filter Bag. Shpg. wt., 1 lb. .... 1.10



POW-r-VAC

**F**



**G**

ACCESSORIES

\*No money down .. see page 438

# Reversible Drive-R-Drill . . . the home workshop



Drills Tile



Re-threads



Assembles



Polishes Car

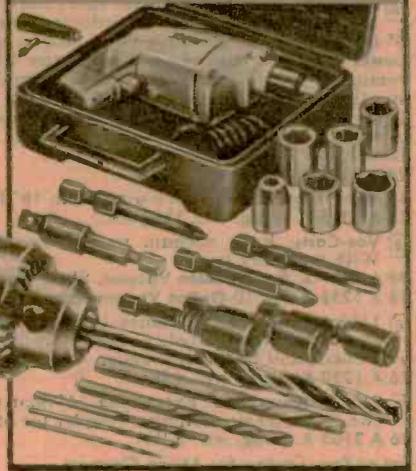


Sands Wood



Drives Screws

Save \$8.45 on Drive-R-Drill, 18-pc. Accessory Outfit and Case . . . great value for the home mechanic



## SKIL



Reverse Switch  
Speed Control

Adjustable Knob holds speed

<p><math>\frac{1}{4}</math>" Drill Alone <b>29<sup>88</sup></b></p> <p>Complete Outfit <b>34<sup>88</sup></b></p>	<p><math>\frac{3}{8}</math>" Drill Alone <b>36<sup>88</sup></b></p> <p>Complete Outfit <b>41<sup>88</sup></b></p>	<p><math>\frac{1}{2}</math>" Drill Alone <b>39<sup>88</sup></b></p> <p>Complete Outfit <b>44<sup>88</sup></b></p>
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## Skil Drive-R-Drill offers reversible variable speed, trigger controlled

Remarkable Drive-R-Drill with Trigger Speed Control and special accessory kit is much more than a drill. Operating in forward or reverse at any speed up to 2000 rpm, it's a power drill, a power wrench, an electric screwdriver, a sander, and a buffer. You can drill a hole in metal, thread the hole, drive a bolt in, and tighten a nut on the bolt, all with the same tool. You can drill in any material, even glass; tighten or remove nuts and bolts; drive or remove screws; polish, sand, grind, and do hundreds of other jobs. So lightweight and compact, handling it is a breeze.  $\frac{1}{4}$ " drill has 2.5-amp motor;  $\frac{3}{8}$ " and  $\frac{1}{2}$ " drills have 3-amp motor. Speed ranges:  $\frac{1}{4}$ "—0-2000 rpm;  $\frac{3}{8}$ "—0-1000 rpm;

$\frac{1}{2}$ "—0-750 rpm. 6-ft. 3-wire cord and plug. Less bit. Outfits include 6 screwdriver bits, 7 nut driver bits and 5 drill bits in fitted case. U.L. Listed. 115 V, 50-60 Hz AC.

26 A 1206 X.  $\frac{1}{4}$ " Drill Outfit. Shpg. wt., 6 lbs. . . . . 34.88

26 A 1210 X.  $\frac{3}{8}$ " Drill Outfit. Shpg. wt., 6 $\frac{1}{2}$  lbs. . . . . 41.88

26 A 1216 X.  $\frac{1}{2}$ " Drill Outfit. Shpg. wt., 6 $\frac{1}{2}$  lbs. . . . . 44.88

26 A 1192.  $\frac{1}{4}$ " Drill Alone. Shpg. wt., 4 lbs. . . . . 29.88

26 A 1194.  $\frac{3}{8}$ " Drill Alone. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 36.88

26 A 1201.  $\frac{1}{2}$ " Drill Alone. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 39.88

26 A 3115. Drill Case Alone. Shpg. wt., 1 lb. . . . . 4.95

26 A 3116. Accessory Outfit Alone. Shpg. wt., 1 lb. . . . . 8.50



## THOR

### Thor double-insulated Drills for every application

Years of dependable service go with these tough and durable power drills. Feature a 50% reduction in weight plus compact design for ease of handling without sacrificing any of the rugged power and outstanding performance. New type permanent-magnet motor placed above and behind the handle provides high torque plus perfect balance. High-impact polycarbonate housing provides exceptional durability and good protection. Three-jaw geared chuck and key; trigger control; 7-ft. two-conductor cable and plug. Variable-speed drills have trigger speed control; nonvariable, momentary contact switch.

Low as  
**24<sup>95</sup>**  
Double-Insulated,  
Lightweight

26 A 1687. D1-110VSC  $\frac{1}{4}$ " Variable Speed Drill. Speed, 0-2000 rpm. Length, 7 $\frac{3}{4}$ ". Spindle Offset, 1 $\frac{1}{2}$ ". Shpg. wt., 2 $\frac{3}{4}$  lbs. . . . . 32.95

26 A 1688. D1-110  $\frac{1}{4}$ " Fixed Speed Drill. Above, but nonvariable. . . . 24.95

26 A 1701. D1-112VSC  $\frac{3}{8}$ " Variable Speed Drill. Speed, 0-1200 rpm. Length, 7 $\frac{7}{8}$ ". Spindle Offset,  $\frac{5}{8}$ ". Shpg. wt., 3 lbs. . . . . 36.95

26 A 1716. D1-112  $\frac{3}{8}$ " Fixed Speed Drill. Above, but nonvariable. . . 29.95

# Pro or hobbyist, there's a Drill here for you

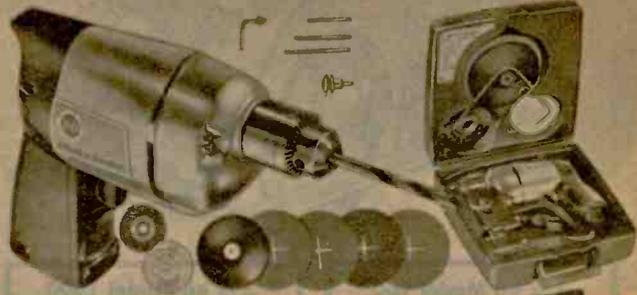
## Black & Decker 14-piece Handyman's Outfit

- Full-capacity  $\frac{3}{8}$ " power Drill
- Drills  $\frac{1}{8}$ " steel,  $\frac{3}{4}$ " hardwood
- Groys custom-molded carrying case

**19<sup>99</sup>**

Features Model U-124  $\frac{3}{8}$ " drill with rugged double-reduction gears. 1000 rpm (no load). 1/7-hp motor rated 2 amps. 8 $\frac{1}{2}$ " long. Outfit includes wheel arbor, 3" coarse wire-brush, three 5" abrasive discs, 3 bits ( $\frac{1}{8}$ ",  $\frac{3}{16}$ ",  $\frac{1}{4}$ "), chuck-key, holder, 3" cotton buffing pad, 5" rubber backing pad, luggage-look case. U.L. Listed. 115 VAC.

26 A 1278. Shpg. wt., 3 $\frac{3}{4}$  lbs. . . . . 19.99  
 26 A 1804. Drill Alone. Shpg. wt., 2 $\frac{1}{2}$  lbs. . . . . 13.95  
 Model 7000  $\frac{1}{4}$ " Drill. Trigger lock.  $\frac{1}{4}$ " steel.  $\frac{1}{2}$ " wood. 1/7-hp, 1.9 amps. 2250 rpm. 115 VAC.  
 26 A 1912. Shpg. wt., 3 $\frac{1}{4}$  lbs. . . . . 8.88



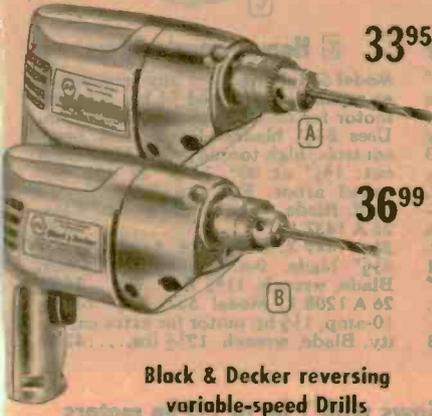
## Thor 39-piece variable-speed Shop Outfit

- Complete workshop in one outfit
- Continuously variable speed
- Precision ball-bearing construction

**39<sup>95</sup>**

A great value for the home mechanic! Gives you the versatility of a complete power shop with sander-buff-grinder all in one outfit. Includes Thor DI-112VSC drill with continuously variable speed from 0-1200 rpm; plus 7 drill bits ( $\frac{1}{16}$  to  $\frac{3}{8}$ "); 21 assorted sanding discs; 5" rubber backing pad; 5 $\frac{1}{2}$ " polishing bonnet; adapter hardware; 3" wire brush; 3" grinding wheel; 3" muslin buff; 2-piece steel arbor; 2-piece  $\frac{1}{4}$ " shank arbor; chuck key. Entire shop outfit is housed in an attractive plastic case. Includes 6-ft. 2-wire cord. U.L. Listed and C.S.A. approved. For 117 VAC. See facing Page for Listing of Drill Alone. Shpg. wt., 18 lbs.

26 A 1596. . . . . 39.95



**Black & Decker reversing variable-speed Drills**

**33<sup>95</sup>**

### Wen four-speed reversible $\frac{1}{2}$ " Drill Outfit

- Split-second speed change
- Powerful  $\frac{1}{2}$ -hp motor
- With case and drill bits

**36<sup>99</sup>**

Model 950. Complete outfit with reversible drill for heavy-duty work. Gives the right speed for every job, in either direction. Operates at 630, 730, 2200, 2400 rpm (no load). Double-switch reverse, locking trigger-switch. Powerful  $\frac{1}{2}$ -hp, 6-amp motor has double-reduction gears. 11" long. 6-ft. 3-wire cord. Carrying case and 5 bits ( $\frac{1}{4}$ - $\frac{1}{2}$ "). U.L. Listed. 115 VAC.  
 26 A 1233 X. Shpg. wt., 12 lbs. . . . . 43.33  
 26 A 2822 X. Drill Alone. 9 lbs. . . . . 38.88



Drill Alone

**38<sup>88</sup>**

Outfit

**43<sup>33</sup>**

Double-insulated variable-speed reversing drills with controlled power you can depend on at any speed from the lowest to the highest. Permits proper speed for each material drilled. Just squeeze trigger for any speed from 0 to full. Flick switch to reverse direction. Rugged double-insulated construction with nylon housing for maximum safety. Infinite speed lock. 2-wire cord plug. Long-life roller bearings. Less bit. 115 VAC.

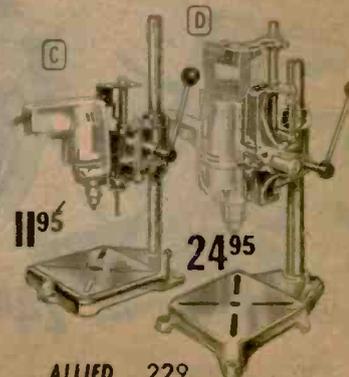
**A** Model 7050  $\frac{1}{4}$ " Drill. Drills  $\frac{1}{4}$ " steel,  $\frac{1}{2}$ " hardwood.  $\frac{1}{4}$ -hp motor rated 3.5 amps. Speed Range, 0-2250 rpm.  
 26 A 1659. Shpg. wt., 4 lbs. . . . . 33.95

**B** Model 7150  $\frac{3}{8}$ " Drill.  $\frac{3}{8}$ " steel,  $\frac{3}{4}$ " wood.  $\frac{1}{4}$ -hp, 3.5 amps, 0-1000 rpm.  
 26 A 1660. Shpg. wt., 5 lbs. . . . . 36.99

### Stands for Radial Drill Press

**C** Thor 580 Drill Stand. Converts electric drill to lever-operated drill press. Holds  $\frac{1}{4}$ " and  $\frac{3}{8}$ " drills. Height, 18". 3" maximum feed. 3" chuck to column. Rack and pinion feed.  
 26 A 1226 X. Shpg. wt., 7 lbs. 11.95

**D** Thor 585 Drill Stand. Heavier construction for heavy-duty model. Easily handles  $\frac{1}{2}$ " and  $\frac{3}{8}$ " drills. Height, 20 $\frac{1}{2}$ ". 2 $\frac{3}{4}$ " maximum feed. 6" chuck to column. 7 $\frac{1}{2}$ " square base. Shpg. wt., 15 lbs.  
 26 A 1227 X. . . . . 24.95



**11<sup>95</sup>**

**24<sup>95</sup>**

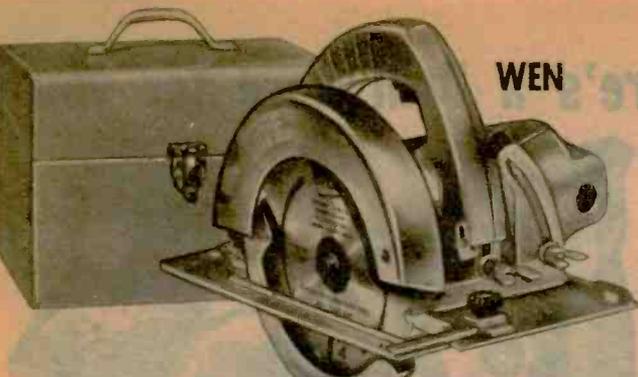
WEN

# Circular Saw values for homeowner or "pro"

## Builder's 7 1/4" heavy-duty Saws

**Model 960.** Boasts powerful 1 3/4 hp, 10-amp motor to give no-load speed of 5200 rpm. Cuts to 2 1/2" at 90°, 1 5/8" at 45°. Life-time lubricated sleeve and needle bearings, heavy-duty gears, heavy baseplate, chip ejector port. Depth, bevel controls, rip guide, removable shoe extension. 110-120 VAC, 3-wire cord. Two 7 1/4" blades, wrench, case. U.L. Listed. 26 A 0023 L3X. With Case, Wt., 17 lbs. .... 46.99  
26 A 2394 X. Saw Alone, 1 Blade, 15 1/4 lbs. .... 36.88

**Model 1000.** Powerful contractor's model, has 2 1/2 hp, 12-amp motor for 5340 rpm no-load speed. Permanently lubricated ball and needle bearings. Extra-heavy base plate, auxiliary knob. Depth and bevel controls, rip guide, removable shoe extension. 110-120 VAC. With two 7 1/4" combination blades, wrench, steel case. U.L. Listed. Shpg. wt., 17 lbs. 26 A 0022 L3X. With Case, .... 59.95  
26 A 1433 X. Saw Alone, 1 Blade, 15 1/2 lbs. .... 49.95



1 3/4 hp Model 960	
With case, 2 blades	Saw alone, 1 blade
<b>46<sup>99</sup></b>	<b>36<sup>88</sup></b>

2 1/2 hp Model 1000	
With case, 2 blades	Saw alone, 1 blade
<b>59<sup>95</sup></b>	<b>49<sup>95</sup></b>

SKIL

29<sup>88</sup>

26<sup>88</sup>  
5 1/2"

Professional quality for finest performance

**79<sup>95</sup>**



### A 7 1/4" Saw with 2 hp motor

**Model 553.** Rugged and dependable, powerful enough for the toughest jobs, ideal for everyday professional use. Sturdy 2 hp, 12-amp motor produces no-load speeds up to 5200 rpm. Depth of cuts to 2 3/8" at 90°, 1 5/8" at 45°. Built-in safety clutch protects blade and motor. Heavy-duty quadrant and ribbed shoe for rigidity, accuracy. Spring-loaded blade guard protects blade when not in use, automatically exposes blade when saw is in use. Sawdust ejector. For 115 VAC. With blade, wrench. Shpg. wt., 16 lbs. 26 A 1442 X. .... 79.95

### B 7 1/4" Saw with 1 1/2 hp motor

**Model 574.** Super value 1 1/2 hp, 7 1/4" homeowner's saw is ideal for those weekend projects. So powerful it even cuts through soft metal. Heavy-duty burn-out protected motor rated at 10 amps, provides speeds up to 5200 rpm, no-load. Cuts to a depth of 2 3/8" at 90°, 1 5/8" at 45°. Safety stop brushes, anti-friction bearings. Vari-Torque clutch protects blade motor. Sawdust ejector. Spring-loaded blade guard to protect blade when saw is not in use. 9 1/2" long. For 115 VAC. 3-wire cord. U.L. Listed. Blade, wrench. Shpg. wt., 12 1/2 lbs. 26 A 3019 X. .... 29.88

### C Homeowner's Saws

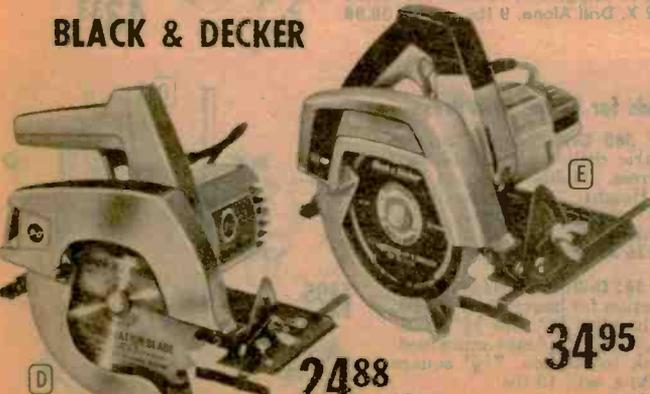
**Model 533.** Perfect for any remodeling or repair job. Rugged 3/4 hp, 5.5-amp motor for no-load speed of 3950 rpm. Uses 5 1/2" blades. Depth and bevel controls; high torque gears. Maximum cut: 1 3/4" at 90°, 1 1/2" at 45°. 1/2" round arbor. For 115 VAC. 3-wire cord. Blade, wrench. Shpg. wt., 9 lbs. 26 A 1437 X. .... 26.88  
26 A 1449 X. **Model 536.** As above, but 6 1/2" blade, 9-amp, 1 1/4 hp motor. Blade, wrench, 11 1/4 lbs. .... 36.88  
26 A 1208 X. **Model 537.** 7 1/4" blade, 10-amp, 1 1/2 hp motor for extra capacity. Blade, wrench, 12 1/2 lbs. .... 42.88

BLACK & DECKER

## 7 1/4" Saws with 1 hp to 1 1/2 hp motors

**D Model 7301.** Tackles a variety of jobs with ease. Powerful 9-amp, 1hp motor delivers 4400 rpm no-load speed. Takes either 6 1/4" or 7 1/4" blades. Cutting depth: 2 3/8" at 90°, 1 5/8" at 45°. Calibrated rip fence; bevel and depth adjustments. Non-binding telescoping blade guard. 3-wire cord. For 110-120 VAC. With 7 1/4" combination blade and wrench. U.L. Listed. Shpg. wt., 16 lbs. 26 A 3610 X. .... 24.88

**E Model U-131.** Powerful 1 1/4 hp motor for extra cutting capacity. Rated 9-amps, 4400 rpm no-load speed. Cord protector in handle keeps cord from interfering with work. Maximum cut: 2 3/8" at 90°, 1 5/8" at 45°. For 7 1/4" or 6 1/2" blades. 3-wire. 110-120 VAC. 7 1/4" blade, wrench. U.L. Wt., 13 1/2 lbs. 26 A 1451 X. .... 34.95  
26 A 1432 X. **Model 231.** As above, but 1 1/2 hp, 9.5-amp motor. With 7 1/4" blade, wrench, 14 3/8 lbs. 44.95



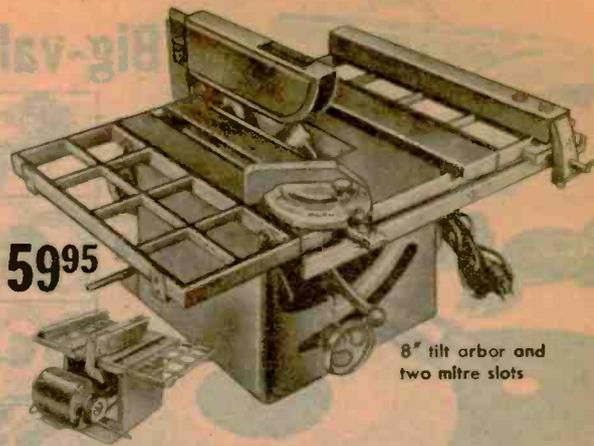
24<sup>88</sup>

34<sup>95</sup>

# Fast-cutting Jigsaws for home or on-the-job

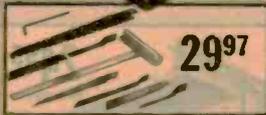
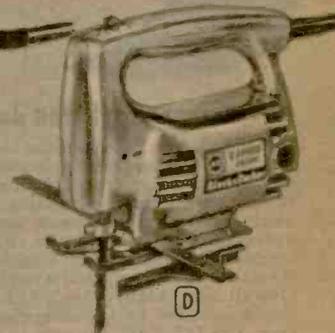
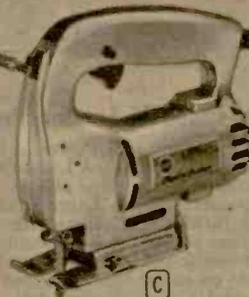
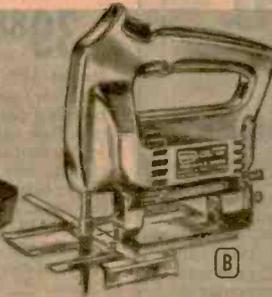
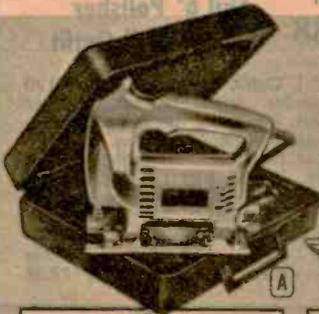
## AMT Tilt Arbor Saw develops 1 full hp

Model 2164MXE. The perfect addition to your shop—this versatile precision table saw crosscuts, rips, bevels, cuts compound angles, mitres, makes dadoes, mouldings, coves. Perfect for precise woodworking and cabinetmaking. Solid-ground 10½x13" cast iron table has two precision mitre gauge slots, one each side of blade, for maximum flexibility. Maximum depth of cut: 2¼". Blade tilts to 45° with easy-access control mounted on front. Ball bearing G.E. motor develops one full hp. Precision depth and angle controls. Complete with 8" blade, rip fence, blade guard. 10" table extensions to support oversize work. For 115 V, 60 Hz AC. Shpg. wt., 44 lbs.  
26 A 1430 U.....59.95

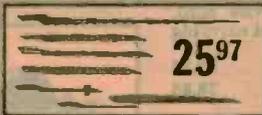


8" tilt arbor and two mitre slots

59.95



29.97



25.97

¼-hp motor 29.99  
.. cuts tile

1/7-hp motor 22.95  
.. big value

## Wen versatile Jigsaw Outfits

**A** 511 2-Speed Jigsaw. Flick the switch to low for starting or cutting metals; switch to high for fast cutting of wood, plastics, etc. Cuts 6" logs, 6x6's, 4x4's at 45°; metals to ½"; pipe to 2". Starts inside cuts. Adjustable shoe. ½ hp, 4-amp motor; 2400 or 2800 one-inch strokes per minute. U.L. Listed. For 115 VAC. With seven blades, carrying and storage case. Shpg. wt., 6¾ lbs.  
26 A 0021 L2X.....29.97  
26 A 1420 X. Saw Alone. With 7 blades. Wt., 5 lbs....26.97

**B** 521 Variable Speed Jigsaw. Thumb control gives exact speed and torque control from 0-2800 one-inch strokes/minute. Adjustable shoe. ½ hp motor. Cuts 6x6 wood, ½" metal, 2" pipe. U.L. 115 VAC. 7 blades. Shpg. wt., 5 lbs.  
26 A 1426 X.....25.97

## Black & Decker multi-purpose Jigsaws

**C** Model U-255S Deluxe 2-speed Jigsaw. Versatile jigsaw lets you select high speed of 3000 strokes per minute for wood, plastics, etc., or low speed of 2500 strokes per minute for soft metal. Cuts hardwood up to 1" thick, soft wood up to 2". Cuts tile. Rugged ¼ hp motor is rated 2.5 amps. Stroke length, ⅝". With woodcutting blade, blade pouch. 115 VAC. U.L. Listed. Shpg. wt., 5¾ lbs.  
26 A 3606.....29.99  
26 A 1539 X. Model 7561 Variable Speed Jigsaw. Similar to above, but variable speed. 6 extra blades. Wt., 5¾ lbs. 44.95

**D** Model U-155 2-Speed Jigsaw. Similar to U-255S but 1/7 hp. Less tile-cutting feature. Rip fence, 2 blades, pouch. 115 VAC. U.L. Shpg. wt., 4¼ lbs.  
26 A 1540 X.....22.95

**E** Complete 41.88

## High-speed Saws for home or shop

**E** Wen 909D. Fast-cutting ½ hp jigsaw does the work of a whole shop full of standard saws. Cuts wood 6x6's, metal to ½" and pipe to 2". Makes its own starting hole—cuts straight or curved lines, angles. Powerful 6-amp motor drives blade at 3400 or 2400 one-inch strokes per minute. Fan keeps rip guide clean. Rip fence, circle guide, 7 blades. U.L. Listed. 115 VAC. Shpg. wt., 10 lbs.  
26 A 0024 L2X. With Steel Case.....41.88  
26 A 2373 X. Saw Alone. With 7 blades. Wt., 9 lbs....36.88

**F** Thor 911 Roto-Blade Speedsaw. Unique speedsaw cuts scrolls, tight curves by simply twisting knob to change direction. Fingertip power steering lets you cut in any direction—or lock blade in position. Cuts wood up to 2" thick, steel up to ½". Angle of cut adjustable to 45°. 3400 ⅝" strokes per minute. With 2 wood blades. 3-wire cord. For 115 VAC. Shpg. wt., 5 lbs.  
26 A 1458 X.....39.95



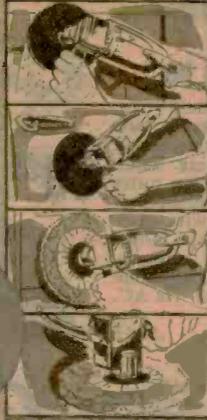
39.95

# Big-value Electric Sanders



With Case  
**43<sup>33</sup>**

Tool Alone  
**38<sup>88</sup>**



## Burnoutproof Wen dual-speed 7" Sander/Polisher

Model 940. Ideally suited for home or shop use. Powerful 1/2-hp, 6-amp, dual-speed motor features burnout-proof armature. Lightweight, perfectly balanced design for quick work on metal, wood or plastic... professional results on automobile sanding, paint removal. Large wool bonnets for waxing and polishing floors, cars, furniture. Designed for fast, efficient operation. 940 electronically switches to 3400 rpm for sanding, 1800 rpm for polishing and buffing. Rugged needle-point bearings and all-gear construction. Auxiliary handle mounts on either side for added convenience. Overall size, 14x6 1/2 x 3 1/2". U.L. and C.S.A. Listed. 6-ft., 3-wire cord. Outfit includes: two sanding discs, polishing bonnet, husky steel carrying case. For 117 VAC.

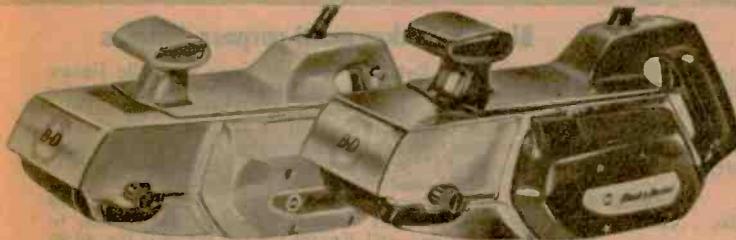
26 A 0019 12U. Outfit with case. Shpg. wt., 12 lbs. .... 43.33  
26 A 2406. Outfit without Case. Shpg. wt., 8 1/2 lbs. .... 38.88



Outfit  
**39<sup>88</sup>** Skill 6" Polisher Sander-Drill Outfit

Model 120-1 Outfit. Includes Model 120 polisher/sander with bonnet, rubber backing pad, 3 sanding discs, wrench, removable side handle. 2000 rpm, 2.5 amp 1/3-hp motor. Outfit also includes: 1/4" drill chuck, key, 5 drill bits (1/16-1/4"), 5-pe. auger bit set for holes to 1" in wood, carrying case. For 117 VAC.

26 A 1558. Outfit. Wt., 8 lbs. .... 39.88  
26 A 1559. Model 120 Polisher/Sander Alone. Less drill access. 5 lbs. .... 29.88



**49<sup>95</sup>** Black & Decker 3x24-in. Belt Sanders **59<sup>95</sup>**

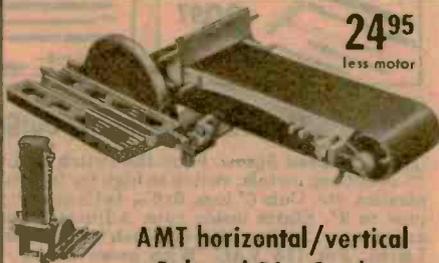
Model U-144 One-Speed. Compact gear-driven sander goes into tight areas, gives smooth professional finish. Has 3/8 hp, 5.2 amp motor between pulleys—no tilting or rocking. Belt moves at 1200 sq. ft./minute for fast operation; 13.8 sq. in. sanding area. Front controls for easy belt installation. For 117 VAC. Accepts dust bag at right. Shpg. wt., 10 3/4 lbs.  
26 A 3645 X. .... 49.95

Model U-244 Two-Speed. Choose the right speed for every job—1250 sq. ft./minute for fast material removal, or 1050 sq. ft./minute for smoother finish. Has 3/4 hp, 5.7 amp motor. For 117 VAC.  
26 A 3646 X. Wt., 10 1/4 lbs. .... 59.95

Zippered Dust Bag and Housing. For U-144 and U-244 sanders. Powered by sander motor. Wt., 2 lbs.  
26 A 3611. .... 7.95

**59<sup>88</sup>** Skill dustless 3" Belt Sander

Model 595. Sands flush to any surface. Fan-driven dust pick-up. Self tensioning mechanism for easy belt changes. Control knob centers belt on pulleys! Bronze bearings, precision cut gears with cog belt drive. Universal 5.5-amp motor. No load speed, 925/minute. With sanding belt. For 117 VAC.  
26 A 1416 X. Shpg. wt., 12 lbs. .... 59.88



**24<sup>95</sup>**  
less motor

AMT horizontal/vertical Belt and Disc Sander

Model 271. Rugged belt sander operates horizontally or vertically; unique track/tension adjustment. Disc sander table tilts to 45°. Drive spindle for 1/4" tools. 117 VAC. Motor sold separately below.  
26 A 1282 X. Shpg. wt., 17 lbs. .... 24.95

26 A 3274 X. G.E. Motor. For above. Develops 1 hp. 1750 rpm. 117 VAC. Shpg. wt., 17 lbs. .... 22.95



Wen in-line Vibrator Sander

**10<sup>95</sup>**

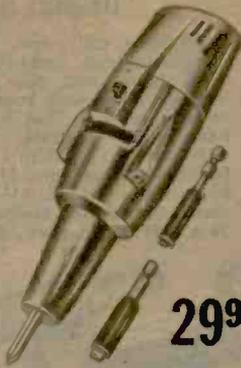
Model 310. Fast removal, smooth finishing. Straight-line action of 7200 3/16" strokes/minute with 26 sq. in. sanding area. Solid-state control. No whip or bounce. 7 1/2 x 3 3/8 x 4 3/4". For 117 VAC.  
26 A 3644. Shpg. wt., 4 lbs. .... 10.95

# Professional-quality Electric Power Tools



## Rockwell 1/2-hp Router with ball bearing motor 49<sup>99</sup>

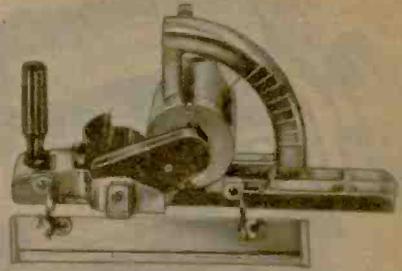
Model 645. Compact, lightweight... with dual knobs for positive control. Double insulated for safety and endurance. Has 1/2-hp, 28,000 rpm motor; depth control; 1/4" collet. With bit for slotting, grooving; bit for corner routing; bit for rabbeting or step-cutting. Adjustable edge guide, instruction book. 117 VAC. 26 A 1052 X. Shpg. wt., 10 lbs. . . . . 49.99



29<sup>95</sup>

## Electric reversible Screwdriver by Shopmate

Model 1895. Zips screws in or out with ease, using high-torque 100:1 gear reduction. Drives both slotted and Phillips head screws. Fan-cooled "Lifeweld" 3-amp motor with clutch action. Ball thrust and self-lubricating bronze bearings. On-off and reversing switches. No-load speed, 325 rpm. Accepts any 1/4" hex shank bit. 8 1/2" long. Includes 2 slotted bits with "head finders" and Phillips bit. 3-wire cord and plug. U.L. Listed. For 117 VAC. Shpg. wt., 3 1/4 lbs. 26 A 1200. . . . . 29.95



• For level or surface planing  
• Rugged 1/2-hp motor 32<sup>97</sup>

## Wen Power Planer - heavy-duty design

Model 930. For professional edges, surfaces and miters. Burnoutproof, 6-amp motor. Two replaceable cutters are separately adjustable; cut a path to 2 1/8" wide, 1/8" deep. Miter guide adjusts to 45°; removes for surface planing. 16" shoe for flatter, more accurate work. No-load speed, 14,500 rpm. Bronze bearings and welded steel armature. Airstream chip ejector. Lightweight aluminum housing. 7 1/2 x 7 x 16". U.L. and C.S.A. Listed. 117 VAC. Wt., 9 3/4 lbs. 26 A 2091 X. . . . . 32.97

## Skil Router with precise depth control

34<sup>88</sup>

Ball bearing  
1/2 hp motor  
—25,000 rpm  
no load speed



Model 548. Versatile power router offers precise performance. Calibrated to 1/2 of an inch. Helical groove permits quick and accurate depth adjustments. Built-in spindle lock for easy bit change. 1/2 hp, 25,000 rpm, 3.7 amp. motor. 1/4" collet. With eye shield. Base plate 5 5/8" diameter. Height 6". 115 V, 60 Hz AC. 26 A 1377 X. Shpg. wt., 6 lbs. . . . . 34.88



44<sup>95</sup>

## Wen 6" Bench Grinder Outfit

Model 1030. Has shaded-pole 8.5-amp, 1/2 hp motor. Twin 6" wheels turn at 3450 rpm. Adjustable tool rests, eye shields, spark arrestors. With fine, coarse wheels; wire, buffing wheels; suction cup feet; 2 dust bags; lamp. 15x5 3/4 x 9 1/2". 117 VAC. 26 A 1058 X. Kit. 20 lbs. . . . . 44.95  
26 A 1059 X. Grinder Alone. With coarse, fine wheels. 18 lbs. . . . . 39.95



29<sup>95</sup>

## Thor 6" Wheel Grinder

Model 928. Low-cost speed grinder performs all grinding, buffing, wire brushing operations. Ideal for home bench or professional shop. Self-aligning oil-less bronze bearings. 115 V, 60 Hz AC 1/4-hp shaded pole motor. 3450 rpm speed. With eye shields, adjustable tool rests. 16" overall length. 26 A 1735 X. Wt., 20 lbs. . . . . 29.95

14<sup>95</sup>  
less  
motor

For the professional carpenter or woodworking hobbyist



## AMT Spindle Shaper

Model 252. Makes decorator edges, beads, coves, moldings, tongue-in-groove joints and more. Fully adjustable, takes 1/2" bore cutters. Sealed ball bearings. With plans for construction of wood table and base. Order motor below. 26 A 1056 X. Shpg. wt., 9 lbs. . . . . 14.95  
26 A 3274 X. AC Motor. Wt., 17 lbs. . . . . 22.95

## AMT 4" Jointer-Planer

Model 2432. Built to make accurate glue joints, rabbet cuts to 3/8", taper and bevel cuts. Precision-ground table adjusts for cut depth; fence adjusts to 50°. Twin balanced heads, 3 high-speed knives. Order motor separately below. 29" long. Shpg. wt., 19 lbs. 26 A 1057 X. . . . . 29.95  
26 A 3274 X. AC Motor. 17 lbs. 22.95



29<sup>95</sup>  
less  
motor

With 3 high-speed knives

# Precision Power Lathe . . it's 5 tools in one

## Unimat multi-purpose 3-inch Lathe



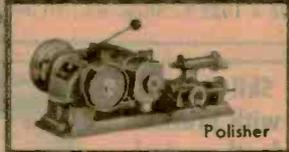
It's a lathe, drill press, milling machine, polisher and grinder . . . all in one compact, precision unit. You can turn, face, grind, buff, saw, sand, thread, mill, drill . . . converts from one operation to another in seconds. Headstock rotates and revolves 360°, removes from bed for vertical set-ups. Has ball bearing spindles accurate to .0005". Ball bearing idler assembly provides 11-speed drive system, powered by self-contained 1/10-hp 115 VAC motor. Lathe handles 3"-dia. pieces, 8.9" between centers. Drill takes pieces 6 1/4" high, drills to center of 6 1/4" circle. Overall, 14 1/2"x5x5". With drill chuck, roughing bit, wood chest, 40-page illustrated handbook. From Austria. 26 A 1431 U. Shpg. wt., 37 lbs. . . . . 139.50

With Motor,  
Drill Chuck,  
Toll Bit and  
Wood Chest

# 139<sup>50</sup>



Surface grinder



Polisher



Milling machine



Universal drill



### Popular Unimat Accessories

- A** 1290 Power Carriage Feed. For fine finishing. 26 A 2443. Wt., 6 lbs. . . . . 24.95
- B** 1240 Circular Saw Attachment. 6x8" table; rip fence; blade guard; arbor. Takes blade to 3 1/2". 26 A 2448. Wt., 4 lbs. . . . . 14.95
- C** 1080 Jig Saw. 6x8" table; with 12 asstd. blades. 26 A 2445. Wt., 6 lbs. . . . . 19.90
- D** 1100 Six 1/4" Lathe Tools. For turning, facing, bore, cut-off. 26 A 1650. Wt., 8 oz. . . . . 10.90
- E** 1040 Steady Rest. Supports 1 1/2" bars and tubing for machining, end drilling. 26 A 2444. Shpg. wt., 1 lb. . . . . 9.95
- F** 1260 Index Head. Divides, spaces for making gears, etc. 26 A 2446. Wt., 1 lb. . . . . 14.95
- G** 1002 4-Jaw Independent Lathe Chuck. For pcs. to 2 1/4". 26 A 1690. Wt., 1 lb. . . . . 23.90
- H** 1001 3-Jaw Universal Chuck. 2 1/4". 26 A 2442. Wt., 1 lb. . . . . 24.95
- I** 1261 Work Plate. Holds work in lathe. 2 3/4". With clamps. 26 A 2447. Wt., 1 lb. . . . . 6.50
- J** 1210 Milling Table. 3x5". Clamps work for milling. 26 A 1689. Wt., 2 lbs. . . . . 12.50
- K** 1010 Machine Vise. Fits cross slide, mill table. Cap. 1 1/8". 26 A 1679. Wt., 13 oz. . . . . 9.50



### Vari-Tool Workshop Kit

# 2750

Includes 16 attachments

An entire workshop in one unit. Perfect for fine engraving, carving, drilling. Speeds through deburring, model building, grinding and more. Works on wood, steel, glass—all materials. Instant-action chuck changes accessories in seconds. Stay-cool Lexan® housing has large vents. Dynamically balanced armature. Includes: 6 sanding discs, polishing wheel, bristle and wire brushes, 2 grinding wheels, mandrel, rotary file, 1/8" drill, 1/8" collet, collet wrench. U.L. Listed. 117 VAC. 26 A 1802. Wt., 2 lbs. . . . . 27.50



### AMT

# 2995

less motor

### Industrial-quality four-foot Wood Lathe with 12" swing

Full-size lathe for big wood-turning jobs. Excellent quality at a modest price. Has swing of 12" for pieces to 12" diameter with 36" maximum between centers. Graduated T-rest assembly, screw-action tailstock ram. Headstock spindle. 3/8"; tailstock spindle, 5/8". Heavy duty spur center, ball thrust cup center. 49" bed. Takes motor below. 26 A 3268 X. Shpg. wt., 29 lbs. . . . . 29.95  
26 A 3274 X. G.E. Motor. Develops full 1 hp. 1750 rpm. For AMT lathe. 115 VAC. Wt., 17 lbs. . . . . 22.95

# Dremel super-powered Moto Tools



**27<sup>95</sup>**

**A** Model 261 Moto Tool Kit. Super-compact Moto Tool fits perfectly in the palm of your hand, handles as easily as a pencil. Performs intricate work with pinpoint accuracy. Has power to spare for demanding work loads. The 0.5-amp motor delivers 30,000 rpm, with torque drop-off so gradual it's almost stall-proof. Dynamically balanced for vibration-free operation. Large vents, high velocity fan. Kit includes 34 accessories, same as Model 271 below. 115 VAC. U.L. Listed.  
26 A 3195. 3 lbs. . . . . 27.95  
26 A 3249. 260 Tool Alone. 2 lbs. . . . . 21.95



**B** Model 281 Heavy duty Moto Tool Kit. Similar to Model 271 below, but has super-power Moto Tool with extra-rugged ball bearing construction. For its size, this is the fastest, most powerful hand grinder you can buy. Has permanent-magnet 0.9-amp motor with full-wave rectifier—runs at 30,000 rpm, no-load. Weighs only 11 oz. Kit has 34 accessories, same as Model 271 below. U.L. Listed. 115 VAC. Shpg. wt., 3 lbs.  
26 A 3260. . . . . 44.95  
26 A 3261. 280 Tool Alone. 2 lbs. . . . . 38.95



**44<sup>95</sup>**

**C** Model 271 Moto Tool Kit. Permanent-magnet 0.8-amp motor with full-wave rectifier (30,000 rpm, no-load). Vibration-free; high velocity cooling fan. Self-lub. bronze bearings, pencil grip extension for detail work. 7 1/4" long. Only 11 oz. Kit includes 34 accessories: high speed steel cutters, grinding wheels, rubber polishing tip, brushes, sanding discs, drum sander, mandrels, dressing stone, wrench, 4 collets (1/8", 3/16", 1/4", 5/16"). case. For 115 VAC. U.L. Listed.  
26 A 2128. Shpg. wt., 3 lbs. . . . . 32.95  
26 A 2127. 271 Tool Alone. Shpg. wt., 2 lbs. . . . . 26.95



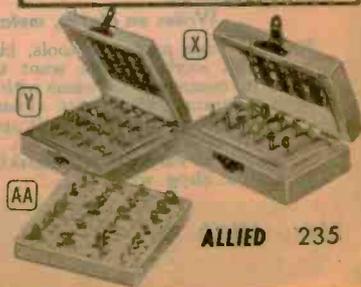
**32<sup>95</sup>**



- D** No. 428 Wire Brush. Wt., 1 oz. . . . . 50¢  
26 A 2929. . . . .
- E** No. 442 Wire Brush. Wt., 1 oz. . . . . 50¢  
26 A 2930. . . . .
- F** No. 443 Wire Brush. Wt., 1 oz. . . . . 50¢  
26 A 2931. . . . .
- G** No. 407 Drum Sander. 1/2" dia. . . . . 1.00  
26 A 2932. Wt., 1 oz. . . . . 1.00  
26 A 2933. No. 430. 3/8" dia. . . . . 1.00
- H** Drum Sander Bands. Pkg. 12  
26 A 2934. 432. 1/2" fine. 4 oz. . . . . 50¢  
26 A 2935. 408. 1/2" coarse. 4 oz. . . . . 50¢  
26 A 2936. 431. 3/8" coarse. 4 oz. . . . . 50¢  
26 A 2938. 433. 3/8" fine. 4 oz. . . . . 50¢
- J** No. 406 Steel Saw. .005" thick. . . . . 1.00  
26 A 3002. Wt., 1 oz. . . . . 1.00  
26 A 3003. 400. .023" thick . . . . . 1.00
- K** No. 101 1/8" Routing Cutter. . . . . 1.25  
26 A 3004. Wt., 1 oz. . . . .
- L** No. 103 3/16" Routing Cutter. . . . . 1.25  
26 A 3005. Wt., 1 oz. . . . .
- M** No. 104 1/8" Routing Cutter. . . . . 1.25  
26 A 3010. Wt., 1 oz. . . . .
- No. 650 1/8" Straight Cutter Bit. . . . . 3.00  
26 A 1063. Wt., 2 oz. . . . .
- No. 652 3/16" Straight Cutter Bit. . . . . 3.00  
26 A 1204. Wt., 2 oz. . . . .
- No. 654 1/4" Straight Cutter Bit. . . . . 3.00  
26 A 1124. Wt., 2 oz. . . . .
- No. 610 Convex Edger for Beading. . . . . 3.00  
26 A 1291. Wt., 2 oz. . . . .
- No. 632 Veining Bit for Line Work. . . . . 3.00  
26 A 1135. Wt., 2 oz. . . . .

- No. 640 "V" Grooving Bit for Lettering. Chamfer edges. . . . . 3.00  
26 A 1292. Wt., 3 oz. . . . .
- N** No. 409 Emery Cutting Wheels. . . . . Pkg. 36/1.50  
26 A 3011. 1 oz. . . . .
- P** No. 412 Med. Sanding Discs., 1 oz. . . . . Box of 100/50¢  
26 A 2433. . . . .
- R** No. 223 Universal Stand. Leaves hands free, can be set at any angle. Cast-iron base will not tip. . . . . 6.95  
26 A 2480. Wt., 2 1/2 lbs. . . . .
- S** No. 224 Shaping Table. Use with 223 Stand for routing, grinding. Raises, lowers to adjust cut depth. . . . . 3.95  
26 A 2485. Wt., 8 oz. . . . .
- T** No. 225 Drill Press. Perfect for precision drilling, miniature routing. Table can be raised, lowered; locks in position. Steel. 12" high. . . . . 12.95  
26 A 2491. Wt., 3 lbs. . . . .
- W** No. 229 Router Attachment. Designed to put you closer to the work for greater visibility, ease of control. Constructed of steel and Delrin® for long life. Infinite depth adjustment; integral guide bars. . . . . 9.95  
26 A 1025. Wt., 1 lb. . . . .
- X** No. 220 12-Pc. Cutter Set. . . . . 15.00  
26 A 3137. Wt., 1 lb. . . . .
- Y** No. 240 24-Pc. Cutter Set. . . . . 30.00  
26 A 3138. Wt., 2 lbs. . . . .
- AA** Emery Wheel Grinding Stones. . . . . Pkg. 33/16.50  
26 A 3102. 12 oz. . . . .

## MOTO-TOOL ACCESSORIES FOR ADDED VERSATILITY



# Power Workshop, Sprayers, Electric Pencil



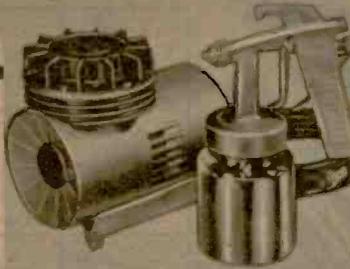
**39<sup>95</sup>**  
\$5 monthly\*



## Dremel Moto-Shop Power Workshop

- Five multipurpose power tools in one machine
- Powered by ball-bearing 3450-rpm rotary motor
- Table can be tilted for precision angle cuts

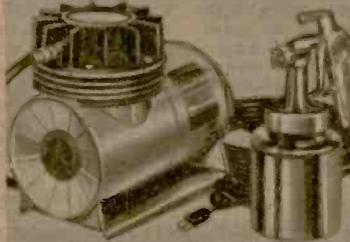
Model 57. Versatile Moto-Shop operates five different tools with unique power takeoff. With attachments connected, 15" jigsaw becomes disc sander, bench grinder, buffing wheel or flexible shaft machine. Jigsaw has four blades, each adapts in three directions. Table tilts for angle cuts. Lightweight flexible-shaft handpiece has  $\frac{1}{4}$  to  $\frac{1}{8}$ " capacity. With finger guard, 12 bits for drilling, grinding, routing, sharpening, deburring, carving. Attachments included: rubber backing pad, 3 sanding discs, grinder, buffer, wire brush, wheel guard, polishing stick. U.L. Listed. 117 VAC. 26 A 1834 X. Shpg. wt., 17 lbs. . . . . 39.95



"Compact" fan-nozzled Paint Spray Outfit

**34<sup>95</sup>**  
\$5 monthly\*

Internal mix gun sprays enamel, flat, oil and water-base paint, varnish, household liquids. Pint cup, adjustable trigger, 8-ft. detachable hose. Oil-free compressor has heat-resistant diaphragm, replaceable air filter. Quiet, never needs oiling. Direct-drive motor. Air delivery 1.1 cfm U.L. Listed. For 115 VAC. 26 A 2363 X. Shpg. wt., 17 lbs. . . . . 34.95



Deluxe  $\frac{1}{3}$ -hp all-purpose Spray Outfit

**59<sup>95</sup>** \$5 monthly\*

Sprays all paints, lacquers, enamels, household liquids. One-quart cup, internal and external-mix nozzles. Oil-less compressor has 1000-hour diaphragm, sealed ball bearings, removable air filter, safety valve. Siphon or pressure feed. Air delivery, 2 $\frac{1}{2}$  cfm. Lifetime-lubricated; 15-ft. hose. U.L. Listed. For 115 VAC. 26 A 3100 X. Shpg. wt., 30 lbs. . . . . 59.95



BVI complete electric Paint Sprayer Kit

**17<sup>95</sup>**

Model VS-868. Airless sprayer gives easy, professional results. Just plug in to spray paint, enamel, varnish, lacquer, insecticides, chemicals. Built-in pump and motor, sapphire nozzle, 24-oz. glass jar. Cleans and lubricates itself. 6-ft. cord. Kit includes fan-spray nozzle, viscosity cup for thinning paint. For 115 VAC. 26 A 1009. Shpg. wt., 6 lbs. . . . . 17.95  
26 A 1018. Airless Paint Sprayer Alone. 4 $\frac{1}{2}$  lbs. . . . . 13.95

## BVI Electric Pencil for permanent engraving

**6<sup>95</sup>**



Writes on plastic, metal, wood

Engrave your name on tools, ladders, flashlights, hub caps, anything you want to call your own. Dress up commonplace items with attractive designs or monograms. Marks are clean and permanent. Completely automatic—pick it up, it turns itself on; put it down, it turns itself off. Adjustment knob allows you to vary width of marking. 117 VAC. 26 A 2106. Shpg. wt., 1 lb. . . . . 6.95



Hobbyist air brush Paint Sprayer Outfit

**24<sup>95</sup>** \$5 monthly\*

Perfect for shading, silhouetting, stencils, and touch-up. Ideal for hobby and model use, ceramics and sign painting. Includes compressor with air hose, shading brush with two nozzles, and paint storage jars. For 110-120 V. 60 Hz AC. 26 A 3639 X. Wt., 8 $\frac{3}{4}$  lbs. 24.95

# Dymo Labelmakers and Kits for everyone

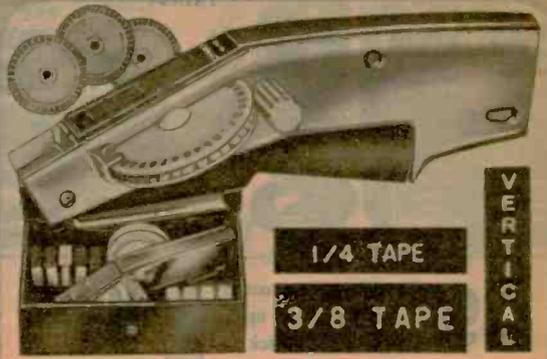
988



## Low-cost Kit for both 1/4" and 3/8" tapes

Model M-6. Makes raised-letter labels that are self-adhesive, permanent, waterproof. Just dial each letter, number, or symbol and squeeze handle. Squeeze trigger to snip off finished label. Kit: plastic embossing tool, 2 wheels for large, small characters, three 3/8" and two 1/4" rolls of tape, case. Order extra tapes below.

26 A 3183. Shpg. wt., 1 1/2 lbs. . . . . 9.88  
26 A 3184. Tool Alone. Shpg. wt., 10 oz. . . . . 6.88



1/4" TAPE

3/8" TAPE

VERTICAL

1995

## All-metal Tool embosses 1/4", 3/8" and vertically

Model M-10. Our best selling labeling outfit. Labelmaker is polished-chrome-finished for durability and smart appearance. Outfit includes: embossing tool, three wheels, ten rolls of tape, and compact 3x6x9" storage case. One wheel embosses standard-size characters on 1/4" tape, one wheel embosses giant-size characters on 3/8" tape, and the third wheel embosses vertically! Five 3/8" and five 1/4" rolls of assorted-color tape. See below for extra-color or replacement tapes.

26 A 1355. Shpg. wt., 2 lbs. . . . . 19.95  
26 A 1353. Tool Alone. With two wheels and 12-ft. roll of tape. Shpg. wt., 13 oz. . . . . 14.95

3495



## Deluxe Tool prints 3/8", 1/2", vertical

Model M-20. Versatile kit ideal for office, workshop or home use. Handles all medium- or large-tape jobs. Precision-made embossing tool, 3 wheels, five 3/8" and five 1/2" tapes, case. Wheel for 3/8" tapes embosses basic-size letters, 1/2" wheel for giant letters. Third wheel embosses letters vertically! Order extra tapes below.

26 A 3185. Shpg. wt., 4 lbs. . . . . 34.95  
26 A 3186. Tool Alone. Shpg. wt., 2 1/2 lbs. . . . . 24.95

1/4" or 3/8"

288



## Budget-Line Labelmakers

Perfect for light-duty embossing work. Tough plastic 6 1/2" body is extremely resistant to breakage and chipping. Embosses 40 different characters. Choice of model with 1/4" or 3/8" wheel. Order tape from listing below. Wt., 10 oz.

26 A 2142. M-4. For use with 1/4" tape (below) . . . . . 2.88  
26 A 2803. M-38. For use with 3/8" tape (below) . . . . . 2.88

Vertical or Horizontal

695



## Two-way home Labelmaker Kit

Model 1700. Sturdy high-impact plastic labelmaker takes 3/8" vinyl tape in easy-to-use magazine. Has automatic pull-tab cut-off. Tool, standard embossing wheel, special wheel for vertical letters, 3 tapes, case. Extra tapes below.

26 A 3936. Wt., 1 lb. . . . . 6.95  
26 A 3968. Tool Alone. With 2 embossing wheels, 1 tape. Shpg. wt., 12 oz. . . . . 4.95

## Slimline Tool prints 3/8", 1/2", vertically

1995

Model 1470. Ideal for studio, classroom, workshop, or office. Slim tapewriter stores flat in drawer or briefcase! With two wheels for 3/8" and 1/2" tapes; third wheel for vertical characters; two rolls 1/2" vinyl tape—one black, one red; case.

26 A 1519. Shpg. wt., 1 3/4 lbs. . . . . 19.95  
26 A 1520. Tool Alone. 1 lb. . . . . 16.95



## Slimline Tool for 1/4" and 3/8" tapes

1495

Model 1450. Easy-to-store tapewriter measures only 8 1/4" x 2 1/2" x 1 1/4". Brushed aluminum and plastic. Kit includes tool, two wheels for large and small characters, one magazine of 1/4" red vinyl tape, one magazine of 3/8" black vinyl tape, carrying case.

26 A 1653. Shpg. wt., 1 1/4 lbs. . . . . 14.95  
26 A 1654. Tool Alone. 1 lb. . . . . 12.95



## Genuine Dymo Label-making Tape for all tapewriters on this page

Stick to almost any clean, smooth surface. Can even be used outside; hold-up well in all weather. In solid and gold-

striped colors. Colors (not size) may be assorted for extra savings. Av. shpg. wt., 1 oz.

Stock No.	Tape Size	Use With Labelmaker	Ft.	Type	Colors—Be Sure to Specify Choice	EACH ROLL	
						1-2	3-Up
26 A 2473 C	1/4"	M-4, M-6, M-10, 1450	12	Solid	Clear, Red, Org., Blue, Grn., Yel., Brn., Blk., Gray, Gold, Walnut	.89	.75
26 A 1884 C	3/8"	M-38, 1700, M-6, M-10, M-20, 1450, 1470	12	Solid	Red, Org., Blue, Grn., Yel., Brn., Blk., Gold, Walnut	.99	.89
26 A 2017 C	3/8"	M-38, 1700, M-6, M-10, M-20, 1450, 1470	10	Stripe	Red, Blue, Grn., Brn., Blk. (gold edges)	1.35	1.19
26 A 1903 C	1/2"	M-20, 1470	12	Solid	Clear, Red, Org., Blue, Grn., Brn., Blk., Walnut, Yel., Gray	1.49	1.25
26 A 2009 C	1/2"	M-20, 1470	12	Stripe	Red, Blue, Grn., Brn., Blk. (gold edges)	1.79	1.59

# Welding Outfits and Torches for home and shop



**139<sup>95</sup>**

60 primary amps  
welds metal up  
to 1-inch thick

**119<sup>95</sup>**

35 primary amps  
welds metal up  
to 1/2-inch thick

**79<sup>95</sup>**

29 primary amps  
welds metal up  
to 1/4-inch thick

## 180-amp industrial Welder

MODEL 180A-3C7. Our finest heavy-duty industrial arc welding outfit. Welds metal up to 1-inch thick, handles welding rods  $\frac{3}{64}$ " to  $\frac{3}{16}$ ". Boasts heavy-duty transformer and extra-stable arc of 25-30 arc volts. Has 16 instant-heat stages to 180 amps. 60 primary amps, 79% power factor.

Continuous operation with 30% duty cycle. Dual-coil design; special insulation. Includes: head shield; electrode holder; electrodes; welding, ground, power cables; ground clamp; instructions.  $25\frac{3}{4} \times 16 \times 11\frac{1}{2}$ ". For 110/220 V, 50-60 Hz AC.

26 A 3635 Z. Shpg. wt., 90 lbs... 139.95

## Heavy-duty 125-amp Outfit

MODEL 125A-11A5. Heavy-duty arc-welding outfit. Continuous manual duty cycle for fast production and maintenance work. Handles  $\frac{1}{16}$ " to  $\frac{5}{64}$ " rods on metal to  $\frac{1}{2}$ " thick. 25-30 arc-volts. Offers 16 instant-heat stages from 20 to 125 amps. 35 primary amps. 75% power factor.

Includes: head shield; welding, ground, power cables; ground clamp; 3-prong plug; assorted electrodes; electrode holder; instructions. Dual head construction. Welded metal cabinet in heat-resistant gray enamel.  $12\frac{1}{4} \times 16 \times 11\frac{1}{2}$ ". For 110-220 V, 50-60 Hz AC.

26 A 1115 Z. Shpg. wt., 82 lbs... 119.95

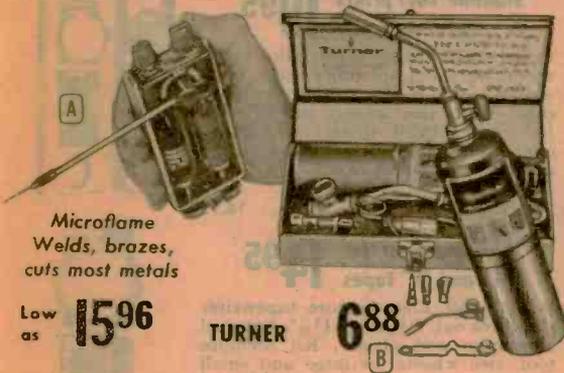
## Portable 80-amp Welding Outfit

MODEL 80A-11A4. Complete industrial-type outfit handles  $\frac{1}{16}$ " to  $\frac{3}{64}$ " rods on metal up to  $\frac{1}{4}$ " thick. Continuous duty. Provides 9 heat stages from 20-80 amps. 25 arc volts. 29 primary amps with 80% power factor.

Includes: head shield; welding, ground, power cables; ground clamp; 3-prong plug; electrode holder; assorted electrodes; instructions. Welded gray metal cabinet,  $9\frac{1}{4} \times 12\frac{1}{2} \times 9\frac{1}{4}$ ". For 117 volt, 50-60 Hz AC.

26 A 1116 U. Shpg. wt., 39 lbs... 79.95

MODEL D-17 Carbon Arc Torch. Gives constant 9000°F arc. For all models. 26 A 1576 X. Shpg. wt., 4 lbs... 24.95



Microflame  
Welds, brazes,  
cuts most metals

Low  
as **15<sup>96</sup>**

TURNER

**688**

### A Versatile Microflame miniature Torch

Self-contained torch uses miniature oxygen and LP cylinders. Develops over 5000°F. Only  $5\frac{1}{4} \times 2 \times 1\frac{1}{4}$ ". 3 tips, torch tube, gaskets, 2 oxygen and 1 butane cylinders, instructions. In plastic box. Shpg. wt., 1 lb.

26 A 3275. 1-5 Each 17.95 6-Up... Each 15.96

26 A 3276. Oxygen Cylinder... Each .75

2-5... Each .70 6-Up... Each .60

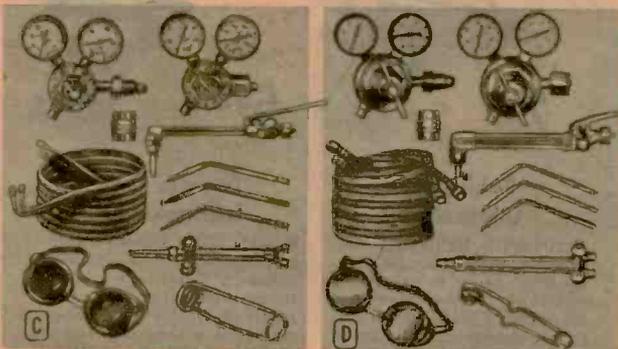
26 A 3277. Butane Cylinder... Each .50

2-5... Each .45 6-Up... Each .40

### B All-purpose propane-gas Torch Outfit

LP-99. For a wide variety of uses. Brass torch has heavy-duty valve with drag spring on knob. Includes: pencil-point burner; heavy-duty burner; brass flame spreader; copper chisel-point solder tip; tank of fuel; spark lighter; steel case.  $3 \times 10\frac{1}{2} \times 6$ ". U.L. Listed.

26 A 1081 X. Shpg. wt.,  $4\frac{1}{2}$  lbs... 7.88



### C Turner oxyacetylene/propane Welding Outfit

Designed for expert welding, cutting, brazing, soldering or heating. Welds metal up to  $\frac{1}{4}$ " thick; cuts metal up to  $1\frac{1}{2}$ " thick. Professionally-rated, single-stage outfit includes: torch handle and mixer assembly; oxygen regulator; acetylene or propane regulator; three welding tips—numbers 1, 5 and 8.

Also cutting attachment, tip; goggles; spark lighter; 12 $\frac{1}{2}$ -ft. hose; fittings and adapters. Needs only oxygen and acetylene or propane cylinders. Shpg. wt., 17 lbs.

26 A 1522 X... 89.50

### D Turner heavy-duty welding/cutting Outfit

Welds metal to 1", cuts to 2". Includes: torch handle and mixer assembly; oxygen regulator; regulator for acetylene or propane; 3 welding tips; cutting attachment and tip; goggles; spark lighter; 20-ft. of hose; fittings and adapters. Needs only oxygen and acetylene or propane cylinders.

26 A 1454 X. Shpg. wt., 22 lbs... 109.95

# Weller Soldering Tools, Soldering Gun Outfits

**Model 8200 PK Soldering Outfit.** Economical soldering kit has everything you need for fast, easy soldering. Includes: 100/140-watt dual-heat "Expert" soldering gun; three (2 spare) copper soldering tips; wrench; brush; solder-aid tool; solder; instructions. Balanced gun has spotlight to illuminate work. In hi-impact plastic case. U.L. Listed. For 117 VAC. 26 A 2059. Shpg. wt., 2½ lbs. 7.95  
26 A 2058. Gun Alone. 2 lbs. 6.60

**Model D550PK Soldering Outfit.** Heavy-duty outfit includes: 240/325-watt dual-heat soldering gun; 3 tips—soldering, cutting, smoothing; case; wrench; solder; instructions. 2 trigger positions select 2 temperatures—instantly provides heat suited for job. Copper tips, dual lights. U.L. Listed. 117 VAC. 26 A 2057. Shpg. wt., 5½ lbs. 11.60  
26 A 1496. Model D550 Soldering Gun Alone. Shpg. wt., 4 lbs. 9.95

**Model D-440 Medium-Duty Soldering Gun.** Convenient trigger selection of either 145 or 210 watts lets you choose the proper heat required for the job. Almost instant warm-up of the tip makes it perfect for a wide variety of uses—no waiting for tip to heat. Dual pre-focused spotlights illuminate work. Includes efficient, long-life copper tip. U.L. Listed. 117 VAC. 26 A 1497. Shpg. wt., 3 lbs. 9.15



795 Model 8200 PK

1160 Model D550PK

915 Model D-440

## "Tempmatic" temperature controlled Soldering Tool



Low as 795

Powerheads can be switched quickly and easily for top versatility and convenience

**Model GT-7A.** Fast-heating trigger action gun. Changeable temperature controlled powerheads. Eject one, push in another. Premium plated 700°F 3/16" chisel point powerhead. 117 VAC. Shpg. wt., 3 lbs. 26 A 1694. 1-2. . . . . Each 9.95  
3-11. . . . . Each 8.95 12-Up. . . . . Each 7.95  
**Model GT-6B.** Above, but 600°F 1/8" conical point powerhead. 3 lbs. 26 A 1695. 1-2. . . . . Each 9.95  
3-11. . . . . Each 8.95 12-Up. . . . . Each 7.95  
26 A 1696. GT Gun. 1 lb. . . . . 3.00  
26 A 1697. 7A Pwrhd. 1/2 lb. . . . . 6.95  
26 A 1698. 6B Pwrhd. 1/2 lb. . . . . 6.95

## Weller Tips and Accessories

### Versatile Accessory Tips. 3 oz.

Stock No.	Type	Descrp.	For Models	EA.
26 A 1516	6110	Cutting	WS-100, WD-135, S-400, D-440	.50
26 A 1517	6120	Smoothing	8100 (B), 8200, 50	
26 A 1518	6130	Cutting	WS-200, S-500, 50	
26 A 1521	6140	Smoothing	D-550, 8250A, 50	

### Replacement Tips. 2 per pkg. 3 oz.

Stock No.	Type	Use With Models	EA.
26 A 1476	7135	WS-100, WD-135, S-400, D-440, 8200	.50
26 A 1475	7250	WS-200, WD-250, S-500, D-550, 8250A	.50
26 A 1477	7300	S-107, D-207. Not interchangeable with above.	.50
26 A 1209	8125	8100B, 8200	.50

### Replacement Parts. Type 7325 and 7417 are nuts for connecting tips to gun. 7324 is trigger switch. 3 oz.

26 A 1491	7325	D-440, S-440, 8100, 8100B, 8200	.20
26 A 1494	7417	D-550, S-500, 8250A	.20
26 A 1493	7324	All Dual-heat types	1.20

## Wen Replacement Tips

For Models 450 and 222. Light duty, 25-100W; medium 100-200W; heavy, 200-450W. \*For Model 450 only. 2 oz.

Stock No.	Type	Tip	EA.
26 A 2675	45F7	Light-duty	.98
26 A 2676	45M7	Medium-duty	.98
26 A 2677	45A7	Heavy-duty*	.98
26 A 2678	45P57	Smoothing	.45
26 A 2679	45S7	Cutting	.45

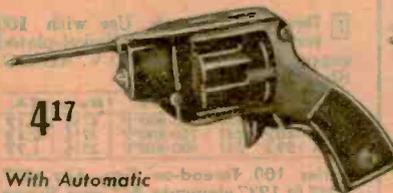
For Model 75. Av. shpg. wt., 4 oz.

26 A 2029	75A7	Standard solder	.70
26 A 2031	75B7	Fine point	.70

## Wen Soldering Guns

1172

**Model 450K4 Multipurpose Soldering Outfit.** 25 to 450 watt gun has Automatic Thermal Regulation for more heating power on less current. Three tips—25-100 watt, 100-200 watt, 200-450 watt. With solder in shock-resistant case. Spotlight, 11" long with tip. 117 VAC. 26 A 3267. Shpg. wt., 5 lbs. 11.72  
26 A 2674. Model 450 Gun Alone. With 45 A 7 tip. Wt., 3 lbs. 9.97



417

With Automatic Thermal Regulation

**Model 75 Soldering Pistol.** Gives heat of 100-watt device from peak surge of only 50 watts and normal draw of 30 watts—automatically. Instant heat. Heavy copper tip for repeated dressing down; single set-screw. U.L., C.S.A. Listed. 117 VAC. 26 A 2479. Shpg. wt., 1¼ lbs. 4.17



879

**Model 222K5 Dual-Heat Soldering Outfit.** Two heat ranges depending on tip: 25-100 or 100-200 watts. Automatic Thermal Regulation. Smoothing and cutting tips. Spotlight, 9¼" long. U.L. and C.S.A. Listed. 117 VAC. 26 A 1023. Shpg. wt., 4 lbs. 8.79  
26 A 1022. Gun Alone. 2¼ lbs. 5.83

# Ungar Soldering Tools

## Professional Soldering Gun for ICs and FETs

Lightweight, less than 5 oz.



Model 6760

995

Model 6760. Designed for service technicians and serious electronics hobbyists. Features soldering tip electrically isolated from heating element to assure safe, damage-free soldering of integrated circuits and field effect transistors. Solid-state design permits dramatic weight reduction. Has replaceable tips. Dual "hi-lo" heat control allows instant selection of temperature of approximately 500° F. or 900° F. With 3 interchangeable tips to handle almost any high-density circuitry soldering. 26 A 1734. Shpg. wt., ½ lb. 9.95

## High-heating pencil-type Soldering Kit

Air-flow handle for cooler grip



Model 7070

Low as

448

Model 7070 Outfit. Ideal for kit construction and general solid-state electronics work. Air-flow design provides cooler grip. Outfit contains: Type 1237 heating unit (37½ watts, temperature 750° F. to 800° F.); Type 777 lightweight pastel-colored polypropylene handle (will not crumble or dust); three interchangeable thread-on copper tips (pencil, chisel and pyramid) to handle virtually every soldering job; spool of 60/40 resin core solder. For 117 VAC. U.L. Listed. Shpg. wt., 1 lb. 26 A 1036. 1-5. Each 4.88 6-Up. Each 4.48

Low as

136

## 776 and 777 fatigue-free Handles with Cord

Type 776 Handle. Accepts variety of thread-in elements and tips. Spring socket holds tip firmly—can't wobble or give. Non-conductive ceramic and glass internal insulation. Stainless steel deflector. Cork grip and thermo-stabilized 5" phenolic body; vinyl-covered cord. U.L. Listed. Order appropriate elements and soldering tips at right. Shpg. wt., 4 oz.

26 A 1304. 1-9. Each 1.65  
10-Up. Each 1.36

Type 777 Handle. Same as 776 above, but made of pastel-colored phenolic. Heat stabilized octagon-shaped grip is convection cooled. U.L. Listed. Shpg. wt., 4 oz.

26 A 1029. 1-9. Each 1.87  
10-Up. Each 1.53



**A** Soldering Iron Holder. Wire guard protects user from burns, also protects iron. Mounts on any bench or wall. Adjust angle. 8 oz. 26 A 1606. For Standard Line... 1.95  
26 A 1702. For Imperial Irons... 1.95

**B** Type 8001 Anti-Seize Compound. Prevents tip from "freezing" to element, lubricates threads. Reduces seizure and corrosion. ½-oz. tube. Shpg. wt., 3 oz. 26 A 1356. 65

## Elements with Tips



For 776 and 777 Handles

Fit 776 and 777 handles. 533, 536, 539, 1233, copper alloy tip; 1236 and 1239, silver-plated iron; 4033, 4036, 4039, silver-plated iron-clad copper alloy. U.L. Listed. 115 V, AC-DC. 2 oz.

23½ WATTS—650-700° F.

Stock No.	Type	Fig.	Tip	EA.
26 A 1400	533	C	Chisel, 1½x¼"	1.52
26 A 1478	536	D	Pyramid, 1½x¾"	1.52
26 A 1479	539	E	Chisel, 1½x¾"	1.52

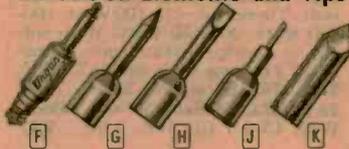
37½ WATTS—750-800° F.

Stock No.	Type	Fig.	Tip	EA.
26 A 1401	1233	C	Chisel, 1½x¼"	1.92
26 A 1480	1236	D	Pyramid, 1½x¾"	1.92
26 A 1481	1239	E	Chisel, 1½x¾"	1.92

47½ WATTS—850-1000° F.

Stock No.	Type	Fig.	Tip	EA.
26 A 1498	4033	C	Chisel, 1½x¼"	3.17
26 A 1499	4036	D	Pyramid, 1½x¾"	3.17
26 A 1500	4039	E	Chisel, 1½x¾"	3.17

## Thread-on Elements and Tips



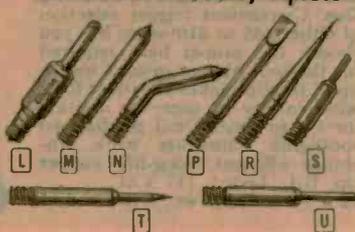
**F** Thread-on Elements. Use with 100 series thread-on tips. Nickel-plated copper alloy. For 110-120 V, AC-DC. Shpg. wt., 2 oz.

Stock No.	Type	Temp.	Watts	EA.
26 A 1403	4037	850-900° F	47½	3.17
26 A 1402	1237	750-800° F	37½	2.13
26 A 1593	537	600-650° F	23½	1.77

Series 100 Thread-on Tips. For 537, 4037 or 1237 elements. ¾" long. Silver-clad copper alloy tips, except \*unplated. Shpg. wt., 2 oz.

Stock No.	Type	Fig.	Description	EA.
26 A 1404	PL-111	G	pencil	.80
26 A 1406	111*	G	pencil	.40
26 A 1405	PL-113	H	chisel	.80
26 A 1407	113*	H	chisel	.40
26 A 1040	PL-114	J	micro-spade	.80
26 A 1041	PL-116	K	pyramid	.80
26 A 1048	116*	K	pyramid	.40

## Thread-In Elements, Tiptets



**L** Thread-in Elements. For Tiptets. Fit 776 and 777 handles. 535, 1235, 4035 fit ½" Tiptets; 4045 fits ¾" Tiptets and tips. Shpg. wt., 4 oz.

Stock No.	Type	Tip Temp.	Watts	EA.
26 A 1482	535	600-650° F	23½	1.52
26 A 1488	1235	700-750° F	37½	1.92
26 A 1490	4035	800-850° F	47½	3.17
26 A 1105	4045	800-850° F	47½	3.17

## Series 300 ¼" O.D. Tiptets

For subminiature work. Thread into 535, 1235, 4035 elements (above) Silver-plated, iron-clad copper alloy tips, except \*unplated copper. 1" long, except PL-332 and 332, 1¼"; PL-340, 5/8". PL-338, 7154, 7155 have ¼" point; PL-340, ¾" point. 7154, 7155 are Stepped Tiptets. 2 oz.

Stock No.	Type	Fig.	Description	EA.
26 A 1469	PL-331	M	Pencil	.60
26 A 1483	331*	M	Pencil	.25
26 A 1470	PL-332	N	Offset pencil	.60
26 A 1484	332*	N	Offset pencil	.25
26 A 1471	PL-333	P	Chisel	.60
26 A 1495	333*	P	Chisel	.25
26 A 1101	PL-338	R	Tapered needle	.60
26 A 1409	PL-340	S	Micro-spade	.60
26 A 1755	7154	T	Stepped pencil	.60
26 A 2068	7155	U	Stepped chisel	.60

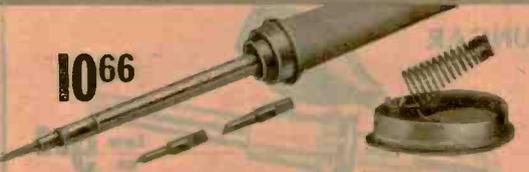
## Series 800 ¾" O.D. Tiptets

As above, but with ¾" shanks. Use with 4045 element, above. Iron-plated except \*unplated. 1" long except PL-833 and 834. 1¼" long taper. 2 oz.

Stock No.	Type	Fig.	Description	EA.
26 A 1410	PL-823	...	Pyramid	.70
26 A 2023	823*	...	Pyramid	.30
26 A 1411	PL-824	P	Chisel	.70
26 A 2024	824*	P	Chisel	.30
26 A 1412	PL-833	P	Chisel	1.00
26 A 1413	PL-834	N	Offset chisel	1.00

# Ungar Soldering Outfits and Accessories

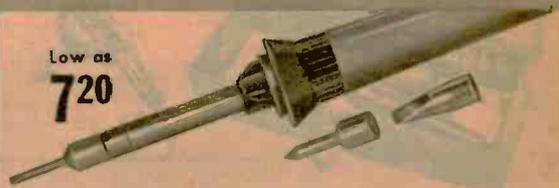
1066



## Microminiature component Soldering Outfit

Model 6900. A perfect workbench combination for soldering micro-electronic circuitry. It's like working with a fine ball-point pen. Ideally suited for hair-thin wire, micro-resistors, capacitors and diodes. With turquoise handle, two-wire cord, 10-watt heat capsule, three soldering tips, iron holder, and cleaning sponge. For 110-120 V, 60 Hz AC. 26 A 1570. Shpg. wt., 10 oz. . . . . 10.66

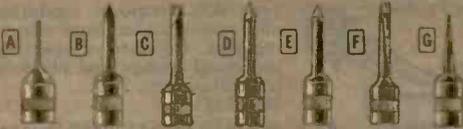
Low as  
720



## Imperial 6-piece 40-watt Soldering Outfit

Model 6010. Meets the increasing need for efficiency in the modern electronics industry. Combines ease of operation and dependability in attractive, lightweight package. Handles like a pencil. Kit contains: 40-watt cartridge; 3 Mini-tips (long taper chisel, pyramid, micro-chisel); Imperial Handle; 2-wire cord. U.L. Listed. For 110-120 V, AC-DC. Shpg. wt., 8 oz. 26 A 1053. 1-5 . . . . . Each 7.55 6-Up . . . . . Each 7.20

## Select your own Imperial Handles, Cords, Elements, Tips



### Interchangeable Thread-On Mini-Tips®

For below. \*24-kt. gold plated, iron-clad; †copper. 2 oz.

Stock No.	Mfr's. Type	Flg.	Description	Size	EACH	
					1-9	10-Up
26 A 1625	6304	A	*Micro-chisel	3/16x1/2"	1.06	.89
26 A 1627	6312	B	†Pencil	1/8x3/8"	.48	.40
26 A 1631	6318	C	†Long taper chisel	1/8x3/8"	.48	.40
26 A 1632	6319	C	*Long taper chisel	1/8x3/8"	1.06	.87
26 A 1633	6324	D	†Long taper pyramid	1/8x3/8"	.48	.40
26 A 1634	6325	E	*Long taper pyramid	1/8x3/8"	1.06	.89
26 A 1636	6331	F	*Screwdriver	1/8x3/8"	1.06	.89
26 A 1637	6333	G	*Needle	1/8x3/8"	1.06	.89
26 A 1050	6520		†100-w. cart. chisel	1 1/2x1 1/2"	1.29	1.08

### "Long-Life" Heat Cartridges

Stainless Steel. U.L. Listed. For 115 V, AC-DC. 1 oz.

Stock No.	Type	Watts	EACH	
			1-9, EACH	10-Up, EACH
26 A 1049	6207	100	6.31	5.30
26 A 2025	6203	60	4.73	3.97
26 A 1622	6200	40	4.12	3.46
26 A 1623	6201	30	4.12	3.46
26 A 1624	6202	25	4.12	3.46

### "Perma-Cool" Handles

Type 6100. Functional handles weigh only 1 oz. Fit heat cartridges, below at left. Double cushion of air and five heat-transition surfaces for cool operation. Made of polycarbonate resin, have die-cast aluminum heat sink. 4.7" long; 0.8" diameter at grip. Shpg. wt., 2 oz.

Stock No.	Color	EACH	
		1-9	10-Up
26 A 1616	Beige	1.52	1.28
26 A 1617	Ivory	1.52	1.28
26 A 1618	Turquoise	1.52	1.28
26 A 1579	Black	1.52	1.28

### Plug-in Power Cords

Type 6102. Vinyl-covered 2 or 3-wire power cords for Imperial handles. Choice of 4 colors to match handles above. Molded-on female connector, positive slip-on action, and snap-lock. Polyvinylchloride installation on both wire and plug. 18-gauge wire; each conductor 65 strands .005 wire. U.L. Listed. For 115 V, AC-DC. Wt., 3 oz.

Color	Stock No.	2-Wire, EACH		Stock No.	3-Wire, EACH	
		1-9	10-Up		1-9	10-Up
Beige	26 A 1683	2.22	1.86	26 A 1685	3.88	2.74
Ivory	26 A 1684	2.22	1.86	26 A 1686	3.88	2.74
Turquoise	26 A 1619	2.22	1.86	26 A 1620	3.88	2.74
Black	26 A 1663	2.22	1.86	26 A 1661	3.88	2.74

## "Little Dandy" Soldering Irons by American Beauty

- Lightweight • Plug-in tips
- Aerated grip • Can't roll

### Model 3110—25 watts

Offers highly efficient, precise soldering performance for heavy-duty production-line work. Heats to operating temperature quickly. Handle remains cool, won't char. Tips can be changed in seconds even while iron is hot. "Lexan" perfect-balance handle, anti-roll flange, stainless steel element case. With 274 nickel-plated 3/16" screwdriver tip. 6 1/2" long. Shpg. wt., 5 oz. For 110-120 V, 60 Hz AC. 26 A 1072. 3110 2-wire type. 1-5. Each 4.70 6-Up. Each 4.46 26 A 1084. 3110-53 3-wire type. 1-5. Each 5.40 6-Up. Each 5.13



### 3110 Replacement Elements

Stock No.	Type	Watts	EA.
26 A 1095	9010	25	3.10
26 A 1097	9010	30	3.10
26 A 1098	9010	35	3.10

### 3110 Nickel-Plated Tips

Stock No.	Type	Description	EA.
26 A 1068	274	3/16" Screwdriver	.26
26 A 1069	275	1/4" Chisel	.26
26 A 1070	277	3/16" Diamond	.26
26 A 1071	278	1/4" Diamond	.26

### 3110 "Paragon" Iron-Clad Tips

Stock No.	Type	Description	EA.
26 A 1054	602	3/16" Chisel	1.40
26 A 1055	604	1/4" Chisel	1.40
26 A 1056	605	3/16" Chisel	1.40
26 A 1065	610	3/16" Diamond	1.40
26 A 1066	613	3/16" Screwdriver	1.40
26 A 1067	618	1/4" Screwdriver	1.40

## "Marksman" Soldering Irons by Weller

**H** Featherweight SP-23 25-watt Pencil Iron. Features long-reach stainless steel barrel. Thin, nickel-plated removable tip. Develops 750° F. 115 VAC. 26 A 2391. Shpg. wt., 8 oz. . . . . 2.50

**J** Lightweight SP-40 40-watt Pencil Iron. Compact iron weighs only 2 oz. Excellent for detailed work. Has 3/4" diameter plated-copper tip. 115 VAC. 26 A 3121. Shpg. wt., 8 oz. . . . . 3.35



## "Marksman" 25-watt Soldering Outfit

Model SP-23-K. Complete soldering outfit features the "Marksman" 25-watt pencil iron above. Kit also includes three different pre-tinned nickel-plated copper tips, soldering aid tool, 5-ft. 60/40 resin core solder, instructions. 115 VAC. 26 A 2392. Shpg. wt., 8 oz. . . . . 3.70

# Soldering Tools and Accessories



**1775**

Easy soldering or desoldering with full 360° "wrap-around" contact

## Endeco 9-piece Desoldering Kit

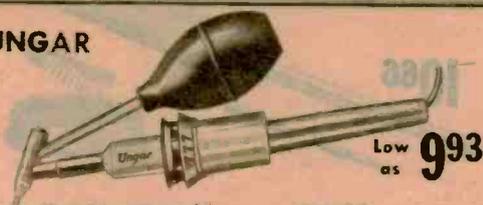
Model 300-K. For almost any desoldering or soldering job. Only 8" long, it weighs just 3½ oz. Removes miniature soldered components in seconds without damage. Solders new connections even faster with 360° "wrap-around" contacts. Simple one-hand operation. 40 watts. With 6 tips from 0.38 to .090, tip cleaning tool, steel box. 117 VAC. 26 A 1195. Shpg. wt., 3 lbs. . . . 17.75

## X-Acto 348 Solder aid Kit

Now you can do professional-quality soldering every time. Manufactured from hard chrome-plated steel, to which solder will not adhere. Tools include fork, knife and scraper, tracer, reamer, brush, double-chuck handle and see-thru carrying case. 26 A 1229. Shpg. wt., 1½ oz. . . . 2.98



UNGAR



## Hot-Vac Desolderer and Solderer

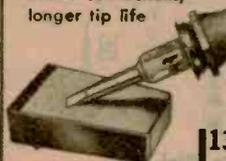
Also for heat-shrinkable tubing

Type 7800. Desolders and cleans printed circuit boards. Hot-Vac melts solder, which is sucked up into collector by bulb. Special coating makes tip-tinning unnecessary. Also for heat-shrinkable tubing. With 37½-watt element. For 115 volts AC. Shpg. wt., 12 oz.

26 A 1028. 1-5 . . . . . Each 12.09  
6-Up . . . . . Each 9.93

## Ungar "Kleen-Tip" Kit

Better connections, longer tip life



Type 400. Removes oxidation and excess solder from soldering tips. Consists of specially processed sponge and phenolic tray. Shpg. wt., 2 oz.

26 A 1421 . . . . . 1.13

113 26 A 1422. Type 455 Refill Sponge. Shpg. wt., 2 oz. . . . . 45¢

## Ersin and Kester non-corrosive Solders

### Ersin extra-fine-gauge Solder

Five-core solder. 60% tin, 40% lead. "Eutectic—37% lead, 63% tin. Meets Federal spec. QQ-S-571. Each package contains four ½-lb. spools. Shpg. wt. per package, 3 lbs.

Stock No.	Gauge	EACH
26 A 3015	24 (.022")	11.57
26 A 3016	28 (.014")	15.29
26 A 3017	32 (.0108")	19.96
26 A 3018	34 (.009")	24.26
26 A 3056	*20 (.036")	7.45
26 A 3057	*24 (.022")	12.12
26 A 3058	*28 (.014")	15.52
26 A 3059	*32 (.0108")	20.15

### Ersin multicore Solders

Tin/Lead Solder. Non-corrosive Ersin flux. 60% tin, 40% lead. 1-lb. spools. Shpg. wt. per spool, 1¼ lbs.

Stock No.	Gauge	EACH
26 A 1730	16 (.064")	3.34
26 A 1733	18 (.048")	3.40
26 A 1736	20 (.036")	3.67

Resin multicore Solder. 5 cores of flux. 40% tin, 60% lead. 1-lb. spools. Shpg. wt. per spool, 1½ lbs.

26 A 1594	16 (.064")	2.67
26 A 1313	18 (.048")	2.70

"Savbi" Solder. 5 cores of flux. Copper-tin-lead alloy reduces tip wear, offers greater strength. 1-lb. spools. Shpg. wt. per spool, 1½ lbs.

26 A 1123	16 (.064")	3.22
26 A 1629	18 (.048")	3.34
26 A 1635	20 (.036")	3.63



A Solder for every purpose . . . types for hobbyist, radio and TV serviceman

### Kester Solders

Kester "44". Fast-melting for high-speed soldering. Resin flux core. Non-corrosive, non-conductive. 60/40 alloy.

Stock No.	Dia.	Net	Shpg.	EACH
26 A 2112	.062"	1 lb.	1¼ lb.	2.14
26 A 2164	.031"	1 lb.	1¼ lb.	2.82

"Resin Five" Core Solder. For printed circuits. Has active Resin flux. Non-corrosive, non-conductive. 60% tin, 40% lead.

Stock No.	Dia.	Net	Shpg.	EACH
26 A 2234	.062"	1 lb.	1¼ lb.	2.14
26 A 2285	.031"	1 lb.	1¼ lb.	2.82

Solder Paste. Provides an even distribution of active ingredients. 2-oz. can. Shpg. wt., 5 oz.

26 A 1578 . . . . . 15¢

Tinning Block. Shpg. wt., 1¼ lbs.

26 A 1582 . . . . . 65¢



Printed-Circuit Pak. 40% lead, 60% tin alloy resin-core solder for printed circuit boards. 18-ga., 5 cores. In flameproof aluminum dispenser. 5 oz.

26 A 1599 . . . . . 69¢

## Lightweight Miller and G-C Soldering Heat Sinks



G Miller 80. Spring-type sink. Copper jaws, plastic covered handles. Shpg. wt., 6 oz.

26 A 1743 . . . . . 95¢

H G-A 9077. Aluminum sink gives firm grip. 3 oz.

26 A 1742 . . . . . 35¢

## Soldering-aid Tools

A G-C 9088. One end has stiff wire brush for cleaning wire and terminals before soldering; other end shaped to hold wires during soldering. Solder does not stick to chrome-tipped probe. 8". 4 oz.

26 A 1000 . . . . . 98¢

B C G-C 9075 and 9076. Double ends ream, hold, or pry. Heat-treated tool steel. Chrome plated to prevent solder from sticking. 4 oz.

26 A 1728. (B) Straight Probe . . . 78¢

26 A 1729. (C) Angled Probe . . . 78¢

D G-C 9093. For printed circuits. Offset and slotted probes of hardened stainless steel—solder does not stick to tool. 8" long. 4 oz.

26 A 1586 . . . . . 98¢

E G-C 9094. Stainless steel brush, hardened steel scraper. For printed circuit boards. Solder does not stick to tool. 8" long. 3 oz.

26 A 1587 . . . . . 96¢

F Xcelite 42H Seizer. Versatile, 6" straight-nose tool clamps tightly. Holds wires for soldering, acts as a heat sink, retrieves small parts from hard-to-reach places. Precision made of stainless steel. 3 oz.

26 A 1255 . . . . . 3.93

26 A 1256. Type 43H. As above, but has curved nose . . . . . 4.07

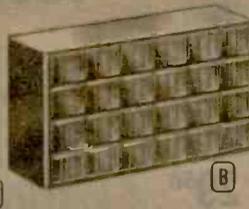
# Storage Cabinets and Hardware



**349**  
less  
tools

## Akro-Mils Tool Caddy

Has a total of 39 different tool-holding slots. Two large storage wells for other items. Four dust-free drawers for small parts. Large sure-grip handle. High-impact heavy-duty styrene. Easy-to-assemble.  $11\frac{1}{2} \times 14 \times 7$ ". Tools not included. Shpg. wt.,  $3\frac{1}{2}$  lbs.  
26 A 2789 X..... 3.49



## Akro-Mils Storage Cabinets

Convenient cabinets for home or shop. Available in your choice of molded clear styrene "See-Thru" or opaque extra-heavy-duty polystyrene drawers. Can be used individually on flat surfaces, in rows, stacked vertically or mounted on wall. Welded steel frames for added durability. Gray finish. Cabinets,  $17\frac{1}{8}$ " wide". Type 17 has "See-Thru" drawers; Type 18 has opaque extra-heavy-duty drawers. Av. shpg. wt., 15 lbs.

Stock No.	Mfr's Type	Fig.	Cabinet HxD"	Drawers		EACH
				No.	HxWxD In.	
26 A 2501 X	17-136	A	11x6"	36	1 $\frac{1}{2}$ x2 $\frac{1}{2}$ x5 $\frac{1}{2}$ "	13.49
26 A 1700 X	17-024	B	10x6"	24	2x2 $\frac{1}{2}$ x5 $\frac{1}{2}$ "	13.49
26 A 1722 X	18-136	A	11x6"	36	1 $\frac{1}{2}$ x2 $\frac{1}{2}$ x5 $\frac{1}{2}$ "	13.49
26 A 1723 X	18-024	B	10x6"	24	2x2 $\frac{1}{2}$ x5 $\frac{1}{2}$ "	13.49

18 drawer  
Cabinet

**431**



## C Steel-frame Cabinets

Extra low prices on tool cabinets with husky all-steel welded frames. Feature clear-plastic "See-Thru" drawers,  $2\frac{1}{4} \times 1\frac{1}{4} \times 5\frac{3}{4}$ ". Adjustable dividers. Baked-on enamel finish. Labels and one divider per drawer included. Depth, 6".

Stock No.	No. of Drawers	Size H & W	Wt., Lbs.	EACH
26 A 1739 X	18	9x10"	5 $\frac{1}{2}$	4.31
26 A 1780 X	24	9x13"	7	5.63
26 A 1975 X	48	18x13"	13	8.95

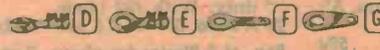
## Vlcek polystyrene Storage Boxes . . strong, lightweight clear plastic

Stock No.	Type	Compartments	Size	Overall Size	Lbs.	EA.
26 A 2375	P250	1	5 $\frac{7}{8}$ x3 $\frac{3}{8}$ "	6 $\frac{1}{4}$ x4x1 $\frac{1}{8}$ "	1	.42
26 A 2378	P203	6	1 $\frac{1}{4}$ x3 $\frac{3}{8}$ "	8 $\frac{1}{4}$ x4 $\frac{1}{2}$ x1 $\frac{3}{8}$ "	1 $\frac{1}{2}$	.54
26 A 2379	P210	9	8—1 $\frac{1}{2}$ x1 $\frac{3}{8}$ "; 1—1 $\frac{1}{8}$ x3 $\frac{3}{8}$ "	7x3 $\frac{3}{4}$ x1 $\frac{1}{8}$ "	1	.41
26 A 2380	P201	12	6—1 $\frac{1}{4}$ x1 $\frac{1}{8}$ "; 4—1 $\frac{1}{4}$ x2"; 2—1 $\frac{1}{4}$ x3 $\frac{3}{8}$ "	8 $\frac{1}{4}$ x4 $\frac{1}{2}$ x1 $\frac{3}{8}$ "	1 $\frac{1}{2}$	.54
26 A 2381	P612	12	6—1 $\frac{1}{2}$ x1 $\frac{1}{8}$ "; 6—1 $\frac{1}{8}$ x4"	11x6 $\frac{1}{4}$ x1 $\frac{1}{8}$ "	2	1.26
26 A 2094	P812	12	2x4 $\frac{1}{2}$ x2 $\frac{1}{8}$ "	13 $\frac{1}{2}$ x9x2 $\frac{1}{2}$ "	1	2.04
26 A 2382	P200	18	1 $\frac{1}{4}$ x1 $\frac{1}{4}$ "	8 $\frac{1}{4}$ x4 $\frac{1}{2}$ x1 $\frac{3}{8}$ "	$\frac{3}{4}$	.54
26 A 2383	P618	18	1 $\frac{1}{2}$ x1 $\frac{1}{8}$ "	11x6 $\frac{1}{4}$ x1 $\frac{1}{8}$ "	2 $\frac{1}{2}$	1.28
26 A 2384	P818	18	2—2x2"; 6—2x4 $\frac{1}{8}$ "	13 $\frac{1}{2}$ x9x2 $\frac{1}{2}$ "	3	2.07
26 A 2385	P824	24	2x2"	13 $\frac{1}{2}$ x9x2 $\frac{1}{2}$ "	3 $\frac{1}{2}$	2.13
26 A 2095	P166	36	1 $\frac{1}{2}$ x1 $\frac{1}{8}$ x1 $\frac{1}{8}$ "	10x7x1 $\frac{1}{8}$ "	3 $\frac{1}{2}$	1.41

All-plastic hinged-top with 1 to 36 compartments for storing small parts or hardware. Rigid, lightweight, scratch-resistant, easy to clean. Strong hinge design. P250 has removable cover. \*No. of compartments per box.



## G-C Hardware Assortment for everyone—technician, homeowner, hobbyist



Tinned Soldering (and Solderless) Lugs: Fig. D or E are solderless lugs. No. 8 holes take no. 6 screws. Wt., 3 oz.

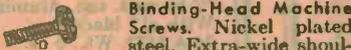
Stock No.	Hole Size	Leth.	Fig.	Quantity	PER PKG.
26 A 2691	No. 6	2 $\frac{1}{2}$ "	D	25	.39
26 A 2692	No. 8	$\frac{3}{4}$ "	D	25	.39
26 A 2693	No. 6	1 $\frac{1}{8}$ "	F	30	.39
26 A 2694	No. 6	$\frac{3}{8}$ "	G	30	.39
26 A 2695	No. 8	$\frac{3}{8}$ "	G	30	.39
26 A 2696	No. 6	1 $\frac{1}{8}$ "	E	25	.39
26 A 2697	No. 8	1 $\frac{1}{8}$ "	E	25	.39

Internal Lock Washers. Start-type. Hold screws tight under vibration. Cadmium plated. Av. shpg. wt. per pkg., 2 oz.

Stock No.	Screw Size	O. D.	Quantity	PER PKG.
26 A 1163	No. 4	$\frac{3}{16}$ "	50	.39
26 A 1196	No. 6	$\frac{3}{16}$ "	50	.39
26 A 1197	No. 8	2 $\frac{1}{8}$ "	50	.39
26 A 1198	No. 10	$\frac{3}{8}$ "	45	.39

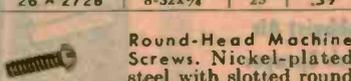
Metal Washers. Nickel plated.  $\frac{1}{16}$ " thick. For screw sizes indicated. Av. wt., 3 oz.

Stock No.	Screw Size	Hole Size	O. D.	Quantity	PER PKG.
26 A 2705	No. 4	$\frac{1}{8}$ "	$\frac{3}{16}$ "	80	.39
26 A 2706	No. 6	$\frac{3}{16}$ "	$\frac{3}{16}$ "	80	.39
26 A 2707	No. 8	$\frac{3}{16}$ "	$\frac{7}{16}$ "	80	.39



Binding-Head Machine Screws. Nickel plated steel. Extra-wide shoulder. Av. wt., 3 oz.

Stock No.	Size	Quantity	PER PKG.
26 A 2718	2-56x $\frac{1}{4}$ "	40	.39
26 A 2719	2-56x $\frac{1}{2}$ "	40	.39
26 A 2720	4-36x $\frac{1}{4}$ "	40	.39
26 A 2721	4-36x $\frac{1}{2}$ "	35	.39
26 A 2722	4-36x $\frac{3}{4}$ "	35	.39
26 A 2723	4-40x $\frac{1}{4}$ "	40	.39
26 A 2724	4-40x $\frac{1}{2}$ "	35	.39
26 A 2726	6-32x $\frac{1}{4}$ "	35	.39
26 A 2727	6-32x $\frac{1}{2}$ "	30	.39
26 A 2728	8-32x $\frac{1}{4}$ "	25	.39



Round-Head Machine Screws. Nickel-plated steel with slotted round heads. Av. shpg. wt. per package, 3 oz.

Stock No.	Size	Quantity	PER PKG.
26 A 2709	2-56x $\frac{1}{4}$ "	40	.39
26 A 2710	2-56x $\frac{1}{2}$ "	40	.39
26 A 1166	4-36x $\frac{1}{4}$ "	40	.39
26 A 1167	4-36x $\frac{1}{2}$ "	35	.39
26 A 2711	4-40x $\frac{1}{4}$ "	40	.39
26 A 1170	6-32x $\frac{1}{4}$ "	40	.39
26 A 1172	6-32x $\frac{1}{2}$ "	30	.39
26 A 1173	6-32x $\frac{3}{4}$ "	30	.39
26 A 2715	8-32x $\frac{1}{4}$ "	25	.39
26 A 2717	8-32x $\frac{1}{2}$ "	20	.39
26 A 1175	10-32x $\frac{1}{2}$ "	20	.39



Hex-Head Sheet Metal Screws. Nickel-plated, slotted, self-tapping screws. Pointed type "A". Av. shpg. wt., 2 oz.

Stock No.	Size	Quantity	PER PKG.
26 A 1176	4x $\frac{1}{2}$ "	35	.39
26 A 2737	6x $\frac{1}{4}$ "	30	.39
26 A 2738	6x $\frac{1}{2}$ "	25	.39
26 A 2739	6x $\frac{3}{4}$ "	25	.39
26 A 2741	8x $\frac{1}{2}$ "	20	.39



Hexagon Nuts. Nickel plated steel resists oxidation. \*Indicates thickness. Av. shpg. wt., 3 oz.

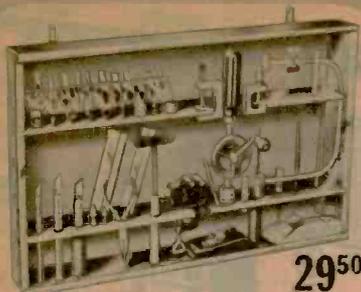
Stock No.	Thrd	Width	Quan.	PKG.
26 A 2742	2-56	$\frac{3}{16}$ "	1 $\frac{1}{2}$ "	30 .39
26 A 1186	4-36	$\frac{1}{4}$ "	$\frac{3}{8}$ "	30 .39
26 A 2744	4-40	$\frac{1}{4}$ "	$\frac{3}{8}$ "	30 .39
26 A 1188	6-32	$\frac{1}{4}$ "	$\frac{3}{8}$ "	30 .39
26 A 1193	8-32	$\frac{1}{4}$ "	$\frac{3}{8}$ "	30 .39
26 A 1187	10-32	$\frac{3}{8}$ "	$\frac{3}{8}$ "	30 .39



Black Rubber Grommets. Soft rubber. Fit chassis up to  $\frac{1}{16}$ ". Av. wt., 2 oz.

Stock No.	Meg. Hole	Inner Dia.	Overall Dia.	Quantity	PER PKG.
26 A 1212	$\frac{1}{8}$ "	$\frac{1}{8}$ "	1 $\frac{1}{2}$ "	16	.39
26 A 1213	$\frac{3}{16}$ "	$\frac{3}{16}$ "	$\frac{7}{8}$ "	14	.39
26 A 1214	$\frac{1}{4}$ "	$\frac{1}{4}$ "	$\frac{3}{4}$ "	12	.39
26 A 1215	$\frac{5}{16}$ "	$\frac{5}{16}$ "	$\frac{1}{2}$ "	10	.39
26 A 2708	$\frac{3}{8}$ "	$\frac{1}{2}$ "	1 $\frac{3}{8}$ "	8	.39

# Tools, Sets for the hobbyist



29<sup>50</sup>

## X-Acto 88N Hobby Den Tool Cabinet

Fitted wooden cabinet, see-thru cover. Includes: 3 knives with blades; 6 blades; 6 gouges; 4 routers; 2 punches; saw, 4 blades; planer; sander; file; vise; hammer; pliers; 2 screwdrivers; tweezer; 2 chucks; drill bit; 2 screwdriver bits; 5 clamps; project book.  
26 A 2590 X. Wt., 8 lbs..... 29.50



## X-Acto 84 Knife and Tool Set

11<sup>25</sup>

Includes Nos. 1, 2 and 5 knives plus complete assortment of blades, gouges, routers, punches; planer; 1" sander; spokeshave; balsa stripper. Wooden box has see-thru cover, fitted plastic tray insert. Shpg. wt., 2½ lbs.  
26 A 2619..... 11.25



4<sup>49</sup>

## X-Acto cordless Hobby Drill

Battery-powered, ideal for models. Drills plastic, wood, light metal; grinds, polishes, carves. 3 collets, punch, grinder. Order 2 batteries.  
26 A 2438. Shpg. wt., 1 lb..... 4.49  
18 A 5078, "C" Batt. 10 oz... 2 for 33¢

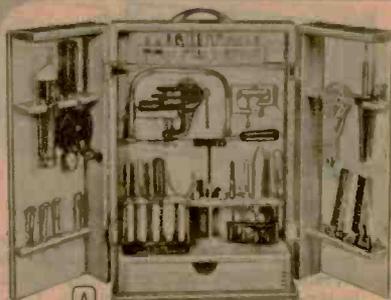


## Hobbyist Air Brush Sprayer

19<sup>95</sup>

- Easy to use, clean
- No AC required
- Spray adjustment

Single-action air brush has metal parts with Teflon bearings and seals. Includes sprayer, 6-ft. vinyl air hose, 2 cans of propellant (½-hour spraying each), on-off valve, 1-oz. paint jar, two ½-oz. jars.  
26 A 2662 X. Wt., 5 lbs..... 19.95  
26 A 2698. Extra Propellent. 1½ lbs..... Pkg. 2 for 3.98



## 49<sup>95</sup> X-Acto 99 super 65-piece Tool Set

Contains a complete assortment of hobby tools, knives and blades fitted into a handsome Philippine Mahogany cabinet. Provides compact, convenient storage for all your hobby tools. Cabinet has drawer storage for small parts. Overall size, 19x13x5½".  
26 A 2656 X. Wt., 13½ lbs... 49.95



18<sup>95</sup>

## X-Acto 87 Knife and Tool Chest

Includes Nos. 1, 2 and 6 knives, assorted blades, gouges, routers, punches; plus planer, sander, hobbycraft saw, spokeshave, balsa stripper, steel rule, pin vise, screwdriver, assorted drill bits. In fitted wood chest.  
26 A 2660. Wt., 3½ lbs..... 18.95



4<sup>00</sup>

## Soldering Iron/Hot Knife

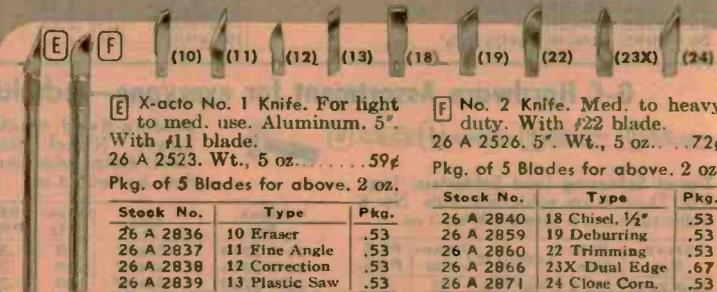
X-Acto 378. Compact 25-W iron for hobby, electronics work. Handle remains cool. Pre-tinned, nickle tip. Knife cuts through plastics, clears surfaces rapidly.  
26 A 1448. Wt., 2¼ lbs..... 4.00



4<sup>25</sup>

## Multi-purpose Knife Chest

X-Acto 82. Low-cost set includes Nos. 1, 2 and 5 knives with nine assorted extra blades. In handy, neutral-finish wood chest.  
26 A 2522. Wt., 12 oz..... 4.25



**E** X-Acto No. 1 Knife. For light to med. use. Aluminum. 5". With #11 blade.  
26 A 2523. Wt., 5 oz..... 59¢  
Pkg. of 5 Blades for above. 2 oz.

**F** No. 2 Knife. Med. to heavy duty. With #22 blade.  
26 A 2526. 5". Wt., 5 oz..... 72¢  
Pkg. of 5 Blades for above. 2 oz.

Stock No.	Type	Pkg.
26 A 2836	10 Eraser	.53
26 A 2837	11 Fine Angle	.53
26 A 2838	12 Correction	.53
26 A 2839	13 Plastic Saw	.53

Stock No.	Type	Pkg.
26 A 2840	18 Chisel, ½"	.53
26 A 2859	19 Deburring	.53
26 A 2860	22 Trimming	.53
26 A 2866	23X Dual Edge	.67
26 A 2871	24 Close Corn.	.53



## 24" flexible-shaft electric Hobby Tool 24-pc. Set

19<sup>95</sup>

Bench-top power tool has 1/60 hp 3000 rpm shaded-pole motor with 2-ft. flexible shaft and handpiece. Includes: 2 sanding bands; 2 sanding discs; polishing buff; cutting disc; mandrels; 6 drills with collets (¼", ½", ¾", 1", 1½", 2", 3", 4", 5", 6", 8", 10", 12", 14", 16", 18", 20", 22", 24", 26", 28", 30", 32", 34", 36", 38", 40", 42", 44", 46", 48", 50", 52", 54", 56", 58", 60", 62", 64", 66", 68", 70", 72", 74", 76", 78", 80", 82", 84", 86", 88", 90", 92", 94", 96", 98", 100").  
26 A 2669 X. Shpg. wt., 1 lb..... 19.95

# Precision Tools for home and shop

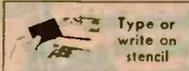


Complete with electrolyte and stencils

1995

## Etch-O-Matic Marking Kit

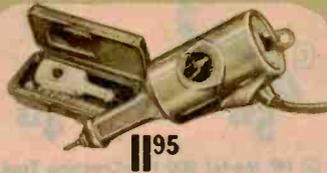
Etch names, designs, numbers into almost any metal by typing, writing, drawing or die imprinting on special stencil. 110 VAC. Wt., 1 lb. 26 A 1085 ..... 19.95



Type or write on stencil



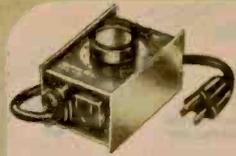
Etch into metal in seconds



1195

## Dremel Model 290 Engraver

Easy to use as a pencil. Even engraves glass. 5-speed adjustment for stroke length, depth. Hi-speed reciprocating motor. Nylon. With case, carbide point. 110-120 VAC. 26 A 2405. Wt., 1½ lbs. .... 11.95



Lutron Mark II

Low as 1195

## Power Tool Speed Control

Varies speed of drill, saw, etc. from "off" to full. For up to 5 amp univ. (AC-DC) and series DC motors only. 900 W max. 115 VAC. 26 A 1836. Wt., 1½ lbs. .... 11.95  
26 A 2434. Up to 10 amp. .... 17.95



498

## Thermogrip Glue Gun

Insert solid glue stick in gun, it's heated and melted and glue feeds from tip. Permanent, waterproof bond in 60 seconds—no clamping. With glue sticks, sealer-sticks for caulking. 115 V AC-DC. 26 A 2435. Wt., 1 lb. .... 4.98  
26 A 3188. Extra 1½" Glue Sticks. 12 oz. .... Pkg. of 60 for 1.98  
26 A 3189. Extra 1½" Sealer Sticks. 12 oz. .... Pkg. of 60 for 1.98



With Pins 329

## Concrete Fastener

No drilling! Anchor wood or light metal to concrete with 5 hammer taps. Piston concentrates hammer force. With asstd. driver pins. 26 A 2425. Wt., 12 oz. .... 3.29  
26 A 2426. ¾" Pin. Fastens conduit, straps. 8 oz. .... Pkg. 19/79¢  
26 A 2427. 1½" Pin. Furring strips to concrete. 8 oz. .... Pkg. 10/79¢  
26 A 2428. 2½" Pin. For 2x4" planks to concrete. 8 oz. .... Pkg. 9/79¢  
26 A 2429. ¼"-20 Threaded Stud. For concrete. 8 oz. .... Pkg. 10/79¢



Vaco Power Riveter Kit

Exclusive "bubble action" assures positive fastening every time



795

- With Pow'Rivets
- Rivets ½" thick

575100. Simple squeeze gives neat, tight riveting from one side of work. 4-way head takes any size blind rivet. Includes Rivetool, 55 assorted rivets, plastic case. 26 A 2556. Wt., 2 lbs. .... 7.95  
Model 495 Rivetool Only. 26 A 2549. Wt., 1 lb. .... 4.95  
Pow'Rivets. Clamp-up action. 8 oz.

Stock No.	Dia.	Lgth.	Qty.	BOX
26 A 2566	¼"	.400"	50	.89
26 A 2576	¾"	.470"	32	.89
26 A 2580	½"	.530"	27	.89
26 A 2581	¾"	.720"	22	.89

Adjustable illuminated Magnifier

995



Lens and light frame adjust to required height and visual range. Lens, 4x2", adjusts from 1" to 6½" high. Aluminum stand, 5"x5"x5". Wt., 1¼ lbs. 26 A 1541. .... 9.95

Vacu-Vise with swivel action

1695



For industry, schools, hobby use. Swivels to any position, adjusts to any angle. Fastens instantly; no screws or clamps needed. Practical ... moderately priced, too. 26 A 1542. Wt., 5 lbs. .... 16.95



995

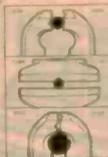
Each

## A 4-In-1 Metalworker

Forms angles to 90° in flat or rod stock to 16-gauge, 1" wide; shears; rivets; punches. With 3 punches. 26 A 2500. Wt., 6 lbs. .... 9.95

## B Metal forming Brake

Shapes perfect bends and contours in metal to 16-gauge; bends to 90°. Thickness, sharpness adjustment. 26 A 2439. Wt., 9 lbs. .... 9.95



1495

## Hobbyist's precision Flexi-Vise

Universal 3-way vise rotates work 360° in any plane. Cantilever design for stability; non-skid base. Spring-assisted V-groove aluminum jaws give firm, safe grip; 1½" capacity; neoprene liners. 26 A 2589. Wt., 2 lbs. .... 14.95



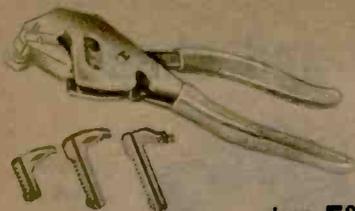
995

## Dremel electric Scroll Saw

- Cuts in any direction
- Cuts wood to ¾" thick

Cuts scrolls, angles and curves in wood to ¾" thick, tile, light metal. Thin, fast blade leaves smooth wood. Cuts in any direction—9½" deep throat. For 115 VAC. 26 A 2436. Wt., 3 lbs. .... 9.95  
26 A 2437. Pkg. 10 Blades. 2 oz. 98¢

# Values in quality Hand Tools



Standard Large Pipe Jaw Giant Internal-External Jaw

Low as **500**

## Vaco Plierenx multi-purpose Tool

Replaces most wrenches and pliers. Grips any surface—round, hex or square—fits all U.S.S. or metric sizes. Forged steel. 7" long.

26 A 2118. Shpg. wt., 1½ lbs. .... 5.00

Deluxe 8½" Plierenx. Up to one ton of gripping power. Access. jaws below.

26 A 2119. Shpg. wt., 2 lbs. .... 6.35

26 A 2120. Standard Pipe Wrench Jaw. Shpg. wt., 6 oz. .... 1.40

26 A 2121. Large Pipe Wrench Jaw. Shpg. wt., 6 oz. .... 1.40

26 A 2122. Giant Internal-External Jaw. Shpg. wt., 6 oz. .... 1.60

## HUSKY WRENCH SETS



14 Pieces **A**

**2495**

8 Pieces **B**

**995**

Popular wrench sets packaged in handsome vinyl plastic roll cases. Cases are grommeted for hanging.

**A** 14-Piece Combination Set. One end open-end, other end box. Includes: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 5/16", 1", 1 1/16", 1 1/8", 1 1/4". Vinyl case. Shpg. wt., 10 lbs.

26 A 2535. \$5 Monthly. .... 24.95

11-Piece Combination Set. (Not illus.) One end open-end, other end box. Includes: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 5/16", 1". Vinyl roll case. Shpg. wt., 5 lbs.

26 A 2539. .... 15.95

**B** 8-Piece Open End Set. Both ends open-end. Includes: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 5/16", 1". Case. Shpg. wt., 2 lbs.

26 A 2536. .... 9.95

## 1/4" Drive Socket Set



**469**

Low priced 11-piece socket set for those small jobs around the house. Consists of: six 6-point sockets—1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 5/16", 1". Case. Shpg. wt., 1 lb.

26 A 1429. .... 4.69



**C** **595**

**D** **415**

**C** HP Model 500 Nut-Cracking Tool. Cracks nuts from 5/16" to 1 1/16". Easy to use, provides up to 25,000 lbs. pressure. Shpg. wt., 1 1/4 lbs. 26 A 1583. .... 5.95

**D** Adel Metal "Nibbling" Tool. "Nibbles" openings in 18-ga. steel, aluminum, or other soft metals up to 1/16" thick. 8 oz. 26 A 1153. .... 4.15

26 A 1130. Extra Punch. 2 oz. .... 2.12



## 3-Dimension Magnifiers

Low **495** As

Lightweight binocular 3-D magnifiers provide up to 3 1/2 X magnification. Feature precision ground and polished prismatic lens. Adjustable headband for comfortable fit. You choose from three different magnification powers. Shpg. wt., 1 lb.

26 A 3616. 2 1/4 X 10" focus. .... 4.95

26 A 3617. 2 1/2 X 8" focus. .... 5.95

26 A 3618. 3 1/2 X 4" focus. .... 5.95



## Adjustable Socket Wrench

**249** • Press—adjusts to size • 7 Sizes: 1/4" to 7/16"

Just press and turn, wrench automatically adjusts to any of seven commonly used hex sizes from 1/4" to 7/16". Durable chrome-plated housing. Shockproof insulated handle grips easily. Overall length, 5 3/4". Shpg. wt., 8 oz.

26 A 3279. .... 2.49

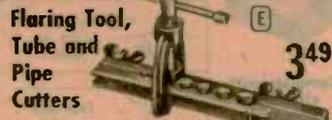
## 3/8" Drive Socket Set

**1095**



Versatile 11-piece outfit for home or shop. Includes: four 6-pt. sockets—3/8", 7/16", 1/2", 9/16"; three 12-pt. sockets—5/8", 11/16", 3/4"; socket extension; reversible ratchet; 10" flex handle; metal storage box, 10x3 1/2 x 1 1/2". Shpg. wt., 3 lbs.

26 A 2008. .... 10.95



**E** **349**



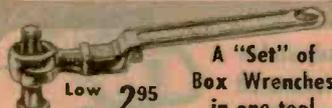
**F** **219**

**G** **459**

**E** Flaring Tool. Quality constructed tool makes SAE 45° flare on 3/16" to 5/8" O.D. soft copper, brass, and aluminum tubing without cracking or splitting. Shpg. wt., 2 lbs. 26 A 2139. .... 3.49

**F** Tubing Cutter. High quality cutter cuts hard or soft 1/8"-1 1/8" O.D. copper, brass, aluminum, and thinwall conduit. Meets Federal Specifications. Has retractable reamer blade. Shpg. wt., 1/2 lb. 26 A 2140. .... 2.19

**G** Combination Tubing and Pipe Cutter. Combination tool easily cuts tubes and pipes. Cuts 5/8"-2 3/8" copper, brass, aluminum, thinwall conduit; 3/8"-1" iron and steel pipe. Shpg. wt., 2 lbs. 26 A 2141. .... 4.59



Low as **295** as **A "Set" of Box Wrenches in one tool**

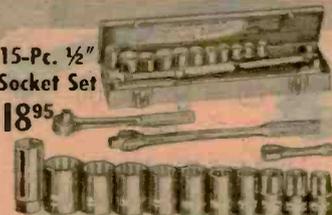
Adjusts from 1/4" to 1". Narrow head for extremely tight spots. Tightly grips even burred and damaged nuts. Forged alloy steel, nickel-chrome finish. 8" handle. 26 A 2982. Shpg. wt., 8 oz. .... 2.95

Above, but has 10" handle and adjusts from 3/8" to 1 1/8". 26 A 2983. Shpg. wt., 14 oz. .... 4.95

Extra large. Has 12" handle and adjusts from 7/16" to 1 1/16". 26 A 2984. Shpg. wt., 21 oz. .... 5.95

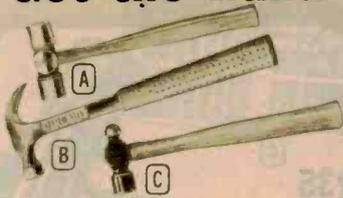
## 15-Pc. 1/2" Socket Set

**1895**



Excellent for work around the house. Set consists of: three 6-pt. sockets—1/2", 5/8", 3/4"; seven 12-pt. sockets—5/8" to 1"; 1 1/2" sparkplug socket; 5" socket extension; reversible ratchet; 15" flex handle; metal box, 15 1/4 x 4 x 2". 26 A 2329. Shpg. wt., 10 lbs. 18.95

# Get the Hand Tools you need now



## Hammers to fit every need

- A** Soft-Face Hammer. 1 3/8" dia. red vinyl and amber tenite faces. Steel head, hickory handle. 12 3/4". 26 A 1161. Shpg. wt., 1 lb.... 3.44
- B** Claw Hammer. One-piece steel, rubber-cushioned handle. 13". 26 A 1299. Shpg. wt., 1 1/2 lbs. 3.53
- C** Ball Peen Hammer. Drop-forged steel; hickory handle. 14". 26 A 1577. Shpg. wt., 1 1/2 lbs. 1.98

## Lufkin "Lokmatic" Tape Rules

Lever-Lok, ball-bearing rewind, end hooks, 1/16" graduations. Vinyl, metal case. Width, 1/2" except 3/4".

Stock No.	Type	Feet	Oz.	EACH
26 A 3045	W728	8	7	1.80
26 A 3046	W7210	10	8	2.07
26 A 3047	W7212	12	8	2.47
26 A 3048	W7312*	12	10	3.33
26 A 3049	W7316*	16	10	3.97



- H** Lufkin White-Clad Tape. 50' steel tape. Black figures on white. 26 A 1184. Shpg. wt., 1 lb.... 4.97
- 26 A 1185. Above. 100'. 2 lbs. 6.90
- J** 6" Rule and Wire Gauge. Graduated in 32nds and 64ths. B&S wire gauge, decimal equivalents. 26 A 1320. Shpg. wt., 2 oz.... 55¢
- K** Multipurpose 4" Rule. 32nds, 64ths, mm; protractor; square; drill gauge; tape-drill table. 26 A 1329. Shpg. wt., 4 oz.... 1.47



- P** Henry Hanson 120 Hand Reamer. High quality hand reamer 5 1/2" long, 1/2"-diameter shank, 1/8" point. Made of high-carbon steel. 26 A 1390. Shpg. wt., 9 oz.... 1.49
- R** 6" Adjustable Crescent Wrench. Adjustable both ends; one end 1/2", other end 3/4". 26 A 1263. Shpg. wt., 6 oz.... 3.59
- 26 A 1382. Ctr. Punch. 5 oz.... 3.49
- 26 A 1383. Extra Point. 1 oz.... 47¢

## Contoured Sanders Needle File Set

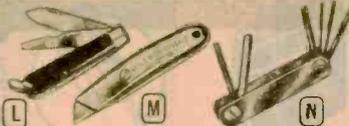


- D** X-acto 351 Contoured Sanders. Precision sanding in metal, plastic, and wood. Unique kit offers 5 different sanding heads with grip-tight handles. Includes an assortment of precut sheets of plastic-backed sandpaper. Shpg. wt., 8 oz. 26 A 2493. .... 3.95
- E** X-acto 605-ST Swiss Needle File Set. Set of 12 assorted styles. 26 A 2519. Shpg. wt., 8 oz.... 5.95

## Drill and Steel-Wire Gauge



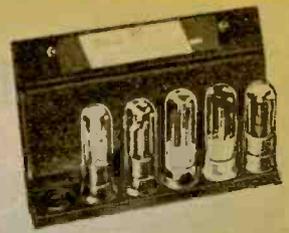
- Drill, tap, and steel-wire gauge. Gauges and gives decimal measurement equivalents for wire sizes 1 to 60, tap and drill sizes 2-56 to 1/4"-28. Shpg. wt., 5 oz. 26 A 1319. .... 1.69



- L** Electricians Knife. Knife, screwdriver, and wirescraper. 2 1/2" long tool-steel blades. 26 A 1424. Shpg. wt., 5 oz.... 1.49
- M** Millers Falls Utility Knife. Five inches long. Five blades. 26 A 2655. Shpg. wt., 1/2 lb.... 83¢
- 26 A 1171. 5 Extra Blades. 2 oz. 37¢
- N** Hex-Key Wrench Set. Folds like pocket knife. Hardened nickel-chrome steel. Shpg. wt., 4 oz. 26 A 1126. .... 98¢



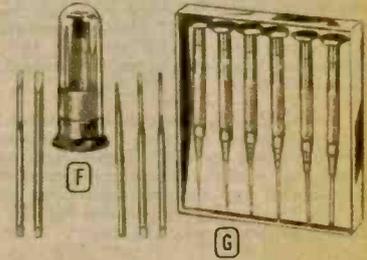
- T** Corsair 12" Combination Square. Try/miter square, depth gauge, plumb, and level. Locks at any point. Shpg. wt., 8 oz. 26 A 1308. .... 84¢
- W** Economy 1" Micrometer. Accuracy to 0.0005" in full-range micrometer. Screw-type anvil permits simplified zero adjustment. Factory adjusted. Japan. 26 A 2132. Shpg. wt., 8 oz.... 4.95



## Moody precision Tiny Tool Set

36 pieces **1495** • 6 different sets • Leather-like case

- 6 different sets, each with its own chuck handle, plastic case. 4 screwdrivers (.05", .07", .08", .1"); 1" awl; 2 Phillips screwdrivers (#0, 1); 3 Allen wrenches (#4, 6, 8); OE-5 open-end wrench set and T8-5 tap set, below; SW-5 socket wrench set (nonmagnetic); 5 matching tap drills. All sets in leather-like case. Shpg. wt., 2 lbs. 26 A 2022. .... 14.95



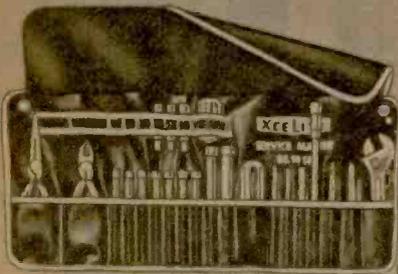
- F** SC-5 Screwdriver Set. .055", .070", .080", .100", Awl. Chuck handle. Plastic case. Shpg. wt., 5 oz. 26 A 1152. .... Per Set 1.29
- OE-5 Open-End Wrench Set. Offset. Steel. Chuck handle 5/64", 3/32", 7/64", 1/8", 5/32". Plastic case. Wt., 5 oz. 26 A 1126. .... Per Set 1.64
- TS-5 Tiny Tap Set. Sizes: 0-80, 1-72, 2-56, 3-48, 4-40; handle. Wt., 5 oz. 26 A 1647. .... Per Set 4.95
- BW-5 Magnetic Socket Wrench Set. Magnetized handles. 5/64", 3/32", 7/64", 1/8", 5/32"; handle, case. Wt., 5 oz. 26 A 2021. .... Per Set 2.59
- G** JS-6 Jeweler's Screwdriver Set. Set has six precision-made jeweler's drivers in a sturdy case. With heat-treated steel blades, knurled handles. Blade sizes are: .025", .040", .055", .070", .080" and .1". Wt., 8 oz. 26 A 1384. .... Per Set 2.89



12-volt Solder Iron **1095**

- Operates from 12-V battery or 12-14 V AC/DC source. Tip temperature control. Low drain, only 2.5 to 2.9 amps. 30-41 W. 700°F 3/16" screwdriver tip, battery clips, 12-ft. cord. 7 1/2". 26 A 2168. Shpg. wt., 2 lbs. 10.95

# Xcelite Tools



**2685** **A** Vinyl-coated roll-up case

**A** Model 99SM Service Master Tool Set. Provides a variety of tools and combinations to speed-up work. Set includes: long-nose pliers; 6" adjustable wrench; 9 regular nutdrivers from  $\frac{3}{16}$ " thru  $\frac{1}{2}$ ";  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ " stubby nutdrivers;  $\frac{3}{16}$ " and  $\frac{1}{4}$ " slotted screwdrivers; #1 Phillips screwdriver;  $\frac{1}{8}$ " to  $\frac{3}{8}$ " reamer;  $\frac{1}{4}$ " to  $\frac{1}{2}$ " reamer; 8" extension. Vinyl-coated canvas roll-up case.  
26 A 1162. Shpg. wt.,  $2\frac{3}{4}$  lbs. . . . . 26.85

**B** Model HS6-18 Hollow-Shaft Nutdriver Set. Ten nutdrivers in a rugged carrying case. Super-tough cold-drawn, case-hardened sockets. High-carbon steel shafts are polished and plated. Shock and breakproof plastic handles color-coded and marked with large numbers. Sizes from  $\frac{3}{16}$ " thru  $\frac{3}{8}$ " in  $\frac{1}{32}$ " steps. Also  $\frac{1}{16}$ ",  $\frac{1}{2}$ ", and  $\frac{9}{16}$ ".  
26 A 1199. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 11.63

**1163** **B**



**2835** **C**

**C** Model 99MP Multi-Purpose Tool Set. Your most-often-needed tools are readily available in this convenient 39-piece set. Includes: 10 regular nutdrivers, 9 Allen hex type screwdrivers, 9 Bristol multiple spline screwdrivers, 3 slotted screwdrivers, 2 Phillips screwdrivers, 2 reamers, 1 awl/scraper, 1 extension blade, 1 regular handle, 1 Tee handle, and vinyl-coated canvas roll-up case.  
26 A 1507. Shpg. wt.,  $3\frac{1}{2}$  lbs. . . . . 28.35

**D** Model 99PR Screwdriver/Nutdriver Set. A grand total of 14 pieces in a handy roll-up vinyl pouch. Includes: 9 nutdrivers in sizes from  $\frac{3}{16}$ " thru  $\frac{1}{2}$ " in  $\frac{1}{32}$ " steps; 2 single-end screwdrivers,  $\frac{3}{16}$ ",  $\frac{1}{4}$ "; 2 single-end Phillips, Nos. 1 and 2. Shockproof and breakproof Plastic handles. All have chrome-plated shafts and blades to resist corrosion.  
26 A 1259. Shpg. wt., 2 lbs. . . . . 9.42

**942** **D**

## Allen Wrench, Nutdriver, Screwdriver Sets



**710** **E**



**420** **F**



**585** **G**

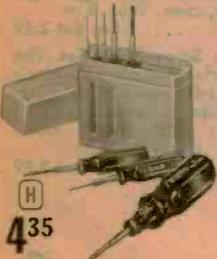
**E** 99PS-40 Allen Screwdriver Set. Includes breakproof handle; 4" extension; 9 blades,  $\frac{3}{64}$ " to  $\frac{5}{32}$ " in  $\frac{1}{64}$ " steps, also  $\frac{3}{16}$ ".  
26 A 1757. Wt., 12 oz. . . . . 7.10

**F** PS88 Screwdriver Set. 5 slot-tip types from  $\frac{3}{32}$ " to  $\frac{1}{4}$ "; 3 Phillips drivers, #0, #1, #2; 1x $3\frac{1}{8}$ " standard handle.  $3\frac{1}{2}$ " drivers.  
26 A 2579. Wt., 11 oz. . . . . 4.20

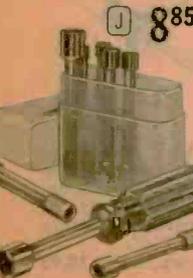
**G** PS120 Nutdriver Set. Includes: 10 color-coded drivers from  $\frac{3}{32}$ " to  $\frac{3}{8}$ " in  $\frac{1}{32}$ " steps.  $3\frac{1}{2}$ " drivers. Plastic case fits pocket.  
26 A 2194. Wt., 11 oz. . . . . 5.85

**H** PS-89 Screwdriver Set. 8 midget Allen hex type screwdriver, .028", .035", .050",  $\frac{1}{16}$ ",  $\frac{5}{64}$ ",  $\frac{3}{32}$ ",  $\frac{1}{8}$ ",  $\frac{1}{4}$ ". Torque amplifier handle.  
26 A 2939. Wt.,  $1\frac{1}{2}$  lbs. . . . . 4.35

**J** HSC-1 Nutdriver Set. Eight  $4\frac{1}{8}$ " nutdrivers with hollow shaft to accommodate screwdriver.  $\frac{3}{16}$ " to  $\frac{3}{16}$ ". Break-and shockproof handle, with plastic case.  
26 A 2040. Wt., 12 oz. . . . . 8.85



**435** **H**



**885** **J**

## Set-screw, Phillips, round-shaft Screwdrivers

**K** Set-Screw type Screwdrivers, 2 oz.

Stock No.	Type	Shaft Size		O'alt	EACH
		Dia.	Lgth.		
26 A 1129	R-3323SS	$\frac{3}{32}$ "	3"	5"	.39
26 A 1136	R-1845S	$\frac{1}{8}$ "	4"	6"	.45



**L** Phillips Screwdrivers. \*Pocket clip. 6 oz.

Stock No.	Type	No. of	Shaft Size	O'alt	EACH
26 A 1223	P-12S*	No. 0	2"	4"	.45
26 A 1155	X-108	No. 1	6"	10"	.90
26 A 1156	X-102	No. 2	4"	7 $\frac{3}{4}$ "	.96
26 A 1158	X-103	No. 3	6"	10"	1.35



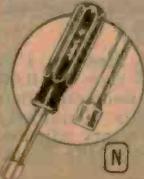
**M** Round-Shaft Screwdrivers. 5 oz.

Stock No.	Type	Shaft Size	O'alt	EACH	
26 A 1142	R-182	$\frac{1}{8}$ "	2"	4 $\frac{1}{2}$ "	.39
26 A 1147	R-184	$\frac{1}{8}$ "	4"	6 $\frac{1}{2}$ "	.45
26 A 1148	R-186	$\frac{1}{8}$ "	6"	8 $\frac{1}{2}$ "	.51
26 A 1150	R-188	$\frac{1}{8}$ "	8"	10 $\frac{1}{2}$ "	.60
26 A 1279	R-144	$\frac{1}{8}$ "	3"	8"	.93
26 A 1280	R-146	$\frac{1}{8}$ "	6"	10"	1.02
26 A 1281	R-148	$\frac{1}{8}$ "	7"	12"	1.09
26 A 3281	R-3163	$\frac{3}{16}$ "	3"	6 $\frac{5}{8}$ "	.66
26 A 3282	R-3164	$\frac{3}{16}$ "	4"	7 $\frac{5}{8}$ "	.72
26 A 3283	R-3166	$\frac{3}{16}$ "	6"	9 $\frac{5}{8}$ "	.81
26 A 3284	R-3168	$\frac{3}{16}$ "	8"	11 $\frac{5}{8}$ "	.90



**N** Color-Coded Hex Nutdrivers. Standard-type with lightweight hollow shafts. Types HS-6, 7 are  $6\frac{1}{4}$ " long overall. Types HS-8, 9, 10, 11, and 12 are 7" long overall. Types HS-14, 16, and 20 are  $7\frac{1}{4}$ " long overall. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Hex Size	Color	EACH
26 A 1648	HS-6	$\frac{3}{16}$ "	Black	.99
26 A 1649	HS-7	$\frac{1}{2}$ "	Brown	.99
26 A 1264	HS-8	$\frac{1}{4}$ "	Red	.99
26 A 1646	HS-9	$\frac{3}{8}$ "	Orange	.99
26 A 1265	HS-10	$\frac{3}{16}$ "	Amber	.99
26 A 1266	HS-11	$1\frac{1}{2}$ "	Green	.99
26 A 1267	HS-12	$\frac{3}{16}$ "	Blue	.99
26 A 1268	HS-14	$\frac{3}{16}$ "	Brown	1.14
26 A 1269	HS-16	$\frac{1}{2}$ "	Red	1.14
26 A 1271	HS-20	$\frac{3}{8}$ "	Amber	1.35



# Pliers and Tools for every home workshop



## Precision Pliers and Cutters for any application

Professional-Quality—Allied Pliers and Cutters

Drop forged from high-grade tool steel and heat treated for optimum temper. Vinyl cushion grips for safety and comfort. All carry one year guarantee against breaking. \*Has cross coil spring. Made in U.S.A. to Allied's specifications.

Stock No.	Fig.	Length	Description	Wt., oz.	EACH	
					1-4	5-Up
26 A 2900	A	6½"	Electrician's Side Cutting Pliers	8	2.88	2.60
26 A 2901	A	8"	Electrician's Side Cutting Pliers	16	3.58	3.23
26 A 2908	B	6"	Long Needle or Snip Nose Pliers	6	2.82	2.54
26 A 2912	C	7"	Extra Long Chain Nose Cutting Pliers	6	4.10	3.74
26 A 2915	D	6"	*Long Nose Pliers	3	3.78	3.42
26 A 2902	E	4½"	Diagonal "Oblique" Cutting Pliers	2	2.55	2.30
26 A 2903	E	5"	Diagonal "Oblique" Cutting Pliers	3	2.65	2.39
26 A 2904	E	6"	Diagonal "Oblique" Cutting Pliers	3	2.87	2.57
26 A 2910	F	6"	Long Chain Needle Nose Pliers	3	2.47	2.25
26 A 2909	F	6"	Long Chain Needle Nose Pliers	3	2.95	2.68
26 A 2913	G	5"	*Radio and Ignition Nose-Cutting Pliers	3	3.68	3.32
26 A 2916	H	7"	*Extra Fine Long Nose Pliers	3	2.99	2.69
26 A 2924	J	6"	Satin Finish Combination Pliers	5	.92	.83
26 A 2925	J	8"	Satin Finish Combination Pliers	9	1.21	.87
26 A 2926	J	6"	Satin Finish Thin Nose Combination Pliers	5	1.46	1.30
26 A 2905	K	4½"	Diagonal Needle Point Cutting Pliers	2	3.60	3.23
26 A 2906	K	5"	Diagonal Needle Point Cutting Pliers	3	3.63	3.25
26 A 2911	L	5"	Short Chain Needle Nose Cutting Pliers	3	3.14	2.81
26 A 2914	M	5"	*Slim Nose Pliers	3	3.39	3.05
26 A 2917	N	4½"	*Needle Point Diagonal Flush Cut Pliers	6	3.48	3.13
26 A 2927	P	10"	Tongue-and-Groove Utility Pliers	16	3.05	2.75

## Popular low-priced Tool Sets for all needs

### Ratchet 14-pc. Screw/Nutdriver Set

**Y** Features 3-way ratchet handle to speed work. Includes: seven nutdrivers, 3/16" to 1/2"; No. 1 and No. 2 Phillips-head screwdrivers; three slotted screwdrivers; plus 5" blade extension. In handy see-thru plastic pouch. Shpg. wt., 2 lbs.  
26 A 2236..... 12.99

### Insulated Screwdriver Set

**Z** Model ZSD-5. In 5 popular sizes: 3/16", 1/4", 5/16", 11/32", and 3/8". Shock and breakproof plastic handles. Durable plastic cover for use as roll, hang-up, or stand-up kit.  
26 A 1472. Wt., 1 1/4 lbs..... 6.45

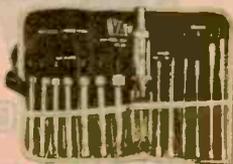
### Insulated Nutdriver Set

**AA** Model ZND-5. Insulated nutdrivers designed for quicker, easier work. In 5 popular sizes: 3/16", 1/4", 5/16", 11/32", 3/8". Shock and break-proof plastic handles. Contained in durable vinyl cover for use as roll, hang-up, or stand-up kit.  
26 A 1473. Wt., 1 1/4 lbs..... 7.45

### 5-piece electronic Screwdriver Set

Set of 5 chrome vanadium blades with shockproof tenite handle that assures firm grip. Each screwdriver blade has spring gripper to hold screw when starting. 5/16" hex diameter on 4, 5, 6, 7 and 8" blades. Roll-up pouch. Shpg. Wt., 1 lb.  
26 A 1513..... 3.98

5-pc. Set  
**398**



**1299** **Y**

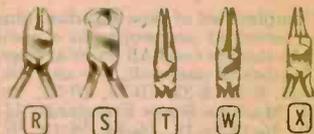
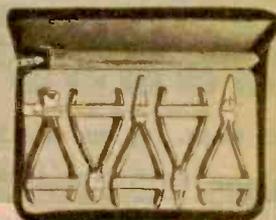


**645** **Z**



**745** **AA**

## Allied Jeweler's Plier Set



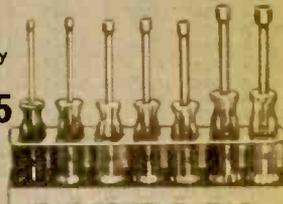
- Drop forged fine grain tool steel
- Comfortable vinyl cushion grips
- Zippered, leatherette carry case

Set of five professional 4½" precision pliers (also sold individually below). Vinyl cushion grips. Smooth polished head and handle, drop forged fine grain tool steel. Fig. R for close cutting. Fig. S for end cutting. Figs. T, W, X have smooth jaws. Shpg. wt., 1 1/4 lbs. (Av. wt. of individual pliers, 5 oz.)  
26 A 2918. 1-2 Sets..... Each 14.25  
3 Sets Up..... Each 13.15

### INDIVIDUAL JEWELER'S PLIERS

Stock No.	Fig.	Description	EACH	
			1-4	5-Up
26 A 2919	R	Diag. Cutter	2.70	2.40
26 A 2920	S	End Cutter	3.05	2.73
26 A 2921	T	Chain Nose	2.44	2.20
26 A 2922	W	Flat Nose	2.52	2.28
26 A 2923	X	Round Nose	2.54	2.28

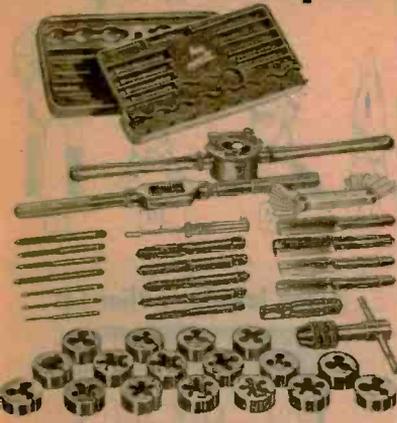
With Sturdy Rack  
**695**



### Allied 8-Piece Nutdriver Set

Seven hex drivers, 3/16" to 1/2", in supporting rack. Color-coded handles, with nickel-chrome plated drivers. Made of drop forged tool steel, heat treated for maximum hardness. Shafts 6 1/4", except 6 3/8" on 1/16" and 1/2" drivers.  
26 A 1787. Wt., 1 1/4 lbs..... 6.95

# Fine quality Tools for home or shop



## Ace 40-pc. Tap and Die Set

**3095** • Includes all popular sizes  
• Hi-tempered alloy steel  
• Unbreakable plastic case

Complete set of taps and dies, plus all essential accessories in a compact storage case. All popular sizes. Consists of one each, tap and die: 4-36, 6-32, 8-32, 10-24, 10-32, 12-24 (Machine Screw Standard); 1/4-20, 3/8-18, 1/2-16, 5/8-14, 3/4-13 NC (U.S. Standard); 1/4-28, 5/16-24, 3/8-24, 1/2-20, 5/8-20 NF (S.A.E. Standard); 1/8" pipe.

Also includes die stock, tap, and reamer wrench, "T" tap wrench, screwdriver, and pitch gauge. High-tempered alloy steel. Unbreakable plastic case with recessed pocket for each part. Wt., 4 lbs.

26 A 1391. . . . . 30.95  
26 A 2848. S35P Screw Extractor Set. With extractor Nos. 1, 2, 3, 4, 5. Use with 1/4" drill. 5 oz. . . . . 1.98

## Greenlee Punches

Type 730 Round Punch Cuts holes in chassis, cabinets and panels. Cuts up to 16-gauge metal, bakelite, hard rubber. Wt., 1 1/2 lbs.

Stock No.	Hole	Lead Size	EACH
26 A 1337	1/2"	1/4"	2.85
26 A 1349	5/8"	1/4"	2.85
26 A 1306	11/16"	3/8"	2.85
26 A 1340	3/4"	3/8"	2.85
26 A 1342	7/8"	3/8"	2.85
26 A 1343	1"	3/4"	3.20
26 A 1344	1 1/8"	3/4"	3.35
26 A 1347	1 1/4"	3/4"	3.35
26 A 1327	2"	3/4"	8.35

Ball-Bearing Drive Screws. Minimize effort needed to operate punches. Reduces drive screw friction, 1 lb.  
26 A 1604. AV322-BB. 1 1/16" x 7/8". 1.25  
26 A 1605. AV112-BB. 1" x 1 1/2". 1.35  
26 A 1169. AV304-BB. 2" punch 3.40

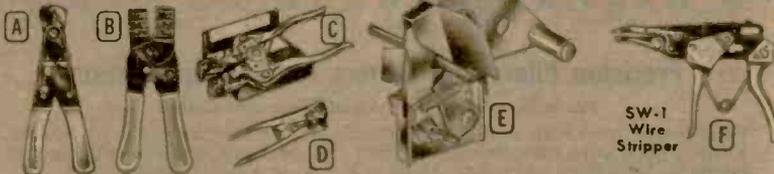
Replacement Cap Screws. For all punches above. Shpg. wt., 2 oz.

Stock No.	Size	Punch Size	EACH
26 A 1376	1/4"	1/2" and 3/8"	.30
26 A 1378	3/8"	1/16" to 7/8"	.30
26 A 1336	3/4"	1" to 1 1/4"	.35

## Heavy-duty Wire and Cable Strippers/Bolt Slicer



Vaco 1963 Wire Cutter/Bolt Slicer. Cuts, strips 22 to 10 gauge wire; crimps insulated, non-insulated terms. Slices 6 bolt sizes: 4-40, 5-40, 6-32, 8-32, 10-32, 10-24. 26 A 2048. Wt., 1 lb. . . . . 4.85



**A** K. Miller 101-S Wire Stripper. Strips, cuts wire up to No. 8. Spring-lock holds blades closed when not in use. 5-inches long overall. 26 A 1392. Shpg. wt., 4 oz. . . . . 1.27  
**B** K. Miller Coaxial Cable Stripper. Strips, cuts and slits cable. Has adjustable blades for RG59U coaxial cable. Shpg. wt., 8 oz. 26 A 1339. . . . . 13.75  
**C** G-C Wire Stripper Kit. Includes Model 766 wire stripper; 7 blades. For No. 8 to 30 gauge wire. Plastic case. Wt., 2 1/4 lbs. 26 A 1389. . . . . 13.16  
26 A 1387. 766. Stripper Alone. For 12-20 wire. Shpg. wt., 1 1/4 lbs. . . . . 5.93  
26 A 1388. 766A. Stripper Alone. For 14-30 wire. Wt., 1 1/4 lbs. . . . . 5.93

**D** G-C 802 Wire Stripper. Automatic stop, return. Has wire cutter. For No. 10-22 wires. 26 A 1341. Shpg. wt., 8 oz. . . . . 5.93  
**E** Blender-Tongue Coaxial Cable Stripper. Strips cable up to 1/2-inch diameter. Scale for exact stripping measurements. Uses single-edge razor blade. Holds cable under spring tension. Heavy steel construction. 26 A 2169. Shpg. wt., 4 oz. . . . . 3.45  
**F** Utica SW-1 "Stripwright" Wire Stripper. Strips Teflon® and many other wire and cable insulations. Positive cam-action adjusts to correct wire sizes from No. 12 to No. 26. The ideal stripping tool for limited access areas. Shpg. wt., 7 oz. 26 A 1680. . . . . 16.90

## Precision high-speed Drill Bits



**G** 15-Drill Set. 1/16 to 1/2" in 32nds. Steel index. 26 A 2137. Wt., 2 1/4 lbs. . . . . 14.50  
21-Drill Set. 1/16 to 3/8" in 64ths. Steel index. Wt., 1 3/4 lbs. 26 A 2173. . . . . 12.50  
29-Drill Set. 1/16 to 1/2" in 64ths. Steel index. Wt., 3 3/4 lbs. 26 A 2200. . . . . 24.99  
60-Number Size Drill Set. Sizes 1 to 60. Steel index. Wt., 1 1/4 lbs. 26 A 3244. . . . . 17.99  
5-Piece Drill Set. 1/4" shank. Sizes: 1/4, 5/16, 3/8, 7/16, 1/2. Plastic pouch. Shpg. wt., 5 oz. 26 A 2208. . . . . 7.95

12-Piece Drill Set. Sizes from 1/16" to 1/4" in 64ths. Includes center punch. With roll-up pouch. 26 A 3238. Shpg. wt., 9 oz. . . . . 5.35  
13-Piece Drill Set. 1/16" to 1/2" in 32nds. Drill sizes over 1/4" have 1/4" shank. With roll-up pouch. 26 A 3239. Shpg. wt., 3 lbs. . . . . 13.50  
**H** Masonry Set. 1/4", 5/16", 3/8", 1/2". Sizes over 1/4" have 3/4" shanks. 26 A 3248. Shpg. wt., 5 oz. . . . . 3.98  
**J** Miniature Set. Twenty drills from No. 61 (.039") to No. 80 (.0135"). 26 A 2291. Shpg. wt., 6 oz. . . . . 7.95  
**K** General Hardware Circle Cutters. Round shanks fit drill press, square shanks fit hand brace. Pilot drill keeps circle cutter centered. Cuts wood, plastic, steel. 8 oz.

10-Piece Drill Set. 1/16, 5/64, 3/32, 7/64, 1/8, 5/32, 3/16, 1/32, 1/4. Steel index. Wt., 5 oz. 26 A 2254. . . . . 3.79  
13-Drill Set. 1/16 to 1/4" in 64ths. Steel index. Wt., 8 oz. 26 A 2277. . . . . 4.99  
17-Drill Set. 1/16 to 1/4" in 64ths; 5/16, 3/8, 7/16, 1/2, 3/4 shank. Steel index. 26 A 2289. Wt., 2 lbs. . . . . 11.95

Stock No.	Shank	Hole Size	EACH
26 A 1245	Round 1/4"	7/8-4"	2.10
26 A 1246	Square	1-6"	2.30
26 A 1247	Round 3/8"	1-6"	2.30
26 A 1224	Round 1/2"	1-6"	2.30
26 A 1225	Round 1/2"	1 1/4-8"	4.74

26 A 1248. Extra Blades for Circle Cutters. Av. shpg. wt., 4 oz. . . . . Each 52¢

# Tool Boxes, Vises and Staplers



## Metal and plastic Tool and Utility Boxes

- A** Park Type 132 Metal Tool Box. All-purpose box for tackle, tools, sewing. Two cantilever trays. Enamel finish.  $5\frac{3}{4} \times 13\frac{1}{2} \times 6\frac{1}{2}$ ".  
26 A 3152 X. Shpg. wt., 5 lbs. . . . . 2.95  
Type 131. Above, one tray.  $4\frac{1}{2} \times 13\frac{1}{2} \times 6\frac{1}{2}$ ".  
26 A 3153 X. Shpg. wt., 3 lbs. . . . . 1.95
- B** Park Type 151-T. Metal, for hand tools. Lift-out tray. Heavy-gauge steel, full-length hinge, clasp lock. Edges turned, welded. Baked enamel.  $4\frac{1}{2} \times 15 \times 6\frac{1}{2}$ ".  
26 A 3660 X. Shpg. wt.,  $4\frac{1}{2}$  lbs. . . . . 3.49

- C** Vlcek Model 1212 "Crush-proof" Plastic Tool Box. Guaranteed unbreakable. Has two trays, with 14 compartments. Top and bottom open flat, cannot tip. Unbreakable polypropylene. Rustproof hardware. Green.  $6 \times 12\frac{3}{4} \times 7$ ".  
26 A 1772 X. Wt.,  $2\frac{1}{2}$  lbs. . 3.98  
Model 1211. Above, but one tray. Green.  $4\frac{3}{8} \times 12\frac{3}{8} \times 7$ ".  
26 A 3156 X. Wt., 2 lbs. . . . 2.98

## Bench Vises for home, shop and electronic work

### Wilton Vises for home workshops

All-purpose vises feature replaceable cap jaws, reinforced forming horn, swivel base, polished anvil, serrated steel replaceable top jaws. Also,  $\frac{3}{8}$ " formed steel slide. Gray finish. \*Indicates pipe capacity.

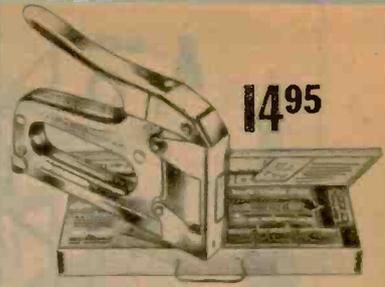
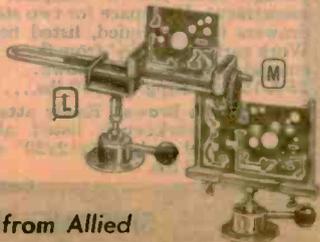
Stock No.	Mfr's Type	Jaw Width	Max. Open	Wt. Lbs.	EACH
26 A 2315 X	643½	3½"	4"	1/8-2"	19 12.45
26 A 2316 X	644	4¼"	4½"	1/8-2½"	26 18.95
26 A 2318 X	645	5"	5½"	1/8-2½"	34 21.55

### Quality Vises for every application

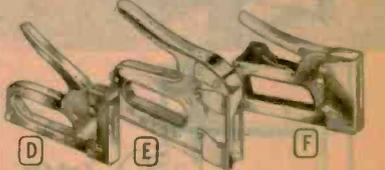


- G** Wilton C55. Serrated inserts, pipe jaws. Swivels. Jaws,  $4\frac{1}{2}$ " w., 3" d., open  $4\frac{1}{2}$ ".  
26 A 1489 X. Shpg. wt., 19 lbs. . . . . 7.95  
26 A 2203 X. C53½. Above,  $3\frac{1}{2}$ " jaw. 11 lbs. 6.38
- H** Millers Falls Deluxe 217. Use on drill press, work bench. Jaws,  $2\frac{3}{8}$ " wide; faces extend to  $3\frac{3}{8}$ ". Swivel jaw.  
26 A 1321. Shpg. wt., 5 lbs. . . . . 8.99
- J** Brink and Cotton 149 Hobbyist. Holds small parts. Clamps to bench up to  $1\frac{3}{4}$ " thick. Jaws,  $1\frac{3}{4}$ " wide; open to  $1\frac{3}{4}$ ".  
26 A 1317. Shpg. wt.,  $2\frac{3}{4}$  lbs. . . . . 1.99
- L** Wilton Model 353 Electronics Vise with Positioner. For small PC boards, etc. Rubber-covered jaws. Bars adjust to  $6\frac{1}{2}$ ".  
26 A 2210. Shpg. wt., 3 lbs. . . . . 15.60
- M** Wilton Model 371 PC Holder and Positioner. Brackets adjust horizontally 3" to 6". Vertical posts are V-grooved ( $\frac{1}{8}$ " wide,  $\frac{3}{16}$ " deep). Post height, 4".  
26 A 2211. Shpg. wt., 2 lbs. . . . . 12.55

- K** Wilton Model 364 Vise and Positioner. The most convenient bench tool you can use to hold small parts secure. Single-handed control of "PowRarm" positioner leaves one hand free, permits rotating or tilting of work. Maximum work weight, 15 lbs. at 6-inches. Jaws open to  $2\frac{1}{4}$ -inches and are  $2\frac{1}{4}$ -inches wide. Shpg. wt., 5 lbs.  
26 A 1149. . . . . 18.25



- ### Arrow Complete Stapling Kit
- T-50MP. Has T-50 stapler with powerful double-leverage action, jam-proof mechanism. Mend screens, window shades; fasten ceiling tile, wire; hang party decorations—hundreds of uses. Includes: T-50 staple gun; screen, shade attachments; staple lifter; 2000— $\frac{1}{4}$ ", 1000— $\frac{3}{8}$ ", 1000— $\frac{1}{2}$ " staples; 1000 Ceil-Tile staples. T-50 uses  $\frac{1}{4}$ " to  $\frac{3}{8}$ " staples. Extra staples below.  
26 A 1465. Kit. Wt.,  $4\frac{3}{4}$  lbs. . . 14.95  
26 A 2653. T-50 Staple Gun Alone. Shpg. wt.,  $2\frac{1}{4}$  lbs. . . . . 10.95  
26 A 2190. T-50 Screen Attachment. Shpg. wt., 1 oz. . . . . 1.00  
26 A 2191. T-50 Wire Attachment. Shpg. wt., 1 oz. . . . . 1.00  
26 A 2192. T-50 Window Shade Attachment. Wt., 1 oz. . . . . 1.00  
26 A 2193. SL-50 Staple Lifter. Shpg. wt., 1 oz. . . . . 1.00



- D** JT-21 JR. Low-priced stapling gun. Safety lock handle, staple extractor, visual refill aid. Loads 100— $\frac{1}{4}$ " staples.  $3 \times 6\frac{1}{8} \times \frac{3}{4}$ ". Order staples below.  
26 A 1249. Wt., 1 lb. . . . . 4.79  
26 A 2180. Combination Wire/Screen Attachment for above. 1 oz. . . . . 7.5¢
- E** T-55. Medium-duty gun. Similar to T-50. Non-pinch, easy-grip handle. Order staples below.  
26 A 2307. Wt., 2 lbs. . . . . 7.95

### Wire and Cable Staplers

- F** T-75. Heavy-duty gun handles up to  $\frac{1}{2}$ " wire, cable, tubing. Flat crown staples hold firmly. Tapered striking edge for close corners. Order staples below.  
26 A 2314. Wt.,  $2\frac{1}{4}$  lbs. . . . . 13.95  
26 A 1467. T-25 Wire Stapler. For low-voltage  $\frac{1}{4}$ " wire. Grooved blade positions wire.  $2\frac{1}{4}$  lbs. 13.95

### Arrow Gun Staples. \*Indicates ceiling tile for T50, T55. Wt., 1 lb.

Stock No.	For Model	Size	Quantity	EA.
26 A 2337	T50, T55	$\frac{1}{4}$ "	5000	2.13
26 A 1273	T50, T55	$\frac{3}{8}$ "	5000	2.34
26 A 2343	T50, T55	$\frac{1}{2}$ "	5000	2.76
26 A 2654	T50, T55	*	5000	3.19
26 A 2344	JT-21	$\frac{1}{4}$ "	5000	2.65
26 A 2365	JT-21	$\frac{3}{8}$ "	5000	2.65
26 A 2366	T-25	$\frac{3}{8}$ "	5000	3.40
26 A 2387	T-25	$\frac{5}{8}$ "	5000	3.83
26 A 2390	T-75	$\frac{3}{8}$ "	1000	1.91
26 A 2409	T-75	$\frac{1}{2}$ "	1000	1.91
26 A 2410	T-75	$\frac{3}{4}$ "	1000	2.13



**A** Hanging Shelf  
\$4.98

**B** 40-Drawer Cabinet  
\$17.95

**C** 2x5 ft. Workbench  
\$19.95

Storage Racks  
Low \$5.95 as **D**

## Edsal Workshop Equipment

### **A** Steel hanging Shelf

A heavy-duty, all-steel hanging shelf for off the floor storage in garages, basements, workshop areas. Quickly assembled and hung on easy-to-mount wall brackets. Gray baked enamel finish. 12x30x25" high. Knocked down. 26 A 1942 X. Wt., 16 lbs. . . . . 4.98

### **B** Multi-drawer Cabinets

40-Drawer Cabinet. Holds everything from small tools to electronic components. Features 32 big 4x11" and 8 jumbo-sized 8x11" drawers. One-piece drawers of sturdy corrugated-board construction. Special stop-tab keeps drawers from being pushed in or pulled out too far. All-steel frame 37x36x12". Shpd. knocked-down. 26 A 2145 Z. Wt., 37 lbs. . . . . 17.95

15-Drawer Cabinet. Similar to above, but with 12 drawers 4x11", 3 drawers 8x11". Overall size: 26x21x12". 26 A 2470 Z. Wt., 24 lbs. . . . . 6.98

### 2x4-ft. Bench with pegboard

2x4-ft. workbench has full-length pegboard tool and parts rack with enough room for a complete tool assortment. Has space for two storage drawers (not included, listed below). Work surface is 34 1/2" from floor. Gray enamel finish. Knocked down. 26 A 1523 Z. Shpg. wt., 70 lbs. . . . . 19.95

Steel Storage Drawer. Easily attached to either workbench listed above. Gray enamel finish. 3x12x20" deep. Shpg. wt., 12 lbs. 26 A 1524 X. . . . . Each 3.19

### 2x5-ft. steel-frame Bench

**C** 2x5-ft. deluxe workbench features a full 10 square feet of working space. Can support over 200 lbs. per sq.-ft. 1" No-Mar top and sturdy one-piece heavy-gauge welded steel legs that take rough use in stride. Accommodates two drawers (not included, listed below left). Work surface 34 1/2" from floor. Gray baked enamel steel parts fight rust and corrosion. Knocked down. Shpg. wt., 76 lbs. 26 A 2563 Z. . . . . 19.95

### **D** All-steel storage Racks

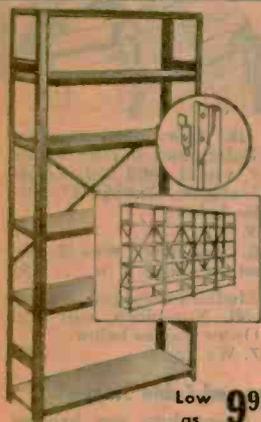
Sturdy, all-steel storage racks ideal for storing bulky and oversize items, paint cans, bottles, cartons, etc. No unsightly sway braces. Accessible from either side. Shelves are rust-proofed, scratch and mar resistant. Can be raised or lowered at 1 1/2" intervals. A screwdriver is all you need for assembling. With hardware, post caps and floor guards.

#### Storage Racks

Stock No.	No. Shelves	HxWxD	Wt., Lbs.	EACH
26 A 2109 X	4	60x30x12"	18	5.95
26 A 2110 X	5	66x30x12"	22	6.95
26 A 2111 X	5	72x36x12"	25	7.95
26 A 2114 X	5	72x36x18"	34	9.95

#### Extra Shelves for above racks

Stock No.	For Use With	Wt., Lbs.	EACH
26 A 2115 X	30x12" Units	5	1.49
26 A 2116 X	36x12" Units	7	1.59
26 A 2117 X	36x18" Units	9	1.99



"Kwik-Klip" for easy shelf adjustment

Stack them in rows

Low as \$9.95

### Deluxe all-steel Racks

All-purpose utility racks with hundreds of practical applications in home or industry. Assembles with simple hand tools—just bolt tops and bottoms together. "Kwik-Klip" fasteners secure the shelves to the frame, making each shelf completely and individually adjustable. Mounting holes in posts are at convenient 1" intervals. Each heavy-duty shelf supports up to 500 lbs. Rack has 5 shelves with upright brackets. Overall height: 75", width 36". Rust resistant Gray enamel. Knocked down.

- With 12" Deep Shelves.
- 26 A 1783 U. Wt., 47 lbs. . . . . 9.95
- 26 A 1784 Z. With 18" Deep Shelves. Shpg. wt., 60 lbs. . . . . 12.95
- 26 A 1781 X. 12" Shelf. 6 lbs. . . . . 1.69
- 26 A 1782 X. 18" Shelf. 8 lbs. . . . . 2.19

# Park heavy-duty Tool Boxes and Machinists Chests



**A** Model 200F Mechanic's Tool Box. Extra-large, long, flat-top tool box for the millwright; tractor, auto and truck repairman; etc. Brown baked enamel finish. 11x20x10".  
26 A 2560 X. Shpg. wt., 15½ lbs. . . . . 11.95

**B** Model 802 Government-Type Hip Roof Tool Box. Double-cover hip-style box. Twin handles prevent box from opening while being carried. Can be padlocked through handles. Lift-out tray has socket partition. Brown baked enamel finish. 7¼x21x8½".  
26 A 2561 X. Shpg. wt., 11 lbs. . . . . 7.95

**C** Model P-23N Three-Drawer Machinist Chest. Drawers have full-suspension slides; lock when cover is closed. Pushing drawer closed locks drawer even if cover is closed. 4"-high till in top for large tools. Drawers each 1½" high. Full-length hinge. Silicon-treated baked green finish. 10¼x20x8½".  
26 A 2506 X. Shpg. wt., 18 lbs. . . . . 12.95  
26 A 2149 X. Model P-22 Two-Drawer Machinist Chest. As above, but two drawers. 9¾x20x8½". Shpg. wt., 16 lbs. . . . . 11.95

**D** Model 1000 Ten-Drawer Machinist Chest. Full-suspension drawer slides allow full extension; drawers remove for cleaning. Removable front panel locks when cover is closed, stores in bottom compartment when open. One-piece drawbolts, plus pin tumbler lock. Till in top, 4x20x8½". 6 drawers are 1x8½x7½". 4 others: 2x8½x7½"; 1½x18¼x7½"; 2½x18¼x7½"; 3x18¼x7½". Electrically welded. Brown baked enamel finish. 17½x20x8½".  
26 A 2507 U. Shpg. wt., 40 lbs. . . . . 34.95  
Model 700 Seven-Drawer Machinist Chest. As above, but has seven drawers. Four drawers are 1x8½x7½". Three others: 2x8½x7½"; 1½x18¼x7½"; 2½x18¼x7½". Size, 13¼x20x8½".  
26 A 2508 U. Shpg. wt., 30 lbs. . . . . 29.95

**E** 26 A 3712 X. Two-Drawer Add-On Chest. For Model 1000 and Model 700 above. 7¾x20x8½". Shpg. wt., 15 lbs. . . . . 12.95

**F** 26 A 3739 X. Three-Drawer Add-On Chest. For Model 1000 and Model 700 above. 7¾x20x8½". Shpg. wt., 16 lbs. . . . . 14.95

Model 1000  
**34.95**



# Rem Line top-quality Roller Cabinets and Tool Chests



**52.50** \$5 monthly\*

**79.95** \$5 monthly\*

**43.50**  
\$5 monthly\*

**69.95** \$5 monthly\*

**3-Drawer Roller Cabinet**  
Model 9002. Wrap-around construction, 4" composition casters. 16-gauge base. Flush-to-front drawers, 21½" wide, 16¾" deep. 2 drawers, 2½" high; one, 5¾". Panel compartment, 26¼x12¼". Lock, keys. 32¼x26¾x17".  
26 A 3947 Z. 93 lbs. . . . . 52.50

**7-drawer Roller Cabinet**  
Model 9502. Two top drawers, 10½x16¾x1¾". Others, 21½" wide, 16¾" deep. Height: two, 1¾"; two, 2¾"; one, 4½". Panel compartment, 26½x12½x17". I-beam slides; chrome-plated pulls. Lock, keys. 38x26¾x17".  
26 A 3949 Z. 121 lbs. . . . . 79.95

**6-drawer Tool Chest**  
Model 1100. Two drawers, 1¾x5½x12½"; one, 1¾x11¼x12½"; two, 1¾x23½x12½"; one, 3¾x23½x12½". Divided full-width top drawer; divided tote tray. Lock, keys. Red enamel drawers, charcoal finish. 15½x26x12¾".  
26 A 3932 Z. 61 lbs. . . . . 43.50

**12-drawer Tool Chest**  
Model 1160. Six drawers, 1¾x5½x12½"; three, 1¾x11¼x12½"; two, 1¾x23½x12½"; one, 3¾x23½x12½". I-beam slides, positive stops. Divided tray. Lock, keys. Rolled steel spot welded. Charcoal finish. 19½x26x12¾".  
26 A 3945 Z. 85 lbs. . . . . 69.95

\*Full Credit details on page 438. . . Buy with no money down

# Adjustable Lamps for home and office

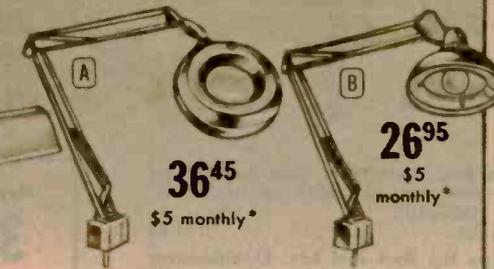


**Fluorescent Desk Lamp**

With Tubes  
**25<sup>95</sup>**  
\$5 monthly\*

- Twin Lamp
- Raise or lower with a touch

Luxo FL-1. Twin-light fluorescent lamp that's ideally suited for use in any office or home where a large area of bright, cool light is necessary. Lamp can be raised or lowered with a slight touch... yet arms are spring-controlled and counter-balanced to stay in place. Lamp swivels full 360°, has 45° reach. Gray enameled metal finish. Eight-ft. cord. Two type T8 Fluorescent Tubes included. Order mounting bracket desired, at right. U.L. Listed. For 117 VAC.  
26 A 3166 X. Wt., 9 lbs. . . . . 25.95



**A** Luxo LFM-1 Fluorescent Magnifier Lamp. Big 5" magnifier lens is ideal for miniature assembly, inspection or reading fine print. Moves with a touch, yet stays in place. 360° swivel; 45" reach. Gray finish. With T9 fluorescent tube. Order mtg. bracket below. U.L. Listed. 117 VAC.  
26 A 3169 X. Shpg. wt., 8 lbs. . . . . 36.45

**B** Luxo LC-1 Combination lamp. Has both fluorescent and incandescent lights... use together or separately. 360° swivel; 45" reach. Gray finish. With T9 tube, less incandescent bulb. Order mtg. bracket below. U.L. Listed. 117 VAC.  
26 A 3167 X. Shpg. wt., 9 lbs. . . . . 26.95



**C** Marks Dual Fluorescent Lamp. Special HI-LO switch: LO position for normal light; HI position increases light to almost that of a two tube lamp. Spring-action dual 12" arms, with set screws. Cast metal "C" mtg. clamp. With tube. For 117 VAC.  
26 A 3170 X. 7 lbs. . . . . 24.95  
26 A 3171 X. Above, with desk base. 12 lbs. . . . . 27.95

## Mounting Brackets for all Luxo Lamps



**D** Desk Clamp. For table or desk. Opens to 2 1/4". Shpg. wt., 1 lb.  
26 A 2992. . . . . 1.68

**E** Slanted Surface Clamp. Fits drafting board. Adjustable angle.  
26 A 2995. Wt., 1 lb. . 2.62

**F** Screw Mount. For wall, other vertical surface. Three mtg. holes.  
26 A 2993. Wt., 1 lb. . 1.68

**G** Screw Mount. For desk, other level surfaces. Two mounting holes.  
26 A 2994. Wt., 1 lb. . 1.68



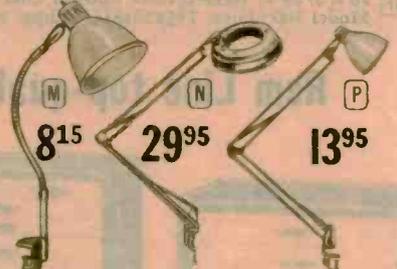
**H** 19<sup>95</sup> \$5 monthly\*  
With Magnifier



**J** 9<sup>95</sup>

**K** 8<sup>95</sup>

**L** 3<sup>95</sup>



**M** 8<sup>15</sup>

**N** 29<sup>95</sup>

**P** 13<sup>95</sup>

## Low-voltage high-intensity Desk Lamps

Built-in transformer reduces voltage for cool, glare-free light

- H** Lamp/Magnifier. Two-power magnifier has 7" focus; swivels vertically, rotates. Lamp also swivels, extends to 12". Each moves independently. Hi-Lo switch for 500 or 250 footcandles. With #1133 bulb. . . . . 19.95
- J** Powerful "President" Lamp. Equivalent to 200-watt incandescent lamp. Chromed folding arm, double shade with rich rosewood inlay, textured base. Hi-Lo-Off switch. With #133 bulb. 117 VAC.  
26 A 3230, Shpg. wt., 3 lbs. . . . . 9.95
- K** Handsome "Continental" Lamp. Equivalent to 100-watt incandescent lamp. Chromed folding arm, double shade, mar-proof grain finish, rosewood inlay in base. Hi-Lo-Off switch. #93 bulb. 117 VAC.  
26 A 3231, Shpg. wt., 2 1/2 lbs. . . . . 8.95
- L** Low-Price "Swinger" Lamp. Smartly-styled lamp features flexible neck, double "sure-kool" shade, attractive walnut inlay in base. 15 candlepower. With type #93 bulb, 6-ft. cord. For 117 VAC.  
26 A 3233, Shpg. wt., 2 lbs. . . . . 3.95  
26 A 3147, Replacement #93 Bulbs. Shpg. wt., 2 oz. . . . . Pkg. of 2/49¢  
26 A 3149, Replacement #1133 Bulbs. Shpg. wt., 2 oz. . . . . Pkg. of 2/62¢

## "Swing-O-Lite" Lamps

- M** Low-Cost Gooseneck Lamp. Flexible neck extends over 30" circle. Shade rotates to direct light. Neutral gray finish. With "C" mounting clamp for easy installation. With incandescent bulb. For 110-120 V, 60 Hz AC. 5 lbs.  
26 A 3174 X. . . . . 8.15
- N** Model BBM-9 Fluorescent Magnifier Lamp. Has 5" lens with 13" focus. Spring controlled, counterbalanced arm reaches 45". Gray. "C" clamp bracket. T9 tube included. For 110-120 V, 60 Hz AC. Shpg. wt., 10 lbs.  
26 A 3175 U. . . . . 29.95
- P** Model BB45C All-Purpose Lamp. Spring-controlled arm extends 45"—adjusts with a touch. Vented shade. Gray. "C" clamp. With incandescent bulb. For 110-120 V, 60 Hz AC.  
26 A 3173 X. Shpg. wt., 5 lbs. . . . . 13.95

**A** Fluorescent Strip Light Fixtures. Heavy-gauge metal fixtures with tubes. Rapid start with "P" rated ballast, except "pre-heat (starter) type. White baked enamel. Easy row mounting.  $2\frac{3}{4}$ " wide x  $1\frac{3}{4}$ " deep.

Stock No.	Type	Watts	Length	Lbs.	EACH
26 A 1746 X	ST-120*	20	24"	3 $\frac{1}{2}$	4.09
26 A 1747 X	ST-140	40	48"	8	7.49
26 A 1748 X	ST-240	2-40	48"	14	12.49

**B** 15-Watt Pin-Up Strip Lamp. Installs easily anywhere.  $2x1\frac{1}{2}x20\frac{3}{4}$ " long. With fluorescent tube, 6-ft. cord, plug, AC outlet, switch. 117 VAC. U.L. Listed.  
26 A 1923 X. Shpg. wt., 3 lbs. . . . . 5.95

**C** 15-Watt Under-Cabinet Fixture. Sticks up with Scotch-mount®—no screws, no drilling.  $1\frac{1}{8}x5\frac{1}{4}x18\frac{1}{2}$ ". With tube, cord, plug, switch. 117 VAC. U.L. Listed.  
26 A 3237. Shpg. wt., 4 lbs. . . . . 5.95

**D** Circline-Style Ceiling Fixture. Chromed. Extends 3" to 4" below ceilings. Use with wall switch. With 12" 32-W, 16" 40-W rapid-start tubes. 117 VAC. U.L. Listed.  
26 A 3235 X. Shpg. wt., 10 lbs. . . . . 14.95

**E** Wafer Thin Fluorescent Light Fixtures. Attractive when hung individually, or pendant, surface or continuous row mounted. Walnut wood-grain metal ends; one-piece wrap-around diamond prismatic polystyrene lens. Rapid start with "P" rated premium ballasts. All lamps included.  $3\frac{3}{8}$ " deep. Two-lamp fixtures,  $11\frac{1}{4}$ " wide; four-lamp fixtures,  $15\frac{13}{16}$ " wide. 117 VAC. U.L. Listed.

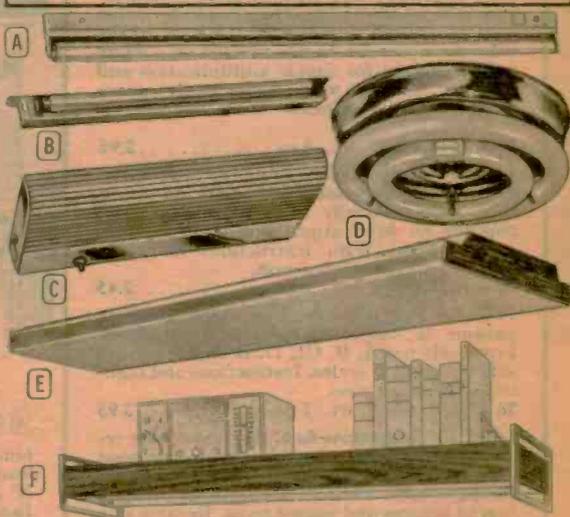
Stock No.	Type	Watts	Length	Lbs.	EACH
26 A 2665 X	WTB-420	4-20	24"	16	27.95
26 A 2666 U	WTB-240	2-40	48"	18	20.45
26 A 2667 U	WTB-440	4-40	48"	25	34.45

**F** Decorator-Styled Fluorescent Shelf-Lite. Attractively designed to light brightly, look handsome anywhere—in homes, schools or offices. Walnut-grain finish metal front. Keyhole slots make mounting easy. With mounting screws, 6-ft. cord, plug, switch and convenience outlet. With one 30-watt rapid start lamp.  $8\frac{1}{2}x5\frac{3}{4}x38\frac{1}{4}$ " long. For 110-120 117 VAC.  
26 A 1737 X. Shpg. wt., 10 lbs. . . . . 23.95

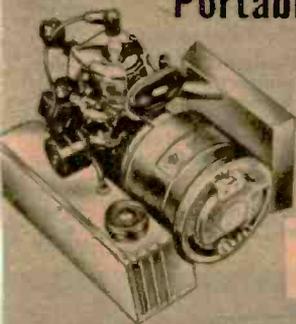
## Fluorescent Light Fixtures

**Reflector Fluorescent Light Fixture.** Rapid-start, with 6-ft. SJ cord and pull-chain switch. Plugs into existing outlet. With two 40-watt 48" fluorescent tubes. "P" rated ballast with thermal protection. White enamel.  $13x4\frac{3}{4}x48$ ". 117 VAC. U.L. Listed.  
26 A 1922 U. Shpg. wt., 15 lbs. . . . . 15.95

**26 A 2546 U. Two-Tube Rapid-Start Fixture.** As above, but without SJ power cord or switch. 15 lbs. . . . . 13.95



## Portable AC Power Plants

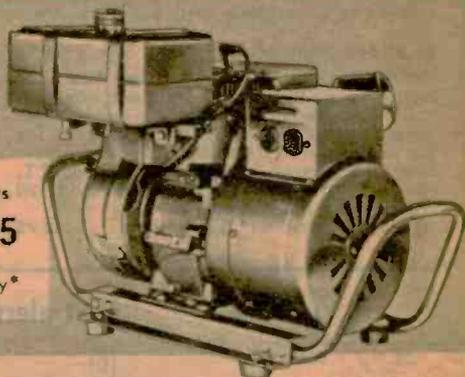


350 Watts **99<sup>95</sup>** \$5 monthly\*

1250 Watts

**159<sup>95</sup>**

\$8 monthly\*



### Featherweight Generator

**Tiny Tiger.** Miniature gasoline-powered generator delivers 350 watts at 117 VAC or 12 amps at 12 VDC. Weighs only 14 pounds . . . so small you can carry it in your hand. Charges batteries, operates electrical equipment in boats, cars, camps or anywhere.

One-hp engine runs at 6300 rpm for  $2\frac{1}{2}$  hours with 30-minute cooling time. Uses only 14 oz. of fuel per hour. High-capacity magneto ignition; direct drive generator; spark arrester; muffler. All-metal construction.  $10\frac{1}{2}x8\frac{3}{8}x8\frac{1}{2}$ ".  
26 A 3751 X. Shpg. wt., 15 lbs. . . . . 99.95

### Emergency power Portable AC Alternators

3600-rpm alternators offer  $\pm 5\%$  voltage regulation, 25% reserve surge capacity. Solid-state excitation. Automatic recoil starter. Shock-mount design with muffler. 115 V units have two polarized receptacles; dual-voltage also have twist locks. Fuel cap., 1 gal. except 5000-watt,  $1\frac{1}{2}$  gal. Made to NEMA standards. Sent truck or express from Oshkosh, Wisconsin. No C.O.D. orders.

Stock No.	Volts	Watts	Rated Amps		Outlets-AC		Horse-power	Size HxWxD	Wt., Lbs.	EACH
			115 V	230 V	115 V	230 V				
26 A 3290 ZF	115	1250	10.9		2		3	18x24x19"	85	159.95
26 A 3291 ZF	115	1500	14.0		2		4	18x24x19"	87	199.95
26 A 3292 ZF	115	1750	15.2		2		4	18x24x19"	87	219.95
26 A 3293 ZF	115/230	2500	21.7	10.9	2		6	18x24x19"	99	289.95
26 A 3294 ZF	115/230	3000	26.1	13.0	3	1	2 $\frac{1}{4}$	18x28 $\frac{1}{2}$ x18"	148	329.95
26 A 3295 ZF	115/230	3500	30.4	15.2	3	1	2 $\frac{1}{4}$	18x28 $\frac{1}{2}$ x18"	148	379.95
26 A 3296 ZF	115/230	4000	35.0	17.5	3	1	2 $\frac{1}{4}$	18x28 $\frac{1}{2}$ x18 $\frac{1}{4}$ "	158	399.95
26 A 3297 ZF	115/230	5000	43.5	21.8	3	1	10 $\frac{1}{2}$	24 $\frac{1}{2}$ x31x20 $\frac{3}{4}$ "	200	499.95

\*See page 438 for full Credit details . . . buy with no money down

# Drawing Sets, Slide Rules and Templates



## Post precision Slide Rules

... easy to use and extremely accurate

**1444K 5" Pocket Rule.** Same quality construction, accuracy, and smooth glide action inherent in all Post rules. Dimensionally stable bamboo is used to make up the body of the rule; the scales are engine divided on a white face. Designed for simple multiplication and division. Will not warp, slides easily under any weather conditions. With instructions and carrying case.

26 A 1644. Shpg. wt., 6 oz. .... 5.95

**1445 8" Student Rule.** Provides 3-digit accuracy of conventional 10" rules on an 8" base. Dimensionally stable bamboo body, requires no lubrication. For multiplication and division. With instructions and tab-punched vinyl carrying case.

26 A 1651. Shpg. wt., 6 oz. .... 2.45

**1447 Full-Size 10" Rule.** For rapid, accurate answers to simple mathematical problems. Front side has A, B, C1, D, K scales; reverse side has S, L, T scales. Instructions and high-impact molded case.

26 A 1655. Shpg. wt., 7 oz. .... 3.95

**1450F 10" Technicians Rule.** For those who require an advanced trig rule, yet do not need a log log rule. Excellent for a series of related computations. Permits accurate determination of squares and square roots. Reverse side has L, A, TT, Sec T St, Cos S, C, D, and D1 scales. Comes complete with case and instructions.

26 A 1665. Shpg. wt., 1½ lbs. .... 14.95

**1460M Versalog 23-Scale log Log Rule.** For engineers, mathematicians, anyone using advanced mathematics. Log log scales cover range from 1.001 to 22.000; reciprocal log log scales cover 0.00005 to 0.999. Reverse side scales carry LL/1, LL/2, LL/3, TT, Sec T St, Cos S, C, D. With case and 120 page instruction book.

26 A 1699. Shpg. wt., 2½ lbs. .... 22.95

## Professional Outfit

**32<sup>50</sup>**



## Deluxe Outfit

**19<sup>95</sup>**

## Drawing Set/Instrument Set Outfits

**A Professional Drawing Set:** 20x24" board; 24" transparent edged T-square; 10" 30-60°, and 8" 45° triangle; 6" protractor; combination scale; French curve; vinyl eraser; erasing shield; tape; lead holder; 2 sticks 2H and 4H leads; electronic template; Pen N' Pencil letter, number template; brush; 12 sheets vellum; case.

**Instrument Set:** Large and small combination compass; friction divider; beam bar; lead holder. Case. Imported.

26 A 3691 X. Complete Outfit. Shpg. wt., 13 lbs. .... 32.50

26 A 3741 X. Drawing Set Alone. Shpg. wt., 12 lbs. .... 20.50

26 A 3713. Instrument Set Alone. Shpg. wt., 1 lb. .... 13.75

**B Drawing Set:** 18x24" board; 24" T-square; architect's scale; 10" 30°, 8" 45° triangles; curve; 5" protractor; 2H, 4H pencils; lead pointer; tape; art gum eraser; 6 sheets of 12x18" paper; erasing shield; lettering guide; dusting brush; case. **Instrument Set:** 6", 4½" bow compasses, pencil and divider parts, center wheel adjustment; 5½" dividers, straightening device; leads; case. Nickel plated. Imported.

26 A 2559 X. Complete Outfit. Shpg. wt., 11 lbs. .... 19.95

26 A 2011 X. Drawing Set Alone. Shpg. wt., 10 lbs. .... 12.95

26 A 2073. Instrument Set Alone. Shpg. wt., 1 lb. .... 9.95

## Post electronic symbols Templates



**C 2972R Electronics Symbols Template:** Plastic template has symbols for tubes, rectifier, crystal, resistors, capacitors, lamps (pilot, illuminated), meter, filament; connectors, plug, receptacle, transformers (standard, delta, Y), relay, coils, revisions, ground, battery, switch, pushbutton, wafer switch, antenna, fuse. Size, 5½x9¼". Shpg. wt., 6 oz. .... 3.60

**D 2972½Q. Skts., meters, tubes, transistors, antennas, capacitors, chassis/ground, fuse, mike, spkr., batt, rectifiers, thermal overload, solenoids, heaters, rheostats, coils, transformers, plug. Size 5x7".** 26 A 2171. Wt., 5 oz. .... 2.95

**E 2974R Wave Forms. Sine/variable, steady and fluctuating DC, modulated carrier, 5½x8¾".** Wt., 1 oz. .... 2.65

**F 2973D Transistor Outlines. Based on JEDEC standards. 27 cutouts, top and side views. 5½x9½".** Wt., 1 oz. .... 2.95

26 A 2195. .... 2.95

**G 2972½R Electronic Symbols. Cathode, speaker, pushbutton, heater, ground, antenna, mike, switches, capacitors, ohm, resistance, fuse, batt., coils, outlets, aux. systems, pos./neg.** 26 A 2172. Size, 3x8¾". Wt. 1 oz. 1.69

# Allied Reverb Systems for stereo-like sound



only \$1 more  
Deluxe 6"  
rear deck  
speaker kit



only \$1 more  
Deluxe 6"  
rear deck  
speaker kit



## Dash-mount Tunable Reverb

**1995**  
less  
speaker

Quality reverb  
with tunable control

Enjoy the exciting musical sound that reverberation brings to your car. Set mounts under dash, connects to your car radio. Double-spring reverb with tunable control gives you complete command of stereo-like sound. Hand-somely styled in chrome and non-reflective pebble grain. With safety knobs, pilot light.  $1\frac{1}{2} \times 7 \times 5\frac{1}{2}$ ". For 12 VDC, negative ground.  
19 A 4544. Wt., 5 lbs. . . . . 19.95  
19 A 4543. As above, plus 6" round speaker (for convertibles and hard-tops), 6x9" adapter board (for rear deck). Includes chrome speaker grille. Shpg. wt., 6 lbs. . . . . 20.95

## Trunk-mount Tunable Reverb

**2295**  
less  
speaker

Reverberation "turns-on" AM or AM-FM radio

Variable control on dash panel lets you adjust reverberation for thrilling "live" sound. Double-spring system delivers beautiful music with stereo-like fidelity. Control unit, with pilot light, has two recessed safety knobs on die-cast panel. Solid state, works in coldest weather. For 12 VDC, negative ground. Control panel,  $1\frac{3}{4} \times 4\frac{3}{4}$ ". Reverb mounts in trunk.  
19 A 4542. Wt.,  $5\frac{1}{2}$  lbs. . . . . 22.95  
19 A 4541. As above, plus 6" round speaker (for hardtops and convertibles), 6x9" adapter board (for rear deck). Includes 6x9" chrome speaker grille. Shpg. wt., 6 lbs. . . . . 23.95



Control Panel mounts  
under dashboard

Reverb unit mounts inside  
your car's trunk... Tuning  
panel gives you fingertip  
control from the front seat

## Verbalite adds reverb plus a psychedelic light show to car radio or tape player

Ranger Model R-39R. Unique solid-state Verbalite adds tunable reverberation to your car radio, or an exciting 3rd channel effect to your stereo tape player, plus a fascinating under-the-dash psychedelic light show. Multi-colored light display is activated by the beat and frequency of the music from your radio or tape player for synchronized color and sound. Reverb and light intensity controls. Slim, modern styling for easy mounting.  $1\frac{1}{2} \times 9 \times 6\frac{1}{2}$ ". With 6x9" speaker, chrome grille. 12 VDC, negative ground. Japan. Safety First: Lights should not be used while car is moving or when they may distract the driver.  
19 A 4596. Shpg. wt., 5 lbs. . . . . 34.95

**3495** Offers reverberation, plus multi-color  
light display that varies with music



## Enjoy the stereo-like sound that your car radio gives you with Reverberation

Ranger Model RR-22-R. Cruising along the freeway, highway or byway, the most beautiful musical sound you're likely to hear will come from a reverberation system connected to your car's AM or AM-FM radio. Variable control permits listener to tune reverberation to suit his taste. Boasts rugged solid-state construction for dependability, on/off indicator lamp. Face plate has handsome walnut finish trimmed in sparkling chrome. Easy to install because plug-in assembly eliminates wiring confusion. Includes 6x9" rear speaker with chrome grille. Size,  $1\frac{1}{2} \times 9 \times 4\frac{1}{2}$ ". 12 VDC, neg. ground. Japan.  
19 A 4538. Shpg. wt., 5 lbs. . . . . 22.95

**2295** Tunable reverb system for  
your car's AM or AM-FM radio



# FM-AM Radios and FM Tuners for your car



**69<sup>95</sup>**

\$5 monthly\*

- Enjoy static-free FM radio while you drive
- Delivers car-filling sound without distortion



**44<sup>95</sup>**

\$5 monthly\*

- Adds FM reception to your present AM car radio
- Smart slimline styling for under dash mounting

## Deluxe pushbutton FM-AM Car Radio

Automatic Radio. Provides full-fidelity reception of static-free FM, plus excellent AM. Sensitive 11-transistor circuit pulls in strong, clear signals. Push-pull output delivers plenty of car-filling volume without distortion. Has volume and tone controls; Automatic Frequency Control (AFC) to prevent FM drift. Big 5x7" speaker. Mounts easily under dash in all cars or boats; Even mounts in dash in some autos. 5 1/8" knob centers; 3 3/8 x 1 1/2" dial window. Size, 2x7x7". For 12 VDC, positive or negative gnd. From Japan. 19 A 4254 X. Shpg. wt., 10 lbs. . . . . 69.95

## Solid-state hi-fi FM Car Radio Tuner

Automatic Radio. Adds the enjoyment of static-free FM music to your present AM car radio. Slim-styled tuner mounts under dash; has safe, thumbwheel controls. "SS" switch eliminates overload and distortion in strong signal areas. AFC locks in FM stations, prevents drift. Solid-state circuit boasts 9 transistors, 4 diodes, thermistor. Installs easily by plugging into your AM car radio antenna input, uses its antenna. 2 1/2 x 7 x 6 1/2". For 12 VDC, negative ground. With cables, instructions. From Japan. 19 A 4193 X. Shpg. wt., 4 lbs. . . . . 44.95

## Slimline solid-state Car Radios by Ranger



### Ranger slim-line FM Car Radio Tuner

Adds the wonderful world of FM programming to your present AM car radio. Solid-state circuit—no drift, excellent wide-range response. Has 6 transistors and 8 diodes. Automatic Frequency Control locks in FM stations to prevent tuning drift. Unique mounting design permits built-in look, and interchangeable walnut and black vinyl inserts add to custom appearance. Glistening chromed knobs and trim. Size, 1 7/8 x 9 x 4 1/2". For 12 VDC, neg. gnd. Japan. 19 A 4038. Shpg. wt., 4 lbs. . . . . 39.95



FM Tuner

**39<sup>95</sup>**

\$5 monthly\*

FM-AM Radio

**59<sup>95</sup>**

\$5 monthly\*

### Slim-line FM-AM under-dash Radio

Slim, trim under-dash radio for complete car entertainment. Tunes high-fidelity FM broadcasts, plus your favorite AM programs. Solid-state circuit—reliable, compact. Slide-rule dial, tone and volume controls. FM-AM selector switch. Sensitive, powerful circuit includes 11 transistors, 8 diodes, thermistor. Interchangeable walnut and black vinyl inserts add to custom-installed look. Has 5x7" speaker. 1 7/8 x 9 x 4 1/2". For 12 VDC, neg. or pos. gnd. Japan. 19 A 4256. Shpg. wt., 6 lbs. . . . . 59.95

## Custom-mount FM-AM Radio for Volkswagens . . . by Automatic Radio



For 6 or 12 Volt VW's

**69<sup>95</sup>**

\$5 monthly\*

- Mounts in dash of 1958-1969 VW sedans
- Pushbutton controls for FM and AM tuning

Add the enjoyment of both FM and AM radio reception to your Volkswagen, at a price well below that of dealer-installed VW radios. Custom-designed, deluxe pushbutton radio mounts perfectly in the dash of 1958 through 1969 Volkswagen sedans. Features five easy-to-set pushbuttons, three for AM and two for FM. Instant-play 11 transistor circuit boasts seven tuned stages, plus RF stage for long-range reception. AFC prevents FM drift. Tone control and 6" speaker provide excellent sound quality. With everything needed for installation. For 6 or 12 VDC. Japan. 19 A 4456 X. Shpg. wt., 9 lbs. . . . . 69.95

# Custom and universal-mount AM Car Radios

**29<sup>95</sup>**

\$5 monthly\*



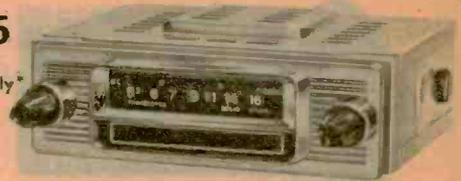
## Our lowest priced pushbutton AM Radio

Easy-to-install radio adds entertainment to your driving with the ease of pushbutton tuning. Solid-state AM radio features five easy-to-set pushbuttons for fingertip control. Seven-transistor high-gain circuit offers good sensitivity and selectivity. Mounts under dash in any 12-volt vehicle. Will mount in-dash in some cars. 5x7-inch external speaker delivers big sound. 5 1/8" knob centers. Large, easy-to-read 1 1/2x3 1/2" slide-rule dial for on-station tuning. Size, 2x5x6 3/8". For 12 VDC negative or positive ground. From Japan. Shpg. wt., 9 lbs.

19 A 4235 X. . . . . 29.95

**1995**

\$5 monthly\*



## Our lowest priced manual-tuning Radio

Get the latest news and music while you drive with this value-packed six-transistor AM car radio. High-gain 6-transistor circuit offers good sensitivity and selectivity. Plays the instant you turn it on—no waiting for tubes to warm up. Mounts easily under dash in any 12-volt vehicle. Will mount in dash in some cars. Built-in 4-inch speaker has clear tone. 5 1/8" knob centers. Large easy-to-read 1 1/2x3 1/2" slide-rule dial for pinpoint manual tuning. Size, 2x5x6 3/8". For 12 VDC negative or positive ground. From Japan. Shpg. wt., 9 lbs.

19 A 4234 X. . . . . 19.95

# Pushbutton AM Radios for custom mounting in Volkswagens

Pushbutton

**39<sup>95</sup>**

Manual

**29<sup>95</sup>**



Pushbutton  
Radio

**39<sup>95</sup>**



## Custom AM Radio for 1958-1969 models

High-styled solid-state radio specially designed for custom installation in Volkswagen cars from 1958-1969. Fits perfectly in dash. Priced well below dealer-installed Volkswagen radios. Five easy-to-set pushbuttons. Tone control. 5-inch speaker. 6 or 12 VDC, neg. gnd. Japan. 19 A 4130 X. Shpg. wt., 7 1/2 lbs. . . . . 39.95

AM Radio with Manual Tuning for 1958-1969 Model VW's. (Not illus.) 7 transistors, 2 diodes, 5" speaker. 19 A 4147 X. Shpg. wt., 7 1/2 lbs. . . . . 29.95

## Custom AM Radio for '68, '69 model VW's

Quality radio installs in all 1968, 1969 1300 Series VW's. Priced well below dealer-installed Volkswagen radios, yet performs like a high-priced set. 7-transistors for high sensitivity, selectivity. Plays the instant you turn it on—no waiting for tubes to warm up. 5 easy-to-set pushbuttons makes it easy to tune your favorite station. Manual control tunes in seldom-used stations. Continuously variable tone control for rich lows, clear highs. Wide-range 6" speaker. For 12 VDC. Japan. 19 A 4595 X. Shpg. wt., 7 1/2 lbs. . . . . 39.95



## Deluxe slim-line AM Radio fits any car

**29<sup>95</sup>**

\$5 monthly\*

- RF stage • 6 transistors and 8 diodes
- Large full-tone 5x7" built-in speaker
- Luxurious styling enhances any car

Full-feature AM car radio rivals factory-installed models costing much more. Circuit with RF stage boasts 6 transistors and 8 diodes for high sensitivity and selectivity. 2-watt audio output. Tone control. Built-in 5x7" speaker. Mounts under dash with universal mounting bracket. Interchangeable walnut and black vinyl inserts. Chrome-trimmed case, 1 1/8x9x4 1/2". For 6 and 12 VDC, neg. or pos. gnd. Japan. 19 A 4255. Shpg. wt. 5 lbs. . . . . 29.95



## Pushbutton 9-band Shortwave Car Tuner

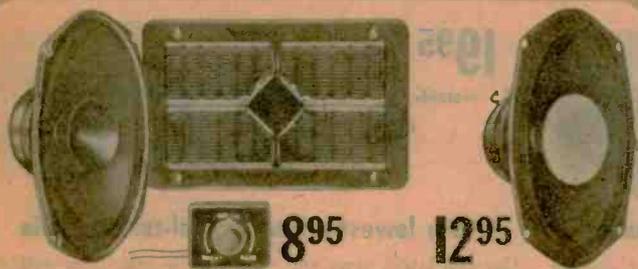
**29<sup>95</sup>**

\$5 monthly\*

- Tunes 3.1 to 22 MHz in 9 bands
- Plays through AM car radio
- Plug-in hookup—no rewiring

Receive shortwave in your car. Solid-state tuner pulls in European radio, Voice of America, more. Pushbuttons select 90, 60, 49, 41, 31, 25, 19, 16 and 13 meters. Tune your AM radio to "10", select desired band, then tune with your regular radio. Plugs into antenna socket of AM radio, uses its standard antenna—no rewiring! 1 1/2x8 1/3x3 1/2". 6 or 12 VDC neg./pos. ground. 19 A 4041. Shpg. wt., 3 1/2 lbs. . . . . 29.95

# Auto Speakers, Antennas and Accessories



## Utah tone-improving Rear Deck Speaker Outfits

### 6x9" Speaker Outfit

Add a new dimension of realism to your present car radio at a modest cost. Rear deck speaker system adapts to any automobile radio—tube type or transistor. Features powerful 5.5-oz. magnet. Illustrated instructions show how to wire for 10, 20, or 40 ohms operation. Full 12-watt music power capacity. Deluxe chromed grille, 5 1/2 x 9". Depth, 3". Screw terminals. Includes: grille, escutcheon, fader, hardware, wire, instructions. Wt., 1 3/4 lbs.  
19 A 4572..... 8.95

### 6x9" hi-fi Outfit

Finest 2-way rear deck automotive speaker system. Features big 6x9" woofer complete with 6-oz. magnet for rich, powerful bass. Built-in 3" tweeter for better reproduction of high notes. Can be wired for 10, 20, or 40 ohms operation. Capacity, 15 watts peak. Deluxe chrome grille, 5 1/2 x 9". Depth, 3". Screw terminals for easy, no-solder hookup. Includes: grille, escutcheon, fader control, hardware, wire, full instructions. Wt., 2 1/2 lbs.  
19 A 4571..... 12.95

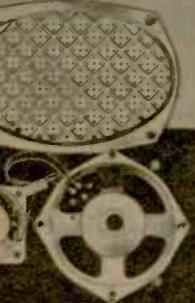
## Hash-Husher Noise Filter Pkgs.



Low as **10.50** Reduces annoying interference—especially effective on FM radio and CB

Add miles to mobile AM, FM, CB or Ham reception. Filters out interference ("hash") carried to your radio receiver from the ignition, alternator, etc. Snaps in place between spark plugs and leads. Has high-tension coil-to-distributor filter lead. Shpg. wt., 8 oz.

19 A 4435. HH-8 for 8 Cylinder..... 12.95  
19 A 4436. HH-6 for 6 Cylinder..... 10.50  
19 A 4593. HH-4 for 4 Cylinder..... 10.50



## 2-speaker Rear Deck Outfit

**5.95**

- Big 5" Woofer, 3 1/2" Tweeter
- Independent Volume Control

Surround yourself with the sound of music. Budget-priced speaker system features separate 5" woofer and 3 1/2" tweeter for smooth response, greater realism. Woofer, tweeter, and crossover network are completely wired and installed on a baffle plate. For 8-10, 20, or 40 ohms. Capacity, 6 1/2 watts peak. Fits 6x9" cutout. Volume control, hardware, chrome grille.

19 A 4573. Shpg. wt., 3 lbs..... 5.95

## Utah Universal Auto Replacement Speakers



Standard Universal replacement speakers with 2 separate voice coils that can be connected for 8-10, 20, 40 ohm speakers. Av. wt., 9 oz.

Stock No.	Type	Size	Imp.	EACH	Stock No.	Type	Size	Imp.	EACH
19 A 4582	SP57DMI	5x7"	10/20/40	4.17	19 A 4588	SP610EB	6x10"	8-10	4.50
19 A 4583	SP69DMI	6x9"	10/20/40	4.56	19 A 4589	C57ECW	5x7"	8	3.96
19 A 4584	SP410EMI	4x10"	10/20/40	5.16	19 A 4590	C69JCW	6x9"	8	5.85
19 A 4585	SP6DMI	6"	10/20/40	4.17	19 A 4591	C69FCMW	6x9"	10/20/40	5.94
19 A 4586	CSFC	5"	8	4.74	19 A 4592	C69GC3MI	6x9"	10/20/40	9.96
19 A 4587	SP58DB	5x8"	8-10	3.30					

## Stereotron... converts radio to two-channel sound



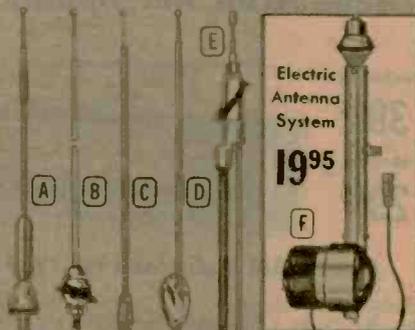
**19.95** less speakers

### Hear "stereo-like" sound

Takes monophonic output from FM or AM radio, or phono, and separates it into two channels for stereo-like sound. Not a reverb. Just connect unit to output terminals, connect two speakers (not included) to Stereotron. Size, 3x2x1 1/2". Shpg. wt., 2 lbs.

19 A 4123..... 19.95

## Merlin Auto Radio Antennas for AM or FM reception



**A** SP-3800. Has built-in booster coil for long range reception—equivalent to 125" mast. Swivel ball base permits mounting at any angle. With unbreakable stainless steel spring mount. 3 sections, 48" lead cable.  
19 A 4437 X. Shpg. wt., 2 lbs..... 3.98

**B** SP-901. Standard 3-sec. top mount with ball and steel stamped rocker base. Extends from 25" to 57". Has 48" fixed lead cable. Shpg. wt., 2 lbs.  
19 A 4438 X..... 1.98

**C** SP-4000-T. Unique transistorized antenna pulls in metropolitan or fringe stations. 3 sections extend to a full 57". Has 48" lead cable. Shpg. wt., 2 lbs.  
19 A 4190 X..... 6.98

**D** SP-2601. Single stanchion side-mount. For any model Volkswagen through 1966, other foreign cars. 23" mast extends to 57". With chrome base, 36" copper lead cable.  
19 A 4440 X. Shpg. wt., 2 lbs..... 2.98

**E** 19 A 4441 X. For '67-'70 Volkswagens. 3.49

**F** TM-5. Electric power antenna for front mounting on most domestic cars. Extends to 35", collapses to 1 1/4". With 54" shielded cable, 72" elec. harness. Operates from 12 VDC; 15-lb. thrust. Includes hardware.  
19 A 4442 X. Shpg. wt., 6 lbs..... 19.95  
19 A 4443 X. Adapt. for Rear Mount. 1 lb. 3.79

# Install-it-yourself Auto Accessories

## Radar Sentry warns of radar traffic zones

Gives audible warning when triggered by police radar. Alerts you when driving into dangerous area; makes you aware of speed limits for safety. Solid-state circuit powered by two 1000 hour mercury batteries (included). Volume control. Only  $2\frac{1}{4} \times 3\frac{5}{8} \times 3\frac{1}{4}$ " ; clips to sun visor. Black color. Use may be regulated by state laws.



**29.95** \$5 monthly  
see page 438

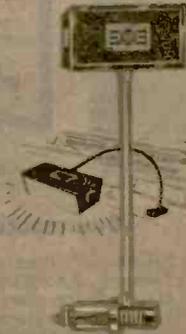


## High-intensity Auto Lite

**2.59** • For map reading  
• Flexible arm

Fedtro Dash-12V. Plugs into your car cigarette lighter. Instantly provides you with a high-intensity non-glare all-purpose light. Chrome-Flex™ swivel arm directs light to where you need it. Ideal aid for map reading, shaving, applying makeup, etc. Special convenience bonus: piggyback electrical socket that permits use of another 12-VDC appliance at the same time. Has on/off control. Size,  $7\frac{1}{2} \times 3\frac{1}{8} \times 1\frac{1}{4}$ ".

19 A 4017. Shpg. wt., 4 oz. . . . . 2.59



## Lectrojack™ electric Auto Jack

**39.95** \$5 monthly  
see page 438

Pushbutton electric auto jack plugs into your car's cigarette lighter. Raises any passenger automobile in a jiffy and keeps it up while you change a flat or a wheel or install tire chains. Holds by itself indefinitely. Consumes no more power than an electric window. Has 10-space adjustable bumper hook. With universal cigarette lighter plug, 16-ft. cord, reversing in-line switch, operating instructions, For 12 VDC systems.

19 A 4018 X. Shpg. wt., 23 lbs. . . . . 39.95



## Side Marker Lights for style and safety



**4.95**

Set of 4



Side Marker Turn Indicator Light Set

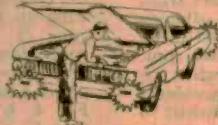
**8.95**

Set of 4

**A** Side Marker Lights. Bring your car up-to-date with side marker lights, required by law on all new cars. Gives added safety to your car and passengers by warning autos approaching from the side. Easy to install; waterproof construction; uses S.A.E. lenses and bulbs. Set includes 2 red and 2 amber lights. For 12 VDC. 19 A 4021. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . Set of 4 for 4.95

**B** Light Cornering Set. Deluxe warning lights give your car an up-to-the-minute look. Light-up with headlights and blink in unison with turn indicators, warning other cars approaching from the side. Waterproof construction. Easy-to-install; solderless connectors. Includes 2 red and 2 amber lights. For 12 VDC. 19 A 4034. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . Set of 4 for 8.95

## Hazard-Warning Light



**4.29**

A safety "must" for every car. Prevents possible collision when you're stranded on the highway at night. Flashes all four turn signals at once—warns approaching traffic. Easy to hook-up. Illuminated pull-switch. For 12 VDC. With heavy-duty flasher, in-line fuse. 19 A 4029. Shpg. wt., 2 lbs. . . . . 4.29

## Bon-Aire Auto Vacuum Cleaner



Plugs into car's lighter socket

**8.88**

Vacuum cleans cars, campers, boats, planes. Lightweight design. Powerful suction provided by 12,000-rpm motor and specially pitched impeller. Handy nozzle gives easy access to hard-to-get at places. Includes upholstery brush. Draws only 4.5 amps.  $4 \times 17$ ". For 12 VDC. 19 A 4257 X. Shpg. wt., 3 lbs. . . . . 8.88  
19 A 4156 X. Above, 15,000 rpm motor, crevice tool.  $5\frac{1}{2} \times 21$ ". Shpg. wt., 5 lbs. . . . . 14.98

## Dial-O-Matic Headlight Turn-off-Delay Control

**8.95** Safely escorts you to the door, no fumbling, stumbling



Fedtro HDC-12V. Lets you dial the length of time headlights stay "on" after you leave your car: 30, 60, or 120 seconds. Your headlights stay "on" while you walk in safety to your door. The lights then turn "off" automatically after you are in your home.  $4\frac{3}{4} \times 1\frac{3}{4} \times 2$ ". 12 VDC. 19 A 4006. Shpg. wt., 1 lb. . . . . 8.95

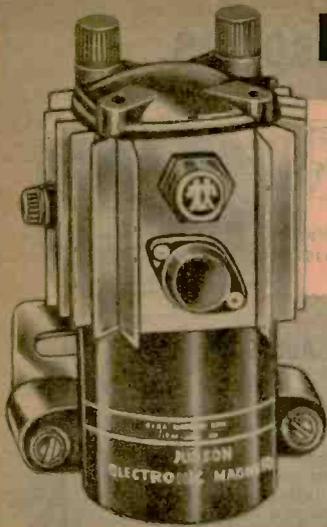
## 53-amp Alternator System

**64.95** • Keep your battery at high-charge level  
\$5 monthly • Even charges at idle  
see page 438

Replaces low-amp alternator or generator. Gives peak of 53 amps, 15 amps at idle. Splashproof windings. With regulator,  $\frac{3}{8}$ " single pulley (not for air-cond. cars with 2 drive belts), bracket, cables. 12 VDC negative ground. 19 A 4039 X. Wt., 17 lbs. . . . . 64.95



# Install-it-yourself Auto Accessories



Electronic-magneto Ignition System

**3988**

\$5 monthly\*

Capacitive-discharge Ignition System

**3995**

\$5 monthly\*



## Judson electronic-magneto Ignition System

Performance-proved silicon transistor system gives improved ignition for faster starts, outstanding high-rpm performance, longer plug and point life. Like the mechanical magneto, voltage increases as engine speed increases, matching ignition requirements of engine. Even the output waveform is same as a magneto, reducing plug wear and giving hotter spark. One-piece unit installs easily, simply transfer 2 wires from present coil. Use less current than standard ignition. For 6 or 12 V neg. gnd.

19 A 4112. Shpg. wt., 3½ lbs. . . . . 39.88  
19 A 4385. As above, but for positive ground. . . . . 39.88

## Delta capacitive-discharge Ignition System

"Mark 10." True *electronic* ignition system for car or boat. Develops 3 to 4 times more energy, with spark rise-time 10 times faster, for complete combustion. Reduces waste, boosts performance, gives easier starts in any weather. Provides up to 20% better gas mileage; 3 to 10 times longer spark plug life; 60 to 80% less ignition maintenance. Silicon Controlled Rectifier switching—unaffected by temperature extremes. After easy assembly, it installs in just 10 minutes, using standard coil—no rewiring! Size, 8x5x4". For 12 volts DC negative ground. Shpg. wt., 3 lbs.

19 A 4552. . . . . 39.95

## Full-sweep 270° Auto Tachometer

**2995**

\$5 monthly\*

- Our best selling Auto Tach
- 0-9000 rpm
- Panel mount
- Illuminated full-sweep-dial

Custom-styled 3½" tachometer gives accurate indications of engine rpm. Full-sweep 270° dial has three times the needle travel of ordinary tachs. Adjustable pointer can be set to shift points. Reads 0-9000 rpm. Universal panel mount, handsome chromed case. Zener diode controlled. For 6 or 8-cylinder engines; 6 or 12 volt systems, positive or negative ground. Shpg. wt., 3 lbs.

19 A 4431 . . . . . 29.95



**2995**

\$5 monthly\*



**A**

**1995**

\$5 monthly\*



**B**

**1295**



Reads 0-6000 rpm

**1295**

## Volkswagen Tach

Get top performance from Volkswagen, most other 4-cylinder cars. Bullet tachometer reads 0-6000 rpm. Lets you know when to up-shift for best acceleration, when to downshift to avoid lugging—insures best gas mileage. Just set pointer to proper shift points. Illuminated 2" dial. Mounts anywhere. Black/chrome. For 6 or 12 V ignition. Wt., 1¼ lbs.

19 A 4430. . . . . 12.95

## Uni-Tach Motor Monitor

Versatile instrument can be dash or console-mounted, or used as tune-up tester. Measures: engine rpm (2 ranges): 0-1600, 0-6400 rpm; dwell angle, 0-45°-60°; battery output, 0-16 volts. Determines point condition, monitors timing. For 4, 6 and 8-cylinder engines; 6 or 12 VDC pos. or neg. ground. Easy to install—only three connections. With cable, mtg. hardware, plug-in test leads, instructions and tune-up guide. 6¼x3¾x2". Shpg. wt., 4 lbs.

19 A 4015. . . . . 29.95

**A** Wide-Sweep "GT" Tachometer. Gives continuous 0-8000 rpm reading for maximum performance and gas mileage. Zener regulated for accuracy. Solid-state circuit. Lighted 3½" dial. You set adjustable pointer to show when to shift. Black/chrome finish. Universal mount. For 8-cylinder cars only. 6-12 V, positive or negative ground.

19 A 4427. Shpg. wt., 1¼ lbs. . . . . 19.95

**B** Custom 2" Bullet Tachometer. Rugged tach with 2" illuminated dial, reads 0-8000 rpm. Zener diode regulated for accuracy. Universal mount for steering column, console, under dash, top of dash. Adjustable shift indicator. Black/chrome. For 6 or 12 volts, positive or negative ground. 1¼ lbs.

19 A 4087. For 8-Cylinder Cars. . . . . 12.95

19 A 4088. For 6-Cylinder Cars. . . . . 12.95

# Easy-to-install Accessories for your car

## RAC continental-styled Auto Gauges

Continental design gauges monitor your engine continuously, eliminate guesswork. Minimize possibility of engine damage. Illuminated gauges have black diamond chrome bezels, are set in luxurious chrome edge panels with simulated teak inlay. With fittings and mounting hardware. For 12 volts.

- A** 989 Trio Combination Panel. Includes 0-80 lb. oil pressure gauge, 60-0-60 ammeter, 100-250° electrical water temperature gauge. Wt., 2 lbs. 19 A 4564 ..... 17.95
- B** 942 Dual Combination Panel. Includes 0-80 lb. oil pressure gauge, 60-0-60 ammeter. 1½ lbs. 19 A 4565 ..... 6.95
- C** 416 Water Temperature Gauge. Reads 100-250°. 19 A 4567. Shpg. wt., 8 oz. .... 9.95
- D** 284 Oil Pressure Gauge. Reads 0-80 lbs. 19 A 4568. Shpg. wt., 8 oz. .... 4.95
- E** 468 Ammeter. Reads 60-0-60 amps. 19 A 4566. Shpg. wt., 8 oz. .... 4.95
- 19 A 4597. 8' 10-ga. Wire for Ammeters. 8 oz. .... 1.14



1795

**A** 989 Trio Combination Panel



**B**



**C**

**D**

**E**



## Combination 270° Water-Oil-Amps Gauge Kit

Illuminated gauges in chrome panel

1495

Custom-styled panel with trio of 270° wide-sweep gauges for efficient monitoring of your engine's operation. No need to trust your engine to the usual indicator lights—you can spot trouble before it begins. Includes 0-80 lb. oil pressure gauge, 100-220° water temperature gauge, and 60-0-60 ammeter. Illuminated, in deluxe chrome panel with black and walnut inlays. For 12 volts DC. 19 A 4560. Shpg. wt., 2 lbs. .... 14.95

## Fiamm Musical Horn Sets

6995 \$5 Each monthly\*



River Kwai Cavalry Charge

Model 501. River Kwai (Col. Bogey's March) Musical Horn. Five-trumpet horn set plays the first four bars of famous Col. Bogey's March from the award winning film "Bridge on the River Kwai". Cycle switch permits horns to sound simultaneously. Enameled die-cast trumpets (longest is 15"); battery-operated single-blast compressor. One mile range. Switch for use of regular horn. For 12 VDC neg. gnd. 19 A 4461 X. 12 lbs. .... 69.95

Model 411 Cavalry Charge Musical Horn Set. (Not illus.) Similar to "River Kwai" set, but has 4 trumpets. Plays U.S. cavalry charge. Shpg. wt., 10 lbs. 19 A 4462 X. .... 69.95

## Two-trumpet single-blast Horn Set

1995

\$5 monthly\*



Model 32. Two chrome-plated brass horns deliver a loud, clear and pleasing continental tone. Powerful, distinctive and attention-getting. Range, ½-mile. Comes with heavy-duty compressor. 12 VDC negative ground. Shpg. wt., 5 lbs. 19 A 4050 X. .... 19.95



## Siren Burglar Alarm

2795

Spun-aluminum construction

Protects your car with sharp penetrating sound of a police-type siren. Operates when doors, hood or trunk are opened and continues until alarm is turned off with key. With 6 switches, brackets, electric lock, hardware, instructions. 12 V neg. gnd. 6 lbs. 19 A 4127 X. .... 27.95



## Triplite Burglar Alarm

2495

Heavy-duty Siren

Piercing siren goes off when door is opened, hood or trunk lid is raised. Can be wired to blast when emergency brake is released. Stays on until reset by pick-proof lock. With all switches, brackets, wire, instructions. For 6, 12 or 24 V neg. gnd. Wt., 5 lbs. 19 A 4569. .... 24.95

## Hella Fog and Driving Lamps

Extremely powerful fog and driving lamps, promote safer night driving. Ultra-thin design. Special heat interchanger, hardened and tempered white glass lens, long-life quartz-iodine element. 5¾" diameter, 2½" deep. Adjustable mounting bracket. 12 VDC. Shpg. wt., 2 lbs. 19 A 4136. Fog Lamp. .... 12.98 19 A 4137. Driving Lamp. .... 12.98 19 A 4138. Replacement Element. .... 4.98



1298

# Keep your car in top tune and save

## BONUS OFFER

Keyless E-Z Start

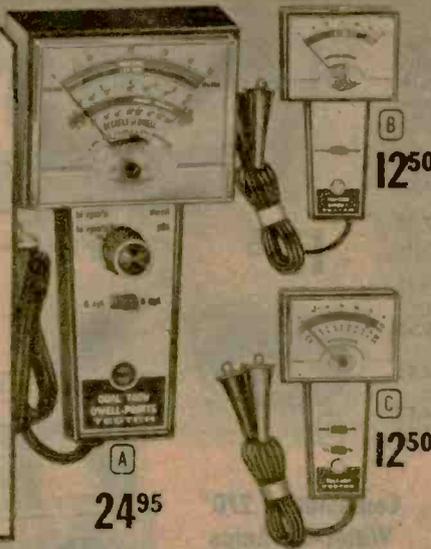
**FREE**

when you buy all three of these RAC hand-held car engine testers, listed at right.

Save \$4.88

4-piece Outfit only

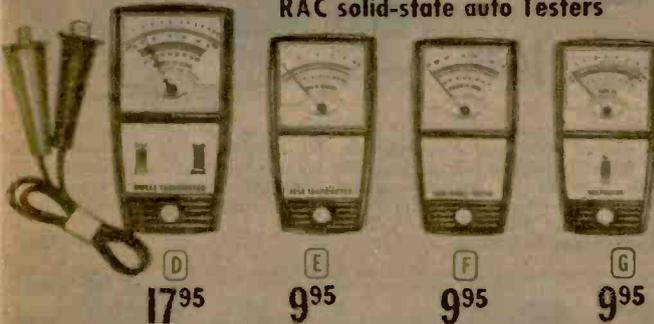
**49<sup>95</sup>** \$5 monthly\*



## Hand-held car engine Testers

- A** Dual-Range Dwell/Tach/Points Auto Tester with Big 3 1/2" Meter. Dual-range tach scale, 0-1000 and 0-5000 rpm. For adjusting idling speed, high-speed engine adjustments, properly setting correct cam angle of points. 0-45°, 0-60° dwell ranges. Resistance scale tells you when points should be replaced. For 4, 6 or 8-cylinder, 4-cycle engines. 6 or 12-volt systems. Zener-regulated. 1 lb. 19 A 4194. . . . . 24.95
- B** 3 1/2" Meter Ignition Circuit Tester. Quickly and easily pinpoints troubles in the ignition system. Checks points, coil, condenser, spark plug, wire, resistance. Color-coded scale. Oil and gas-resistant leads. For 6, 12, 24-volt, pos. or neg. gd. Wt., 1 lb. 19 A 4195. . . . . 12.50
- C** 3 1/2" Meter Volt-Amp Tester. For testing, troubleshooting, setting generators, alternators, voltage regulators, overall electrical system. Ranges: volts, 0-8, 0-16; amps, 0-60. For 6-12 volts, positive or negative ground. 19 A 4196. Shpg. wt., 1 lb. . . . . 12.50
- 4-Piece Outfit. All three units above, plus **FREE** Keyless E-Z Start Bonus. 5 lbs. 19 A 0008 L4X. . . . . 49.95

## RAC solid-state auto Testers



- D** Idle Dwell/Tach Auto Tester. Measures dwell and rpm on 4, 6, 8-cylinder engines without changing connections or instruments. Scales: 0-1000 rpm; 0-45°, 0-60°. Tells when points are spaced right, reveals dwell angle variations. Checks weak cylinders, valves, plugs, air-filter capacity, air-fuel ratio. Burnout-proof. Shpg. wt., 1 lb. 19 A 4197. . . . . 17.95
- E** 555 Idle Tach Tester. 0-1000 rpm. For adjusting idle speed on 4, 6, 8-cylinder engines. For 6-12 volts positive or negative ground. 19 A 4198. Shpg. wt., 1 lb. . . . . 9.95
- F** 556 Cam Dwell Tester. 0-45°, 0-60°. Shows cam dwell angle of breaker points on 4, 6, 8-cylinder engines. 6 or 12-volt systems. 19 A 4199. Shpg. wt., 1 lb. . . . . 9.95
- G** 558 Dual-Range Voltmeter Tester. For checking and troubleshooting 6 and 12 volt ignition systems. 19 A 4205. Shpg. wt., 1 lb. . . . . 9.95



- H** Deluxe DC-Power Timing Light. Provides brilliant, blue-white flash for checking ignition timing even in daylight. Safe, shockproof. Triple-plated chrome finish. Operates from 6 or 12-volt car battery. Fully protected against accidental burnout in case of reverse polarity. Xenon strobe. Leads. 3 1/2 lbs. 19 A 4463. . . . . 24.95
- 19 A 4164. Repl. Tube. 6 oz. . . . . 6.29
- J** AC-Powered Timing Light. Gives sharp, bright image for accurate timing. Checks automatic spark advance, detects worn distributor shaft, helps sync double points. Xenon strobe, U.L. Listed. 110 V, AC/DC. 19 A 4131. Shpg. wt., 2 lbs. . . . . 12.95
- 19 A 4165. Repl. Tube. 6 oz. . . . . 4.99

## RAC Keyless E-Z Start

**4.88** Starts, turns off engine from under-the-hood

Simplifies repair jobs, eliminates need for the second man. Combination remote starter/ignition switch "starts" car without a key. Lets you turn on ignition, start motor, and turn off ignition from under hood. Supplied with extra-long leads. Housed in shockproof case. Shpg. wt., 2 lbs. 19 A 4114. . . . . 4.88



## Save on set of four troubleshooter Testers

- Complete Set of 4 Testers Listed Below:  
19 A 4113 X. 5 1/2 lbs. *Save 69¢.* . . . . . 9.88
- K** Timing Light. Neon bulb. Wt., 1 lb. 19 A 4012. . . . . 2.75
- L** Remote Starter. Lets you crank engine from under hood. Wt., 1 lb. 19 A 4011. . . . . 1.98
- M** Vacuum and Fuel Pump Tester. 0-30" vacuum, 0-7 lbs. pressure. Wt., 1 1/2 lbs. 19 A 4014. . . . . 2.89
- N** Compression Tester. 0-300 lbs. 1 1/2 lbs. 19 A 4013. . . . . 2.95

# Deluxe Automotive Test Instruments

## Solid-state all-purpose Auto Analyzer

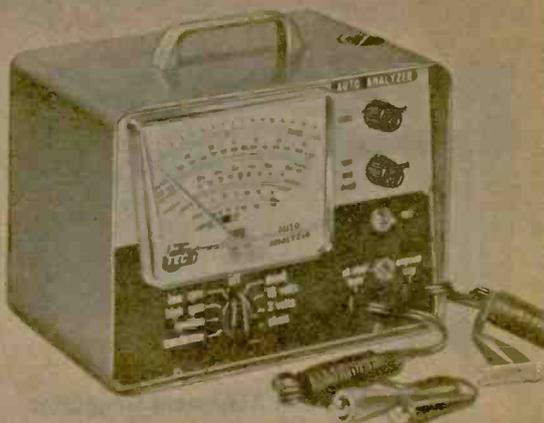
- Color-coded, easy-to-read 6" Meter
- Tachometer, Spark Tester, Dwell Meter, Voltmeter, Ohmmeter, Ammeter and Condenser Checker—all in one Unit

**69<sup>95</sup>**

\$5 monthly\*

A "must" for the serious repairman. Fast-working, all-in-one battery-powered analyzer makes tune-ups and servicing easier. For 4, 6 and 8-cylinder engines. Tachometer reads engine rpm—helps you to set idling speed and automatic transmission shift points. Dwell meter tests points, distributor and spark advance. Ammeter checks generator, alternator, voltage regulator. Ohmmeter covers electrical systems. Color-coded scales: Tachometer, 0-1200 and 0-6000 rpm; Dwell angle, 0-60°; Amps, -5 to +90; Volts, 0-3, 0-16; Spark Output, 0-30; Resistance, 0-20,000 ohms; condenser resistance; coil resistance. For 6 or 12 volts. With batteries. Shpg. wt., 8 lbs.

19 A 4208 X..... 69.95  
18 A 5079. Extra Batteries. (Use 3.) 10 oz..... Pkg. of 4 for 65¢



Battery Post Adapter for easy hookup

### Electrical Tester

**29<sup>95</sup>**

Makes five different tests \$5 monthly\*

Deluxe electrical tester makes highly accurate checks of alternator, generator, regulator, battery and starter. Has easy-to-read D'Arsonval meter, trouble-free burnout-proof circuitry. Reads 0-120 and 0-300 amps; 0-16 volts. Has battery post adapter for easy hookup and simplified test procedures. Detailed instructions.

19 A 4126. 4 lbs..... 29.95



Easy-to-read 6" Meter

Use when idling or moving

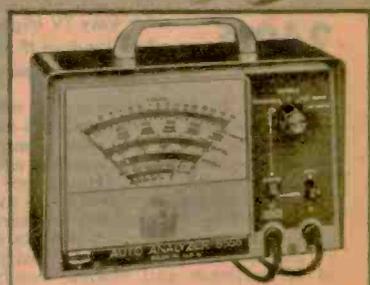
**69<sup>95</sup>**

\$5 monthly\*

### Exhaust Gas Analyzer

Clues you in on combustion problems and assists in making carburetor adjustments. Carburetor can be set while car is idling, or pickup unit can be hung on rear bumper, with receiver in car for precise settings on the road. Measures air-fuel ratios from 10.2 to 15, and percent of combustion. Color-coded Rich-Idle-Lean scale also indicates proper setting for smog control. Usable for propane and butane, too. 12 lbs.

19 A 4207 X..... 69.95



Six instruments in a single, compact unit

**49<sup>95</sup>**

\$5 monthly\*

### Low-priced Auto Analyzer

Solid-state auto analyzer, great for hobbyists, mechanics. Has scales for six different functions: 0-1000 and 0-5000 rpm; 0-60° dwell angle; 0-16 volts; 0-250 amps; ohms and point condition. Easy-to-read 6" jeweled meter. Sequence testing procedure finds problems quickly and easily. Solid-state circuit. For 4, 6 and 8-cylinder engines, 6 or 12-volt systems, positive or negative ground. With batteries, leads.

19 A 4129. Wt., 5 lbs..... 49.95

## Schauer Battery Chargers and Boosters at low Allied prices

**A** J-5612 Boost/Charger. Uses 110 VAC current for fast starts of engines with dead battery, plus rapid charging of 6 or 12 volt batteries. Builds to 100 amps or more on 6 volt battery, 60 amps or more on 12 volt. Charges at 20 amp rate. Automatic temperature controlled circuit breaker. 7 1/4 x 10 3/8 x 9 1/2". With 3 1/2-ft. DC leads, 10-ft. AC cord. Wt., 15 lbs.  
19 A 4562X..... 49.95

A-6612 4-Amp Charger. For 6 or 12-V batteries. Charges in 5-14 hrs. Circuit breaker; ammeter. 7 1/4 x 4 1/2 x 5". 115 V, 60 Hz AC.  
19 A 4008. Wt., 5 lbs..... 9.95

**B** BR-312 6-Amp Automatic Charger. For 12-V batteries, operates without attention. Automatically shuts off when battery is fully charged, with "trickle charge" to keep battery at full capacity. Ammeter. Gold-color case, 9 3/8 x 6 x 6 1/2". For 110-120 V, 60 Hz AC. 9 lbs.  
19 A 4004..... 19.95

C-6612 10-Amp Charger. 6- or 12-V batteries in 2-6 hrs. Circuit breaker, ammeter. 9 3/8 x 6 x 6 1/2". 110-120 V, 60 Hz AC.  
19 A 4010. Wt., 11 lbs..... 16.95  
19 A 4009. B-6612 6-Amp Charger. Charges 6 or 12-V batteries in 3-7 hrs. 115 VAC. 9 lbs..... 11.95



A

**49<sup>95</sup>**

\$5 monthly\*



B

**19<sup>95</sup>**

\$5 monthly\*

\*See page 438 for full Credit Details

# B&K Test Equipment for TV and radio



## Sweep and Marker Alignment Generator

**349<sup>95</sup>**

- For easy TV alignment
- Ten standard IF markers
- Neon marker indicators

Model 415. Supplies every output needed for precision alignment of color or black-and-white TV sets: video sweep, IF sweep, modulated and unmodulated markers, channel 4 and channel 10 RF sweep, and 10.7 MHz sweep. Ten crystal controlled IF markers from 39.75 to 47.25 MHz, plus provision for external marker inputs. Exclusive marker tilt circuit permits horizontal or vertical marker positioning. Front panel display of IF response and chroma bandpass curves; can be viewed without disabling horizontal output stage of receiver. Has unity gain into oscilloscope, for easy calibration. Two  $\pm 0.25$  VDC and one  $\pm 0.50$  VDC bias supplies. Size,  $9\frac{3}{4} \times 18 \times 12$ ". For 117 VAC.  
21 A 4574 U. Shpg. wt., 26 lbs. . . . . 349.95



## Deluxe TV Analyst

**379<sup>95</sup>**

Pinpoint TV troubles in minutes

Model 1077. Directly injects UHF, RF, IF, composite video or audio signals into any stage of B&W or color transistor or tube-type sets—lets you view results directly on set's screen. Generates plate and grid drive for sweep checks, composite sync with adjustable amplitude and impedance. Crystal-controlled rainbow and keyed color bar patterns test sync, range or hue control, help align demodulators and adjust color convergence. AGC keying pulse; direct picture tube modulation.  $9\frac{3}{4} \times 18 \times 12$ ". For 117 VAC.  
21 A 4172 U. Shpg. wt., 31 lbs. . . . . 379.95



## 8-in-1 transistor radio Analyzer

**209<sup>95</sup>**

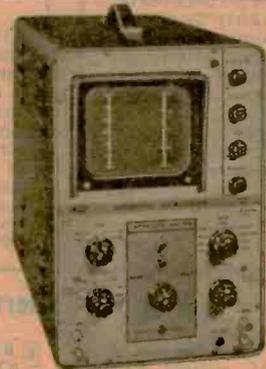
Traces circuits stage by stage

Model 970. Combines signal tracer; transistor tester; AM, FM, RF, IF and audio generators; 1.5-15 VDC supply. Tests transistors in-circuit with "Dyna-Trace" probe; out-of-circuit for leakage, beta (0-300). Ranges: 0-2-20-200-500 VDC; 0-2-200 mA, 0-2-5 Amp; ohms, 0-50K-500K-5 megs.  $9 \times 8\frac{1}{2} \times 15\frac{1}{2}$ ". With transistor guide. 105-125 V, 60 Hz AC.  
21 A 4367 U. Shpg. wt., 22 $\frac{1}{4}$  lbs. . . . . 209.95



## Portable Color Generator

Model 1245. For easy convergence and color adjustments. Connects directly to antenna terminals. Over 5000- $\mu$ V RF output on TV channels 3, 4, 5. Crystal-controlled keyed rainbow color display, dot patterns, crosshatch, horizontal and vertical lines. Horizontal lines are one scanning line thick. Small dots with adjustable brightness.  $2\frac{1}{2} \times 8\frac{1}{2} \times 8\frac{7}{8}$ ". With RF cable. 117 VAC. Degaussing coil is 13" dia.; 9' cord, switch. 6 lbs.  
21 A 0001 L2U. With Coil . . . 140.95  
21 A 4448U. 1245 Alone, 4 lbs. 139.95  
21 A 4361. Coil Alone, 2 lbs. . . 13.60



Includes vector-scope

Intermittent analyzer for easy diagnosis

Direct/low capacity probe

**279<sup>95</sup>**

## Professional Diagnostic Scope

Model 1450. Features Intermittent Analyzer with visual indicators and electronic memory, for fast isolation of intermittent stage. Automatic sync; double-scale calibrated screen; direct p-p readings; 7-step attenuator. Horizontal sweep, over 500 kHz (accurately shows 5 MHz signal). Vertical sensitivity, 25 mV rms/inch, 70 mV p-p inch; horizontal, 0.5 V rms/inch. Z-axis input.  $13\frac{3}{8} \times 8\frac{3}{4} \times 17\frac{1}{4}$ ".  
21 A 4575 U. Wt., 26 lbs. . . . . 279.95

**Degaussing Coil only \$1 more**

**Save \$12.60** with professional degaussing coil

With coil **140<sup>95</sup>**  
1245 alone **139<sup>95</sup>**



## Color Bar Pattern Generator

Model 1242. Solid-state design provides outstanding reliability and high stability over a wide temperature range. For fast, easy color convergence and adjustments. Gives dot, crosshatch, horizontal and vertical lines, plus color patterns on channels 3 and 4. Over 5000- $\mu$ V RF output. Built-in gun killer has "mini-clips" for easy connection to set. Zener diode regulated power supply. Lightweight, rugged metal case with storage compartment.  $2 \times 6\frac{1}{2} \times 9\frac{3}{4}$ " deep. RF output cable. 117 VAC.  
21 A 4189 U.  $2\frac{1}{2}$  lbs. . . . . 99.95

- Fast and easy color convergence, adjustment
- Easy connections to TV receiver

With RF cable **99<sup>95</sup>**

# Professional Test Equipment by B&K



**Dynamic-type Tube Tester 19995**

A

**"Dyna-Quik" Tube Tester 8495**



B

**A** Model 707. Professional, dynamic-type mutual conductance tester features multiple-socket plug-in and check section, plus actual load condition testing. Checks radio and TV tubes, thyratrons, VR's, auto radio hybrids, European hi-fi and industrial tubes. Can also check nuvistors; 10-pins, compactrons. Adjustable grid emission test—over 100 megohm sensitivity. Also tests shorts, leakage, gas, "life".  $4\frac{1}{2}''$  meter with Good-7-Replace scale.  $16\frac{1}{2} \times 15\frac{1}{4} \times 5\frac{1}{8}''$ . For 105-125 V, 50-60 Hz AC. 21 A 4165 U. Shpg. wt., 16 lbs. . . . . 199.95

**B** Model 606. Compact, emission-type tube tester is fast and accurate. Checks most commonly-used TV and radio tubes: nuvistors, 10-pins, 12-pin compactrons, VR's, thyratrons, auto radio hybrids, hi-fi and industrial tubes. Tests under simulated load. Has four switches;  $4\frac{1}{2}''$  Good-7-Replace scale; adjustable grid emission test with sensitivity to over 100 megohms. Also makes accurate tests for shorts, leakage and gas. Compact case,  $8\frac{1}{2} \times 11 \times 4\frac{1}{8}''$ , latching cover. For 105-125 V, 50-60 Hz AC. 21 A 4164 X. Shpg. wt., 7 lbs. . . . . 84.95



**9495** Handles all new CRT types

## Color CRT Tester/Rejuvenator

- Handles high and low G2 picture tubes
- Checks and rejuvenates tube in TV set

Model 465. Checks color or black-and-white CRT's for leakage, shorts, opens, emission. Predicts remaining useful life of picture tube. Operates tubes at correct filament (1-13 volts) and G<sub>1</sub> and G<sub>2</sub> voltages. Handles Hi and Lo G<sub>2</sub> tubes, low beam current types. Tests, rejuvenates 100° tubes, 19° and 23° types, color tubes including 90° and 23° rectangular. Checks and corrects each color gun separately.  $4\frac{1}{2}''$  meter, neon indicators. Vinyl covered case,  $10\frac{1}{2} \times 11\frac{1}{2} \times 4\frac{1}{2}''$ . 117 V, 60 Hz AC. 21 A 4490 X. Shpg. wt., 11 lbs. . . . . 94.95

## 30-kV CRT Probe with meter

Model HV-30. For direct high-voltage readings at TV CRT's. Features triple-insulated probe, detachable 50- $\mu$ A meter. Meter reads 0-30,000 VDC; 16,000 ohms/V sensitivity; individually calibrated at 25,000 V. Accuracy,  $\pm 2\%$  at 25,000 V;  $\pm 3\%$  full scale. Auto-tilt stand.  $14\frac{1}{2}''$  long. Leads, case. 21 A 4168. 2 lbs. . . . . 24.95

2495

## Dyna-flex 3-point Probe

Model FP-3. Versatile probe provides instant connection to three printed circuit board terminals. Automatically adjusts to any spacing,  $\frac{1}{16}''$  to  $\frac{3}{8}''$ . Contact resistance less than .05 ohm. Use with VTVM, VOM, transistor tester. 21 A 4576. 8 oz. . . . . 12.95

## Dynascope Convergence Aid

Model DS-1. Designed as a convenient aid in faster and more accurate static convergence of a color CRT. Also for detailed purity and focus checks. Lets you view screen from back of TV. Movable clip-on magnifier increases dot size. 21 A 4580. 8 oz. . . . . 7.95

1295

795

## Capacitor Analyst

**10995** Tests in or out-of-circuit

Model 801. For quick and accurate testing of foil, mica, ceramic and electrolytic capacitors. Tests electrolytics out-of-circuit for energy storage and effective capacitance, up to 2000  $\mu$ F. Measures capacitance from 25 pF to 100  $\mu$ F; values read on scale.

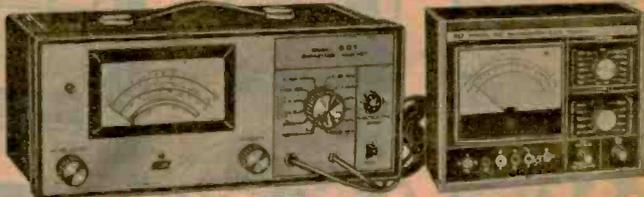
Tests in-circuit or out-of-circuit for leakage, with direct reading up to 50 megohms; shorts, 10 pF to 2000  $\mu$ F (low as 25-ohm shunt); opens (low as 50-ohm shunt), down to 25 pF. Size,  $5\frac{1}{2} \times 12\frac{1}{2} \times 6\frac{3}{4}''$ . For 105-125 V, 60 Hz AC. 21 A 4342 U. 11 lbs. . . . . 109.95

## Transistor Analyst

**9995** Tests AC beta, leakage, more

Model 162. Latest design DC transistor tester tests both transistors and FET's in and out of circuit. Checks transistors from 1 mA to 1 amp collector current in steps of 10. Constant  $1\frac{1}{2}$ -volt collector voltage.

Highly sensitive meter for accurate leakage tests. FET's are tested by measuring the GM of the device from 0-50,000 micromhos. GM test position can also be used to measure in-circuit impedance in the presence of transistors. Checks dual-gate FET's.  $7\frac{3}{4} \times 9\frac{1}{8} \times 4''$ . For 117 VAC. Shpg. wt., 5 lbs. 21 A 4579. . . . . 99.95



# Sencore performance-proven Test Instruments.

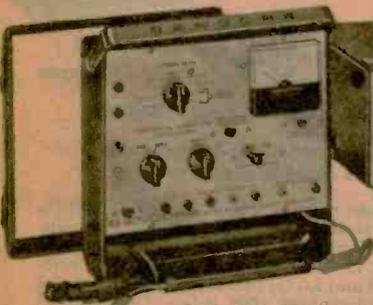
16995 **A**



12995 **B**

**A** Model CG141 Color Bar Generator. Temperature-controlled solid-state circuit. 5 standard patterns: RCA color bars, cross-hatch, white dots, vertical and horizontal bars; movable single dot and cross. Snap tuning for Ch. 2-6. Interlace control, high-output chrome and sync signals, 4.5 MHz crystal-controlled sound carrier. Steel case, 10x9x3 1/2". 115 VAC.  
21 A 4314 U. Shpg. wt., 9 lbs. . . . . 169.95

**B** Model CG18 Color Bar Generator. Battery-powered. 10 standard keyed color bars, 10 vertical lines, 14 horizontal lines, crosshatch, adjustable white dots. Solid-state, crystal-controlled. Snap tuning for Ch. 3/4/5. Interlace control, 4.5 MHz sound carrier. 9 1/2 x 7 3/4 x 3 3/4". Requires 8 "C" batteries below.  
21 A 4525 U. Shpg. wt., 7 lbs. . . . . 129.95



Choice of Battery or AC Model

**D** Battery Model

8450

**C** Model 55137 TV Sweep Generator. For sweep, sync. HV work. Universal horizontal/vertical oscillators substitute for TV's. Vertical test signal. 300  $\mu$ A meter for AC, p-p. DC V, DC current, 2d anode to 30 kV. 9x10x3 1/2". Probe, leads 115 VAC.  
21 A 4400. Shpg. wt., 10 lbs. . . . . 94.50

**D** Model CG10 Color Bar Generator. Crystal-controlled, solid-state. Color bars, dots, crosshatch, vertical, horizontal lines. 10 keyed color bars. Interlace control. Zener-reg, battery power. 3 1/2 x 10 1/4 x 8 1/2". Order 8 "C" batteries, below.  
21 A 4469 U. Shpg. wt., 5 1/2 lbs. . . . . 84.50  
18 A 5078. "C" Batteries. 4 oz. . . . . Pkg. 2/33¢

**C** 9450

CG12 Generator. Same as CG10, but for 117 VAC, 4.5 MHz crystal-controlled signal.  
21 A 4526 U. Shpg. wt., 8 lbs. . . . . 109.95



**E** Model FE-14 Field-Effect VOM. FET's in differential circuit for zero warmup time, stability, 15-meg input. DC, 10' meg AC. 1/2-V zero center scale. DCV/ACV rms: 0-1-3-10-30-100-300-1000. ACV p-p: 0-2.8-8.4-28-84-280-840-2800. Ohms: 0-1000-10K-100K, 0-1000 meg. DC curr., 0-100  $\mu$ A, 0-1-10-100 mA, 1A. 4 1/2" meter. 7 1/4 x 5 x 3". Leads. Requires one 9V and "C" batt. HV probe below.  
21 A 4138. Shpg. wt., 4 lbs. . . . . 69.95

**F** Model FE-16 Field-Effect VOM. High-accuracy model ( $\pm$ 1.5% DC and  $\pm$ 3% AC). 4 1/2" meter and knobs. Low circuit loading, true zero center scale. Meter-tilting metal handle, mirrored scale. Ranges same as FE-14 above. 15-meg input DC, 10 meg AC. Vinyl-clad steel case, 7 1/4 x 5 x 3". Leads. Requires one 9V and "C" batt.  
21 A 4183. Shpg. wt., 5 lbs. . . . . 84.50  
21 A 4139. 39A19 High-V Probe. To 30 kV. 8 oz. . . . . 9.95

**G** Model TF17 Transistor/FET Tester. Tests FET's in or out of circuit for true  $G_m$  gain in micromhos; transistors for AC current gain in Betas. Shows leakage of FET ( $I_{GSS}$ ) and transistor ( $I_{CBO}$ ) in  $\mu$ A. Separate tests for high-power and RF transistors;  $I_{PSS}$  current check for matching FET's. 4 1/2" meter. Vinyl-clad steel case, 9 1/2 x 7 3/4 x 3 3/4". With manual listing 12,000 types. 115 VAC.  
21 A 4527 U. Shpg. wt., 7 lbs. . . . . 109.50

**H** Model CR143 Color Picture Tube Tester. Tests color and b/w tubes. Automatically checks color-tube guns for tracking at all settings of brightness control. Short test, emission-test with pure DC, life test. Automatically-controlled rejuvenation circuit brings low-emission tubes to life, removes shorts, equalizes color-tube gun currents. Vinyl-covered case, 10x9x3 1/2". 115 VAC.  
21 A 4286 U. Shpg. wt., 11 lbs. . . . . 119.50

# .. for the radio and television technician



**"Mighty Mite V" Tube Tester**

**8450** • Test Over 3000 Types  
• Full Cathode Current

Model TC 142. Cathode-emission tester for accurate testing. "Third hand" booklet cuts set-up time. Tests over 3000 types including compactrons, novars, nuvistors, frame-grid, 10-pin, mag-novals. Grid leakage measured with 100-meg circuit. Stethoscopic short test. Vinyl-clad steel case, detachable lid. 10x9x3½". 115 VAC.

21 A 4284 X. Wt., 9 lbs. .... 84.50  
TC154 Tube Tester. Similar to above, but instant-on solid-state circuit.  
21 A 4572 U. Wt., 9 lbs. .... 89.95



**Deluxe Sweep and Marker Generator**

**39500** • Ultra-Linear Sweep  
• 3 Cables for Hookup

Model SM152. Solid-state. Aligns tuner, IF, chroma bandpass—each stage individually, or overall. Ultra-flat linear sweep output, all channels from 10-920 MHz. Sweep width calibrated, 0.3-15 MHz; RF sweep, 10 μV to 0.1 V. Pushbuttons select 8 crystal-controlled true post-injected IF markers. Two preset 3.58 MHz chroma outputs. 10" dial shows range in use. Only 3 cables for hookup. 13½x9½x5¾". Leads, probes. 115 VAC.

21 A 4528 U. Wt., 15 lbs. .... 395.00



**Oscilloscope/Vectorscope**

**22950** • Converts Instantly  
• For Color TV Chroma

Model PS148. Combines wideband, hi-sensitivity scope with vectorscope for complete troubleshooting and color TV chroma alignment. Vectograph screen shows degree of chroma demodulation. Vertical amplifier: 10 Hz to 5.2 MHz, ±1 dB; rise time, .055 μsec; sensitivity, .017 V rms/in. Five sweep ranges, 5 Hz to 500 kHz. Input: 27 or 2.7 meg. Retrace blanking. Use with keyed color bar generator. 11x9x15½". Direct/lo-cap probe. 115 VAC.  
21 A 4438 U. Wt., 22 lbs. .... 229.50

**A** Model RC144 Component Substitutor. Provides 36 most-needed resistors, capacitors: 24 ½-watt and 1-watt resistors from 10 ohms to 5.6 megs; 10 capacitors, 100 pF to 0.5 μF at 600 V; two electrolytics, 10 μF and 40 μF at 450 V. Only 4x3x2".  
21 A 4529. Shpg. wt., 12 lbs. .... 17.95

**B** Model RC146 Component Substitutor. 75 values of resistors, capacitors, rectifiers for fast substitution. Twelve 1-watt resistors, 10 to 5600 ohms; 12 ½-watt, 10K to 5.6 megs; 20-watt power, 2.5-15,000 ohms; ten 600V capacitors, 100 pF to 0.5 μF; ten electrolytics, 2-250 μF, 450V; 0.5 A selenium and silicon rectifier. Surge-protected. 10½x4¾x4¾".  
21 A 4288 X. Shpg. wt., 3½ lbs. .... 49.95

**C** Model MU150 Dynamic Mutual Conductance Tube Tester. Speedy, with lab accuracy. Checks over 3000 foreign and domestic tubes. Full rated cathode current drawn from every tube. True G<sub>m</sub> in micromhos using 5000 Hz square wave. 100-meg grid leakage test. Stethoscopic test for shorts. Life test. Vinyl-clad steel case. Plastic-coated tube chart. 17x11x4". 115 VAC.  
21 A 4437 U. Shpg. wt., 18 lbs. .... 229.50

**D** Model FS134 Solid-State TV-FM Field-Strength Meter. For all TV channels, VHF and UHF, plus FM. Sensitivity: 30 μV. Accuracy: VHF/FM, ±3 dB; UHF, ±6 dB. Calib.: 0-60 dB, 30-30,000 μV, X1, X10, X100. IF/image rej.: over 50 dB VHF, 30 dB UHF. Input: 75 or 300 ohms, built-in balun. Bandwidth: 500 kHz. Speaker. 9x10x5". Order 9 batteries below.  
21 A 4340 U. Shpg. wt., 9 lbs. .... 229.50  
18 A 5078. "C" Batteries, 4 oz. .... Pkg. 2/33c



**A**  
**1795**



**B**  
**4995**



**C**



**D**

**22950 22950**

# RCA high-accuracy Test Instruments



**A 9500**

**A** Model WA-504A Sine/Square Wave Generator. Provides tunable sine or square wave audio frequency signal. Covers 20 Hz to 200 kHz in four ranges. Calibrated dial with vernier drive. Ultra stable, less than  $\pm 1.5$  dB amplitude variation. Can be used for testing audio amplifiers; speakers and enclosures; finding L-C combinations in circuits. Total sine wave harmonic distortion under 0.25%.  $7\frac{3}{4} \times 5\frac{3}{8} \times 4\frac{3}{4}$ ". With leads. 117 VAC.  
21 A 4352. Shpg. wt., 5 lbs. . . . . 95.00



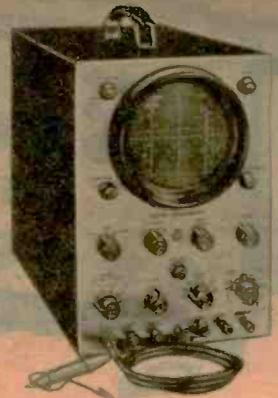
**B 6500**

**B** Model WR-50B RF Signal Generator. Excellent RF signal generator is ideal for educational uses, and for accurate maintenance and troubleshooting of FM-AM radios and TV's. Produces accurate CW and AM signals from 85 kHz to 40 MHz plus 455 kHz and 10.7 MHz sweeps; 400 Hz AF oscillator for audio testing of speakers, amplifiers, etc. Permanent test cables. Case,  $7\frac{3}{4} \times 5\frac{3}{8} \times 4\frac{3}{4}$ ". Carrying handle. For 117 VAC.  
21 A 4192. Shpg. wt., 7 lbs. . . . . 65.00



**C 13900**

**C** Model WO-33A 3-inch Scope. For observing colorburst signals, other TV work. Dual-band vertical amplifier response: narrowband, 3 mV rms/inch, 20 Hz to 150 kHz,  $-3$  dB; wideband, 100 mV rms/inch, 5.5 Hz to 5.5 MHz,  $-3$  dB. Sweep oscillator, 15 Hz to 75 kHz. Synchronization: internal plus or minus. external. Line sweep, 160° adjustable phase, 3" flat-faced CRT. Metal case,  $8\frac{3}{4} \times 6\frac{1}{2} \times 10\frac{1}{4}$ ". Combination test probe. 117 VAC.  
21 A 4276 U. Shpg. wt., 16 lbs. . . . . 139.00



**D 26900**

**D** Model WO-91C Dual-Band 5" Scope. Professional 5" scope for color and B&W TV. Has sync separation for stable sweep lock-in; 10 Hz to 100 kHz continuous sweep. Dual-band response and sensitivity; wideband,  $\pm 1$  dB, 10 Hz to 4.5 MHz; narrowband,  $-6$  dB, 10 Hz to 1.5 MHz or  $-1$  dB, 10 Hz to 0.5 MHz. Sensitivity; wideband, 0.150 V p-p/inch; narrowband, 0.5 V p-p/inch.  $13\frac{1}{2} \times 9 \times 16\frac{1}{4}$ ". 117 VAC. With WC-300B Direct/Low-Capacitance test probe.  
21 A 4543 U. Shpg. wt., 30 lbs. . . . . 269.00



**E 4000**

**E** Model WP-26A TV Isotap. Adjustable isolation/auto-transformer provides instant high/low/medium line voltage. Matches line voltage of 105-130 V, 50-60 Hz, in 5-volt steps. Output: 105, 115 or 130 V. Isolation output, 400 VA; auto-transformer, 500 VA.  $5\frac{3}{4} \times 5 \times 4\frac{3}{8}$ ".  
21 A 4117. Shpg. wt., 15 lbs. . . . . 40.00  
Model WP-25A. As above, but 275 VA isolation output.  
12 A 4171. Shpg. wt., 15 lbs. . . . . 27.50



**F 29500**

**F** Model WR-69A Sweep Generator. For visual alignment of TV and FM receivers. Ideal for color TV. Covers VHF TV channels and 88-108 MHz FM band. Preset positions for channels 2-13; FM, video, chrominance and IF frequencies. VHF output on fundamentals. IF/video output: 50 MHz continuously tuned. Bandwidth, 50 kHz to 420 MHz; 12 MHz max. on TV.  $10 \times 13\frac{1}{2} \times 7$ ". 117 VAC.  
21 A 4347 U. Shpg. wt., 18 lbs. . . . . 295.00



**G 25650**

**G** Model WR-99A Marker Generator. Supplies fundamental-frequency RF carrier for precision alignment of TV and FM receivers. Crystal calibrator beats at 1 or 10 MHz. Covers 19-260 MHz in 8 bands. Has heterodyne detector, amplifier and speaker. 4.5 MHz crystal for alignment of intercarrier IF amplifiers. Triple markers. Slide-rule tuning dial.  $13\frac{1}{2} \times 10 \times 7$ ". For 105-125 V, 50-60 Hz AC.  
21 A 4329 U. Shpg. wt., 21 lbs. . . . . 256.50



**H 1850**

**H** Model WV-120A AC Power Line Monitor. For lab, shop use. Reveals fluctuations or "bounces" in AC line voltage. True rms reading, 100-140 VAC. Accuracy,  $\pm 2\%$  at 120 V,  $\pm 3\%$  at 100/140 V. 25-400 Hz.  $3\frac{1}{2} \times 5 \times 3\frac{1}{8}$ ".  
11 A 4193. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 18.50  
Model WV-503A AC Power Line Monitor. (Not illus.) Same as above, but reads 200-280 VAC. 25-400 Hz frequency.  
21 A 4398. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 18.50

# RCA Test Equipment



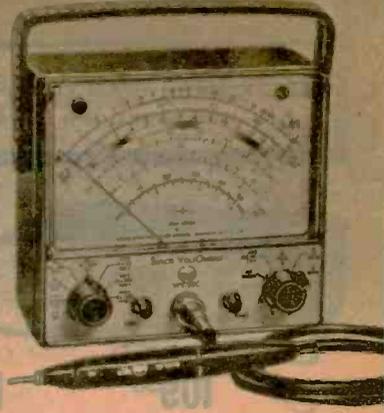
**5200**



**7900**



**6675**



• 6½" mirrored scale  
• ±3% accuracy **8850**

**A** Model WV-38A VOM. Highly accurate portable instrument features 2-color 5" meter with sensitive 50  $\mu$ A movement; flat response to 50 kHz on 2.5, 10 and 50 V ranges; extra-low 0.25 and 1.0 VDC ranges; precision 1% resistors. Has 39 ranges: AC and DC volts, 0.2-5-10-50-250-1000-5000, plus 0.25-1 VDC; Ohms, 3 ranges to 20 megohms. DC current, 0-50  $\mu$ A, 0-1-10-100-500 mA, 0-10 amps. dB, -20 to +50. Input resistance: DC, 20,000 ohms/volt; AC, 5000 ohms/volt. Accuracy: ±3% DC, ±5% AC. Polarity reversal switch, burnout protection, clips for test lead storage. With test leads. 6½x5½x3½". Factory wired and tested. Shpg. wt., 3½ lbs.  
21 A 4219. . . . . 52.00  
21 A 4220. WG-270A Case. 1 lb. . . 5.25

**B** Model WV-500B Solid-State Volt-Ohmyst. Battery-operated volt-meter. Has 8 VDC ranges from 0.02 to 1500 V; 7 AC (rms) ranges from 0.1 to 1500 V; AC (p-p) ranges from 0.5 to 4200 V. DC current, 8-ranges from 2  $\mu$ A to 1.5 amps. Ohms, 7 ranges, 0.2 ohm to 1000 megohms. 11 megohm input resistance, ±3% accuracy; 6½x5½x3½".  
21 A 4172. Shpg. wt., 3½ lbs. . . 79.00

**C** Model WT-501A In or Out-of-Circuit Transistor Tester. Tests  $I_{CBO}$ ,  $I_{CEO}$ , and DC Beta. Plots forward current transfer ratio up to 1 amp; adjustable collector current. (Not for FETs or MOS transistors.) Front panel NPN, PNP sockets. Low impedance. Leads, battery. 6½x5½x3½".  
21 A 4318. Shpg. wt., 2¾ lbs. . . 66.75

Model WV-98C VoltOhmyst. Precision VTVM gives direct p-p reading of complex wave-forms. 11-megohm input resistance. Reads: AC and DC volts, 0-1.5-5-15-50-150-500-1500 (plus 0-0.5 VDC range); 7 AC p-p ranges from 4 volts to 4200 V; 7 ohms ranges from 0.2 ohm to 1000 megohms. With probe. 6½x7x3¼". 105-125 VAC.  
21 A 4214. Shpg. wt., 6 lbs. . . . 88.50

Model WV77E VTVM. Above, except 4½" meter, no 0-0.5 VDC scale, no AC/DC probe, 7½x5½x4¾".  
21 A 4208. Shpg. wt., 5 lbs. . . . 52.00



**11800**

Model WT-509A Picture Tube Tester. Tests color and black-and-white picture tubes for emission quality, leakage, shorts. Has five test sockets, including universal adapter for any tube type. "Activate" function improves performance of some low-emission tubes. Solid-state, with triac device for controlling internal voltages. Sensitive cut-off adjustment. 12x10x5". For 105-132 V, 50-60 Hz AC.  
21 A 4183. Shpg. wt., 12 lbs. . . 118.00

## Resistance-capacitance Substitution Box

Model WG-412A. Has 36 one-volt resistor values (15 ohms to 10 megohms), 18 600-volt capacitor values (100 pF to .22  $\mu$ F). ±10% tolerance. Select values separately, in series, or parallel RC combinations. With test leads, clips. 6½x5½x2¾". Factory wired and tested. Wt., 1 lb.  
21 A 4461. . . . . 30.00

**3000**

Ideal for circuit designing



## RCA test equipment Probes and Accessories

Stock No.	Mfr's Type	Description	Shpg. wt.	EACH
21 A 4212	WG-289	High Voltage probe extends WV-98C to 50 kv. Use multiplier below.	8 oz.	13.50
21 A 4209	WG-297	Extends WV-77E or WV-38A to 50 kv. Use multiplier.	8 oz.	13.50
21 A 4213	WG-206	1090 megohm multiplier to be used with High Voltage probes above.	2 oz.	3.75
21 A 4274	WG-210	900 megohm multiplier to be used with High Voltage probes above.	2 oz.	3.75
21 A 4275	WG-211	495 megohm multiplier to be used with High Voltage probes above.	2 oz.	3.75
21 A 4215	WG-301A	Crystal diode probe for WV-98C (to 250 MHz).	8 oz.	8.25
21 A 4366	WG-351A	Crystal diode probe for WV-77E (to over 100 MHz).	4 oz.	5.25
21 A 4279	WG-300B	Direct/low capacitance probe for RCA scopes.	4 oz.	12.00
21 A 4378	WG-350A	Demodulator probe for WO-33A oscilloscope.	4 oz.	5.25
21 A 4380	WG-349A	Direct/low capacitance probe for WO-33A scope.	4 oz.	6.75
21 A 4182	WG-299E	AC-Ohms/DC probe for use with WV-98C.	4 oz.	9.75
21 A 4353	WG-411A	Slip-on High-voltage probe for WG-299D and WG-410A. To 50,000 volts when used with WG-206 multiplier.	12 oz.	13.50
21 A 4323	WG-416A	I.F. Test Block; 180-ohm detector and IF transformer loading circuit. Connects to scope.	6 oz.	15.25
21 A 4458	WG-418A	Mixer grid-matching pad. Couples generator output.	6 oz.	13.50
21 A 4198	WG-307B-K	TV bias supply kit. 3 output voltages, adj. 0 to -15 V for RF, IF or AGC bias.	1½ lbs.	13.50
21 A 4196	WG-295	Video multimeter. Provides 7 markers for response curves in color TV. Connects to sweep gen.	8 oz.	33.50
21 A 4197	WG-304B	Radio Frequency Modulator. Checks response of Television receivers.	4 oz.	18.00

## Transistor and diode Checker

**1800**

- Tests Both NPN and PNP Transistors
- Easy-to-Read Meter



Model WC-506A. Checks relative gain and leakage of out-of-circuit transistors, plus relative front-to-back current ratio of diodes. Transistor socket, color-coded leads. (Not for FETs or MOS transistors.) Uses 2 "AA" batteries (not included). 3½x6¼x2".  
21 A 4320. Shpg. wt., 1 lb. . . . . 18.00

For complete selection of Eico Kits, see pages 486 to 488

# Eico wired Test Equipment.



**A** 109<sup>95</sup>



**B** 149<sup>95</sup>



**C** 249<sup>95</sup>



**D** 169<sup>95</sup>

## **A** Versatile Color-Bar/Pattern Generator

Model 385. Battery-powered. Color-coded gun killers eliminate any one color or combination of two or more colors from display. Generates 10 color bars, cross-hatch and dot patterns, horizontal and vertical lines. Feeds directly to TV antenna terminals. Low current drain.  $2\frac{1}{2} \times 8\frac{1}{2} \times 8\frac{3}{8}$ ". With test leads.

21 A 4538 U. Shpg. wt., 9 lbs. . . . . 109.95  
21 A 4537. Model 385-K Kit. Shpg. wt., 9 lbs. . . . . 79.95

## **B** Deluxe 5" wideband Oscilloscope

Model 460. Flat from DC to 4.5 MHz, usable to 10 MHz. Reproduces 3.58 MHz color TV sync burst. Vertical Sensitivity: 10 mV/inch. Input Impedance: 3 meg shunted by 35 pF. 4-position attenuator. Full screen DC positioning; 2X horizontal. Sweep: 10 Hz to 100 kHz, plus low-frequency with ext. capacitor. Plus, minus, internal, external, line-sync.  $13 \times 8\frac{1}{2} \times 16"$ . 105-125 V, 50-60 Hz AC.

21 A 4157 U. Shpg. wt., 25 lbs. . . . . 149.95  
21 A 4158 U. Model 460-K Kit. Shpg. wt., 25 lbs. . . . . 99.95

## **C** Professional 5" wideband Oscilloscope

Model 465. Flat DC to 8 MHz, usable to 10 MHz. Vertical Sensitivity: .034V p-p/cm. Horizontal Sensitivity: 0.05 V p-p/cm, DC to 1 MHz. Automatic sync limiter, full retrace blanking. Sweep: 10 Hz to 100 kHz, plus 30 Hz vertical and 7875 Hz horizontal. Plus, minus, internal, external, line sync.  $12\frac{3}{4} \times 8\frac{1}{2} \times 17\frac{1}{2}"$ . For 117 VAC.

21 A 4536 U. Shpg. wt., 27 lbs. . . . . 249.95  
21 A 4535 U. Model 465-K Kit. Shpg. wt., 27 lbs. . . . . 179.95

## **D** Portable 3" wideband Oscilloscope

Model 435. Flat DC to 4.5 MHz, usable to 10 MHz. Vertical Sensitivity: 18 mV rms/cm. Push-pull 3-stage direct-coupled amplifier. Zener diode calibration. Four-position frequency-compensated decade attenuator. Reads DC or p-p AC from 50 mV to 500 V. Sweep: 10 Hz to 100 kHz, plus 30 Hz vertical and 7875 Hz horizontal.  $8\frac{1}{2} \times 5\frac{3}{4} \times 12\frac{5}{8}"$ . For 105-125 volts, 50-60 Hz AC.

21 A 4335 U. Shpg. wt., 18 lbs. . . . . 169.95  
21 A 4282 U. Model 435-K Kit. Shpg. wt., 18 lbs. . . . . 119.95



54<sup>95</sup>



44<sup>95</sup>



149<sup>95</sup>

## Sine/Square Wave Generator

Model 377. Sine Wave Range: 20 Hz to 200 kHz in 4 bands. Response:  $\pm 1\frac{1}{2}$  dB, 60 Hz to 150 kHz. Square Wave Range: 60 Hz to 50 kHz in 4 bands. Output: 10 volts across 10K ohms. Hum: under 0.4% of rated output. Accuracy:  $\pm 3\%$ . Wien Bridge oscillator circuit uses 1% resistors. Choke filtering in power supply.  $7\frac{1}{2} \times 11\frac{1}{2} \times 7\frac{5}{8}"$ . For 110-120 V, 50-60 Hz AC.

21 A 4134 X. Shpg. wt., 14 lbs. . . . . 54.95  
21 A 4135 X. Model 377-K Kit. . . . . 39.95

## Stable RF Signal Generator

Model 324. Ideal for AM, FM radios, hi-fi's, other equipment. Provides 150 kHz to 435 MHz RF output; 150 kHz to 145 MHz on fundamentals (6 ranges). Accuracy:  $\pm 1.5\%$ . Has internal variable 400-Hz modulation. Also takes external modulation sources. Has RF attenuators. 6:1 vernier drive. Rugged case,  $8 \times 10 \times 4\frac{1}{2}"$ , carrying handle. For 117 VAC.

21 A 4140. Shpg. wt., 10 lbs. . . . . 44.95  
21 A 4141. Model 324-K Kit. . . . . 32.95

## Sweep/Marker Generator

Model 369. Signals are unaffected by receiver. 5 sweep ranges cover 3 to 220 MHz. 3 marker ranges cover 2 to 75 MHz on fundamentals, 60 to 225 MHz on harmonics. 4.5 MHz crystal supplied for accurate marker check. 6:1 vernier drive; easy-to-read 360° scales. Retrace blanking for scope. 3-stage AGC circuit. 50 ohms.  $8\frac{1}{2} \times 12\frac{1}{2} \times 7"$ . 110-120 V, 50-60 Hz AC.

21 A 4308 U. Shpg. wt., 18 lbs. . . . . 149.95  
21 A 4307 U. Model 369-K Kit. . . . . 99.95



**E** 99<sup>95</sup>



74<sup>95</sup>

## Deluxe CRT Tester/Rejuvenator . . Audio Generator

**E** Model 633 Tester/Rejuvenator. 12 filament voltages, emission test. Safely repairs shorts, welding of cathode. Switch selects individual guns of color CRT's for testing.  $4\frac{1}{2}"$  meter. Transformer-isolated supply. Luggage-type case,  $5\frac{3}{4} \times 12\frac{1}{2} \times 9\frac{1}{4}"$ . Tube chart, cables. 117 VAC.

21 A 4540 U. Shpg. wt., 10 lbs. . . . . 99.95  
21 A 4539 U. Model 633-K Kit. Shpg. wt., 10 lbs. . . . . 69.95

**F** Model 379 Solid-state Sine/Square-Wave Generator. 20 Hz to 2 MHz in 5 bands. Output Voltage: (sine wave) 0-7.5 V rms into high impedance, 0-6.5 V into 600 ohms; (square wave) 0-10 V p-p, rise time at 20 kHz less than 0.1  $\mu$ s. Maximum Distortion: 0.25%.  $7\frac{1}{2} \times 8\frac{1}{2} \times 8\frac{1}{2}"$ . 117 V. 50-60 Hz AC.

21 A 4244. Shpg. wt., 9 lbs. . . . . 74.95  
21 A 4177. Model 379-K Kit. Shpg. wt., 9 lbs. . . . . 54.95

# for every service purpose

For complete selection of Eico Kits, see pages 486 to 488

44<sup>95</sup>



## Tube and Battery Tester

Model 636. Tests 800 radio, TV tubes for cathode emission, leakage, shorts, open elements, intermittents. Tests, under load, commonly used batteries from 1.5 to 90 volts. 3-color meter. Transformer power supply. Black bakelite case, 8<sup>5</sup>/<sub>8</sub>x7<sup>1</sup>/<sub>2</sub>x3<sup>1</sup>/<sub>8</sub>". With tube manual. 117 VAC.  
 21 A 4238. Shpg. wt., 4 lbs. .... 44.95  
 21 A 4544. Model 636-K Kit .... 29.95

139<sup>95</sup>



## Tube and Transistor Tester

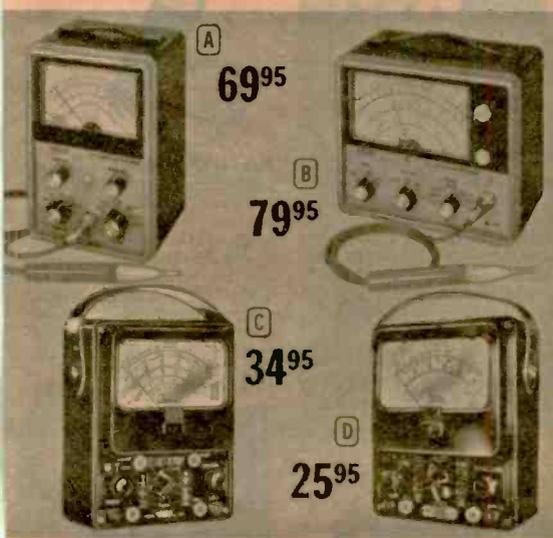
Model 667. Combines mutual conductance (Gm), plate conductance (Gp), and peak emission tests to give a single reading of tube quality. Gain, leakage tests for transistors. Big 4<sup>1</sup>/<sub>2</sub>" meter. Multicircuit level switch. 4<sup>1</sup>/<sub>2</sub>x15x12". For 115 VAC.  
 21 A 4142 U. Shpg. wt., 23 lbs. .... 139.95  
 21 A 4143 X. Model 667-K Kit. .... 89.95  
 21 A 4144. CRU CRT Adapter. 1 lb. .... 9.95

69<sup>95</sup>



## Portable Tube Tester

Model 635. Tests all tubes, including TV picture tubes. Checks dynamic cathode emission, shorts, grid leakage, gas. Has pin straighteners for all types; burnout-protected 3<sup>1</sup>/<sub>2</sub>" D'-Arsonval meter; short, grid-leak, and power indicators. Luggage case, 4x12<sup>1</sup>/<sub>2</sub>x9". 117 VAC.  
 21 A 4542. Shpg. wt., 4 lbs. .... 69.95  
 21 A 4541. Model 635-K Kit. .... 44.95



69<sup>95</sup>

79<sup>95</sup>

34<sup>95</sup>

25<sup>95</sup>

## Values in accurate FET Voltmeters and VOM's

- A** Model 240 Voltmeter. Impedances: DC, 11 megs; AC, 1 meg. 25 Hz to 2 MHz. Ranges: DC and AC Volts, 0-1-3-10-30-100-300-1000; p-p AC Volts, 0-2.8-8.5-28-85-280-850-2800; Resistance, 0.2 ohm to 1000 megs in 7 ranges. 5<sup>3</sup>/<sub>4</sub>x8<sup>1</sup>/<sub>2</sub>x4<sup>3</sup>/<sub>4</sub>". AC or batteries. With Uniprobe.  
 21 A 4305. Shpg. wt., 6 lbs. .... 69.95  
 21 A 4304. Model 240-K Kit. Shpg. wt., 6 lbs. .... 49.95
- B** Model 242 Voltmeter (mA). Imp.: DC, 11 megs; AC, 1 meg. 25 Hz to 2 MHz. DC, AC Volts, mA: 0-1-3-10-30-100-300-1000; p-p AC Volts, mA: 0-2.8-8.5-28-85-280-850-2800; Resistance: 0.2 ohm to 1000 megs. 7 ranges. With Uniprobe. 7<sup>1</sup>/<sub>2</sub>x8<sup>1</sup>/<sub>2</sub>x5". 117 VAC or batteries (req. three 9-V, one "D").  
 21 A 4316. Shpg. wt., 6 lbs. .... 79.95  
 21 A 4306. Model 242-K Kit. Shpg. wt., 6 lbs. .... 59.95
- C** Model 565 VOM. 20K ohms/V DC, 1000 ohms/V AC. AC, DC V: 0-5000; DC: 0  $\mu$ A to 10 A (5 ranges). Ohms: 2K-200K, 0-20 meg; dB: -12 +55. 6<sup>3</sup>/<sub>4</sub>x5<sup>1</sup>/<sub>4</sub>x3". Batteries.  
 21 A 4269. Less leads. Shpg. wt., 4 lbs. .... 34.95  
 21 A 4268. Model 565-K Kit. .... 25.95  
 21 A 4271. Model 555. Above assembled, 1% resistors. .... 39.95
- D** 566 VOM. 1000 ohms/V. AC, DC: 0-5000V; 0-10 mA, 0-1A; Ohms: 0-10K-100K-1 meg; dB: -20 to +69. 6<sup>3</sup>/<sub>4</sub>x5<sup>1</sup>/<sub>4</sub>x3".  
 21 A 4261. Less leads. Wt., 3 lbs. .... 25.95  
 21 A 4260. Model 566-K Kit. Shpg. wt., 3 lbs. .... 19.95  
 21 A 4263. Model 556. Above, assembled; 1% resistors. .... 29.95

## R-C Bridge/R-C-L Comparator and VTVM's

- E** Model 950 Bridge. 0.5 ohm to 500 megs, 10 pF to 5000  $\mu$ F (4 ranges). 0.05-20 comparator range. 0-500 volts tests capacitors for shorts, leakage. Measures power factor of electrolytics. Less leads. 8x10x4<sup>3</sup>/<sub>4</sub>". 117 VAC.  
 21 A 4100 X. Shpg. wt., 10 lbs. .... 39.95  
 21 A 4101. Model 950-K Kit. Shpg. wt., 10 lbs. .... 29.95
- F** Model 232 VTVM. Uni-Probe lets you measure AC, DC, ohms with one probe. AC p-p V: 0-4-14-42-140-420-1400-4200; DC V: 0-1.5-5-15-50-150-500-1500; Ohms: 0.2 to 1000 meg, 7 ranges. 30 Hz to 3 MHz. 8<sup>1</sup>/<sub>2</sub>x5x5". 117 VAC.  
 21 A 4236. Shpg. wt., 5 lbs. .... 49.95  
 21 A 4235. Model 232-K Kit. Shpg. wt., 5 lbs. .... 34.95
- G** Model 249 VTVM. Uni-Probe. AC p-p V: 0-4-14-42-140-420-1400-4200; DC V: 0-1.5-5-15-50-150-500-1500; Ohms: 0.2 to 1000 meg (7 ranges). Balanced bridge circuit, 1% multipliers; zero center scales. 8<sup>1</sup>/<sub>2</sub>x13x5". 117 VAC.  
 21 A 4234. Shpg. wt., 9 lbs. .... 59.95  
 21 A 4233. Model 249-K Kit, Shpg. wt., 9 lbs. .... 39.95



39<sup>95</sup>

49<sup>95</sup>

59<sup>95</sup>

# Quality Test Equipment for every purpose . .



20,000 ohms/volt VOM

**12<sup>95</sup>** Versatility, low circuit loading

Eico 20A3. Modestly priced precision pocket-portable VOM with rugged double-jeweled D'Arsonval movement. Ranges: DC Volts, 0-0.25-2.5-10-50-250-1000; AC Volts, 0-10-50-250-500-1000 (AC sensitivity, 10,000 ohms/volt); DC Current, 0-50  $\mu$ A, 0-25-250 mA; Resistance, 0-7K-700K ohms, 0-7 megs; Decibels, -10 to +36. Accuracy,  $\pm 2\%$ .  $5\frac{1}{2} \times 3\frac{3}{8} \times 1\frac{1}{8}$ ". With batteries, leads. 21 A 4571. Wt.,  $1\frac{1}{4}$  lbs.... 12.95

High-impact case



30,000 ohms/volt VOM

**19<sup>95</sup>** With antiparallax mirror-back scale

Eico 30A4. Professional-type pocket-portable VOM with overload-protected D'Arsonval movement. Ranges: DC Volts, 0-0.6-3-12-60-300-600-1200-3000; AC Volts, 0-6-30-120-600-1200 (AC sensitivity, 10K ohms/volt); DC Current, 0-30  $\mu$ A, 0-60-600 mA; Resistance, X1, X100, X1K, X10K; Decibels, -20 to +63 in 5 ranges. Accuracy  $\pm 2\%$ .  $5\frac{1}{2} \times 3\frac{3}{8} \times 1\frac{1}{8}$ ". Batteries, leads. 21 A 4570. Wt.,  $1\frac{1}{4}$  lbs.... 19.95

Pocket lab



**149<sup>95</sup>**

\$8 monthly\*



**289<sup>95</sup>**

\$15 monthly\*

**199<sup>95</sup>**

\$10 monthly\*



5" wideband Scope

Precision E-5508. 5-MHz bandwidth. R-p voltage calibrator. Resp., vertical,  $\pm 1$  dB, 10 Hz to 5 MHz; horizontal,  $\pm 1$  dB, 10 Hz to 1 MHz. Sensitivity: vertical, 0.010 V/inch; horizontal, 0.100 V/inch. Sweep: 10 Hz to 100 kHz. Sync: 30 Hz and 7875 Hz.  $18\frac{1}{2} \times 14 \times 8\frac{3}{4}$ ". 117 V, 60 Hz AC. 21 A 4226 U. 47 lbs... 289.95 21 A 4227. Probe. 1 lb. 29.95

HV Probe with Meter

**19<sup>95</sup>**

\$5 monthly\*



Eico MVP-5. High-voltage probe reads to 30,000 V; features built-in voltmeter. Barriers isolate high-voltage tip from probe handle and meter. For fast measurements of TV CRT's, other high-voltage equipment. Easy-to-read meter, alligator ground clip. Needs no batteries.  $14\frac{1}{2}$ " long. 2 lbs. 21 A 4237... 19.95

RF Signal Generator

Precision E-200C. 88 kHz to 110 MHz on fundamentals, to 440 MHz on harmonics. Has AVC-AGC substitution system. 0-100% modulation. Outputs: modulated RF, unmodulated RF, externally modulated RF, 400-Hz sine-wave audio, adjustable 0-80 V peak. 1% dial accuracy.  $13 \times 11\frac{1}{2} \times 6\frac{3}{8}$ ". For 117 V, 60 Hz AC. 21 A 4289 U. 16 lbs... 149.95

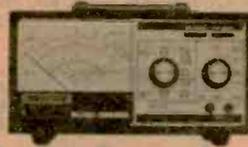
Audio Generator

Precision E-310. Sine/Square waves, 5 Hz to 600 kHz on fundamentals in 5 bands.  $\pm 2\%$  accuracy, 50 Hz to 600 kHz;  $\pm 1$  Hz, 5-50 Hz. Less than 1% distortion at 10 V rms output. Four-step attenuator. Sine-wave output, 10 V rms (600 ohms); square-wave, 10 V p-p. Rise Time, 0.20  $\mu$ sec.  $9 \times 11\frac{1}{2} \times 11\frac{1}{4}$ ". 117 V, 50-60 Hz AC. 21 A 4287 U. 24 lbs... 199.95



**99<sup>95</sup>**

\$5 monthly\*



**74<sup>95</sup>** \$5 monthly\*



**79<sup>95</sup>** \$5 monthly\*



**99<sup>95</sup>** \$5 monthly\*

Tester/Rejuvenator

Commander 857. Color, B&W CRT's. Voltmeter measures to 50 kV DC (with probe below). Good-Y-Replace scale. 3-step rejuvenation.  $10\frac{1}{2} \times 4\frac{3}{4} \times 12\frac{3}{8}$ ". Chart. 117 VAC. 21 A 4440 U. 5 lbs... 99.95 21 A 4346 U. 855. Above, less adj. G2, adapters... 79.95 21 A 4441. 857-9 HV Probe. To 50 kV DC. 3 oz.... 12.95

Solid-state FET VOM

Commander 876. FET VOM for highest impedance and stability. Ranges: AC Volts, 0.3 V to 3 kV in 9 ranges; DC volts, 0.3 V to 1 kV in 8 ranges; DC Current, 100  $\mu$ A to 1 A in 4 ranges; Resistance, 7 ranges, Accuracy  $\pm 2\%$  DC,  $\pm 4\%$  AC. Resp. 10 Hz to 10 MHz.  $9\frac{1}{4} \times 5\frac{3}{4} \times 6\frac{3}{8}$ ". Batts., leads. 21 A 4302.  $6\frac{1}{2}$  lbs.... 74.95

Transistor Tester

Commander 830. Simplified Good/Bad test in and out of circuit. Protects transistors against accidental burn-out. Tester is protected against burn-out, too. Color-coded meter scales for rapid testing. Handsome luggage-type case with carrying handle. Pilot light.  $6\frac{3}{8} \times 9\frac{1}{4} \times 5\frac{3}{4}$ ". 117 VAC. 21 A 4267. 3 lbs. .... 79.95

TV Color Generator

Commander 860. Crystal controlled silicon transistor solid-state generator for all color adjustments. Has centering, static convergence, fine tuning, dynamic convergence, linearity, 3-bar color patterns. Gun killer. Handsome black leatherette case,  $5 \times 9 \times 4$ ". With batteries, leads. 21 A 4277 U.  $3\frac{1}{2}$  lbs... 99.95

# .. designed for today's rigid requirements



16<sup>95</sup>



19<sup>95</sup>

\$5 monthly\*



19<sup>95</sup>

\$5 monthly\*



19<sup>95</sup>

\$5 monthly\*

## Mini-Box Resistor Box

Produces over 3400 nonstandard values

Compact resistor substitution box features unique keyboard of resistor leads instead of a control switch for resistor selection. Allows faster selection of resistance values and permits one-hand operation when using other equipment at the same time. Standard range of 84 one-watt, 10% resistors from 2.7 ohms to 22 megohms. Molded phenolic case, removable cover. Size, 3x4x2 1/4".

21 A 4332. 10 oz. .... 16.95

## 30-kV CRT Test Probe

Direct readings at TV CRT'S

Pomona 2900. For direct readings of cathode ray tube high voltages. Features triple-insulated probe, highly sensitive 50- $\mu$ A meter. Reads 0-30,000 Volts DC. Has 20,000 ohms/volt DC sensitivity. Individually calibrated at 25,000 volts. Accuracy,  $\pm 2\%$  at 25,000 volts,  $\pm 3\%$  full scale. Easy-to-read meter. Needs no batteries or other power source. 14 1/2" long. Shpg. wt., 2 lbs.

21 A 4160. .... 19.95

## Transistor Checker

Tests transistors, diodes, rectifiers

Provides standard basic tests, plus leakage, gain, open, and short tests. Leakage (ICO) current is accurate within 1/10  $\mu$ A. Beta scale from 0-300 for precise gain checks. Has 0-500,000 ohms scale to check forward and reverse resistance of diodes and rectifiers. Heavy duty black bakelite case; 7x4 1/4 x 3 1/2". With socket, leads, batteries, and full operating instructions. Japan.

21 A 4551. 2 lbs. .... 19.95

## Solid-state DC Supply

Handiest equipment on your workbench

Powers transistor radios, hearing aids, low-power amplifiers, more. Special heat-dissipation devices for cool operation under full load. Has isolating line transformer. Provides 0-10 V at 200 mA, 0-20 V at 150 mA. Panel meter monitors 0-20 VDC, 0-20 mA DC, 0-200 mA DC. AC ripple under 0.025 mV rms. Neon pilot light, fuse. 6 1/2 x 3 3/4 x 1 1/2" 110-120 V, 50-60 Hz AC. With leads. Japan.

21 A 4553. 1 1/2 lbs. .... 19.95



Quick filament continuity checks

5<sup>95</sup>

## Filament Checker

Sencore FC147. Checks filament continuity of compactrons, novars, 10-pins, nu-vistors, and decals. Has test leads for CRT filament checking. Doubles as neon voltage indicator. Size, 4x3x1".

21 A 4334. 1 lb. .... 5.95



Voltage regulated 12<sup>95</sup>

## Solid-state DC Supply

Handy small DC power supply with big current output. Provides smooth zener-regulated 12 VDC at up to 1 amp. Can power most auto tape players. Voltage-regulated within 10% of load. 110 VAC.

21 A 4385. 1 lb. .... 12.95



90<sup>00</sup> \$5 monthly\*

## Solid-state Grid-Dip Meter

Millen 90651-A. Stable RF oscillator, solid-state DC amplifier and voltmeter. Taut-band movement. 2" meter reads from 1.7 to 300 MHz. Plug-in coils; 7 direct-reading scales. 7x3 1/2 x 13 3/8" high. 117 VAC. 21 A 4331. Shpg. wt., 8 lbs. .... 90.00

21 A 4324. Type 90651. Above, less DC amp. .... 78.50

Extra Coils. To extend frequency coverage. 3 oz.

Stock No.	Mfr's Typc	MHz Range	EACH
21 A 4325	46702	925-2000	9.40
21 A 4326	46703	500-1050	9.40
21 A 4327	46704	325-600	9.40
21 A 4328	46705	220-350	9.40
21 A 4443	46706	165-225	9.40

## Don Bosco Pen-Size Signal Tracers

**E** "Mosquito." Locates defective circuits. Cordless, detachable probe. Transistor oscillator generates signals rich in IF and HF harmonics. Couples to magnetic circuits without leads. Powered by 1 pen-light-battery (included). 5 1/2" long, 1/2" dia. 21 A 4301. Shpg. wt., 3 oz. .... 9.95

**F** Stethotracer. Detects low-level mW audio or modulated RF signal. Range, 60 Hz to 200 MHz 60 dB gain. 5 1/2" long, 1/2" dia. Earphone, 3 attenuator probes, crystal-diode probe, ground lead, battery. 21 A 4292. Shpg. wt., 3 oz. .... 34.95



A

**A** Emico AC Voltage Tester. Plugs into AC outlet, detects high or low line voltage. 0-150 volt range. Prongs swivel 90°. Damped 2" meter,  $\pm 5\%$  accuracy. Shockproof.

21 A 4368. Shpg. wt., 8 oz. .... 3.38



B

**B** AMF Circuit Tester. Glow tester checks shorts, continuity, grounds, opens. Dim light indicates poor connection. No light when resistance exceeds 10 ohms. Use for dead circuits only. Requires 2 penlight cells.

21 A 4370. Shpg. wt., 3 oz. .... 1.66



C

**C** C-C Neon Glow Tester. Use for finding hot AC leads, checking fuses, appliance repair. Lights from 60 VAC-90 VDC to 550 VAC-VDC. With 5" leads.

21 A 4369. Shpg. wt., 3 oz. .... 12.44

21 A 4442. Above, for 5 to 50 volts. Shpg. wt., 3 oz. .... 9.95

# Simpson Test Equipment

## Low-cost Model 260-5 VOM

- 20,000 ohms/VDC, 5000 ohms/VAC
- Accurate within  $\pm 2\%$  on DC,  $\pm 3\%$  on AC
- High-accuracy spring-backed jewel movement



260-5  
**6200**  
\$5 monthly\*



VOM Shown with Plug-In Adapter

Highly-reliable, low-cost VOM boasts spring-backed jewel meter movement; DC polarity reversing switch; full-wave bridge rectifier for fast, easy, accurate readings. Has AC response from 5 to 50 kHz; AC accuracy of  $\pm 3\%$ ; DC accuracy of  $\pm 5\%$ . 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, 0-10-100-500; DC amps, 0-10; Resistance, 0-20 mega in 3 ranges with center-scale readings of 12, 1200 and 120K ohms; Decibels, -20 to +50 in 4 ranges. Rugged case,  $7 \times 5 \frac{1}{4} \times 3 \frac{3}{8}$ ". Battery, test leads.

- 51 A 9199, Shpg. wt., 5 lbs. . . . . 62.00
- 51 A 5035, Model 260-5P VOM. Has the same fine features as above, but is also equipped with special sensor device for complete protection against overloads and burnouts. With test leads and battery. Shpg. wt., 5 lbs. . . . . 94.00
- 51 A 9200, Model 260-5RT, Model 260-5 in roll-top case. Size,  $9 \times 6 \frac{3}{8} \times 4 \frac{3}{4}$ ". Shpg. wt., 9 lbs. . . . . 68.00
- 51 A 9586, Model 260-5M RT, Model 260-5 in roll-top case, with mirrored scale to prevent parallax.  $10 \frac{1}{2}$  lbs. . . . . 70.00

## Accessories for Simpson Series 260 and 270 VOM's

Probes, Leads and Carrying Cases. Burnout-proof Model 260-5P takes all accessories below, except Type 8375 Test Leads. See table for other models.

Stock No.	Type	Description	For Models	Lbs.	EACH
51 A 9210	0508	HV probe; 25 kV range	260-3, 4 or 5	$\frac{1}{2}$	16.00
51 A 9202	0509	HV probe; 50 kV range	260-3, 4 or 5	$\frac{1}{2}$	16.00
51 A 9196	8375	Leads; alligator clips 1 term.	260-3	$\frac{1}{2}$	2.75
51 A 9203	7500	Leads; banana plugs allig. clip	260-4	1	2.75
51 A 9151	0805	Ever-Ready Leather Case	260, 270, 303	2	13.00
51 A 9162	1818	Standard Leather Case	260, 270	2	11.00

Plug-In Adapters. Turn any 260 or 270 made since 1947 into 8 different testers.  $4 \frac{3}{8} \times 5 \frac{5}{16} \times 3 \frac{1}{16}$ ". 2 lbs.

Stock No.	Type	Function	Description	EACH
51 A 9334	650	Transistor Tester	0-100 $\mu$ A $I_{cc}$ , 3 beta ranges	41.00
51 A 9336	651	DC VTVM	0-0.5-1.0-2.5-5-10-25-50-100-250-500 V	46.00
51 A 9337	652	Temperature Tester	-50° to +250° F. in 2 ranges	46.00
51 A 9338	653	AC Ammeter	0-0.25-1.25-12.5-25 A, 50-3000 Hz	28.00
51 A 9339	654	Audio Wattmeter	17 $\mu$ W to 100 W; 4/8/16/600 ohms	30.00
51 A 9340	655	Microvolt Attenuator	2.5-250,000 $\mu$ V, decade steps	28.00
51 A 9342	656	Battery Tester	Up to 90 volts	28.00

## Complete line of Simpson Test Equipment

(As Simpson releases new Test Equipment, Allied will place it in stock)

### SIMPSON VOM'S

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9591	160	Compact VOM	6	53.00
51 A 9619	250	VOM	4	68.00
51 A 9620	255	VOM	4	90.00
51 A 9154	262	Microammeter VOM	6	80.00
51 A 9212	263	Dual-Sensitivity VOM	4	94.00
51 A 9153	269-2	Microammeter VOM	6	95.00
51 A 9209	270	AC-DC VOM	5	75.00
51 A 9228	270RT	AC-DC VOM	5	81.00

### SIMPSON VTVM'S

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9148	303	AC-DC VTVM	6 $\frac{1}{2}$	90.00
51 A 9152	303RT	AC-DC VTVM	8	97.00
51 A 9587	311	AC-DC VTVM	8	91.00
51 A 9623	312	AC-DC VTVM	5	93.00
51 A 9239	715	AC VTVM	5	80.00

### OTHER SIMPSON TEST EQUIPMENT

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9163	240 VOM	Hammer	3	43.00
51 A 9254	355 VOM	Midgettester	2	50.00
51 A 9197	362	Low Ohmmeter Micro-Tester	3	37.00
51 A 9165	370	AC Ammeter Micro-Tester	3	37.00
51 A 9166	372-2	Ohmmeter Micro-Tester	3 $\frac{3}{8}$	37.00
51 A 9204	373	DC Milliammeter Micro-Tester	3	37.00
51 A 9205	374	DC Microammeter Micro-Tester	3	37.00
51 A 9206	375	DC Ammeter Micro-Tester	3	37.00
51 A 9207	385-3L	Temperature Meter	2	43.00
51 A 9159	388-3L	Thermometer	6	80.00
51 A 9201	389-3L	Temperature Meter	6	75.00
51 A 9164	390	Volt-Amp-Wattmeter	4	65.00
51 A 9850	603	Strip Chart Recorder 0-50 Mic. DC	4	107.00
51 A 9851	603	Strip Chart Recorder 0-100 Mic. DC	4	102.00
51 A 9852	603	Strip Chart Recorder 0-250 Mic. DC	4	98.00
51 A 9853	603	Strip Chart Recorder 0-1 mA DC	4	90.00
51 A 9854	603	Strip Chart Recorder 0-15 V DC	4	97.00
51 A 9855	603	Strip Chart Recorder 0-150 V DC	4	96.00
51 A 9856	603	Strip Chart Recorder 0-5 V AC	4	102.00
51 A 9857	603	Strip Chart Recorder 0-150 V AC	4	102.00
51 A 9858	603	Strip Chart Recorder 0-300 V AC	4	104.00
51 A 9624	U604	Volt-Amp-mA- $\mu$ A Multicorder	6	200.00
51 A 9226	150	Amp-Clamp	1	30.30

### SIMPSON SCOPE

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9643	U 466	5" Handiscope	29	190.00

### SIMPSON ACCESSORIES

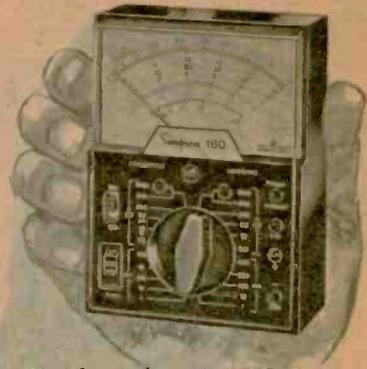
Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 5136	0010	15' Thermistor Lead, 385-3L, 389-3L	$\frac{1}{2}$	7.50
51 A 9150	0073	RF Probe for Model 303	1	10.75
51 A 9149	0074	High Voltage Probe for Model 303	1	16.00
51 A 9604	0152	RF Probe for Model 312	1	10.75
51 A 9213	0158	High Voltage Probe for Model 263	1	16.00
51 A 9626	0161	High Voltage Probe for Model 255	1	16.00
51 A 5289	0173	High Voltage Probe for Model 269	2	16.00
51 A 9158	0181	High Voltage Probe for Model 269	2	16.00
51 A 9160	0187	Surface Temperature Probe, 388-3L	1	10.75
51 A 9161	0190	General Purpose Probe	1	6.50
51 A 5137	0216	30' Thermistor Lead, 389-3L, 385-3L	1	9.00
51 A 5138	0415	50' Thermistor Lead, 389-3L, 385-3L	1 $\frac{1}{2}$	10.00
51 A 5140	0417	150' Thermistor Lead, 389-3L, 385-3L	4 $\frac{1}{2}$	17.00
51 A 9625	0531	Clamp-on Adapter Model 255	1	30.00
51 A 9622	0549	Carrying Case	2	19.00
51 A 9621	0574	High Voltage Probe Case	1	5.50
51 A 9606	0577	Case for Model 312	2	16.00
51 A 9862	0683	Special Gear Train Unit for 604	$\frac{1}{4}$	30.00
51 A 9211	0731	High Frequency Probe, Model 311	1	16.00
51 A 9208	0732	High Voltage Probe, Model 311	1	16.00
51 A 5135	0789	Free-Air Temp. Probe, 385-3L	1	11.00
51 A 5141	0790	Surface Temperature Probe, 389-3L	1	7.50
51 A 9863	02611	Ever-Ready Carrying Case for 604	1 $\frac{1}{2}$	27.00
51 A 9605	0155	High Voltage Probe, Model 312	1	16.00
51 A 5593	2055	Probe Tip Test Lead, Model 160	1	3.00
51 A 5595	2929	Carrying Case for Model 160	1	10.00
51 A 9225	4236	Carrying Case, 250, 260, 261, 270	2	15.00
51 A 9155	5262	Carrying Case, Models 262, 269	2	13.00
51 A 9157	6355	Leather Case for 355 VOM	$\frac{1}{2}$	5.50
51 A 9198	8600	Extra Lead for 355 VOM	$\frac{1}{2}$	3.00
51 A 9615	2612	Chart Paper for Model 604 (Box of 10 rolls)	2	19.50
51 A 9859	20196	Carrying Case for Model 603	2	21.40
51 A 9860	20195	Takeup Paper for Model 603	1	16.00
51 A 9861	20097	Chart Paper for Model 603 (Box of 6 Rolls)	1	13.55

# World-famous Test Equipment

SIMPSON

**Allied can supply the Test Instrument you need!**

Test equipment shown in this catalog is only a sampling of Allied's actual stocks. We can ship, promptly, most models by Amprobe, B & K, Eico, Hathaway, Hickok, Jerrold, Precision Apparatus, RCA, Rustrak, Seco, Sencore, Simpson, Sprague, Triplett and others.



**Handy pocket-size VOM**

**5300** Compact version of famous 260 VOM \$5 monthly\*

Model 160 Handi-VOM. Has the same quality features of the famous 260 VOM, plus extended range coverage for accurate transistor work. Protected taut-band meter movement; recessed range selector switch; 1-volt plug-in jack. Reads VDC to 1000, VAC to 1000, DC current to 500 mA, ohms to 10K. Accuracy: AC, ±3%; DC, ±2%. 2 1/4 x 3 1/8 x 5 1/16". With test leads, batteries.

51 A 9591. Shpg. wt., 6 lbs. . . . . 53.00  
51 A 9593. Probe-Tip Leads. 1 lb. . . . . 3.00  
51 A 9595. Carrying Case. 2 lbs. . . . . 10.00

## Jerrold Antenna Signal-Strength Meter

Model AIM-718. Lightweight, compact signal-strength meter reads directly in dB mV and μV to show exact antenna requirements for best installation. Covers 54-216 MHz for VHF-TV and FM, 470-890 MHz for UHF-TV. Has 75 and 300-ohm inputs (matching transformer supplied); two built-in 20-dB attenuators. Reads to 200,000 μV and +40 dB with attenuators. Accuracy: VHF, -3 dB; UHF, -6 dB. Sensitivity, 20 μV at 75 ohms; 40 μV at 300 ohms. 9x6 x 4". With batteries, audio output jack, crystal earphone.

51 A 9657. Shpg. wt., 4 1/2 lbs. . . . . 179.50

**17950**

\$9

monthly\*



**Lectrotech**  
**1 1/2-V Supply**

Replaces ohmmeter battery in most VTVM's. Takes just a few minutes to mount. Permanent source of 1 1/2-VDC. For all VTVM's using negative-grounded "D" cell for ohmmeter.

51 A 5634. Shpg. wt., 4 oz. . . . . 3.95



**Metergard**

Prevents bent Pointers; Pivots

Ends expensive meter repairs. Metergard wires across any meter rated 25 μA to 25 mA. Protects against 10,000% overload. Won't affect accuracy. Compact size.

51 A 5627. Shpg. wt., 4 oz. . . . . 2.95

## Amprobe extra-convenient Test Instruments for accurate readings of voltage and current



**Multi-purpose Voltage Tester**



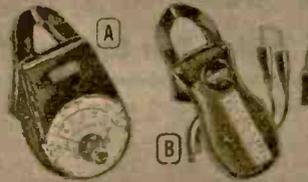
Fits in shirt pocket

**950**

- Indicates Polarity
- 3-Ft. Test Probe

Model VT-100. Compact, easy-to-use multi-purpose voltage tester fits easily in your shirt pocket. Ideal for testing all types of circuits. Shows nominal voltage levels on thermometer-type scale by a series of two windows corresponding to each voltage level: 115-220-277-440-550 VAC; 115-220-400-600-750 VDC. On AC measurements, both windows light and an audible indication of frequency is given. Pitch of signal increases with frequency from 25 to 800 Hz. On DC measurements, only one of the windows light, indicates the positive side of the line. Sliding probe pushes through body; retractable probe has 3-ft. cord. 6x2 1/4 x 3 1/4".

51 A 5210. Wt., 8 oz. . . . . 9.50



**A "Amprobe Jr." Testers**

Y Snap. Voltage, current testers series around conductors to 1/8" dia. Measure amps shown and 0-125-250 V, except A-150-600. With leads. Order carrying case below.

Stock No.	Type	Amps	EACH
51 A 9089	Y25	0-25	24.50
51 A 9167	Y525*	0-25	24.50
51 A 9168	Y550*	0-50	24.50
51 A 9169	Y500*	0-100	24.50

51 A 9105. Leather Case. 1 lb. . . . . 3.25

**B Rotary scale Tester**

Model RS-3. Single scale shows behind magnified window. Clamps around conductor to 1 1/8" dia. for current; plugs in for voltage and ohms. To 600 VAC; 300 amps; 25 ohms mid-scale. Accuracy ±3%. 7 1/2 x 2 3/8 x 1 1/8". Leads, case. 2 lbs.

51 A 9268. . . . . 58.50

**Deluxe Test Outfit**

**6985**

\$5 monthly\*



Volt-Amp-Ohmmeter Package

Model TM-63. Ideal for everyone who does electrical troubleshooting. Includes RS-3 Rotary-Scale Snap-Around Volt-Amp-Ohmmeter. Ranges: 0-150/300/600 VAC; 0-6/15/40/100/300 amps AC; 25 ohms mid-scale. ±3% accuracy. Pointer lock. Set of VLK-311 "Extend-Leads" that eliminate the need for a "third hand"; A-45L Energizer for increasing the sensitivity of the RS-3 up to 5 or 10 times. Permits current readings on permanently-wired low-current equipment. Compact "A" leather carrying case has hinged cover, snap lock, handle. 11x8 1/2 x 3". Shpg. wt., 3 lbs.

51 A 5209. . . . . 69.85

\*See page 438 for full Credit Details

# Accurate easy-to-use Instruments by Triplet



**Model 310 compact VOM** **44<sup>00</sup>** \$5 monthly\*

Popular, compact VOM. Small, but no sacrifice in range, quality, or workmanship. Provision for attaching Model 10 clamp-on AC ammeter. Interchangeable test prod can be plugged into jack at top of VOM to make it the common probe and free one hand. Single function and range switch. Rugged spring-backed jeweled movement. Self-shielded for use in strong magnetic fields. Sensitivity, 20,000 ohms/V DC, 5000 ohms/V AC. Accuracy,  $\pm 3\%$  DC,  $\pm 4\%$  AC. Ranges: DC, 0-6-60-600; DC  $\mu$ A, 0-600; Resistance, 0-20K-200K ohms, 0-2-20 mega. Size,  $4\frac{1}{2} \times 2\frac{3}{4} \times 1\frac{1}{8}$ ". With batteries, leads, manual. 4 lbs. 51 A 9667.....44.00



**Model 631 VTVM-VOM**

11-meg VTVM input **82<sup>00</sup>** \$5 monthly\*

VTVM and VOM at the price of a single tester. Single-switch selector for VTVM or VOM operation. Large easy-to-read  $5\frac{1}{2}$ " meter with unbreakable face. Spring-backed jewels for ruggedness. Long-life battery operation. Accuracy: VOM, 3% DC, 4% AC; VTVM, 4%. Ranges: VTVM DC V, 0-1.2-6-30-120 (11 megs input imp.); VOM DC volts, 0-3-12-60-300-1200 (20,000 ohms/volt); AC and audio volts, 0-3-12-60-300-1200 (5000 ohms/volt); DC current, 0-60  $\mu$ A, 0-1.2-12-120-1200 mA, 0-12 amps; dB, -20 to +63; Ohms, 0-1500-15K, 0-1.5-150 megs.  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". With test leads, alligator clips, batteries, rubber feet, and detailed instruction manual. Shp. wt.,  $4\frac{1}{2}$  lbs. 51 A 9113.....82.00



**Model 630 VOM**

0.1 ohm to 100 megs **61<sup>00</sup>** \$5 monthly\*

Has the accuracy of some VOM's costing much more. 1% ultra-accurate resistors give  $\pm 2\%$  accuracy on DC,  $\pm 3\%$  on AC. Usable through 500 kHz. Single selector switch for all functions and ranges minimizes chance of an incorrect setting and possible burnout. Resistance can be accurately read from .1 ohm to 100 megs. DC volt-meter sensitivity, 20,000 ohms/V, AC, 5000 ohms/V. Ranges: DC and AC volts, 0-3-12-60-300-1200-6000; DC current, 0-60  $\mu$ A, 0-1.2-12-120 mA, 0-12 amps; Resistance, 0-1000-10,000 ohms, 0-1-100 megs; Decibels, -20 to +70 (600-ohm line at 1 mW); Output volts, 0-3-12-60-300-1200 (jack has capacitor).  $7\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ ". Batteries, leads, manual. 6 lbs. 51 A 9118.....61.00

## Complete line of Triplet Test Equipment and Accessories

(As Triplet releases new test equipment, Allied will place it in stock)

Here is Triplet's entire line of VOM's and other test equipment, featuring high quality and accuracy. In Triplet's extensive line of VOM's you get large, easy-to-read red-printed scales; easy-to-operate single-switch function and range selector; more ohmmeter ranges to allow higher and lower readings; fuse protection in ohmmeter ranges to prevent damage to precision resistors; self-shielded Bar-Ring

meter construction to protect movement against stray magnetic fields; spring-backed instrument jewels to give additional ruggedness to meter movement; heavy-duty phenolic case to protect instrument against damage from rough handling. Feature-packed Triplet instruments are not only versatile, easy to operate, and accurate, but offer excellent value for your test equipment dollar.

### TRIPLET VOM'S

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 5095	100	VOM and AC Ammeter Outfit	7	78.00
51 A 5096	310C	VOM	2	56.00
51 A 9121	630A-2	VOM	5	71.00
51 A 9690	630APL-3	VOM	5	71.00
51 A 9693	630APLK	Burnout-Proof VOM	5	105.00
51 A 9692	630L	VOM	5	66.00
51 A 9230 T	630M	Professional VOM	5	220.00
51 A 9110	630NA	Deluxe VOM	5	93.00
51 A 9691	630NS	200,000 Ohms/Volt VOM	5	110.00
51 A 9229	630PL	VOM	5	61.00
51 A 5299	630PLK-3	Burnout-Proof VOM	5	93.00
51 A 9114	666R	Pocket VOM	3	44.00
51 A 9071	800	Lab-Type VOM	7	110.00

### OTHER TRIPLET TEST EQUIPMENT

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9618	2590	Transistor Tester	$6\frac{1}{4}$	71.00
51 A 9645 X	3414	Tube Tester	$16\frac{1}{2}$	132.00

### TRIPLET VTVM

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9257	850	VTVM	7	93.00

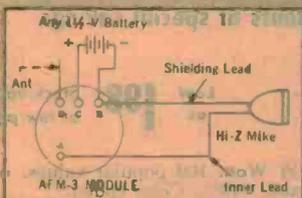
### TRIPLET ACCESSORIES

51 A 9231	10	AC Ammeter Adapter	1	20.00
51 A 9232	101	Line Separator for Model 10	1	8.00
51 A 9235	311	Lead for Model 10	$\frac{1}{2}$	3.20
51 A 9195	379	Leather Case for Model 10	3	8.00
51 A 9256	611	Lead for Model 10	$\frac{1}{2}$	3.20
51 A 9119	639-N	Black Cowhide Case for 630 Series	$\frac{1}{2}$	12.60
51 A 9116	639-P	Black Cowhide Case for 630 Series	$\frac{1}{2}$	17.90
51 A 5280	669-OS	Black Leather Case for 666R Series	$\frac{1}{2}$	9.00
51 A 9111	T-2247-BV	CRT Adapter for Model 3414	1	9.00
51 A 9120	T-255A35	Stand for 630 Series	$\frac{1}{2}$	2.10
51 A 9112	T-79-70	Probe for 630, 630A, 631	$\frac{1}{2}$	17.90
51 A 9215	T-79-71	Probe for 630, 630A, 631	$\frac{1}{2}$	17.90
51 A 9258	T-79-83	Probe for 630PL, 630APL, 630L	$\frac{1}{2}$	17.90
51 A 9259	T-79-130	Probe for 630PL, 630APL, 630L	$\frac{1}{2}$	17.90
51 A 9260	T-79-145	Probe for 630, 630A, 631	$\frac{1}{2}$	9.50
51 A 9193	T-79-196	Probe for 850	$\frac{1}{2}$	25.20
51 A 9261	T-79-215	Probe for 850	$\frac{1}{2}$	9.00
51 A 9146	369	Leather Case for Model 310	$\frac{1}{2}$	4.20

# Allied solid-state Modules

## AN AMAZING CONCEPT IN SPACE-AGE ELECTRONICS

These modules introduce you to today's world of *microminiature electronics* at a price any hobbyist or experimenter can afford. Each contains the solid-state circuit for such electronic devices as amplifier, intercom, PA, more. Make connections to battery, switch, speaker or other accessories (listed below), and create many fascinating and useful electronic devices. Modules are *permanently encapsulated* in virtually indestructible plastic nuggets. All are quality constructed to highest engineering standards. Av. shpg. wt., 6 oz.



All are 1 1/2 x 1 1/4 x 1", except AMP-3, AFM-3, and TVM-1 are 2 x 1 1/2 x 1/2"



Low as **2.98** Each

### Intercom Amplifier

AIC-3. For sensitive intercom. Use with A, two C (or D), H, K, below.  
24 A 9465..... 2.98

### Public Address Amplifier

APA-3. Portable hi-gain system. Use with A, C (or D), E, J, L, below.  
24 A 9466..... 2.98

### Electronic Siren

ASM-3. Simulates wail of mechanical sirens. Use A, C (or D), E, F, below.  
24 A 9469..... 2.98

### CB Microphone Preamp

AMP-3. Doubles mike output. Use E, M, below, shielded cable, 1 1/2-V batt.  
24 A 9470..... 2.98

### Electronic Burglar Alarm

ABA-3. Hi-volume siren. Use with A, C (or D), E and G, listed below.  
24 A 9471..... 2.98

### AM Wireless Mike Transmitter

AWM-3. Transmit into your AM radio. Use with B and J, listed below.  
24 A 9473..... 2.98

### FM Wireless Mike Transmitter

AFM-3. Transmit into your FM radio. Use with J, below, and 1 1/2-V battery.  
24 A 9474..... 2.98

### Shortwave Converter

CM-S. Tunes 25, 31, 41-mtr bands (7-12 MHz). Use with B, below.  
24 A 9462. Shpg. wt., 8 oz..... 5.00

### VHF Police, Fire Converter

CM-P. Receive police, fire calls using AM radio, 30-50 MHz. Use B and P.  
24 A 9463. Shpg. wt., 6 oz..... 5.00

### VHF Aircraft Converter

CM-A. Receive aircraft using AM radio. Tunes 118-128 MHz. Use B, below.  
24 A 9464. Shpg. wt., 6 oz..... 5.00

### TV Wireless Mike Transmitter

TVM-1. Transmit your voice to TV on channels 2, 3 or 4. Use with B, J, below, plus 100,000 ohm potentiometer.  
24 A 9459. Shpg. wt., 2 oz..... 5.00

### Police, Weather Converter

CM-H. Receive 150-164 MHz police, fire, emergency, marine, weather transmissions on FM radio. Use B, K, below.  
24 A 9461. Shpg. wt., 8 oz..... 5.00

### Metal Locator

DL-1. With AM radio detects and locates metal objects. Use B, K, below.  
24 A 9460. Shpg. wt., 1 oz..... 5.00

### Signal Injector

SI-7. Generates 2 kHz audio-frequency signal with modulated radio frequency harmonics to 30 MHz. Use B, below.  
24 A 9476. Shpg. wt., 1 oz..... 2.98

## Midland solid-state Modules for the hobbyist

14-640 Phono Preamp. Amplifies magnetic type cartridges 0.5 V to 1.0 V RIAA curve characteristic. Flat response. Use 9-12 VDC supply. Japan.  
24 A 9490. Shpg. wt., 6 oz..... 2.49

14-641 Tape Preamp. Can amplify tape head up to 0.5 V to 1.0 V. NARTB curve characteristic. Flat response. Use as pre-amp for hi-fi amplifier used with tape deck. Japan.  
24 A 9491. Shpg. wt., 6 oz..... 2.49

14-643 Power Amplifier. Can produce up to 300 mW when combined with 14-640, or 14-641 (above). Use with 8 or 16-ohm speaker. Japan.  
24 A 9492. Shpg. wt., 6 oz..... 2.98

14-644 FM Transmitter Module. Transmit on 88 to 108 MHz through FM receiver up to 50 yards away. Use with 14-640 or 14-641. Japan.  
24 A 9493. Shpg. wt., 6 oz..... 2.98

14-646 Electronic Organ Module. Tone oscillator specifically designed for use with electric organs. Can be adjusted to raise key pitch as much as 2 1/2 octaves. Japan.  
24 A 9494. Shpg. wt., 6 oz..... 1.98

14-648 Wireless Code Oscillator. Transistorized For code practice. Use with N, below, and any PM speaker, 3 to 9-V battery. Japan.  
24 A 9495. Shpg. wt., 6 oz..... 1.98

## Selected Accessories for use with Modules

**A** Type 510S 6-Volt Lantern Battery. For modules above.  
18 A 5085. Shpg. wt., 1 1/2 lbs. .99¢

**B** Allied 9-Volt Battery. For modules above. 6 oz.  
18 A 5980..... Pkg. of 2 for 59¢

**C** 8" Round Speaker, 8 Ohms. Ideal for use with modules requiring an efficient quality PM speaker. Delivers clear response.  
24 A 9530. Wt., 1 1/2 lbs. .... 2.49

**D** 4" Square Speaker, 8 Ohms. For use with low-output modules. Compact but efficient.  
24 A 9533. Wt., 12 oz. .... 79¢

**E** Type GF323 SPST Slide Switch. Use as on-off with modules.  
56 A 5023. Shpg. wt., 3 oz. .... 50¢

**F** Type 188 Pushbutton Switch. Momentary-contact SPST switch for use with Siren module.  
56 A 4890. Wt., 2 oz. .... 46¢

**G** Type BRD2-5L-IS Interlock Switch. Flat base, solder terminals.  
56 A 3971. Wt., 4 oz. .... 2.00

**H** Type GF342 4PDT Switch. 4PDT slide switch for use with Intercom module. Has solder-lug terminals. Shpg. wt., 3 oz. .... 1.00

**J** Crystal Lapel Mike. High-impedance mike. Response: 60-5000 Hz, -50 dB output. From Japan.  
24 A 9881. Shpg. wt., 4 oz. .... 98¢

**K** Type U-12 5000-Ohm Control. Volume control.  
46 A 3751. Wt., 3 oz. .... 1.02

**L** Type U-53 1-Megohm Control.  
46 A 3776. Wt., 3 oz. .... 1.02

**M** Type U-48 1/2-Megohm Control.  
46 A 3773. Wt., 3 oz. .... 1.02

**N** Telegraph Key. Fully adjustable.  
17 A 6656. Wt., 2 lbs. .... 2.50

**P** Metal Box. Gray. 4x2 1/8x1 5/8".  
24 A 9688. Wt., 4 oz. .... 71¢

FREE



Mounting Board is included with each Midland Module

Each: 2 1/2 x 1 1/4 x 1/2"

Dual Flasher Module. Electronic switch for alternately flashing 2 miniature bulbs. Use with 6-V, 100 or 200 mA bulb. For warning lights; model cars, railroads; attention getters. Japan.  
24 A 9489. Shpg. wt., 6 oz. .... 1.98

# Resistors and Capacitors at bargain prices

## Carbon Resistor Assortments at special savings



Low as **198** Stock up now at low prices!

½ Watt. ±10% tolerance. Two each: 3.9, 10, 12, 15, 22, 27, 39, 82, 120, 150, 180, 270, 390, 470, 560, 680, 820, 1200, 1800, 2700, 3300, 3900, 5600, 6800, 8200, 12K, 18K, 22K, 27K, 33K, 39K, 68K, 82K, 100K, 120K, 150K, 330K, 390K, 470K, 680K, 820K ohms; 1, 1.5, 1.8, 2.2, 3.3, 5.6, 6.8, 8.2, 10 megs.

24 A 9660. Wt., 5 oz. . . . . 100 for 2.98  
¼, ½, 1, 2 Watt. 25 ¼-watt, 100 ½-watt, 25 1-watt, 50 2-watt. ±5% and ±10%. Color coded.

24 A 9285. 10 oz. . . . . 200 for 3.49  
½, 1, 2 Watt. 40 ½-watt, 30 1-watt, 30 2-watt. ±5%, ±10%.

24 A 9329. 5 oz. . . . . 100 for 1.98  
½ Watt. 100 popular values. ±10%. Color coded.

24 A 9699 R. 5 oz. . . . . 100 for 1.98

½ Watt. 100 popular values. ±5% and ±10%. Color coded.

24 A 9717. 5 oz. . . . . 100 for 2.49

¼ Watt. 150 popular values. ±10%. 24 A 9718. 1 lb. . . . . 150 for 2.98

½ Watt. 200 popular values. ±5% and ±10%. Color coded.

24 A 9719. 10 oz. . . . . 200 for 3.96

½ Watt. Two each: 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82, 100, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820, 1000, 1200, 1500, 1800, 2200, 2700, 3300, 3900, 4700, 5600, 6800, 8200, 10K, 12K, 15K, 18K, 22K, 27K, 33K, 39K, 47K, 56K, 68K, 82K, 100K, 120K, 150K, 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K, 820K; 1-15 megohms. Shpg. wt., 10 oz.

24 A 9377. . . . . 150 for 3.95

## RF and Audio Power Transistor Assortments



**298**

Ideal for experimenters. 25 assorted audio transistors: 4 TO-3 PNP germanium, 15 watts; 4 TO-3 NPN silicon mesa, 15 watts; 2 TO-13 PNP germanium, 10 watts; 4 TO-5 PNP germanium DAP, 2 watts; 4 TO-9 PNP germanium 0.4 watt; 2 TO-18 NPN silicon 0.2 watt; 5 TO-24 PNP germanium MADT, 0.2 watt.

24 A 9517. Wt., 6 oz. . . . . 25 for 2.98

Selection of 25 RF and AF transistors: 5 TO-3 PNP germanium AF, 15 watts; 5 TO-3 NPN silicon mesa AF, 15 watts; 3 TO-5 PNP germanium AF, 3 watts; 5 TO-3 PNP germanium RF, 1 MHz; 5 TO-3 NPN silicon mesa RF, 1 MHz; 2 TO-5 PNP germanium RF, 2 MHz.

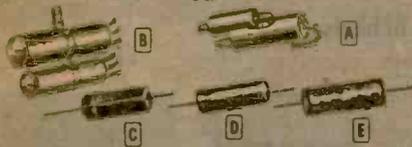
24 A 9518. Wt., 2 oz. . . . . 25 for 2.98

## Bargains in Power Resistors of assorted values and wattages

**50** for **98¢** Unbeatable value in a package of 50 power resistors with axial leads. Assortment includes popular values in 3 to 30 watt ratings. ±10% tolerance.  
24 A 9723. Shpg. wt., 10 oz. . . . . 50 for 2.98



**25** for **98¢** A great bargain! Twenty-five wirewound axial-lead power resistors, each a different value, in wattage ratings from 3 to 10 watts. Ceramic case. ±10% tolerance.  
24 A 9960. Shpg. wt., 6 oz. . . . . 25 for 98¢



## Capacitor Bargains

Standard Brands, Popular Values

**A** Single-Section Electrolytics. Aluminum cans. 3" axial leads. 4 oz.

Stock No.	µF	WVDC	EACH
24 A 9988	150	150	.75
24 A 9989	200	200	.98
24 A 9990	20	450	.49
24 A 9991	40	450	.59
24 A 9992	80	450	.89

**B** Multisection Capacitors. Wax filled. Tinned leads. Mounting strap. 4 oz.

Stock No.	µF	WVDC	Size	EACH
24 A 9993	50-30	150	2½" x 1"	.45
24 A 9994	50-30-20	150	2½" x 1½"	.69
24 A 9995	80-40	150	2½" x 1"	.79

**C** Plastic Molded and Ceramic Capacitors. Less than 4¢ each! Selection of popular values for every need, in voltages from 50 to 6000 volts. 10 oz.

24 A 9962. . . . . Pkg. of 25 for 98¢

**D** Tubular Capacitors. Wax impregnated. U.S.-made standard brands. 100 to 1000 WVDC. Axial leads. 12 oz.

24 A 9584. . . . . Pkg. of 40 for 98¢

**E** Ceramic Tubulars. Values from 1 µF to 3000 µF. Most are NPO and N750 temperature coefficient types. 3 oz.

24 A 9357. . . . . Pkg. of 100 for 98¢

## Disc Ceramics by famous manufacturers



**48** for **98¢**

Values in high-quality disc ceramic capacitors. Made by famous manufacturers to their rigid standards. Generous 48-piece assortment includes values from 2 pF to 1000 pF at 50 to 5,000 VDC. All have parallel wire leads. All are manufactured in America.

24 A 9958. Shpg. wt., 8 oz. . . . . 48 for 98¢

## Assortment of 40 Miniature Electrolytics

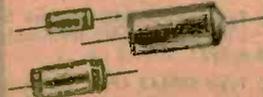


**40** for **395**

Assortment of miniature electrolytics in handy plastic storage case. These are high-quality capacitors made to exacting specifications for printed circuit use. Five each: 2 µF, 25 WVDC; 10 µF, 15 µF at 6 WVDC; 2 µF, 10 µF at 25 WVDC; 10 µF, 20 µF at 50 WVDC; 90 µF, 3 WVDC.

24 A 9289. Shpg. wt., 8 oz. . . . . 40 for 3.95

## Assortment of 100 polystyrene-film Capacitors



**100** for **298**

Bargain in specially selected assortment containing 5 each of 20 values from 20 pF to 8800 pF. 160 to 630 volts. 5% and 10% tolerances. These quality capacitors have a leakage resistance greater than 100,000 megs. Outlast and outperform foil, mylar, and mica capacitors.

24 A 9721. Shpg. wt., 3 oz. . . . . 100 for 2.98

# Bargains in solid-state Circuit Components

## Assortments .. all in Plastic Cases

Popular Values



Ideal assortments for experimenter,  
hobbyist, and serviceman.

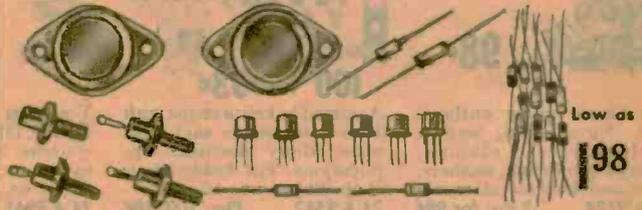
**Miniature Electrolytics.** For solid-state circuit. Five each: 10  $\mu$ F, 16 WVDC; 20  $\mu$ F, 20 WVDC; 30  $\mu$ F, 6 WVDC; 50, 100  $\mu$ F, 3 WVDC. Five each of two other values. 24 A 9265. Wt., 8 oz. .... 40 for 3.95

**1/2-Watt Resistor Assortment.** (Not illus.) Eight each: 1000, 47K, 100K, 270K, 1 meg; seven each: 4700, 10K, 220K, 2.12 meg; five each: 3300, 22K, 27K, 33K, 330K, 4.7 meg; four each: 100, 470, 1500, 2200, 2700, 56K, 68K, 313 meg; three each: 47, 220, 270, 10 meg. 24 A 9190. Wt., 4 1/2 lbs. .... 150 for 5.98

**72-Piece Capacitor Assortment.** (Not illus.) Ceramic or molded. Fifteen: .01; twelve: .05; eight: .005, .02, .1; five: .001, .002, .047; two: .0047, .03, .25  $\mu$ F. 24 A 9196. Wt., 2 lbs. .... 72 for 5.98

**100-Piece Ceramic Disc Assortment.** Short-lead ceramic discs for printed circuit boards. Capacitance ranges from 2.2 pF to .01  $\mu$ F. 500 WVDC. (Not illus.) 27 A 9722. Wt., 1 lb. .... 100 for 2.98

## Money-saving Semiconductor Assortments



Low as  
**1.98**

**38-Piece Assortment.** Carefully selected for the experimenter, hobbyist, and technician. Contains a wide variety of semiconductor in popular types. Includes 4 PNP transistors, 4 NPN transistors, 2 power transistors (in TO-3 case), 4 silicon rectifiers (rated 2 amp), 20 germanium diodes, and 4 zener diodes (rated 3/4 watt). Save time and trouble—keep a stock of these items conveniently on hand. And save money, too—stock up now while prices are this low. 24 A 9477. 4 oz. .... 38 for 1.98

**100-Piece Assortment.** 2 TO-3 PNP germanium AF, 15 watts; 2 TO-3 NPN silicon mesa, 15 watts; 2 TO-3 PNP germanium, 15 watts; 4 TO-9 PNP germanium, 0.4 watt; 4 TO-5 NPN germanium, 0.4 watt; 15 TO-24 PNP germanium MADT, 0.2 watt; 2 TO-5 PNP germanium DAP, 2 W; 5 DO-7 germanium, 0.2 W; 2 TO-18 SCR; 22 DO-7 germanium, 0.2 W; 27 DO-7 silicon, 0.4 W; 4 DO-4 silicon; 4 silicon zeners, 0.75 W; 5 DO-7 silicon zeners, 0.4 W. 24 A 9514. 1 lb. .... 100 for 5.49

**60-Piece Assortment.** 15 MADT high-frequency transistors, 50 MHz; 5 zener diodes, 400 mW (assorted voltages); 2 TO-5 PNP germanium, 3 amp; 5 IN82A germanium diodes; 2 SCR, 0.2 amp (low voltage); 2 TO-3 NPN silicon mesa power; 2 TO-3 PNP germanium power; 27 SCR, 400 mW (more than 25 PIV). 24 A 9513. Shpg. wt., 8 oz. .... 2.98

## Values in Transistors



2 for **79¢**      4 for **88¢**      Each **87¢**

**A** Audio Power Transistors. 2N176 for audio power amplifiers. Rated 3 amps at 30 VDC. Beta, 25V;  $I_{CBO}$ , 3 mA; Gain; 33.5 dB. For 6, 12, 28-volt circuits. 24 A 9633. 4 oz. .... Pkg. of 2 for 79¢

**B** NPN Transistors. Check this bargain. Four NPN Transistors for less than 25¢ each. Equivalents of 2N168, 2N169, and 2N170.  $BV_{CBO}$ , 15 V;  $BV_{CER}$ , 10 V;  $I_C$  peak, 400 mA. 24 A 9643. 4 oz. .... Pkg. of 4 for 88¢

**C** 40-Watt PNP Transistor. A special Allied bargain. It's a germanium-alloy junction type. Rated 15 A at 30 volts. Replaces Deleco Type 501, Bendix 2N278 and 2N173, etc. 24 A 9634. Shpg. wt., 3 oz. .... Each 87¢

## Epoxy Silicon Rectifiers



Low as  
**2 for 59¢**

Top-quality, ideal for application in all types of hi-fi, radio, and TV power supplies. All have 750-mA output. 1 1/2" axial leads, epoxy construction. Pkg. of 2. Shpg. wt., 3 oz. 24 A 9692. PIV 200 ..... 2 for 59¢  
24 A 9669. PIV 400 ..... 2 for 77¢  
24 A 9693. PIV 600 ..... 2 for 99¢  
24 A 9572. PIV 800 ..... 2 for 98¢  
24 A 9573. PIV 1000 ..... 2 for 1.39

## Famous-brand Zener Diodes



**2 for 88¢**

Each has a 1 to 2-watt power rating. All have axial leads.  $\pm 10\%$  tolerance. Pkg. of 2. Shpg. wt., 2 oz. 24 A 9358. 3.9 V ..... 2 for 88¢  
24 A 9359. 6.8 V ..... 2 for 88¢  
24 A 9361. 12 V ..... 2 for 88¢  
24 A 9362. 18 V ..... 2 for 88¢  
24 A 9363. 33 V ..... 2 for 88¢  
24 A 9340. Assortment of 12. 250-mW stud-mount. 1 W 2.7 to 33 V. 4 oz. 1.98

## 25-pc. Rectifier Assortment



**25 for 2.98**

All are case cathode type (except \*case anode type) with axial leads. Rated more than 50 PIV. Assortment contains 7 DO-12, 0.5 amp; 3 DO-1, 0.75 amp; 3 DO-1\*, 0.75 amp. 6 A-31, 1 amp; 6 A-31, 1.5 amp. 24 A 9516. Wt., 8 oz. .... 25 for 2.98

## 25-pc. Transistor Assortment



**25 for 2.98**

3 TO-3 PNP Ge AF; 3 TO-3 PNP Ge RF; 3 TO-3 NPN silicon mesa AF; 3 TO-3 NPN silicon mesa RF; 2 TO-5 PNP Ge AF; 6 TO-24 PNP Ge MADT RF; 3 TO-9 PNP Ge AF; 2 TO-18 silicon NPN AF. 24 A 9515. Wt., 8 oz. .... 25 for 2.98

## Heat-Sink Assortment

Giant value in 12-pc. heat sink assortment. Contains eight 10-fin heat sinks for JEDEC TO-5 transistor cases and four to fit JEDEC TO-18. Stock up now at this low price! 24 A 9367. Wt., 4 oz. .... 12 for 1.98

**12 for 1.98**

## Integrated Circuit

Fairchild NJ5716 medium-power/low-distortion audio amplifier integrated circuit. Has gains to 10, 20, 100, 200; IC contains 11 transistors, 6 diodes, 18 resistors. Booklet, instructions. 24 A 9268. Shpg. wt., 1 oz. .... 5.95

**5.95**

# Stock up now on bargain counter specials

## 5-lb. Hardware Assortment



98¢

For home hobby enthusiasts. Nuts, bolts, screws, eyelets, rivets, clamps, springs, grommets, washers, wood and sheet metal screws. 24 A 9724..... 5 lbs. for 98¢

## Terminal Strips



100 for 98¢

Assorted bakelite strips with 1 to 6 terminals each. 3/8" wide. Many electronic applications. For hobbyist or shop. Shpg. wt., 12 oz. 24 A 9582..... Pkg. 100/98¢

## Assorted Slide Switches



12 for 98¢

You get SPST, SPDT, DPST, DPDT slide switches—under 9¢ each. Rated 1/2 to 3 amps, 125V. U.L. listed. Shpg. wt., 9 oz. 24 A 9865..... Pkg. 12/98¢

## Volume Control Assortment



10 for 98¢

Ideal for experimenters or servicemen. You get: 500-ohm, 2500-ohm, 100K, 500K, 1 meg, plus 5 other values. Shpg. wt., 8 oz. 24 A 9314..... Pkg. 10/98¢

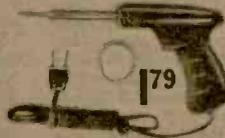
## Chassis Kit

375



Aluminum frame expands, stacks, couples. Phenolic mounting board, panel rails. With breadboard. 2x4x7". 50 solderless terminals. 24 A 9210. Wt., 10 oz. 3.75

## Soldering Gun



179

30-watt gun has 3" copper tip, 3' cord. 10" long. 110 VAC. U.L. Listed. Japan. 24 A 9847. 2 lbs. .... 1.79  
24 A 9316. Dual Pack Solder. 5' ea. 4 oz. .... Pkg. 2/79¢

## Pocket Blowtorch Kit



Holds 1/2-hour butane gas fuel supply 375

Solder or braze at 3500° with pinpoint flame. Uses butane gas cartridges. 24 A 9263. Wt., 10 oz. 3.75  
24 A 9264. Extra Cartridges. 6 oz. .... Pkg. of 4/1.09

## Phone Plug Value



4 for 98¢

Completely shielded phone plugs have easily removable handle to assure accessibility when soldering. 1 3/8" handle. Wt., 5 oz. 24 A 9512..... Pkg. of 4/98¢

## 50-ft. Spaghetti Assortment



Twenty 30" lengths 79¢

Assortment of completely insulated sleeving includes twenty 30" lengths. In various diameters, colors, and finishes. Wt., 8 oz. 24 A 9018..... 79¢

## Wire Assortment



Five 100-ft. coils coated hookup wire

5 for 398

Five 100-ft. coils assorted wire. Stranded and solid conductors. Vinyl coated to resist abrasion and corrosion. In five colors. 2 1/2 lbs. 24 A 9384. Five coils. .... 3.98

## UHF-VHF Twin Line



Moisture resistant polyethylene

50 ft. for 98¢

Foam-filled tubular 300-ohm all-channel TV-FM twin line in 50-ft. coil. Moisture resistant. Black polyethylene. 1 1/2 lbs. 24 A 9501..... 50-ft. for 98¢

## Heat Shrinkable Tubing



10 Pcs. 98¢

Assorted sizes. For insulating tools, etc. Shrinks at 135° C. in oven or other heat source. Polyolefin. I.D. from 1/8"-1". 2 oz. 24 A 9007..... Pkg. of 10/98¢

## Assorted molded plastic radio knobs



Fluted or grooved

98¢

In assorted colors. Fluted or grooved type knobs fit many dials. 1 1/2 lbs. 24 A 9287..... Pkg. of 50/98¢  
24 A 9282. TV Knobs. For most makes. Pkg. of 50/1.98

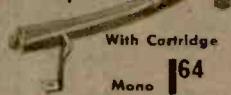
## Assorted Switches



12 for 98¢

Excellent for the experimenter. Push-to-talk (4P-DT), momentary contact (SPST); slide (5 ea. SPST, 3 ea. SPDT); 2 others. 24 A 9502. 10 oz. Pkg. 12/98¢

## Stereo/Mono Pickup Arms

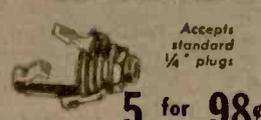


With Cartridge

Mono 164

Has turnover cartridge with two synthetic sapphire needles. For manual phonos. From Japan. Wt., 8 oz. 24 A 9580. Stereo. .... 1.94  
24 A 9579. Monophonic. 1.64

## 2-cond. Phone Jacks



Accepts standard 1/4" plugs

5 for 98¢

Great buy! Especially for Ham enthusiasts. Open circuit 2-conductor jacks accept standard 1/4" plugs smoothly. Shpg. wt., 6 oz. 24 A 9227..... Pkg. of 5/98¢

## Alligator Clips



4 for 39¢

For adapting banana plug to clips, or accepting wires. Screw terminals. 3/8" steel. Shpg. wt., 3 oz. 24 A 9266. Red. .... 4/39¢  
24 A 9267. Black. .... 4/39¢

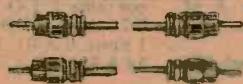
## Cable-Plug Kit



6-pc. Set 198

72" shielded cable, 2 phono plug; 9" cable, phono plug; 2 alligator clips; 2 couplers; 1 adapter; and case. Japan. Shpg. wt., 8 oz. 24 A 9877..... 1.98

## Shielded Audio Cables



2 for 67¢

Audio cables with pin plugs on both ends. Japan. Shpg. wt., 8 oz. 24 A 9608. 18" Cable. 2/67¢  
24 A 9609. 36" Cable. 2/84¢  
24 A 9870. 72" Cable. 2/98¢

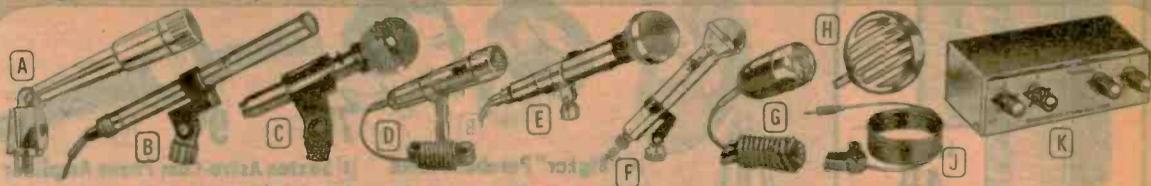
## Phone Plugs



4 for 98¢

Nickel-plated brass plugs are complete with screw terminals. Plugs measure 2 3/8" long, 1/4" dia. 12 oz. 24 A 9225. Black. .... 4/98¢  
24 A 9226. Red. .... 4/98¢

# Big values in low-priced Mikes and Speakers



## Microphones for every purpose . . . all at low prices

**A** Dynamic Mike. Features wide 175° pickup pattern, 50-14,000 Hz response. Dual impedance, 600 ohms or hi-Z. 20-ft. shielded cable. Less stand. From Japan. Shpg. wt., 3 lbs.  
24 A 9348 . . . . . 9.95

**B** Slim Dynamic Mike. Dynamic cardioid mike is perfect for pickup of voice or music. Response, 40-18,000 Hz. Impedance, 50,000 ohms. Slim  $\frac{5}{8}$ " dia. x  $6\frac{3}{8}$ ". 10-ft. cable, standard adapter. Japan. Wt., 8 oz.  
24 A 9001 . . . . . 8.95

**C** Deluxe Dynamic Mike. Cardioid mike for stage, recording or PA use. Has built-in volume control with on-off switch, 20-ft. detachable cable. Wire-mesh screen. 100-10,000 Hz; 50K and 600-ohms.  
24 A 9505. Japan. Wt., 12 oz. . . . . 17.98

**D** Slim Crystal Mike. Trim slim-line styling makes mike ideal choice for hand use. Hi-Z. Has handy on-off switch. Response, 100-9000 Hz. With standard 6-ft. cable. From Japan. Shpg. wt., 8 oz.  
24 A 9587 . . . . . 2.95

**E** Cardioid Dynamic Mike. Professional-quality mike is a real performer for indoor or outdoor use. Sphere-top. Dual impedance, 150-250 ohms or hi-Z. 100-10,000 Hz. On-off switch, 20-ft. cable. From Japan.  
24 A 9222. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 14.95

**F** Dynamic Ball-Type Mike. Features omnidirectional pattern and "pop-proof" grille. 100-12,000 Hz. Hi-Z. With 20-ft. cable, swivel adapter. From Japan. Shpg. wt., 1 lb.  
24 A 9023 . . . . . 8.95

**G** Crystal Mini-Mike. Only  $2\frac{1}{4}$ " long, 1" diameter. Response, 100-10,000 Hz. Hi-Z. For recording, general purpose use. With 5-ft. shielded cable. From Japan. Shpg. wt., 6 oz.  
24 A 9589 . . . . . 2.49

**H** Crystal Lapel Mike. Clips to pocket. For recording, interviews, etc. Response, 60-5000 Hz. Hi-Z. Japan. 24 A 9881. Shpg. wt., 6 oz. . . . . 9.9¢

**J** Guitar Contact Mike. For amplifying string instruments. Hi-Z. Includes volume control. 8-ft. cable.  
24 A 9002. Japan. Wt., 8 oz. . . . . 1.88

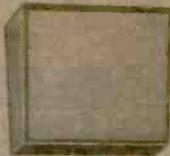
**K** Solid-state Mike Mixer. Mixes 4 signals to single output. 2-conductor phone inputs and phone-jack output. 6-dB gain. Size,  $2\frac{3}{8}$ "x $6\frac{1}{2}$ "x $1\frac{1}{2}$ ". Includes battery. From Japan. Wt., 4 lbs.  
24 A 9352 . . . . . 6.95



Ideal as extension speaker  
**788**

### Shelf-speaker System

Compact-design enclosure has plastic wood-grained oiled walnut finish. Ideal for use as extension speaker or in low-cost hi-fi music systems. 6x4" speaker with 1 oz. magnet. Power capacity, 5 watts. Impedance, 8 ohms. With 20-ft. cable. 6x9x4 $\frac{1}{2}$ ". Wt., 3 lbs.  
24 A 9012 . . . . . 7.88



Wall Baffles  
Low as **249**  
as

Wall-Mounting Baffles. Washable cover. Less speaker. Handsome baffles for use anywhere.  
24 A 9253 X. For 12-inch speakers. Shpg. wt., 5 lbs. . . . . 5.69  
24 A 9254 X. For 8-inch speakers. Shpg. wt., 4 lbs. . . . . 3.49  
24 A 9255 X. For 4 to 5-inch speakers. Wt.,  $1\frac{1}{2}$  lbs. . . . . 2.49

Speaker-Baffles. Handsome wall-mounting baffles with speakers. Use for extension speakers. 35-11,000 Hz, 10 watts. 8 ohms. Wt.,  $5\frac{1}{4}$  lbs.  
24 A 9354 X. 12-inch. . . . . 8.95  
24 A 9355. 8-inch. . . . . 6.65



Your Choice  
**249**

**98¢**

Low as  
**595**

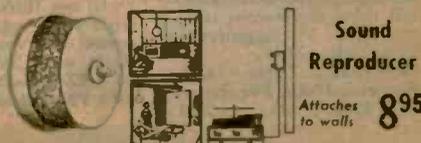
### Replacement Speakers

- L** 6x9" Oval Speaker. Has efficient 1.47-oz. Alnico V magnet. Whizzer cone to extend high-frequency response. 8 watts. 8 ohms.  
24 A 9529. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 2.49
- M** 8" Round Speaker. Features whizzer cone, 1.47-oz. Alnico V magnet. Capacity, 8 watts. 8 ohms.  
24 A 9530. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 2.49
- N** 4" Square Speaker. Precision centered. Has .50 oz. Alnico V magnet. EIA dimensions. 8 watts. 8 ohms.  
24 A 9932. Shpg. wt., 8 oz. . . . . 98¢
- P** Dual-Cone Speakers.  $1\frac{1}{2}$ " voice coil. Whizzer cone. Internal dust cap.  
24 A 9632. 8". 40-16,000 Hz. 20 W. 8 ohms. 4" deep. Wt., 3 lbs. . . . . 5.95  
24 A 9631 X. 12". 35-15,000 Hz. 25 W. 8 ohms.  $5\frac{1}{2}$ " deep.  $3\frac{1}{2}$  lbs. . . . . 6.95  
24 A 9630 X. 15". 30-14,000 Hz. 30 W. 8 ohms.  $6\frac{1}{8}$ " deep. 9 lbs. . . . . 9.95

### Indoor and Outdoor Speakers

- R** Weatherproof 5 $\frac{1}{2}$ " Trumpet Speaker. 300-12,000 Hz. 5 W. 8 ohms.  
24 A 9483. Shpg. wt., 2 lbs. . . . . 8.49
- S** 5" Paging Speaker. Weatherproof horn-type. 180° swivel mount. 400-7000 Hz. 5 W. 8 ohms. With 24" hookup wire.  
24 A 9843. Japan. Wt., 2 lbs. . . . . 7.95
- T** 8" Outdoor Speaker. Weatherproof baffle. Volume control. 40-15,000 Hz. 20 watts. 8 ohms.  $10\frac{7}{8}$ "x $10\frac{7}{8}$ "x $5\frac{3}{8}$ ".  
24 A 9732 X. Shpg. wt.,  $6\frac{1}{4}$  lbs. . . . . 9.95  
24 A 9733. Similar to above, 4" speaker.  $4\frac{1}{2}$ "x $5\frac{1}{8}$ "x $2\frac{3}{8}$ ".  $1\frac{1}{4}$  lbs. . . . . 4.95
- W** Pillow Speaker. 8 ohms.  $2\frac{1}{4}$ "x $5\frac{3}{8}$ ".  
24 A 9525. Shpg. wt., 8 oz. . . . . 1.79
- X** Ceiling Speaker-Baffle. 8" speaker. 15 W. 8 ohms. With mounting hardware.  
24 A 9520. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . . 4.98  
24 A 9521. Brushed Aluminum Baffle Alone. Above, less speaker. 12 oz. . . . . 2.49

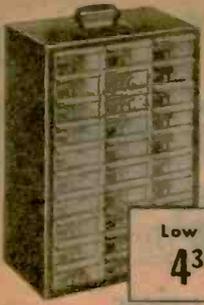
Sound reproducer turns any surface—walls, doors, etc.—into sounding board. Connect speaker outputs to reproducer; then mount on desired surface. Size, 2x2x2".  
24 A 9224. Shpg. wt., 8 oz. . . . . 8.95



Sound Reproducer  
Attaches to walls  
**895**

Rely on Allied for everything in mikes and speakers

# Special Bargain Values



Low as  
**431**

## 30-drawer Cabinet

Versatile cabinet has ample room for small parts and components. Rigid welded steel frame with enamel finish. "See-Thru" non-spill plastic drawers for easy identification of items. Each drawer, 1 1/4 x 2 3/4 x 5 3/4" deep. Plastic dividers, labels. Convenient carrying handle. Size, 9 3/4 x 17 x 6 3/4".  
24 A 9028 X. 9 lbs. . . . 5.49  
26 A 1739 X. 18-Drawer Cabinet. Above, drawers, 2 1/2 x 5 1/2 x 4 1/4". Overall, 9 x 10". 5 1/2 lbs. . . . 4.31



**FM-AM  
Portable  
Radio**  
**1188**

Sensational low price for a quality FM-AM radio! Has AFC circuit for drift-free FM reception. FM-AM selector switch; telescoping antenna for local reception. Plastic case, 5x3x1 3/4". With earphone, battery. Imported.  
10 A 4225 S. 1 lb. . . . 11.88



**Lamp  
Kits**  
**1895**  
**1990**

**All-angle Lamp Kit**  
Assembles easily and quickly with just a screwdriver and pliers. Spring-loaded swivel joints; screw clamp. Gray. Less bulb. For 110-120 VAC.  
24 A 9335 X. 5 lbs. . . . 9.90

**Magnifier Lamp Kit**  
Same fine features as above, but takes fluorescent tube and has 5" magnifying lens. Tube below.  
24 A 9338 X. 7 lbs. . . . 18.95  
Fluorescent Tube. For above.  
24 A 9930. 8 oz. . . . 2.99



**A**  
**1695**

**"Big Ear" Parabolic Mike**  
Picks up whispers at 150 feet, conversations at 50 feet, bird calls at 200 feet. For home security, hunting, keeping track of children. Tripod, 18" reflector, microphone, stethoscope, earphones. Takes one battery (order below).  
24 A 9024 X. 5 lbs. . . . 16.95  
18 A 5980. 9-Volt Battery. Shpg. wt., 6oz. Pkg. of 2 for 59¢



**B**  
**795**

**Saxton Astro-Com Phone Amplifier**  
Attaches instantly and securely to any phone. Solid-state circuit. Volume control. Takes 1 battery, order below.  
24 A 9687. Shpg. wt., 4 oz. . . . 7.95  
18 A 5082. Battery. 1 oz. . . . 6 for 57¢



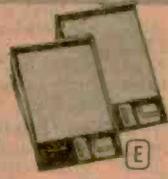
**C**  
**988**

**Wrist FM Transmitter**  
Astro-Com X100. Broadcasts to any standard FM radio up to 100 feet away. Tunable 85-91 MHz. Battery below.  
24 A 9299 S. Shpg. wt., 2 oz. . . . 9.88  
18 A 5345. Battery. 3 oz. . . . 6 for 1.98



**D Telephone Amplifier.** Solid-state. Boosts telephone sound to room level. Great for conference calls. 10x3x3". 9V battery.  
24 A 9231. Japan. Wt., 1 1/2 lbs. . . . 14.95

**E 2-Station Intercom System.** Remote can signal master. Volume control; talk button. 5x4x2". With battery, 66-ft. cable.  
24 A 9957. Japan. Wt., 3 lbs. . . . 9.95



**F Message Recorder.** Records up to 30-second messages on continuous tape. Record/playback switch. Battery. 6x3x2".  
24 A 9032. Shpg. wt., 1 1/2 lbs. . . . 12.95

**G Miniature Audio Amplifier.** 1 watt. 4 transistors. Uses 9V battery. Japan.  
24 A 9207. Shpg. wt., 12 oz. . . . 5.95  
24 A 9209. Above, 3-watt output. . . . 6.95



**H Four-Prong Ivory Telephone Plug.** Japan.  
24 A 9365. Shpg. wt., 4 oz. . . . 59¢



**J Wall-Mounting Jack.** For plug above.  
24 A 9366. Japan. Wt., 4 oz. . . . 59¢



**K Wall Plate.** For plug and jack above.  
24 A 9389. Japan. Wt., 4 oz. . . . 1.79



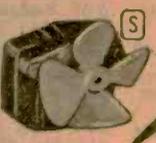
**L 30-ft. Phone Cable.** Telephone jack on one end, plug on other. From Japan.  
24 A 9368. Shpg. wt., 1 1/2 lbs. . . . 2.49



**M Tube Continuity Checker.** Checks tubes, appliances, fuses, coils. 115 VAC.  
24 A 9305. Shpg. wt., 1 lb. . . . 1.79



**N Degaussing Coil.** Demagnetizes picture tube and chassis to remove color TV impurities. 7" coil. 115 VAC.  
24 A 9386. Shpg. wt., 12 oz. . . . 4.49



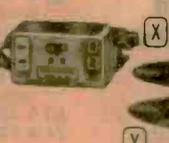
**S Tube Fan.** Cools vacuum tubes for longer life and better performance. Has 3200-rpm quiet-running shaded-pole motor. Four-blade fan. 115 VAC.  
24 A 9457. 1 1/2 lbs. . . . 4.49



**T Nylon Tip Markers.** Easy to use thin-line markers with water soluble ink. Assorted colors or black only. Shpg. wt., 12 oz.  
24 A 9273. Ass't. . . . 12/2.89  
24 A 9274. Black. . . . 12/2.89



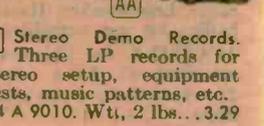
**W Stereo Headphones.** Response to 15,000 Hz. 2 1/2" dynamic reproducers. Adjustable vinyl covered headband. 8 ohms. 6-ft. cord, plug. Japan.  
24 A 9369. 1 lb. . . . 6.98



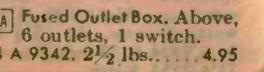
**X Hi-Fi Shutoff.** Automate your hi-fi system. Turns your entire hi-fi system off after last record has been played. For any changer with automatic shutoff.  
24 A 9234. Wt., 2 lbs. . . . 4.95



**Y Stereo Demo Records.** Three LP records for stereo setup, equipment tests, music patterns, etc.  
24 A 9010. Wt., 2 lbs. . . . 3.29



**Z Fused Outlet Box.** 15 amps. 10-ft. cord, 2-wire plug. 13x2 1/4 x 1 1/4". 4 outlets, 4 switches.  
24 A 9343. 2 1/4 lbs. . . . 4.95



**AA Fused Outlet Box.** Above, 6 outlets, 1 switch.  
24 A 9342. 2 1/2 lbs. . . . 4.95

# Eight exciting values in accurate VOM's

1000  
Ohms/Volt  
VOM  
495



Midland. Pocket-size VOM at an amazing low price. Ranges: AC, DC Volts: 0-10-50-250-1000; DC Current: 0-100 mA; Ohms: 0-150 K. 1000 ohms/volt DC sensitivity. Single range/function switch.  $3\frac{1}{2} \times 2\frac{1}{4} \times 1\frac{1}{8}$ ". High-impact plastic case. Leads, battery. Japan. 24 A 9590. Shpg. wt., 10 oz. . . . 4.95

20,000  
Ohms/Volt  
VOM  
895



Midland. Sensitive, handy VOM. Precision resistors throughout. Reads DC volts to 2500; AC volts to 1000; ohms to 6 megs; -20 to +22 dB. Recessed nylon range selector.  $3\frac{1}{2} \times 2$ -color scale.  $4\frac{1}{2} \times 3\frac{1}{4} \times 1\frac{1}{8}$ ". With carry case, leads, battery. From Japan. 24 A 9318. Shpg. wt., 1 lb. . . . 8.95

30,000  
Ohms/Volt  
VOM  
1495



Midland. Accurate, mirrored scale. 30,000 ohms/volt DC, 15,000 ohms/volt AC. Reads AC, DC volts to 1200; DC current to 300 mA; ohms to 16 megs; -20 to +63 dB. Recessed nylon range selector.  $5\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{8}$ ". With leather case, leads, battery. From Japan. 24 A 9372. Shpg. wt., 1 lb. . . . 14.95



20,000 Ohms/Volt VOM  
1095 Protected against accidental overload

Midland. Accurate 20,000 ohms/volt VOM with overload protection circuit. Two-color scale. Ranges: AC Volts, 0-6-30-300-1200; DC Volts, 0-3-15-150-300-1200; Ohms, 0-60K-6 megs; Current, 0-60  $\mu$ A, 300 mA; dB, -20 to +17.  $4\frac{1}{4} \times 3\frac{1}{2} \times 1\frac{1}{8}$ ". With case, test leads, battery. From Japan. 24 A 9591. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . 10.95

Deluxe  
20,000  
Ohms/Volt  
VOM  
1895



Midland. Precision resistors on all ranges. Ranges: DC Volts, 0-2.5-10-50-250-500-5000; AC Volts, 0-10-50-250-100; DC Current, 0-0.05-5-50-500 mA; Ohms, 0-12K-120K-1.2 megs; dB, -20 to +62. Big 3" dial. High-impact bakelite case,  $5\frac{1}{2} \times 3\frac{3}{8} \times 2\frac{3}{4}$ ". With leather case, batteries, leads. Japan. 24 A 9484. Shpg. wt., 2 lbs. . . . 18.95

Deluxe  
30,000  
Ohms/Volt  
VOM  
2195  
\$5 Monthly\*



Midland. 50- $\mu$ A movement measures DC voltage down to 0.001 volt. Ranges: DC Volts, 0-3-6-12-60-300-600-1200-3000; AC Volts, 0-6-30-120-300-1200; DC Current, 0-0.03-6-60-600 mA; Ohms, 0-6K-600K-6 megs; dB, -20 to +46.  $6 \times 4 \times 2$ ". Leather case, leads, instructions. Japan. 24 A 9485. Shpg. wt., 3 lbs. . . . 21.95

## A 50,000 Ohms-per-Volt VOM

Deluxe VOM, ideal for serviceman or technician. Good enough to meet today's rigid requirements in testing modern electronic equipment. Has precision 1% resistors for high accuracy. 50,000 ohms/volt DC sensitivity; 15,000 ohms/volt AC. Ranges: DC Volts, 0-0.6-3-12-60-300-600-1200-3000; AC Volts, 0-6-30-120-300-1200; DC Current, 0-30  $\mu$ A, 0-6-60-600 mA; Ohms, 0-10K-1-10-100 megs; dB, -20 to +63. Low resistance selector switch. Easy-to-read scales. Compact,  $6 \times 4 \times 1\frac{1}{8}$ ". With leads, batteries. From Japan. 24 A 9594. Shpg. wt.,  $1\frac{1}{2}$  lbs. . . . 19.95

## B 100,000 Ohms-per-Volt VOM

Precision VOM. Highly sensitive, full sized, reliable instrument suitable for laboratory use, but priced low enough for any technician, serviceman, or hobbyist. Accurate 4" mirrored scale. Ranges: DC volts, 0-0.5-2.5-10-50-250-1000; AC Volts, 0-2.5-10-50-250-1000; DC Current, 0-10-250  $\mu$ A, 0-2.5-25-250 mA, 0-10 amps; Ohms, 0-20K-200K-2 megs; dB from -20 to +62. Rugged case,  $7 \times 5\frac{1}{2} \times 3\frac{1}{4}$ ". Carrying handle. With leads, battery, operating manual. From Japan. 24 A 9593. Shpg. wt., 8 lbs. . . . 34.95



A 1995  
\$5 monthly\*



B 3495  
\$5 monthly\*



# Allied Guaranteed\* Receiving Tubes

ALLIED'S OWN MONEY-SAVING TUBES

✓ Money-saving prices

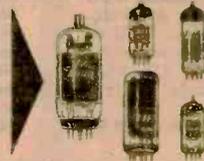
✓ Wide selection

✓ Quantity savings

Made for Allied, and specially priced to give you extra value! Save even more by buying in quantity. \*Allied will replace, free of charge, any tube that is defective due to faulty workmanship or material within two years of purchase date (not applicable to broken tubes). Ideal for replacement applications or designing new electronic equipment. Quantity prices also apply to assorted tubes. Some tubes are imported—country of origin is shown on tube carton. When ordering, specify Dept. No. 25 A 51 and tube type. Example: 25 A 51 OZ4. Av. shpg. wt. per tube, 4 oz.

Stock-up on tubes with no money down . . . see page 438

**SAVE 27%  
ON COLOR-TV  
TUBE PACKAGE**



Reg. \$9.65

**6<sup>98</sup>**

**5 most popular types**

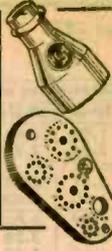
Five-tube package with popular tubes used in color TV. Includes these types: 6FQ7/6GC7, 6U8A/6KD8, 6JE6A, 6EA8, 6DW4B. Shpg. wt., 1 lb. 24 A 9006 . . . All 5 for 6.98

Dept. No.	Tube Type	EACH		
		1-9	10-49	50-U <sub>p</sub>
25 A 51	OZ4	1.53	1.36	1.22
25 A 51	1G3GT/1B3GT	1.53	1.36	1.22
25 A 51	1K3/1J3	1.53	1.36	1.22
25 A 51	1R5	2.00	1.78	1.60
25 A 51	1V2	1.15	1.02	.92
25 A 51	1X2B/1X2A	1.67	1.48	1.33
25 A 51	2CY5	1.98	1.76	1.58
25 A 51	3A3A/3B2	1.44	1.28	1.15
25 A 51	3AT2	1.53	1.36	1.22
25 A 51	3BZ6	1.49	1.32	1.19
25 A 51	3CB6/3CF6	1.33	1.18	1.06
25 A 51	3CU3	1.69	1.60	1.35
25 A 51	3DK6	1.33	1.18	1.06
25 A 51	3DT6A	1.46	1.30	1.17
25 A 51	3GT5	1.89	1.68	1.51
25 A 51	3GS8/3BU8	2.21	1.96	1.76
25 A 51	3HM5/3HA5	1.73	1.54	1.39
25 A 51	3V4	1.53	1.36	1.22
25 A 51	4BZ6	1.33	1.18	1.06
25 A 51	4CB6	1.28	1.14	1.03
25 A 51	4DT6A	1.46	1.30	1.17
25 A 51	4EH7	1.60	1.42	1.28
25 A 51	4EJ7	1.60	1.42	1.28
25 A 51	5AR4	1.91	1.70	1.53
25 A 51	5AQ5	1.33	1.18	1.06
25 A 51	5CG8	1.67	1.48	1.33
25 A 51	5CL8A	2.21	1.96	1.76
25 A 51	5EA8	2.27	2.02	1.82
25 A 51	5LJ8	1.85	1.64	1.48
25 A 51	5U4GB	1.24	1.03	.99
25 A 51	5U8	1.91	1.70	1.53
25 A 51	5Y3GT	1.17	1.04	.94
25 A 51	6AB4	1.62	1.44	1.30
25 A 51	6AF3	1.60	1.42	1.28
25 A 51	6AF4A/6DZ4	2.00	1.78	1.60
25 A 51	6AG5	1.53	1.36	1.22
25 A 51	6AK5/EF95	2.14	1.90	1.71
25 A 51	6AL3	1.17	1.04	.94
25 A 51	6AL5	1.21	1.08	.97
25 A 51	6AM8A	1.82	1.62	1.46
25 A 51	6AN8A	2.09	1.86	1.67
25 A 51	6AQ5A	1.33	1.18	1.06
25 A 51	6AS5	1.69	1.50	1.35
25 A 51	6AU4GTA	1.98	1.76	1.58
25 A 51	6AU6A	1.19	1.06	.95
25 A 51	6AU8A	2.34	2.08	1.87
25 A 51	6AV6	.88	.78	.70
25 A 51	6AW8A	1.80	1.60	1.44
25 A 51	6AX4GTB	1.53	1.36	1.22
25 A 51	6AY3B	1.53	1.36	1.22
25 A 51	6BA6/EF93	1.21	1.08	.97
25 A 51	6BC8	2.00	1.78	1.60
25 A 51	6BE6	1.53	1.36	1.22
25 A 51	6BH8	2.07	1.84	1.66
25 A 51	6BJ6	1.62	1.44	1.30
25 A 51	6BK4B	3.40	3.02	2.72

Dept. No.	Tube Type	EACH		
		1-9	10-49	50-U <sub>p</sub>
25 A 51	6BK7B	2.00	1.78	1.60
25 A 51	6BL7GTA	2.27	2.02	1.82
25 A 51	6BL8/PCF80	1.21	1.08	.97
25 A 51	6BN4A	1.80	1.60	1.44
25 A 51	6BN6	1.85	1.64	1.48
25 A 51	6BN8	1.67	1.48	1.33
25 A 51	6BQ5/EL84	1.60	1.42	1.28
25 A 51	6BQ6GTB/6CU6	2.21	1.96	1.76
25 A 51	6BQ7A	2.05	1.82	1.71
25 A 51	6BR8A/6FV8A	2.12	1.88	1.69
25 A 51	6BUR8	2.05	1.82	1.71
25 A 51	6BZ6	1.21	1.08	.97
25 A 51	6BZ7	1.87	1.66	1.49
25 A 51	6C4	1.33	1.18	1.06
25 A 51	6CB6A/6CF6	1.28	1.14	1.03
25 A 51	6CD6GA	2.61	2.32	2.09
25 A 51	6CG7	Use 6FQ7/6CG7		
25 A 51	6CG8A	1.73	1.54	1.39
25 A 51	6CL3	1.58	1.40	1.26
25 A 51	6CL6	1.87	1.66	1.49
25 A 51	6CL8A	1.87	1.66	1.49
25 A 51	6CM7	1.62	1.44	1.30
25 A 51	6CQ8	1.85	1.64	1.48
25 A 51	6CUS	1.60	1.42	1.28
25 A 51	6CX8	2.34	2.08	1.87
25 A 51	6CW4	2.21	1.96	1.76
25 A 51	6CV5	1.91	1.70	1.53
25 A 51	6CZ5	2.14	1.90	1.71
25 A 51	6DE4	1.46	1.30	1.17
25 A 51	6DE6	1.33	1.18	1.06
25 A 51	6DK6	1.33	1.18	1.06
25 A 51	6DQ5	3.54	3.14	2.83
25 A 51	6DR7	2.07	1.84	1.66
25 A 51	6DT6A	1.21	1.08	.97
25 A 51	6DW4B	1.58	1.40	1.26
25 A 51	6EA8	1.60	1.42	1.28
25 A 51	6EB8	2.27	2.02	1.82
25 A 51	6EH7/EF183	1.73	1.54	1.39
25 A 51	6EJ7/EF184	1.60	1.42	1.29
25 A 51	6EM5	1.80	1.60	1.44
25 A 51	6EM7	2.57	2.28	2.05
25 A 51	6FW6	1.35	1.20	1.08
25 A 51	6FG7	1.87	1.66	1.49
25 A 51	6FQ7/6CG7	1.10	.98	.87
25 A 51	6GE5	2.05	1.82	1.71
25 A 51	6GF7A	2.18	1.94	1.75
25 A 51	6GH8A	1.44	1.28	1.15
25 A 51	6GK6	1.53	1.36	1.22
25 A 51	6GM6	1.46	1.30	1.17
25 A 51	6GN8	1.94	1.72	1.55
25 A 51	6GV5	1.87	1.66	1.49
25 A 51	6GU7	1.53	1.36	1.22
25 A 51	6GW6/6DQ6B	1.89	1.68	1.51
25 A 51	6CWS/ECLE6	1.37	1.22	1.10
25 A 51	6GX7	1.80	1.60	1.44
25 A 51	6GV6	1.44	1.28	1.15

Dept. No.	Tube Type	EACH		
		1-9	10-49	50-U <sub>p</sub>
25 A 51	6HMS/6HA5	1.73	1.54	1.39
25 A 51	6HQ5	2.03	1.80	1.62
25 A 51	6HS5	3.49	3.10	2.79
25 A 51	6HSS/6KF8	1.94	1.72	1.55
25 A 51	6HZ6	1.35	1.20	1.08
25 A 51	6J6A	1.82	1.62	1.46
25 A 51	6J6CA	1.78	1.58	1.42
25 A 51	6JE6A	3.82	3.40	3.06
25 A 51	6JH6	1.33	1.18	1.06
25 A 51	6JS6B	3.29	2.93	2.64
25 A 51	6JTS	1.20	1.60	1.44
25 A 51	6JU8A	1.73	1.54	1.39
25 A 51	6K6GT	1.58	1.40	1.26
25 A 51	6KA8	2.03	1.80	1.62
25 A 51	6KY8A	3.26	2.90	2.61
25 A 51	6KZ8	1.67	1.48	1.33
25 A 51	6L6GC	2.36	2.10	1.89
25 A 51	6L B6	3.87	3.44	3.10
25 A 51	6MD8	1.18	1.94	1.75
25 A 51	6M4	1.53	1.36	1.22
25 A 51	6SL7GT	1.98	1.76	1.58
25 A 51	6SN7GTB	1.60	1.42	1.28
25 A 51	6T8A	1.96	1.74	1.57
25 A 51	6U8A/6KD8	1.55	1.38	1.24
25 A 51	6V6GTA	1.69	1.50	1.35
25 A 51	6W6GT	1.85	1.64	1.48
25 A 51	6X4	1.24	1.03	.99
25 A 51	6X8A	1.71	1.52	1.37
25 A 51	7AU7	1.53	1.36	1.22
25 A 51	8AW8A	2.18	1.94	1.75
25 A 51	8B10	1.58	1.40	1.26
25 A 51	8FQ7/8CG7	1.10	.98	.87
25 A 51	10DE7	2.00	1.78	1.60
25 A 51	12AD6/12GA6	1.58	1.40	1.26
25 A 51	12A T7/ECC81	1.44	1.28	1.15
25 A 51	12AU6	1.46	1.30	1.17
25 A 51	12AU7A/ECC82	1.85	1.64	1.48
25 A 51	12AV6	.88	.78	.70
25 A 51	12AX4GTB	1.33	1.18	1.06
25 A 51	12AX7A/ECC83	1.21	1.08	.97
25 A 51	12AZ7A	1.67	1.48	1.33
25 A 51	12BA6	.95	.84	.76
25 A 51	12BE6	1.15	1.02	.92
25 A 51	12BH7A	1.58	1.40	1.26
25 A 51	12BY7A	1.44	1.28	1.15
25 A 51	12CUS/12CS	1.76	1.56	1.40
25 A 51	12GW6/12DQ6B	1.91	1.70	1.53
25 A 51	23Z9	2.12	1.88	1.69
25 A 51	35C5	1.21	1.08	.97
25 A 51	35W4	.74	.66	.59
25 A 51	35Z5GT	1.33	1.18	1.06
25 A 51	50C5	1.15	1.02	.92
25 A 51	50EH5	1.35	1.20	1.08
25 A 51	50L6GT	1.80	1.60	1.44

# RCA Quality Receiving Tubes



FREE With Purchase of 5 Tubes. (May be assorted.) RCA Type 1A1348 receiving tube puller. Makes removing tubes from sockets quick and easy.  
24 A 9148 G. Puller Alone, 6 oz. .50

FREE With Purchase of 10 Tubes. (May be assorted.) RCA Type 1A1369 handy 5-way pin straightener.  
24 A 9149 G. Straightener Alone, 4oz. 1.00



FREE With Purchase of 15 Tubes. RCA Tube Manual. Receiving and picture tubes.  
23 A 7676 EG. 1 1/4 lbs. 1.75

FREE With Purchase of 15 Tubes. RCA Color-TV Service Handbook. '67, '68.  
23 A 7877 EG. 3/4 lb. 2.00

Get All 4 Service Aids FREE with Purchase of 45 Tubes.



## COMPLETE SELECTION OF COLOR TV TUBES

With our full selection of tube types, Allied can provide you with complete satisfaction. Quantity prices for assorted tubes apply to this listing only. We replace any tube

that does not provide efficient performance for two years (does not apply to broken tubes). New tube types stocked as they are released. Av. shpg. wt., 4 oz.; per 10. 2 1/2 lbs.

ALL TUBES IN THIS LISTING ARE AVAILABLE ON CREDIT TERMS—see page 438

When ordering, specify Dept No., 25 A 28 AND Tube Type No. Example: 25 A 28 OZ4.

### \*Indicates Tube Types for Color TV, plus Other Applications

Tube Type	EA. In Quantities of			Tube Type	EA. in Quantities of			Tube Type	EA. In Quantities of		
	1-9	10-49	50-Up		1-9	10-49	50-Up		1-9	10-49	50-Up
OZ4	1.70	1.53	1.36	3CB6/3CF6	1.48	1.33	1.18	5AN8*	2.60	2.34	2.08
OZ4A	1.70	1.53	1.36	3CE5	Use 3BC5/3CE5			5AQ5*	1.48	1.33	1.18
1A3	3.33	2.99	2.66	3CF6	Use 3CB6/3CF6			5AR4/GZ34	2.13	1.91	1.70
1A5GT	2.00	1.80	1.60	3CN3A*	1.60	1.44	1.28	5AS4A	1.73	1.55	1.38
1AD2*	1.70	1.53	1.36	3CS6*	1.85	1.67	1.48	5AS8	2.20	1.98	1.76
1AY2	1.30	1.17	1.04	3CU3	Use 3CL3A			5AT8*	2.23	2.00	1.78
1B3GT*	Use 1G3 GT/1B3GT			3CU3A*	2.33	2.09	1.84	5AU4	Use 5V3A/5AU4		
1BC2	1.63	1.46	1.30	3CX3*	1.75	1.57	1.40	5AV8	2.03	1.83	1.62
1BH2	1.53	1.38	1.22	3CY5	1.95	1.76	1.56	5AZ4	2.65	2.39	2.12
1G3GT/1B3GT*	1.70	1.53	1.36	3CZ3	2.02	1.82	1.66	5B8	2.75	2.48	2.20
1K3/1J3	1.70	1.53	1.36	3DB3*	2.01	1.82	1.62	5BC3A*	1.70	1.53	1.36
1L6	6.28	5.65	5.02	3DC3	2.33	2.09	1.84	5BE8	1.55	1.40	1.24
1N5GT	2.45	2.21	1.96	3DG4*	2.60	2.34	2.08	5BK7A	2.08	1.87	1.66
1R5	2.23	2.00	1.78	3DK6	1.48	1.33	1.18	5BQ7A	2.15	1.94	1.72
1S2A/DY87	1.28	1.15	1.02	3DT6A*	1.63	1.46	1.30	5BR8	2.45	2.21	1.96
1S4	2.05	1.85	1.64	3DZ4	Use 3AF4A/3DZ4			5BT8*	1.55	1.40	1.24
1S5	1.70	1.53	1.36	3EA5	1.78	1.60	1.42	5BW8	1.60	1.44	1.28
1T4	1.93	1.73	1.54	3EH7/XF183	1.28	1.15	1.02	5CG8	1.85	1.67	1.48
1U4	1.93	1.73	1.54	3EJ7/XF184	1.28	1.15	1.02	5CL8A	2.45	2.21	1.96
1U5	1.70	1.53	1.36	3EP5	2.23	2.00	1.78	5CQ8	2.05	1.85	1.65
1V2*	1.28	1.15	1.02	3FH5	1.63	1.46	1.30	5CZ5	2.23	2.00	1.78
1X2A	Use 1X2B/1X2A			3FS5	2.15	1.94	1.72	5DJ4	1.78	1.60	1.42
1X2B/1X2A*	1.85	1.67	1.48	3GK5*	2.10	1.89	1.68	5E8	2.53	2.27	2.02
2A3	4.95	4.46	3.96	3GS8	Use 3BU8/3GS8			5E8/YCC189	2.75	2.47	2.20
2AF4B/2DZ4*	2.05	1.85	1.64	3HM5/3HA5	1.93	1.73	1.54	5EU8	2.00	1.80	1.60
2AH2	1.70	1.53	1.36	3HQ5*	2.63	2.36	2.10	5EW6	1.70	1.53	1.36
2AS2	1.65	1.49	1.32	3JC6A*	2.20	1.98	1.76	5FG7	2.03	1.82	1.62
2AV2*	1.43	1.28	1.14	3KT6*	1.90	1.71	1.52	5FV8	1.63	1.47	1.30
2BJ2	2.10	1.89	1.68	3Q4	1.68	1.51	1.34	5GH8A*	2.30	2.07	1.84
2BN4A	1.78	1.60	1.42	3QG5GT	2.93	2.63	2.34	5GJ7*/LCF801	1.48	1.33	1.18
2BU2*	2.01	1.76	1.56	3S4	1.70	1.53	1.36	5GM6	1.63	1.46	1.30
2CN3A	1.63	1.46	1.30	3V4	1.88	1.69	1.50	5GX6	1.23	1.10	.98
2CW4	2.45	2.21	1.96	4AU6	1.70	1.53	1.36	5CX7*	2.00	1.80	1.60
2CY5	2.20	1.98	1.76	4AV6	1.48	1.33	1.18	5HA7	1.53	1.37	1.22
2DS4	2.45	2.21	1.96	4BC8	2.00	1.80	1.60	5HB7	1.70	1.53	1.36
2DV4*	3.23	2.90	2.58	4BL8/XCF80*	1.20	1.08	.96	5HG8/LCF86	1.85	1.67	1.48
2DZ4	Use 2AF4B/2DZ4			4BN6	2.03	1.82	1.62	5HZ6	1.63	1.46	1.30
2EG4	2.45	2.21	1.96	4BQ7A*	2.45	2.21	1.96	5J6	1.85	1.67	1.48
2EN5	1.60	1.44	1.28	4BS8	2.13	1.91	1.70	5JK6*	1.93	1.73	1.54
2ER5	1.85	1.67	1.48	4BU8/4GS8	2.23	2.00	1.78	5JL6*	1.93	1.73	1.54
2FH5	1.85	1.67	1.48	4BZ6	1.48	1.33	1.18	5KD8	1.25	1.13	1.00
2FQ5A	Use 2GK5			4BZ7	2.45	2.21	1.96	5KE8	2.90	2.61	2.32
2FS5	2.43	2.18	1.94	4CB6	1.43	1.28	1.14	5KZ8*	1.28	1.15	1.02
2GK5	2.10	1.89	1.68	4CS6	1.70	1.53	1.36	5LJ8	2.05	1.85	1.64
2GU5	2.25	2.03	1.80	4DE6	1.48	1.33	1.18	5MB8	1.83	1.64	1.46
2HA5	1.93	1.73	1.54	4DK6	1.70	1.53	1.36	5T8	2.23	2.01	1.78
2HQ5*	1.93	1.73	1.54	4DT6A*	1.63	1.46	1.30	5U4G	1.38	1.24	1.10
3A2*	2.75	2.48	2.20	4EH7/LF183*	1.78	1.60	1.42	5U4GB*	1.38	1.24	1.10
3A3A/3B2*	1.60	1.44	1.28	4EJ7/LF184*	1.78	1.60	1.42	5U8	2.13	1.91	1.70
3AF4A/3DZ4	2.05	1.85	1.64	4ES8/YCC189	2.75	2.49	2.20	509/LCF201*	1.48	1.33	1.18
3AL5*	1.35	1.21	1.08	4EW6	1.45	1.31	1.16	5V3A*/5AU4	2.08	1.87	1.66
3AT2*	1.70	1.53	1.36	4GK5	1.95	1.76	1.56	5V4GA	2.15	1.94	1.72
3AU6	1.48	1.33	1.18	4GM6	1.10	.99	.88	5V6GT*	1.85	1.67	1.48
3AV6	1.48	1.33	1.18	4GS8	Use 4BL8/4GS8			5X8	2.08	1.87	1.66
3AW2*	1.60	1.44	1.28	4GX7	2.00	1.80	1.60	5Y3GT*	1.30	1.17	1.04
3AW3*	Use 3A3A/3B2			4HA5/PC900*	1.18	1.06	.94	5Y4GA	1.23	1.10	.98
3B2*	Use 3A3A/3B2			4HA7	1.53	1.37	1.22	5Y4GT	1.70	1.53	1.36
3BA6	1.18	1.06	.94	4HC7	1.53	1.37	1.22	5Z3	2.23	2.00	1.78
3BC5/3CE5	1.35	1.21	1.08	4HM6	1.55	1.40	1.24	5Z4	Use 5Y3GT		
3BL2*	1.77	1.60	1.42	4HQ5	2.30	2.07	1.84	6A7	4.00	3.60	3.20
3BM2*	1.80	1.62	1.44	4HS8	1.85	1.67	1.48	6A8	3.55	3.20	2.84
3BN2*	1.73	1.55	1.38	4HT6	1.28	1.15	1.02	6AB4	1.80	1.62	1.44
3BN4A	1.70	1.53	1.36	4JC6A	2.30	2.07	1.84	6AC7	2.88	2.59	2.30
3BN6*	2.38	2.14	1.90	4JD6	2.30	2.07	1.84	6AC10*	2.13	1.91	1.70
3BS2A*	1.62	1.46	1.30	4JH6	1.70	1.53	1.36	6AD10*	3.55	3.20	2.84
3BU8/3GS8	2.45	2.21	1.96	4KE8*	3.03	2.72	2.42	6AF3	1.78	1.60	1.42
3BY6*	1.50	1.35	1.20	4KT6*	2.24	1.87	1.66				
3BZ6*	1.65	1.49	1.32	4LJ8*	2.05	1.85	1.64				
3CA3*	1.60	1.44	1.28	5AM8*	2.45	2.21	1.96				

TUBES CONTINUED ON NEXT PAGE



# Receiving Tubes

When ordering, Specify Dept. No., 25 A 28 AND Tube Type No. Example 25 A 28 6AF4

AS NEW TYPES ARE RELEASED, ALLIED WILL STOCK THEM To Get Free Service Aids With Your Tubes, see page 287

\*Indicates Tube Types for Color TV, plus Other Applications

Tube Type	EA. In Quantities of			Tube Type	EA. In Quantities of			Tube Type	EA. In Quantities of		
	1-9	10-49	50-Up		1-9	10-49	50-Up		1-9	10-49	50-Up
6AF4*	2.23	2.00	1.78	6BQ5/EL84*	1.78	1.60	1.42	6DZ4*	2.05	1.85	1.64
6AF4A*	2.23	2.00	1.78	6BQ6GTB/6CU6*	2.45	2.21	1.96	6E5	2.83	2.54	2.26
6AF6G	3.15	2.84	2.52	6BQ7A*	2.28	2.05	1.82	6EA5	Use 6CY5		
6AF9	1.78	1.60	1.42	6BR8A*	2.35	2.12	1.88	6EA7	2.85	2.57	2.28
6AF11	2.60	2.34	2.08	6BS3A*	1.85	1.67	1.48	6EA8*	1.78	1.60	1.42
6AG5	1.90	1.71	1.52	6BS8*	2.45	2.21	1.96	6EB8	2.53	2.27	2.02
6AG7*	3.43	3.08	2.74	6BU8*	2.28	2.05	1.82	6EH4A*	4.10	3.69	3.28
6AG9*	2.83	2.54	2.26	6BV8*	1.65	1.49	1.32	6EH5	1.78	1.60	1.42
6AG11	2.08	1.87	1.66	6BV11	2.48	2.23	1.98	6EH7/EF183*	1.93	1.73	1.54
6AH4GT*	1.63	1.46	1.30	6BW4	1.38	1.24	1.10	6EH8	1.75	1.58	1.40
6AH6*	2.45	2.21	1.96	6BW8	1.68	1.51	1.34	6EJ4A*	4.25	3.82	3.40
6AH9	2.38	2.14	1.90	6BW11	2.20	1.98	1.76	6EJ7/EF184*	1.78	1.60	1.42
6AK5/EF95	2.38	2.14	1.90	6BX7GT	2.80	2.52	2.24	6EL4	3.78	3.40	3.02
6AK8/EABC80	1.65	1.49	1.32	6BY5GA	2.40	2.16	1.92	6EM5	2.00	1.80	1.60
6AL3/EY88	1.30	1.17	1.04	6BY6*	1.70	1.53	1.36	6EM7*	2.85	2.57	2.28
6AL5*	1.35	1.21	1.08	6BY8	1.35	1.21	1.08	6EQ7	1.48	1.33	1.18
6AL7GT	3.48	3.13	2.78	6BZ6*	1.35	1.21	1.08	6ER5*	2.10	1.89	1.68
6AL11*	2.38	2.14	1.90	6BZ7*	2.23	2.00	1.78	6ES5	1.43	1.28	1.14
6AM4	2.78	2.50	2.22	6BZ8	Use 6BC8/6BZR			6ES8/ECC189	2.73	2.45	2.18
6AM8A	2.03	1.82	1.62	6C4*	1.48	1.33	1.18	6ET7	2.00	1.80	1.60
6AN4	3.08	2.77	2.46	6C5	2.68	2.41	2.14	6EU7	1.80	1.62	1.44
6AN8A*	2.33	2.09	1.86	6C6	3.93	3.54	3.14	6EU8	1.85	1.67	1.48
6AQ5A*	1.48	1.33	1.18	6C9	2.75	2.48	2.20	6EV5	1.78	1.60	1.42
6AQ6	1.63	1.46	1.30	6C10	1.85	1.67	1.48	6EV7	1.63	1.46	1.30
6AQ7GT	2.35	2.12	1.88	6CA4	1.63	1.46	1.30	6EW6*	1.50	1.35	1.20
6AQ8/ECC85*	1.50	1.35	1.20	6CA5	1.50	1.35	1.20	6EW7	3.00	2.70	2.40
6AR5	1.23	1.10	.98	6CA7/EL34	2.68	2.41	2.14	6EZ5*	2.53	2.27	2.02
6AR8	2.43	2.18	1.94	6CB5A*	4.68	4.21	3.74	6EZ8	1.78	1.60	1.42
6AR11	2.25	2.03	1.80	6CB6A/6CF6*	1.43	1.28	1.14	6F5	2.93	2.63	2.34
6AS5	1.88	1.69	1.50	6CD6GA*	3.10	2.79	2.48	6F6	3.08	2.77	2.46
6AS8*	2.43	2.18	1.94	6CE3	Use 6CG3/6CE3/6CD3			6F6GT	2.90	2.61	2.32
6AS11	2.55	2.30	2.04	6CE5	Use 6BC5/6CE5			6F8G	4.23	3.81	3.38
6AT6*	1.20	1.08	.96	6CF6	Use 6CB6A/6CF6			6FA7	1.48	1.33	1.18
6AT8A*	2.60	2.34	2.08	6CG3/6CE3/6CD3*	1.85	1.67	1.48	6FD7	2.85	2.57	2.28
6AU4GTA*	2.20	1.98	1.76	6CG7	Use 6FQ7/6CG7			6FE5	1.70	1.53	1.36
6AUSGT*	2.60	2.34	2.08	6CG8A*	1.93	1.73	1.54	6FG6	Use EM84/6FG6		
6AU6A*	1.33	1.19	1.06	6CH8	2.80	2.52	2.24	6FG7*	2.08	1.87	1.66
6AU8A*	2.60	2.34	2.08	6CJ3*	1.80	1.62	1.44	6FH5*	2.28	2.05	1.82
6AV5GA*	2.60	2.34	2.08	6CK3	1.85	1.67	1.48	6FH8	2.20	1.98	1.76
6AV6*	.98	.88	.78	6CK4	1.78	1.60	1.42	6FJ7*	2.08	1.87	1.66
6AV11*	2.20	1.98	1.76	6CL3*	1.75	1.57	1.40	6FM7*	1.95	1.76	1.56
6AW8A*	2.00	1.80	1.60	6CL6*	2.08	1.87	1.66	6FM8	1.43	1.28	1.14
6AX3	1.45	1.31	1.16	6CL8A*	2.08	1.87	1.66	6FQ5A	Use 6GK5/6FQ5A		
6AX4GTB*	1.70	1.53	1.36	6CM3	2.45	2.21	1.96	6FQ7/6CG7*	1.23	1.10	.98
6AX5GT	1.93	1.73	1.54	6CM6*	1.93	1.73	1.54	6FS5	2.05	1.85	1.64
6AX8	1.75	1.58	1.40	6CM7	1.80	1.62	1.44	6FV6	2.23	2.00	1.78
6AY3B	1.70	1.53	1.36	6CM8	2.03	1.82	1.62	6FV8A	2.35	2.12	1.88
6AY11	2.25	2.03	1.80	6CN7*	2.23	2.00	1.78	6FW5	1.93	1.73	1.54
6AZ8*	2.75	2.48	2.20	6CQ4	1.78	1.60	1.42	6FY5/EC97	1.38	1.24	1.10
6B8	3.43	3.08	2.74	6CQ8*	2.05	1.85	1.64	6FY7	1.75	1.58	1.40
6B10	1.90	1.71	1.52	6CR6	1.48	1.33	1.18	6G11	2.20	1.98	1.76
6BA3	1.53	1.37	1.22	6CS6*	1.65	1.49	1.32	6GB5/EL500	1.90	1.71	1.52
6BA6/EF93*	1.35	1.21	1.08	6CS7	1.88	1.69	1.50	6GC5*	2.50	2.25	2.00
6BA7	2.93	2.63	2.34	6CU5	1.78	1.60	1.42	6GE5	2.28	2.05	1.82
6BA8A*	2.33	2.09	1.86	6CU6	Use 6BQ6GTB/6CU6			6GF5	1.90	1.71	1.52
6BA11*	2.23	2.00	1.78	6CU8	2.30	2.07	1.84	6GFTA*	2.43	2.18	1.94
6BC4	2.75	2.48	2.20	6CW4*	2.45	2.21	1.96	6GH8A*	1.60	1.44	1.28
6BC5/6CE5	1.63	1.46	1.30	6CW5/EL86*	1.38	1.24	1.10	6GJ5A	3.08	2.77	2.46
6BC7*	1.80	1.62	1.44	6CX8	2.60	2.34	2.08	6GJ7/ECF801*	1.55	1.40	1.24
6BC8*/6BZ8	2.23	2.00	1.78	6CY5	2.13	1.91	1.70	6GK5*/6FQ5A	2.08	1.87	1.66
6BD6	1.18	1.06	.94	6CY7	1.53	1.37	1.22	6GK6*	1.70	1.53	1.36
6BD11	2.78	2.50	2.22	6CZ5*	2.38	2.14	1.90	6GL7*	2.90	2.61	2.32
6BE3/6BZ3*	1.88	1.69	1.50	6D10	2.33	2.09	1.86	6GM5	1.53	1.37	1.22
6BE6	1.70	1.53	1.36	6DA4	1.85	1.67	1.48	6GM6*	1.63	1.46	1.30
6BF5	1.68	1.51	1.34	6DB5	2.50	2.25	2.00	6GN8	2.30	2.07	1.84
6BF6	1.43	1.28	1.14	6DC6*	1.93	1.73	1.54	6GQ7*	1.88	1.69	1.50
6BF11	2.53	2.28	2.02	6DC8/EBF89	1.53	1.37	1.22	6GT5A	3.18	2.86	2.54
6BG6G*	3.23	2.90	2.58	6DE4	1.63	1.46	1.30	6GU5	2.05	1.85	1.64
6BH3A	1.40	1.26	1.12	6DE6*	1.48	1.33	1.18	6GU7*	1.85	1.67	1.48
6BH6*	1.80	1.62	1.44	6DE7	2.23	2.00	1.78	6GV5	2.08	1.87	1.66
6BH8*	2.30	2.07	1.84	6DG6GT	1.93	1.74	1.54	6GV8/ECL85	2.30	2.07	1.84
6BH11*	2.35	2.12	1.88	6DK6*	1.48	1.33	1.18	6GW6/6DQ6B*	2.33	2.09	1.86
6BJ3	1.40	1.26	1.12	6DL4/EC88	3.98	3.58	3.18	6GW8/ECL86	1.53	1.37	1.22
6BJ6	1.80	1.62	1.44	6DL5/EL95	1.48	1.33	1.18	6GX6*	1.60	1.44	1.28
6BJ7*	1.48	1.33	1.18	6DM4A	1.85	1.67	1.48	6GX7*	2.00	1.80	1.60
6BJ8*	2.23	2.00	1.78	6DN6	3.50	3.15	2.80	6GY5	2.30	2.07	1.84
6BK4B*	3.78	3.40	3.02	6DN7*	2.30	2.07	1.84	6GY6*	1.45	1.31	1.16
6BK5*	1.75	1.58	1.40	6DQ5*	3.93	3.54	3.14	6GY8	1.95	1.76	1.56
6BK7B*	2.23	2.00	1.78	6DQ6B*	Use 6GW6/6DQ6B			6H6	2.85	2.57	2.28
6BL7GTA*	2.80	2.52	2.24	6DR7	2.30	2.07	1.84	6HA5*	Use 6HMS/6HA5		
6BL8/ECF80*	1.35	1.21	1.08	6DS4*	2.45	2.21	1.96	6HB5	2.30	2.07	1.84
6BM8/ECL82*	1.45	1.31	1.16	6DS5	1.83	1.65	1.46	6HB6*/6HA6	2.23	2.00	1.78
6BN4A*	2.00	1.80	1.60	6DT5	1.78	1.60	1.42	6HB7*	2.00	1.80	1.60
6BN6/6KS6*	2.05	1.85	1.64	6DT6A*	1.35	1.21	1.08	6HC5*	2.10	1.89	1.68
6BN8*	1.85	1.67	1.48	6DT8	1.88	1.69	1.50	6HF5*	4.03	3.62	3.22
6BN11*	2.25	2.03	1.80	6DV4*	3.23	2.90	2.58	6HF8*	2.85	2.57	2.28
				6DW4B*	1.75	1.58	1.40	6HG5	1.48	1.33	1.18
				6DX8/ECL84*	1.45	1.31	1.16	6HG8/ECF86*	1.85	1.67	1.48

When ordering, Specify Dept. No., 25 A 28,  
AND Tube Type No. Example: 25 A 28 6HJ8.

# Receiving Tubes



QUANTITY PRICES FOR ASSORTED RCA TUBES To Get Free Service Aids with Your Tubes, see page 287

## \*Indicates Tube Types for Color TV, plus Other Applications

Tube Type	EA. in Quantities of			Tube Type	EA. in Quantities of			Tube Type	EA. in Quantities of		
	1-9	10-49	50-Up		1-9	10-49	50-Up		1-9	10-49	50-Up
6HJ8	1.55	1.40	1.24	6M11*	2.50	2.25	2.00	8LC8	2.38	2.14	1.90
6HK5	1.95	1.76	1.56	6MB8	1.83	1.64	1.46	8LT8	1.63	1.46	1.30
6HL8*	1.53	1.37	1.22	6MD8*	2.43	2.18	1.94	9A8/PCF80*	1.33	1.19	1.06
6HMS/6HA5*	1.93	1.73	1.54	6ME8*	2.53	2.27	2.02	9AU7	1.48	1.33	1.18
6HM6	1.48	1.33	1.18	6MF8	2.38	2.14	1.90	9BJ11	2.40	2.16	1.92
6HQ5*	2.25	2.03	1.80	6MG8	1.23	1.10	.98	9BR7	1.58	1.42	1.26
6HR5	1.28	1.15	1.02	6MJ8	2.33	2.09	1.86	9EA8	1.53	1.37	1.22
6HR6	1.85	1.67	1.48	6MK8	2.15	1.94	1.72	9GV8/XCL85	1.70	1.53	1.36
6HS5*	3.88	3.49	3.10	6MN8*	2.10	1.89	1.68	9KC6*	2.18	1.96	1.74
6HS6	1.85	1.67	1.48	6MQ8	1.90	1.71	1.52	9KX6	2.08	1.87	1.66
6HS8*	2.15	1.94	1.72	6N7	2.53	2.27	2.02	9KZ8	1.48	1.33	1.18
6HU6/EM87	2.42	2.18	1.94	6N7GT	2.80	2.52	2.24	9LA6	2.10	1.89	1.68
6HV5	3.88	3.49	3.10	6G7	2.95	2.66	2.36	9U8A	1.55	1.40	1.24
6HZ6*	1.50	1.35	1.20	6RK19*	2.43	2.18	1.94	10AL11	2.28	2.05	1.82
6J5	2.30	2.07	1.84	6S4A*	1.70	1.53	1.36	10BQ5	1.38	1.24	1.10
6J5GT	2.05	1.85	1.64	6SA7	2.95	2.66	2.36	10C8	2.58	2.32	2.06
6J6A*	2.03	1.82	1.62	6SA7GT	2.20	1.98	1.76	10CW5/LL86	1.28	1.15	1.02
6J7	3.08	2.77	2.46	6SB7Y	2.98	2.68	2.38	10DE7	2.23	2.00	1.78
6J10*	Use 6210/610			6SC7	2.68	2.41	2.14	10DR7	2.23	2.00	1.78
6J11	2.40	2.16	1.92	6SF5	2.50	2.25	2.00	10DX8/LCL34	1.38	1.24	1.10
6JB6A	2.93	2.63	2.34	6SF7	3.15	2.85	2.52	10EG7	2.18	1.96	1.74
6JC6A*	1.98	1.78	1.58	6SG7	2.80	2.52	2.24	10EM7	2.45	2.21	1.96
6JC8	1.53	1.37	1.22	6SH7	3.08	2.77	2.46	10EW7	2.85	2.57	2.28
6JD6*	1.78	1.60	1.42	6SJ7	2.45	2.21	1.96	10GF7A*	2.38	2.14	1.90
6JE6A*	Use 6LQ6/6E6C			6SK7	2.50	2.25	2.00	10GK6	1.73	1.55	1.38
6JE8	1.85	1.67	1.48	6SK7GT	2.75	2.48	2.20	10GN8	2.23	2.00	1.78
6JF6	3.43	3.08	2.74	6SL7GT	2.20	1.98	1.76	10HF8	2.68	2.41	2.14
6JG6A	3.25	2.93	2.60	6SN7GTB*	1.78	1.60	1.42	10JA8	2.08	1.87	1.66
6JH6*	1.48	1.33	1.18	6SQ7	2.48	2.23	1.98	10JT8*	2.03	1.82	1.62
6JH8*	2.85	2.57	2.28	6SR7	2.45	2.21	1.96	10JY8	1.83	1.64	1.46
6JK6	1.92	1.73	1.54	6T4*	2.58	2.32	2.06	10KR8	2.13	1.91	1.70
6JK8*	2.03	1.82	1.62	6T8A*	2.18	1.96	1.74	10KU8	2.43	2.18	1.94
6JM6A*	2.48	2.23	1.98	6T9	2.20	1.98	1.76	10LB8*	2.35	2.11	1.88
6JN6*	2.45	2.21	1.96	6T10*	2.33	2.09	1.86	10LE8	2.94	2.66	2.36
6JN8	1.83	1.64	1.46	6U5	3.70	3.33	2.96	10LW8	2.13	1.91	1.70
6JQ6	1.93	1.73	1.54	6U8A/6KD8*	1.73	1.55	1.38	10LZ8	2.08	1.87	1.66
6JR6	3.18	2.86	2.54	6U9/ECF201	1.45	1.31	1.16	11AR11	2.05	1.85	1.64
6JS6B*	3.65	3.29	2.92	6U10*	1.90	1.75	1.52	11BM8	2.93	2.64	2.34
6JT6A	2.70	2.43	2.16	6V3A	2.28	2.05	1.82	11BQ11	2.05	1.85	1.64
6JT8*	2.00	1.80	1.60	6V6	3.40	3.06	2.72	11BT11	3.25	2.93	2.80
6JU6	3.18	2.86	2.91	6V6GTA*	1.88	1.69	1.50	11CA11*	2.83	2.54	2.26
6JU8A*	1.93	1.73	1.54	6W4GT	1.65	1.49	1.32	11CY7	1.80	1.62	1.44
6JV8	2.20	1.98	1.76	6W6GT*	2.05	1.85	1.64	11FV7*	1.70	1.53	1.36
6JW8/ECF802*	1.55	1.40	1.24	6X4	1.38	1.24	1.10	11HF7*	2.63	2.36	2.10
6JZ6	2.33	2.09	1.86	6X5GT	1.65	1.49	1.32	11J8	1.93	1.73	1.54
6JZ8	1.78	1.60	1.42	6X8A*	1.90	1.71	1.52	11KV8	2.95	2.66	2.36
6K6GT	1.75	1.58	1.40	6X9/ECF200*	1.48	1.33	1.18	11LQ8*	2.95	2.66	2.36
6K7	2.95	2.66	2.36	6Y6GA/6Y6G	2.48	2.23	1.98	11L8	1.63	1.46	1.30
6K8	3.85	3.47	3.08	6Y9*/EFL200	1.48	1.33	1.18	11Y9/LFL200	1.85	1.67	1.48
6K11/6Q11	1.90	1.71	1.52	6Z4	Use 84/6Z4			12AB5	1.93	1.73	1.54
6KA8*	2.25	2.03	1.80	6Z10/6J10*	2.75	2.48	2.20	12AC6	1.05	.95	.84
6KD6	4.25	3.82	3.40	7A7	3.58	3.22	2.86	12AD6	1.75	1.58	1.40
6KD8	Use 6U8A/6KD8			7AU7*	1.70	1.53	1.36	12AE6A	1.55	1.40	1.24
6KE8*	2.83	2.55	2.26	7C5	1.68	1.51	1.34	12AE10	2.33	2.09	1.86
6KL8	1.48	1.33	1.18	7C7	1.70	1.53	1.36	12AF3	2.13	1.91	1.70
6KM6*	4.10	3.69	3.28	7EY6	1.75	1.58	1.40	12AF6	1.58	1.42	1.26
6KM8	1.73	1.55	1.38	7F7	3.75	3.38	3.00	12AL5	1.38	1.24	1.10
6KN6	3.60	3.24	2.88	7F8	4.13	3.72	3.30	12AL8	3.08	2.77	2.47
6KR8	2.13	1.91	1.80	7HG8/PCF86	1.38	1.24	1.10	12AL11	2.83	2.54	2.26
6KS6	Use 6BN6/6KS6			7N7	3.55	3.20	2.84	12AQ5	1.75	1.58	1.40
6KT6*	1.65	1.49	1.32	8AR11*	2.18	1.96	1.74	12AT6	1.38	1.24	1.10
6KT8*	2.45	2.21	1.96	8AU8	1.93	1.73	1.54	12AT7/ECC81*	1.60	1.44	1.28
6KU8	2.40	2.16	1.92	8AW8A	2.43	2.18	1.94	12AU6	1.45	1.31	1.16
6KV8	2.93	2.63	2.34	8B10	1.75	1.58	1.40	12AU7A/ECC82*	1.38	1.24	1.10
6KY8A	3.63	3.27	2.90	8BABA	1.73	1.54	1.38	12AV5GA	2.73	2.45	2.18
6KZ8*	1.85	1.67	1.48	8BA11	2.08	1.87	1.66	12AV6*	.98	.88	.78
6L6	4.83	4.34	3.86	8BH8	1.68	1.51	1.34	12AV7*	2.08	1.87	1.66
6L6GC*	2.63	2.36	2.10	8BM11	2.35	2.12	1.88	12AW6	1.78	1.60	1.42
6L7	3.48	3.13	2.78	8BN8	1.85	1.67	1.48	12AX3*	1.50	1.35	1.20
6LB6*	4.30	3.87	3.44	8BN11	2.18	1.96	1.74	12AX4GTB	1.48	1.33	1.18
6LB8	2.35	2.12	1.88	8BQ5	1.88	1.69	1.50	12AX7A/ECC83*	1.35	1.22	1.08
6LC8	2.38	2.14	1.90	8BQ11*	2.15	1.94	1.72	12AY3A	1.45	1.31	1.16
6LE8*	3.10	2.79	2.48	8BU11*	2.50	2.25	2.00	12AY7	2.85	2.57	2.28
6LF6	4.22	3.80	3.38	8CG7	Use 8FQ7/8CG7			12AZ7A*	1.85	1.67	1.48
6LF8*	2.33	2.09	1.86	8CM7	1.35	1.21	1.08	12B4A	1.75	1.58	1.40
6LH6A	3.85	3.47	3.08	8CN7	1.53	1.37	1.22	12BA6	1.05	.95	.84
6LJ6*	3.78	3.40	3.02	8CS7	2.00	1.80	1.60	12BA7	2.95	2.66	2.36
6LJ8	2.05	1.85	1.64	8CW5/XL86	1.28	1.15	1.02	12BD6	1.18	1.06	.94
6LM8*	2.23	2.00	1.78	8CX8	2.20	1.98	1.76	12BE3	1.73	1.55	1.38
6LN8/LCF80	1.20	1.08	.95	8EB8	2.05	1.85	1.64	12BE6	1.28	1.15	1.02
6LQ6/6JE6C	4.25	3.83	3.40	8EM5	1.38	1.24	1.10	12BF6	1.18	1.05	.94
6LQ8	2.77	2.50	2.22	8ET7	2.08	1.87	1.66	12BF11*	3.08	2.77	2.46
6LR6	3.65	3.29	2.92	8FQ7/8CG7*	1.23	1.10	1.08	12BH7A*	1.75	1.58	1.40
6LR8	2.38	2.14	1.90	8GJ7/PCF801	1.45	1.31	1.16	12BK5*	1.88	1.69	1.50
6LT8*	1.75	1.58	1.40	8GN8	2.08	1.87	1.66	12BL6	1.85	1.67	1.48
6LU8*	2.38	2.14	1.90	8GU7*	1.60	1.44	1.28	12BN6	1.83	1.64	1.46
6LX8/LCF802	1.30	1.17	1.04	8JU8A	1.68	1.51	1.34				
6LY8*	1.95	1.76	1.56	8JV8*	2.15	1.94	1.72				
				8KA8	2.33	2.09	1.86				

TUBES CONTINUED  
ON NEXT PAGE



# Receiving Tubes

When Ordering, Specify Dept. No., 25 A 28 AND Tube Type No. Example: 25 A 28 12BQ6GT/12CU6.

AS NEW TYPES ARE RELEASED. ALLIED WILL STOCK THEM To Get Free Service Aids with Your Tubes, see page 287

\*Indicates Tube Types for Color TV, plus Other Applications

Tube Type	EA. In Quantities of:			Tube Type	EA. In Quantities of:			Tube Type	EA. In Quantities of:		
	1-9	10-49	50-Up		1-9	10-49	50-Up		1-9	10-49	50-Up
12BQ6GT/ 12CU6	2.23	2.00	1.78	13Z10/13J10	2.78	2.50	2.22	22DE4	2.10	1.89	1.68
12BR7	1.53	1.37	1.22	14BL11	2.80	2.52	2.24	22JF6	3.43	3.08	2.74
129S3A	1.85	1.67	1.48	14BR11	3.08	2.77	2.46	22JG6A	3.10	2.79	2.48
12BT3	1.43	1.28	1.14	14GT8	1.73	1.55	1.38	22JR6	3.10	2.79	2.48
12BV7	1.65	1.49	1.32	14JG8	1.55	1.40	1.24	22JU6	3.18	2.86	2.54
12BV11	2.40	2.16	1.92	15AF11	2.38	2.14	1.90	22KM6*	4.10	3.69	3.28
12BW4	1.68	1.51	1.34	15BD11A	2.75	2.48	2.20	23J56A	6.68	6.01	5.34
12B7A*	1.60	1.44	1.28	15CW5/PL84*	1.23	1.09	.98	23Z9	2.35	2.12	1.88
12BZ6	1.20	1.08	.96	15DQ8/PCL84*	1.70	1.53	1.36	24BF11	2.60	2.34	2.08
12BZ7	2.08	1.87	1.66	15FM7	1.70	1.53	1.36	24JE6A*	4.25	3.83	3.40
12C5	Use 12CU5/12CS			15FY7	1.95	1.76	1.56	24JZ8	2.25	2.03	1.80
12CA5	1.98	1.78	1.58	15KY8A	2.90	2.61	2.32	24LQ6/24JE6C	4.25	3.83	3.40
12CL3	1.75	1.58	1.40	15LE8*	3.83	3.45	3.06	25AV5GA	2.83	2.55	2.26
12CN5	1.63	1.46	1.30	16A8/PCL82	1.70	1.53	1.36	25AX4GT	1.53	1.37	1.22
12CR6	1.48	1.33	1.18	16AK9	2.95	2.66	2.36	25BK5	1.70	1.53	1.36
12CU5/12CS	1.95	1.76	1.56	16AQ3/XY88	1.35	1.21	1.08	25BQ6GT/25CU6	2.20	1.98	1.76
12CU6	Use 12BQ6GT/12CU6			16BQ11	2.18	1.96	1.74	25C5	2.05	1.85	1.64
12CX6	1.38	1.24	1.10	16BX11	2.55	2.30	2.04	25CA5	1.80	1.62	1.44
12D4	1.53	1.37	1.22	16GK6	1.53	1.37	1.22	25CD6GB	3.20	2.88	2.56
12DB5	1.30	1.17	1.04	16GY5	2.43	2.18	1.94	25CG3*	1.70	1.57	1.36
12DK6	1.15	1.04	.92	17AB10/17X10	2.23	2.00	1.78	25CK3*	1.70	1.57	1.36
12DQ6B	Use 12GW6/12DQ6B			17AX3	1.30	1.17	1.04	25CU6	Use 25 BQ6GT/25CU6		
12DQ7	1.63	1.46	1.30	17AX4GTA	1.85	1.67	1.48	25DN6	3.30	3.03	2.64
12DS7	2.70	2.43	2.16	17AY3A	1.70	1.53	1.36	25EC6	3.08	2.77	2.46
12DT5	1.55	1.40	1.24	17BB14*	5.23	4.70	4.18	26EH5	1.85	1.67	1.48
12DT8	2.00	1.80	1.60	17BE3/17BZ3	1.60	1.44	1.28	26F5A	1.93	1.73	1.54
12DW7	1.53	1.37	1.22	17BF11	2.35	2.12	1.88	26L6GT	1.85	1.67	1.48
12DY8	3.98	3.58	3.18	17BH3	1.43	1.28	1.14	25W4GT	1.85	1.67	1.48
12DZ6	1.80	1.62	1.44	17BQ6GTB	2.60	2.34	2.08	26Z6GT	1.93	1.74	1.54
12ED5	1.35	1.21	1.08	17BS3A/17DW4A	1.70	1.53	1.36	27GB5/PL500	1.85	1.67	1.48
12EK6	1.78	1.60	1.42	17BW3	1.60	1.44	1.28	31AL10	2.50	2.25	2.00
12EQ7	1.38	1.24	1.10	17BZ3	Use 17BE3/17BZ3			31J56A*	3.65	3.29	2.92
12F8	1.63	1.47	1.30	17C5	Use 17CU5/17CS			32HT5A	1.20	1.08	.96
12FK6	1.28	1.15	1.02	17CK3	3.58	3.22	2.86	32HQ7	3.10	2.79	2.48
12FM6	1.30	1.17	1.04	17CT3	1.78	1.60	1.42	33GT7	3.48	3.13	2.78
12FQ8	2.60	2.34	2.08	17CU5/17C5	1.70	1.53	1.36	33GY7A	3.03	2.72	2.42
12FV7	1.70	1.53	1.36	17D4	2.03	1.82	1.62	33JV6	2.33	2.09	1.86
12FX5	1.63	1.46	1.30	17DE4	1.83	1.64	1.46	34CE3	1.95	1.76	1.56
12GC6*	2.18	1.96	1.74	17DM4A	2.03	1.82	1.62	34GD5A	1.48	1.33	1.18
12GE5*	2.25	2.03	1.80	17DQ6B	Use 17GW6/17DQ6B			35B5	1.60	1.44	1.28
12GJ5A	2.45	2.21	1.96	17DW4A	Use 17BS3A/17DW4A			35C5	1.35	1.21	1.08
12GN7A*	2.55	2.30	2.04	17EW8/HCC85	1.38	1.24	1.10	35EH5	1.70	1.53	1.36
12GT5	2.68	2.41	2.14	17GE5	2.18	1.96	1.74	35GL6	1.45	1.31	1.16
12GW6/12DQ6B	2.48	2.23	1.98	17GJ5A	3.03	2.72	2.42	35L6GT	1.93	1.73	1.54
12H6	2.23	2.01	1.78	17GT5A	2.78	2.50	2.22	35W4	.83	.74	.66
12HE7	3.40	3.06	2.72	17GV5	2.10	1.89	1.68	35Y4	2.25	2.03	1.80
12HG7*	2.55	2.30	2.04	17GW6/17DQ6B	2.63	2.36	2.10	35Z4GT	1.28	1.15	1.02
12HL7*	2.23	2.00	1.78	17JB6A	2.75	2.48	2.20	35Z5GT	1.48	1.33	1.18
12J5GT	2.40	2.16	1.92	17JG6A	3.15	2.84	2.52	36AM3B	1.28	1.15	1.02
12J8	2.18	1.96	1.74	17JM6A	2.48	2.23	1.98	38HE7	3.33	2.99	2.66
12JB6A	3.10	2.79	2.48	17JN6	2.25	2.03	1.80	38KH7	3.28	2.95	2.62
12JN6	1.95	1.76	1.56	17JT6A	2.30	2.07	1.84	40KD6	4.05	3.65	3.24
12JN8	1.85	1.67	1.48	17JZ8	1.78	1.60	1.42	42	2.43	2.18	1.94
12JQ6	2.23	2.00	1.78	17KV6*	3.93	3.54	3.14	42KN6*	3.60	3.24	2.88
12JT6A	2.48	2.23	1.98	17LD8	Use 15KY8A			43	3.60	3.24	2.88
12K5	1.73	1.55	1.38	17X10	Use 17AB10/17X10			50A5	2.93	2.63	2.34
12K7GT	3.30	2.97	2.64	18AJ10	2.20	1.98	1.76	50B5	1.48	1.33	1.18
12KL8	1.23	1.10	.98	18FW6A	1.23	1.10	.98	50BM8	2.18	1.96	1.74
12L6GT	1.78	1.60	1.42	18FX6A	1.48	1.33	1.18	50C5	1.28	1.15	1.02
12MD8	2.43	2.18	1.94	18FY6A	1.48	1.33	1.18	50DC4	1.20	1.08	.96
12R5	1.68	1.51	1.34	18G5*	2.58	2.32	2.06	50EH5	1.50	1.35	1.20
12SA7	2.95	2.66	2.36	18GD6A	1.48	1.33	1.18	50FE5	2.23	2.01	1.78
12SC7	2.60	2.34	2.08	19AU4GTA*	2.18	1.96	1.74	50FK5	1.10	.99	.88
12SF5	1.93	1.73	1.54	19BG6GA	3.33	2.99	2.66	50HC6	1.20	1.08	.96
12SF7	3.10	2.79	2.48	19CG3	1.70	1.53	1.36	50HK6	1.08	.97	.86
12SG7	2.35	2.12	1.88	19CL8A	1.85	1.67	1.48	50L6GT	2.00	1.80	1.60
12SH7	2.70	2.43	2.16	19EA8	2.23	2.00	1.78	50X6	2.93	2.63	2.34
12SJ7	2.15	1.94	1.72	19EZ8	2.25	2.03	1.80	50Y6GT	2.18	1.96	1.74
12SK7	2.85	2.57	2.28	19GQ7	1.90	1.71	1.52	53HK7	4.18	3.76	3.34
12SK7GT	2.23	2.01	1.78	19HR6	1.23	1.10	.98	60FX6	1.48	1.33	1.18
12SL7GT	2.48	2.23	1.98	19HS6	1.20	1.08	.96	80	2.40	2.16	1.92
12SN7GTA	1.93	1.73	1.54	19HV8	1.88	1.69	1.50	84/6Z4	2.60	2.34	2.08
12SQ7	2.48	2.23	1.98	19J6	1.85	1.67	1.48	117L7/M7GT	7.38	6.64	5.90
12T10*	2.33	2.09	1.86	19J8	1.60	1.44	1.28	117N7GT	6.43	5.79	5.14
12V6GT	2.23	2.01	1.78	19K8	1.60	1.44	1.28	117Z3	2.25	2.03	1.80
12W6GT	2.45	2.21	1.96	19KG8	1.55	1.40	1.24	5879	2.50	2.25	2.00
12X4	1.13	1.01	.90	19T8	2.45	2.21	1.96	6973	2.30	2.07	1.84
13CW4	2.53	2.27	2.02	19X8	2.05	1.85	1.64	7025	1.55	1.40	1.24
13DE7	2.38	2.14	1.90	20AQ3/L788	1.63	1.46	1.30	7027A	3.73	3.35	2.98
13DR7	2.85	2.57	2.28	20EZ7	1.70	1.53	1.36	7189	1.93	1.73	1.54
13EM7/15EA7	2.93	2.63	2.34	21GY5	2.33	2.09	1.86	7199	2.45	2.21	1.96
13FD7	2.85	2.57	2.28	21HB5A	2.38	2.14	1.90	7247	1.60	1.44	1.28
13FM7	1.70	1.53	1.36	21JV6	2.33	2.09	1.86	7355	1.84	1.64	1.46
13GB5/XL500	1.85	1.67	1.48	21JZ6	2.43	2.18	1.94	7408	1.68	1.51	1.34
13GF7A	2.35	2.12	1.88	21KA6	2.23	2.00	1.78	7543	1.63	1.46	1.30
13J10	Use 13Z10/13J10			21LG6	3.83	3.44	3.06	7581A	2.28	2.05	1.82
13V10	2.23	2.00	1.78	21LR8*	2.38	2.14	1.90	7591A	1.40	1.26	1.12
				21LU8	2.38	2.14	1.90	7695	2.20	1.98	1.76
				22BH3A	1.55	1.40	1.24	7868	2.38	2.14	1.90
				22BW3	1.70	1.53	1.36	8417	2.83	2.54	2.26
								EM84/6FG6	1.68	1.51	1.34

# Laboratory-Tested Hi-Fi Tubes

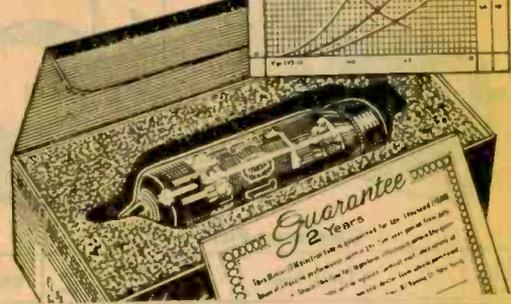
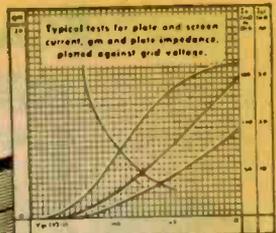
QUALITY TUBES GUARANTEED FOR 10,000 HOURS

Master 10X Series

INDIVIDUALLY TESTED FOR . . .

- Tube-to-Tube Uniformity
- Noise and Microphonics
- Distortion
- Heater Current

Carefully designed and selected tubes, guaranteed for 10,000 hours of efficient and effective performance within a two-year period from the date of purchase. (Does not apply to broken tubes.) Individually laboratory-tested to assure long life. Feature tube-to-tube and section-to-section uniformity. Have stable, close-tolerance characteristics. Highly recommended for any critical circuit application such as in stereo hi-fi components, broadcast and antenna systems, instrumentation, computers, radar, commercial sound and public address systems, and many other devices. Ideal for today's technically advanced and exacting electronic assemblies. Each is packaged and sealed in a plastic-foam cushion for extra protection. Give optimum results with existing equipment as well as in designing new equipment. From Great Britain. Av. shpg. wt. per tube, 5 oz.



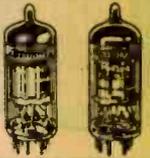
When Ordering, Please Specify Full Dept. No. AND Tube Type No.  
Example: 25 A 21 6AB8

Dept. No.	Tube Type	EACH	Dept. No.	Tube Type	EACH	Dept. No.	Tube Type	EACH
25 A 21	6AB8	2.75	25 A 21	6HG8	3.10	25 A 21	EF86/6HC8	3.10
25 A 21	6A18	2.65	25 A 21	6J6	2.55	25 A 21	EF86/6267	2.50
25 A 21	6AK5	2.60	25 A 21	6L6A	2.60	25 A 21	PCF86/8HG8	2.65
25 A 21	6AL5	1.95	25 A 21	6TR8	2.80	25 A 21	ECC88/6DJ8	3.10
25 A 21	6AO5	2.15	25 A 21	8HG8	2.65	25 A 21	KT88	5.60
25 A 21	6A05A	2.15	25 A 21	9A8	3.25	25 A 21	EBF89/6DC8	2.65
25 A 21	6A08	2.40	25 A 21	12AT7	2.55	25 A 21	EF89/6DA6	2.55
25 A 21	6AT6	2.00	25 A 21	12AU7	2.20	25 A 21	ECC90/6AT6	2.00
25 A 21	6AU6	2.05	25 A 21	12AU7A	2.20	25 A 21	EC90/6C4	2.10
25 A 21	6AU6A	2.05	25 A 21	12AV6	1.95	25 A 21	EK90/6BE6	2.80
25 A 21	6AV6	1.95	25 A 21	12AX7	2.20	25 A 21	EL90/6A05	2.55
25 A 21	6BA6	2.00	25 A 21	12AX7A	2.20	25 A 21	EB91/6AL5	1.95
25 A 21	6BE6	2.10	25 A 21	12DW7	2.50	25 A 21	EBC91/6AV6	1.95
25 A 21	6BL8	2.05	25 A 21	15CW5	3.50	25 A 21	ECC91/6E10	2.55
25 A 21	6BU6A	2.05	25 A 21	5654/6AK5W	4.50	25 A 21	HBC91/12AV6	1.95
25 A 21	6B05	2.15	25 A 21	KT66	3.68	25 A 21	EF93/6BA6	2.00
25 A 21	6B05A	2.15	25 A 21	KT77	4.28	25 A 21	EF94/6AU6	2.05
25 A 21	6C5	2.85	25 A 21	EABC80/6AK8	2.80	25 A 21	ECC95/6ER5	2.40
25 A 21	6DC8	2.65	25 A 21	ECC80/6BL8	3.05	25 A 21	EF95/6AK5	2.25
25 A 21	6DJ8	3.10	25 A 21	ECL80/6AB8	2.75	25 A 21	EL95/6DL5	2.55
25 A 21	6DL5	2.55	25 A 21	PCF80/9A8	3.25	25 A 21	ECC97/6FV5	2.35
25 A 21	6DX8	2.85	25 A 21	ECC81/12AT7	2.65	25 A 21	EF13/6EH7	2.60
25 A 21	6EH7	2.60	25 A 21	ECH81/6AJ8	2.65	25 A 21	EF184/6E17	2.60
25 A 21	6E17	2.60	25 A 21	ECC82/12AU7	2.20	25 A 21	ECC189/6ES8	3.50
25 A 21	6ER5	2.40	25 A 21	ECC83/12AX7	2.20	25 A 21	6267	2.50
25 A 21	6ES8	3.50	25 A 21	ECL84/6DX8	2.85	25 A 21	7025	2.35
25 A 21	6EU7	3.35	25 A 21	EL84/6B05	2.15	25 A 21	7247/12DW7	2.55
25 A 21	6FV5	3.50	25 A 21	PL84/15CW5	2.50			
25 A 21	6GK5	2.40	25 A 21	ECC85/6A08	2.40			

## MULLARD MATCHED PAIRS FOR SUPERIOR HI-FI PERFORMANCE

For optimum performance, it is important that the incoming signal be amplified proportionately in the push-pull output tubes in an audio amplifier. This prevents a loss of power as well as distortion of the complex wave forms of the audio signal and their harmonics.

Mullard's laboratory-balanced matched pairs are designed for this purpose. Matched pairs are available for virtually every high-fidelity amplifier. They will perform in each circuit exactly as the equipment was designed to operate. Av. shpg. wt.. 10 oz.



When Ordering, Specify Dept. No. (25 A 21) AND Tube Type No.

Dept. No.	Tube Type	PER PAIR	Dept. No.	Tube Type	PER PAIR	Dept. No.	Tube Type	PER PAIR
25 A 21	6A05A/EL90MP	2.48	25 A 21	45B5/UL84MP	2.96	25 A 21	EL90MP	Use 6A05A
25 A 21	6AW8/ECL86MP	Use 6GW8	25 A 21	50B8M/UCL82MP	3.48	25 A 21	EL95MP	Use 6DL5
25 A 21	6BM8/ECL82MP	3.30	25 A 21	ECL86MP	3.43	25 A 21	KT66MP	8.00
25 A 21	6B05/EL84MP	3.05		EL34MP	Use 6CA7	25 A 21	KT77MP	9.25
25 A 21	6CA7/EL34MP	5.93		EL37MP	Use 6CA7	25 A 21	KT88MP	11.95
25 A 21	6CW5/EL86MP	2.87	25 A 21	EL84MP	2.47	25 A 21	UCL82MP	Use 50B8M
25 A 21	6DL5/EL95MP	3.37		EL86MP	Use 6CW5	25 A 21	UL84MP	Use 45B5
25 A 21	6GW8/ECL86MP	3.43				25 A 21	7189MP	3.21

## ARGOS SERVICEMEN'S TUBE CADDIES

### JUNIOR TUBE CADDY

1150

Type TC-200. Easy-to-carry—only two-thirds the size and weight of ordinary caddies. Perfect for quick servicing trips. Holds up to 143 tubes with room for meters and tools. "Break-open" section has cover and snap lock for keeping small parts in order. Gray vinyl covering. Clasp lock. Plastic handle. 12 1/2 x 15 3/4 x 8". Shpg. wt., 8 lbs.



### "CARRY-ALL" CADDY

1795

Type TC-400. One of the most popular caddies sold. Carries up to 262 tubes with room for soldering gun, meter, probes, tools, and assorted small parts. "Break-away" design permits quick access to all sections. Has two clasp locks; plastic carrying handle. Scuffproof gray vinyl covering. Size, 15 x 21 x 8". Shpg. wt., 11 lbs.



### SUPER TUBE CADDY

3195

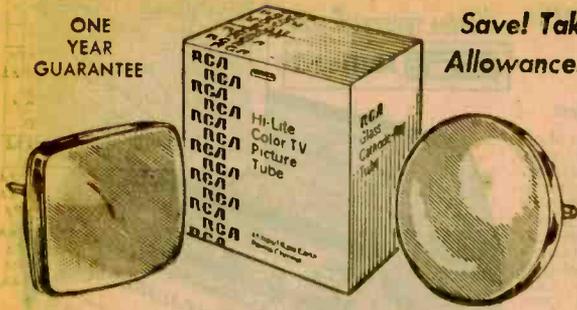
Type TC-600. Most rugged, durable tube caddy ever built. Big double door caddy for tubes, tools and parts. Saves extra trips—carries a full load of up to 325 tubes with space for test equipment. Removable 3/4" deep small parts tray. Steel strips protect bottom and sides. Gray vinyl. 16 1/2 x 24 x 8 1/2". Shpg. wt., 22 lbs.



Always Specify Dept. No. and Mfr's Tube Type No. When Ordering

# RCA Guaranteed TV Picture Tubes

ONE  
YEAR  
GUARANTEE



Save! Take Advantage of Allied's Generous Trade-In Allowances by Returning Your Used Color Picture Tube

HI-LITE AND COLORAMA COLOR TUBES ARE SAME QUALITY TUBES AS USED IN BRAND-NEW SETS

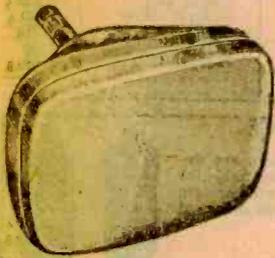
RCA Hi-Lite Color Tubes. All-new with advanced green and blue sulphide phosphors, plus rare earth red phosphor for finest color fidelity. RCA Colorama Tubes. Contain used materials carefully inspected to meet RCA's standards. Both guaranteed one year (tube replaced at no cost if defect occurs due to workmanship, materials or construction). Old tubes returned to Allied for allowance must be shipped prepaid in same carton in which tube was received. Specify Dept. No. (25 A 28), "Ship." Letter, and Tube Type.

## Colorama Picture Tubes

Ship.	Tube Type	Wt. Lbs.	Bulb Allow.	EACH
Z	C-11 WP22	15	5.00	92.30
Z	C-15LP22	17	20.00	98.09
Z	C-15NP22	16	20.00	95.33
Z	C-19GVP22/19EXP22	29	25.00	112.50
Z	C-19GWP22/19EYP22	30	25.00	113.84
Z	C-19HNP22	29	25.00	155.89
Z	C-21AXP22A	45	10.00	81.37
Z	C-21CYP22A	45	10.00	74.53
Z	C-21FBP22	45	17.50	77.94
Z	C-21FJP22	54	17.50	84.78
Z	C-21GUP22/21FBP22A	46	17.50	84.28
Z	C-21GVP22/21FJP22A	54	17.50	100.50
Z	C-22JP22	42	25.00	127.10
Z	C-23EGP22	52	15.00	189.53
Z	C-25AJP22	34	30.00	175.04
Z	C-25AP22A	52	30.00	103.25
Z	C-25BP22A	52	30.00	97.77
Z	C-25XP22/25AP22A	52	30.00	103.25
Z	C-25YP22/25BP22A	52	30.00	97.77

## Hi-Lite All-New Color Picture Tubes

Ship.	Tube Type	Wt. Lbs.	Bulb Allow.	EACH
Z	H-19GVP22 Replaces: 19EXP22; 4901B22; 490LB22	29	25.00	136.06
Z	H-19GWP22 Replaces: 19EYP22; 19FMP22; 19FXP22	30	25.00	140.85
Z	H-21GUP22 Replaces: 21AXP22.A; 21CPV22.A; 21FBP22.A	46	17.50	104.61
Z	H-21GVP22 Replaces: 21FJP22.A; 21FKP22	54	17.50	111.45
Z	H-19HNP22 Replaces: 19HNP22	29	25.00	169.22
Z	H-22KP22 Replaces: 22KP22; 22RP22	35	30.00	161.37
Z	H-22UP22 Replaces: 22UP22; 22XP22	52	30.00	185.66
Z	H-25AJP22 Replaces: 25ASP22; 25AGP22; 25AJP22; 25ADP22	48	30.00	187.42
Z	H-25XP22 Replaces: 25AP22; HR/25AP22A; RE25AP22.A; REA25AP22A; 25CP22; REA25CP22; 25GP22.A; RE25GP22; 25SP22	52	30.00	148.37



## RCA BLACK-AND-WHITE PICTURE TUBES

ALL TUBES GUARANTEED ONE FULL YEAR

- Premium Quality Name-Brand Tubes At Lowest Cost
- Replace Almost All Existing Types
- Each Carries Same Guarantee as All-New Picture Tube
- Most Have Aluminized Screens

Provide greater contrast, brighter picture. All parts and materials used are brand new, except for the envelope, which is carefully inspected to meet standards of the original new envelope. Where alternate tubes are indicated, the substitute is interchangeable with the original. New

tube types are added to stock as soon as released by the manufacturer. Allied provides you with complete, immediate satisfaction and personalized service. Types marked with \* are not illuminated. To order: Specify Dept. No. (25 A 28), "Ship." Letter, and Tube Type.

Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH
X	8DP4*	8	30.66	U	16BT4	...	Use 16CHP4A	U	17ATP4A	...	Use 17BJP4
X	8XP4	8	34.66	U	16BV4	...	Use 16CMP4A	U	17AVP4	...	Use 17BJP4
X	8YP4*	8	36.39	U	16BW4	...	Use 16BP4	U	17AVP4/A	...	Use 17BJP4
X	9AEP4	5	21.28	U	16CP4	...	Use 16LP4A	U	17BJP4	17	24.13
X	9WP4	10	22.66	U	16CAP4	...	Use 16BP4	U	17BP4B	...	Use 17BP4D
X	10BP4C/D	...	Use 10FP4A	U	16CEP4	...	Use 16CMP4A	U	17BP4D	20	22.53
X	10CP4*	...	Use 10FP4A	U	16CHP4	...	Use 16CHP4A	U	17BRP4	...	Use 17DSP4
X	10EP4*	...	Use 10BP4A	U	16CHP4A	22	32.10	U	17BUP4	...	Use 17BJP4
X	10FP4A	13	42.00	U	16CJP4A	...	Use 16CMP4A	U	17BZP4	...	Use 17DSP4
X	11AP4	...	Use 11HP4A	U	16CMP4	...	Use 16CMP4A	U	17CAP4	...	Use 17DSP4
U	11BP4	...	Use 11HP4A	U	16CMP4A	23	32.60	U	17CBP4*	...	Use 17BJP4
X	11CP4	4	25.80	U	16CTP4	...	Use 16BP4	U	17CDP4	14	32.61
X	11HP4	...	Use 11HP4A	U	16CUP4	...	Use 16CMP4A	U	17CFP4	17	24.54
X	11HP4A	4	24.73	U	16CUP4	...	Use 16CMP4A	U	17CKP4	...	Use 17DSP4
X	12BNP4	...	Use 12BNP4A	U	16GP4B*	...	Use 16WP4A	U	17CLP4	...	Use 17BJP4
U	12BNP4A	5	23.33	U	16KP4	...	Use 16RP4B	U	17CP4*	16	28.46
U	12CFP4	...	Use 12CNP4	U	16KP4/A	...	Use 16RP4B	U	17CWP4	...	Use 17DSP4
U	12CP4	...	Use 12BNP4A	U	16LP4A	25	20.88	U	17CYP4	17	31.39
U	12CNP4	7	25.33	U	16QP4*	...	Use 16RP4B	U	17DAP4	13	31.40
U	12DFP4	7	21.28	U	16RP4A	...	Use 16RP4B	U	17DHP4	...	Use 17EFP4
U	12DFP4	7	30.00	U	16RP4B	22	20.66	U	17DKP4	...	Use 17DSP4
U	16AP4A	...	Use 16LP4A	U	16SP4A*	...	Use 16WP4A	U	17DLP4	...	Use 17DSP4
U	16ASP4	...	Use 16CMP4A	U	16TP4*	21	28.20	U	17DQP4	13	25.33
U	16ATP4	...	Use 16CHP4A	U	16UP4*	...	Use 16RP4B	U	17DRP4	14	31.98
U	16AXP4	...	Use 16CMP4A	U	16VP4*	...	Use 16WP4A	U	17DSP4	13	26.60
U	16AYP4	9	Use 16BQP4	U	16WP4A*	21	30.66	U	17DTP4	...	Use 17DSP4
U	16BP4	...	Use 16BP4A	U	16XP4*	...	Use 16RP4B	U	17DXP4	14	24.40
U	16BP4	22	31.85	U	16YP4*	...	Use 16WP4A	U	17DZP4	...	Use 17DXP4
U	16BKP4	...	Use 16CHP4A	U	16ZP4*	...	Use 16LP4A	U	17EAP4	...	Use 17HP4A
U	16BP4	...	Use 16BP4A	U	17AP4*	...	Use 17BP4D	U	17EBP4	...	Use 17EFP4
U	16BP4	...	Use 16BP4A	U	17ATP4*	...	Use 17BJP4	U	17EFP4	24	24.40

Listings Continued on Following Page

# RCA Guaranteed TV Picture Tubes (Cont'd)

HOW TO ORDER: Specify Dept. No. 25 A 28; "X", "U", or "Z" Shipment; and Tube Type No.

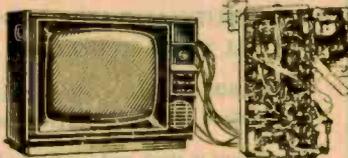
Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH
Z	19AZP4	...	Use 19AVP4	Z	19GRP4	...	Use 19DQP4	Z	21EVP4	...	Use 21FDP4	Z	23ERP4	...	Use 23EKP4
Z	19BDP4	24	33.00	Z	19GTP4	...	Use 19FEP4B	Z	21FAP4	...	Use 21EMP4/21EQP4	Z	23ESP4	...	Use 23HFP4A
Z	19BHP4	...	Use 19AVP4	Z	19XP4	...	Use 19AVP4	Z	21FDP4	29	40.33	Z	23ETP4	41	48.26
Z	19BLP4	...	Use 19AVP4	Z	19YP4	...	Use 19AVP4	Z	21FDP4	...	Use 21CBP4A	Z	23EWP4/A	...	Use 23EQP4
Z	19BMP4	...	Use 19AFP4	Z	19ZP4	...	Use 19AVP4	Z	21FDP4	...	Use 21CBP4A	Z	23EYP4	44	49.00
Z	19BRP4	...	Use 19DRP4	Z	20CP4*	...	Use 20DP4D	Z	21FP4C	...	Use 21FP4D	Z	23EZP4	...	Use 23BKP4
Z	19BSP4	...	Use 19AVP4	Z	20CP4A/B/C	...	Use 20DP4D	Z	21FP4D	35	28.80	Z	23FBP4	40	47.00
Z	19BTP4	...	Use 19AVP4	Z	20CP4D	...	Use 20DP4D	Z	21FVP4	19	40.96	Z	23FCP4	...	Use 23GJP4A
Z	19BVP4	...	Use 19AVP4	Z	20DP4C	24	31.40	Z	21FWP4	...	Use 21FVP4	Z	23FDP4	...	Use 23GJP4A
Z	19BWP4	...	Use 19AYP4	Z	20XP4	...	Use 20TP4	Z	21FZP4	...	Use 21FVP4	Z	23FEP4	...	Use 23ENP4
Z	19BXP4	...	Use 19AYP4	Z	20YP4	...	Use 20SP4	Z	21GAP4A	23	42.08	Z	23FHP4	...	Use 23GJP4A
Z	19CAP4	...	Use 19AVP4	Z	21ACP4/A	...	Use 21AMP4B	Z	21MP4	...	Use 21YP4B	Z	23FJP4	...	Use 23ETP4
Z	19CDP4	...	Use 19CXP4	Z	21AFP4*	...	Use 21YP4A	Z	21WP4A/B	31	29.46	Z	23FLP4	...	Use 23EKP4
Z	19CFP4	...	Use 19CXP4	Z	21ALP4/A/B	...	Use 21CBP4A	Z	21XP4A/B	33	29.46	Z	23FMP4	...	Use 23HFP4A
Z	19CHP4	24	33.33	Z	21AMP4A/B	35	23.33	Z	21YP4A/B	32	21.60	Z	23FP4A	34	39.86
Z	19CJP4	...	Use 19AVP4	Z	21ANP4/A	...	Use 21CBP4A	Z	21ZP4B/C	33	21.60	Z	23FSP4	40	49.60
Z	19CKP4	...	Use 19CHP4	Z	21AP4*	...	Use 21ZP4C	Z	23ACP4	...	Use 23AP4	Z	23FVP4/A	...	Use 23HFP4A
Z	19CLP4	...	Use 19BDP4	Z	21AQP4*	...	Use 21AMP4B	Z	23AFP4	...	Use 23YP4	Z	23GP4	...	Use 23CP4
Z	19CMP4	26	33.33	Z	21ASP4*	...	Use 21XP4B	Z	23AHP4	39	41.00	Z	23BP4	...	Use 23HFP4A
Z	19CQP4	...	Use 19CXP4	Z	21ATP4/A/B	...	Use 21CBP4A	Z	23ALP4	...	Use 23CQP4	Z	23GEP4	...	Use 23ENP4
Z	19CRP4	...	Use 19BDP4	Z	21AUP4/A/B	...	Use 21AVP4C	Z	23ANP4	...	Use 23BQP4	Z	23GJP4/A	34	48.40
Z	19CSP4	...	Use 19CHP4	Z	21AVP4B/C	24	26.33	Z	23ARF4	35	38.50	Z	23GP4	...	Use 23CP4
Z	19CUP4	...	Use 19CAMP4	Z	21AYP4*	...	Use 21XP4B	Z	23ASP4	36	41.00	Z	23GSP4	40	49.60
Z	19CXP4	26	33.33	Z	21BAP4	...	Use 21CBP4A	Z	23ATP4	...	Use 23BKP4	Z	23GTP4	...	Use 23ETP4
Z	19CYP4	...	Use 19AVP4	Z	21BCP4	...	Use 21YP4B	Z	23AUP4	...	Use 23AHP4	Z	23GWP4	...	Use 23GJP4A
Z	19CZP4	...	Use 19DQP4	Z	21BDP4	...	Use 21AVP4C	Z	23AVP4	...	Use 23CP4	Z	23GXP4	...	Use 23GSP4
Z	19DAP4	...	Use 19DQP4	Z	21BNP4	...	Use 21CBP4A	Z	23A WP4	...	Use 23BP4	Z	23HFP4A	40	48.40
Z	19DEP4	...	Use 19AVP4	Z	21BSP4	...	Use 21AMP4B	Z	23BDP4	...	Use 23YP4	Z	23HGP4	40	49.60
Z	19DFP4	...	Use 19CHP4	Z	21BTP4	...	Use 21CBP4A	Z	23BGP4	36	44.33	Z	23HLP4	...	Use 23HFP4A
Z	19DLP4	...	Use 19CHP4	Z	21CBP4A	33	20.80	Z	23BHP4	...	Use 23BGP4	Z	23HLP4	...	Use 23GSP4
Z	19DQP4	26	36.40	Z	21CEP4/A	...	Use 21EMP4/21ENP4	Z	23BJP4	35	41.00	Z	23HP4	...	Use 23CP4
Z	19DRP4	26	36.40	Z	21CMP4	...	Use 21CBP4A	Z	23BKP4	44	45.66	Z	23HQP4	...	Use 23HGP4
Z	19DSP4	26	36.40	Z	21CQP4	20	31.53	Z	23BLP4	...	Use 23BKP4	Z	23HUP4A	40	48.40
Z	19DTP4	...	Use 19DQP4	Z	21CUP4	...	Use 21AMP4B	Z	23BMP4	...	Use 23YP4	Z	23HXP4	...	Use 23HFP4A
Z	19DUP4	19	36.40	Z	21CVP4	...	Use 21CBP4A	Z	23BNP4	...	Use 23CP4	Z	23JEP4	36	49.53
Z	19DWP4	...	Use 19DQP4	Z	21CWP4	...	Use 21CBP4A	Z	23BP4	40	44.33	Z	23JP4	43	44.33
Z	19EAP4	...	Use 19FEP4B	Z	21CXP4	...	Use 21DSP4	Z	23BTP4	...	Use 23YP4	Z	23KPA4	...	Use 23FPA4
Z	19EBP4	26	35.00	Z	21CZP4	...	Use 21DEP4A	Z	23BVP4	...	Use 23YP4	Z	23MP4/A	...	Use 23FPA4
Z	19EGP4	26	35.00	Z	21DAP4	...	Use 21DEP4A	Z	23BWP4	...	Use 23YP4	Z	23NP4	40	39.86
Z	19EJP4	...	Use 19FEP4B	Z	21DEP4A	26	27.66	Z	23BZP4	...	Use 23CGP4	Z	23TP4	...	Use 23YP4
Z	19ELP4	...	Use 19AVP4	Z	21DEP4A	...	Use 21EMP4/21EQP4	Z	23CBP4	35	45.00	Z	23UP4	...	Use 23BQP4
Z	19EMP4	...	Use 19EBP4	Z	21DFP4A	...	Use 21EMP4/21EQP4	Z	23CGP4	40	41.00	Z	23WP4	...	Use 23FPA4
Z	19ENP4/A	...	Use 19FEP4B	Z	21DHP4	32	31.46	Z	23CP4	36	44.33	Z	23XP4	...	Use 23YP4
Z	19EVP4	...	Use 19DQP4	Z	21DLP4	30	25.93	Z	23CP4A	...	Use 23CP4	Z	23YP4	48	45.66
Z	19EWP4	...	Use 19DQP4	Z	21DMP4	...	Use 21EMP4/21EQP4	Z	23CQP4	36	39.86	Z	24ADP4	...	Use 24CP4B
Z	19EZP4	30	40.46	Z	21DNP4	...	Use 21CBP4A	Z	23CZP4	...	Use 23AHP4	Z	24AEP4	46	28.96
Z	19FBP4	...	Use 19EGP4	Z	21DQP4	...	Use 21DLP4	Z	23DAP4	28	42.26	Z	24AHP4	40	41.86
Z	19FCP4/A	...	Use 19DQP4	Z	21DSP4	37	27.66	Z	23DBP4	30	39.26	Z	24ALP4	...	Use 24AHP4
Z	19FDP4	...	Use 19DQP4	Z	21EAP4	...	Use 21FDP4	Z	23DLP4	...	Use 23ENP4	Z	24ANP4	...	Use 24AEP4
Z	19FEP4/A/B	26	36.40	Z	21EDP4	...	Use 21EMP4/21EQP4	Z	23DLP4A	...	Use 23ENP4	Z	24AUP4	39	35.60
Z	19FJP4/A	...	Use 19DQP4	Z	21EFP4	...	Use 21EMP4/21EQP4	Z	23DNP4	...	Use 23BKP4	Z	24AVP4	...	Use 24BEP4
Z	19FLP4	26	35.40	Z	21EHP4	...	Use 21EMP4/21EQP4	Z	23DQP4	...	Use 23BKP4	Z	24BEP4	36	52.46
Z	19FSP4	...	Use 19FEP4B	Z	21EMP4	...	Use 21EMP4/21EQP4	Z	23DSP4/A	...	Use 23ENP4	Z	24CP4A/B	33	29.06
Z	19FTP4	...	Use 19FLP4	Z	21EP4	...	Use 21EMP4/21EQP4	Z	23DYP4	...	Use 23ETP4	Z	24DP4/A	...	Use 24AEP4
Z	19FWP4	...	Use 19AYP4	Z	21EP4B/C	35	28.80	Z	23DZP4	...	Use 23EQP4	Z	24QP4*	...	Use 24CP4B
Z	19GAP4	19	40.46	Z	21EMP4	29	28.86	Z	23ECP4	...	Use 23ENP4	Z	24TP4	...	Use 24CP4B
Z	19GBP4	...	Use 19DQP4	Z	21EQP4	...	Use 21EQP4	Z	23EDP4	...	Use 23EKP4	Z	24VP4/A	...	Use 24CP4B
Z	19GEP4	...	Use 19GEP4A	Z	21ESP4	...	Use 21EMP4/21EQP4	Z	23EHP4	...	Use 23EKP4	Z	24XP4*	...	Use 24CP4B
Z	19GEP4A	19	34.26	Z	21ETP4	...	Use 21EMP4/21EQP4	Z	23EJP4	29	46.40	Z	24YP4	...	Use 24AEP4
Z	19GFP4	...	Use 19GER4A	Z	21ETP4	...	Use 21EMP4/21EQP4	Z	23ENP4	33	45.06	Z	24ZP4	...	Use 24AEP4
Z	19GHP4	...	Use 19DUP4	Z	21ETP4	...	Use 21EMP4/21EQP4	Z	23EP4	...	Use 23HFP4A	Z	23ORB4	...	Use 19WP4
Z	19GJP4/A	...	Use 19DQP4	Z	21ETP4	...	Use 21EMP4/21EQP4	Z	23EQP4	40	41.80	Z	310AVB4	...	Use 12CNP4

**IMPORTANT:** Be sure to specify dept. no. (25 A 28) shipping letter ("X", "U" or "Z") and tube type no. Example: 25 A 28 H-15P22. Dept. no. indicates RCA picture tube listed in 1970 Catalog No. 290. Shipping letter indicates method of shipment. "X" items are shipped

Parcel Post. "U" items are too large for Parcel Post and are usually shipped by Railway Express (REA). "Z" items, too heavy for Parcel Post are usually shipped by truck. Tube type no. indicates exact tube ordered.

## RCA MARK II COLOR TV TEST JIG

- Trouble-Shoot TV in Customer's Home
- Lightweight for Portability



Trouble-shoot TV chassis, including degaussing circuits. For RCA 90° rectangular chassis (18" diameter, 180 sq. in.; 20" diameter, 227 sq. in.; 23" diameter, 295 sq. in.) plus RCA 21" 70° round receivers made within the past 10 years. Deflection yoke, blue lateral magnet assembly, convergence components. Size, 19x24 1/2 x 16". Less CRT tube (order below), speaker.

- 21 A 4246 U. Shpg. wt., 32 lbs. .... 99.50
- 21 A 4247. 10J115 Extension Cables, Adapter Kit for Mark II. For color. Shpg. wt., 2 lbs. .... 20.85
- 25 A 28 Z. 1830P22 19" CRT for Mark II. Shpg. wt., 46 lbs. .... 63.56

## RCA MARK III DELUXE PORTABLE TEST JIG

- With Needed Deflection Components
- Matched Components for Accuracy
- Makes Testing Faster and Easier



Identify problems in the tube neck and components without removing chassis. For RCA 90° rectangular chassis (18" diameter, 180 sq. in.; 20" diameter, 227 sq. in.; 23" diameter, 295 sq. in.) plus RCA 21" 70° round receivers made in past 10 years. Deflection yoke, purity and blue lateral magnet assembly. Size, 15x17 3/4 x 17 3/4". Less CRT tube (order below).

- 21 A 4221 U. Shpg. wt., 16 lbs. .... 99.50
- 21 A 4222. 10J116 Extension Cables, Adapter Kit for Mark III. For color. Shpg. wt., 2 lbs. .... 19.20
- 25 A 28 Z. 1830P22 19" CRT for Mark III. Vt., 40 lbs. .... 63.56

SEE ALLIED'S COMPLETE STOCK OF QUALITY PICTURE TUBE TESTERS

Specify Dept. No. 25 A 28; "X", "U" or "Z" Shipment; and Tube Type No.

# Special-Purpose High Reliability Tubes

## ORDERING INFORMATION

When ordering, be sure to include the full Stock No. of each tube you need. This consists of two parts: 1. The Department No., and 2. The Tube Type No. i.e., 59 A 1 (Dept. No.) OA2 (Tube Type); thus 59 A 1-OA2.

Special-Purpose Tubes Are Available on Credit Terms . . . See Page 438

Highly reliable, special-purpose tubes from famous manufacturers. Meet exacting specifications in commercial, military, Amateur, and experimental uses. Carefully made and thoroughly tested. Spe-

cial high-fidelity tubes are followed by brackets in table below. (Type in brackets indicates receiving tube prototype.) All are directly interchangeable; need no rewiring.

### DEPARTMENT NO. KEY TO NAMES OF MANUFACTURERS

59 A 1	Radio Corporation of America	59 A 4	Amperex
59 A 2	Raytheon	59 A 12	Sylvania Electric



Stock No.			Stock No.			Stock No.			Stock No.		
Dept.	Tube Type	EACH	Dept.	Tube Type	EACH	Dept.	Tube Type	EACH	Dept.	Tube Type	EACH
59 A 1	OA2	1.32	59 A 1	812A	7.20	59 A 2	5886	5.00	59 A 1	6661/6BH6	1.34
59 A 4	OA2	1.26	59 A 1	816	4.50	59 A 4	5894	29.00	59 A 1	6663/6AL5	.92
59 A 1	OA3	1.54	59 A 1	866A	3.75	59 A 1	5902	4.80	59 A 1	6677/6CL5	1.85
59 A 1	OA4G	1.86	59 A 1	868	6.85	59 A 1	5915	1.62	59 A 1	6678/6UBA	1.62
59 A 1	OB2	1.37	59 A 1	872A	10.70	59 A 1	5915	1.36	59 A 1	6679/12AT7	1.50
59 A 4	OB2	1.32	59 A 1	884	2.28	59 A 1	5964	1.55	59 A 1	6680/12AU7A	1.22
59 A 1	OB2WA	2.40	59 A 1	922	3.75	59 A 1	5965	1.92	59 A 4	6688A	8.75
59 A 1	OC2	1.50	59 A 1	923	5.50	59 A 2	CK5965A	1.90	59 A 1	6883	4.25
59 A 1	OC3	1.50	59 A 1	925	5.95	59 A 1	6005	3.23	59 A 4	6922/E88CC	4.87
59 A 1	OD3	1.44	59 A 1	926	5.75	59 A 4	6007	2.15	59 A 4	6977	2.80
59 A 2	1AD4	2.80	59 A 1	927	7.15	59 A 1	6012	7.65	59 A 4	7025	1.40
59 A 2	1AG4	7.30	59 A 1	929	3.65	59 A 1	6021	3.50	59 A 1	7054	1.54
59 A 4	1M3/DM70	2.30	59 A 1	930	5.60	59 A 1	6072	3.90	59 A 1	7056	.92
59 A 1	1P39	3.45	59 A 1	931A	12.10	59 A 2	CK6072A	3.88	59 A 1	7059	1.48
59 A 1	1P40	5.60	59 A 2	1026	5.25	59 A 1	6073	3.00	59 A 1	7060	1.75
59 A 1	2D21	1.29	59 A 1	1612	5.77	59 A 1	6074	3.45	59 A 1	7061	1.16
59 A 1	2E26	3.95	59 A 1	1614	4.93	59 A 1	6080	5.33	59 A 4	7062	2.75
59 A 1	2X2A	4.20	59 A 1	1619	6.23	59 A 2	CK/6087/		59 A 4	7119	4.05
59 A 1	3A4	1.55	59 A 1	1620	7.55	59 A 2	5Y3WGTB	5.75	59 A 4	7167	1.41
59 A 1	3A5	2.03	59 A 1	1622	5.35	59 A 2	6088	3.50	59 A 4	7189	1.55
59 A 2	5R4GYA	2.05	59 A 1	1625	6.30	59 A 1	6111	3.70	59 A 4	7308	5.20
59 A 1	5R4GYB	2.03	59 A 1	1629	2.04	59 A 1	6112	4.15	59 A 1	7360	3.77
59 A 12	5UP1	21.10	59 A 1	1635	4.20	59 A 1	6136	2.70	59 A 1	7551	3.37
59 A 12	5Y3WGTB	4.05	59 A 1	2050	2.37	59 A 1	6146A	4.30	59 A 1	7558	3.49
59 A 1	6AK6	1.40	59 A 1	2050A	2.03	59 A 1	6146B/8298A	5.13	59 A 1	7586	3.35
59 A 2	6AN5	4.17	59 A 2	2050W	7.50	59 A 1	6146W	6.60	59 A 1	7587	5.20
59 A 1	6AS6	3.43	59 A 1	5557	9.50	59 A 1	6189	3.70	59 A 1	7735B	175.00
59 A 1	6AS7G	4.93	59 A 1	5581	6.20	59 A 1	6197	2.30	59 A 4	7737	8.35
59 A 12	6D4	3.30	59 A 1	5582	7.45	59 A 1	6201	2.95	59 A 4	7788	10.20
59 A 1	6DJ8/ECC88	1.89	59 A 1	5583	9.30	59 A 1	6202	2.69	59 A 1	7895	3.35
59 A 4	6DJ8/ECC88	1.89	59 A 1	5642	3.53	59 A 1	6211	2.15	59 A 1	7898	1.34
59 A 1	6J4	4.02	59 A 1	5651A	1.78	59 A 12	6216	4.15	59 A 1	7905	3.85
59 A 1	6X4W	1.60	59 A 1	5654	2.41	59 A 2	CK6265	4.10	59 A 12	7963	8.00
59 A 1	12A17WA	2.53	59 A 1	5663	2.20	59 A 4	6267/EF86	1.30	59 A 12	7984	5.35
59 A 4	EL34(6CA7)	2.68	59 A 1	5670	2.45	59 A 1	6293	5.50	59 A 1	8008	11.50
59 A 4	GZ34(5AR4)	2.62	59 A 2	5672	2.27	59 A 1	6350	1.85	59 A 1	8032	4.90
59 A 4	EL37	5.43	59 A 2	5676	3.05	59 A 4	6360A	6.25	59 A 1	8056	5.00
59 A 4	EABC80	1.88	59 A 1	5678	2.30	59 A 1	6417	3.33	59 A 1	8077/7054	1.40
59 A 4	ECF80(6BL8)	1.35	59 A 1	5686	3.37	59 A 2	6418	3.20	59 A 4	8228	2.90
59 A 4	EF80(6BX6)	2.28	59 A 1	5687	4.05	59 A 4	6463	3.50	59 A 4	8233	16.25
59 A 4	EZ80(6V4)	.75	59 A 1	5691	8.75	59 A 12	6476A	14.95	59 A 1	8393	3.45
59 A 4	ECC81(12AT7)	1.93	59 A 1	5692	8.25	59 A 2	6485	2.05	59 A 1	9001	5.38
59 A 4	ECH81(6AJ8)	1.38	59 A 1	5693	6.60	59 A 1	6550	4.59	59 A 1	9002	4.14
59 A 4	EZ81(6CA4)	1.23	59 A 1	5696	1.95	59 A 1	6550V1	9.25	59 A 1	9003	5.38
59 A 4	ECC82(12AU7A)	1.15	59 A 2	5702	4.20	59 A 1	6626/OA2WA	3.33			
59 A 1	83	1.89	59 A 1	5718	3.65						
59 A 4	ECC83(12AX7A)	1.25	59 A 1	5719	3.15						
59 A 4	EL84(6BQ5)	1.48	59 A 1	5725	3.15						
59 A 4	EM84(6FG6)	4.55	59 A 1	5725/6AS6W	3.12						
59 A 4	EL84MP(6BQ5)	2.58	59 A 1	5726	1.55						
59 A 4	ECC85(6AQ8)	1.50	59 A 1	5727	2.90						
59 A 4	EF85(6BY7)	1.68	59 A 1	5749	2.20						
59 A 4	ECL86(6GW8)	1.53	59 A 1	5750	3.45						
59 A 4	EF86(6Z67)	1.30	59 A 1	5751	2.55						
59 A 4	EL86(6CW5)	1.38	59 A 2	5755	9.30						
59 A 4	UF86	2.65	59 A 1	5763	2.45						
59 A 4	EBF89(6DC8)	1.53	59 A 2	5784	5.00						
59 A 4	EF89(6DA6)	2.10	59 A 1	5814A	2.35						
59 A 4	90C1	2.25	59 A 1	5823	1.72						
59 A 4	EZ90(6X4)	.90	59 A 1	5824	3.60						
59 A 4	EF91	3.53	59 A 1	5840	5.35						
59 A 4	EF95	2.25	59 A 1	5842/417A	7.35						
59 A 4	EL95(6DL5)	1.55	59 A 4	5842	7.35						
59 A 12	GB407A	5.90	59 A 1	5844	2.40						
59 A 12	GB408A	4.95	59 A 12	5845	9.95						
59 A 2	417A See 5842/417A		59 A 4	5847	9.55						
59 A 2	512AX	4.35	59 A 1	5876A	6.90						
59 A 2	533AX	4.40	59 A 2	CK5879	1.95						
59 A 1	807	4.20	59 A 1	5881	3.10						
59 A 1	811A	7.75									

## ALLIED STOCKS A WIDE VARIETY OF HIGH-RELIABILITY AND SPECIAL-PURPOSE TUBES FOR ALL YOUR ELECTRONIC REQUIREMENTS

- Over 800 Types
- Major Manufacturers
- Immediate Shipment
- Write for Free Information

Allied keeps in stock and ready for immediate shipment over 800 types of special-purpose and high-fidelity tubes. Due to space requirements however, we can only list the most popular of these tubes in our catalog. If you need a special-purpose or high-fidelity tube type not listed, simply write Allied for prompt information. Also, everything we sell (including special-purpose tubes) is available on Credit Terms . . . see page 438 for complete details and information.

# Eveready Reliable Long-Life Batteries

## ALKALINE ENERGIZER BATTERIES

For continuous operation devices: portable TV sets, flashguns, etc. High amperage and constant output for long life. \*Indicates rechargeable. Sizes: E90-"N", E91-"AA", E92-"AAA", E93-"C", E95-"D". Av. shpg. wt., 10 oz.



Stock No.	Mfr's Type	V	Size	PRICE	Replaces	
					Mallory Burgess	PRICE
18 A 5440	E90	1 1/2	1 1/2 dia. x 1 1/8"	Pkg. of 2/.66	Mn1900AL-N	
18 A 5426	E91BP-4	1 1/2	9/16 dia. x 1 1/2"	Pks. of 4/1.57	Mn1500AL-9	
18 A 5348	E92	1 1/2	1 1/2 dia. x 1 1/4"	.39 ea.	Mn2400AL-7	
18 A 5347	E93BP-2	1 1/2	1 1/2 dia. x 1 1/16"	Pkg. of 2/.99	Mn1400AL-1	
18 A 5993	E94	1 1/2	1 1/2 x 1 1/2"	.52 ea.		
18 A 5346	E95BP-2	1 1/2	1 1/2 dia. x 2 1/32"	Pkg. of 2/1.27	Mn1300AL-2	
18 A 5856	E177	9	3 1/4 dia. x 1 1/2 x 1/2"	1.48 ea.	TR-177 H-177	
18 A 5996	523	4 1/2	2 1/2 dia. x 1 1/2"	1.00 ea.	PX-21 AL-133	
18 A 5997	531	4 1/2	3/8 dia. x 2 1/6"	1.00 ea.	PX-19	
18 A 5857	*560	7 1/2	2 1/2 x 1 1/2 x 1 1/2"	4.62 ea.		
18 A 5858	*561	15	8 1/2 x 2 1/4 x 5 1/8"	10.62 ea.		
18 A 5859	*563	4 1/2	1 1/2 dia. x 7 3/8"	2.76 ea.		
18 A 5043	*504	4	8 1/2 x 2 1/4 x 5 1/8"	9.94 ea.		
18 A 5848	596	1 1/2	8 1/2 x 2 1/4 x 5 1/8"	1.20 ea.		

## PHOTOFLASH BATTERIES

Peak current for synchronization of solenoid shutter and bulb. Type 467 is for slave units. 460K, 482, 489, 491, 492, 493, 497, and 726: electronic repeating flash. 411, 413, 504, and 505: B-C units. 815, 835, and 850: cylindrical cells. 815-"AA"; 835-"C"; 850-"D".



Stock No.	Mfr's Type	Volts	Size	Shpg. Wt.	PRICE	Replaces	
						Burgess	PRICE
18 A 5608	411	15	1 1/2 x 5/8 x 1 29/32"	2 oz.	1.00 ea.	U10	
18 A 5610	413	30	1 1/2 x 5/8 x 2 1/8"	2 oz.	1.30 ea.	U20	
18 A 5605	457	67 1/2	2 1/4 x 1 1/2 x 1 1/4"	3 lb.	2.70 ea.	K-45	
18 A 5272	460K	45	1 3/4 x 1 1/2 x 2 1/2"	3/4 lb.	1.97 ea.	47P	
18 A 5614	467	67 1/2	2 1/4 x 1 1/2 x 1 3/8"	3/4 lb.	2.70 ea.	XX45	
18 A 5605	482	45	3 1/2 x 2 1/2 x 5 1/2"	2 lbs.	2.97 ea.	M30	
18 A 5613	489	225	4 1/2 x 2 1/2 x 4 3/8"	2 1/2 lbs.	6.96 ea.	XX150	
18 A 5607	490	90	3 3/4 x 1 3/4 x 3 3/4"	1 lb.	3.15 ea.	V60	
18 A 5609	491	240	2 1/2 x 2 1/2 x 1 1/2 x 1 1/2"	3/4 lb.	6.26 ea.	U160	
18 A 5606	492	225	3 1/2 x 2 1/2 x 2 1/2 x 2 1/2"	2 1/2 lbs.	8.35 ea.	N150	
18 A 5611	493	300	2 1/4 x 2 1/2 x 3 1/2 x 2 1/2"	1 lb.	9.07 ea.	U200	
18 A 5612	497	510	3 x 1 1/2 x 5 1/8"	1 1/2 lbs.	11.87 ea.	U320	
18 A 5615	504	15	3 1/2 x 1 1/2 x 1 1/2"	1 oz.	1.00 ea.	V10	
18 A 5616	505	22 1/2	5/8 x 1 1/2 x 1 1/2"	1 oz.	1.17 ea.	V15	
18 A 5603	726	4 1/2	1 3/4 x 1 1/2 x 2 1/16"	3/4 lb.	1.23 ea.	D3	
18 A 5161	812BP	1 1/2	1 1/2 x 1 1/4"	1/2 lb.	2/.33		
18 A 5602	815BP	1 1/2	9/16 dia. x 1 1/2"	1/2 lb.	Pkg. of 2/.33	920	
18 A 5600	835BP	1 1/2	1 1/2 dia. x 1 1/16"	1/2 lb.	Pkg. of 2/.39	120	
18 A 5349	850	1 1/2	1 1/2 dia. x 2 1/32"	3/4 lb.	.19 ea.	220	
18 A 5053	EPX 825BP-1.5	1.5	2 3/4 x 1 1/4"	1 oz.	Pkg. of 2/.67	PX825	

## 1 1/2-VOLT NICKEL CADMIUM BATTERIES

Rechargeable storage batteries sealed in steel. All have pressure contacts except "T" indicates soldered lug terminals. Sizes: N46-"AA"; N54-"C"; N57-"D"; 110 hr. discharge rate in ampere hours. B in Type No. indicates button cell; C, cylindrical. Av. shpg. wt., 3 oz.



Stock No.	Mfr's Type		Size	AH	Replaces Burgess	EACH
	New	Old				
18 A 5617	B20	N22	2 3/4 x 1 1/2"	2	CD1	1.16
18 A 5618	B50	N24	3 3/4 x 1 1/2"	.5	CD2	.88
18 A 5628	B100T	N26T	6 1/4 x 1 1/2"	1.0	CD81	1.08
18 A 5619	B150	N28	6 1/4 x 1 1/2"	1.5	CD3	.97
18 A 5623	B225	N32	6 1/4 x 1 1/2"	2.25	CD4	1.00
18 A 5624	B225T	N32T	6 1/4 x 1 1/2"	2.25	CD4L	1.16
18 A 5031	BH225	N33	1 1/2 x 3/4"	2.25		1.13
18 A 5625	B450	N36	1 1/2 x 3/4 x 1 1/2"	4.5	CD5	1.51
18 A 5626	B450T	N36T	1 1/2 x 3/4 x 1 1/2"	4.5	CD5L	1.64
18 A 5032	BH500	N38	1 1/2 x 3/4 x 2 1/4"	5.0		1.82
18 A 5636	CH500	N46	9/16 x 1 1/2 x 1 1/2"	5.0	CD6	1.95
18 A 5630	CH500T	N45T	9/16 x 2 1/2 x 1 1/2"	4.5	CD6L	2.24
18 A 5633	C900	N52	3/4 x 3 1/2 x 1 1/2"	9.0	CD9	3.09
18 A 5637	CH150T	N53T	7/8 x 1 3/4"	7.5	CD12	2.21
18 A 5162	CH1.5	N54	1.031 x 1.969"	1.5		4.52
18 A 5634	CH4	N57	1 1/4 x 2 1/2 x 1 1/2"	4.0	CD10	6.30
18 A 5635	CH4T	N57T	1 1/4 x 2 1/2 x 1 1/2"	4.0	CD10L	6.43

## LONG-LIFE TRANSISTOR BATTERIES



Provide distortion-free tonal quality and steady full-charge power. Fit most transistor radios, flashlights, etc. \*Indicates flat contacts (206 has recessed negative); †regular snap-type contacts; ‡miniature snap-type contacts. No. 222BP is a long-life battery, similar to 216, but premium quality. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Volts	Size	Replaces Burgess		PRICE
				Burgess	PRICE	
18 A 5150	206BP*	9	2 x 3/4"	1.6		.63
18 A 5151	216BP†	9	1 1/2 x 2 1/2 x 1 1/2 x 1 1/2"	2U6		.49
18 A 5152	222BP†	9	1 1/2 x 2 1/2 x 1 1/2 x 1 1/2"	2MN6		.65
18 A 5153	226BP†	9	1 x 1 1/4"	P6		.69
18 A 5154	246†	9	1 1/2 x 2 1/2 x 1 1/2 x 2 1/4"	2N6		1.36
18 A 5155	266†	9	1 1/2 x 2 1/2 x 1 1/2 x 2 1/4"	M6		1.36
18 A 5156	276†	9	2 1/2 x 2 1/2 x 1 1/2 x 1 1/2"	D6		1.57
18 A 5157	333BP*	4 1/2	2 3/4 x 1 1/2"			.69
18 A 5158	1015BP	1 1/2	9/16 x 1 1/2"	930		4.64
18 A 5159	1035BP*	1 1/2	1 1/2 x 1 1/2"	130		2.39
18 A 5160	1050BP*	1 1/2	1 1/2 x 2 1/2"	230		2.39

## TOP-QUALITY ZINC/CARBON FLASHLIGHT BATTERIES

Zinc/carbon batteries, sealed to provide protection in handling and against corrosive leakage. Fit all popular size flashlights. Type 955-"C" is for baby tubular flashlights. 950-"D"; 1150-"D"; standard duty flashlights. 1150 is a heavy-duty battery for extra long life. 915-"AA"; standard penlights. 912-"AAA"; slim penlights. 904 is for miniature and novelty lights. Av. shpg. wt., 10 oz. per pkg.



Stock No.	Mfr's Type	PRICE	Size (L x Dia.)	Replaces Burgess		Ray-O-Vac
				Burgess	PRICE	
18 A 5082	904	Pkg. of 6 for .57	1 1/2 x 3/8"	N	716	
18 A 5080	912BP-2	Pkg. of 2 for .26	1 1/2 x 1 1/4"	7	400	
18 A 5083	915BP-2	Pkg. of 2 for .27	1 1/2 x 3/8"	Z	7R	
18 A 5078	935-2	Pkg. of 2 for .33	1 1/2 x 6/16"	1	11P	
18 A 5079	950-4	Pkg. of 4 for .65	2 3/4 x 1 1/2"	2	21P	
18 A 5081	1150	Pkg. of 4 for .67	2 3/8 x 1 1/4"	210	31P	

## LANTERN BATTERIES

Specially designed for use with railroad type lanterns. Type 509 has positive coil-spring contacts. Others have binding posts. Type 732 features pressurized construction for underwater use. All are 6-volt batteries, \*except 732 which is 12-volt.



Stock No.	Mfr's Type	EACH	Size	Wt. Lbs.	Replaces	
					Burgess	Ray-O-Vac
18 A 5084	509	.99	2 5/8 x 2 5/8 x 4 3/8"	1 1/2	F4M	941
18 A 5085	510S	.99	2 5/8 x 2 5/8 x 4"	1 1/2	F4BP	941SC
18 A 5086	510F	1.06	2 5/8 x 2 5/8 x 4 1/2"	1 1/2	F45C	941C
18 A 5087	731	2.15	5 3/4 x 2 7/8 x 4 1/2"	3 1/4	TW1	918
18 A 5088	732*	2.33	5 3/4 x 2 7/8 x 4 1/2"	3 1/4	TW1S	

## HEARING AID AND ELECTRONIC BATTERIES

Button-type batteries for hearing aids, small electronic watches and as accurate reference voltage sources. Provides higher voltage and greater milliwatt-hour\* ratings. All are 1 1/2 volts. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Ht. x Dia.	*mW Hour	PKG. OF 6
18 A 5344	S41	.455 x .165"	105	1.80
18 A 5345	S76	.455 x .200"	165	1.98
18 A 5427	E675	.455 x .205"	180	1.92
18 A 5428	S312	.310 x .140"	30	1.62
18 A 5429	S13	.310 x .210"	60	1.80

## EVEREADY BATTERY MANUAL

Revised edition answers every conceivable question concerning each Eveready battery in production. Numerous charts, graphs, tables. Dimensions, drain data, weights. Over 700 pages. Overall size, 5 1/2 x 8 1/2". Shpg. wt., 1 1/2 lbs. 23 A 7200 E. . . . . 6.00



# Burgess Quality-Engineered Batteries

## FLASHLIGHT AND GENERAL-PURPOSE BATTERIES



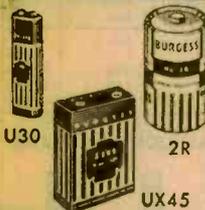
No. 1  
No. 2

Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Oz.	Replaces			
						Eveready	Ray-O-Vac	RCA	NEDA
18 A 5779	2	Pkg. of 2 for .33	1 1/2	2 3/8 x 1 1/4" dia. (D)	10	950	2D	VS036	13F
18 A 5781	210	Pkg. of 2 for .34	1 1/2	2 3/8 x 1 1/4" dia. (D)	10	1050	3D		13C
18 A 5865	1	Pkg. of 2 for .33	1 1/2	1 1/2 x 3/4" dia. (C)	10	935	1C	VS035A	14F
18 A 5870	2	Pkg. of 2 for .20	1 1/2	1 1/2 x 3/4" dia. (AA)	10	515	7R	VS034A	15E
18 A 5047	910	Pkg. of 2 for .27	1 1/2	1 3/4 x 3/4" dia. (AA)	10	415	7A	VS034A	15F
18 A 5855	7	Pkg. of 2 for .27	1 1/2	1 3/4 x 3/4" dia. (AAA)	10	912	4DO	VS074	24F

## SPECIAL LONG-LASTING ALKALINE BATTERIES

18 A 5872	AL-2	.63 ea.	1 1/2	2 1/2 x 1 1/4" dia.	10	E95	MN-1300	VS1336	13A
18 A 5873	AL-1	.49 ea.	1 1/2	1 1/2 x 3/4" dia.	10	E93	MN-1400	VS1335	14A
18 A 5874	AL-9	Pkg. of 2 for .79	1 1/2	1 3/4 x 1 1/2" dia.	10	E91	MN-1500	VS1334	15A
18 A 5646	AL-7	Pkg. of 2 for .79	1 1/2	1 3/4 x 1 1/2" dia.	10	E92	MN-2400	VS1074	24F

## PORTABLE RADIO BATTERIES



U30  
2R  
UX45

Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Lbs.	Replaces			
						Eveready	Ray-O-Vac	RCA	NEDA
18 A 5782	2R	.17 ea.	1 1/2	2 3/8 x 1 1/4" dia.	1/2	1050	2LP	VS316	13
18 A 5041	B5	2.27 ea.	7 1/2	3 29/32 x 2 1/8 x 2 7/32"	1/2	713	8	VS129	8
18 A 5044	C5	1.23 ea.	7 1/2	2 7/8 x 1 3/8 x 3 1/2"	3/4	717	9	V5065	9
18 A 5592	F3	1.65 ea.	4 1/2	4 x 1 1/2 x 4 1/4"	1 1/4	736	A3	VS067	3
18 A 5593	Z4	.87 ea.	6	1 3/8 x 1 1/2 x 2 1/2"	3/4	724	A2	V5068	2
18 A 5570	A30	3.46 ea.	45	3 9/16 x 2 1/4 x 4 3/16"	1 3/4	W359	206	VS014	206
18 A 5571	B30	5.40 ea.	45	4 1/8 x 2 1/2 x 5 9/16"	2 1/4	484	207	VS012	207
18 A 5669	N60X	6.50 ea.	90	1 7/8 x 1 1/2 x 2 1/8"	1 1/8	495		VS316	216
18 A 5645	P45	2.70 ea.	67 1/2	1 5/8 x 1 1/2 x 5/8"	3/4	477	211P	VS218	211
18 A 5651	P60	2.97 ea.	90	1 5/8 x 1 1/2 x 7 1/2"	1	479	214	VS219	214
18 A 5649	U30	1.75 ea.	45	1 3/4 x 1 1/2 x 1 1/2"	1/4	415	213	VS086	213
18 A 5668	UX45	2.07 ea.	67 1/2	1 3/4 x 1 1/2 x 3 1/2"	1/2	416	217	VS318	217
18 A 5586	XX50	5.50 ea.	75	1 1/2 x 2 1/8 x 6 7/8"	1	437	212	VS217	212
18 A 5581	XX69	4.86 ea.	103 1/2	1 1/2 x 1 1/2 x 1 1/2"	1	W361	227		227
18 A 5572	Z30	4.95 ea.	45	3 x 2 3/8 x 4 1/8"	1 1/2	738	205	VS015	205

## BATTERIES FOR TRANSISTOR CIRCUITS



2U6  
NE  
930  
130

Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Lbs.	Replaces			
						Eveready	Ray-O-Vac	RCA	NEDA
18 A 5769	2MN6	.65 ea.	9	1 x 3/8 x 1 1/8"	1/8	222			1604D
18 A 5661	2N6	1.30 ea.	9	2 1/4 x 1 3/8 x 1 1/8"	1/4	246			1602
18 A 5650	2U6	.48 ea.	9	1 1/2 x 3/8 x 1 1/8"	1/4	216	1602	VS305	1602
18 A 5816	130	Pkg. of 2 for .39	1 1/2	1 1/2 x 3/8 x 1 1/8"	1/4	1035	1604	VS323	1604
18 A 5862	230	Pkg. of 2 for .39	1 1/2	1 1/2 x 3/8 x 1 1/8"	1/4	1050	14	VS335	14
18 A 5863	930	Pkg. of 4 for .64	1 1/2	2 5/8 x 1 1/2" dia.	1/2	1015	13	VS336	13
18 A 5666	A4	2.48 ea.	6	1 3/4 x 2 1/2 x 1 1/2"	1/4		15	VS334	15
18 A 5670	C6X	1.64 ea.	9	1 9/32 x 1 9/32 x 2 1/2"	3/4	2356N		VS330	1612
18 A 5098	D5	2.00 ea.	7 1/2	2 1/8 x 2 2 1/2"	1	707	26	VS315	26
18 A 5652	D6	1.57 ea.	9	2 9/16 x 2 x 3 5/8"	1	276	1603	VS306	1603
18 A 5667	D6PI	4.20 ea.	3, 6, 9	2 19/32 x 1 1/2 x 7 7/32"	1 1/2	2506	1601	VS301	1601
18 A 5174	L6	.62 ea.	9	1 3/4 x 2 1/4" dia.	1/8	206		VS327	1611
18 A 5102	M6	1.36 ea.	9	1 1/2 x 1 1/2 x 2 1/4"	1/2	266	1605	VS322	1605
18 A 5864	NE	Pkg. of 6 for .57	1 1/2	1 1/2 x 3/8 x 1 1/8"	1/2	904	716	VS073	910
18 A 5093	P6	.68 ea.	9	1 1/2 x 1" dia.	1/4	226	1600	VS300A	1600
18 A 5779	PM6	.80 ea.	9	1 1/2 x 1" dia.	1/4				1600D
18 A 5657	XX9	1.77 ea.	9, 13 1/2	1 3/4 x 2 3/4 x 2 1/2"	1 1/4	239	1900	VS304	1900
18 A 5364	V6	.83 ea.	9	1 5/8 x 3/8 x 1 3/8"	1/8		1606		1606

## BURGESS DRY BATTERIES



## BURGESS DRY BATTERIES (Cont'd)

Stock No.	Mfr's Type	Batt. Type	EACH	Volts	Size	Wt., Lbs.	Replaces			
							Eveready	Ray-O-Vac	RCA	NEDA
18 A 5009	F4BP	A	.99	6	2 3/8 x 2 3/8 x 4"	1 1/2				
18 A 5557	10308SSC	B	7.66	45	8 1/4 x 4 1/2 x 7 3/8"	12				
18 A 5555	21308SSC	B	8.25	45	8 1/4 x 4 1/2 x 7 3/8"	13				
18 A 5558	2308SC	B	7.66	45	8 3/4 x 2 1/2 x 7 1/8"	7 1/2				
18 A 5560	4156	B	1.61	22 1/2	3 1/2 x 2 1/2 x 2 3/8"	1				
18 A 5561	5156PI	B	4.16	22 1/2	4 3/4 x 2 3/8 x 2 3/8"	1 3/4				
18 A 5562	5156SC	B	4.16	22 1/2	4 3/4 x 2 3/8 x 2 3/8"	1 3/4				
18 A 5559	5308	B	3.05	45	4 1/4 x 2 3/8 x 5 1/4"	2 1/4				
18 A 5569	230N	B	2.69	45	3 1/2 x 1 1/2 x 4 1/8"	1 1/2				
18 A 5772	V45	B	2.77	67 1/2	2 1/4 x 1 1/2 x 3 3/4"	1				
18 A 5597	V60	B	3.15	90	3 1/2 x 1 1/2 x 3 1/8"	1				
18 A 5583	2370	C	2.10	4 1/2	3 1/4 x 1 1/2 x 2 1/4"	1 1/4				
18 A 5565	5360	C	1.23	4 1/2	2 1/2 x 2 1/2 x 2 1/2"	1 1/2				
18 A 5564	5540	C	1.80	7 1/2	4 x 1/4 x 2 1/4"	1 1/2				
18 A 5568	WSBP	C	5.80	7 1/2	2 1/2 x 2 1/2 x 1 1/4"	1 1/4				

## INDUSTRIAL AND TRANSISTOR BATTERIES



5308  
XX15  
U200

Stock No.	Mfr's Type	PRICE	Volts	Size	Shp. Wt., Oz.	Replaces			
						Eveready	Ray-O-Vac	RCA	NEDA
18 A 5054	XX15	2.10 ea.	22 1/2	1 1/2 x 1 1/2 x 3 7/8"	4	425P			
18 A 5060	XX JOPI	2.84 ea.	45	1 1/2 x 1 1/2 x 4 1/2"	12	455P	PN15		
18 A 5104	K-10	1.57 ea.	15	1 1/4 x 1 x 1 1/2"	2	417	PN30F		
18 A 5105	K-15	1.65 ea.	22 1/2	1 1/4 x 7/8 x 2 3/2"	2	420			224
18 A 5064	U15	1.17 ea.	22 1/2	1 x 3/8 x 1 1/2"	2	412	215	VS084	215
18 A 5068	Y20	1.75 ea.	30	1 3/8 x 1 1/2 x 1 1/2"	3	506			223
18 A 5077	Y20S	1.30 ea.	30	1 3/8 x 1 1/2 x 2 1/8"	3	507			222
18 A 5066	U20	1.30 ea.	30	1 x 3/8 x 2 1/2"	2	413	A210	VS085	210
18 A 5594	U200	9.07 ea.	300	2 3/4 x 2 3/4 x 3 7/8"	16	493	722	VS093	722
18 A 5660	U320	13.00 ea.	510	2 1/8 x 1 1/2 x 5 7/8"	24	497			
18 A 5559	5308	3.05 ea.	45	4 1/8 x 2 1/8 x 5 1/8"	48	762S	709	VS112	709

# Mallory "Duracell" Mercury Batteries

Mercury batteries provide more power per unit of volume than any other type. Voltage stability is excellent throughout long operating life, and shelf storage life is outstanding. Actually cost less per listening hour

than other batteries in most transistor radios. "T" suffix indicates 1/2" tab on negative terminal; "T2" suffix indicates tabs on both ends. \* Indicates capacity in milliamper hours. † With snap terminals.

Stock No.	Mfr's Type	Price	Volts	mA <sup>h</sup> *	Use	Di. x Ht. or HWD	Replaces
18 A 5326	303314	10.70 each	16.8	2400	Two-Way Radio	1 1/2 x 2 1/2	E 303314
18 A 5327	PX-825	.33 each	1.5	300	Camera	.900 x .221	EPX825
18 A 5921	RM1	Pkg. of 2 for 1.24	1.4	1000	Electronic	1 1/2 x 1 1/2	HG1
18 A 5922	RM1R	Pkg. of 2 for 1.38	1.35	1000	Electronic	1 1/2 x 1 1/2	HG1R
18 A 5800	RM1RT	Pkg. of 2 for 1.48	1.35	1000	Electronic	1 1/2 x 1 1/2	HG1R
18 A 5924	RM3R	Pkg. of 2 for 2.16	1.35	2200	Electronic	1 1/2 x 2 1/2	E3
18 A 5925	RM4R	Pkg. of 2 for 2.94	1.35	3400	Electronic	1 1/2 x 2 1/2	E4
18 A 5926	RM4RT	Pkg. of 2 for 3.04	1.35	4400	Electronic	1 1/2 x 2 1/2	HG3
18 A 5927	RM42	Pkg. of 2 for 2.00	1.4	7400	Electronic	1 1/2 x 1 1/2	HG4R
18 A 5929	RM12R	Pkg. of 2 for 2.19	1.35	3600	Electronic	1 1/2 x 1 1/2	E12N
18 A 5930	RM12RT	Pkg. of 2 for 2.29	1.35	3600	Electronic	1 1/2 x 1 1/2	HG12R
18 A 5931	RM12RT2	Pkg. of 2 for 2.39	1.35	3600	Electronic	1 1/2 x 1 1/2	HG12R
18 A 5981	RM41	Pkg. of 6 for 1.62	1.4	1005	Electronic	0.16 x 0.46	E42N
18 A 5987	RM42R	3.30 each	1.35	14000	Electronic	1 1/2 x 2 1/2	HG42R
18 A 5375	RM42RT2	3.40 each	1.35	14000	Electronic	1 1/2 x 2 1/2	HG42R
18 A 5950	RM312	Pkg. of 2 for .48	1.4	36	Electronic	5/8 x 3/4	E312
18 A 5125	RM400	.33 each	1.4	75	Hearing Aid	4.50 x 1.30	HG400
18 A 5890	RM401	Pkg. of 2 for 1.12	1.4	800	Electronic	2 1/4 x 1 1/2	HG401
18 A 5967	RM401R	Pkg. of 2 for 1.25	1.35	800	Electronic	2 1/4 x 1 1/2	HG401R
18 A 5953	RM412	Pkg. of 2 for 5.22	22.4	160	Electronic	1 x 1 1/2 x 1 1/2	HG412R
18 A 5954	RM413	Pkg. of 2 for 6.92	28.0	160	Electronic	1 x 1 1/2 x 3 1/2	HG413R
18 A 5955	RM415	Pkg. of 2 for 10.26	42.0	160	Electronic	1 1/2 x 1 1/2	HG415R
18 A 5957	RM520	Pkg. of 2 for 2.00	1.35	2400	Electronic	4.26 x .385	E502
18 A 5127	RM520	.17 each	1.4	130	Hearing Aid	3/8 x 1/4	E520
18 A 5969	RM625	Pkg. of 2 for .84	1.4	250	Electronic	3/8 x 1/4	E625
18 A 5961	RM625R	Pkg. of 2 for 1.12	1.35	250	Electronic	3/8 x 1/4	HG625R
18 A 5959	RM625RT2	Pkg. of 2 for 1.32	1.35	250	Electronic	3/8 x 1/4	HG625R
18 A 5892	RM640	Pkg. of 2 for .86	1.4	500	Electronic	3/8 x 1/4	HG640
18 A 5971	RM640R	Pkg. of 2 for 1.12	1.35	500	Electronic	3/8 x 1/4	HG640R
18 A 5899	RM675	Pkg. of 6 for 1.92	1.4	160	Electronic	2 1/4 x 1 1/2	HG675
18 A 5804	TR112	Pkg. of 2 for 3.14	2.8	350	Electronic	2 1/2 x 1 3/8	E113
18 A 5893	TR113R	Pkg. of 2 for 3.66	4.05	250	Electronic	2 1/2 x 1 3/8	E115
18 A 5972	TR115	Pkg. of 2 for 4.28	7	350	Dictating	2 1/2 x 1 3/8	E115N
18 A 5896	TR115R	Pkg. of 2 for 4.28	6.75	250	Electronic	2 1/2 x 1 3/8	H115R
18 A 5118	TR118	2.80 each	10.8	250	Medical	2.014 x .656	H118R
18 A 5891	TR126	Pkg. of 2 for 2.96	8.4	600	Radio	3/8 x 2	E126
18 A 5973	TR132	Pkg. of 2 for 2.30	2.8	1000	Paging	2 1/2 x 1 1/2	E132
18 A 5898	TR132R	Pkg. of 2 for 2.54	2.7	1000	Electronic	2 1/2 x 1 1/2	H132R
18 A 5883	TR133	Pkg. of 2 for 2.96	4.2	1000	Radio/Pag.	2 1/2 x 2	E133
18 A 5932	TR133R	Pkg. of 2 for 2.94	4.05	1000	Radio/Pag.	2 1/2 x 2	H133R
18 A 5933	TR134R	Pkg. of 2 for 3.66	5.4	1000	Electronic	2 1/2 x 2 1/2	E134N
18 A 5934	TR135R	Pkg. of 2 for 4.28	6.75	1000	Electronic	2 1/2 x 3 1/2	E135N
18 A 5978	TR136	Pkg. of 2 for 4.54	8.4	1000	Electronic	2 1/2 x 3 1/2	E136
18 A 5935	TR136R	Pkg. of 2 for 4.94	8.1	1000	Electronic	2 1/2 x 3 1/2	H136R
18 A 5985	TR137R	Pkg. of 2 for 5.60	9.45	1000	Electronic	2 1/2 x 4 1/2	H137R
18 A 5884	TR146X	Pkg. of 2 for 2.64	8.4	585	Radio	1 x 1 1/2 x 1 1/2	E146
18 A 5986	TR152	Pkg. of 2 for 7.74	2.8	350	Electronic	1 1/2 x 1 1/2	E152
18 A 5940	TR163	Pkg. of 2 for 2.96	4.2	500	TV Tuner	2 1/2 x 1 1/2	E163
18 A 5895	TR164	Pkg. of 2 for 2.96	5.6	500	Radio	2 1/2 x 1 1/2	E164
18 A 5988	TR164R	Pkg. of 2 for 3.30	5.4	500	Electronic	2 1/2 x 1 1/2	E164N
18 A 5941	TR165	Pkg. of 2 for 3.66	7.0	500	TV Tuner	2 1/2 x 2 1/2	E165
18 A 5812	TR165R	Pkg. of 2 for 3.90	6.75	500	Electronic	2 1/2 x 2 1/2	H165R
18 A 5942	TR169	Pkg. of 2 for 6.92	12.6	500	Turner Mike	1 1/2 x 3 1/2	E169
18 A 5117	TR175	1.15 each	7.0	160	Turner Mike	1.031 x .500	E175
18 A 5887	TR177	Pkg. of 2 for 2.96	9.8	160	Radio	3/8 x 1 1/2	E177
18 A 5888	TR233	Pkg. of 2 for 5.20	4.2	2200	Radio	1 1/4 x 1 1/2	E233
18 A 5360	TR234R	Pkg. of 2 for 5.6	5.6	2200	Electronic	1 1/4 x 1 1/2	E234
18 A 5943	TR235R	Pkg. of 2 for 7.56	6.75	2200	Electronic	1 1/4 x 2 1/2	E235N
18 A 5991	TR236R	Pkg. of 2 for 8.58	8.1	2200	Electronic	1 1/4 x 3 1/2	E236N
18 A 5889	TR286	Pkg. of 2 for 2.96	8.4	750	Radio	1 1/4 x 3 1/2	E286
18 A 5944	TR289	Pkg. of 2 for 5.60	12.6	750	CB Radio	1 1/2 x 2 1/2	HG9
18 A 5813	TR431	Pkg. of 2 for 5.60	10.7	1000	Dictation	1 1/2 x 2 1/2	E9
18 A 5881	ZM98	Pkg. of 2 for 1.33	1.4	2400	Radio	1 1/2 x 2	HG9
18 A 5814	ZM12	1.15 each	1.4	1600	Clock	3/4 x 2	HG9

## ALKALINE DURACELL BATTERIES († Capacity, mA<sup>h</sup>)

Stock No.	Type	Price	Volts	mA <sup>h</sup> *	Use	Di. x Ht. or HWD	Replaces
18 A 5128	MN1300	.63 each	1.5	10,000†	All-Purpose	1 1/2 x 1 1/2	D
18 A 5130	MN1400	.49 each	1.5	5000†	All-Purpose	1 1/2 x 1 1/2	C
18 A 5131	MN1500B2	Pkg. of 2 for .79	1.5	1800†	All-Purpose	1 1/2 x 1 1/2	AA
18 A 5132	MN1604	1.00 each	1.9	1901	All-Purpose	1 1/2 x 1 1/2	AAA
18 A 5133	MN2400B2	Pkg. of 2 for .79	1.5	7501	All-Purpose	1 1/2 x 1 1/2	AAA
18 A 5134	MN9100B2	Pkg. of 2 for .67	1.5	5801	All-Purpose	1 1/2 x 1 1/2	N

## CINCH-JONES BATTERY PLUGS

Quality plugs for "A", "B" and various other battery types. Manufactured to high standards for dependable long term service. Av. shpg. wt. per package, 1 oz. 2 per package.

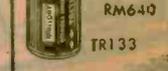
Stock No.	Type	Fig.	For Burgess Battery	For Eveready	PKG/2
18 A 5178	5A1	A	2F, 4F, 6F, 8F, 2D, 8R	720, 960P	.16
18 A 5180	5A5	A	B5, C5, S5, J5	717	.23
18 A 5176	5B1A	A	XX15, XX22, X30P1	425P, 433P	.14
18 A 5310	5B2-1	A	A30, B30, M30, W30P1, Z30, 10308P1	W-359	.19
18 A 5181	5AB2	B	2TXK40U	720, W360	.23
18 A 5177	5AB1-1	B	6TA60, 4T60	226, 707	.11
18 A 5301	5M	C	P6, D5, P6M, M6, XX45, XX30, XX50, K45, P45, P45M, P60, D6, 4D4, N60X, C6X	455, 477, 457, 437, 495	.11
18 A 5175	5A4	D	2F4, F4P1, XX15, XX22, XX30P1	415, 216, E146	.16
18 A 5184	5D	E	U30, 2U6, 2N6, UX45	477, 479	1.39
18 A 5307	5D1	F	XX50, P45, P45M, P60, N60X, C6X	457, 479	1.01
18 A 5309	5MFA	F	XX45, XX30, K45	457	.83

## ALLIED 9-V TRANSISTOR RADIO BATTERY

2 for 59¢

For direct replacement in many transistor radios. Made by a famous American manufacturer, yet sell at imported-battery prices. Rigid manufacturing procedures and quality control standards assure long life. Replace: Burgess 2U6; RCA VS323; Eveready 216; Sears 6417, and many others. 18 A 5980. Wt., 6 oz. Pkg. of 2 for .59

Allied keeps in stock and ready for immediate shipment a wide variety of high-quality batteries. If you need a battery not listed, Allied can supply it. Simply contact Allied for information.



# Lanterns, Lights and Batteries

## G.E. PERMACELL NICKEL-CADMIUM BATTERY SYSTEM



**MODEL BC-1  
BATTERY  
CHARGER**

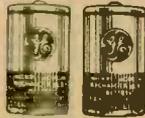


**749**

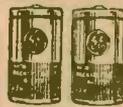
- Charges 2 or 4 same-size Batteries
- Fast and Automatic

Brings your batteries to peak performance in just 15 hours. Automatic operation. Positive, spring-loaded terminals for sure connections. Charges 2 or 4 of the same-size batteries (order at right) or any two pairs simultaneously. 7 1/2 x 5 1/2 x 2 1/2". 110-120 VAC.  
18 A 5238. Shpg. wt., 3 lbs. **7.49**

### RECHARGEABLE NICKEL-CADMIUM BATTERIES



"D" Cells



"C" Cells



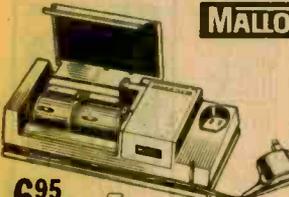
"AA" Cells

Eliminate constant replacing of dead or weak batteries in toys, tape recorder, transistor radios, flash equipment, other electronic devices. Recharge up to 1000 times or more with BC-1 Battery Charger left (not recommended for other chargers). Rugged, sealed construction, uniform power output. Available in sizes A.A., C. or D.

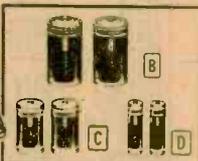
Stock No.	Mfr's Type	Volts	Ampere Hours	Size	PRICE
18 A 5237	GC-3	1.2	1.0	D	Pkg. of 2 for 2.79
18 A 5236	GC-2	1.2	1.0	C	Pkg. of 2 for 2.79
18 A 5235	GC-1	1.2	1.0	AA	Pkg. of 2 for 2.49

## MALLORY

### MODEL BC-15 CHARGER AND RECHARGEABLE ALKALINE BATTERIES



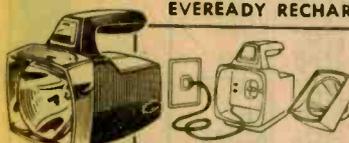
**695**



**A** BC-15 CHARGER. For batteries SA-13D, SA-14C and SA-15AA (order at right). Charges two or four of the same size batteries, or any two pairs simultaneously. Positive, automatic operation. Brings batteries to top charge in 24 hours. Built-in AC line cord. Size, 9 3/4 x 4 3/4 x 2 3/4". For 110-130 VAC.  
18 A 5239. Wt., 1 lb. **6.95**

- B** SA-13D. 1.5 volt battery. 2000 milliamp-hour cap. 1.3x2.367". 18 A 5815. Wt., 5 oz. **1.00**
- C** SA-14C. 1.5 volts. 1000 milliamp-hour cap. 1.01x1.94". 18 A 5816. Wt., 2 1/2 oz. **.81**
- D** SA-15AA. 1.5 volts. 300 milliamp-hour cap. 0.55x1.94". 18 A 5817. Wt., 1 oz. **.52**

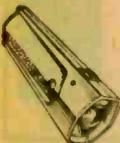
### EVEREADY RECHARGEABLE LANTERN



Peak performance is restored after overnight recharge from any AC outlet.

THE "COMMANDER." Low-cost, top-quality lantern provides bright steady beam for up to one and three-quarter hours without recharging. Never needs batteries, contains extra long-life rechargeable nickel-cadmium batteries and self-contained line cord for easy recharging. Recharges to peak performance after overnight charge from AC line. Holds charge, when not in use, for over a year—it's always ready for instant use. Easy to hold cantilever handle with convenient thumbtip pushbutton control. Rugged high-impact body, chrome trim. 3x4x6". For 110-130 V, 60 Hz AC.  
18 A 5171. Shpg. wt., 3 lbs. **15.95**

### MALLORY "C" CELL/COMPACT LIGHT



Ultra-compact, light weight flashlight provides more power than regular 2-cell flashlights. Powered by two MN-1400 "C" size Duracell alkaline batteries (included). Unbreakable plastic case, rust and corrosion proof. 6 1/2 x 2 x 1 1/2". Great for pocket or purse.  
18 A 5172. Shpg. wt., 7 oz. **1.95**

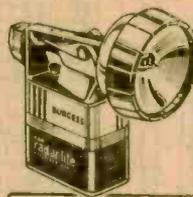
### KEYSTONE BATTERY HOLDERS



For transistor assemblies, radios, meters, etc. Snap-clips, moistureproof fiber washers, mtg. holes and aluminum alloy, nickel-plated eyelets. \*End to end. Wt., 3 oz.

Stock No.	Mfr's Type	Holds	Burgess	Mallory	Eveready	PKG. OF 2
18 A 5900	104	1		RM4R	E4	.76
18 A 5901	139	1	CD6	RM12R	E9, E-12	.46
18 A 5902	140	2	9R,Z	TR133R	E133, ES02	.76
18 A 5903	171	3	HG9, E133	RM502R	915, 1015E	.98
18 A 5904	182	4	HG12R, 333	ZM-9	505	1.28
18 A 5906	173	1	130°	TR233R	E233, 635	.60
18 A 5907	174	2			935	.76
18 A 5908	185	2			912	.46
18 A 5909	137	1	7	TR132R	E132	.76
18 A 5910	138	2		TR115R		.60
18 A 5911	132	1	H-132R	RM42R	E42	.60
18 A 5912	175	1	2, Z4	N56	N56	.76
18 A 5913	176	2			D99	D99	.92
18 A 5914	186	2	210°	411	411	.60
18 A 5915	166	1	U10	216	216	.88
18 A 5271	203P	1	2U6			

## BURGESS



**1065**  
less battery

**1831**  
with batteries



### PANTHER-LITE

### SAFARI-LITE

PANTHER-LITE SEALED BEAM LANTERN. 40,000 cp sealed beam, light-weight Cyclocac® construction. Red alert flasher with switch in handle. Contoured grip. Requires TW1 battery, order below.  
18 A 5169. Shpg. wt., 2 1/4 lbs. **10.65**  
18 A 5170. TW1 Lantern Battery. (Use 1) Shpg. wt., 3 1/4 lbs. **2.15**

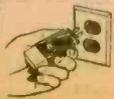
SAFARI-LITE FLUORESCENT PORTABLE LIGHT. Operates on batteries or 117 VAC. With two Z46 batteries, extra batteries below.  
18 A 5164. Shpg. wt., 11 lbs **18.31**  
18 A 5143. Z46 Batteries. (Use 2) Wt., 6 1/4 lbs. **Pkg. of 2 for 5.88**

### ASH-FLASH FLASHLIGHTS AND LANTERNS



- E** HEAVY-DUTY MAGNET FLASHLIGHT. Celanese fortiflex; acid resistant, dent-proof, non-slip grip. Unbreakable lens, cushion lens guard. Black case, red end cap and magnet housing. Use 2 "D" batteries (order from page 295). 8x2 1/4" dia. Japan.  
18 A 5147. Shpg. wt., 8 oz. **1.19**
- F** RECHARGEABLE FLASHLIGHT. For pocket or purse. Two nickel-cadmium power cells. Plastic case, 5 1/2 x 2 1/4 x 1 1/2".  
18 A 5149 S. Japan. Shpg. wt., 8 oz. **3.95**
- G** FLOATING HIGH-INTENSITY LANTERN. Has waterproof switches, sealed-beam reflector, blinker. Unbreakable plastic case, circular lens guard. 10 1/2 x 4 3/4 x 4 3/4". With 6 "D" batteries.  
18 A 5146. Japan. Shpg. wt., 2 1/4 lbs. **3.95**

### FETRO RECHARGEABLE FLASHLIGHT



Lifetime rechargeable flashlight never needs batteries. Just snap off back and plug into 115 VAC outlet. Great for pocket or purse. Has high-impact plastic case, only 4 1/2 x 1 1/2 x 1 1/2". Recharges overnight.  
18 A 5173. Wt., 5 oz. **3.49**

# Power Supplies, Inverters, Chargers

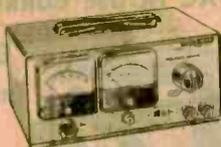


**EICO**  
MODEL 1020-W  
LOW-COST  
POWER SUPPLY

**SOLID STATE**

Versatile, completely transistorized portable DC power and bias supply. Provides continuously variable output voltage monitored by a dual range voltmeter (0.6, 0-30 VDC). Output: 150 mA, 0-12 volts; 200 mA, 12-24 volts; 330 mA, 24-30 volts. Low ripple output, only 0.005% full load. Comprises power transformer, full-wave silicon diode rectifier circuit, 2-transistor cascaded filter circuit. Size, 5x4x5 1/2". For 105-125 V, 60 Hz AC.  
21 A 4121. Shpg. wt., 4 1/2 lbs. .... 34.95  
21 A 4122. 1020-K Kit Form ..... 25.95

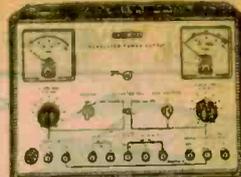
## POWER SUPPLIES AND CHARGERS



MODEL 1025-W  
TWO-METER  
POWER SUPPLY

**SOLID STATE**

Portable DC power and bias supply provides continuously variable output voltage monitored by a dual-range voltmeter (0-6, 0-30 VDC) and a 0-500 mA milliammeter. Output: 150 mA, 0-12 volts; 200 mA, 12-24 volts; 300 mA, 24-30 volts. Special filter circuit provide low ripple output of 0.005% at full rated load. Circuitry comprises power transformer, full-wave silicon rectifier circuit; 2-transistor cascaded filter circuit. Fused for added circuit protection. Overall size, 3 3/4 x 8 x 4 3/4". For 110-130 volts, 60 Hz AC.  
21 A 4547. Shpg. wt., 5 lbs. .... 49.95  
21 A 4548. 1025-K. Kit Form ..... 34.95



### 1030-W TWO-OUTPUT SUPPLY

General-purpose supply offers two independent, continuously variable regulated DC outputs, plus two unregulated filament voltages. 0-150 VDC at 2 mA and 0-400 VDC at up to 150 mA. Regulated to  $\pm 0.3\%$  or 0.3 V, whichever is higher, to 100 mA. Ripple, less than 3 mV rms. Filaments, 6.3 and 12.6 V at 3 A. Voltmeter, ammeter, standby switch. 13x8 1/2 x 7". 110-120 V, 50-60 Hz AC.  
21 A 4491 U. Wt., 21 lbs. .... 99.95  
21 A 4492 U. 1030-K. Kit Form. 69.95

### MODEL 1060-W BATTERY-CHARGER/ELIMINATOR



- 6 or 12-Volt Output
- Variable Transformer
- Extra-Low Ripple Output

Operates 6 or 12-volt equipment, including transistor types. Highly stable output. Voltages are adjusted by variable transformer. Has high-capacity electrolytic smoothing filter. Low range: 0.8 volts at 10 amps continuous. 20 amps intermittent  $\pm 1.5\%$  ripple at 2 amps. 2% at 6 amps. High range: 0-16 volts at 6 amps continuous. 10 amps intermittent, 0.3% ripple at 2 amps. 1.5% at 10 amps. Steel case. 8 1/2 x 10 1/2 x 7 3/4". 105-125 volts. 60 Hz AC. Shpg. wt., 19 lbs.  
21 A 4125 X. .... 59.95  
21 A 4126 X. 1060-K. Kit Form. 45.95

### MODEL 1064-W BATTERY-CHARGER/ELIMINATOR



Low-Ripple  
Output

Low-ripple DC necessary to service transistorized equipment. Extra-heavy-duty selenium rectifiers. L-C filter circuit boasts iron-core choke and dual 5000  $\mu$ F electrolytic capacitor. Provides two DC voltage ranges: 0-8 V at 10 amps cont., 20 amps intermit. 0-16 V at 6 amps cont., 10 amps intermit. Ripple: 0-16 V, 1% at 6 amps; 0-8 V,  $\pm 5\%$  at 10 amps. Separate voltmeter and ammeter monitor voltage and current. Ammeter range automatically switches over to voltage range. 8 1/2 x 5 3/4 x 7 1/2". 105-125 V, 50-60 Hz AC. 15 lbs.  
21 A 4119 X. .... 69.95

MODEL 1064-K. As above, but in kit form.  
21 A 4120 X. .... 49.95



WP-703A



WP-702A

## RCA

## CONSTANT-VOLTAGE DC POWER SUPPLIES

Model WP-703A. For circuit design, servicing, industrial and educational applications. Output is continuously adjustable 0-20 V at up to 500 mA. Front panel meter for voltage and current levels. Automatic current limiting, overload indicator. Five-way output terminals, +DC, -DC and GND. Three-wire AC line cord. Overall size, 5 1/4 x 8 1/4 x 3 3/4". 115 VAC.  
21 A 4562. Wt., 3 lbs. .... 58.00  
21 A 4563. Model WP-704A. Above, 0-40 V at 0-250 mA. Wt., 3 lbs. .... 58.00

Model WP-702A. Dual unit power supply delivers continuously adjustable output of 0-20 volts at 0-200 mA from each section. Features line and load regulation; front panel voltage and current meter for each section. Overload indicator lamp, short-circuit protection. Five-way terminals for +DC, -DC and GND. Overall size, 6x12x3". 115 V, 50-60 Hz AC.  
21 A 4561. Wt., 4 lbs. .... 87.00  
21 A 4560. Model WP-700A. As above, single unit. 4x6 1/2 x 3". 3 lbs. .... 48.00



## VIBRATOR-TYPE DC-TO-AC POWER INVERTERS



### A DC-TO-AC INVERTERS WITH SQUARE WAVE OUTPUT

Vibrator-type inverters start instantly. Output is 115 volts, 60 Hz with excellent stability even under varying loads. High capabilities for intermittent overloads; wattage figures for intermittent use are rated for power factors from 70 to 100%. Superior filtering for excellent performance with TV, shortwave, FM receivers. Conservatively rated. Fig. A except \*without finger holes.

Stock No.	Mfr's Type	Typical Applications	Watts			Size	Wt., Lbs.	EACH
			Input VDC	Cont.	Int.			
21 A 4493	12SP2A	Shaver only, intermittent duty	12	20	20	3 3/4 x 2 1/4 x 2 1/4"	7	14.46
21 A 4413	12A4	Test gear, dictaphones, phonos, shavers	12	40	50	6 1/4 x 4 1/2 x 3 1/2"	6	25.48
21 A 4415 X	12B8	Small recorders & TV sets, stereo amplifiers	12	100	125	8 1/4 x 7 1/2 x 3 1/2"	12	39.84
21 A 4416 X	12B10	Office machines, calculators, typewriters	12	100	125	8 1/4 x 7 1/2 x 3 1/2"	14	41.95
21 A 4417 X	12TV12	Small-screen TV, radios, phonos, appliances	12	120	140	8 3/4 x 7 1/2 x 3 3/4"	16	42.95
21 A 4418 X	12D15	Small induction soldering guns, office machines	12	150	175	10 1/4 x 9 1/4 x 5 1/2"	26	73.00
21 A 4419 X	12D22	Multi-use: camp trailer, small tools, CB, TV	12	220	250	10 3/4 x 9 1/4 x 5 1/2"	31	90.50
21 A 4420 X	28D15	Aircraft, marine, others using 28 VDC	28	150	175	10 3/4 x 9 1/4 x 5 1/2"	26	87.50

21 A 4431. RK-112 Remote Control. For all of above except 12SP2A, 12A4. Wt., 1 lb. .... 10.81

### B DC-TO-AC INVERTERS WITH REGULATED SINE-WAVE OUTPUT

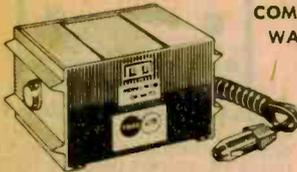
Similar to above, but have added reactor and capacitors to form true sine-wave output indistinguishable from commercial power. May be used portable or permanently mounted. Automatic load regulation; extremely low hum.

21 A 4421 U	12DSW10	Like utility power; any FF load above 25%	12	100	125	10x9 1/4 x 5 1/2"	22	88.06
21 A 4422 U	12ESW25	SSE, large PA systems, 100-watt amplifiers	12	250	300	12x9 1/4 x 5 1/2"	31	117.51

# DC-to-AC Power Inverters for All Applications

TRIPP LITE

INVERTERS PROVIDE REGULAR AC HOUSE CURRENT FROM 12-VOLT BATTERY



**COMPACT 100-WATT POWER INVERTER**

**SOLID STATE**

MODEL PV-100. Solid-state inverter plugs into 12-volt DC car cigarette lighter, delivers instant AC house current at 100 watts continuous. Specially designed to power personal-size TV sets in the car. Also ideal for operating portable tape recorders, small tools, etc. in car, trailer, boat or plane. Lightweight, compact design (only 4 3/4 x 4 3/4 x 3") with two power-switching transistors for reliable performance. Delivers 115 watts intermittent output (5 minutes); instantaneous surges up to 130 watts. With cord and cigarette lighter plug.  
21 A 4577. Shpg. wt., 5 lbs. . . . . 29.95

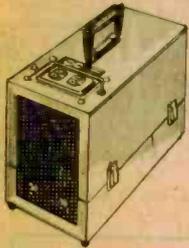


**SOLID STATE INVERTER AND INVERTER/CHARGER**



MODEL PV-150. Quality constructed 150-watt, 2-transistor, low-cost inverter brings regular AC house current to cars and boats. Converts 12 volts DC to 117 volts, 60 Hz AC. Delivers 150 watts continuously, 195 watts instantaneous. Easily connected to any 12-VDC system. Includes on-off switch, replaceable fuse. Ruggedly constructed for shock resistance. Anodized heat sink. All metal parts treated for resistance to weather and corrosion. 3 1/2 x 5 x 5". With mounting studs.  
21 A 4432. Wt., 5 1/2 lbs. . . . . 39.95

MODEL PV-2008. Dependable 200 watt DC-to-AC inverter with built-in 6-amp battery charger. Has same features as Model PV-150 at left, but continuously delivers 200 watts; 250 watts instantaneous. In addition, has 4 power transistors and exclusive "burst boost" circuit that permit bursts of power for heavy, short duration jobs such as starting motor-type appliances. Mounts under or on top of dashboard, or anywhere inside vehicle. Overall size, 3 1/2 x 5 x 5". With fuse, mounting studs.  
21 A 4433. Wt., 6 lbs. . . . . 49.95



**800-WATT POWER INVERTER**

MODEL PV-800-FC. Highly stable inverter converts 12 VDC to 117 V, 60 Hz AC with frequency accuracy of 1 Hz. Particularly suited for true reproduction of hi-fi sound. Solid-state design eliminates chattering reeds—no moving parts to wear out. Ideal for "on the spot" power for outside servicemen. Delivers 800 watts continuously, 900 watts intermittently, 1000 watt surge. 24 transistors, zener diode. Overload/low-battery light. Polarity protection. Silver-color corrosion-resistant case, 10x7x14". Carrying handle. Note: Not intended for use with capacitor motors, heaters, refrigerators.  
21 A 4360 U. Shpg. wt., 38 lbs. . . . . 290.00

**SOLID STATE**

**HEAVY-DUTY 450-WATT DC-TO-AC INVERTER/CHARGER**



**SOLID STATE**

- 450-Watt Continuous
- 550-Watt Power Surge
- Battery Charge and Drain Indicator

MODEL PV-450B. Dependable solid-state static design with 10 power-switching transistors; meets exacting heavy-duty requirements. Ideal for instant AC where fast emergency power is needed. 450-watt continuous output, 500-watt intermittent (5 minutes). Hash-free TV and AM-FM reception without interference. Built-in rack handles. With fuses, 4x7x6".  
21 A 4355 U. Wt., 13 lbs. . . . . 99.50

MODEL PV-450FC. Above, but with frequency control for constant 60 Hz AC; for recorders, phonos, etc.  
21 A 4354 U. Wt., 15 1/4 lbs. . . . . 149.50

*terado*

## POWER INVERTERS AND BATTERY CHARGERS



**SOLID STATE**

**MARK I INVERTER/CHARGER**

- Delivers 450-500 Watts of AC Power
- Charges Batteries at Up to 20 Amps
- Efficient Solid-State Circuit

MODEL 50-131. Now you can enjoy the luxury and convenience of using your electrical appliances anywhere. Provides full 450 to 500 watts of 117 volt AC power from any 12-volt storage battery. Lets you operate a wide variety of appliances—radios, TV, tools, shavers, lights, hi-fi sets—in car, trailer or boat.

The Mark I also charges 12-volt batteries from 117-volt AC source. Charges at 20 amp or 10-amp rate, or at a low trickle charge. Meter indicates charging rate. Rugged solid-state circuit provides 450 watts continuously, or 500 watts intermittently. AC output receptacle on front panel. Fuse protected. Carrying handle for easy portable use. Compact, sturdy metal case, 6x12 1/2 x 6". Shpg. wt., 21 lbs.  
21 A 4265 U. . . . . 104.50

MODEL 50-132 MARK II. Same as above but rated 275 watts continuous, 300 watts intermittent. Shpg. wt., 21 lbs.  
21 A 4266 U. . . . . 89.50



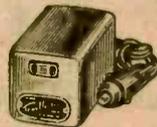
**SOLID STATE**

12 VDC to 117 VAC

**SOLID-STATE POWER INVERTERS**

Convert 12 volts DC to 117 volts, 60 Hz AC. \*Automatic frequency control maintains output within 1/2 cycle of 60 Hz for operating tape recorders, phonos. A—10 3/4 x 6 x 6"; B—12 1/2 x 6 x 6"; C—10 3/4 x 13 x 7 1/4".

Stock No.	Mfr's Type	Capacity Cont. Intr.	Size	Wt. Lbs.	EACH
21 A 4499	50-205	140 175	A 10 3/4	10	46.94
21 A 4500	50-170	125 150	A 10 3/4	10	39.87
21 A 4501 U	50-129	275 300	B 20	78.15	
21 A 4487 U	50-175	150 175	A 21	76.67	
21 A 4502 U	50-128	450 500	B 20	97.17	
21 A 4383 U	50-201	150 175	A 20	100.51	
21 A 4384 U	50-200	175 200	A 21	114.53	
21 A 4382 U	50-191	275 300	A 30	158.40	
21 A 4381 Z	50-202	550 600	C 60	327.74	



**MODEL 50-116 "SENIOR" INVERTER**

- For 12-V Batteries
- 40 Watts Constant
- 50 Watts Intermittent

Plugs into 12-volt cigarette lighter on dash. Aluminum case with copper-tone baked enamel. AC plug-in receptacle on front. 2 1/4 x 2 1/4 x 4 1/2". Shpg. wt., 3 lbs.  
21 A 4484. . . . . 18.47

**"TRAV-ELECTRIC" WITH BATTERY AND CHARGER**



**SELF CONTAINED 60-Hz AC POWER SOURCE**

MODEL 50-160. A truly portable source of electricity, ready to go where and when you choose with built-in battery and charger. Inverter delivers 125 watts of AC for portable TV, hi-fi, lights, appliances. Battery can be recharged from any AC outlet, or from auto cigarette lighter while enroute. One charge runs portable TV 3 to 4 hours.

"Trav-Electric" comes complete with storage battery, inverter, charger, easy-to-read battery condition meter and heavy copper-clad steel carrying case. Size, 12x5 1/2 x 8". Supplies 125 watts continuously, 175 watts intermittent. Shpg. wt., 30 lbs.  
21 A 4503 U. . . . . 74.19



**"SUPREME" DC-AC INVERTER**

- Remote Control
- Variable Output
- Signal Light
- Frequency Filter

MODEL 50-153. For 12-volt DC only. 175 watts constant, 200 watts intermittent. Copper-clad ventilated steel case. With battery cables. Filtered for tape recorders. 10 3/4 x 6 x 6". Shpg. wt., 25 lbs.  
21 A 4488 U. . . . . 84.07

# Allied's Semiconductor and Integrated Circuit Directory

## WORLD'S LARGEST SUPPLIER OF SEMICONDUCTORS

### KEY TO NAMES OF MANUFACTURERS

Dept. No.	Mfr.	Name
49 A 1	RCA	Radio Corp. of America
49 A 12	SYL	Sylvania
49 A 24	IR	International Rectifier
49 A 26	MOT	Motorola
49 A 30	SPR	Sprague
49 A 31	ST	Sarkes Tarzian
49 A 32	TI	Texas Instruments

- Over 8000 Types of Semiconductors in Stock
- Products of 7 Leading Manufacturers
- You Are Assured of Prompt, Efficient Service
- You Get Lowest Prices in Effect at Time of Your Order
- New Types Are Added As They Are Announced

Semiconductors listed on these pages are the most popular types stocked by Allied—for a complete listing of all units stocked by Allied, ask for Directory No. 23 A 7901. It will be sent at no charge.

### HOW TO ORDER SEMICONDUCTORS

When ordering, specify Department Number, followed by Manufacturer's Type Number and Name.

For example: 49 A 12 1N21B-SYL  
designates Sylvania Type 1N21B

### HOW TO ORDER INTEGRATED CIRCUITS

When ordering, specify Department Number, followed by Manufacturer's Type Number and Name.

For example: 50 A 1 CA3000-RCA  
designates Radio Corp. of America Type CA3000

Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH
1N21B	SYL .81	1N463	SYL .54	1N766	TI 1.05	1N980A	MOT 2.35	1N1202	ST 1.25
1N21C	SYL .84	1N464	SYL .53	1N770	SVL .46	1N980B	MOT 2.95	1N1202A	RCA 2.48
1N21D	SYL 2.10	1N482	SYL .66	1N816	SVL .52	1N981	MOT 2.15	1N1203	IR 3.45
1N21E	SVL 3.16	1N483	SVL .70	1N821	MOT 2.75	1N981B	MOT 2.95	1N1203A	RCA 3.47
1N21F	SVL 6.30	1N484	SVL .70	1N823	MOT 3.60	1N982	MOT 2.15	1N1203RA	RCA 3.47
1N21WE	SVL 3.16	1N484A	SVL .70	1N825	MOT 5.80	1N982A	MOT 2.35	1N1204	IR 4.40
1N23	SVL .49	1N485	SVL .90	1N825A	MOT 6.50	1N984A	MOT 2.35	1N1204A	RCA 4.46
1N23C	SVL .81	1N486A	SVL .90	1N827	IR 8.75	1N985	MOT 9.50	1N1204RA	RCA 4.46
1N23D	SVL 2.10	1N487A	SVL 1.41	1N830A	SVL 3.85	1N985A	MOT 3.00	1N1205	IR 5.25
1N23E	SVL 3.16	1N488	SVL 1.17	1N831	SVL 6.85	1N985B	MOT 3.65	1N1205A	RCA 5.36
1N23F	SVL 7.15	1N497	SVL .39	1N905A	SVL 1.55	1N987	MOT 2.60	1N1206	IR 6.10
1N23WE	SVL 3.16	1N498	SVL .44	1N914	SVL .45	1N987A	MOT 3.00	1N1206A	RCA 6.19
1N25	SVL 3.53	1N500	SVL .53	1N914A	SVL 5.0	1N988	MOT 2.60	1N1206RA	RCA 6.19
1N26	SVL 6.50	1N536	RCA .36	1N916	SVL .75	1N988A	MOT 3.00	1N1313	MOT 3.10
1N34A	RCA .30	1N537	RCA .40	1N916A	SVL .75	1N989A	MOT 3.00	1N1314	MOT 3.10
1N35	SVL 1.58	1N538	RCA .45	1N935	MOT 2.30	1N989B	MOT 3.65	1N1315	MOT 3.10
1N38A	SVL 4.9	1N539	RCA .50	1N935A	MOT 2.60	1N990	MOT 2.60	1N1316	MOT 3.10
1N38B	SVL 4.9	1N540	RCA .56	1N936	MOT 2.75	1N990A	MOT 3.00	1N1317	MOT 3.10
1N48	SVL .30	1N547	RCA .79	1N936A	MOT 3.55	1N992	MOT 2.60	1N1320	MOT 3.10
1N54A	SVL .42	1N625	SVL .43	1N937	MOT 5.35	1N992A	MOT 3.00	1N1321	MOT 3.10
1N55A	SVL .40	1N626	SVL .45	1N937A	MOT 6.15	1N992B	MOT 3.65	1N1323	MOT 3.10
1N58A	SVL .55	1N627	SVL .60	1N938	MOT 6.95	1N995	SVL .30	1N1324	MOT 3.10
1N60	SVL .30	1N628	SVL .72	1N938A	MOT 7.55	1N1081	ST .60	1N1326	MOT 3.10
1N63	SVL .36	1N629	SVL .81	1N941	MOT 3.20	1N1082	ST .65	1N1341	IR .95
1N64	SVL .30	1N634	SVL .52	1N941A	MOT 3.40	1N1083	ST .70	1N1341B	RCA 1.16
1N65	SVL .48	1N643A	SVL 1.50	1N942	MOT 3.50	1N1084	ST .75	1N1342	IR 1.20
1N67A	SVL .28	1N645	TI 1.40	1N942A	MOT 4.35	1N1085A	ST 3.34	1N1342B	RCA 1.32
1N68A	SVL .28	1N645A	TI 1.65	1N943	MOT 6.95	1N1086A	ST 4.00	1N1343	ST 1.20
1N69A	SVL .30	1N646	TI 1.60	1N943A	MOT 6.95	1N1088A	ST 5.35	1N1344	IR 2.05
1N78A	SVL 4.50	1N647	SVL 1.70	1N957	MOT 2.15	1N1088A	RCA .7	1N1344B	RCA 2.15
1N81A	SVL .48	1N648	TI 1.80	1N957A	IR 1.00	1N1096	TI .97	1N1345	IR 2.85
1N82AG	SVL .91	1N649	SVL 2.50	1N958B	MOT 2.95	1N1108	ST 3.15	1N1345B	RCA 3.05
1N87	SVL .20	1N658	TI 1.48	1N959A	IR 1.00	1N1109	ST 4.00	1N1346	ST 1.50
1N90	SVL .33	1N659	SVL .58	1N960	MOT 2.15	1N1110	ST 4.75	1N1346B	RCA 3.96
1N98	SVL .31	1N660	TI .65	1N960A	IR 1.00	1N1111	ST 5.65	1N1347	IR 4.60
1N99	SVL .50	1N661	TI .98	1N961	MOT 2.15	1N1113	ST 7.35	1N1347B	RCA 4.75
1N100	SVL .32	1N662	TI .92	1N961A	IR 1.00	1N1124A	TI 1.86	1N1348B	IR 5.75
1N116	SVL .49	1N663	SVL 1.20	1N962	MOT 2.15	1N1125	TI 2.25	1N1348B	RCA 5.78
1N118A	SVL .23	1N695	SVL .30	1N962A	MOT 1.50	1N1125A	TI 2.25	1N1507	IR 2.75
1N126	SVL .30	1N702	IR 1.00	1N963	MOT 2.15	1N1126A	TI 3.05	1N1508	IR 2.75
1N128	SVL .32	1N703	IR 1.00	1N963A	IR 1.00	1N1183	MOT 1.80	1N1509	IR 2.75
1N191	SVL .35	1N704	IR 1.00	1N964	MOT 2.15	1N1183A	RCA 2.15	1N1510	IR 2.75
1N192	SVL .34	1N705	IR 1.00	1N964A	IR 1.00	1N1184	MOT 2.10	1N1511	IR 2.75
1N198	SVL .35	1N706	IR 1.00	1N965	MOT 2.15	1N1184A	RCA 2.48	1N1512	IR 2.75
1N198B	SVL 1.03	1N707	IR 1.00	1N965A	IR 1.00	1N1184A	RCA 2.48	1N1513	IR 2.75
1N248B	MOT 1.50	1N708	IR 1.00	1N966	MOT 2.15	1N1184RA	RCA 2.48	1N1513A	IR 3.45
1N249B	MOT 1.65	1N709	IR 1.00	1N966A	IR 1.00	1N1185	MOT 2.60	1N1514	IR 2.75
1N249C	MOT 1.95	1N710	IR 1.00	1N967	MOT 2.15	1N1186	MOT 3.15	1N1515	IR 2.75
1N250B	MOT 2.40	1N711	IR 1.00	1N967A	IR 1.00	1N1186A	RCA 3.55	1N1516	IR 2.75
1N250C	MOT 2.70	1N712	IR 1.00	1N968	MOT 2.15	1N1186RA	RCA 3.55	1N1517	IR 2.75
1N251	SVL .65	1N713	IR 1.00	1N968A	IR 1.00	1N1187	MOT 4.65	1N1518	IR 2.75
1N252	SVL .65	1N714	IR 1.00	1N969	MOT 2.15	1N1187A	RCA 4.95	1N1519	IR 2.70
1N256	SVL 2.16	1N715	IR 1.00	1N969A	IR 1.00	1N1188	MOT 5.2	1N1519A	IR 3.50
1N270	RCA .48	1N718	IR 1.00	1N970	MOT 2.15	1N1188A	RCA 6.19	1N1520	IR 2.70
1N276	SVL .31	1N721	IR 1.00	1N970A	IR 1.00	1N1188RA	RCA 6.19	1N1521	IR 2.70
1N277	SVL .34	1N722	IR 1.00	1N971	MOT 2.15	1N1189	MOT 6.00	1N1522	IR 2.70
1N279	SVL .29	1N723	IR 1.00	1N971A	IR 1.00	1N1189A	MOT 7.05	1N1523	IR 2.70
1N281	SVL .31	1N746	IR 1.00	1N972A	IR 1.00	1N1190	MOT 6.75	1N1524	IR 2.70
1N283	SVL .51	1N747	IR 1.00	1N973B	TI 2.95	1N1191	MOT 1.35	1N1525	JR 2.70
1N294	SVL .34	1N748	IR 1.00	1N974B	MOT 2.95	1N1192	MOT 1.50	1N1526	IR 2.70
1N295	RCA .55	1N749	IR 1.00	1N975	MOT 2.15	1N1193	MOT 1.80	1N1527	IR 2.70
1N429	MOT 5.45	1N750	IR 1.00	1N975B	MOT 2.95	1N1194	MOT 2.60	1N1528	IR 2.70
1N440B	RCA .53	1N751	IR 1.00	1N976	MOT 2.15	1N1195	MOT 3.80	1N1581	TI 1.05
1N441B	RCA .60	1N752	IR 1.00	1N976B	MOT 2.95	1N1195A	MOT 4.35	1N1588	IR 3.80
1N442B	RCA .66	1N753	IR 1.00	1N977	MOT 2.15	1N1196	MOT 4.35	1N1589	IR 3.80
1N443B	RCA .98	1N754	IR 1.00	1N977A	MOT 2.35	1N1196A	RCA 4.95	1N1590A	IR 4.55
1N444B	RCA .92	1N755	IR 1.00	1N977B	MOT 2.95	1N1197A	RCA 5.94	1N1591	IR 3.80
1N445B	RCA 1.12	1N756	IR 1.00	1N978	MOT 2.15	1N1198	MOT 6.75	1N1591A	IR 4.55
1N456	SVL .42	1N757	IR 1.00	1N978A	MOT 2.35	1N1198A	MOT 7.05	1N1592	IR 3.80
1N457	SVL .45	1N758	IR 1.00	1N978B	MOT 2.95	1N1199A	RCA 1.24	1N1593A	IR 4.55
1N458	SVL .48	1N759	IR 1.00	1N979	MOT 2.15	1N1199RA	RCA 1.24	1N1594	IR 3.80
1N459	SVL .51	1N763	IR 1.00	1N979A	MOT 2.35	1N1200A	RCA 1.41		
1N461	SVL .42	1N764	MOT 2.15	1N979B	MOT 2.95	1N1200RA	RCA 1.41		
1N462	SVL .44	1N765	TI 1.05	1N980	MOT 2.15	1N1201	IR 1.75		

Type	Mfr.	EACH	Type	Mfr.	EACH	Type	Mfr.	EACH	Type	Mfr.	EACH	Type	Mfr.	EACH
1N1594A	IR	4.55	1N2820A	MOT	7.65	1N3019	MOT	2.85	1N3313	IR	5.50	1N3793	MOT	3.75
1N1595	IR	3.80	1N2821	MOT	7.65	1N3019B	MOT	3.20	1N3313A	MOT	7.65	1N3793A	MOT	5.30
1N1595A	IR	4.55	1N2821A	MOT	7.65	1N3020	MOT	2.85	1N3314	IR	5.50	1N3794	MOT	3.75
1N1596	IR	3.80	1N2822	MOT	5.65	1N3020A	MOT	3.20	1N3314A	MOT	7.65	1N3794A	MOT	5.30
1N1597	IR	3.80	1N2822A	MOT	7.65	1N3021	MOT	2.85	1N3315	MOT	5.65	1N3795	MOT	3.75
1N1598	IR	3.80	1N2824	MOT	5.65	1N3021A	MOT	3.20	1N3315A	MOT	7.65	1N3795A	MOT	5.30
1N1599	IR	5.95	1N2824A	MOT	7.65	1N3022	MOT	2.85	1N3316	MOT	5.65	1N3796	MOT	3.75
1N1600	IR	5.95	1N2825	MOT	5.65	1N3022A	MOT	3.20	1N3316A	MOT	7.65	1N3796A	MOT	5.30
1N1600A	IR	8.00	1N2825A	MOT	7.65	1N3023	MOT	2.85	1N3317	MOT	5.65	1N3797	MOT	3.75
1N1601	IR	5.95	1N2826	MOT	5.65	1N3023A	MOT	3.20	1N3317A	MOT	7.65	1N3797A	MOT	5.30
1N1601A	IR	8.00	1N2826A	MOT	7.65	1N3024	MOT	2.85	1N3318	MOT	5.65	1N3798	MOT	3.75
1N1602	IR	5.95	1N2828	MOT	5.65	1N3024A	MOT	3.20	1N3318A	MOT	7.65	1N3799	MOT	5.30
1N1602A	IR	8.00	1N2828A	MOT	7.65	1N3025	MOT	2.85	1N3319	MOT	5.65	1N3799A	MOT	3.75
1N1604	IR	5.95	1N2829	MOT	5.65	1N3025A	MOT	3.20	1N3319A	MOT	7.65	1N3800	MOT	5.30
1N1604A	IR	8.00	1N2829A	MOT	7.65	1N3026	MOT	2.85	1N3320	MOT	5.65	1N3800A	MOT	3.75
1N1605	IR	5.95	1N2830	MOT	5.65	1N3026A	MOT	3.20	1N3320A	MOT	7.65	1N3801	MOT	5.30
1N1605A	IR	8.00	1N2830A	MOT	7.65	1N3027	MOT	2.85	1N3321	IR	5.50	1N3801A	MOT	3.75
1N1606	IR	5.95	1N2831	MOT	5.65	1N3027A	MOT	3.20	1N3321A	MOT	7.65	1N3802	MOT	5.30
1N1606A	IR	8.00	1N2831A	MOT	7.65	1N3028	MOT	2.85	1N3322	MOT	5.65	1N3802A	MOT	3.75
1N1608	IR	5.95	1N2833	MOT	5.65	1N3028A	MOT	3.20	1N3322A	MOT	7.65	1N3803	MOT	5.30
1N1608A	IR	8.00	1N2833A	MOT	7.65	1N3029	MOT	2.85	1N3323	IR	5.50	1N3803A	MOT	3.75
1N1609	IR	5.95	1N2834	MOT	5.65	1N3029A	MOT	3.20	1N3323A	MOT	7.65	1N3804	MOT	5.30
1N1612R	RCA	1.08	1N2834A	MOT	7.65	1N3030	MOT	2.85	1N3324	IR	5.50	1N3804A	MOT	3.75
1N1613	RCA	1.24	1N2835	MOT	5.65	1N3030A	MOT	3.20	1N3324A	MOT	7.65	1N3805	MOT	5.30
1N1613R	RCA	1.24	1N2835A	MOT	7.65	1N3031	MOT	2.85	1N3325	MOT	5.65	1N3805A	MOT	3.75
1N1614	RCA	1.90	1N2838	MOT	5.65	1N3031A	MOT	3.20	1N3325A	MOT	7.65	1N3806	MOT	5.30
1N1614R	RCA	1.90	1N2838A	MOT	7.65	1N3032	MOT	2.85	1N3326	MOT	5.65	1N3806A	MOT	3.75
1N1615	RCA	3.71	1N2839	MOT	6.80	1N3032A	MOT	3.20	1N3327	MOT	7.65	1N3807	MOT	5.30
1N1615R	RCA	3.71	1N2839A	MOT	11.30	1N3033	MOT	2.85	1N3327A	MOT	5.65	1N3807A	MOT	3.75
1N1616	RCA	5.36	1N2840	MOT	6.80	1N3033A	MOT	3.20	1N3328	MOT	7.65	1N3808	MOT	5.30
1N1621	ST	2.24	1N2840A	MOT	11.30	1N3034	MOT	2.85	1N3328A	MOT	5.65	1N3808A	MOT	3.75
1N1622	ST	2.80	1N2841	MOT	6.80	1N3034A	MOT	3.20	1N3329	MOT	7.65	1N3809	MOT	5.30
1N1624	ST	4.24	1N2841A	MOT	11.30	1N3035	MOT	2.85	1N3329A	MOT	5.65	1N3809A	MOT	3.75
1N1731	MOT	6.00	1N2842	MOT	6.80	1N3035A	MOT	3.20	1N3330	MOT	7.65	1N3810	MOT	5.30
1N1732	MOT	6.75	1N2842A	MOT	11.30	1N3036	MOT	2.85	1N3330A	MOT	5.65	1N3811	MOT	3.75
1N1733	MOT	7.80	1N2843	MOT	6.80	1N3036A	MOT	3.20	1N3331	MOT	7.65	1N3811A	MOT	5.30
1N1735	MOT	5.40	1N2846	MOT	6.80	1N3037	MOT	2.85	1N3331A	MOT	5.65	1N3812	MOT	3.75
1N1736	IR	6.52	1N2858A	RCA	.33	1N3037A	MOT	3.20	1N3332	MOT	7.65	1N3812A	MOT	5.30
1N1763A	RCA	.42	1N2859A	RCA	.37	1N3038	MOT	2.85	1N3333	MOT	5.65	1N3813	MOT	3.75
1N1764A	RCA	.52	1N2860A	RCA	.40	1N3038A	MOT	3.20	1N3334	MOT	7.65	1N3813A	MOT	5.30
1N1826	TI	5.10	1N2861A	RCA	.42	1N3039	MOT	2.85	1N3335	MOT	5.65	1N3814	MOT	3.75
1N1832	TI	5.10	1N2862A	RCA	.48	1N3039A	MOT	3.20	1N3335A	MOT	7.65	1N3815	MOT	5.30
1N1835	TI	5.10	1N2863A	RCA	.58	1N3040	MOT	2.85	1N3336	MOT	5.65	1N3816	MOT	3.75
1N2069	SYL	.45	1N2970	MOT	5.45	1N3040A	MOT	3.20	1N3337	MOT	7.65	1N3817	MOT	5.30
1N2069A	SYL	.50	1N2971	MOT	5.45	1N3041	MOT	2.85	1N3338	MOT	5.65	1N3817A	MOT	3.75
1N2070	SYL	.57	1N2972	MOT	5.45	1N3041A	MOT	3.20	1N3339	MOT	7.65	1N3818	MOT	5.30
1N2070A	SYL	.67	1N2973	MOT	5.45	1N3042	MOT	2.85	1N3339A	MOT	5.65	1N3819	MOT	3.75
1N2071	SYL	.72	1N2974	MOT	5.45	1N3042A	MOT	3.20	1N3340	IR	5.50	1N3820	MOT	5.30
1N2071A	SYL	.75	1N2975	MOT	5.45	1N3043	MOT	2.85	1N3340A	MOT	7.65	1N3821	MOT	3.75
1N2175	TI	6.40	1N2976	MOT	5.45	1N3043A	MOT	3.20	1N3341	MOT	5.65	1N3822	MOT	5.30
1N2326	RCA	.55	1N2977	MOT	5.45	1N3044	MOT	2.85	1N3342	MOT	6.80	1N3823	MOT	3.75
1N2389	ST	6.10	1N2978	MOT	5.45	1N3044A	MOT	3.20	1N3343	MOT	6.80	1N3823A	MOT	5.30
1N2482	ST	.33	1N2979	MOT	5.45	1N3045	MOT	2.85	1N3344	MOT	6.80	1N3824	MOT	3.75
1N2483	ST	.35	1N2979A	MOT	5.85	1N3045A	MOT	3.25	1N3345	MOT	6.80	1N3824A	MOT	5.30
1N2484	ST	.37	1N2980	MOT	5.45	1N3046	MOT	2.95	1N3346	MOT	6.80	1N3825	MOT	3.75
1N2490	ST	7.07	1N2980A	MOT	5.85	1N3046A	MOT	3.25	1N3347	MOT	6.80	1N3825A	MOT	5.30
1N2610	ST	.35	1N2982	MOT	5.45	1N3047	MOT	2.95	1N3348	MOT	6.80	1N3826	MOT	3.75
1N2611	ST	.37	1N2984	MOT	5.45	1N3047A	MOT	3.25	1N3349	MOT	6.80	1N3827	MOT	5.30
1N2613	ST	.43	1N2985	MOT	5.45	1N3048	MOT	2.95	1N3350	MOT	6.80	1N3828	MOT	3.75
1N2615	ST	.47	1N2986	MOT	5.45	1N3048A	MOT	3.25	1N3351	MOT	6.80	1N3829	MOT	5.30
1N2620	MOT	4.10	1N2987	MOT	5.45	1N3049	MOT	2.95	1N3352	MOT	6.80	1N3830	MOT	3.75
1N2620A	MOT	4.35	1N2987A	MOT	5.85	1N3050	MOT	2.95	1N3353	MOT	6.80	1N3830A	MOT	5.30
1N2620B	MOT	4.90	1N2988	MOT	5.45	1N3050A	MOT	3.25	1N3354	MOT	6.80	1N3831	MOT	3.75
1N2621	MOT	4.60	1N2988B	MOT	7.30	1N3051	MOT	2.95	1N3355	MOT	6.80	1N3831A	MOT	5.30
1N2621A	MOT	5.55	1N2989	MOT	5.45	1N3051A	MOT	3.25	1N3356	MOT	6.80	1N3832	MOT	3.75
1N2622	MOT	7.60	1N2990	MOT	5.45	1N3085	IR	8.00	1N3357	MOT	1.11	1N3832A	MOT	5.30
1N2622A	MOT	8.15	1N2991	MOT	5.45	1N3111	IR	7.00	1N3358	MOT	1.27	1N3833	MOT	3.75
1N2622B	MOT	9.35	1N2992	MOT	5.45	1N3154	MOT	2.60	1N3359	MOT	1.48	1N3834	MOT	5.30
1N2623	MOT	8.80	1N2993	MOT	5.45	1N3155	MOT	3.60	1N3360	MOT	.94	1N3835	MOT	3.75
1N2630	IR	6.25	1N2994	MOT	5.45	1N3155A	MOT	3.55	1N3361	MOT	5.20	1N3835A	MOT	5.30
1N2631	IR	5.50	1N2995	MOT	5.45	1N3156	MOT	6.15	1N3362	MOT	.99	1N3836	MOT	3.75
1N2633	IR	5.50	1N2996	MOT	5.45	1N3157	MOT	7.60	1N3363	MOT	1.33	1N3837	MOT	5.30
1N2637	IR	9.65	1N2996A	MOT	5.85	1N3193	RCA	.35	1N3364	MOT	1.48	1N3838	MOT	3.75
1N2804	MOT	5.65	1N2997	MOT	5.45	1N3195	RCA	.38	1N3365	MOT	1.70	1N3839	MOT	5.30
1N2805	MOT	7.65	1N2998	MOT	5.45	1N3195A	RCA	.53	1N3366	MOT	1.70	1N3840	MOT	3.75
1N2805A	MOT	5.65	1N2999	MOT	5.45	1N3196	RCA	.74	1N3367	MOT	1.70	1N3841	MOT	5.30
1N2806	MOT	5.65	1N2999A	MOT	5.85	1N3208	MOT	1.10	1N3368	MOT	1.10	1N3842	MOT	3.75
1N2806A	MOT	5.65	1N3002	MOT	5.85	1N3209	MOT	1.25	1N3369	MOT	1.10	1N3843	MOT	5.30
1N2807	MOT	5.65	1N3003	MOT	5.85	1N3210	MOT	1.70	1N3370	MOT	1.10	1N3844	MOT	3.75
1N2807A	MOT	7.65	1N3003A	MOT	5.85	1N3211	MOT	2.30	1N3371	MOT	1.10	1N3845	MOT	5.30
1N2808	MOT	5.65	1N3004	MOT	5.85	1N3212	MOT	2.55	1N3372	MOT	1.10	1N3846	MOT	3.75
1N2808A	MOT	7.65	1N3004A	MOT	5.85	1N3213	MOT	3.45	1N3373	MOT	1.10	1N3847	MOT	5.30
1N2809	MOT	5.65	1N3005	MOT	5.85	1N3214	MOT	3.90	1N3374	MOT	1.10	1N3848	MOT	3.75
1N2809A	MOT	7.65	1N3005A	MOT	5.85	1N3253	RCA	.38	1N3375	MOT	1.10	1N3849	MOT	5.30
1N2810	MOT	5.65	1N3006	MOT	5.85	1N3254	RCA	.42	1N3376	MOT	1.10	1N3850	MOT	3.75
1N2810A	MOT	7.65	1N3006A	MOT	5.85	1N3255	RCA	.56	1N3377	MOT	1.10	1N3851	MOT	5.30
1N2811	MOT	5.65	1N3007	MOT	5.85	1N3256	RCA	.76	1N3378	MOT	1.10	1N3852	MOT	3.75
1N2811A	MOT	7.65	1N3007A	MOT	5.85	1N3282	MOT	2.45	1N3379	MOT	1.10	1N3853	MOT	5.30
1N2812	MOT	5.65	1N3008	MOT	5.45	1N3283	MOT	3.05	1N3380	MOT	1.10	1N3854	MOT	3.75
1N2812A	MOT	7.65	1N300											

Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH
1N4100	MOT 3.85	1N4747	MOT 1.26	1N5234A	MOT .90	1N5293	MOT 4.45	2N336A	TI 6.25
1N4101	MOT 3.85	1N4747A	MOT 1.93	1N5235	MOT .67	1N5294	MOT 4.45	2N337	TI 4.85
1N4102	MOT 3.85	1N4748	MOT 1.26	1N5235A	MOT .90	1N5295	MOT 4.45	2N338	TI 5.50
1N4103	MOT 3.85	1N4748A	MOT 1.93	1N5236	MOT .67	1N5296	MOT 4.45	2N350A	MOT 1.65
1N4104	MOT 3.85	1N4749	MOT 1.26	1N5236A	MOT .90	1N5297	MOT 4.45	2N351A	MOT 1.70
1N4105	MOT 3.85	1N4749A	MOT 1.93	1N5237	MOT .67	1N5298	MOT 4.45	2N370	RCA 1.08
1N4106	MOT 3.85	1N4750	MOT 1.26	1N5237A	MOT .90	1N5299	MOT 4.45	2N372	RCA 1.06
1N4107	MOT 3.85	1N4750A	MOT 1.93	1N5238	MOT .67	1N5300	MOT 4.45	2N375	MOT 2.20
1N4109	MOT 3.85	1N4751	MOT 1.26	1N5238A	MOT .90	1N5301	MOT 4.45	2N376A	MOT 1.85
1N4111	MOT 3.85	1N4751A	MOT 1.93	1N5239	MOT .67	1N5302	MOT 4.45	2N378	MOT 1.80
1N4112	MOT 3.85	1N4752	MOT 1.26	1N5239A	MOT .90	1N5303	MOT 4.45	2N379	MOT 1.90
1N4113	MOT 3.85	1N4752A	MOT 1.93	1N5240	MOT .67	1N5304	MOT 4.45	2N381	MOT 1.28
1N4114	MOT 3.85	1N4753	MOT 1.26	1N5240A	MOT .90	1N5305	MOT 4.45	2N382	MOT 1.73
1N4115	MOT 3.85	1N4753A	MOT 1.93	1N5241	MOT .67	1N5306	MOT 4.45	2N383	MOT 2.18
1N4117	MOT 3.85	1N4754	MOT 1.26	1N5241A	MOT .90	1N5307	MOT 4.45	2N384	RCA 1.65
1N4118	MOT 3.85	1N4754A	MOT 1.93	1N5242	MOT .67	1N5308	MOT 4.45	2N388	RCA .47
1N4119	MOT 3.85	1N4755	MOT 1.26	1N5242A	MOT .90	1N5309	MOT 4.45	2N388A	RCA .88
1N4120	MOT 3.85	1N4755A	MOT 1.93	1N5243	MOT .67	1N5310	MOT 4.45	2N395	TI .50
1N4123	MOT 5.05	1N4756	MOT 1.26	1N5243A	MOT .90	1N5311	MOT 4.45	2N398	PCA .93
1N4124	MOT 5.05	1N4756A	MOT 1.93	1N5244	MOT .67	1N5312	MOT 4.45	2N398A	PCA .91
1N4125	MOT 5.05	1N4757	MOT 1.26	1N5244A	MOT .90	1N5313	MOT 4.45	2N398B	RCA 1.16
1N4129	MOT 5.05	1N4757A	MOT 1.93	1N5245	MOT .67	1N5314	MOT 4.45	2N404	RCA .42
1N4131	MOT 5.05	1N4758	MOT 1.26	1N5245A	MOT .90	1N5333A	MOT 2.20	2N404A	RCA .55
1N4135	MOT 5.05	1N4758A	MOT 1.93	1N5246	MOT .67	1N5334A	MOT 2.20	2N405	RCA .48
1N4148	SVL .35	1N4759	MOT 1.26	1N5246A	MOT .90	1N5335A	MOT 2.20	2N406	RCA .54
1N4149	SVL .45	1N4759A	MOT 1.93	1N5247	MOT .67	1N5336A	MOT 2.20	2N407	RCA .41
1N4151	SVL .80	1N4760	MOT 1.26	1N5247A	MOT .90	1N5337A	MOT 2.20	2N408	RCA .48
1N4152	SVL .65	1N4760A	MOT 1.93	1N5248	MOT .67	1N5338A	MOT 2.20	2N409	RCA .55
1N4154	SVL .40	1N4761	MOT 1.26	1N5248A	MOT .90	1N5339A	MOT 2.20	2N410	RCA .48
1N4360	TI 1.05	1N4761A	MOT 1.93	1N5249	MOT .67	1N5340A	MOT 2.20	2N412	RCA .53
1N4370	MOT 2.00	1N4762	MOT 1.26	1N5249A	MOT .90	1N5341A	MOT 2.20	2N414	RCA .42
1N4370A	MOT 2.75	1N4762A	MOT 1.93	1N5250	MOT .67	1N5342A	MOT 2.20	2N441	MOT 1.26
1N4371	MOT 2.00	1N4763	MOT 1.26	1N5250A	MOT .90	1N5343A	MOT 2.20	2N442	MOT 1.66
1N4371A	MOT 2.75	1N4763A	MOT 1.93	1N5251	MOT .67	1N5344A	MOT 2.20	2N443	MOT 1.90
1N4372	MOT 2.00	1N4764	MOT 1.26	1N5251A	MOT .90	1N5345A	MOT 2.20	2N456A	MOT 1.80
1N4372A	MOT 2.75	1N4764A	MOT 1.93	1N5252	MOT .67	1N5346A	MOT 2.20	2N456B	TI 1.80
1N4383	SVL .48	1N4770	MOT 5.85	1N5252A	MOT .90	1N5347A	MOT 2.20	2N457A	TI 2.18
1N4384	SVL .58	1N4785	RCA 1.08	1N5253	MOT .67	1N5348A	MOT 2.20	2N457B	TI 2.18
1N4385	SVL .78	1N4810	IR .24	1N5253A	MOT .90	1N5349A	MOT 2.20	2N458A	TI 2.63
1N4436	VA 4.15	1N4817	IR .28	1N5254	MOT .67	1N5350A	MOT 2.20	2N458B	TI 2.63
1N4437	VA 5.45	1N4818	IR .32	1N5254A	MOT .90	1N5351A	MOT 2.20	2N459	MOT 4.35
1N4438	VA 7.45	1N4819	IR .37	1N5255	MOT .67	1N5352A	MOT 2.20	2N460	MOT 2.25
1N4441	VA 2.01	1N4820	IR .41	1N5255A	MOT .90	1N5353A	MOT 2.20	2N461	MOT 2.25
1N4446	SVL .40	1N4821	IR .45	1N5256	MOT .67	1N5354A	MOT 2.20	2N464	MOT 1.88
1N4447	SVL .50	1N4822	IR .50	1N5256A	MOT .90	1N5355A	MOT 2.20	2N465	MOT 1.88
1N4448	SVL .80	1N4933	MOT 1.12	1N5257	MOT .67	1N5356A	MOT 2.20	2N466	MOT 2.10
1N4449	SVL .50	1N4934	MOT 1.42	1N5257A	MOT .90	1N5357A	MOT 2.20	2N467	MOT 2.55
1N4454	SVL .35	1N4935	MOT 1.65	1N5258	MOT .90	1N5358A	MOT 2.20	2N489	TI 7.10
1N4549	MOT 6.05	1N4936	MOT 2.45	1N5258A	MOT 1.12	1N5359A	MOT 2.20	2N489B	TI 9.15
1N4550	MOT 6.05	1N4937	MOT 3.90	1N5259	MOT .90	1N5360A	MOT 2.20	2N501	SPR 6.35
1N4551	MOT 6.05	1N4997	MOT .66	1N5259A	MOT 1.12	1N5361A	MOT 2.20	2N502	SPR 2.90
1N4552	MOT 6.05	1N4998	MOT .73	1N5260	MOT .90	1N5362A	MOT 2.20	2N502A	MOT 3.75
1N4553	MOT 6.05	1N4999	MOT .82	1N5260A	MOT 1.12	1N5363A	MOT 2.20	2N502B	MOT 4.20
1N4554	MOT 6.05	1N5000	MOT 1.12	1N5261	MOT .90	1N5364A	MOT 2.20	2N508	MOT .75
1N4557	MOT 6.05	1N5001	MOT 1.50	1N5261A	MOT 1.12	1N5365A	MOT 2.20	2N508A	MOT .90
1N4560	MOT 6.05	1N5002	MOT 2.25	1N5262	MOT .90	1N5366A	MOT 2.20	2N524	MOT 1.20
1N4562	MOT 6.05	1N5003	MOT 3.35	1N5262A	MOT 1.12	1N5367A	MOT 2.20	2N525	MOT 1.20
1N4571	MOT 7.30	1N5052	IR .70	1N5263	MOT .90	1N5368A	MOT 2.20	2N526	MOT 1.20
1N4585	SVL 1.20	1N5053	IR .85	1N5263A	MOT 1.12	1N5369A	MOT 2.20	2N527	MOT 1.43
1N4586	SVL 2.70	1N5054	IR 1.20	1N5264	MOT .90	1N5370A	MOT 2.20	2N554	MOT .60
1N4719	MOT .66	1N5139	MOT 5.85	1N5264A	MOT 1.12	1N5371A	MOT 2.20	2N555	MOT .75
1N4720	MOT .73	1N5140	MOT 5.85	1N5265	MOT .90	1N5372A	MOT 2.20	2N581	RCA .50
1N4721	MOT .82	1N5141	MOT 5.85	1N5265A	MOT 1.12	1N5373A	MOT 2.20	2N582	RCA .66
1N4722	MOT 1.12	1N5142	MOT 5.85	1N5266	MOT .90	1N5374A	MOT 2.20	2N585	PCA .99
1N4723	MOT 1.50	1N5143	MOT 5.85	1N5266A	MOT 1.12	1N5375A	MOT 2.20	2N586	RCA 1.73
1N4724	MOT 2.25	1N5144	MOT 5.85	1N5267	MOT .90	1N5376A	MOT 2.20	2N588	SPR 1.45
1N4725	MOT 3.35	1N5145	MOT 5.85	1N5267A	MOT 1.12	1N5377A	MOT 2.20	2N591	RCA .58
1N4728	MOT 1.26	1N5146	MOT 5.85	1N5268	MOT .90	1N5378A	MOT 2.20	2N618	MOT 2.45
1N4728A	MOT 1.93	1N5147	MOT 5.85	1N5268A	MOT 1.12	1N5379A	MOT 2.60	2N647	RCA 1.08
1N4729	MOT 1.26	1N5148	MOT 5.85	1N5269	MOT .90	1N5380A	MOT 2.60	2N649	RCA .86
1N4729A	MOT 1.93	1N5211	RCA .38	1N5269A	MOT 1.12	1N5381A	MOT 2.60	2N650	MOT 2.03
1N4730	MOT 1.26	1N5212	RCA .42	1N5270	MOT .90	1N5382A	MOT 2.60	2N650A	MOT 2.10
1N4730A	MOT 1.93	1N5213	RCA .56	1N5270A	MOT 1.12	1N5383A	MOT 2.60	2N651	MOT 2.03
1N4731	MOT 1.26	1N5214	RCA .81	1N5271	MOT 1.27	1N5384A	MOT 2.60	2N651A	MOT 2.10
1N4731A	MOT 1.93	1N5215	RCA .42	1N5271A	MOT 1.50	1N5385A	MOT 2.60	2N652	MOT 3.30
1N4732	MOT 1.26	1N5216	RCA .45	1N5272	MOT 1.27	1N5386A	MOT 2.60	2N652A	MOT 2.80
1N4732A	MOT 1.93	1N5217	RCA .60	1N5272A	MOT 1.50	1N5387A	MOT 2.60	2N653	MOT 2.50
1N4733	MOT 1.26	1N5218	RCA .85	1N5273	MOT 1.27	1N5388A	MOT 2.60	2N654	MOT 2.60
1N4733A	MOT 1.93	1N5221	MOT .67	1N5273A	MOT 1.50	1N5411	RCA .61	2N655	MOT 2.80
1N4734	MOT 1.26	1N5221A	MOT .90	1N5274	MOT 1.27	2N109	RCA .66	2N656	TI 2.03
1N4734A	MOT 1.93	1N5222	MOT .67	1N5274A	MOT 1.50	2N173	MOT 3.40	2N657	TI 2.20
1N4735	MOT 1.26	1N5222A	MOT .90	1N5275	MOT 1.27	2N174	MOT 3.60	2N660	TI 1.48
1N4735A	MOT 1.93	1N5223	MOT .67	1N5275A	MOT 1.50	2N174A	MOT 3.80	2N662	TI 1.40
1N4736	MOT 1.26	1N5223A	MOT .90	1N5276	MOT 1.27	2N176	MOT 1.20	2N669	MOT 1.42
1N4736A	MOT 1.93	1N5224	MOT .67	1N5276A	MOT 1.50	2N178	MOT 1.10	2N681	MOT 3.30
1N4737	MOT 1.26	1N5224A	MOT .90	1N5277	MOT 1.27	2N217	RCA .57	2N682	MOT 4.10
1N4737A	MOT 1.93	1N5225	MOT .67	1N5277A	MOT 1.50	2N242	MOT 1.65	2N683	MOT 5.60
1N4838	MOT 1.26	1N5225A	MOT .90	1N5278	MOT 1.27	2N251A	TI 1.88	2N684	MOT .30
1N4738A	MOT 1.93	1N5226	MOT .67	1N5278A	MOT 1.50	2N276	RCA .76	2N685	MOT 6.60
1N4739	MOT 1.26	1N5226A	MOT .90	1N5279	MOT 1.27	2N274	RCA 1.24	2N686	MOT 6.95
1N4739A	MOT 1.93	1N5227	MOT .67	1N5279A	MOT 1.50	2N277	MOT 2.25	2N696	MOT .52
1N4740	MOT 1.26	1N5227A	MOT .90	1N5280	MOT 1.27	2N278	MOT 2.80	2N697	MOT .52
1N4740A	MOT 1.93	1N5228	MOT .67	1N5280A	MOT 1.50	2N297A	MOT 1.60	2N698	TI 1.57
1N4741	MOT 1.26	1N5228A	MOT .90	1N5281	MOT 1.27	2N307	MOT 1.12	2N699	RCA 1.16
1N4741A	MOT 1.93	1N5229	MOT .67	1N5281A	MOT 1.50	2N320	MOT .75	2N700	MOT 7.35
1N4742	MOT 1.26	1N5229A	MOT .90	1N5282	MOT 4.45	2N321	MOT .83	2N705	MOT 1.03
1N4742A	MOT 1.93	1N5230	MOT .67	1N5284	MOT 4.45	2N322	MOT .53	2N706	MOT .46
1N4743	MOT 1.26	1N5230A	MOT .90	1N5285	MOT 4.45	2N323	MOT .75	2N706A	MOT 1.18
1N4743A	MOT 1.93	1N5231	MOT .67	1N5286	MOT 4.45	2N324	MOT 4.65	2N708	MOT 1.48
1N4744	MOT 1.26	1N5231A	MOT .90	1N5287	MOT 4.45	2N332	TI 4.65	2N707	MOT 6.30
1N4744A	MOT 1.93	1N5232	MOT .67	1N5288	MOT 4.45	2N333	TI 4.65	2N708	MOT .49
1N4745	MOT 1.26	1N5232A	MOT .90	1N5289	MOT 4.45	2N334	TI 4.90	2N709	RCA 1.32
1N4745A	MOT 1.93	1N5233	MOT .67	1N5290	MOT 4.45	2N335	TI 4.90	2N710	MOT 1.33
1N4746	MOT 1.26	1N5233A	MOT .90	1N5291	MOT 4.45	2N335A	TI 5.20		
1N4746A	MOT 1.93	1N5234	MOT .67	1N5292	MOT 4.45	2N336	TI 5.95		



Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH
2N3762	MOT 7.50	2N4221	MOT 2.17	2N5169	MOT 5.00	3N152	RCA 1.78	CR203	RCA 4.80
2N3763	MOT 7.50	2N4222	MOT 2.17	2N5170	MOT 6.80	3N153	RCA 1.58	CR204	RCA 5.75
2N3765	MOT 8.25	2N4223	MOT 2.25	2N5179	MOT 8.11	3N154	RCA 1.62	CR208	RCA 8.40
2N3766	MOT 2.10	2N4224	MOT 2.10	2N5180	RCA 48	3N155	MOT 6.30	DD170	IR 1.95
2N3767	MOT 2.30	2N4231	MOT 2.10	2N5182	RCA 40	3N156	MOT 6.30	DD175	IR .99
2N3771	RCA 4.13	2N4232	MOT 2.40	2N5183	RCA .32	3N157	MOT 6.30	DD176	IR .99
2N3772	RCA 4.13	2N4233	MOT 3.20	2N5184	RCA .45	3N158	MOT 6.30	DD177	IR .59
2N3796	MOT 3.75	2N4234	MOT 3.00	2N5185	RCA .52	3N159	RCA 2.18	E075L	IR .59
2N3797	MOT 3.75	2N4235	MOT 3.60	2N5186	RCA .40	1MA4	ST .60	E150L	IR 7.4
2N3798	MOT 6.15	2N4236	MOT 4.00	2N5187	RCA .45	2F4	ST .50	E300L	IR 1.10
2N3799	MOT 6.75	2N4237	MOT 2.25	2N5188	RCA .55	2A2	IR .32	E500L	IR 1.22
2N3819	TI .56	2N4238	MOT 2.75	2N5189	RCA .65	5A4	IR .41	E650L	IR 2.08
2N3820	TI .72	2N4239	MOT 3.05	2N5190	MOT 1.57	5A6	IR .50	F-8	ST 1.62
2N3822	MOT 2.77	2N4240	RCA 2.89	2N5191	MOT 1.92	5A8	IR .85	F-8	ST 5.20
2N3823	MOT 2.55	2N4242	TI 1.85	2N5192	MOT 2.50	5A10	IR 1.20	G129	TI 1.00
2N3824	MOT 2.40	2N4254	TI .90	2N5193	MOT 2.00	5MA4	IR .94	H11	TI 4.00
2N3866	RCA 2.97	2N4255	TI .85	2N5194	MOT 2.25	5MA6	IR 1.70	H35	TI 5.00
2N3870	RCA 3.88	2N4259	RCA 1.90	2N5195	MOT 2.90	8D4	IR .44	H38	TI 4.00
2N3871	RCA 4.54	2N4264	MOT .58	2N5202	RCA 4.53	8D6	IR .67		
2N3872	RCA 6.11	2N4265	MOT .44	2N5208	MOT .54	10B1	IR .50		
2N3873	RCA 8.22	2N4276	MOT 3.50	2N5209	MOT .66	10B4	IR .80	KD2501	RCA .90
2N3878	RCA 4.95	2N4298	RCA 3.71	2N5210	MOT .72	10D5	IR .45	KD2503	RCA 1.08
2N3879	RCA 6.60	2N4299	RCA 4.13	2N5219	MOT .28	10D10	IR 1.20	KD2504	RCA 1.08
2N3896	RCA 4.37	2N4314	RCA 1.24	2N5220	MOT .27	18DB2A	IR 2.38	KD3505	RCA 1.08
2N3897	RCA 5.03	2N4346	RCA 2.31	2N5221	MOT .30	18DB6A	IR 2.90	M1B	IR 1.72
2N3898	RCA 6.60	2N4347	RCA 2.97	2N5222	MOT .24	18DB10A	IR 5.12	M1H	IR .56
2N3899	RCA 8.75	2N4348	RCA 4.13	2N5223	MOT .21	18DCA	IR 2.30	MDA920-4	MOT 2.30
2N3903	MOT .75	2N4351	MOT 5.25	2N5224	MOT .24	18DJ2A	IR 2.10	MDA942-1	MOT 2.50
2N3904	MOT .82	2N4352	MOT 5.25	2N5225	MOT .27	18DJ6A	IR 2.30	MDA942-2	MOT 2.80
2N3905	MOT .75	2N4353	SPR 1.05	2N5226	MOT .30	18DJ10A	IR 2.60	MDA942-3	MOT 3.25
2N3909	TI 2.00	2N4384	SPR 1.05	2N5227	MOT .24	60M	ST .85	MDA942-5	MOT 4.20
2N3924	MOT 4.00	2N4390	RCA .75	2N5228	MOT .28	61-8969	IR 2.95	MDA952-1	MOT 3.25
2N3932	RCA 1.40	2N4391	MOT 6.45	2N5262	RCA 1.62	65C00	TI 4.85	MDA952-2	MOT 3.50
2N3933	RCA 1.62	2N4392	MOT 4.95	2N5265	MOT 5.25	65C03	TI 4.85	MDA952-3	MOT 4.45
2N3946	MOT 2.40	2N4393	MOT 5.70	2N5266	MOT 4.27	65C20	TI 4.85	MJ400	MOT 1.65
2N3947	MOT 2.75	2N4400	MOT .60	2N5267	MOT 3.97	65C25	TI 4.85	MJ420	MOT 1.80
2N3948	MOT 5.15	2N4401	MOT .75	2N5268	MOT 3.75	40022	RCA 83	MJ421	MOT 1.85
2N3980	MOT 3.40	2N4402	MOT .60	2N5269	MOT 3.97	40050	RCA .99	MJ440	MOT 1.55
2N4036	RCA 1.32	2N4403	MOT .75	2N5270	MOT 4.27	40084	RCA .99	MJ2251	MOT 1.87
2N4037	RCA 1.16	2N4409	MOT .67	2N5293	RCA .91	40108	RCA .99	MJ2252	MOT 2.02
2N4058	TI .35	2N4410	MOT .96	2N5294	RCA .91	40109	RCA 1.16	MJ3101	MOT 1.95
2N4059	TI .29	2N4427	RCA 2.15	2N5295	RCA .91	40110	RCA 1.57	MJ3201	MOT 1.72
2N4060	TI .30	2N4441	MOT 1.20	2N5296	RCA .91	40208	RCA .99	MJ3202	MOT 1.87
2N4061	TI .32	2N4442	MOT .50	2N5297	RCA 1.04	40231	RCA .47	MJ3101	MOT 1.57
2N4062	TI .34	2N4443	MOT 2.00	2N5298	RCA 1.04	40232	RCA .53	MK-10	MOT .25
2N4063	RCA 3.80	2N4444	MOT 4.50	2N5320	RCA 2.15	40233	RCA .60	MK-15	MOT .25
2N4064	RCA 1.90	2N4851	MOT 1.10	2N5321	RCA 1.57	40234	RCA .57	MK-20	MOT .30
2N4068	RCA 1.34	2N4852	MOT 1.10	2N5322	RCA 2.15	40235	RCA .42	MM380	MOT .26
2N4072	MOT 2.25	2N4853	MOT 2.25	2N5323	RCA 1.57	40238	RCA .43	MM1339	MOT 1.15
2N4073	MOT 2.70	2N4870	MOT .75	2N5324	MOT 4.50	40242	RCA .57	MM4048	MOT 4.10
2N4074	RCA .73	2N4871	MOT .68	2N5325	MOT 6.00	40345	RCA 40	MM5000	MOT 4.40
2N4091	MOT 5.25	2N4890	MOT 1.12	2N5358	MOT 1.12	40346	RCA .38	MM5001	MOT 3.15
2N4092	MOT 4.00	2N4898	MOT 1.95	2N5359	MOT 4.50	40347	RCA 1.16	MM5002	MOT 2.25
2N4093	MOT 3.45	2N4899	MOT 2.60	2N5360	MOT 3.90	40250	RCA .78	MP500	MOT 5.70
2N4101	RCA 3.05	2N4900	MOT 2.90	2N5361	MOT 3.00	40263	RCA .50	MP504	MOT 6.60
2N4102	RCA 2.64	2N4901	MOT 2.75	2N5362	MOT 3.45	40265	RCA .35	MP505	MOT 10.20
2N4103	RCA 5.12	2N4902	MOT 3.30	2N5363	MOT 3.90	40266	RCA .29	MP505A	MOT 12.75
2N4123	MOT .52	2N4903	MOT 4.25	2N5364	MOT 4.50	40267	RCA .33	MP3730	MOT 1.58
2N4124	MOT .60	2N4904	MOT 3.35	2N5415	RCA 3.30	40309	RCA .70	MP3731	MOT 2.10
2N4125	MOT .52	2N4905	MOT 4.45	2N5416	RCA 4.95	40311	RCA 7.3	MP1102	MOT .90
2N4126	MOT .60	2N4906	MOT 5.60	2N5457	MOT .90	40314	RCA .78	MP5269	MOT .53
2N4151	MOT 1.45	2N4910	MOT 1.55	2N5458	MOT .92	40315	RCA .75	MP5271	MOT .34
2N4152	MOT 1.60	2N4911	MOT 1.80	2N5459	MOT .86	40317	RCA .78	MP5272	MOT .32
2N4153	MOT 1.75	2N4912	MOT 2.10	2N5460	MOT 1.00	40320	RCA .78	MP52715	MOT .57
2N4154	MOT 1.95	2N4913	MOT 2.40	2N5461	MOT .75	40323	RCA .70	MP52716	MOT .60
2N4155	MOT 2.40	2N4914	MOT 2.60	2N5462	MOT 1.00	40326	RCA .78	MP52926	MOT .29
2N4156	MOT 2.80	2N4915	MOT 4.20	2N5463	MOT 1.50	40329	RCA .47	MP53392	MOT .32
2N4160	MOT 1.60	2N4918	MOT 1.65	2N5464	MOT 1.20	40347	RCA .66	MP53393	MOT .32
2N4162	MOT 1.95	2N4919	MOT 1.90	2N5465	MOT 1.50	40363	RCA 1.82	MP53394	MOT .27
2N4164	MOT 2.80	2N4920	MOT 2.25	2N5471	MOT 8.25	40395	RCA .38	MP53395	MOT .45
2N4167	MOT 1.60	2N4921	MOT 1.33	2N5472	MOT 6.00	40396	RCA .83	MP53398	MOT .57
2N4168	MOT 1.75	2N4922	MOT 1.48	2N5473	MOT 4.50	40398	RCA .60	MP53702	MOT .39
2N4169	MOT 1.90	2N4923	MOT 1.80	2N5474	MOT 3.75	40429	RCA 2.06	MP53703	MOT .39
2N4170	MOT 2.10	2N4928	MOT 4.05	2N5475	MOT 3.75	40430	RCA 2.39	MP53704	MOT .61
2N4171	MOT 2.55	2N4929	MOT 4.95	2N5476	MOT 3.75	40431	RCA 2.56	MP53705	MOT .57
2N4172	MOT 2.95	2N4930	MOT 5.90	2N5484	MOT 1.05	40432	RCA 2.97	MP53706	MOT .52
2N4173	MOT 5.15	2N4931	MOT 6.75	2N5485	MOT 1.12	40433	RCA 2.06	MP53707	MOT .60
2N4174	MOT 6.90	2N4937	MOT 7.15	2N5486	MOT 1.20	40486	RCA 2.39	MP53708	MOT .45
2N4175	MOT 1.60	2N4938	MOT 5.70	2N5490	RCA 1.07	40504	RCA 1.78	MP53709	MOT .45
2N4177	MOT 1.90	2N4939	MOT 3.40	2N5491	RCA 1.07	40505	RCA 2.48	MP53710	MOT .49
2N4178	MOT 2.10	2N4942	MOT 8.85	2N5492	RCA 1.19	40506	RCA 3.22	MP53711	MOT .54
2N4179	MOT 2.55	2N4948	MOT 1.35	2N5493	RCA 1.19	40507	RCA 1.63	MP56511	MOT .68
2N4180	MOT 2.95	2N4949	MOT 2.40	2N5494	RCA 1.19	40508	RCA 2.01	MP56518	MOT 1.57
2N4182	MOT 6.90	2N4959	MOT 6.75	2N5495	RCA 1.19	40511	RCA 2.72	MP56519	MOT .75
2N4183	MOT 1.59	2N5034	RCA 1.34	2N5496	RCA 1.29	40512	RCA 3.14	MP56522	MOT .90
2N4184	MOT 1.74	2N5035	RCA 1.32	2N5497	RCA 1.29	40513	RCA 1.24	MP56523	MOT .97
2N4185	MOT 1.89	2N5036	RCA 1.42	2N5555	MOT 1.20	40514	RCA 1.26	MP56542	MOT 1.20
2N4186	MOT 2.09	2N5037	RCA 1.41	2N5567	RCA 3.38	40515	RCA 1.57	MP56543	MOT 1.37
2N4187	MOT 2.54	2N5060	MOT .69	2N5568	RCA 4.41	40526	RCA 1.62	MP56544	MOT .54
2N4188	MOT 2.94	2N5061	MOT .78	2N5569	RCA 3.88	40527	RCA 2.31	MP56545	MOT .84
2N4189	MOT 5.14	2N5062	MOT .90	2N5570	RCA 4.90	40528	RCA 1.57	MP56546	MOT 1.24
2N4190	MOT 6.89	2N5063	MOT .95	2N5571	RCA 3.47	40529	RCA 1.62	MP56547	MOT 1.35
2N4191	MOT 1.59	2N5067	MOT 1.80	2N5572	RCA 4.65	40530	RCA 2.31	MP56560	MOT .78
2N4192	MOT 1.74	2N5068	MOT 2.25	2N5573	RCA 3.96	A1B	IR 1.22	MP56561	MOT .69
2N4193	MOT 1.89	2N5069	MOT 2.85	2N5574	RCA 5.15	A1H	IR .43	MP56565	MOT .52
2N4194	MOT 2.09	2N5086	MOT .75	3N116	SPR 3.75	AF139	MOT 1.95	MP56566	MOT .57
2N4195	MOT 2.54	2N5087	MOT .81	3N124	MOT 3.77	AF239	MOT 2.17	MP56567	MOT 1.00
2N4196	MOT 2.94	2N5088	MOT 6.75	3N126	MOT 3.37	B1B	IR 1.28	MP56568	MOT 1.50
2N4198	MOT 6.89	2N5089	MOT 9.75	3N128	RCA 1.45	B1H	IR .40	MP56569	MOT 1.11
2N4212	MOT 2.15	2N5109	RCA 3.47	3N138	RCA 3.30	C1B	IR 1.46	MP56570	MOT .96
2N4213	MOT 2.60	2N5164	MOT 3.30	3N139	RCA 2.89	C1H	IR .42	MPT28	MOT .67
2N4214	MOT 3.30	2N5165	MOT 4.65	3N140	RCA 1.62	CR103	RCA 8.15	MPT32	MOT .67
2N4215	MOT 4.50	2N5166	MOT 6.45	3N141	RCA 1.55	CR104	RCA 9.60	MPT36	MOT .68
2N4216	MOT 4.95	2N5167	MOT 9.75	3N142	RCA 1.08	CR105	RCA 10.55		
2N4220	MOT 2.25	2N5168	MOT 3.70	3N143	RCA 1.39	CR201	RCA 3.10		

MOTOROLA HEP  
DEVICES See Page 504

# Semiconductors, Rectifiers and Diodes

SEMICONDUCTOR DIRECTORY (CONT'D FROM PAGE 305) . . ORDERING INFORMATION ON PAGE 301

Type	Mfr. EACH	Type	Mfr. EACH	Type	Mfr. EACH
MR322	MOT .67	MV1636	MOT 1.42	SK 3026	RCA 1.80
MR322R	MOT .67	MV1638	MOT 1.42	SK 3027	RCA 3.15
MR323	MOT .76	MV1640	MOT 1.42	SK 3028	RCA 3.60
MR323R	MOT .76	MV1642	MOT 1.42	SK 3029	RCA 6.30
MR324	MOT 1.11	MV1644	MOT 1.42	SK 3030	RCA .42
MR324R	MOT 1.11	MV1646	MOT 1.42	SK 3031	RCA .51
MR325	MOT 1.27	MV1650	MOT 1.42	SK 3032	RCA .61
MR326	MOT 1.48	Q1B	IR .41	SK 3033	RCA .81
MR326R	MOT 1.48	Q4B	IR 1.56	ST-14C	IR 4.20
MR327	MOT 2.40	SD-94A	IR .96	TV-40A4	TI 5.50
MR328	MOT 3.35	SD-95A	IR 1.06	TI-47	TI .87
MR330	MOT 6.75	SK-3003	RCA .99	TI-51	TI .39
MR331	MOT 9.75	SK-3004	RCA .99	TI-52	TI .42
MR1033B	MOT .93	SK-3005	RCA 1.17	TI-53	TI .45
MR1120	MOT 1.03	SK-3006	RCA 1.41	TI-54	TI .50
MR1337-1	MOT 3.35	SK-3007	RCA 1.26	TI-55	TI .57
MR1337-2	MOT 4.95	SK-3008	RCA 1.23	TI-56	TI .65
MR1337-3	MOT 6.75	SK-3009	RCA 2.34	TI-57	TI .73
MR2266	MOT 1.08	SK-3010	RCA 1.26	TI-481	TI 1.90
MR2272	MOT .57	SK-3011	RCA 1.62	TI-482	TI 2.10
MR2273	MOT .48	SK-3012	RCA 4.38	TI-483	TI 2.30
MS-10	MOT 2.00	SK-3013	RCA 4.68	TI-484	TI 2.80
MU4891	MOT .90	SK-3014	RCA 3.15	TI-487	TI 5.60
MU4892	MOT 1.23	SK-3015	RCA 6.30	TI-492	TI 1.55
MU4893	MOT .96	SK-3016	RCA .57	TI-493	TI 1.90
MU4894	MOT 1.05	SK 3017A	RCA .60	TI-494	TI 2.50
MV1620	MOT 1.42	SK-3018	RCA 1.35	TI-495	TI 3.00
MV1622	MOT 1.42	SK 3019	RCA 1.47	TI-496	TI 1.75
MV1624	MOT 1.42	SK 3020	RCA 1.32	TIS37	TI .38
MV1626	MOT 1.42	SK 3021	RCA 1.95	TIS38	TI .35
MV1628	MOT 1.42	SK 3022	RCA 3.96	TIS43	TI .76
MV1630	MOT 1.42	SK 3023	RCA 3.96		
MV1632	MOT 1.42	SK 3024	RCA 1.98		
MV1634	MOT 1.42	SK 3025	RCA 2.70		

## integrated circuit directory

Type	Mfr. EACH	Type	Mfr. EACH
CA3000	RCA 3.80	CA3036	RCA 1.47
CA3001	RCA 5.55	CA3037	RCA 3.14
CA3002	RCA 3.71	CA3037A	RCA 4.79
CA3004	RCA 3.71	CA3038	RCA 4.79
CA3005	RCA 2.48	CA3038A	RCA 6.84
CA3006	RCA 5.80	CA3039	RCA 1.61
CA3007	RCA 5.35	CA3040	RCA 4.87
CA3008	RCA 6.44	CA3041	RCA 2.06
CA3008A	RCA 9.74	CA3042	RCA 2.06
CA3010	RCA 2.61	CA3043	RCA 2.81
CA3010A	RCA 4.79	CA3044	RCA 2.31
CA3011	RCA 1.47	CA3044V1	RCA 2.31
CA3012	RCA 1.82	CA3045	RCA 2.47
CA3013	RCA 2.15	CA3046	RCA 1.61
CA3014	RCA 2.48	CA3047	RCA 2.61
CA3015	RCA 3.96	CA3047A	RCA 4.79
CA3015A	RCA 6.44	CA3048	RCA 4.04
CA3016	RCA 8.91	CA3049	RCA 3.22
CA3016A	RCA 11.39	CA3050	RCA 3.71
CA3018	RCA 1.62	CA3051	RCA 2.72
CA3018A	RCA 2.22	MC815P	MOT 1.15
CA3019	RCA 1.62	MC816P	MOT 1.40
CA3020	RCA 2.56	MC817P	MOT 1.15
CA3020A	RCA 3.26	MC818P	MOT 1.15
CA3021	RCA 3.14	MC819P	MOT 1.25
CA3022	RCA 2.64	MC822P	MOT 1.55
CA3023	RCA 2.56	MC824P	MOT 1.25
CA3026	RCA 2.06	MC825P	MOT 1.25
CA3028A	RCA 1.47	MC826P	MOT 1.55
CA3028B	RCA 2.06	MC829P	MOT 2.15
CA3029	RCA 1.18	MC885P	MOT 1.25
CA3029A	RCA 3.14	MC886P	MOT 1.25
CA3030	RCA 4.79	MC887P	MOT 2.15
CA3031/702A	RCA 4.95	MC888P	MOT 1.55
CA3032/702C	RCA 3.30	MC889P	MOT 1.25
CA3033	RCA 4.79	MC890P	MOT 2.30
CA3033A	RCA 8.09	MC892P	MOT 1.25
CA3034V1	RCA 2.89	MC893P	MOT 1.25
CA3035	RCA 2.48	MC898P	MOT 1.40
CA3035V1	RCA 2.48	MC899P	MOT 1.25

Because of space limitations, only the most popular semiconductors are listed in this Directory—for a complete list of semiconductors stocked at Allied—ask for Directory No. 23 A 7901. It will be sent at no charge.

## INTERNATIONAL RECTIFIER SILICON RECTIFIERS AND SELENIUM RECTIFIER STACKS

### HOW TO ORDER

Specify Dept. No., 49 A 24, followed by Mfr's Type No. and Name. Ex.: 49 A 24 E-075L-IR Designates International Rectifier E-075L.

### COMPACT SELENIUM STACKS

Low cost, high density selenium rectifier for original equipment and replacement use. Offer long life, stable characteristics, negligible leakage. All are rated 130 volts rms max. input. With mounting bracket, hardware. Av. shpg. wt. 3 oz.

Type No.	Replaces Type	Size	DC Output (mA)	EACH
E-075L	TO65 075	2 $\frac{1}{2}$ x 67 x .67"	0-75	.44
E-150L	TO75 150	$\frac{1}{2}$ x 1 x 1"	75-150	.62
E-300L	T200/300	1 $\frac{1}{2}$ x 1 $\frac{1}{2}$ x 1 $\frac{1}{2}$ "	150-300	.92
E-500L	T450/500	1 $\frac{1}{2}$ x 1 $\frac{1}{2}$ x 1 $\frac{1}{2}$ "	400-500	1.02
E-650L	T550/650	2 x 2 x 2"	500-650	1.73

### 8D SUBMINIATURE SILICON RECTIFIERS

Silicon rectifiers using diffusion and encapsulation techniques to achieve DC output rating of 1000 mA at 25° C. Silver leads for easy soldering. Shpg. wt., 1 oz.

Mfr's Type	Peak Rev. V	Max. Surge, Amps	EACH
8D4	400	50	.44
8D6	600	50	.67

### HOW TO ORDER RCA DIODES

Specify Dept. No., 49 A 1, followed by Mfr's Type No. and Name. For example, 49 A 1 KD2501-RCA designates RCA type KD2501

## RCA DIODES (For use in TV, AM or AM/FM radio, and other Communication Devices)

### ZENER DIODES

Mfr's Type	Material	Operating Voltage	Dissipation	Shpg. Wt.	EACH
KD2501	Silicon	10 V	400mW	$\frac{1}{2}$ oz.	1.50
KD2503	Silicon	6.2 V	1 W	$\frac{1}{2}$ oz.	1.80
KD2504	Silicon	9.1 V	1 W	$\frac{1}{2}$ oz.	1.80
KD2505	Silicon	12 V	1 W	$\frac{1}{2}$ oz.	1.80

### CRYSTAL DIODES

Mfr's Type	Material	Cont. Reverse Voltage	Avar. Forward Current	Shpg. Wt.	EACH
IN34A	Germanium	60 V	50 mA	$\frac{1}{2}$ oz.	.55
IN60	Germanium	25 V	50 mA	$\frac{1}{2}$ oz.	.55
IN82A	Silicon	5 V		$\frac{1}{2}$ oz.	1.60
IN270	Germanium	80 V	90 mA	$\frac{1}{2}$ oz.	.48
IN295	Germanium	40 V	35 mA	$\frac{1}{2}$ oz.	.55

### "PLUG IN" ALL-CIRCUIT SILICON RECTIFIERS



Fit clip-type rectifier holders for use in radio-TV, motor control, amplifier, industrial power supply circuits. PIV, 400V. Input rms, 140 V. Shpg. wt., 2 oz.

Type No.	Output, DC mA @ 60° C	Max. Surge Amps	EACH
	Resistive	Capacitive	
1MA4	350	250	.80
5MA4	1000	800	.92

57 A 3006, Holder. Shpg. wt., 2 oz. . . . . 19

### ZENER DIODE KIT

DD-170. This bargain package contains an assortment of 5 popular 1-watt zener diodes and a complete 24-page instruction manual that includes many hobby and experimental projects. Shpg. wt., 3 oz.  
DD-170 . . . . . 1.95

### SILICON RECTIFIER KITS

Low priced rectifier kits designed to encourage experimentation with, and understanding of silicon rectifiers. Ideal for schools, laboratories, commercial applications, experimental and hobby projects. Kits contain a free 24 page instruction manual crammed with interesting and instructive projects and experiments. Shpg. wt., 3 oz.

DD-175, 100 PRV.,  $\frac{1}{2}$  amp. . . . . Pkg. of 4 for .99  
DD-176, 200 PRV.,  $\frac{1}{2}$  amp. . . . . Pkg. of 2 for .59  
DD-177, 400 PRV.,  $\frac{1}{2}$  amp. . . . . Pkg. of 2 for .99



### COLOR-TV RECTIFIER

Selenium cartridge rectifier used in 1964 color sets. Shpg. wt., 3 oz.

Mfr's Type	PRV (Volts)	Use	EACH
61-8969	6500	Focus	2.95

# RCA "Top-of-the-Line" Solid-State Replacements

## GERMANIUM TRANSISTORS

SK-3003. Germanium, PNP, alloy-junction transistor for replacement in AF output, driver and low-level amplifier stages of battery-operated portable radios and other electronic equipment using DC supply not greater than 9 volts. Shpg. wt., 2 oz.	99
SK-3004. Germanium, PNP, alloy-junction transistor for replacement in AF output, driver and low-level amplifier stages in battery-operated portable radios and other electronic equipment using DC supply not greater than 15 volts. Shpg. wt., 2 oz.	1.14
SK-3005. Germanium, PNP, alloy-junction transistor for replacement in RF amplifier, converter and IF amplifier stages of standard AM broadcast band (530 to 1550 kHz) sets. Shpg. wt., 2 oz.	1.17
SK-3006. Germanium, PNP, drift-field transistor for replacement use in RF amplifier, IF amplifier and converter stages of FM and AM/FM receivers up to 108 MHz and other electronic equipment using DC supply up to 15 volts. Shpg. wt., 2 oz.	1.41
SK-3007. Germanium, PNP, drift-field transistor for replacement use in RF amplifier, IF amplifier and converter stages of "all-wave" receivers up to 30 MHz using DC supply up to 15 volts. Shpg. wt., 2 oz.	1.26
SK-3008. Germanium, PNP, drift-field transistor for RF amplifier, IF amplifier and converter stages of standard broadcast car radios and portable radios up to 15 volts. Shpg. wt., 2 oz.	1.23
SK-3009. Germanium, PNP, alloy-junction transistor for audio output stages of auto radios, high-fidelity amplifier equipment, and communications equipment. Shpg. wt., 2 oz.	2.34
SK-3010. Germanium, NPN, alloy-junction transistor for replacement use in Class A voltage amplifier of driver stage using DC supply voltages not greater than 15 volts. Shpg. wt., 2 oz.	1.26
SK-3011. Germanium, NPN, alloy-junction transistor for replacement use in RF amplifier, converter, and IF amplifier stages of standard AM broadcast band (530 to 1550 kHz) sets using supply voltages up to 18 V. Shpg. wt., 2 oz.	1.62
SK-3012. Germanium, PNP, alloy-junction transistor for replacement use in audio output stages of transistorized automobile radios. Stud-mounted. Shpg. wt., 2 oz.	4.38
SK-3013. Matched pair of SK-3009 transistors for replacement use in push-pull type output stages of auto radios, high-fidelity amplifiers, and communications equipment. Shpg. wt., 4 oz.	4.68
SK-3014. Germanium, PNP, drift-field transistor for audio output stages of auto radios, high-fidelity amplifier equipment and other audio communications equipment. Shpg. wt., 2 oz.	3.15
SK-3015. Matched pair of SK-3014 transistors, above. For replacement use in push-pull audio output stages of auto radios, amplifiers and other communications equipment. Shpg. wt., 4 oz.	6.30
SK-3034. PNP, diffused. For replacement use in vertical output stages and horizontal driver stages of television receivers where set circuit uses DC supply voltages up to 36 volts. Shpg. wt., 2 oz.	4.50
SK-3036. PNP, diffused. For replacement use in horizontal output stages of TV receivers using picture tubes with deflection angles up to 114°. Anode voltage ratings to 10 kV. Shpg. wt., 2 oz.	5.49

## SILICON TRANSISTORS

SK-3018. Silicon, NPN, planar transistor for use in VHF-TV tuners, TV-IF amplifiers, FM tuners, FM-IF amplifiers, and other communications equipment. 4-terminal case. Shpg. wt., 4 oz.	1.35
SK-3019. Silicon, NPN, planar transistor designed specifically for use in UHF TV oscillator stages that originally employed silicon NPN transistors. Sealed 4-terminal case. Shpg. wt., 4 oz.	1.47
SK-3020. Silicon, NPN, planar transistor for AF amplifier output stages or in low-level driver applications operating with collector supply voltages up to 25 volts. Shpg. wt., 1 oz.	1.32
SK-3021. Silicon, NPN, diffused transistor for replacement or experimenter use in AF output stages for line-operated radios, phonographs, and color or black-and-white TV receivers using DC supply voltages of 120 volts. Dissipation, up to 8 watts at T <sub>MF</sub> =70°C. 2 oz.	1.95
SK-3024. Silicon NPN diffused power transistor for replacement use in driver stages of audio amplifiers using DC supply voltages to 80 V. NPN complement of SK-3025. Shpg. wt., 2 oz.	1.98
SK-3026. Silicon PNP planar power transistor for replacement use in driver stages of audio amplifiers using DC supply voltages to 80 V. PNP complement of SK-3024. Shpg. wt., 2 oz.	2.70
SK-3026. Silicon NPN planar power transistor for use as replacement transistor in Class A and B. Audio output amplifier stages in high fidelity equipment, transmitters, etc. Shpg. wt., 2 oz.	1.80

## HOW TO ORDER

When ordering, specify Dept. No. 49 A 1, followed by Mfr's Type No. and Name. For Example:  
49 A 1 SK3003-RCA Designates Radio Corp. of America Type SK3003

## SILICON TRANSISTORS (Cont'd)

SK-3027. Silicon NPN planar power transistor for use as replacement transistor in class B push-pull audio output amplifier stages in high-fidelity and communications equipment. Shpg. wt., 2 oz.	3.15
SK-3028. Matched pair of SK-3026 silicon NPN power transistors for replacement use in push-pull audio output amplifier stages in high-fidelity and communications equipment. Shpg. wt., 2 oz.	3.60
SK-3029. Matched pair of SK-3027 silicon NPN power transistors for replacement use in push-pull audio output amplifier stages using supply voltages up to 80 V. Shpg. wt., 2 oz.	6.30
SK-3036. NPN, diffused. For replacement use in Class B push-pull audio power amplifier stages of hi-fi and communications equipment with supply voltages up to 80 volts. Shpg. wt., 2 oz.	5.85
SK-3037. Matched pair of SK-3036 transistors, above. NPN, diffused. For replacement use in Class B audio power amplifier stages in hi-fi and communications equipment delivering approximately 100 watt output. Shpg. wt., 4 oz.	11.70
SK-3038. NPN, planar. For replacement use in small-signal, low-noise AF preamplifier stages of hi-fi and communications equipment using supply voltages up to 18 volts. Shpg. wt., 1 oz.	1.44
SK-3039. NPN, planar. For replacement use in RF amplifier, mixer, and converter stages of UHF-television receivers where sets circuit uses supply voltages up to 15 volts. Shpg. wt., 2 oz.	1.98
SK-3040. NPN, diffused. For replacement use in video output stages of black and white television receivers where sets circuit uses supply voltages up to 140 volts. Shpg. wt., 2 oz.	2.25
SK-3041. NPN, homotaxial-base. For replacement use in audio power output stages of automobile receivers using supply voltages up to 18 volts. Shpg. wt., 2 oz.	2.52

## SILICON RECTIFIERS

SK-3016. Silicon rectifier for color and black-and-white TV sets, hi-fi equipment, phonographs, etc. Hermetically sealed Top-Hat case. PRV, 500 V. DC Output, 1 A max. Shpg. wt., 2 oz.	.57
SK-3017A. Silicon rectifier for color and black-and-white TV sets, high-fidelity amplifiers, radios, phonographs, and other types of electronic equipment. Insulated case. PRV, 600 volts. DC output, 1 A max. Shpg. wt., 2 oz.	.60
SK-3030. Silicon rectifier for replacement use in high-fidelity equipment, color and black-and-white TV, other electronic devices. PRV of 200 volts; DC output current to 1 A. Insulated case. Shpg. wt., 2 oz.	.42
SK-3031. Silicon rectifier for replacement use in high-fidelity equipment, color or black-and-white TV, or other electronic devices. PRV of 400 volts; DC output current to 1 A. Insulated case. Shpg. wt., 2 oz.	.51
SK-3032. Silicon rectifier for replacement use in high-fidelity equipment, color and black-and-white TV, other electronic devices. PRV of 800 volts; DC output current to 1 A. Insulated case. Shpg. wt., 2 oz.	.61
SK-3033. Silicon rectifier for replacement use in high-fidelity equipment, color and black-and-white TV, other electronic devices. PRV of 1000 volts; DC output current to 1 A. Shpg. wt., 2 oz.	.81

## LINEAR INTEGRATED CIRCUITS

SK-3022. Wideband amplifier discriminator for replacement use only in audio IF stages of TV receivers. TO-5 style package with 10 leads. To order, specify Department Number, 50 A 1, Mfr's Type No. and Name (50 A 1 SK3022-RCA). Shpg. wt., 2 oz.	3.96
SK-3023. Wideband amplifier discriminator for replacement use only in audio IF stages of TV receivers. TO-5, 10-lead (Formed) pkg. To order, specify Department Number, 50 A 1, Mfr's Type No. and Name. (50 A 1 SK3023-RCA). Shpg. wt., 2 oz.	3.96

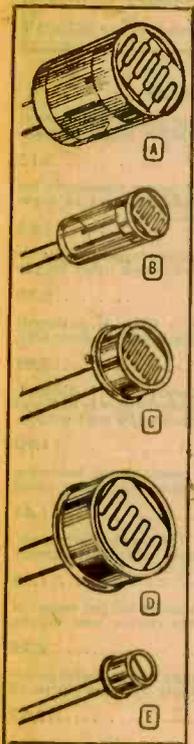
## SPG-202H CROSS REFERENCE GUIDE

Lists over 12,200 transistor, integrated circuit and rectifier types replaced by the SK-Series "Top-of-the-Line" semiconductors. Size, 8 1/2 x 11". Shpg. wt., 1 1/4 lbs.  
23 A 7232 E. .20

# Photocells and Humidity-Sensitive Devices

## CLAIREX Cds AND CdSe PHOTOCELLS

\*Resistance @ 2 fc = 33 1/2% †Res. ratio from 2 fc to dark within 5 seconds. ‡Power diss. @ 25°C. (mW). §With/without heat sink. Av. shpg. wt., 2 oz.



Stock No.	Type No.	Fig.	Description	DxL (In.)	*Resist. @ 2 fc	†Max. Res. Ratio	Max. Volt.	‡Power Dissip.	EACH
60 A 9488	CL5M2	D	Type 2 CdS, peak resp. 5150 A., bluest response photosensitive material; high stability, low temp. error. Use with fluorescent and incandescent lamps.	.55x.18	55K	1:100	250	2000/500§	2.00
60 A 7460	CL902	B		.25x.5	1 meg.	1:100	300	75	1.50
60 A 7472	CL702	C		.36x.18	1 meg.	1:100	300	125	2.00
60 A 7486	CL902	E		.21x.15	1 meg.	1:100	250	50	2.00
60 A 7469	CL503	A		.5x.5	7.2K	1:10,000	250	500/250§	1.50
60 A 9489	CL5M3	D		.55x.18	7.2K	1:10,000	250	2000/500§	1.50
60 A 7461	CL603	B	Type 3 CdSe, peak spectral response 7350 angstroms, fast response, and very high light-to-dark resistance ratio. Can be used for high speed switching or counting. Sensitive to near infra red. For use with incandescent or neon lamps.	.25x.5	133K	1:10,000	300	75	1.75
60 A 7462	CL603A	B		.25x.5	75K	1:10,000	300	75	1.75
60 A 7463	CL603AL	B		.25x.5	35K	1:10,000	170	75	1.50
60 A 7473	CL703	C		.36x.18	133K	1:10,000	300	125	1.50
60 A 6437	CL703A	C		.36x.18	67K	1:10,000	300	125	1.50
60 A 7474	CL703L	C		.36x.18	2.7K	1:10,000	100	125	1.50
60 A 7488	CL903	E		.21x.15	133K	1:10,000	250	50	1.50
60 A 6438	CL903A	E		.21x.15	67K	1:10,000	250	50	1.50
60 A 6439	CL903L	E		.21x.15	5.9K	1:10,000	100	50	1.50
60 A 7456	CL504	A		.5x.5	1.5K	1:1000	250	500/250§	1.50
60 A 9490	CL5M4	A		.55x.18	1.5K	1:1000	250	2000/500§	1.50
60 A 7457	CL504L	A	Type 4 CdSe, peak spectral response 6900 angstroms, very low resistance photocells. Can be used for "on-off" applications when low resistance is desired. For use with either incandescent or neon lamps.	.55x.18	0.25K	1:1000	170	500/250§	1.50
60 A 6440	CL5M4L	A		.25x.5	30K	1:1000	300	75	1.75
60 A 7464	CL604	B		.25x.5	1.5K	1:1000	170	75	1.75
60 A 7465	CL604L	B		.36x.18	30K	1:1000	300	125	1.50
60 A 6441	CL704	C		.36x.18	0.6K	1:1000	100	125	1.50
60 A 7476	CL704L	C		.21x.15	2K	1:1000	100	50	1.50
60 A 7490	CL904	E		.5x.5	9K	1:100	250	500/250§	1.50
60 A 6442	CL904L	E		.55x.18	9K	1:100	250	2000/500§	1.50
60 A 7458	CL505	A		.5x.5	1.5K	1:100	170	500/250§	1.50
60 A 9491	CL5M5	A		.55x.18	1.5K	1:100	170	500/250§	1.50
60 A 7459	CL505L	A	Type 5 CdS, peak spectral response 5500 angstroms (closely matches the human eye), stable, low memory photocell. Can be used in light measuring applications, and precision low speed switching. For use with incandescent, fluorescent or neon lamps.	.55x.18	1.5K	1:100	170	2000/500§	1.50
60 A 6443	CL5M5L	A		.25x.5	166K	1:100	300	75	1.50
60 A 7466	CL605	B		.25x.5	1.5K	1:100	170	75	1.50
60 A 7467	CL605L	B		.25x.5	1.5K	1:100	170	75	1.50
60 A 6444	CL705	C		.36x.18	166K	1:100	300	125	2.00
60 A 7478	CL705L	C		.36x.18	3.3K	1:100	100	125	1.50
60 A 6445	CL905	E		.21x.15	166K	1:100	250	50	1.50
60 A 6446	CL905L	E		.21x.15	10K	1:100	100	50	1.50
60 A 6447	CL705HL	C	Type 5H CdS, peak response 5500A. Uniform color temp. response. For speed switching, high stability measuring; incandescent, fluorescent, neon lamps.	.36x.18	28K	1:1000	100	125	1.50
60 A 6448	CL905HL	E		.21x.15	100K	1:1000	100	50	1.50
60 A 6449	CL905HN	E		.21x.15	700K	1:1000	100	50	1.50
60 A 6450	CL507	A		.5x.5	7.2K	1:1000	250	500/250§	1.50
60 A 9492	CL5M7	A		.55x.18	7.2K	1:1000	250	2000/500§	1.50
60 A 7468	CL607	B	Type 7 CdS, peak spectral response 6150 angstroms, moderate speed and ratio. Can be used in general beam breaking applications. For use with incandescent, neon or fluorescent lamps.	.25x.5	133K	1:1000	300	75	1.50
60 A 6451	CL707	C		.36x.18	133K	1:1000	300	125	2.00
60 A 6452	CL907	E		.36x.18	2.7K	1:1000	100	125	1.50
60 A 6453	CL907	E		.21x.15	133K	1:1000	250	50	1.50
60 A 6454	CL907N	E		.21x.15	66K	1:1000	100	50	1.50

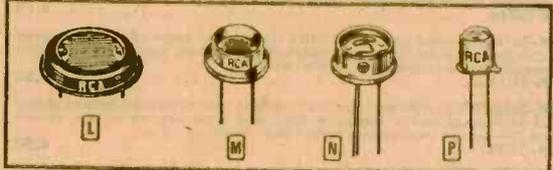
### CLAIREX PHOTOCELL KIT

Has five CdS and CdSe cells for a wide range of experiments. CdS types include: CL505, CL707, CL902; CdSe types: CL603A and CL704L. See also for descriptions. Shpg. wt. 5 oz. 60 A 9265..... 10.00



### RCA BROAD-AREA

### CADMIUM-SULFIDE TYPE PHOTOCELLS

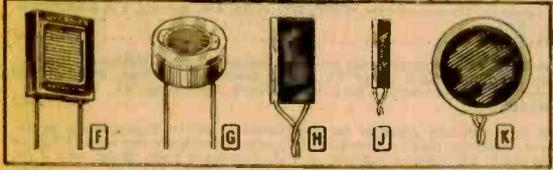


Top-quality cadmium-sulfide type photocells designed to meet today's rigid standards of performance, dependability and longevity. Maximum spectral response, 5100 angstroms. Hermetically sealed. All are glass-metal types (GM in table). †Maximum DC or peak AC voltage. ‡Power dissipation in continuous service. Will do every job required of a cadmium-sulfide photocell with excellent performance and efficiency. Modified cases: \*TO-5, \*TO-8, †TO-18. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Dia. (Inches)	Make	V	W	Res. (Ohms @ 2 fc)	EACH
								1-99 100-Up
60 A 8275	SO2503	L	1	GM	500	0.75	17	1.21 .88
60 A 8276	SO2508	N	1/2	GM	200	0.05	60	1.24 .90
60 A 8277	SO2519	N	1/2	GM	300	0.05	9	1.16 .84
60 A 8278	SO2520	M	1/2	GM	110	0.2	0.7	1.32 .96
60 A 8279	SO2521	M	1/2	GM	250	0.2	8	1.40 1.02
60 A 8281	SO2526	M	1/2	GM	110	0.2	3	1.32 .96
60 A 8282	SO2527	M	1/2	GM	110	0.2	1.6	1.32 .96
60 A 8283	SO2528	N	1/2	GM	300	0.05	800	1.24 .90
60 A 8285	SO2534	N	1/2	GM	150	0.03	675	1.24 .90
60 A 8286	SO2535	P	1/2	GM	50	0.02	25	1.24 .90
60 A 8287	SO2536	N	1/2	GM	110	0.05	3	1.24 .90

### F HYGROPAK HUMIDITY SENSORS

Quality sensors have 30% to 100% relative humidity range. 1x1/4x1/2" 1/4" spacing. Shpg. wt., 4 oz.



### G POLARIS MAJ-1 PHOTOCELL

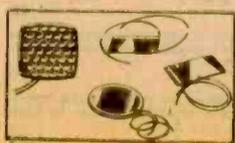
Type LDR-C1. CdS cell. 75-300 ohms at 92 fc; 10 meg in darkness. Max. change, 0.2 meg per sec. Max. dissipation, 0.2 W at 40°C. Max. cell voltage, 110 VAC (peak) or DC. Ambient range, -20° to +60°C. 60 A 7565 (Shpg. wt., 6 oz.)..... 1.00

### SOLAR SYSTEM SILICON CELLS

Power transistor radios or operate relays and small motors from sunlight. Response, 20 microsec maximum. Peak sensitivity at 0.85 micron. Unmounted. 6" color-coded leads. Av. shpg. wt., 2 oz.

Stock No.	SS Type	Fig.	Output		Size	EACH
			mA	mW		
60 A 7566	10 4LC	H	18.0	7.2	8x4"	1.95
60 A 7567	10 6LC	H	27.0	10.8	8x4"	2.40
60 A 7568	10 8LC	H	36.0	14.4	8x4"	3.60
60 A 7569	11 LC	H	12.0	4.8	4x4"	1.95
60 A 7570	12 LC	J	5.0	2.0	4x2"	1.50
60 A 7571	20 LC	H	12.0	4.8	4x2"	3.50
60 A 7572	21 LC	C	5.0	2.0	4x2"	2.20
60 A 7573	22 LC	J	5.0	1.0	2x2"	1.40
60 A 7574	23 LC	J	1.3	0.52	2x1"	1.00
60 A 7575	30 LC	K	75.0	30	1.125" d.	6.75

### IR SOLAR CELL AND PHOTOCELL EXPERIMENTER KIT HAS 7 CELLS FOR A VARIETY OF PROJECTS



Type K-421. Contains 7 different selenium, silicon and cadmium-sulfide photocells similar to illustrations at left. May be used to power transistor radios, build light meters, operate small motors from sunlight, etc. Has detailed instruction manual with a wide variety of circuit diagrams and experiments, plus "Experimenter Handbook." Shpg. wt., 1 lb. 60 A 7875..... 5.95

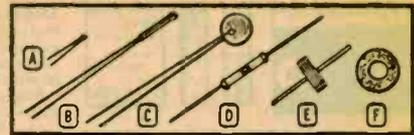
# Thermistors and Semiconductor Coolers

THERMISTORS By FENWAL ELECTRONICS, INC.

Stock No.	Mfr's Type	Fig.	Style	Ohms @ 25°C	Res. Ratio 0°C: 50°C	EACH
60 A 8621	GD25J1	A	Bead	500	5.1:1	3.24
60 A 8622	GB31J1	A	Bead	1000	7.3:1	2.70
60 A 9911	GB32J2	A	Bead	2000	7.3:1	1.96
60 A 8623	GB35J1	A	Bead	5000	7.3:1	3.24
60 A 8624	GB41J1	A	Bead	10K	7.5:1	3.24
60 A 8625	GA45J1	A	Bead	50K	10.3:1	2.67
60 A 9909	GA51J1	A	Bead	100K	10.3:1	1.96
60 A 7113	GA52J2	A	Bead	200K	10.3:1	2.70
60 A 8626	GA55J1	A	Bead	500K	11.8:1	3.24
60 A 7114	GA61J1	A	Bead	1000K	14.0:1	3.78
60 A 8627	GB31P2	B	Probe	1000	7.3:1	2.00
60 A 8628	GB32P2	B	Probe	2000	7.3:1	2.00
60 A 9912	GB32P8	B	Probe	2000	7.3:1	2.35
60 A 8629	GB34P2	B	Probe	4000	7.3:1	2.00
60 A 8630	GB41P2	B	Probe	10K	7.5:1	2.40
60 A 8631	GB42P2	B	Probe	20K	7.5:1	2.40
60 A 7116	GA45P2	B	Probe	50K	10.3:1	2.20
60 A 9910	GA51P2	B	Probe	100K	10.3:1	2.00
60 A 9967	GA51P8	B	Probe	100K	10.3:1	2.35
60 A 8632	GA52P2	B	Probe	200K	10.9:1	2.00
60 A 8633	GA55P2	B	Probe	500K	11.8:1	2.40
60 A 8634	GA61P2	B	Probe	1.0 Meg	14.0:1	2.80
60 A 8635	JB25J1	C	Disc	50	6.9:1	1.00
60 A 8636	JB31J1	C	Disc	1000	6.9:1	1.00
60 A 8637	JA33J1	C	Disc	3000	9.1:1	1.00
60 A 9975	JA35J1	C	Disc	5000	9.1:1	1.00
60 A 7118	JA38J1	C	Disc	8000	9.1:1	1.00
60 A 8638	JA41J1	C	Disc	10K	9.1:1	1.00
60 A 8639	KB21J1	C	Disc	100	6.9:1	.85
60 A 8640	KB22J1	C	Disc	200	6.9:1	.85
60 A 8641	KB23J1	C	Disc	300	6.9:1	.85
60 A 8642	KB25J1	C	Disc	500	6.9:1	.85
60 A 9914	KA31J1	C	Disc	1000	9.1:1	.85
60 A 7119	KA33J1	C	Disc	3000	9.1:1	.85
60 A 8643	KA35J3	C	Disc	5000	9.1:1	.85
60 A 8644	LB12J2	C	Disc	18.6	6.9:1	.97

In a Wide Variety of Styles

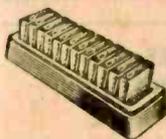
For All Job Requirements



Use glass-coated bead thermistors where fast response, precision and operation in temperatures up to 600°F are required. Medium-small glass probes are similar, but are more rugged and mount more easily. Discs are used for medium power and time response, for temperatures up to 125°C. Rods and washers are ideal for high dissipation applications; operate in temperatures up to 150°C. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Style	Ohms @ 25°C	Res. Ratio 0°C: 50°C	EACH
60 A 7120	LB15J1	C	Disc	50	6.9:1	.85
60 A 9915	LB21J1	C	Disc	100	6.9:1	.85
60 A 8646	LA25L2	C	Disc	500	9.1:1	.85
60 A 8647	LA31J1	C	Disc	1000	9.1:1	.85
60 A 8648	MB13J1	C	Disc	25	6.9:1	.85
60 A 8649	MA21J1	C	Disc	100	9.1:1	.85
60 A 8650	NB11J1	C	Disc	10	6.9:1	.85
60 A 8651	NA21J1	C	Disc	100	9.1:1	.85
60 A 8652	NA22J1	C	Disc	250	9.1:1	.85
60 A 8653	QB41J1	D	Rod	10K	7.1:1	1.25
60 A 9916	QA51J1	D	Rod	100K	9.1:1	1.25
60 A 9917	RB33L1	D	Rod	3150	7.1:1	1.20
60 A 9918	RB41L1	D	Rod	10K	9.1:1	1.20
60 A 9878	RA43L1	D	Rod	31.5K	9.1:1	1.20
60 A 8654	RA51L1	D	Rod	100K	9.1:1	1.35
60 A 8655	TB31L1	D	Rod	1K	7.1:1	1.35
60 A 8656	TA45L1	D	Rod	50K	9.1:1	1.60
60 A 9925	WB11W1	F	Washer	10	6.9:1	1.25
60 A 9919	WA21W1	F	Washer	100	9.1:1	1.25

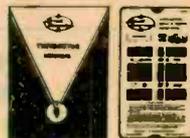
## EXPERIMENTER'S THERMISTOR KITS



G-700 Low-Cost Kit. 4 glass beads and probes, manual and computer for many uses. 1 lb. 60 A 8658 ..... 4.95

G-701 Economy Kit. 10 glass beads and probes, manual and computer for more uses. Shpg. wt., 1 lb. 60 A 8659 ..... 9.95

## THERMISTOR ENGINEERING PACKAGE



Includes 5x8" resistance-temperature slide rule and thermistor manual giving the specifications of over 600 thermistors. Use as step-by-step primer and guide when designing circuits. Wt., 4 oz. 60 A 9877. 1.00

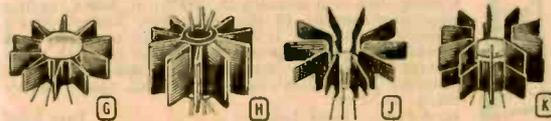
## THERMISTOR PROBE



Thermistor mounted on card, with detailed instructions and schematics showing procedure for use as a remote temperature indicator, liquid level control, or time-delay relay. Rated 135K ohms at 25°C; 1 mW/°C dissipation constant over a time period of 25 seconds. Still-air time constant, 0.3 seconds in rapidly stirred water. Shpg. wt., 2 oz. 60 A 6615 ..... 1.00

## WAKEFIELD ENGINEERING SEMICONDUCTOR COOLERS

### SERIES 200 FEATHERWEIGHT COOLERS



Unique fin design permits horizontal or vertical orientation with excellent natural convection. In forced convection uses, the axis of the semiconductor may be oriented either perpendicular or parallel to the direction of air flow. Series 200 coolers are made from a beryllium copper alloy having twice the thermal conductivity of commonly used alloys. Black finish. Meets MIL-C-81021. Shpg. wt., 2 oz.

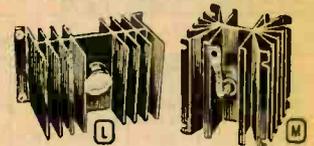
Stock No.	Mfr's Type	Fig.	Dia. In.	Lght. In.	Fits Case Dia.	EACH
60 A 6527	NF201	G	.64	.19	.161/.24	.27
60 A 6528	NF203	K	.64	.38	.161/.24	.29
60 A 6525	NF204	G	.55	.20	.275/.370	.25
60 A 6529	NF205	G	.72	.19	.275/.370	.27
60 A 6530	NF207	K	.72	.38	.275/.370	.29
60 A 6531	NF209	J	1.28	.44	.275/.370	.34
60 A 7074	NF211	G	.83	.19	.440/.544	.27
60 A 7073	NF213	K	.83	.38	.440/.544	.29
60 A 7075	NF215	J	1.40	.44	.440/.544	.34
60 A 7042	NF222	H	.64	.38	.165/.240	.38
60 A 7043	NF224	H	.72	.44	.275/.371	.38

### INSTALLATION TOOLS FOR MODELS ABOVE

60 A 6532	160	Installation tool for Models 201, 3, 5, 7, 9	1.50
60 A 8921	161	Installation tool for Models 211, 13, 15	1.50

### SERIES 400 NATURAL CONVECTION COOLERS

Ideal for use where space is critical. Features an optimum fin design for reliability in a wide range of semiconductor applications. Mounting area: Types 401-403, 6.3 sq. in.; Type 441, 7.13 sq. in. Black anodize finish per MIL-A-8625 Type II specifications. Av. shpg. wt., 4 oz.



Stock No.	Mfr's Type	Fig.	Inches			EACH
			H	W	D	
60 A 6501	NC401A	L	1.50	4.81	1.25	1.55
60 A 6502	NC401B	L	1.50	4.81	1.25	1.55
60 A 7094	NC401E	L	1.50	4.81	1.25	1.78
60 A 6503	NC401K	L	1.50	4.81	1.25	1.29
60 A 6504	NC403A	L	3.00	4.81	1.25	1.78
60 A 6505	NC403B	L	3.00	4.81	1.25	1.78
60 A 7096	NC403C	L	3.00	4.81	1.25	1.78
60 A 6506	NC403K	L	3.00	4.81	1.25	1.52
60 A 9526	NC413A	L	3.00	4.81	1.87	2.41
60 A 9527	NC413B	L	3.00	4.81	1.87	2.41
60 A 9528	NC413K	L	3.00	4.81	1.87	2.15
60 A 6507	NC421A	L	3.00	4.81	2.63	2.51
60 A 6508	NC421B	L	3.00	4.81	2.63	2.51
60 A 7098	NC421C	L	3.00	4.81	2.63	2.51
60 A 6509	NC421K	L	3.00	4.81	2.63	2.24
60 A 6510	NC423A	L	5.00	4.81	2.63	3.66
60 A 6511	NC423B	L	5.00	4.81	2.63	3.66
60 A 6512	NC423K	L	5.00	4.81	2.63	3.40
60 A 7106	NC441J	M	5.90	4.75	4.50	6.41
60 A 7107	NC441W	M	5.90	4.75	4.50	6.41
60 A 6533	NC441K	M	5.90	4.75	4.50	5.92

## TYPE 120 THERMAL JOINT COMPOUND

Grease-like material providing high thermal resistance. Reduces the high thermal impedance of an air gap present between the mating surfaces of the semiconductor case and then against the heat sink surface. Provides better dissipation capability, helps keep semiconductor from overheating. Av. shpg. wt., 8 oz.



Stock No.	Type No.	Quantity	EACH
60 A 9506	122	2 oz.	1.95
60 A 9507	128	8 oz.	5.10
60 A 9514	1280	5 lbs.	30.00

## TYPE 153 DELTA CAST

A pourable casting for encapsulating components and assemblies. Equalizes assembly temperature by removing heat from components. Has thermal expansion similar to aluminum or copper. In 8-oz. Jar. Shpg. wt., 8 oz. 60 A 9494 ..... 4.00



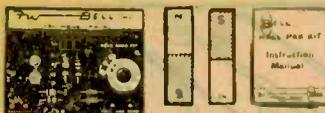
## TYPE 170 ALUMINUM INSULATING WAFER

For use with TO-3 transistors. Has thermally conductive dielectric coating providing a direct thermal path between the case and the heat sink. Wt., 2 oz. 60 A 9495 ..... Each 1.2



# Electronic Specialty Items

## F. W. BELL "HALL PAK" EXPERIMENTAL KIT



Demonstrates Hall effect—development of a voltage between two edges of a strip of metal in which electric current is flowing longitudinally. Ideal for class instruction. Has: Hall-effect device; circuit board (balancing network, transistor DC amplifier), magnet; and complete instructions.

60 A 7659. Shpg. wt., 4 lbs. . . . . 21.95

## CINCH-JONES POWER TRANSISTOR HEAT SINKS



Anodized aluminum wafers to meet exacting applications. High thermal conductivity reduces operating temperature of transistor. High corrosion resistance. Type 2W-1 is for Motorola 2N176, 2N179, 2N554; Type 2W-2 (not illus.) is for Delco 2N174. 2 oz.

Stock No.	Type	1-24, EA.	25-49, EA.	50-99, EA.	100-249, EA.
60 A 6039	2W-1	.54	.43	.36	.29
60 A 6040	2W-2	.42	.34	.28	.22

## AVTRON HEAT-SINK CLIP



Easy way to protect semiconductors from heat while soldering. Springloaded, aluminum clip fits around wire between semiconductor and joint. Shpg. wt., 2 oz.  
60 A 8819. 1-99. Each .25 100-up. . . . Each .20

## MALLORY SONALERT AUDIBLE WARNING DEVICE



Solid state miniature audible-signal warning device emits a discernible signal at minimum current. Eliminates possibility of arcing or RF as in other types of devices. For communications control systems; other electronic equipment. \*Pulsing sound output. 8 oz.

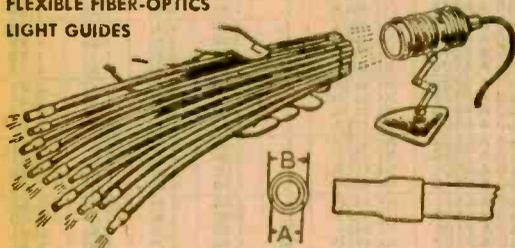
Stock No.	Mfr's Type	EACH	Stock No.	Mfr's Type	EACH
60 A 8983	SC628	5.50	60 A 8985	SC628A	8.75
60 A 9745	SC628P*	9.95	60 A 8986	SC110	8.75
60 A 8984	SC628H	6.35			

### SPECIFICATIONS

Type	Freq.	Volts	mA	dB	Temp. F°
SC628	2.5 kHz	6-28DC	3-14	68-80	-40-130
SC628P*	2.5 kHz	6-28DC	3-14	65-77	-40-130
SC628H	4.5 kHz	6-28DC	3-14	68-80	-40-130
SC628A	2.5 kHz	6-28AC/DC	3-14	68-80	-40-130
SC110	2.5 kHz	110AC/DC	14	80	-40-130

## AMERICAN OPTICAL FIBER OPTICS

### FLEXIBLE FIBER-OPTICS LIGHT GUIDES



Transmits light over a flexible path. Bundles of optical fibers cemented and polished at each end. Guides have stainless steel end tips; encased in PVC sheath. Transmit light through visible and near infrared spectrum to a wave-length about 1.5 microns. 2 oz.

Stock No.	Mfr's Type	Min. Rad. of Bend	Bundle Dia.	A ±.003	B ±.004	Lgth.	EACH
60 A 8989	LGM-1	3/8"	.020"	.032"	.032"	12"	4.80
69 A 9780	LGM-1	3/8"	.020"	.032"	.032"	24"	6.40
60 A 8990	LGM-2	3/8"	.062"	.110"	.160"	12"	13.00
60 A 9781	LGM-2	3/8"	.062"	.110"	.160"	24"	14.00
60 A 8991	LGM-2	3/8"	.062"	.110"	.160"	36"	15.00

## G. E. SILICONES AND COMPOUNDS

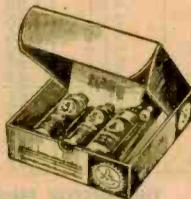
### SILICONE RUBBER SEALANTS

- Withstand temperature extremes without cracking
- Contain no solvents—cure with minimum of shrinkage

Ready-to-use silicone rubber adhesive/sealants for many applications. In squeeze tubes, they are easily applied and air cure to form a durable silicone rubber. Needs no catalyst. Applied at room temperature, adheres without priming. Excellent electrical properties. Withstand -75°F to +300°F. Resist moisture, weathering and aging. Cure with a minimum of shrinkage.

Type RTV-	Description	3-oz. Tube Stock No.	EA.	12-oz. Tube Stock No.	EA.
102	White. For shock mounting	60 A 7227	1.75	60 A 7228	5.55
103	Black. For rubber repair	60 A 7229	1.75	60 A 7230	5.55
108	Translucent	60 A 8594	1.75	60 A 8595	5.55
106	Red. For temp. to +600° F.	60 A 8916	2.20	60 A 8918	7.10
112	White. Brushing or spraying	60 A 7235	2.20	60 A 7236	7.10

## FLUOROCARBON TEFLON BONDING KIT



Contains all materials needed to bond "non-bondable" Teflon to itself and other substances. Kit contains a bottle of Teflon treating agent and two tubes of Thermo-Blend Epoxy Cement. Treating agent is applied to Teflon surface until it turns permanently brown, then surface is cleaned. Bonding agent is then applied, and parts are fitted together. Cures in about four hours at 300°F. Kit includes complete instruction brochure, Teflon treating agent, two tubes epoxy cement. Wt., 2 lbs.  
60 A 7037. Bonding Kit No. 1. . . . Ea. 14.95

## PLASTIC ASSOCIATES

### READY-TO-USE EPOXY CEMENTS

#### PA-1101 THERMA-BLEND EPOXY PASTE



Thoroughly factory-mixed and ready-to-use epoxy cement in paste form. Saves much valuable production time on assembly lines when used for cementing, sealing, insulating and protecting. Works on practically any type of porous and non-porous material. Needs no mixing—only catalyst necessary is the application of 400°F heat from an ordinary heat lamp, oven or an open flame. Curing time is 6 minutes at 400°F; at 360°F, curing time increases to 40 minutes. Once Thermo-Blend epoxy cement paste is cured, it forms a perfect and permanent bond. Maintains great sheer strength, even at high temperature extremes. Meets MIL-A-8623 specifications. Supplied in convenient 1 1/2-oz. squeeze tube. Shpg. wt., 2 oz.  
60 A 7690. 1 1/2-oz. Tube . . . . . Each 2.00

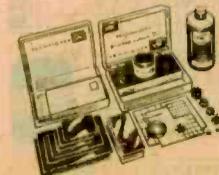
#### PA-1000 AND PA-1001 ROOM-TEMPERATURE AIR-CURE EPOXY KITS



Pre-measured two-component mixer package to prepare air-curing, short pot-life epoxy cement without waste. Catalyst and resin are vacuum-sealed in polyethylene container. Includes stirring stick. Adheres to most porous or non-porous materials. Cures from -50°F to +250°F. Cured bond has tensile strength of 1900 psi. Shpg. wt. per pkg., 8 oz.

Stock No.	Mfr's Type	No. of Units	Oz. per Unit	EACH
60 A 7690	PA-1000	10	1/10	2.50
60 A 7691	PA-1001	10	1/5	4.00

## TECHNIQUES 5002 EXPERIMENTERS KIT



Excellent beginners kit for learning the technique of etched circuitry. Kit includes single and double sided copper laminated for making ultra-compact miniature transmitters, receivers, radio control units and other projects of your design. Kit contains: six copper clad boards from 4 1/2x3" to 3x2 1/4"; three printed circuit tube sockets; tape resist; resist circles; etching solution; printed circuit eyelets and drill. Complete with layout and instructions. All parts packaged in convenient plastic box, 5 1/2x1 3/4x4".  
47 A 1250. Shpg. wt., 8-oz. . . . . 4.75

# Rotron Cooling Fans

## COMPACT SPRITE® FAN—33-CFM

- Very Small, Only 3 1/8" Square x 1 1/8" Deep
- Fits 3 1/2" Panel Height in Relay Racks
- Ambient Temp. Range, —20° to +140° F



Perfect for any application requiring 33-cfm (free delivery). Unusually small size makes it ideal where space is at a premium. Fits 3 1/2" panel height in relay racks. Applications include: power supplies, transmitters and receivers, digital voltmeters, office copying machines, paper-tape equipment, counters, printers, etc. Easily mounted with holes in fan-barrel flanges. Quiet—only 35 dB noise level. Venturi, spiders, and motor mounting are combined in a single aluminum die casting. Has 9-blade molded propeller made of high-impact polycarbonate. Airflow is easily reversed by turning fan end-for-end. Life up to 5 years. Order accessories below. For 115 volts, 50-60 Hz AC. Shpg. wt., 14 oz.

60 A 6764. Model SP2A2	Each	13.20
60 A 6765. Finger Guard for Above. Wt. 8 oz.	Each	.60
60 A 6766. Plug and Cord for Above. Wt., 5 oz.	Each	.90
60 A 8618. Oiler Kit for Above. Wt., 6 oz.	Each	3.00
60 A 8617. Lubricant for Above. Wt., 3 oz.	Each	1.75

## LOW-COST SKIPPER® FAN—100-CFM

Provides really economical cooling. Ideal for computers, vending machines, and general electronic equipment. Delivers 100 cfm (free delivery) at ambient temperatures up to 140° F. Only 5 3/8" diameter by 1 3/8" deep. Bearing heat sink helps keep motor cool. Quiet—only 38 dB noise level. Airflow reversible. No mounting holes required—mounts with just a retaining ring. Rugged polypropylene venturi; aluminum motor and spiders. Life in excess of 5 years. For 115 volts, 50-60 Hz AC. Shpg. wt., 15 oz.



60 A 9766. SKP-2 Skeleton Fan, Less Venturi	Each	7.80
60 A 8715. SKR-2 Venturi Fan with Frame	Each	8.30

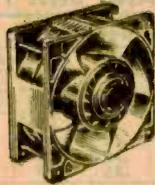
## ACCESSORIES FOR MUFFIN AND WHISPER FANS

60 A 8613. Type A15449 Filter Fan Conversion Kit. Includes filter, frame and clips. Shpg. wt. 1/4 lb.	Each	2.75
60 A 8614. Type 16238 Standard Spiral Grille. 3 oz.	Each	.80
60 A 9401. Type 17826 Expanded Metal Grille. 3 oz.	Each	.80
60 A 8615. Type 13996 Mounting Clips. 2 oz.	Per Pair	.20
60 A 9268. Type 20132-2 Finger Guard. 2 oz.	Each	.50

## TARZAN® FAN—350-CFM

- Designed for Solid-State Components
- Provides Reversible Air Flow

Unique axial fan designed for cooling tightly-packed electronic cabinets. Radical departure in fan design provides centrifugal-blower performance in an axial-flow fan. Ideal for solid-state components, densely-packed relay-rack communications equipment, compact air-liquid heat exchangers, and other uses. Airflow is reversible. Ambient temperatures to 131° F. Life to 3 years at 120° F. Phenolic venturi; diecast aluminum spiders; polycarbonate 5-blade propeller; double-shielded ball bearings, lubricated for life. Ventilated impeller hub insures positive cooling of motor. Mounts easily with holes in venturi. Only 6 2 3/4" square by 4 1/2" deep. For 115 volts, 50-60 Hz AC. Shpg. wt., 5 lbs.



60 A 8717. Type TN382 Tarzan Fan with Solder Terminals	Each	42.45
60 A 8718. Type TN3D2 Tarzan Fan with 12" Leads	Each	41.80
60 A 8719. Type 21196-2 Guard. Protects fan blades. Use for either inlet or outlet. 4 oz.	Each	1.50
60 A 6874. Type 20990 Filter Box. 1 lb.	Each	9.35
60 A 8800. Type 17555 Plug and Card Set. For Model TN3B2 Tarzan Fan, with terminal connections. 2 oz.	Each	.60
60 A 7071. Type 18440. Filtercoat. 3 oz.	Per Can	1.00

## LONG-LIFE GOLD SEAL MUFFIN® FAN—100-CFM

- Extremely Thin, 4 1/16" Square x 1 1/2" Deep
- Quiet, Highly Efficient Air Mover
- Advanced Bearing System Gives Longer Life



Cools, directs heat, or ventilates at moderate cost. Excellent for computers, office machinery, electronic equipment, and other applications. Noise level reduced to only 40 dB at free air delivery for quiet operation. Airflow is reversible by turning fan end-for-end.

Ambient temperature range: 0° to 160° F. Life expectancy 5 years at 70° F. Filter Fan has 14x18 mesh aluminum air filter. For 115 volts, 50-60 Hz AC. Shpg. wt., 1 lb.

60 A 8599. Skeleton Fan	Each	11.90
60 A 8597. Venturi Fan with Frame. 15 oz.	Each	12.25
60 A 8596. Grille Fan with Frame, Grille. 1 1/4 lbs.	Each	13.25
60 A 8598. Filter Fan with Frame, Grille, Filter. 1 1/4 lbs.	Each	15.00

## SUPER-QUIET WHISPER® FAN—65-CFM

Silent operation makes the Whisper Fan the ultimate when noise must be minimized. Low 18 decibel noise level makes it ideal for offices, laboratories, sound systems, and other noise-sensitive devices. Reversible airflow. Compact—only 4 1/16" square by 1 1/2" deep. High-impact, flame retardant, black phenolic frame. Encapsulated bus-bar leads with solder terminals provide maximum resistance to humidity. Advanced bearing system and relative slow speed (1800 rpm nominal) assure long life. Draws only 7 watts power. U.L. Listed. For 145 volts, 50-60 Hz AC. Shpg. wt., 1 lb.

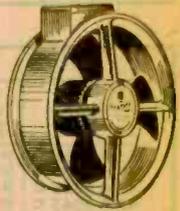


60 A 9400. Skeleton Fan	Each	13.80
60 A 8611. Venturi Fan with Frame. 1 lb.	Each	14.15
60 A 8610. Grille Fan with Frame, Grille. 1 1/4 lbs.	Each	15.15
60 A 8612. Filter Fan with Frame, Grille, Filter. 1 1/4 lbs.	Each	16.90
16 A 2031. Delwyn "Whisper" Fan Kit, Cord, Plug. 2 oz.	Each	14.85

## LIGHT FEATHER® FAN—270-CFM

- Stainless Steel Bearings
- Draws Only 22 Watts

TYPE 103. Moves large volume of air in limited spaces requiring a shallow fan. Excellent for computer consoles, relay racks, power supplies, heat exchangers, and other devices. Ambient temperature range: —55° to +65° C. Pre-lubricated miniature stainless-steel ball bearings. Full 270 cfm (free delivery). Clamping rim mounting provides reversible airflow. Tinned brass terminals. High-impact, fungus-proof, two-tone gray Lexan plastic. Only 7" dia. by 2 7/8" deep. Draws 22 watts. Interchangeable with Saucer Fan. For 115 volts, 50-60 Hz AC. U.L. Listed. Shpg. wt., 1 1/2 lbs.



60 A 8593. Type 103 Feather Fan	Each	34.00
60 A 7246. Type 124110 Filter Box. 1 lb.	Each	10.15
60 A 8591. Type 14559 Rim-Mount Guard. For rim-mounting. Shpg. wt., 4 oz.	Each	3.65
60 A 8592. Type 14651 Panel-Mount Guard. For panel mounting Type 103 Fan. (Use with Clips below.) 4 oz.	Each	3.65
60 A 7247. Type 16410 Mounting Clamps, Uses 3. 2 oz.	Each	.05
60 A 7070. Type 14611 Panel-Mount Clip. Uses 3 with each panel-mount guard above. 1 oz.	Each	.15
60 A 9393. Type 16398 Plug and Cord. 2 oz.	Each	.80
60 A 7071. Type 18440 Filtercoat. 3 oz.	Per Can	1.00

## LIGHTWEIGHT SENTINEL® FAN—100-CFM

- Very Thin, 4 1/16" Square x 1 1/2" Deep
- Pre-lubricated Bearings, No Maintenance
- Ambient Temperature Range to 100° C



Lightweight fan with heavyweight stamina and power. For those ultra-rugged applications where heat and the avoidance of lubrication are major factors. Weighs only 1 pound and measures only 4 1/16" square by 1 1/2" deep, yet delivers 100 cfm at ambient temperatures to 100° C. Provides real powerhouse performance and an exceptionally long, trouble-free life. Meets MIL-ET

4970A. Engineered with every possible feature that allows cool operation at high ambient temperatures. Aluminum heat sink keeps motor cool. Venturi is of high-impact, glass-filled phenolic. Stator is completely encapsulated. Lifetime-lubricated stainless-steel ball bearings. Skeleton, Venturi, Grille, and Filter Fans listed below. For 115 volts/50-60 Hz AC. U.L. Listed. Shpg. wt., 1 lb.

60 A 8804. Skeleton Fan. Includes fan, motor	Each	21.85
60 A 8803. Venturi Fan. Glass-filled phenolic venturi.	Each	22.75
60 A 8802. Grille Fan. With venturi and grille.	Each	23.75
60 A 8801. Filter Fan. Shipped complete with venturi, grille and filter.	Each	25.25

# IRC Carbon and Wirewound Insulated Resistors

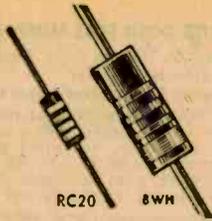
## CARBON COMPOSITION AND WIREWOUND RESISTORS

Type RC Fixed Composition Resistors. Choose from 10% (see Table A) or 5% (Table B) tolerances. Engineered to meet or exceed MIL-R-11 specifications. Withstand 50 to 100% overloads for short periods of time. EIA (RETMA) code for easy identification. Have well-anchored, positive-contact leads with no hot spots. Sizes: RC-1/4, 1/4x3/32"; RC-1/2, 2 3/4x3/16"; RC-1, 3/16x1/2"; RC-2, 1 1/16x5/16". Shpg. wt. per 100: 1/4W, 4 oz.; 1/2W, 6 oz.; 1W, 10 oz.; 2W, 14 oz.

Type BWH-2-Watt Fixed Wirewound. Available in values up to 1800 Ohms. Choose from 10% (Table A) or 5% (Table B) tolerances. Rated at 2-watts up to 158°F ambient temperature; 1-watt at 239°F; and 1/2-watt at 279°F. Manufactured to meet MIL-R-11D specifications. EIA (RETMA) coded for easy identification; wide first band. Inductance .04-4.5 μH from .24-1800 ohms respectively. Same size as 1-watt composition resistors listed above. Shpg. wt. per 100, 10 oz.

### EXPLANATION OF MIL NUMBERS

MIL Numbers. Example: RC07GF-153K. RC designates composition type resistor. 07, 1/4-watt rating. GF, characteristic—ambient temperature. (G) and resistance temperature (F) in reference to MIL-R-11D specification, 153, indicates nominal resistance in ohms—first 2 digits are significant figures, 3rd digit is number of zeros to add. Tolerance—J, ±5%; K, ±10%; M, ±20%.



### HANDY "SNAP PAK"

Resistors can be tested while in package. Added protection, faster identification, 10 resistors per pkg. in 1/4 and 1/2-watt sizes, 5 per pkg. in larger sizes.

## 10% INSULATED RC AND BWH TYPES

### TYPE RC 10% FIXED COMPOSITION—SPECIFY VALUES WANTED

Stock No.	Mfr's Type		MIL Equivalent	Watts	Values See Table "A"	EACH	May Be Assorted (Order Each Value in Multiples of 10)				
	New	Old					EACH				
							1-9	10-99	100-499	500-999	1000-2499	2500-4999
45 A 7150 C	RC-1/4	GBT-1/4	RC07GF	1/4	2.7Ω to 1 meg	.09	.07	.06	.05	.04	.03
45 A 5000 C	RC-1/2	GBT-1/2	RC20GF	1/2	2.7Ω to 22 meg	.09	.07	.06	.05	.04	.03
45 A 5020 C	RC-1	GBT-1	RC32GF	1	10Ω to 22 meg	.18	.08	.07	.06	.05	.04
45 A 5070 C	RC-2	SR-2	RC42GF	2	10Ω to 22 meg	.22	.15	.13	.11	.10	.09

### TYPE BWH 10% 2-WATT FIXED WIREWOUND—SPECIFY VALUES WANTED—TO 1500 OHMS ONLY

Stock No.	Mfr's Type	MIL Equivalent	Watts	Values See Table "A"	EACH	May Be Assorted (Order Each Value in Multiples of 5)				
						EACH				
						1-4	5-99	100-499	500-999	1000-2499	2500-4999
45 A 5076 C	BWH		2	10Ω to 8.2Ω	.18	.11	.10	.09	.08	.07
45 A 5077 C	BWH		2	10Ω to 1500Ω	.18	.11	.10	.09	.08	.07

### TABLE "A"—10% EIA (RETMA) VALUES—SPECIFY RESISTANCE WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs	Megs
0.10	0.33	1.0	3.3	10	33	100	330	1000	3300	10K	33K	100K	330K	1.0	3.3	10
0.12	0.39	1.2	3.9	12	39	120	390	1200	3900	12K	39K	120K	390K	1.2	3.9	12
0.15	0.47	1.5	4.7	15	47	150	470	1500	4700	15K	47K	150K	470K	1.5	4.7	15
0.18	0.56	1.8	5.6	18	56	180	560	1800	5600	18K	56K	180K	560K	1.8	5.6	18
0.22	0.68	2.2	6.8	22	68	220	680	2200	6800	22K	68K	220K	680K	2.2	6.8	22
0.27	0.82	2.7	8.2	27	82	270	820	2700	8200	27K	82K	270K	820K	2.7	8.2	27

## 5% INSULATED RC AND BWH TYPES

### TYPE RC 5% FIXED COMPOSITION—SPECIFY VALUES WANTED

Stock No.	Mfr's Type		MIL Equivalent	Watts	Values See Table "A"	EACH	May Be Assorted (Order Each Value in Multiples of 10)				
	New	Old					EACH				
							1-9	10-99	100-499	500-999	1000-2499	2500-4999
45 A 7155 C	RC-1/4	GBT-1/4	RC07GF	1/4	2.7Ω to 1 meg	.15	.09	.08	.07	.06	.05
45 A 5005 C	RC-1/2	GBT-1/2	RC20GF	1/2	2.7Ω to 22 meg	.15	.09	.08	.07	.06	.05
45 A 5025 C	RC-1	GBT-1	RC32GF	1	10Ω to 22 meg	.30	.12	.11	.10	.09	.08
45 A 5045 C	RC-2	SR-2	RC42GF	2	10Ω to 22 meg	.35	.27	.23	.20	.17	.16

### TYPE BWH 5% 2-WATT FIXED WIREWOUND—SPECIFY VALUES WANTED—TO 1800 OHMS ONLY

Stock No.	Mfr's Type	MIL Equivalent	Watts	Values See Table "B"	EACH	May Be Assorted (Order Each Value in Multiples of 5)				
						EACH				
						1-4	5-99	100-499	500-999	1000-2499	2500-4999
45 A 5078 C	BWH		2	10Ω to 9.1Ω	.30	.17	.16	.15	.14	.13
45 A 5079 C	BWH		2	10Ω to 1500Ω	.30	.17	.16	.15	.14	.13
45 A 5024 C	BWH		2	1600Ω to 1800Ω	.30	.17	.16	.15	.14	.13

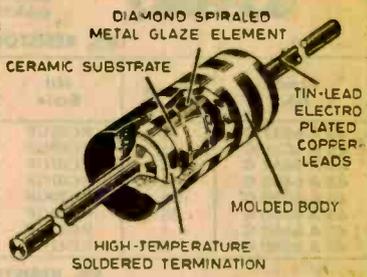
### TABLE "B"—5% EIA (RETMA) VALUES—SPECIFY RESISTANCE WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs	Megs
0.10	0.39	1.5	5.6	22	82	330	1200	4700	18K	68K	270K	1.0	3.9	15	56	22
0.11	0.43	1.6	6.2	24	91	360	1300	5100	20K	75K	300K	1.1	4.3	16	62	24
0.12	0.47	1.8	6.8	27	100	390	1500	5600	22K	82K	330K	1.2	4.7	18	68	27
0.13	0.51	2.0	7.5	30	110	430	1600	6200	24K	91K	360K	1.3	5.1	20	75	30
0.15	0.56	2.2	8.2	33	120	470	1800	6800	27K	100K	390K	1.5	5.6	22	82	33
0.16	0.62	2.4	9.1	36	130	510	2000	7500	30K	110K	430K	1.6	6.2	24	91	36
0.18	0.68	2.7	10	39	150	560	2200	8200	33K	120K	470K	1.8	6.8	27	10	39
0.20	0.75	3.0	11	43	160	620	2400	9100	36K	130K	510K	2.0	7.5	30	11	43
0.22	0.82	3.3	12	47	180	680	2700	10K	39K	150K	560K	2.2	8.2	33	12	47
0.24	0.91	3.6	13	51	200	750	3000	11K	43K	160K	620K	2.4	9.1	36	13	51
0.27	1.0	3.9	15	56	220	820	3300	12K	47K	180K	680K	2.7	10	39	15	56
0.30	1.1	4.3	16	62	240	910	3600	13K	51K	200K	750K	3.0	11	43	16	62
0.33	1.2	4.7	18	68	270	1000	3900	15K	56K	220K	820K	3.3	12	47	18	68
0.36	1.3	5.1	20	75	300	1100	4300	16K	62K	240K	910K	3.6	13	51	20	75

# IRC Metal-Glaze and Power Resistors, Assortments

## IRC LOW-COST METAL-GLAZE 2% AND 5% RESISTORS

Metal-glaze film is up to 100 times thicker than conventional films. Offers excellent temperature coefficients across a wide resistance range. Average resistance changes less than 0.6% after 1000 hours, full load at 70°C. Derated to 0 at 150°. Av. wt. per 100, 6 cz.



2%-TOLERANCE RESISTORS				EACH			
Stock No.	Mfr's Type	Watts	Stock Values—See Table Below	1-99	100-249	250-999	1000-4999
45 A 5028 C	RG07	1/4	51 ohms to 150K	.25	.18	.12	.08
45 A 5029 C	RG20	1/2	51 ohms to 470K	.25	.16	.10	.07

5%-TOLERANCE RESISTORS				EACH			
Stock No.	Mfr's Type	Watts	Stock Values—See Table Below	1-99	100-249	250-999	1000-4999
45 A 5030 C	RG07	1/4	51 ohms to 150K	.25	.16	.10	.07
45 A 5031 C	RG20	1/2	51 ohms to 470K	.24	.15	.09	.06

### TABLE OF STANDARD RESISTANCE VALUES—SPECIFY VALUES WANTED

Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm
51	100	200	390	750	1500	3300	5600	10K	18K	33K	56K	100K
56	110	220	430	820	1600	3600	6200	11K	20K	36K	62K	110K
62	120	240	470	910	1800	3900	6800	12K	22K	39K	68K	120K
68	130	270	510	1000	2000	4300	7500	13K	24K	43K	75K	130K
75	150	300	560	1100	2400	4700	8200	15K	27K	47K	82K	150K
82	160	330	620	1200	2700	5100	9100	16K	30K	51K	91K	160K
91	180	360	680	1300	3000							180K

Features a unique, thick-film resistance element made of glass and special metal alloys, fused to a crystalline ceramic core. Withstands high temperatures and overloads. Meets MIL-R-22684B. Performs better than MIL-R-11 units.

## TYPE AS 1% AND 5% POWER RESISTORS

Miniature wirewound resistors incorporating "Thermacoat"—a solvent-resistant silicone coating formulation with high dielectric strength and heat capabilities. Carry full power even at 125°C ambients, expanding circuit design limits significantly. Welded connections. Meet MIL V (MIL-R-26C). Temperature coefficient less than 20 ppm/°C. Maximum working voltages are 150 volts for Type AS-2, and 400 volts for Type AS-5A. Av. wt. 1 oz.



1%-TYPE AS-2 2-WATT (1/2x1/4")				EACH			
Stock No.	Val. Avail. In Ohms See Table at Right	1-9	10-24	25-49	50-99	100-249	
45 A 5867 C	1.0 to 1000	.98	.73	.57	.54	.50	
45 A 5868 C	1100 to 4700	1.07	.81	.64	.60	.55	
45 A 5869 C	5100 to 10K	1.10	.84	.66	.62	.57	
45 A 5870	15K	1.12	.86	.68	.64	.60	
45 A 5866 C	16K to 20K	1.19	.90	.72	.67	.63	

5%-TYPE AS-2 2-WATT (1/2x1/4")						EACH			
Stock No.	Val. Avail. In Ohms See Table Below	1-9	10-24	25-49	50-99	100-249			
45 A 6160 C	1.0 to 1000	.44	.40	.37	.31	.24			
45 A 6161 C	1100 to 4700	.47	.43	.36	.34	.27			
45 A 6162 C	5100 to 10K	.48	.44	.41	.35	.28			
45 A 6163	15K	.52	.45	.42	.38	.31			
45 A 6164 C	16K to 20K	.55	.47	.43	.41	.34			

1%-TYPE AS-5A 5-WATT (1 1/2x1 1/2")						EACH			
Stock No.	Val. Avail. In Ohms See Table at Right	1-9	10-24	25-49	50-99	100-249			
45 A 5873 C	1.0 to 1000	1.00	.75	.59	.56	.52			
45 A 5874 C	1100 to 4700	1.09	.83	.66	.62	.57			
45 A 5875 C	5100 to 10K	1.12	.86	.68	.64	.59			
45 A 5876	15K	1.14	.88	.70	.66	.62			
45 A 5877 C	16K to 20K	1.21	.92	.74	.69	.65			
45 A 5878 C	22K to 39K	1.28	.98	.78	.74	.68			
45 A 5879	51K	1.39	1.05	.85	.79	.74			

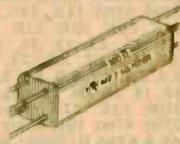
5%-TYPE AS-5A 5-WATT (1 1/2x1 1/2")						EACH			
Stock No.	Val. Avail. In Ohms See Table Below	1-9	10-24	25-49	50-99	100-249			
45 A 6165 C	1.0 to 1000	.48	.41	.37	.33	.28			
45 A 6166 C	1100 to 4700	.50	.43	.39	.35	.29			
45 A 6167 C	5100 to 10K	.51	.44	.40	.36	.30			
45 A 6168	15K	.52	.45	.42	.38	.31			
45 A 6169 C	16K to 20K	.54	.46	.43	.39	.33			

### OHM VALUES AVAILABLE FROM STOCK—SPECIFY VALUES

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|------|------|------|------|
| 1.0  | 4.7  | 12   | 33   | 120  | 300  | 820  | 2400 | 5600 | 20K  |
| 1.2  | 5.1  | 13   | 39   | 130  | 330  | 910  | 2700 | 6200 | 22K  |
| 1.5  | 5.6  | 15   | 51   | 150  | 360  | 1000 | 3000 | 6800 | 27K  |
| 2.0  | 6.2  | 16   | 56   | 160  | 430  | 1100 | 3300 | 7500 | 30K  |
| 2.2  | 6.8  | 18   | 68   | 180  | 510  | 1500 | 3600 | 8200 | 36K  |
| 2.4  | 7.5  | 20   | 75   | 200  | 560  | 1600 | 3900 | 10K  | 39K  |
| 2.7  | 8.2  | 22   | 82   | 220  | 620  | 1800 | 4100 | 15K  | 51K  |
| 3.0  | 9.1  | 24   | 91   | 240  | 680  | 2000 | 4700 | 16K  |      |
| 3.3  | 10   | 30   | 100  | 270  | 750  | 2200 | 5100 | 18K  |      |

## IRC MULTI-RANGE 10-WATT WIREWOUND RESISTORS

Type MR. Versatile resistors combining 4 separate 10-watt elements in a single, compact seatite housing. With instructions for connecting element leads to provide up to 47 different resistance values within the ranges listed below. Size, 1 1/2x1/2". Shpg. wt., 3 oz. 2 resistors per pkg.



Stock No.	Mfr's Type	Resistance Range	Resistor Elements (Ohms)	PER PKG.
45 A 5580	MR1	17 values; 0.5-15 ohms	1, 2, 4, 8	1.20
45 A 5581	MR2	47 values; 5.0-150 ohms	10, 20, 40, 80	1.20
45 A 5582	MR3	47 values; 50-1500 ohms	100, 200, 400, 800	1.20
45 A 5583	MR4	47 values; 500 ohms-15K	1000, 2000, 4000, 8000	1.20
45 A 5584	MR5	112 values; 3000 ohms-50K	10K, 10K, 15K, 15K	1.80

Type 55 Power Resistor Assortment. Includes 2 of each Type MR resistor listed in the table above. Provides complete 10-watt resistance coverage—resistance values range all the way from 0.5 ohms to 50K, supplied in convenient plastic box. Size, 1 1/2x5 1/2x3 1/2". Shpg. wt., 1 lb.

45 A 5585..... 6.60

## IRC 10% 5 AND 10-WATT POWER RESISTORS

### TYPES PW-5 AND PW-10

Popular axial-lead power resistors. Compact shape fits easily among other components. Precisely-wound element has glass fiber core, and is sealed in a rectangular ceramic case. Tolerance is ±10%. Power ratings are at 25°C ambient. 1 1/2" leads.



Type PW-5 5 Watt. Size, 7/8x3/8x1 1/2". Available in values of 1 to 6000 ohms only. Specify values from Table below. Inquire for prices on quantities of 1000 or more. Shpg. wt., 2 oz.

45 A 5175 C, 1-99.....	Each .17	500-999.....	Each .25
100-499.....	Each .17	1000-4999.....	Each .13

### PW-5 VALUES AVAILABLE—SPECIFY VALUES WANTED (OHMS)

1.0	7.5	30	125	350	750	1500	3000
2.0	10	50	150	400	800	1750	4000
3.0	15	75	200	500	1000	2000	4500
4.0	20	100	250	600	1200	2250	5000
5.0	25	120	300	700	1250	2500	6000

Type PW-10 10 Watt. Size, 1 1/8x3/8x1 1/2". Specify values when ordering—see Table of values available below. Inquire for prices on quantities of 1000 or more. Shpg. wt., 2 oz.

45 A 5190 C, 1-99.....	Each .36	500-999.....	Each .19
100-499.....	Each .25	1000-4999.....	Each .19

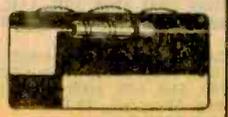
### PW-10 VALUES AVAILABLE—SPECIFY VALUES WANTED (OHMS)

1.0	7.5	30	150	600	2000	10K
2.0	10	40	200	750	3000	12K
3.0	15	50	250	1000	3500	20K
4.0	20	75	300	1200	5000	25K
5.0	25	100	500	1500	6000	

## ALLIED COLOR-CODE GUIDE

Includes color code, tolerance code, listing of EIA-JAN 5 and 10% std. stock values. 2x4 1/2". FREE with 20 or more resistors. 2 oz.

45 A 6770..... 25



# Ohmite "Little-Devil" Resistors and Assortments



Insulated, molded composition resistors. Choose from 10% or 5% tolerances. Color coded for fast, easy identification; tinned leads for easy soldering. Meet MIL-R11E specifications. Care-

fully manufactured, can be used at full wattage ratings to 158° F. Breakdown ratings: 1/4 W, 150 V; 1/2 W, 250 V; 1 W, 350 V; 1 W, 500 V; 2 W, 750 V. Shpg. wt., per 100, 10 oz.

## 10% RESISTORS—SPECIFY VALUES FROM OHMS TABLE "A" BELOW

Stock No.	Watts	MIL Style	Values—See Table Below	EACH						
				May Be Asstd.			Asstd. Minimum 100 Per Value			
				1-4	6-49	50-Up	100-249	250-499	500-999	1000-Up
45 A 6037 C	1/8	RC05GF	2.7 ohms to 8.2 ohms	.27	.22	.18	.16	.14	.13	.12
45 A 6038 C	1/8	RC05GF	10 ohms to 22 meg	.24	.20	.16	.14	.13	.12	.11
45 A 6451 C	1/4	RC07GF	2.7 ohms to 8.2 ohms	.14	.12	.08	.06	.06	.05	.04
45 A 6450 C	1/4	RC07GF	10 ohms to 22 meg	.13	.11	.07	.05	.05	.04	.04
45 A 6039 C	1/2	RC20GF	1 ohm to 2.2 ohms	.13	.11	.07	.05	.05	.04	.04
45 A 6040 C	1/2	RC20GF	2.7 ohms to 22 meg	.12	.10	.08	.07	.06	.05	.04
45 A 6060 C	1	RC42GF	2.7 ohms to 22 meg	.18	.15	.09	.08	.07	.06	.05
45 A 6080 C	2	RC42GF	10 ohms to 22 meg	.24	.20	.15	.11	.10	.09	.08

## 5% RESISTORS—SPECIFY VALUES FROM OHMS TABLE "B" BELOW

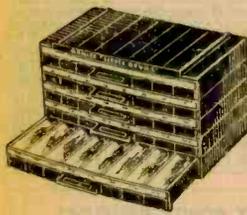
Stock No.	Watts	MIL Style	Values—See Table Below	EACH						
				May Be Asstd.			Asstd. Minimum 100 Per Value			
				1-4	6-49	50-Up	100-249	250-499	500-999	1000-Up
45 A 6042 C	1/8	RC05GF	2.7 ohms to 9.1 ohms	.37	.31	.25	.22	.19	.18	.17
45 A 6043 C	1/8	RC05GF	10 ohms to 22 meg	.34	.28	.23	.20	.18	.16	.15
45 A 6456 C	1/4	RC07GF	2.7 ohms to 9.1 ohms	.29	.24	.16	.11	.10	.08	.07
45 A 6455 C	1/4	RC07GF	10 ohms to 22 meg	.26	.22	.14	.10	.09	.08	.07
45 A 6044 C	1/2	RC20GF	1 ohm to 2.4	.26	.22	.14	.10	.09	.08	.07
45 A 6045 C	1/2	RC20GF	2.7 ohms to 22 meg	.24	.20	.12	.09	.08	.07	.06
45 A 6065 C	1	RC42GF	2.7 ohms to 22 meg	.36	.30	.18	.13	.12	.11	.10
45 A 6085 C	2	RC42GF	10 ohms to 22 meg	.48	.40	.24	.19	.18	.17	.16

## TABLE "A" 10% TOLERANCE RESISTORS—SPECIFY VALUES WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Meg	Meg	Meg
1	2.7	6.8	18	47	120	330	820	2200	5600	15K	39K	100K	270K	680K	1.8	4.7	12
1.2	3.3	8.2	22	56	150	390	1000	2700	6800	18K	47K	120K	330K	820K	2.2	5.6	15
1.5	3.9	10	27	68	180	470	1200	3300	8200	22K	56K	150K	390K	1.0 meg	2.7	6.8	18
1.8	4.7	12	33	82	220	560	1500	3900	10K	27K	68K	180K	470K	1.2 meg	3.3	8.2	22
2.2	5.6	15	39	100	270	680	1800	4700	12K	33K	82K	220K	560K	1.5 meg	3.9	10	...

## TABLE "B" 5% TOLERANCE RESISTORS—SPECIFY VALUES WANTED (Ohms, except \*Megs)

1.0	2.4	5.6	13	33	75	180	430	1000	2400	5600	13K	33K	75K	180K	430K	1.0*	2.4*	5.6*	13*
1.1	2.7	6.2	15	36	82	200	470	1100	2700	6200	15K	36K	82K	200K	470K	1.1*	2.7*	6.2*	15*
1.2	3.0	6.8	16	39	91	220	510	1200	3000	6800	16K	39K	91K	220K	510K	1.2*	3.0*	6.8*	16*
1.3	3.3	7.5	18	43	100	240	560	1300	3300	7500	18K	43K	100K	240K	560K	1.3*	3.3*	7.5*	18*
1.5	3.6	8.2	20	47	110	270	620	1500	3600	8200	20K	47K	110K	270K	620K	1.5*	3.6*	8.2*	20*
1.6	3.9	9.1	22	51	120	300	680	1600	3900	9100	22K	51K	120K	300K	680K	1.6*	3.9*	9.1*	22*
1.8	4.3	10	24	56	130	330	750	1800	4300	10K	24K	56K	130K	330K	750K	1.8*	4.3*	10*	...
2.0	4.7	11	27	62	150	360	820	2000	4700	11K	27K	62K	150K	360K	820K	2.0*	4.7*	11*	...
2.2	5.1	12	30	68	160	390	910	2200	5100	12K	30K	68K	160K	390K	910K	2.2*	5.1*	12*	...



## RESISTOR ASSORTMENTS

Wide selection of industrial and service assortments. In handy plastic cabinets, 4 3/4 x 9 x 5 1/4", with 5 drawers and 40 compartments. CAB-2, 3, 4 and 10. Service assortment, 10% tolerance. 1 cabinet. CAB-25, 26 and 27. Industrial assortment, 10% tolerance. 2 cabinets. CAB-45, 46, 47, and 48. Industrial assortment, 5% tolerance. 4 cabinets.

CAB-2. 1-watt. 125 total. 1 each: 10, 15, 27, 47, 100, 150, 270, 330, 470, 680, 1500, 2200, 6800, 33K, 68K, 82K ohms; 22, 33, 68, 1.5, 2.2, 2.7, 3.9, 4.7, 6.8, 10 meg. 3 each: 1000, 2700, 15K ohms. 5 each: 4700, 22K, 39K ohms; .15 meg. 10 each: 10K, 27K, 47K ohms; .10, .27, .47, 1.0 meg.  
 45 A 6759. Shpg. wt., 2 lbs. .... 22.50

CAB-3. 2 watts. 125 total. Same quantities and values as above.  
 45 A 6762. Shpg. wt., 2 lbs. .... 30.00

CAB-4. 1/4-watt. 150 total. 1 each: 150, 330, 680, ohms; .68, 1.5, 2.2, 2.7, 3.9, 4.7, 6.8, 10.0 meg. 2 each: 82K, ohms. 3 each: 270, 470, 33K, 39K, 68K ohms; .15, .22, .27, .33 meg. 5 each: 47, 100, 1500, 2700, 6800, 10K, 15K, 22K, 27K, 47K ohms; .47 meg. 10 each: 1000, 2200, 4700, 10K ohms; .10, 1.0 meg.  
 45 A 6760. Shpg. wt., 2 1/4 lbs. .... 19.50

CAB-10. 1/2 watt. 150 total. As CAB-4, except: 1 each: 10, 15, 27, 47, 1500, 2200, 6800, 82K ohms. 3 each: 2700, 15K ohms; 2.7 meg. 5 each: 1000, 39K ohms; .15 meg. 10 each: 27K ohms, .27 meg.  
 45 A 6761. Shpg. wt., 2 1/4 lbs. .... 18.00

CAB-25. 1/4 watt. 1000 total. 5 each: 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 12, 15, 18, 22, 27, 33, 39, 56, 68, 82, 120, 180, 390, 560, 820, 1000, 1200, 1800, 5600, 39K, 82K ohms; .12, .15, .18, .27, .39, .56, .68, .82, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 10, 15, 22 meg. 20 each: 10, 47, 150, 220, 330, 470, 680, 1500, 2700, 3900, 8200, 12K, 18K, 27K, 33K, 56K, 68K ohms; .22, .33, .47 meg. 30 each: 100, 270, 2200, 3300, 4700, 6800, 10K, 15K, 22K, 47K ohms; .10, 1 meg.  
 45 A 6763. Shpg. wt., 14 lbs. .... 70.00

CAB-26. 1/2-watt. 1000 total. As CAB-25 except: 5 each: 3900, 8200, 15K, 18K ohms. 15 each: 150, 270, 330, 560, 680, 1800, 2700, 6800, 12K, 39K, 56K, 82K ohms; .15, .33, .52, 2.2, 3.3 meg. 20 each: 3300, 5600 ohms; .27 meg. 30 each: 470, 1000 ohms; .47 meg.  
 45 A 6764. Shpg. wt., 14 lbs. .... 60.00

CAB-27. 1-watt. 600 total. As CAB-25, except: 5 each: 8200, 12K, 18K, 56K, 68K ohms; .33 meg. 10 each: 2.7, 4.7, 6.8, 10, 15, 22, 27, 33, 47, 100, 150, 220, 270, 330, 390, 470, 560, 680, 1000, 1200, 1500, 2200, 2700, 3300, 3900, 4700, 6800, 10K, 15K, 22K, 27K, 33K, 39K, 47K ohms; .10, .15, .22, .27, .47, .82 meg.  
 45 A 6765. Shpg. wt., 14 lbs. .... 54.00

CAB-45. 1/4-watt. 1000 total. 5 each: 2.7, 3.0, 3.3, 3.6, 3.9, 4.7, 5.1, 5.6, 6.8, 7.5, 8.2, 9.1, 11, 12, 15, 16, 18, 20, 22, 24, 27, 30, 33, 36, 39, 43, 56, 62, 68, 75, 82, 91, 110, 120, 130, 150, 160, 200, 240, 270, 300, 330, 360, 390, 430, 510, 560, 620, 680, 750, 820, 910, 1100, 1300, 1600, 1800, 2400, 3000, 3300, 3600, 4300, 5600, 6200, 6800, 7500, 8200, 9100, 11K, 13K, 15K, 16K, 18K, 20K, 22K, 24K, 27K, 30K, 33K, 36K, 39K, 43K, 51K, 56K, 62K, 68K, 75K, 82K, 91K ohms; .11, .12, .13, .15, .16, .18, .20, .22, .24, .27, .30, .33, .36, .39, .43, .47, .51, .56, .62, .68, .75, .82, .91, 1.0, 1.1, 1.2, 1.3, 1.5, 1.6, 1.8, 2.0, 2.2, 2.4, 2.7, 3.0, 3.3, 3.6, 3.9, 4.3, 4.7, 5.1, 5.6, 6.2, 6.8, 7.5, 8.2, 10.0, 12, 15, 18, 20, 22 meg. 10 each: 47, 51, 220, 470, 1200, 2700, 3900, 5100, 12K, 47K ohms. 20 each: 10, 100, 180, 1000, 1500, 2000, 2200, 4700, 10K ohms; 0.10 meg.  
 45 A 6766 U. Shpg. wt., 28 lbs. .... 225.00

CAB-46. 1/4 watt. 1500 total. As CAB-45, except: 5 each: 180 ohms. 10 each: 150, 270, 390, 510, 560, 680, 820, 1500, 2400, 3000, 6200, 18K, 27K, 30K, 39K, 51K, 68K, 82K ohms; .15, .20, 47, 1.5 meg. 25 each: 10, 220, 330, 470, 1200, 1800, 2000, 2700, 3300, 3900, 5100, 5600, 8200, 12K, 20K, 22K, 33K, 47K ohms; 1.0 meg. 30 each: 100, 1000, 2200, 4700, 6800, 10K, 15K ohms; .10 meg. Shpg. wt., 28 lbs.  
 45 A 6767 U. .... 210.00

CAB-47. 1/2 watt. 1500 total. As CAB-45, except: 5 each: 47, 180, ohms. 15 each: 27, 51, 150, 200, 220, 270, 330, 390, 510, 560, 620, 1200, 1800, 2700, 3000, 3900, 5100, 5600, 8200, 78K, 20K, 24K, 27K, 39K, 51K, 56K, 68K ohms; .15, .22 meg. 20 each: 75, 470, 6800, 12K, 33K, 47K ohms; .43, 1.0 meg. 30 each: 10, 100, 1000, 2000, 2200, 3300, 4700, 10K, 15K, 22K ohms; .10 meg.  
 45 A 6768 U. Shpg. wt., 28 lbs. .... 180.00

CAB-48. 1-watt. 900 total. As CAB-45, except: 5 each: 47, 180, 150, 270, 390, 510, 12K ohms. 10 each: 10, 100, 150, 200, 270, 330, 510, 680, 1000, 2000, 2200, 4700, 10K, 22K, 47K ohms; 0.1 meg. Shpg. wt., 28 lbs.  
 45 A 6769 U. .... 160.00

# Ohmite Wirewound Resistors

## STYLE 993-1A—1½ WATT 2½x1½"

Stock No.	Stock Values (Ohms) See Table "A" Below	EACH			
		1-9	10-24	25-99	100-249
45 A 6088 C	1 to 1000	.62	.53	.43	.37
45 A 6089 C	1100 to 3000	.66	.56	.46	.40

## STYLE 995-3A—¾ WATT 3½x1½"

45 A 6090 C	1 to 1000	.59	.50	.41	.35
45 A 6091 C	1100 to 5000	.62	.53	.43	.37
45 A 6092 C	5100 to 10K	.66	.56	.46	.40

## STYLE 995-5B—5 WATT 1½x1½"

45 A 6115 C	1 to 1000	.62	.53	.43	.37
45 A 6116 C	1100 to 5000	.66	.56	.46	.40
45 A 6117 C	5100 to 10K	.70	.60	.49	.42
45 A 6118 C	11K to 20K	.78	.66	.55	.47
45 A 6119 C	22K to 25K	.82	.70	.57	.49

## STYLE 995-10A—11 WATT 1½x2½"

45 A 6122 C	1 to 1000	.68	.58	.48	.41
45 A 6123 C	1100 to 5000	.73	.62	.51	.44
45 A 6124 C	5100 to 10K	.84	.71	.59	.50
45 A 6125 C	11K to 20K	.95	.81	.67	.57
45 A 6126 C	22K to 40K	1.00	.85	.70	.60
45 A 6127 C	43K to 51K	1.12	.95	.78	.67

## SERIES 99 VITREOUS-ENAMELED MOLDED RESISTORS



**WITHSTAND VERY HIGH TEMPERATURES!**

Series 99 resistors show no sign of softening or deformation at temperatures up to 1500°F.

**RESIST CHIPPING AND BREAKING**

Densely molded jacket will not chip where leads enter body.

### UNIFORM SIZE

Consistent size and shape. Ideal for automated assembly.

### HIGH-VOLTAGE INSULATION

1000 VAC Breakdown for molded vitreous enamel insulation.

These wirewound resistors feature molded vitreous enamel coating for excellent insulation characteristics and heat dissipation. Uniform size—mount in metal clips for heat-sink effect allowing up to 100% wattage increase. Uniform insulation thickness for 1000 VAC breakdown rating. Identifying markings fired right onto coating. Consistent size and shape—ideal for automated assembly. Withstand high humidity, immersion in salt solution. 1½" tinned leads. Tolerance, ±5%. Meet MIL-R-26 for RW57, RW58, RW59, RW67, RW68, RW69. Av. shpg. wt. per 25. 4 oz.

TABLE "A" STOCK VALUES—FOR STYLE 995 ABOVE

Specify Values Wanted in Ohms

1.0	3.3	8.2	25	56	180	410	820	2200	4700	9100	24K	50K
1.1	3.6	9.1	27	62	200	450	900	2400	5000	10K	25K	51K
1.2	3.9	10	30	68	220	470	910	2500	5100	11K	27K	53K
1.3	4.0	11	33	75	240	500	1000	2700	5600	12K	30K	56K
1.5	4.3	12	35	82	250	510	1100	3000	5000	13K	33K	60K
1.6	4.7	13	36	91	270	560	1200	3300	6200	14K	35K	63K
1.8	5.0	15	39	100	300	600	1300	3500	6800	15K	36K	66K
2.0	5.1	16	40	110	330	620	1400	3600	7000	16K	39K	70K
2.2	5.6	18	43	120	350	680	1500	3900	7500	17K	40K	73K
2.4	6.2	20	47	130	360	700	1600	4000	8000	18K	43K	77K
2.7	6.8	22	50	150	390	750	1800	4300	8200	20K	45K	80K
3.0	7.5	24	51	160	400	800	2000	4500	9000	22K	47K	84K

## MOUNTING CLIPS FOR STYLE 99 RESISTORS

Protect from mechanical shock. Have heat-sink effect for up to 100% increase in power rating. Av. shpg. wt. per 100. 3 oz.

Stock No.	Mfr's Type	For Resistor	EACH			Stock No.	Mfr's Type	For Resistor	EACH		
			1-99	100-499	500-999				1-99	100-499	500-999
45 A 6096	5900	995-1A (1½-Watt)	.20	.15	.12	45 A 6098	5906	995-3B (5-Watt)	.20	.15	.12
45 A 6097	5904	995-3A (3½-Watt)	.20	.15	.12	45 A 6099	5908	995-10A (11-Watt)	.20	.15	.12

## TYPE 200 "BROWN DEVIL" WIREWOUND RESISTORS

Wide selection of high-quality, compact, wirewound resistors. Specially designed for applications such as voltage dropping, bias supplies, bleeders. Have thick vitreous enamel coating for excellent heat conduction and insulation. Also fully protected against the harmful effects of humidity and moisture, preventing costly and needless failure. Tolerance, ±5%. Overall size (excluding leads): 3-watt, 2½x1½"; 5½-watt, 3½x1½"; 8-watt, 1x3"; 12-watt, 1½x3"; 20-watt, 2x3"; 1½" leads. Specify values from Tables "B" or "C" below. Av. shpg. wt. per 25. 8 oz.



### STYLE 200-3—3-WATT (Values to 10K) See Table "B" Below

Stock No.	Stock Values (Ohms) See Table "B" Below	EACH			
		1-9	10-24	25-99	100-249
45 A 5735 C	1 to 1000	.51	.43	.36	.31
45 A 5736 C	1100 to 4700	.55	.47	.39	.33
45 A 5737 C	5100 to 10K	.58	.49	.41	.35

### STYLE 200-8—8-WATT (Values to 10K) See Table "C" Below

Stock No.	Stock Values (Ohms) See Table "C" Below	EACH			
		1-9	10-24	25-99	100-249
45 A 5730 C	1 to 1000	.55	.47	.39	.33
45 A 5731 C	1100 to 5000	.58	.49	.41	.35
45 A 5732 C	6000 to 10K	.61	.52	.43	.37

### STYLE 200-12—12-WATT (Values to 50K) See Table "C" Below

Stock No.	Stock Values (Ohms) See Table "C" Below	EACH			
		1-9	10-24	25-99	100-249
45 A 5700 C	1 to 1000	.60	.51	.42	.36
45 A 5701 C	1100 to 5000	.64	.54	.45	.38
45 A 5702 C	6000 and 10K	.74	.63	.52	.44
45 A 5703 C	12.5K to 20K	.83	.71	.58	.50
45 A 5704 C	25K and 30K	.87	.74	.61	.52
45 A 5705	50K	.98	.83	.69	.59

### STYLE 200-20—20-WATT (In All Values Except \* in Table "C")

Stock No.	Stock Values (Ohms) See Table "C" Below	EACH			
		1-9	10-24	25-99	100-249
45 A 5720 C	1 to 1000	.71	.60	.50	.43
45 A 5721 C	1200 to 5000	.74	.63	.52	.44
45 A 5722 C	6000 to 10K	.87	.74	.61	.52
45 A 5723 C	12.5K to 20K	.89	.76	.62	.53
45 A 5724 C	25K and 30K	1.04	.88	.73	.62
45 A 5725 C	50K and 60K	1.21	1.03	.85	.73
45 A 5727	100K	1.65	1.40	1.16	.99

TABLE "B" STOCK VALUES—FOR 3 AND 5½-WATT STYLES

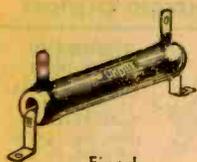
ABOVE—Specify Values Wanted

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|------|------|
| 1.0  | 3.6  | 12   | 43   | 150  | 510  | 1800 | 6200 |
| 1.1  | 3.9  | 13   | 47   | 160  | 540  | 1900 | 6500 |
| 1.2  | 4.3  | 15   | 51   | 180  | 560  | 2000 | 6800 |
| 1.3  | 4.7  | 16   | 56   | 200  | 620  | 2200 | 7500 |
| 1.5  | 5.1  | 18   | 62   | 220  | 680  | 2400 | 8200 |
| 1.6  | 5.6  | 20   | 68   | 240  | 820  | 3000 | 10K  |
| 1.8  | 6.2  | 22   | 75   | 270  | 910  | 3300 | 11K  |
| 2.0  | 6.8  | 24   | 82   | 300  | 1000 | 3600 | 12K  |
| 2.2  | 7.5  | 27   | 91   | 330  | 1100 | 3900 | 13K  |
| 2.4  | 8.2  | 30   | 100  | 360  | 1200 | 4300 | 15K  |
| 2.7  | 9.1  | 33   | 110  | 390  | 1300 | 4700 | 16K  |
| 3.0  | 10   | 36   | 120  | 430  | 1500 | 5100 | 18K  |
| 3.3  | 11   | 39   | 130  | 470  | 1600 | 5600 | 20K  |

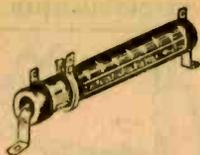
TABLE "C" STOCK VALUES—FOR 8, 12 AND 20-WATT STYLES ABOVE—Specify Values Wanted

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15*	125*	500	1250	4500	15K
1.5*	20*	150	600*	1500	5000	20K
2	25	200	700	1750	6000	25K
3	30*	225*	750	2000	7000	30K
4	35*	250	800	2250	7500	50K
5	40*	300	900	2500	8000	60K
7.5*	50	350	1000	3000	9000	100K
10	75	400	1100*	3500	10K	100K
12*	100	450*	1200	4000	12.5K	.....

# Power Resistors, TV Fuse Resistors, Thermistors



Fixed



Adjustable

## OHMITE WIREWOUND POWER RESISTORS

Fixed Types. For use as voltage droppers, bias resistors, and bleeders in applications where resistance need not be varied. Resistance tolerance,  $\pm 5\%$  for values 1 ohm or higher;  $\pm 10\%$  for values below 1 ohm. Adjustable Types. For voltage dividing networks, power supplies—anywhere adjustable resistance is required. Feature fine alloy wire, wound on quality ceramic cores and insulated by vitreous enamel coatings. Tolerance  $\pm 10\%$ . With slider and mounting brackets. Wattage rating applies only when entire resistance is in circuit; with center lug at intermediate point, rating is reduced in same proportion. Wattage ratings are for free air mounting. Specify value when ordering. Av. shpg. wt., 5-50 watts, 4 oz.; 100 watts and up, 1 lb.

### FIXED POWER RESISTORS STYLE 270-12—12 WATTS— $1\frac{1}{4} \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5770 C	.51, 1.0, 1.5, 10, 15, 18, 33, 39, 47, 56, 68, 82, 100, 120, 150, 180, 220, 470, 560, 820, 1000	.60	.51	.42	.36
45 A 5771 C	1200, 1500, 2200, 3300, 3900, 4700	.64	.54	.45	.38
45 A 5772 C	10K	.74	.63	.52	.44
45 A 5773 C	12K, 15K	.83	.71	.58	.50
45 A 5774 C	22K	.87	.74	.61	.52
45 A 5775 C	51K	.98	.83	.69	.59

### STYLE 270-25—25 WATTS— $2 \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5776 C	1, 2, 3, 4, 5, 10, 15, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	.76	.65	.53	.46
45 A 5777 C	1500, 2000, 2500, 3000, 4000, 5000	.79	.67	.55	.47
45 A 5835 C	6000, 7500, 10K	.89	.76	.62	.53
45 A 5778 C	15K, 20K	.95	.81	.67	.57
45 A 5779 C	25K, 30K	1.09	.93	.76	.65
45 A 5780 C	50K, 60K	1.27	1.08	.89	.76

### STYLE 270-50—50 WATTS— $4 \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5769 C	1	1.63	1.39	1.14	.98
45 A 5783 C	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	1.17	.99	.82	.70
45 A 5784 C	1500, 2000, 2500, 5000	1.20	1.02	.84	.72
45 A 5785 C	10K	1.29	1.10	.90	.77
45 A 5836 C	20K	1.42	1.21	.99	.85
45 A 5786 C	25K	1.62	1.38	1.13	.97
45 A 5787 C	50K	1.81	1.54	1.27	1.09
45 A 5789 C	100K	2.24	1.90	1.57	1.34

### STYLE 270-100—100 WATTS— $6\frac{1}{2} \times \frac{3}{4}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5768 C	1, 2, 3	2.27	1.93	1.59	1.36
45 A 5795 C	4, 5, 10, 25, 50, 75, 100, 125, 150, 250, 500, 1000	1.62	1.38	1.13	.97
45 A 5796 C	1500, 2000, 2500	1.68	1.43	1.18	1.01
45 A 5797 C	7500, 10K	1.82	1.55	1.27	1.09
45 A 5798 C	20K	1.96	1.67	1.37	1.18
45 A 5801 C	50K	2.32	1.97	1.62	1.39
45 A 5803 C	100K	2.89	2.46	2.02	1.73

### STYLE 270-175—175 WATTS— $8\frac{1}{2} \times 1\frac{1}{4}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5837 C	3, 5	3.35	2.85	2.35	2.01
45 A 5838 C	10, 25, 50, 75, 100, 125, 150	2.39	2.03	1.67	1.43
45 A 5841 C	10K	2.66	2.26	1.86	1.60
45 A 5845 C	75K	3.23	2.75	2.26	1.94
45 A 5846 C	100K	3.42	2.91	2.39	2.05

### STYLE 270-225—225 WATTS— $10\frac{1}{2} \times 1\frac{1}{4}$ "

Stock No.	Mfr's Type	Ohms	EACH			
			1-9	10-49	50-99	100-49
45 A 5847 C	1, 2, 3, 4, 5	3.61	3.07	2.53	2.17	
45 A 5848 C	10, 25, 50, 75, 100, 150, 250, 500, 1000	2.58	2.19	1.81	1.55	
45 A 5849 C	2000, 2500, 3000, 5000	2.66	2.26	1.86	1.60	
45 A 5850 C	10K	2.85	2.42	2.00	1.71	
45 A 5851 C	15K, 20K	3.03	2.58	2.12	1.82	
45 A 5853 C	50K	3.23	2.75	2.26	1.94	
45 A 5855 C	100K	3.63	3.09	2.54	2.18	

## HAMILTON HALL TV FUSE-RESISTORS

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. Wt., 2 oz.

Stock No.	Mfr's Type	Ohms	EACH			
			1-9	10-49	50-99	100-49
45 A 6021	FR-4.7	4.7	.29	.24	.18	.16
45 A 6022	FR-5.6	5.6	.29	.24	.18	.16
45 A 6023	FR-7.5	7.5	.29	.24	.18	.16
45 A 6025	FR-22	22.0	.29	.24	.18	.16

PL-99R Fuse-Resistor Kit. Has: six 7.5-ohm types, plus one each 4.7, 5.6, 9.0, 22-ohm types. Shpg. wt., 1 lb.

45 A 6026 ..... 1.95

### DIVIDOHM ADJUSTABLE RESISTORS STYLE 210-12—12 WATTS— $1\frac{1}{4} \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5804 C	1, 2, 3, 5, 7.5, 10, 15, 20, 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000	1.20	1.02	.84	.72
45 A 5805 C	1250, 1500, 2000, 2500, 3000, 3500, 5000	1.24	1.05	.87	.74
45 A 5806 C	7000, 7500, 8000, 10K	1.33	1.13	.93	.80
45 A 5764	Extra Slider for 12-Watt Types	1.15			

### STYLE 210-25—25 WATTS— $2 \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5807 C	1, 2, 3, 5, 10, 15, 20, 25, 50, 75, 100, 150, 200, 300, 400, 500, 750, 1000	1.35	1.15	.95	.81
45 A 5808 C	1500, 2000, 2500, 3000, 5000	1.39	1.18	.97	.83
45 A 5809 C	7500, 10K	1.49	1.27	1.04	.89
45 A 5811 C	25K	1.69	1.44	1.18	1.01

### STYLE 210-50—50 WATTS— $4 \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5812 C	1	2.23	1.90	1.56	1.34
45 A 5813 C	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000	1.76	1.50	1.23	1.06
45 A 5814 C	1500, 2000, 2500, 4000, 5000	1.80	1.53	1.26	1.08
45 A 5815 C	10K	1.89	1.61	1.32	1.13
45 A 5816 C	15K, 20K	2.02	1.72	1.41	1.21
45 A 5817 C	25K, 30K, 40K	2.22	1.89	1.55	1.33
45 A 5818 C	50K	2.40	2.04	1.68	1.44

### STYLE 210-75—75 WATTS— $6 \times \frac{3}{16}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5856 C	1, 2	2.51	2.13	1.76	1.51
45 A 5857 C	5, 10, 15, 25, 50, 100, 200, 250, 300, 1000	1.96	1.67	1.37	1.18
45 A 5765	Extra Slider for 25, 50 and 75-Watt Types	1.15			

### STYLE 210-100—100 WATTS— $6\frac{1}{2} \times \frac{3}{4}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5821 C	1, 2, 3	2.87	2.44	2.01	1.72
45 A 5822 C	4, 5, 10, 25, 50, 100, 250, 500, 1000	2.22	1.89	1.55	1.33
45 A 5823 C	5000	2.28	1.94	1.60	1.37
45 A 5828 C	100K	3.49	2.97	2.44	2.09
45 A 5766	Extra Slider for 100-Watt Types	1.15			

### STYLE 210-225—225 WATTS— $10\frac{1}{2} \times 1\frac{1}{4}$ "

Stock No.	Resistance (Ohms)	EACH			
		1-9	10-24	25-99	100-249
45 A 5829 C	1, 2, 3, 4, 5	4.54	3.86	3.18	2.72
45 A 5830 C	5, 10, 25, 50, 100, 250, 500, 1000	3.51	2.98	2.46	2.11
45 A 5831 C	5000	3.58	3.04	2.51	2.15

## EXTRA MOUNTING BRACKETS FOR RESISTORS

For mounting fixed and adjustable tubular-core resistors. Wt., 2 oz.

Stock No.	Type No.	For Resistor		PKG. OF 100		
		Core O. D.	Watts	1-9	10-24	25-99
45 A 5894	5	$\frac{3}{16}$ "	12	1.47	1.25	1.03
45 A 5895	9	$\frac{3}{16}$ "	25, 50, 75	1.68	1.43	1.18
45 A 5896	12	$\frac{3}{8}$ "	100	3.15	2.68	2.21
45 A 5897	18	$1\frac{1}{8}$ "	175, 225	4.20	3.57	2.94



## G-C GLO-BAR THERMISTORS



These reliable thermal resistors are especially designed for series-string filament circuits in a wide variety of electrical components. Feature stability and fast response at a low cost. Have a large temperature coefficient of resistance. For use in RCA, Admiral, Philco, G.E., Motorola and a variety of other manufacturer's television receivers. An absolutely necessary addition to every serviceman's tube caddy or work bench. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Ohms		Replaces	EACH	
		Hot	Cold		1-9	10-49
45 A 6066	25-912	20	250	G.E. RRV051	1.10	1.00
45 A 6053	25-920	11	600	M'rola 6A73541	1.84	1.67
45 A 6071	25-928	9	600	RCA 100118	1.22	1.10

# Ohmite Wirewound Rheostats, Potentiometers

## VITREOUS-ENAMELED RHEOSTATS FROM 25 WATTS TO 100 WATTS

Selected wirewound rheostats; all are vitreous enameled (except Types 4200, 1-2, 3, 4), silicone ceramic. Cannot smoke, char, shrink or shift. Have copper-plate brushes, except silver-graphite brushes. Ratings at full setting. O.L. Component-Program Rheostats, except Types H, J and K mount on panels up to 1/4" thick; Dimensions: Type H, 1 1/4" dia., 1 1/2" depth behind panel; 1, 2 3/4" dia., 1 1/4" depth; K, 3 3/4" dia., 1 1/4" depth. Less knobs; see knobs, dial plates and coupling kits listed below. Av. shpg. wt., 8 oz.



## TYPE E 12 1/2-WATT RHEOSTATS

Compact miniature power rheostats for limited space applications. Smaller than many 1/2- or 2-watt potentiometers. Rugged, ceramic and metal construction. For high temperature applications; operate at maximum hot spot temperature of 340°C. Resistance tolerance is ±10%. Only 3/4" diameter. Require 1/4" behind panel. 1/4" by 32 threaded bushing 1/4" long, 1/4" diameter shaft, 3/4" long. Less knob, listed below. Av. shpg. wt., 2 1/2 oz.



### 25 WATT—TYPE H

Stock No.	Mfr's Type	Ohms	EACH		
			1-4	5-9	10-24
46 A 7223	0140*	1	5.05	4.29	3.38
46 A 7224	0141*	2	5.05	4.29	3.38
46 A 7225	0142	3	5.05	4.29	3.38
46 A 7226	0143	6	5.05	4.29	3.38
46 A 7227	0144	9	5.05	4.29	3.38
46 A 7228	0145	10	5.05	4.29	3.38
46 A 7229	0146	13	4.55	3.87	3.05
46 A 7230	0147	25	4.55	3.87	3.05
46 A 7231	0148	35	4.55	3.87	3.05
46 A 7232	0149	50	4.55	3.87	3.05
46 A 7234	0150	75	4.55	3.87	3.05
46 A 7236	0151	100	4.55	3.87	3.05
46 A 7237	0152	125	4.55	3.87	3.05
46 A 7238	0153	175	4.55	3.87	3.05
46 A 7239	0154	250	4.55	3.87	3.05
46 A 7240	0155	350	4.55	3.87	3.05
46 A 7241	0156	500	4.55	3.87	3.05
46 A 7242	0157	750	4.55	3.87	3.05
46 A 7244	0158	1000	5.05	4.29	3.38
46 A 7245	0159	1500	5.05	4.29	3.38
46 A 7246	0160	2500	5.05	4.29	3.38
46 A 7247	0161	3500	5.35	4.55	3.58
46 A 7248	0162	5000	5.35	4.55	3.58
46 A 7150	42001	7500	5.55	4.72	3.72
46 A 7151	4201*	10K	5.55	4.72	3.72
46 A 7152	4202*	15K	6.05	5.14	4.05
46 A 7153	4203*	20K	6.80	5.78	4.56
46 A 7154	4204*	25K	7.50	6.38	5.03

### 50 WATT—TYPE J (Cont'd)

Stock No.	Mfr's Type	Ohms	EACH		
			1-4	5-9	10-24
46 A 7258	0317	5	5.05	4.29	3.38
46 A 7259	0318	50	5.05	4.29	3.38
46 A 7260	0319	80	5.05	4.29	3.38
46 A 7261	0320	125	5.05	4.29	3.38
46 A 7262	0321	150	5.05	4.29	3.38
46 A 7263	0322	225	5.05	4.29	3.38
46 A 7264	0323	300	5.05	4.29	3.38
46 A 7265	0324	500	5.05	4.29	3.38
46 A 7266	0325	800	5.05	4.29	3.38
46 A 7267	0326	1000	5.35	4.55	3.58
46 A 7268	0327	1600	5.35	4.55	3.58
46 A 7269	0328	2500	5.35	4.55	3.58
46 A 7270	0329	3500	5.65	4.80	3.79
46 A 7271	0330	5000	5.65	4.80	3.79
46 A 7272	0331	8000	5.65	4.80	3.79
46 A 7273	0332	10K	5.65	4.80	3.79

### 100 WATT—TYPE K

Stock No.	Mfr's Type	Ohms	EACH		
			1-4	5-9	10-24
46 A 7274	0440*	0.5	8.45	7.18	5.66
46 A 7275	0441*	1	8.45	7.18	5.66
46 A 7276	0442*	2	8.45	7.18	5.66
46 A 7277	0443*	3	8.45	7.18	5.66
46 A 7278	0444*	5	8.45	7.18	5.66
46 A 7279	0445	7.5	8.45	7.18	5.66
46 A 7280	0446	10	8.45	7.18	5.66
46 A 7281	0447	16	7.95	6.76	5.33
46 A 7282	0448	25	7.95	6.76	5.33
46 A 7283	0449	50	7.95	6.76	5.33
46 A 7284	0450	75	7.95	6.76	5.33
46 A 7285	0451	100	7.95	6.76	5.33
46 A 7286	0452	200	7.95	6.76	5.33
46 A 7287	0453	300	7.95	6.76	5.33
46 A 7289	0455	500	7.95	6.76	5.33
46 A 7290	0456	750	7.95	6.76	5.33
46 A 7291	0457	1000	8.45	7.18	5.66
46 A 7293	0459	2000	8.45	7.18	5.66
46 A 7295	0461	5000	9.05	7.69	6.06
46 A 7297	0463	10K	10.20	8.67	6.83

### 50 WATT—TYPE J

Stock No.	Mfr's Type	Ohms	EACH		
			1-4	5-9	10-24
46 A 7249	0308*	0.5	5.65	4.80	3.79
46 A 7250	0309*	1	5.65	4.80	3.79
46 A 7251	0310*	2	5.65	4.80	3.79
46 A 7252	0311	3	5.65	4.80	3.79
46 A 7253	0312	6	5.65	4.80	3.79
46 A 7254	0313	8	5.05	4.29	3.38
46 A 7255	0314	12	5.05	4.29	3.38
46 A 7256	0315	16	5.05	4.29	3.38
46 A 7257	0316	22	5.05	4.29	3.38

### DIAL PLATES AND KNOB

Type 6000 Dial Plate. For Types H, J, and K rheostats, 2 3/4" diameter. Handsomely finished with bright figures and lines on etched black background. With 0-100 scale. Shpg. wt., 2 oz.  
46 A 7945, 1-4..... Each .30 6-9..... Each .26 10-24..... Each .20

Type 6150 Knob. Handsomely molded, black bakelite knob with 1/2" finger-grip. For use with Types H, J and K rheostats (listed above). Shpg. wt., 2 oz.  
46 A 7944 1-4..... Each .30 6-9..... Each .26 10-24..... Each .20

### "AB" MOLDED COMPOSITION 2-WATT POTENTIOMETERS

Single units are 3/4x1 1/2" dia. double units are 1 1/2x1 1/2" dia. Mount in 3/8" hole in panels to 1/4" thick. 2 1/2 long 1/4" round shafts except CLU, slotted shaft and locking nut; CMU, 3/4" slotted shaft; CU, CCU, CMU and CLU Types linear taper; CA Types, CW log; CB Types, CCW log. ±10% tolerance, except \*±20%. Av. shpg. wt., 3 1/2 oz.



### STYLE CA, CB, CU

Stock No.	Mfr's Type	Ohms	EACH		
			1-9	10-49	50-99
46 A 500	CU5001	50	1.95	1.75	1.75
46 A 501	CU1011	100	1.95	1.75	1.75
46 A 502	CU1511	150	1.95	1.75	1.75
46 A 503	CU2511	250	1.95	1.75	1.75
46 A 504	CU3511	350	1.95	1.75	1.75
46 A 505	CU5011	500	1.95	1.75	1.75
46 A 506	CU7501	750	1.95	1.75	1.75
46 A 507	CU1021	1000	1.95	1.75	1.75
46 A 508	CU1521	1500	1.95	1.75	1.75
46 A 509	CU2521	2500	1.95	1.75	1.75
46 A 600	CU3821	3500	1.95	1.75	1.75
46 A 506	CU5021	5000	1.95	1.75	1.75
46 A 601	CU7521	7500	1.95	1.75	1.75
46 A 507	CU1031	10K	1.95	1.75	1.75
46 A 508	CB1031	10K	2.25	2.02	2.02
46 A 602	CU1531	15K	1.95	1.75	1.75
46 A 509	CU2531	25K	1.95	1.75	1.75
46 A 603	CU3531	35K	2.25	2.02	2.02
46 A 604	CU5031	50K	1.95	1.75	1.75

### CLU LOCKING-SHAFT TYPES—MIL-R-94B

Stock No.	Mfr's Type	Ohms	EACH		
			1-9	10-49	50-99
46 A 512	CB5031	50K	2.25	2.02	2.02
46 A 604	CU7531	75K	1.95	1.75	1.75
46 A 513	CU1041	100K	1.95	1.75	1.75
46 A 514	CA1041	100K	2.25	2.02	2.02
46 A 605	CU1941	150K	1.95	1.75	1.75
46 A 515	CU2541	250K	1.95	1.75	1.75
46 A 516	CA2541	250K	2.25	2.02	2.02
46 A 517	CU3541	350K	1.95	1.75	1.75
46 A 518	CU5041	500K	1.95	1.75	1.75
46 A 607	CU7541	750K*	1.95	1.75	1.75
46 A 519	CU1052	1 meg*	1.95	1.75	1.75
46 A 520	CA1052	1 meg*	2.25	2.02	2.02
46 A 608	CU1552	1.5 meg*	1.95	1.75	1.75
46 A 521	CU2052	2.0 meg*	1.95	1.75	1.75
46 A 522	CU2552	2.5 meg*	1.95	1.75	1.75
46 A 609	CU3552	3.5 meg*	1.95	1.75	1.75
46 A 523	CU5052	5 meg*	1.95	1.75	1.75

Stock No.	Mfr's Type	Ohms	EACH		
			1-9	10-49	50-99
46 A 525	CLU5001	50	2.55	2.29	2.29
46 A 526	CLU1011	100	2.55	2.29	2.29
46 A 527	CLU2511	250	2.55	2.29	2.29
46 A 528	CLU5011	500	2.55	2.29	2.29
46 A 529	CLU121	1000	2.55	2.29	2.29
46 A 530	CLU2521	2500	2.55	2.29	2.29
46 A 531	CU3021	3000	2.55	2.29	2.29
46 A 532	CU1031	10K	2.55	2.29	2.29
46 A 533	CU2531	25K	2.55	2.29	2.29
46 A 534	CU5031	50K	2.55	2.29	2.29
46 A 535	CBU1041	100K	2.55	2.29	2.29
46 A 536	CU2541	250K	2.55	2.29	2.29
46 A 537	CU5041	500K	2.55	2.29	2.29
46 A 538	CU1052	1 meg*	2.55	2.29	2.29
46 A 549	CLU2052	2 meg*	2.55	2.29	2.29
46 A 539	CU2552	2.5 meg*	2.55	2.29	2.29
46 A 540	CLU5052	5 meg*	2.55	2.29	2.29

### CMU SLOTTED-SHAFT TYPES—MIL-R-94B

Stock No.	Mfr's Type	Ohms	EACH		
			1-9	10-49	50-99
46 A 612	CMU5001	50	1.95	1.75	1.75
46 A 613	CMU1011	100	1.95	1.75	1.75
46 A 614	CMU2511	250	1.95	1.75	1.75
46 A 615	CMU5011	500	1.95	1.75	1.75
46 A 616	CMU1021	1000	1.95	1.75	1.75
46 A 617	CMU2521	2500	1.95	1.75	1.75
46 A 618	CMU5021	5000	1.95	1.75	1.75
46 A 619	CMU1031	10K	1.95	1.75	1.75
46 A 620	CMU2531	25K	1.95	1.75	1.75

### STYLE CCU DUALS

Stock No.	Mfr's Type	Ohms	EACH		
			1-9	10-49	50-99
46 A 622	CMU5011	50K	1.95	1.75	1.75
46 A 623	CMU1041	100K	1.95	1.75	1.75
46 A 624	CMU2541	250K	1.95	1.75	1.75
46 A 625	CMU5041	500K	1.95	1.75	1.75
46 A 626	CMU1052	1 meg*	1.95	1.75	1.75
46 A 627	CMU2552	2.5 meg*	1.95	1.75	1.75
46 A 628	CMU5052	5 meg*	1.95	1.75	1.75

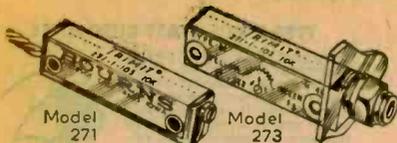
Stock No.	Mfr's Type	Ohms	EACH		
			1-9	10-49	50-99
46 A 541	CCU1031	10K	5.85	5.26	5.26
46 A 542	CCU2531	25K	5.85	5.26	5.26
46 A 543	CCU5031	50K	5.85	5.26	5.26
46 A 544	CCU1041	100K	5.85	5.26	5.26
46 A 545	CCU2541	250K	5.85	5.26	5.26
46 A 546	CCU5041	500K	5.85	5.26	5.26
46 A 547	CCU1052	1 meg*	5.85	5.26	5.26

# Potentiometers and Controls

## BOURNS TRIMIT® SUBMINIATURE POTENTIOMETERS

Body is only  $\frac{3}{8} \times \frac{3}{8} \times \frac{1}{4}$ ". May be stacked. Have 25-turn screwdriver adjustment, zero to full value, with self locking shaft. Power rating is at 25° C. Operating range, -55° to +105° C. Panel mtg. requires .228" hole

with max. thickness, .13". Std. mounts have two  $\frac{1}{2}$  holes on 1" ctrs. Quantity price for one resistance value only. Specify Stock No. and resistance when ordering. Av. shpg. wt., 2 oz.



### 1/4-WATT WIREWOUND TYPE. Size $\frac{3}{8} \times \frac{3}{8} \times \frac{1}{4}$ ".

Stock No.	Mfr's Type	Terminal Connections	Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH		
					1-9	10-24	25-49
46 A 7397 C	271	Insulated leads	Standard	50, 100, 200, 500, 1000, 2000, 5000, 10K	3.19	2.95	2.66
46 A 7381	271	Insulated leads	Standard	20K only	4.32	4.00	3.60
46 A 7034 C	271	Insulated leads	Panel	50, 100, 200, 500, 1000, 2000, 5000, 10K	4.00	3.70	3.34
46 A 7062	271	Insulated leads	Panel	20K only	5.13	4.75	4.28
46 A 7398 C	273	Solder lugs	Standard	50, 100, 200, 500, 1000, 2000, 5000, 10K	3.19	2.95	2.66
46 A 7982	273	Solder lugs	Standard	20K only	4.32	4.00	3.60
46 A 7035 C	273	Solder lugs	Panel	50, 100, 200, 500, 1000, 2000, 5000, 10K	4.00	3.70	3.34
46 A 7063	273	Solder lugs	Panel	20K only	5.13	4.75	4.28
46 A 7399 C	275	PC pins	Printed circuit	50, 100, 200, 500, 1000, 2000, 5000, 10K	3.19	2.95	2.66
46 A 7983	275	PC pins	Printed circuit	20K only	4.32	4.00	3.60

## BOURNS 20-TURN MICROMINIATURE E-Z TRIM POTENTIOMETERS

Type 3007. Rugged potentiometer with high temperature sealed plastic case, usable to 125°C. Precision wirewound element. 20-turn screwdriver adjustment. Meet MIL-R-27208B specifications for humidity, vibration and shock.

Power rating, 1 watt at 40°C. Resolution: 1.6% to 0.2% 50 to 20K. Res. tol. ±10%. Standard PC mounting. Size .75x.16x.31". 2 oz. Quantity prices in table are for one resistance value only.

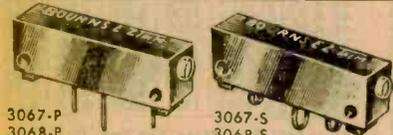


Stock No.	Mfr's Type	Values Available (Ohms)—Specify Values	1-9, EA.	10-24, EA.	25-49, EA.
46 A 7385 C	3007P	50, 100, 200, 500, 1000, 2000, 5000, 10K, 20K	1.75	1.62	1.46

## BOURNS E-Z TRIM® POTENTIOMETERS

Types 3067, 3068. Type 3067 1/2-watt 15-turn and 3068 1/5-watt 15-turn potentiometers are designed specifically for commercial applications. 3068 has a Resistor® carbon resistance element. Type 3067 has a wirewound element. Has 15-turn adjust-

ment and self-locking shafts for stable and precise electrical settings. Wipers slide at both ends of travel. "Printed circuit pin." Solder lugs. Mtg. ctrs.  $\frac{3}{16}$ ".  $\frac{3}{16} \times \frac{1}{2} \times \frac{1}{4}$ ". Specify Mfr's Type No. and resistance value when ordering. Av. Shpg. wt., 2 oz.



Stock No.	Mfr's Type	Values Available (Ohms)—Specify Values	1-9, EA.	10-24, EA.	25-49, EA.
46 A 7636 C	*3067-S	50, 100, 200, 500, 1000, 2000, 5000, 10K, 20K	1.85	1.71	1.54
46 A 7637 C	*3067-P	50, 100, 200, 500, 1000, 2000, 5000, 10K, 20K	1.85	1.71	1.54
46 A 7638 C	*3068-S	20K, 50K, 100K, 200K, 500K, 750K, 1 meg	1.85	1.71	1.54
46 A 7639 C	*3068-P	20K, 50K, 100K, 200K, 500K, 750K, 1 meg	1.85	1.71	1.54

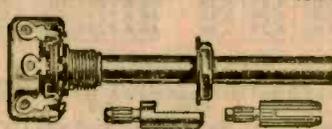
## MALLORY 3-WATT TV CONTROLS

Three-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. Size, 1.25" in diameter. Knurled stub shaft has screwdriver slot.  $\frac{3}{8}$ " bushing. Shpg. wt., 4 oz.



Stock No.	Type	Ohms EACH	Stock No.	Type	Ohms EACH
46 A 3835	R20L	25 .93	46 A 3843	R1500L	1500 .93
46 A 3837	R25L	25 .93	46 A 3844	R2500L	2500 .93
46 A 3840	R50L	50 .93	46 A 3846	R3000L	3000 .93
46 A 3864	R100L	100 .93	46 A 3845	R5000L	5000 .93
46 A 3841	R250L	250 .93	46 A 3693	R10ML	10K 1.08
46 A 3834	R500L	500 .93	46 A 3695	R20ML	20K 1.08
46 A 3842	R1000L	1000 .93			

## MALLORY SERIES U MIDGET CONTROL

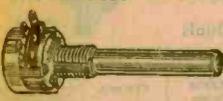


For audio, tone control circuits in home receivers, amplifiers, portables, TV sets and industrial equipment. Available in a full line of resistances, tapers, and taps. Round, hollow shaft—easily cut to desired length. Two spline-shank knob adapters furnish 1/8" dia. brass shaft, 2 1/4" long. 1/4" dia. Less switch. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Ohms Taper*	Stock No.	Mfr's Type	Ohms Taper*
46 A 3714	U-1	100 4	46 A 3763	U-35	50K 4
46 A 3709	U-2	500 4	46 A 3765	U-39	100K 4
46 A 3785	U-4	1K 4	46 A 3767	U-41	100K 1
46 A 3787	U-8	3K 4	46 A 3768	U-42	150K 1
46 A 3751	U-12	5K 1	46 A 3770	U-44	250K 1
46 A 3752	U-14	5K 4	46 A 3772	U-46	250K 4
46 A 3753	U-18	10K 1	46 A 3773	U-48	500K 4
46 A 3755	U-20	10K 4	46 A 3774	U-50	500K 4
46 A 3756	U-21	15K 1	46 A 3776	U-53	1 Meg 1
46 A 3783	U-26	20K 4	46 A 3777	U-54	1 Meg 4
46 A 3712	U-28A	25K 1	46 A 3781	U-56	2 Meg 4
46 A 3761	U-29	25K 4	46 A 3789	U-82	10 Meg 4
46 A 3763	U-33	50K 4			

## MALLORY TYPE VW WIREWOUND 5-WATT CONTROLS

Miniature type. Case size  $\frac{3}{4}$ " in diameter by  $\frac{7}{16}$ " in depth. Bushing:  $\frac{3}{8} \times \frac{3}{4}$ " diameter and length. Has  $\frac{1}{4}$ " plain round shaft. 2 1/2" long from mounting surface. Linear taper. Tolerance ±5%. 305° mechanical rotation; 275° electrical rotation. Av. wt., 4 oz.



Stock No.	Type	Ohms	EA.	Stock No.	Type	Ohms	EA.
46 A 1087	VW-1	1	1.38	46 A 1104	VW-250	250	1.38
46 A 1088	VW-2	2	1.38	46 A 1105	VW-300	300	1.38
46 A 1089	VW-3	3	1.38	46 A 1106	VW-400	400	1.38
46 A 1090	VW-5	5	1.38	46 A 1107	VW-500	500	1.38
46 A 1092	VW-8	8	1.38	46 A 1110	VW-1K	1000	1.38
46 A 1093	VW-10	10	1.38	46 A 1111	VW-1P5K	1500	1.44
46 A 1094	VW-15	15	1.38	46 A 1112	VW-2K	2000	1.44
46 A 1095	VW-20	20	1.38	46 A 1113	VW-2P5K	2500	1.44
46 A 1096	VW-25	25	1.38	46 A 1114	VW-3K	3000	1.44
46 A 1097	VW-30	30	1.38	46 A 1115	VW-4K	4000	1.44
46 A 1098	VW-40	40	1.38	46 A 1116	VW-5K	5000	1.44
46 A 1099	VW-50	50	1.38	46 A 1117	VW-10K	10K	1.50
46 A 1100	VW-60	60	1.38	46 A 1119	VW-15K	15K	1.56
46 A 1102	VW-100	100	1.38	46 A 1120	VW-20K	20K	1.56
46 A 1103	VW-200	200	1.38	46 A 1121	VW-25K	25K	1.65

## MALLORY CONTROL MOUNTING ACCESSORIES

Useful accessories for Mallory controls include mounting brackets with adjustable mounting centers, in two sizes; extender that extends body of controls  $\frac{3}{8}$ " away from mounting surface; and bushing adapter for mounting in panels up to  $\frac{1}{4}$ " thick. Av. shpg. wt., 2 oz.

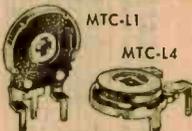


Stock No.	Mfr's Type	Fig.	Description	EACH
46 A 3676	RB249	A	Mtg. bracket mtg. ctrs. 2 1/2"	.05
46 A 3675	RB248	A	Mtg. bracket mtg. ctrs. 1 1/2"	.05
46 A 3681	EB247	C	Extender	.13
47 A 4092	119	B	1/4" bushing (Pkg. of 5)	.75

## EXPLANATION OF TAPERS\*

Taper No. 1: Nonlinear. For audio or antenna shunt circuits.  
Taper No. 4a: Linear. For voltage control.

## MALLORY MTC MINIATURE TRIMMER CONTROLS



Subminiature potentiometers only  $\frac{1}{2}$ " in diameter. Designed especially for printed circuitry. Also meets need for low wattage, carbon-type variable resistance source. Screwdriver slot adjustable. Rated at 1/4 watt. Linear taper. Uses include bias controls where initial setting is usually permanent except for servicing. 270° rotation, 180° with fixed end resistance. Wt., 1 oz.

46 A 3673 C. MTC-11 for Vertical PC Mounting. Terminals are arranged for stand-up mounting on PC circuitry. Available in resistance values listed in table, below. Specify values from Table "A". Each .39

46 A 3674 C. MTC-14 for Horizontal PC Mounting. Terminals arranged so that control can be mounted flat. Resistance values listed in table, below. Specify values from Table "A". Each .39

### TABLE "A"—VALUES AVAILABLE FROM STOCK

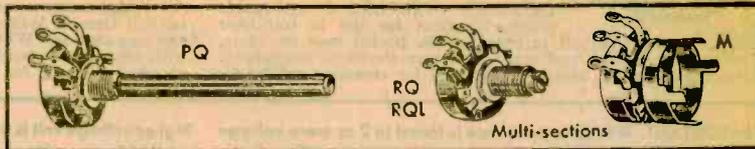
STANDARD RESISTANCE VALUES—SPECIFY VALUES WANTED										
Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs
100	300	1000	3000	6800	20K	100K	250K	500K		1
200	500	1500	5000	10K	25K	100K	250K	500K		2
250	750	2000	6000	15K	50K	180K	450K			3.5

# IRC Controls and Trimmers

## IRC SERIES PQ, RQ, RQL AND M CONTROLS

### EXPLANATION OF TAPERS

- Taper A. Linear curve for uniform resistance change.
- Taper C. Left-hand logarithmic taper for audio circuit control.



Smooth carbon base element and "two-finger" wiper arm. Special-purpose controls can be made up by using a Type PQ, RQ or RQL with several M multisections and a Type 76 switch (listed below). Types PQ, RQ and RQL have 1/2" threaded bushing. Body diameter including terminals is 1 3/8" maximum; depth behind panel, 3/4". Each Type M multisection adds 1 1/2" to the depth. PQ types have shaft 3" long, 1/8" diameter. RQ and RQL types have short shaft with screwdriver slot; shaft extends 1/2" beyond threaded bushing. Types RQ and RQL are identical except RQL has split bushing and locking nut—for permanent, vibration-proof settings. Tolerance of all types is ±10%. Tinned terminals. Type PQ, RQ, RQL and M sections feature 300 degree arc of rotation—with or without switch. Power rating is 1/2 watt, 500 volt maximum. Ground plate on Types PQ, RQ, and RQL has 2 locating tabs that may be bent down out of the way, if not needed. Av. shgp. wt., 4 oz.

### TYPE 76 ATTACHABLE SWITCHES FOR PQ, RQ, RQL, M AND Q CONTROLS

Easily attached to controls listed at left by bending down four metal tabs. Switch housings of arc-resistant material. Terminals hydraulically staked—no openings for solder to run into switch. Silver-plated alloy contacts.

Type 76-4 is make-one, break-one type for CRT spot-killing. Type 76-1 handles up to 5 amps @ 125 V; Type 76-2 is rated 1 amp @ 125 V. Shgp. wt., 2 oz.

46 A 5359, Type 76-1, SPST	Each .75
46 A 5391, Type 76-2, DPST	Each .75
46 A 5888, Type 76-4, SPDT	Each .75

Mfr's Type	Ohms	Taper	Stock No. PQ	Stock No. RQ	Stock No. RQL	Stock No. M
11-103	500	A	46 A 5510	46 A 5542	46 A 3271	46 A 5592
11-108	1000	A	46 A 5511	46 A 5543	46 A 3272	46 A 5574
11-110	2000	A	46 A 5512	46 A 5544	46 A 3273	46 A 5593
11-112	3000	A	46 A 5513	46 A 5545		
11-114	5000	A	46 A 5514	46 A 5546	46 A 3275	46 A 5575
11-115	7500	A	46 A 5515			
11-116	10K	A	46 A 5516	46 A 5548	46 A 3276	46 A 5576
13-116	10K	C	46 A 5517			
11-119	20K	A	46 A 5519		46 A 3277	
11-120	25K	A	46 A 5520		46 A 3278	46 A 5577
11-123	50K	A	46 A 5523	46 A 5555	46 A 3280	46 A 5578
13-123	50K	C	46 A 5524			
11-129	100K	A	46 A 5526	46 A 5558	46 A 3282	46 A 5579
13-128	100K	C	46 A 5527			46 A 5580
11-129	200K	A			46 A 3283	
11-130	250K	A	46 A 5528	46 A 5560	46 A 3284	46 A 5581
13-130	250K	C	46 A 5529			
11-133	500K	A	46 A 5530	46 A 5562	46 A 3286	46 A 5583
13-133	500K	C	46 A 5531	46 A 5563	46 A 3287	46 A 5584
11-137	1.0 meg	A	46 A 5532	46 A 5564	46 A 3288	46 A 5585
13-137	1.0 meg	C	46 A 5533		46 A 3289	
11-139	2.0 meg	A	46 A 5535		46 A 3291	
11-140	3.0 meg	A	46 A 5538	46 A 5570		
13-140	3.0 meg	C	46 A 5539			46 A 5594
11-141	5.0 meg	A	46 A 5540	46 A 5572		
11-143	10.0 meg	A	46 A 5541	46 A 5573		46 A 5590

PQ and RQ Controls ..... Each 1.71  
 M Multisections ..... Each 1.62  
 RQL Controls ..... Each 1.77

### TYPE WRPL CONTROLS

Locking-type controls with screw-driver slot shaft, 1/4" dia. and approximately 1/2" long from mounting face. With 1/2" locking type bushing and locking nut. Linear taper. Specify Type and Ohms. Shgp. wt., 4 oz.

Ohms	Ohms	Ohms	Ohms	Ohms
2	25	250	2000	7500
5	30	400	2500	10K
8	50	500	3000	
10	100	750	4000	
20	200	1000	5000	

46 A 5859 C	Each 1.77
15K | 20K | 25K	
46 A 5869 C	Each 2.19
30K | 50K	
46 A 5890 C	Each 2.43

### SWITCHES FOR WRPL CONTROLS

46 A 5218, Type 76-11, SPST, 2 oz.	.75
46 A 5219, Type 76-12, DPST, 2 oz.	.75

### IRC-CTS Q CONTROLS WITH UNIVERSAL SHAFTS

Knurled, flatted and slotted, 3" universal shaft can be cut to desired length. 1/16" body dia. 3/8" bushing, 1/2" long. Brass, tinned terminals for easy soldering. To gain, use M multisections, above. Less switches. For switches and explanations of taper see above. Av. shgp. wt., 4 oz.



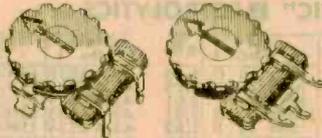
Stock No.	Mfr's Type	Ohms	Taper	Stock No.	Mfr's Type	Ohms	Taper
46 A 5395	Q11-201	250	A	46 A 5318	Q13-128	100K	C
46 A 5300	Q11-103	500	A	46 A 5374	Q11-129	200K	A
46 A 5301	Q11-108	1000	A	46 A 5319	Q11-130	250K	A
46 A 5442	Q11-109	1500	A	46 A 5320	Q13-130	250K	C
46 A 5302	Q11-110	2000	A	46 A 5322	Q11-133	500K	A
46 A 5373	Q13-111	2500	C	46 A 5323	Q13-133	500K	A
46 A 5303	Q11-112	3000	A	46 A 5325	Q11-137	1 meg	C
46 A 5304	Q11-114	5000	A	46 A 5326	Q13-137	1 meg	C
46 A 5383	Q13-114	5000	C	46 A 5328	Q11-138	1.5 meg	A
46 A 5306	Q11-116	10K	A	46 A 5329	Q11-139	2 meg	A
46 A 5309	Q11-119	20K	A	46 A 5330	Q13-139	2 meg	C
46 A 5311	Q11-120	25K	A	46 A 5331	Q11-239	2.5 meg	C
46 A 5443	Q13-120	25K	C	46 A 5332	Q11-140	3 meg	A
46 A 5314	Q11-123	50K	A	46 A 5334	Q11-141	5 meg	A
46 A 5315	Q13-123	50K	C	46 A 5335	Q11-143	10 meg	A
46 A 5317	Q11-128	100K	C				

EACH ..... 1.23

### U-201 AND X-201 CARBON TRIMMERS

- Limited space use
- Easy-to-install

Miniature 1/4-watt carbon trimmers for limited-space application. Ideal for printed circuit boards where an occasionally adjusted variable resistance is required. PC type terminals; easy-to-install, snap-in self-supporting bracket mount. U-201 mounts with adjusting knob parallel to PC board; X-201 with knob perpendicular to board. Blue nylon knurled knob, 1/8" dia.; slotted for easy front and rear adjustment. Linear taper; 260° ±5% rotation; max. voltage 500 VDC; ±20% tolerance.

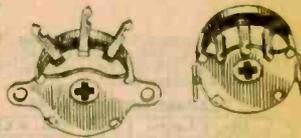


Stock No.	Type U-201	Ohms	Stock No.	Type X-201	Ohms
46 A 1802	R501B	500	46 A 1816	R102B	1000
46 A 1803	R102B	1000	46 A 1817	R252B	2500
46 A 1805	R502B	5000	46 A 1818	R502B	5000
46 A 1806	R103B	10K	46 A 1820	R253B	25K
46 A 1807	R253B	25K	46 A 1821	R503B	50K
46 A 1808	R503B	50K	46 A 1823	R254B	250K

### 117 AND P-115 WIREWOUND TRIMMERS

- Fully enclosed case
- Simple to mount

Miniature trimmers, enclosed to protect resistance unit and adjustable arm for longer life. Silent operation; minimum power loss. Insulated rotor isolates tuning device from shock, prevents external interference or damage to circuit during adjustment. Cross-slot in nylon rotor with adjustment. P-115 is twist-tab mounted; 117 is rivet-ear mounted. Printed circuit type terminals. Linear taper. ±10% tolerance. Rated 2 watts. 260° ±5% rotation. Maximum voltage 500 VDC.



Stock No.	Type 117	Ohms	Stock No.	Type P-115	Ohms
46 A 1826	R5ROA	5	46 A 1837	R5ROA	5
46 A 1829	R500A	50	46 A 1840	R500A	50
46 A 1830	R101A	100	46 A 1841	R101A	100
46 A 1831	R251A	250	46 A 1842	R251A	250
46 A 1832	R501A	500	46 A 1843	R501A	500
46 A 1835	R102A	1000	46 A 1844	R102A	1000
46 A 1835	R502A	5000	46 A 1846	R502A	5000

1-24, Ea. .39 25-49, Ea. .35 50-99, Ea. .33 100-299, Ea. .29 1-24, Ea. 1.25 25-49, Ea. 1.00 50-99, Ea. .75 100-Up, Ea. .60

# Sprague Electrolytic Capacitors

## TYPE TE (30D) "LITL-LYTIC" SUBMINIATURE CAPACITORS



Ultra-small electrolytics at reasonable prices. Excellent for use in transistor radio, transistor circuits in hearing aids, pocket tape recorders, wireless microphones, and other miniature electronic equipment. Hermetically sealed, aluminum-enclosed for complete reliability.

All-welded construction—no pressure joints to cause open or intermittent circuits. Will not corrode. Extremely low leakage current and long shelf life. Withstand temperatures up to 85°C. Furnished with clear plastic insulating sleeves. Size given in table below is diameter x length. Av. shpg. wt., 2 oz.

**IMPORTANT.** Where capacitance is found in 2 or more voltage ratings with nearly same case size and price, normally only the higher voltage unit is listed. A higher voltage rating can be substituted for one of lower value provided  $\mu F$  rating remains equal.

Stock No.	Type TE-	$\mu F$	VV DC	Size Dia. x L	E.A.	Stock No.	Type TE-	$\mu F$	VV DC	Size Dia. x L	E.A.	Stock No.	Type TE-	$\mu F$	VV DC	Size Dia. x L	E.A.
43 A 1739	1032.2	5	3	17/64x35/64	.48	43 A 1769	1131	100	12	25/64x35/64	.69	43 A 1784	1300	1	50	17/64x35/64	.48
43 A 1742	1033	10	3	17/64x35/64	.48	43 A 1771	1137	200	12	25/64x11/64	.75	43 A 1784	1301	2	50	17/64x35/64	.48
43 A 6028	1055	25	3	17/64x35/64	.48	43 A 1772	1138	250	12	25/64x11/64	.75	43 A 1785	1302	3	50	17/64x35/64	.48
43 A 1747	1058	50	3	17/64x35/64	.48	43 A 6624	1152	5	15	17/64x35/64	.48	43 A 6643	1302.1	4	50	17/64x35/64	.48
43 A 1749	1059.5	100	3	21/64x35/64	.54	43 A 1777	1153	6	15	17/64x35/64	.48	43 A 1786	1303	5	50	17/64x35/64	.48
43 A 1003	1061	150	3	21/64x35/64	.66	43 A 1018	1154	8	15	17/64x35/64	.48	43 A 1025	1303.1	6	50	17/64x35/64	.48
43 A 6654	1064	200	3	21/64x35/64	.66	43 A 6625	1155	10	15	17/64x35/64	.48	43 A 1788	1303.3	8	50	17/64x35/64	.48
43 A 1004	1065	250	3	25/64x35/64	.69	43 A 6626	1156	15	15	17/64x35/64	.48	43 A 1789	1304	10	50	17/64x35/64	.54
43 A 6658	1068	500	3	25/64x11/64	.75	43 A 1019	1157	20	15	17/64x35/64	.48	43 A 1790	1304.2	15	50	17/64x35/64	.66
43 A 6654	1084	5	6	17/64x35/64	.48	43 A 6628	1157.1	25	15	17/64x35/64	.48	43 A 6644	1305	20	50	17/64x35/64	.48
43 A 1750	1085	6	6	17/64x35/64	.48	43 A 6629	1158	30	15	21/64x35/64	.54	43 A 6662	1306	35	50	25/64x35/64	.69
43 A 6035	1086	8	6	17/64x35/64	.48	43 A 6630	1159	35	15	21/64x35/64	.54	43 A 6645	1307	50	50	25/64x35/64	.72
43 A 6036	1087	10	6	17/64x35/64	.48	43 A 6631	1160	50	15	21/64x35/64	.54	43 A 1026	1400	1	100	17/64x35/64	.51
43 A 6037	1089	15	6	17/64x35/64	.48	43 A 1020	1161	75	15	21/64x35/64	.66	43 A 1792	1401	2	100	17/64x35/64	.54
43 A 1751	1090	20	6	17/64x35/64	.48	43 A 6633	1162	100	15	21/64x35/64	.69	43 A 1794	1403	4	100	17/64x35/64	.60
43 A 6038	1091	25	6	17/64x35/64	.48	43 A 6634	1163	150	15	25/64x35/64	.72	43 A 6646	1404	5	100	21/64x35/64	.66
43 A 1752	1093	35	6	17/64x35/64	.48	43 A 6635	1164	200	15	25/64x11/64	.75	43 A 1795	1405	6	100	21/64x35/64	.66
43 A 1006	1095	40	6	17/64x35/64	.48	43 A 1779	1200	1	25	17/64x35/64	.48	43 A 6647	1407	10	100	25/64x35/64	.69
43 A 6659	1101.5	75	6	21/64x35/64	.54	43 A 6637	1201	2	25	17/64x35/64	.48	43 A 1028	1408	15	100	25/64x35/64	.72
43 A 1753	1102	100	6	21/64x35/64	.66	43 A 1021	1201.1	3	25	17/64x35/64	.48	43 A 6649	1409	20	100	25/64x11/64	.75
43 A 1754	1103	150	6	25/64x35/64	.69	43 A 1022	1201.2	4	25	17/64x35/64	.48	43 A 1797	1500	1	150	17/64x35/64	.51
43 A 1007	1104	200	6	25/64x35/64	.69	43 A 6046	1201	5	25	17/64x35/64	.48	43 A 1798	1501	2	150	17/64x35/64	.51
43 A 1009	1105	250	6	25/64x35/64	.72	43 A 6047	1203	6	25	17/64x35/64	.48	43 A 1029	1502	3	150	21/64x35/64	.60
43 A 6661	1106	300	6	25/64x11/64	.72	43 A 1023	1203.5	8	25	17/64x35/64	.48	43 A 1799	1503	4	150	21/64x35/64	.66
43 A 6044	1127	5	12	17/64x35/64	.48	43 A 6048	1204	10	25	17/64x35/64	.48	43 A 6651	1504	5	150	21/64x35/64	.66
43 A 6045	1128	10	12	17/64x35/64	.48	43 A 6049	1205	15	25	17/64x35/64	.48	43 A 1800	1505	6	150	21/64x35/64	.66
43 A 1763	1129	15	12	17/64x35/64	.48	43 A 6637	1207	25	25	21/64x35/64	.54	43 A 1801	1506	8	150	25/64x35/64	.69
43 A 1013	1130	20	12	17/64x35/64	.48	43 A 6638	1208	35	25	21/64x35/64	.54	43 A 6652	1507	10	150	25/64x35/64	.72
43 A 1765	1131	25	12	17/64x35/64	.48	43 A 6639	1209	50	25	21/64x35/64	.66						
43 A 1767	1133	50	12	21/64x35/64	.54	43 A 1024	1210	75	25	21/64x35/64	.69						
43 A 1768	1134	75	12	21/64x35/64	.66	43 A 6641	1211	100	25	25/64x35/64	.72						

## TYPE 36D "POWERLYTIC" ELECTROLYTICS



Computer quality. Low effective series resistance, leakage current. Extremely long life. Withstand MIL conditions including -55°C to +85°C storage. Also -55°C to +125°C term. storage for 10-32 screws. Temp. -20° to +85°C. Tol. -10%. -75% to 150 WVDC. -10%. +75% to 150 WVDC. -10%. +50%. 1 1/2 lbs.

### \*CAPACITOR SIZE CHART

	Dia. x Lgth.		Dia. x Lgth.
A	1 1/4 x 2 1/2"	E	2 1/8 x 4 1/2"
B	1 1/2 x 3 1/4"	F	2 1/2 x 4 1/2"
C	1 3/4 x 4 1/2"	G	3 1/8 x 4 1/2"
D	2 1/8 x 3 1/2"		

Stock No.	Type 36D	$\mu F$	VV DC	EACH
43 A 5023	602G010AA	6000	10 A	2.31
43 A 5025	123G010AB	12000	10 B	2.79
43 A 5032	462G015AA	4600	15 A	2.31

Stock No.	Type 36D	$\mu F$	VV DC	E.A.
43 A 5156	922G015AB	9800	15 B	2.79
43 A 5154	133G015AC	13000	15 C	3.22
43 A 5035	213G015BB	21000	15 D	4.31
43 A 5041	232G025AA	23000	25 A	4.31
43 A 5042	552G025AB	5500	25 B	2.80
43 A 5050	822G025AC	8200	25 C	3.23
43 A 5051	183G025BC	18000	25 F	5.22
43 A 5058	552G040AC	5500	40 C	3.25
43 A 5059	842G040BB	8400	40 D	4.37
43 A 5063	132G050AA	13000	50 A	2.32
43 A 5064	262G050AB	26000	50 B	2.32
43 A 5065	392G050AC	39000	50 C	3.26
43 A 5066	602G050BD	60000	50 D	4.39
43 A 5067	902G050BC	90000	50 E	5.34
43 A 5068	153G050CC	15000	50 F	7.80
43 A 5069	223G050DC	22000	50 G	10.12
43 A 508	282G075AA	27000	75 A	3.2
43 A 5086	392F075BB	39000	75 D	4.41
43 A 5087	592F075BC	59000	75 E	5.34
43 A 5091	451F100AA	45000	100 A	2.32
43 A 5097	132F100AC	13000	100 C	3.25
43 A 5099	302F100BC	30000	100 E	5.30

Stock No.	Type 36D	$\mu F$	VV DC	EACH
43 A 5100	532F100CC	5300	100 F	7.78
43 A 5102	301F150AA	300	150 A	2.32
43 A 5103	901F150AB	900	150 C	3.22
43 A 5104	142F150BB	1400	150 D	4.31
43 A 5105	212F150BC	2100	150 E	5.22
43 A 5107	532F150DC	5300	150 G	10.12
43 A 5109	251F200AA	2500	200 A	2.31
43 A 5110	410F200AB	4300	200 B	2.77
43 A 5111	641F200AC	6400	200 C	3.20
43 A 5112	142F200BC	1400	200 E	5.14
43 A 5116	531F250AC	5300	250 C	3.19
43 A 5130	122F250BC	1200	250 E	5.16
43 A 5131	302F250DC	3000	250 G	10.23
43 A 5132	248F300AB	2400	300 B	2.77
43 A 5134	821F300BC	8200	300 E	5.09
43 A 5136	90F350AA	95	350 A	2.30
43 A 5137	191F350AB	190	350 B	2.72
43 A 5138	21F350BB	420	350 D	3.97
43 A 5144	500F450AA	50	450 A	2.25
43 A 5150	141F450AC	140	450 C	3.13
43 A 5151	221F450BB	220	450 D	4.03
43 A 5152	331F450BC	330	450 E	4.99

## TYPE 39D "POWERLYTIC" ELECTROLYTICS

Low series resistance, leakage current. Temp. -20°C to +85°C. Tol. -10%. -75% to 150 WVDC. -10%. +50%. 2 1/2 lbs. Av. shpg. wt. 4 oz.

### \*CAPACITOR SIZE CHART

	Dia. x Lgth.		Dia. x Lgth.
A	3/8 x 1 1/4"	K	1 1/2 x 2 1/4"
B	3/8 x 1 1/2"	L	1 3/4 x 2 1/4"
C	3/8 x 1 3/4"	M	1 3/4 x 2 3/4"
D	3/8 x 2 1/4"	N	1 3/4 x 3 1/4"
E	3/8 x 2 3/4"	O	1 3/4 x 3 3/4"
F	3/8 x 3 1/4"	P	1 1/2 x 2 1/4"
G	3/8 x 3 3/4"	Q	1 1/2 x 2 3/4"
H	3/8 x 4 1/4"	R	1 1/2 x 2 3/4"
I	3/8 x 4 3/4"		
J	3/8 x 5 1/4"		

Stock No.	Type 39D	$\mu F$	VV DC	E.A.
43 A 6484	138G003EL4	1300	3 C	1.67
43 A 6485	218G003HE4	2100	3 K	1.74
43 A 6487	578G003GP4	5700	3 J	2.01
43 A 6488	109G003HS4	10000	3 N	2.52
43 A 6490	607G006EJ4	6000	6 B	1.62

Stock No.	Type 39D	$\mu F$	VV DC	E.A.
43 A 6491	108G006GE4	1000	6 G	1.68
43 A 6492	208G006GJ4	2000	6 H	1.79
43 A 6493	408G006GP4	4000	6 I	2.01
43 A 6495	109G006FS4	10000	6 K	2.91
43 A 6496	507G			

# Sprague Capacitors and Assortments

## "ORANGE DROP" CAPACITORS



## "MYLAR"-PAPER

Compact dual dielectric "Orange Drops" combine best features of Mylar and special capacitor tissue. Rock-hard case with space-saving radial leads. Double-dipped in orange epoxy resin for protection from excessive heat and humidity. Outer foil leads identified by black striping. Temperature range, -40°C to +80°C; can operate to 125°C with proper voltage derating. Tolerance,  $\pm 10\%$ . Shpg. wt., 2 oz.

### TYPE 25P RECTANGULAR

Size, height by thickness.  $4\frac{5}{16}$ " long, except  $3\frac{3}{4}$ ",  $1\frac{1}{16}$ ".

Stock No.	Mfr's Type	$\mu F$	WV DC	Size Inches	E.A.
43 A 3570	1549R75	.15*	75	$5\frac{1}{8} \times 2\frac{3}{4}$	.24
43 A 3571	2249R75	.22*	75	$4\frac{1}{2} \times 2\frac{3}{4}$	.30
43 A 3572	3349R75	.33*	75	$2\frac{3}{4} \times 3\frac{1}{2}$	.54
43 A 3573	4749R75	.47*	75	$2\frac{3}{4} \times 1\frac{1}{2}$	.63
43 A 3574	6849R75	.68†	75	$2\frac{3}{4} \times 1\frac{1}{2}$	.69
43 A 3575	1059R75	1.0†	75	$6\frac{1}{4} \times 1\frac{1}{4}$	.69
43 A 3576	1029R75	.001	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3577	1529R75	.0015	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3578	2229R75	.0022	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3579	3329R75	.0033	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3580	4729R75	.0047	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3581	6829R75	.0068	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3582	1039R75	.01	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3630	1539R75	.015	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3600	2239R75	.022	100	$5\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3601	3339R75	.033	100	$2\frac{1}{2} \times 1\frac{1}{8}$	.18
43 A 3603	3939R75	.039	100	$1\frac{1}{2} \times 1\frac{1}{8}$	.18
43 A 3605	4739R75	.047	100	$1\frac{1}{2} \times 1\frac{1}{8}$	.18
43 A 3608	5639R75	.056	100	$3\frac{1}{8} \times 3\frac{1}{8}$	.18
43 A 3609	6839R75	.068	100	$3\frac{1}{8} \times 3\frac{1}{8}$	.18
43 A 3611	8239R75	.082	100	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.18
43 A 3618	1049R75	.1	100	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.18

### TYPE 220P TUBULAR

Stock No.	Mfr's Type	$\mu F$	WV DC	Size Inches	E.A.
43 A 3017	2PS-S20	.02	200	$3\frac{1}{2} \times 1\frac{1}{8}$	.18
43 A 3018	2PS-S47	.047	200	$2\frac{1}{2} \times 1\frac{1}{8}$	.18
43 A 3019	2PS-S50	.05	200	$1\frac{1}{2} \times 1\frac{1}{8}$	.18
43 A 3020	2PS-P10	.1	200	$3\frac{1}{2} \times 1\frac{1}{8}$	.21
43 A 3138	4PS-P20	.2	200	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.30
43 A 3021	2PS-P25	.25	200	$5\frac{1}{8} \times 1\frac{1}{8}$	.30
43 A 3022	2PS-P33	.33	200	$5\frac{1}{8} \times 1\frac{1}{8}$	.30
43 A 3023	2PS-P47	.47	200	$4\frac{1}{2} \times 1\frac{1}{8}$	.45
43 A 3024	2PS-P50	.5	200	$2\frac{3}{4} \times 1\frac{1}{8}$	.48
43 A 3023A	4PS-S20	.01	400	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3024A	4PS-S40	.02	400	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3026A	4PS-S47	.047	400	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3027A	4PS-S50	.05	400	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3028A	4PS-S68	.068	400	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3028A	4PS-P10	.1	400	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.24
43 A 3029A	4PS-P20	.2	400	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.36
43 A 3030A	4PS-P22	.22	400	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.36
43 A 3031A	4PS-P25	.25	400	$4\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.36
43 A 3032A	6PS-D10	.001	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3033A	6PS-D15	.0015	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3034A	6PS-D20	.002	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3035A	6PS-D25	.0025	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3036A	6PS-D33	.0033	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3037A	6PS-D39	.0039	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3038A	6PS-D47	.0047	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3039A	6PS-D50	.005	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3039A	6PS-D56	.0056	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3051A	6PS-D68	.0068	600	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3052A	6PS-D82	.0082	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3052A	6PS-S10	.01	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3053A	6PS-S15	.015	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.18
43 A 3054A	6PS-S20	.02	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.18
43 A 3055A	6PS-S22	.022	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.18
43 A 3056A	6PS-S25	.025	600	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.18
43 A 3057A	6PS-S33	.033	600	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.18
43 A 3058A	6PS-S39	.039	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3058A	6PS-S47	.047	600	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3059A	6PS-S50	.05	600	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3060A	6PS-S56	.056	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.21
43 A 3061A	6PS-S68	.068	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.27
43 A 3143A	6PS-S82	.082	600	$3\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.27
43 A 3060A	6PS-P10	.1	600	$5\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.24
43 A 3061A	6PS-P15	.15	600	$5\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.36
43 A 3061A	6PS-P20	.2	600	$3\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.45
43 A 3062A	6PS-P22	.22	600	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.48
43 A 3062A	6PS-P25	.25	600	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.48
43 A 3063A	10PS-D10	.001	1000	$2\frac{1}{2} \times 1\frac{1}{8} \times 1\frac{1}{8}$	.15
43 A 3067A	10PS-D30	.005	1000	$1\frac{1}{2} \times 2\frac{1}{8} \times 1\frac{1}{8}$	.18

## "BLACK BEAUTY" "MYLAR" PAPER TELECAPS



Molded tubular capacitors built for long life under high humidity and temperature operating conditions. Dual dielectric combines best features of polyester film and paper. Solid impregnant construction for rock-hard durability. Leakproof. Non-flammable, crackproof case. 200 to 1600 WV types operate to 105°C without derating; 6000 volt up, to 85°C. 6000 WV types are oil impregnated.  $\pm 10\%$  tolerance. Wt., 3 oz.

Stock No.	Mfr's Type	$\mu F$	WV DC	Size Dia. x L.	E.A.
43 A 5119	2TM-S10	.01	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5120	2TM-S20	.02	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5149	2TM-S47	.047	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5121	2TM-S50	.05	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5122	2TM-P10	.1	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5145	2TM-P15	.15	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5146	2TM-P22	.22	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5147	2TM-P25	.25	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5148	2TM-P47	.47	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5123	2TM-P50	.5	200	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5124	2TM-M1	1.0	200	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 5118	4TM-D10	.001	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5117	4TM-D50	.005	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5125	4TM-S10	.01	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5001	4TM-S15	.015	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5126	4TM-S20	.02	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5002	4TM-S25	.025	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5014	4TM-S47	.047	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5127	4TM-S50	.05	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5128	4TM-P10	.1	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5011	4TM-P15	.15	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5521	4TM-P20	.2	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5012	4TM-P22	.22	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5129	4TM-P25	.25	400	$1\frac{1}{2} \times 1\frac{1}{2}$	.84
43 A 5005	4TM-P47	.47	400	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 5010	4TM-P50	.5	400	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 5009	4TM-M1	1.0	400	$1\frac{1}{2} \times 2\frac{1}{2}$	1.08
43 A 6250	6TM-T10	.0001	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.27
43 A 6251	6TM-T25	.00025	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.27
43 A 6253	6TM-T50	.0005	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.27
43 A 5070	6TM-D10	.001	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5084	6TM-D15	.0015	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5071	6TM-D20	.002	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5095	6TM-D25	.0025	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5072	6TM-D30	.003	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5073	6TM-D40	.004	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5093	6TM-D47	.0047	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5074	6TM-D50	.005	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 6254	6TM-D68	.0068	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5076	6TM-S10	.01	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5094	6TM-S15	.015	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5077	6TM-S20	.02	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 6255	6TM-S22	.022	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5096	6TM-S25	.025	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5078	6TM-S30	.03	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5079	6TM-S40	.04	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5098	6TM-S47	.047	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5080	6TM-S50	.05	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5081	6TM-S60	.06	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5007	6TM-S68	.068	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.30
43 A 5082	6TM-P10	.1	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5524	6TM-P15	.15	600	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5525	6TM-P20	.2	600	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 5083	6TM-P22	.22	600	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 5083	6TM-P25	.25	600	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 6260	6TM-P50	.5	600	$1\frac{1}{2} \times 2\frac{1}{2}$	1.08
43 A 6261	6TM-M1	1.0	600	$1\frac{1}{2} \times 2\frac{1}{2}$	1.56
43 A 5928	10TM-T50	.0005	1000	$1\frac{1}{2} \times 1\frac{1}{2}$	.27
43 A 5929	10TM-D10	.001	1000	$1\frac{1}{2} \times 1\frac{1}{2}$	.21
43 A 5936	10TM-D50	.005	1000	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5938	10TM-S10	.01	1000	$1\frac{1}{2} \times 1\frac{1}{2}$	.24
43 A 5945	10TM-S50	.05	1000	$1\frac{1}{2} \times 1\frac{1}{2}$	.48
43 A 5947	10TM-P10	.1	1000	$1\frac{1}{2} \times 2\frac{1}{2}$	.84
43 A 5019	MB-D1	.001	1600	$1\frac{1}{2} \times 1\frac{1}{2}$	.33
43 A 5161	MB-D5	.005	1600	$1\frac{1}{2} \times 1\frac{1}{2}$	.27
43 A 5166	MB-S1	.01	1600	$1\frac{1}{2} \times 1\frac{1}{2}$	.54
43 A 5168	MB-S2	.02	1600	$1\frac{1}{2} \times 1\frac{1}{2}$	.54
43 A 6277	MB-S3	.03	1600	$1\frac{1}{2} \times 2\frac{1}{2}$	.90
43 A 6278					

# Sprague Twist-Lok and Miniature Electrolytics



## TVL "TWIST-LOK" AND PCL "PRINT-LOK" MIDGET CAN CAPACITORS

"Twist-Lok" hermetically sealed aluminum can capacitors. All rated +85°C. Up to 150 WVDC, tolerance is -10%, +100%; above 150 WVDC, -10%, +50%. Can is common negative.

Terminals welded to cathode. \*PCL "Print-Lok" types fit all printed circuit mountings or std. twist-base mounts. With both phenolic and metal mounting washers.

Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L
A	1/2x2"	C	1x1 1/4"	E	1x3 1/2"	G	1 1/2x2 1/2"	J	1 1/2x3 1/2"	L	1 1/2x4 1/2"	N	1 1/2x4 1/2"	P	1 1/2x4 1/2"

### SINGLE SECTION Av. shpg. wt., 1 lb.

Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH
43 A 9620	225	15	1160	M	1.20	43 A 9351	200	150	1431	G	1.68	43 A 9337	250	300	1590	J	3.84
43 A 9364	1000	15	1165	A	1.77	43 A 9064	200	150	1431.1	D	1.68	43 A 9329	40	350	1621	B	1.38
43 A 9365	2000	15	1168	G	2.37	43 A 9352	300	150	1434	G	1.95	43 A 9332	125	350	1638	H	2.73
43 A 9366	3000	15	1170	G	2.94	43 A 9065	125	200	1470	C	1.95	43 A 9333	150	350	1642	H	2.73
43 A 9603	4000	15	1173	K	2.58	43 A 9067	150	200	1471	D	1.95	43 A 9303	250	350	1644.2	K	3.36
43 A 9362	500	25	1220	M	1.77	43 A 9343	160	200	1473	G	2.19	43 A 9084	320	350	1645	K	3.36
43 A 9363	1000	25	1230	G	2.46	43 A 9341	150	250	1540	G	2.13	43 A 9314	10	450	1705	M	1.02
43 A 9357	1000	50	1317	A	1.14	43 A 9068	200	250	1547	H	2.52	43 A 9316	20	450	1714	B	1.26
43 A 9604	250	50	1324	H	1.38	43 A 9069	500	200	1490	L	2.94	43 A 9317	30	450	1720	C	1.35
43 A 9359	1000	50	1338	H	2.58	43 A 9071	20	250	1509	D	1.11	43 A 9324	40	450	1725	C	1.41
43 A 9360	1500	50	1341	H	3.05	43 A 9073	150	250	1539	M	1.11	43 A 9325	50	450	1728	C	1.62
43 A 9344	50	150	1415	M	1.14	43 A 9074	150	250	1541	H	2.13	43 A 9326	80	450	1735	H	2.10
43 A 9346	100	150	1423	M	1.38	43 A 9076	160	250	1541.1	F	2.13	43 A 9328	125	450	1760	J	2.64
43 A 9066	120	150	1425	B	1.50	43 A 9077	80	300	1573	C	1.77	43 A 9308	20	500	1943	C	1.26
43 A 9062	120	150	1428	H	1.50	43 A 9080	100	300	1578	C	2.01	43 A 9085	80	500	1958	H	2.49
43 A 9348	140	150	1428	C	1.50	43 A 9081	125	300	1580	H	2.43	43 A 9312	90	500	1960	J	2.40
43 A 9349	150	150	1429	D	1.50	43 A 9336	150	300	1584	K	2.43						

### DUAL SECTION Av. shpg. wt., 1 1/2 lbs.

Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH
43 A 9120	1000-1000	15	2160	C	3.03	43 A 9397	30-30	350	2628	C	2.01	43 A 9382	40-20	450	2762	G	2.25
43 A 9117	100-100	150	2326	M	1.44	43 A 9093	80-80	350	2635	N	2.82	43 A 9383	40-40	450	2764	H	2.37
43 A 9102	40-40	150	2428	M	1.32	43 A 9639	100-60	350	2639	K	3.30	43 A 9384	50-50	450	2767	J	2.64
43 A 9104	50-30	150	2432	B	1.50	43 A 9398	100-100	350	2641	J	4.23	43 A 9386	60-60	450	2772	J	3.09
43 A 9105	50-50	150	2435	M	1.50	43 A 9194	150-10	350	2643	J	2.97	43 A 9387	80-10	450	2776	J	2.49
43 A 9107	80-40	150	2442	G	1.59	43 A 9095	200-200	350	2645.5	N	4.29	43 A 9389	80-40	450	2778	K	3.48
43 A 9114	200-5	150	2444	G	1.59	43 A 9142	400-20	350	2656	K	2.73	43 A 9110	80-50	450	2778.5	K	3.15
43 A 9403	40-40	250	2520	D	1.71	43 A 9096	80-100	450-50	2711	L	3.75	43 A 9111	80-80	450	2779	K	3.66
43 A 9404	150-150	250	2535	H	3.54	43 A 9098	20-160	450-250	2727.2	H	2.64	43 A 9112	80-160	475-250	2808	N	3.09
43 A 9636	200-200	250	2538	L	4.17	43 A 9100	80-260	450-250	2722.8	N	3.96	43 A 9113	20-100	475-400	2813	J	3.09
43 A 9090	80-80	300	2585	H	2.79	43 A 9101	80-2	450-350	2728.5	N	2.31	43 A 9369	20-20	500	2935	G	1.95
43 A 9092	150-100	300	2591	J	3.72	43 A 9376	10-10	450	2750	B	1.32	43 A 9370	30-30	500	2937	H	2.25
43 A 9358	15-15	350	2625	B	1.56	43 A 9109	30-10	450	2757	C	1.65	43 A 9371	40-40	500	2940	H	2.97
43 A 9396	20-20	350	2626	B	1.59	43 A 9379	20-20	450	2755	F	1.77	43 A 9372	60-40	500	2944	K	3.18

### TRIPLE SECTION Av. shpg. wt., 1 1/2 lbs.

Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WV DC	TVL *PCL Type	Size	EACH
43 A 9186	40-20-20	150	3437	M	1.65	43 A 9123	20-20-20	350-25	3635	B	2.01	43 A 9129	10-10-10	450	3776	B	1.80
43 A 9187	40-20-20	150	3438	B	1.71	43 A 9112	30-20-20	350-350-25	3636	B	2.13	43 A 9179	15-15-15	450	3778.2	C	2.13
43 A 9188	40-40-40	150	3440	P	1.80	43 A 9134	100-60-20	350-200	3639.2	L	3.75	43 A 9131	20-10-10	450	3779	D	2.01
43 A 9190	50-50-50	150	3442	B	2.07	43 A 9820	80-60-60	350	3642	K	3.84	43 A 9132	20-20-20	450	3780	C	2.01
43 A 9191	60-40-20	150	3443	P	1.89	43 A 9140	80-40-100	400-50	3683	J	3.45	43 A 9136	40-40-10	450	3785	H	2.85
43 A 9116	80-40-20	150	3414	B	2.01	43 A 9618	80-40-150	400-400-150	3684	L	3.63	43 A 9137	40-20-20	450	3788	H	3.06
43 A 9194	200-100-60	150	3450	H	3.15	43 A 9163	100-10-80	400-400-350	3689.3	K	4.20	43 A 9138	40-40-40	450	3789	J	3.06
43 A 9627	250-200-100	150	3453	L	3.27	43 A 9141	100-30-20	400	3697	K	3.78	43 A 9139	50-20-4	450	3787.5	E	2.89
43 A 9124	60-200-100	200-150-150	3467.4	J	3.30	43 A 9153	20-160-40	450-250-150	3711.3	K	3.15	43 A 9139	60-20-20	450	3789	J	3.18
43 A 9644	60-5-20	200-200-50	3467	G	1.71	43 A 9159	50-160-160	450-350-250	3719.4	N	5.46	43 A 9151	80-20-20	450	3793	J	3.72
43 A 9118	250-200-10	200	3490	L	4.59	43 A 9160	20-20-20	450-450-25	3739	D	2.10	43 A 9182	10-4-100	475-350-500	3806.6	B	1.83
43 A 9700	20-20-20	250	3532	P	1.80	43 A 9161	40-20-20	450-450-25	3744	H	2.70	43 A 9826	40-80-10	475-450-450	3816	B	3.78
43 A 9119	125-60-40	300-50	3574.6	L	3.60	43 A 9166	80-50-50	450	3754.9	K	3.78	43 A 9124	40-40-100	500-500-200	3935	J	3.99
43 A 9615	60-200-30	350-150-150	3608.6	J	3.45	43 A 9157	80-20-100	450-450-50	3757	K	3.30	43 A 9122	20-20-20	500	3956	J	2.91
43 A 9811	125-5-100	350-200-75	3610	J	3.66	43 A 9178	10-80-80	400-450	3785	N	4.11						

### FOUR SECTION Av. shpg. wt., 1 1/2 lbs.

Stock No.	Capacity $\mu$ F	WVDC	TVL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WVDC	TVL Type	Size	EACH	Stock No.	Capacity $\mu$ F	WVDC	TVL Type	Size	EACH
43 A 9091	60-40-20-200	150-150-150-10	4414	G	2.37	43 A 9300	10-140-100-20	450-350-300	4705.9	G	5.22	43 A 9099	40-40-40-30	150	4712.9	K	2.97
43 A 9079	40-40-40-30	150	4441	G	2.28	43 A 9301	50-20-4-40	450-150-25	4712.9	C	3.00	43 A 9828	10-200-60-30	175	4712.10	J	3.30
43 A 9828	10-200-60-30	175	4450	G	3.84	43 A 9305	50-40-4-40	450-150-25	4714.2	J	3.84	43 A 9831	10-200-140-30	300-150-150-150	4714.2	J	3.84
43 A 9831	10-200-140-30	300-150-150-150	4459	G	3.51	43 A 9313	80-30-20-50	450-250-50	4714.4	J	4.08	43 A 9072	100-10-200-30	300-300-150-150	4561	K	4.08
43 A 9072	100-10-200-30	300-300-150-150	4561	K	4.08	43 A 9318	30-20-160-40	450-250-150	4714.4	J	4.08	43 A 9196	140-10-200-30	300-150	4561.3	G	4.08
43 A 9196	140-10-200-30	300-150	4561.3	G	4.08	43 A 9319	30-50-100-250	450-250-50	4714.5	K	5.58	43 A 9833	150-30-30-150	300-300-300-50	4579	L	4.11
43 A 9833	150-30-30-150	300-300-300-50	4579	L	4.11	43 A 9334	80-50-20-50	450-250-50	4714.6	K	3.96	43 A 9722	40-40-20-10	300	4587	L	4.11
43 A 9722	40-40-20-10	300	4587	L	4.11	43 A 9335	20-160-110	450-250	4714.10								

# Sprague Capacitors

## "PACER" MINIATURE CAPACITORS

Three times smaller than conventional polyester-film tubulars for easy use in modern transistorized circuitry. Extended foil film sections terminate in metal end caps. Non-inductive. Wound with polyester film dielectric and thin gauge foil. Protected by mylar sleeve. 200 WVDC. Rated for -55°C to +85°C; derate 50% at 105°C. Capacitance tolerance, ±10%. Controlled dimensions, may be used with automatic insertion equipment. Average shpg. wt. each, 2 oz.



Stock No.	Mfr's Type	µF	Size	EACH
43 A 0334	192P47192	00047	3/4x3/8"	.33
43 A 0360	192P56192	00056	3/4x3/8"	.30
43 A 0361	192P68192	00068	3/4x3/8"	.30
43 A 0362	192P82192	00082	3/4x3/8"	.30
43 A 0335	192P47192	00047	3/4x3/8"	.27
43 A 0336	192P12292	00122	3/4x3/8"	.27
43 A 0337	192P15292	00152	3/4x3/8"	.27
43 A 0338	192P18292	00182	3/4x3/8"	.27
43 A 0339	192P22292	00222	3/4x3/8"	.27
43 A 0341	192P33292	00333	3/4x3/8"	.27
43 A 0342	192P39292	00399	3/4x3/8"	.27
43 A 0343	192P47292	00477	3/4x3/8"	.27
43 A 0344	192P56292	00566	3/4x3/8"	.27
43 A 0345	192P68292	00688	3/4x3/8"	.27
43 A 0346	192P82292	00822	3/4x3/8"	.30
43 A 0347	192P10392	01033	3/4x3/8"	.30
43 A 0348	192P12392	01233	3/4x3/8"	.30
43 A 0349	192P15392	01533	3/4x3/8"	.30
43 A 0350	192P18392	01833	3/4x3/8"	.30
43 A 0352	192P22392	02233	3/4x3/8"	.30
43 A 0353	192P33392	03333	3/4x3/8"	.33
43 A 0354	192P39392	03939	3/4x3/8"	.36
43 A 0355	192P47392	04739	3/4x3/8"	.39
43 A 0356	192P56392	05639	3/4x3/8"	.39
43 A 0357	192P68392	06839	3/4x3/8"	.42
43 A 0358	192P82392	08239	3/4x3/8"	.45
43 A 0359	192P10492	10439	3/4x3/8"	.48
43 A 0366	192P12492	12439	3/4x3/8"	.48
43 A 0367	192P15492	15439	3/4x3/8"	.51
43 A 0368	192P22492	22439	3/4x1 1/8"	.51

## "CERA-MITE" DISC CERAMICS

Ultraconform ceramic disc capacitors in EIA (RETMA) and other popular varieties. High by-pass efficiency. Moistureproof coating. Tolerance: ±20%. Tagged for identification. Sizes from 1/4 to 3/8". Mfr's. type. Average shpg. wt., 2 oz.



### SERIES 5GA—1000 WVDC

Stock No.	Type	µF	Stock No.	Type	µF
43 A 6300	V50	5	43 A 6333	T3	330
43 A 6302	V75	7.5	43 A 6335	T6	660
43 A 6304	10	10	43 A 6336	T9	390
43 A 6305	Q12	12	43 A 6338	T47	470
43 A 6306	Q15	15	43 A 6339	T50	500
43 A 6308	Q20	20	43 A 6340	T56	560
43 A 6310	Q25	25	43 A 6342	T68	680
43 A 6313	Q33	33	43 A 6343	T75	750
43 A 6315	Q47	47	43 A 6345	T82	820
43 A 6316	Q50	50	43 A 6347	D10	1000
43 A 6317	Q56	56	43 A 6347	D12	1200
43 A 6318	Q68	68	43 A 6348	D13	4300
43 A 6319	Q75	75	43 A 6351	D15	4500
43 A 6320	Q82	82	43 A 6352	D18	1800
43 A 6322	T10	100	43 A 6352	D20	2000
43 A 6323	T12	120	43 A 6353	D22	2200
43 A 6325	T15	150	43 A 6354	D25	2500
43 A 6326	T18	180	43 A 6357	D30	3000
43 A 6327	T20	200	43 A 6357	D33	3300
43 A 6328	T22	220	43 A 6358	D39	3900
43 A 6330	T25	250	43 A 6360	D48	4300
43 A 6331	T27	270	43 A 6361	D4	4700
43 A 6332	T30	300	43 A 6362	D50	5000
43 A 6332	T30	300	43 A 6363	S10	10,000

EACH ..... 15

### SERIES 5HK—500 AND 1000 WVDC

Stock No.	Type	µF	WVDC	E.A.
43 A 8650	D10	.001	1000	.15
43 A 8651	D10	.0015	1000	.15
43 A 8672	D20	.002	1000	.15
43 A 8661	D33	.0033	1000	.15
43 A 8665	D47	.0047	1000	.15
43 A 8673	D50	.005	1000	.15
43 A 8666	D68	.0068	1000	.15
43 A 8674	S10	.01	1000	.15
43 A 8667	S15	.015	500	.15
43 A 8668	S20	.02	500	.15
43 A 8669	S25	.025	500	.15
43 A 8652	S40	.04	500	.27
43 A 8653	S50	.05	500	.27
43 A 8654	P10	.1	500	.54

### SERIES 10TC NPO CERAMICS

Zero temperature-coefficient capacitors. 1000 WVDC. All capacitors listed below are of the disc type. \*Mfr's Type. Av. shpg. wt., 2 oz.

Stock No.	Type	µF	Stock No.	Type	µF
43 A 9955	V10	1.0	43 A 9965	Q25	25
43 A 9956	V15	1.5	43 A 9966	Q33	33
43 A 9957	V22	2.2	43 A 9967	Q39	39
43 A 9958	V33	3.3	43 A 9968	Q47	47
43 A 9959	V47	4.7	43 A 9969	Q50	50
43 A 9960	V68	6.8	43 A 9970	Q68	68
43 A 9961	Q10	10.0	43 A 9971	Q75	75
43 A 9962	Q15	15.0	43 A 9972	T10	100
43 A 9963	Q20	20.0	43 A 9973	T12	120
43 A 9964	Q22	22.0	43 A 9974	T15	150

EACH ..... 15

Stock No.	Type	µF	EACH
43 A 9976	T22	220	.30
43 A 9977	T27	270	.33

### SERIES 10TCU N750 CERAMICS

A negative temperature coefficient capacitor with a negative change of 750 parts per million per degree Centigrade. 1000 WVDC. All capacitors listed below are disc type except rectangular. Av. shpg. wt., 2 oz.

Stock No.	Type	µF	Stock No.	Type	µF
43 A 9978	V50*	5	43 A 9986	Q68	68
43 A 9979	Q10	10	43 A 9987	Q75	75
43 A 9980	Q15	15	43 A 9988	T10	100
43 A 9982	Q22	22	43 A 9989	T15	150
43 A 9983	Q25	25	43 A 9990	T20	200
43 A 9984	Q33	33	43 A 9991	T22	220
43 A 9985	Q47	47	43 A 9992	T33	330

EACH ..... 15

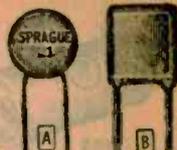
### CAPACITANCE DECODER



Type C-751. Decodes µF, tolerance and WVDC from color codes. Shpg. wt., 2 oz. 43 A 9910. 25

## LOW-VOLTAGE CERAMICS

Especially designed for circuits requiring extremely small components. Ideal for printed circuits, transistor-type radios, etc. Provide very dependable service in bypass and coupling applications. Have excellent humidity resistance.



A Type TG. Have heavy, protective coating. All are rated at 50 working volts, DC. Have tolerance of +80% to -20%, except S25 +80% to -30%. Av. shpg. wt., 3 oz.

Stock No.	Type	µF	Dia.	EACH
43 A 5995	D50	.005	3/8"	.15
43 A 5996	S10	.01	3/8"	.15
43 A 5997	S25	.025	1 1/8"	.15
43 A 5998	S50	.05	1 3/8"	.30
43 A 5999	P10	.1	3/4"	.39

A Hypercen Type. Ultraminiature ceramic discs. Tolerance, guaranteed minimum value. All are rated 3 working volts, DC, except \*10 WVDC. Shpg. wt., 2 oz.

Stock No.	Type	µF	Dia.	EACH
43 A 6671	HY-120	.1	.225"	.39
43 A 6672	HY-125	.22	.275"	.21
43 A 6673	HY-130	.47	.400"	.21
43 A 6674	HY-135	1.0	.595"	.24
43 A 6675	HY-150	2.2	.840"	.36
43 A 6394	HY-310*	.047	.275"	.15
43 A 6395	HY-320*	.1	.400"	.15
43 A 6396	HY-325*	.22	.595"	.24
43 A 6397	HY-330*	.47	.840"	.33

B Monolithic Type. Solid homogeneous block construction assures excellent humidity resistance. Rated 25 working volts, DC. Temperature rating, -55°C to +85°C. Tolerance, ±20%. Size, 1/2x1/4x1/8". Av. shpg. wt. each, 2 oz.

Stock No.	Type	µF	EACH
43 A 6589	5C023104X0250B3	.1	.96
43 A 3382	3C023154X0250B3	.15	1.08
43 A 6698	5C023224X0250B3	.22	1.14
43 A 6699	5C023334X0250B3	.33	1.42
43 A 6825	5C023474X0250B3	.47	1.60
43 A 6823	5C023684X0250B3	.68	1.76
43 A 6824	5C023105X0250B3	1.0	2.00

## DOORKNOB CAPACITORS

High-voltage, 500-pF plastic capacitor for replacement use in all types of TV sets. Molded-in nonflammable, moisture-resistant, thermosetting plastic. Molded guard rings increase surface leakage path. Capacitor body has female threads for variety of interchangeable screw-in terminals. 20DK-T5 comes complete with 7 terminals, as illustrated (packaged 2 per plastic box with 14 terminals). 30DK-T5 is supplied with only 2 terminals. Shpg. wt., 3 oz.



Stock No.	Mfr's Type	kV Rating	Length	PRICE
43 A 5599	20DK-T5	20	1 1/2"	3.60pr.
43 A 5597	30DK-T5	30	1 3/4"	3.78Bea.

## SERIES BL TINY BUFFER CERAMICS

(Not illus.) Disc ceramics for buffer applications. Moisture-proof coating. Rated at 2000 WVDC. Standard tolerance, ±20%. Wt., 1 oz.

Stock No.	Mfr's Type	µF	EACH
43 A 6290	BL-D10	.001	.21
43 A 6294	BL-D50	.005	.21
43 A 6299	BL-S10	.010	.27

## "HYPASS" CAPACITORS

Three-terminal network capacitor bypass VHF currents where ordinary capacitors fail. Suppress TVI from short-wave transmitters, diathermy machines, electronic heating apparatus. Eliminate interference between neighboring TV sets. Install leads in series. Type 48P18 for voltage regulator. \*Screw terminals. †Ac. shpg. wt. ‡Bulkhead mtg. Shpg. wt., 5 oz.



Stock No.	Type	µF	Amplitude	WVDC	Size	EACH
43 A 5688	48P18*	5	40	50	1 1/2x1 1/2"	2.76
43 A 5970	48P9*	1	20	250	1 1/2x1 1/2"	1.80
43 A 5685	48P8*†	1	20	600	1 1/2x1 1/2"	1.80
43 A 5689	80P3*†	1	20	600	1 1/2x1 1/2"	1.95
43 A 5697	47P16*‡	.002	20	5000	1x1 1/2"	2.73

# Cornell-Dubilier Capacitors

LOW-VOLTAGE CERAMICS

## "BLUE BEAVER" TUBULAR ELECTROLYTICS



Tubular electrolytic capacitors specifically designed for service replacement applications. All are hermetically sealed in aluminum cans for protection against heat and humidity, and have cardboard outer sleeves. All have a common negative terminal which is grounded to the can. Type BR section tabs and leads are riveted. Type BBR negative lead is riveted and positive lead is loosely crimped to an aluminum stud. Rated for operation up to +85°C, except 300 volt types which are rated for temperatures up to +65°C. Av. shpg. wt., 6 oz.

### BR/BBR\* SINGLE SECTION

Stock No.	Type	μF	VW	Size In.	E.A.
43 A 9203*	25-6	25	6	1/2x1 1/8	.51
43 A 9204*	50-6	50	6	1/2x1 1/8	.51
43 A 9205*	100-6	100	6	1/2x1 1/8	.69
43 A 9206*	250-6	250	6	1/2x1 1/8	.81
43 A 9285	500-6	500	6	1 1/2x1 1/8	.93
43 A 9286	1000-6	1000	6	1 1/2x1 1/8	1.14
43 A 9287	2000-6	2000	6	1 1/2x1 1/8	1.38
43 A 9207	100-15	100	15	1/2x1 1/8	.75
43 A 9272	250-15	250	15	1/2x1 1/8	.93
43 A 9273	500-15	500	15	1/2x1 1/8	1.05
43 A 9274	1000-15	1000	15	1/2x1 1/8	1.41
43 A 9284	2000-15	2000	15	1/2x1 1/8	1.68
43 A 9216*	10-25	10	25	3/4x1 1/8	.60
43 A 9217*	20-25	20	25	3/4x1 1/8	.60
43 A 9218*	25-25	25	25	3/4x1 1/8	.60
43 A 9219*	50-25	50	25	3/4x1 1/8	.66
43 A 9208	100-25	100	25	3/4x1 1/8	.78
43 A 9270	250-25	250	25	3/4x1 1/8	1.02
43 A 9271	500-25	500	25	3/4x1 1/8	1.38
43 A 9222*	5-50	5	50	3/4x1 1/8	.60
43 A 9223*	10-50	10	50	3/4x1 1/8	.60
43 A 9224*	25-50	25	50	3/4x1 1/8	.63
43 A 9225*	50-50	50	50	3/4x1 1/8	.63
43 A 9147	100-50	100	50	3/4x1 1/8	.81
43 A 9148	150-50	150	50	3/4x1 1/8	.81
43 A 9149	250-50	250	50	3/4x1 1/8	1.05
43 A 9269	500-50	500	50	3/4x1 1/8	1.44
43 A 9214*	4-150	4	150	1x1 1/8	.60
43 A 9249	8-150	8	150	1x1 1/8	.63
43 A 9226	10-150	10	150	1x1 1/8	.63
43 A 9247	12-150	12	150	1x1 1/8	.66
43 A 9248	16-150	16	150	1x1 1/8	.69
43 A 9225	20-150	20	150	1x1 1/8	.69
43 A 9145	25-150	25	150	1x1 1/8	.75
43 A 4046	30-150	30	150	1x1 1/8	.75
43 A 4046	40-150	40	150	1x1 1/8	.81
43 A 4047	50-150	50	150	1x1 1/8	.84
43 A 9146	60-150	60	150	1x1 1/8	.87
43 A 4039	80-150	80	150	1x1 1/8	.93
43 A 4056	100-150	100	150	1x2 1/8	1.05
43 A 4057	150-150	150	150	1x2 1/8	1.11
43 A 4542	200-150	200	150	1x3	1.32
43 A 4543	300-150	300	150	1x3 1/8	1.77
43 A 9227	4-250	4	250	1x1 1/8	.63

### BR/BBR SINGLE SECTION (Cont'd)

Stock No.	Type	μF	VW	Size In.	E.A.
43 A 9228	8-250	8	250	1x1 1/8	.69
43 A 9229	12-250	12	250	1x1 1/8	.75
43 A 4033	16-250	16	250	1x1 1/8	.78
43 A 4034	20-250	20	250	1x1 1/8	.81
43 A 9142	30-250	30	250	1x1 1/8	.87
43 A 4035	40-250	40	250	1x2	.93
43 A 9143	50-250	50	250	1x1 1/8	1.05
43 A 9144	60-250	60	250	1x1 1/8	1.08
43 A 4020	4-350	4	350	3/4x1 1/8	.62
43 A 4021	8-350	8	350	3/4x1 1/8	.73
43 A 4022	12-350	12	350	3/4x1 1/8	.78
43 A 4023	16-350	16	350	3/4x1 1/8	.84
43 A 4018	20-350	20	350	3/4x1 1/8	.89
43 A 4019	30-350	30	350	3/4x1 1/8	.96
43 A 4026	40-350	40	350	1x2	1.05
43 A 4544	60-350	60	350	1x2	1.17
43 A 4545	80-350	80	350	1x3	1.35
43 A 4546	100-350	100	350	1x3	1.50
43 A 4008	1-450	1	450	3/4x1 1/8	.66
43 A 4009	2-450	2	450	3/4x1 1/8	.66
43 A 4010	4-450	4	450	3/4x1 1/8	.69
43 A 4011	8-450	8	450	3/4x1 1/8	.75
43 A 4012	10-450	10	450	3/4x1 1/8	.78
43 A 4013	12-450	12	450	3/4x1 1/8	.78
43 A 4014	16-450	16	450	3/4x1 1/8	.84
43 A 4015	20-450	20	450	3/4x1 1/8	.93
43 A 4016	30-450	30	450	1x2	1.02
43 A 4017	40-450	40	450	1x2 1/8	1.08
43 A 4004	60-450	60	450	1x3	1.41
43 A 4005	80-450	80	450	1x3 1/8	1.68
43 A 4547	100-450	100	450	1x3 1/8	1.92
43 A 9215	4-500	4	500	3/4x1 1/8	.72
43 A 4000	8-500	8	500	3/4x1 1/8	.78
43 A 4001	16-500	16	500	3/4x1 1/8	.90
43 A 4002	20-500	20	500	3/4x1 1/8	.96
43 A 4003	30-500	30	500	1x2	1.05
43 A 4539	10-700	10	700	1 1/4x3 3/8	1.86
43 A 4541	16-700	16	700	1 1/4x4 1/8	2.25

### BBRD DUAL SECTION (Cont'd)

Stock No.	Type	μF	VW	Size In.	E.A.
43 A 9254	3315	30-30	150	1 1/2x1 1/8	1.08
43 A 9257	4415	40-40	150	1 1/2x2	1.11
43 A 9258	5315	50-30	180	1 1/2x2	1.17
43 A 9260	5315	50-50	150	1x2 1/8	1.26
43 A 9260	8415	80-40	150	1x2 1/8	1.35
43 A 8609	01837	100-50	150	1x3	1.82
43 A 9288	101015	100-100	150	1x3	1.82
43 A 9289	8D25	8-8	250	1 1/2x1 1/8	.96
43 A 9263	2225	20-20	250	1x1 1/8	1.11
43 A 9296	3325	30-30	250	1x2 1/8	1.35
43 A 8614	0286	150-100	300	1 1/2x3 1/8	3.15
43 A 9265	8D45	8-8	450	1 1/2x1 1/8	1.02
43 A 9267	16D45	16-16	450	1x2 1/8	1.35
43 A 9269	2245	20-20	450	1x3	1.50
43 A 9299	3445	30-30	450	1 1/2x3 1/8	1.80
43 A 9221	4445	40-40	450	1x4 1/8	2.04

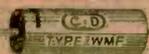
### BBRT TRIPLE SECTION

Stock No.	Type	μF	VW	Size, In.	EACH
43 A 9230	22215	20-20-20	150	1 1/2x1 1/8	1.32
43 A 9231	32215	30-20-20	150	1 1/2x2	1.35
43 A 9232	33215	30-30-30	150	1x2	1.41
43 A 9233	34215	40-20-20	150	1x1 1/8	1.35
43 A 9234	42215	40-30-20	150	1x2	1.41
43 A 9235	44215	40-40-20	150	1x2	1.41
43 A 9236	44415	40-40-40	150	1x2	1.41
43 A 9298	84215	80-40-20	150, 25k	1x2	1.65
43 A 8620	0126.5	150-150-150	150	1 1/2x4 1/8	2.85
43 A 9239	4215C	40-20-20	150, 25k	1 1/4x4 1/8	1.29
43 A 9243	3315C	30-20-20	150, 25k	1x1 1/8	1.41
43 A 9245	8415C	80-40-20	150, 25k	1x2 1/8	1.59
43 A 8621	0185	40-40-40	400	1 1/2x3	2.76
43 A 9282	16745	16-16-16	450	1 1/2x3	1.86

### BBRQ QUADRUPLE SECTION

Stock No.	Type	μF	VW	Size, In.	EACH
43 A 9290	33215C	30-20-20-20	150	1x3	1.47
43 A 9291	44315C	40-40-20-20	150, 25k	1x2 1/8	1.80
43 A 9294	55615C	50-50-50-50	150, 25k	1x3	2.07
43 A 8628	07894	140-5-200-30-300	500	1 1/2x4 1/8	3.09
43 A 8635	01074	40-20-20, 20,450	450	1 1/2x4 1/8	3.27

## TYPE WMF TUBULAR "MYLAR" CAPACITORS



Film-encased ultra-compact tubular capacitors featuring a "Mylar" film dielectric. Exceptional strength, durability and stability. Offer high insulation resistance, low power factor, and operate at temperatures from -55°C to +125°C. End sealed with high density thermosetting plastic. Non-inductive, extended foil construction with tinned wire leads soldered direct to foil for low-resistance and low RF impedance. Power factor, less than 1% at 25°C. Tolerance, ±10%. Av. shpg. wt., 2 oz.

### 100 WVDC

Stock No.	Type	μF	Size	E.A.
43 A 6975	1D1	.001	3/4x1 1/8	.27
43 A 6977	1D22	.0022	3/4x1 1/8	.27
43 A 6979	1D47	.0047	3/4x1 1/8	.27
43 A 6981	1S1	.01	1x1 1/8	.27
43 A 6983	1S22	.022	1x1 1/8	.27
43 A 6984	1S33	.033	1 1/4x3/8	.27
43 A 6985	1S47	.047	1 1/4x3/8	.27
43 A 6986	1S68	.068	1 1/4x3/8	.30
43 A 6987	1P1	.15	1 1/4x3/8	.30
43 A 6988	1P15	.15	1 1/4x3/8	.33
43 A 6989	1P22	.22	1 1/4x3/8	.33
43 A 6990	1P33	.33	1 1/4x3/8	.39
43 A 6991	1P47	.47	1 1/2x1 1/8	.45
43 A 6992	1P68	.68	1 1/2x1 1/8	.60
43 A 6993	1W1	1.0	3/4x1 1/8	.84
43 A 6995	1W1P5	1.5	3/4x1 1/8	1.11
43 A 6996	1W2	2.0	3/4x1 1/8	1.35

### 200 WVDC

Stock No.	Type	μF	Size	E.A.
43 A 6877	2D1	.001	3/4x1 1/8	.27
43 A 6879	2D22	.0022	3/4x1 1/8	.27
43 A 6881	2D47	.0047	3/4x1 1/8	.27
43 A 6882	2D68	.0068	3/4x1 1/8	.27
43 A 6883	2S1	.01	1x1 1/8	.27
43 A 6884	2S15	.015	1x1 1/8	.27

### 200 WVDC (Cont'd)

Stock No.	Type	μF	Size	E.A.
43 A 6885	2S22	.022	3/4x1 1/8	.27
43 A 6886	2S33	.033	3/4x1 1/8	.27
43 A 6887	2S47	.047	3/4x1 1/8	.27
43 A 6888	2S68	.068	3/4x1 1/8	.30
43 A 6889	2P1	.1	1x1 1/8	.36
43 A 6890	2P15	.15	1x1 1/8	.36
43 A 6891	2P22	.22	1 1/4x3/8	.39
43 A 6892	2P33	.33	1 1/4x3/8	.45
43 A 6893	2P47	.47	1 1/4x3/8	.51
43 A 6894	2P68	.68	1 1/4x3/8	.60
43 A 6895	2W1	1.0	1 1/2x1 1/8	.84
43 A 6898	2W2	2.0	1 1/2x1 1/8	1.35

### 400 WVDC

Stock No.	Type	μF	Size	E.A.
43 A 4329	4D1	.001	3/4x1 1/8	.30
43 A 4330	4D22	.0022	3/4x1 1/8	.30
43 A 4331	4D47	.0047	3/4x1 1/8	.30
43 A 6832	4S1	.01	1x1 1/8	.30
43 A 6834	4S22	.022	1x1 1/8	.30
43 A 6835	4S33	.033	1 1/4x3/8	.30
43 A 6836	4S47	.047	1 1/4x3/8	.30
43 A 6837	4S68	.068	1 1/4x3/8	.33
43 A 6838	4P1	.15	1 1/4x3/8	.33
43 A 6839	4P15	.15	1 1/4x3/8	.36
43 A 6840	4P22	.22	1 1/2x1 1/8	.42
43 A 6841	4P33	.33	1 1/2x1 1/8	.66
43 A 6842	4P47	.47	1 1/2x1 1/8	.78
43 A 6844	4W1	1.0	1 1/2x1 1/8	1.1

# Mallory Capacitors

## TYPE MTV ALUMINUM ELECTROLYTIC CAPACITORS

Case	Dia. x L.	Case	Dia. x L.	Case	Dia. x L.
CB	1/8 x 1/8"	CP	1/8 x 1/8"	DN	1/2 x 1/2"
CD	3/8 x 1/8"	DE	1/2 x 1/2"		
CF	1/2 x 1/8"	DJ	1/2 x 1/4"		

Molded tubulars in moisture-tight plastic case. 3 molded Tandoff mounts for PC boards, #20 AWG leads, spaced .200". temp. range, -30° to +65°C continuous; to +85°C intermittent. 1000 hour life test at 65°C. Capacity tol. = ±10%, +100% at 25°C. 120 Hz. Case size indicated in Mfr's type. See table at right. Av. shpg. wt., 1 oz.



Stock No.	Type MTV.	µF	VV DC	EACH
43 A 2664	1000DN3	1000	3	.60
43 A 2665	100CB	100	6	.42
43 A 2669	400DE6	400	6	.48
43 A 2670	500DJ6	500	6	.54
43 A 2672	700CB10	700	10	.42
43 A 2673	100CD10	100	10	.42
43 A 2675	250CP10	250	10	.48
43 A 2676	300DE10	300	10	.54
43 A 2677	400DJ10	400	10	.56
43 A 2679	500CB15	500	15	.42
43 A 2682	90CD15	90	15	.42
43 A 2683	100CF15	100	15	.42

Stock No.	Type MTV.	µF	VV DC	EACH
43 A 2686	250DE15	250	15	.54
43 A 2687	400DJ15	400	15	.60
43 A 2688	500DN15	500	15	.60
43 A 2690	50CD25	50	25	.42
43 A 2693	100CP25	100	25	.48
43 A 2694	200DJ25	200	25	.60
43 A 2695	250DN25	250	25	.60
43 A 2697	50CF35	50	35	.48
43 A 2699	100DE35	100	35	.54
43 A 2701	200DN35	200	35	.60
43 A 2702	1CB50	1	50	.40
43 A 2703	2CB50	2	50	.40

Stock No.	Type MTV.	µF	VV DC	EACH
43 A 2704	3CB50	3	50	.40
43 A 2705	4CB50	4	50	.40
43 A 2706	5CB50	5	50	.40
43 A 2707	6CB50	6	50	.40
43 A 2710	10CB50	10	50	.42
43 A 2711	15CD50	15	50	.42
43 A 2712	20CD50	20	50	.42
43 A 2713	25CF50	25	50	.48
43 A 2750	50DE50	50	50	.48
43 A 2752	100DN50	100	50	.60

## TYPE MTA TUBULAR ALUMINUM ELECTROLYTICS

Stock No.	Type MTA.	µF	VV DC	Size*	EACH
43 A 0411	450F6	450	6	C	.51
43 A 0412	500F6	500	6	C	.51
43 A 0413	40D10	40	10	A	.36
43 A 0415	100E10	100	10	B	.40
43 A 0416	200F10	200	10	C	.45
43 A 0418	30D15	30	15	A	.36
43 A 0419	35D15	35	15	A	.36
43 A 0420	50E15	50	15	B	.40
43 A 0431	100E15	100	15	B	.40
43 A 0433	300F15	300	15	C	.57
43 A 0434	350F15	350	15	C	.57
43 A 0435	25D20	25	20	A	.36
43 A 0441	60E20	60	20	B	.40
43 A 0445	70E20	70	20	B	.40
43 A 0447	50E25	50	25	B	.40
54 A 0452	175F25	175	25	C	.54
43 A 0456	20D30	20	30	A	.36
43 A 0457	40E30	40	30	B	.40
43 A 0460	15D35	15	35	A	.36
43 A 0461	25E35	25	35	B	.40
43 A 0462	30E35	30	35	B	.40
43 A 0463	35E35	35	35	B	.40

Stock No.	Type MTA.	µF	VV DC	Size*	EACH
43 A 0465	100F35	100	35	C	.51
43 A 0481	125F35	125	35	C	.54
43 A 0482	150F35	150	35	C	.57
43 A 0483	1D50	1	50	A	.36
43 A 0484	2D50	2	50	A	.36
43 A 0485	3D50	3	50	A	.36
43 A 0486	4D50	4	50	A	.36
43 A 0487	5D50	5	50	A	.36
43 A 0488	6D50	6	50	A	.36
43 A 0489	7D50	7	50	A	.36
43 A 0490	8D50	8	50	A	.36
43 A 0492	10F50	10	50	B	.40
43 A 0493	15E50	15	50	B	.40
43 A 0494	20E50	20	50	B	.40
43 A 0495	25F50	25	50	C	.45
43 A 0501	30F50	30	50	C	.45
43 A 0505	35F50	35	50	C	.45
43 A 0506	40F50	40	50	C	.45
43 A 0524	50F50	50	50	C	.45
43 A 0525	60F50	60	50	C	.51
43 A 0526	70F50	70	50	C	.51
43 A 0529	80F50	80	50	C	.54

Special precision molding process ensures case uniformity, higher than average quality. Polypropylene case for humidity protection. Welded construction. Temp. range, -20°C to +65°C. Cap. tol., -10%, +100%. 2 oz.

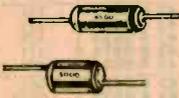


CASE SIZES	
Code Letter	Size Dia. x Length
A	3/8 x 3/8"
B	1/2 x 1/2"
C	1/2 x 1/2"

Stock No.	Type MTA.	µF	VV DC	Size*	EACH
43 A 0405	60D3	60	3	A	.36
43 A 0406	175E3	175	3	B	.45
43 A 0407	600F3	600	3	C	.45
43 A 0408	50D6	50	6	A	.36
43 A 0409	125E6	125	6	B	.40
43 A 0410	150E6	150	6	B	.46

## TYPE SX POLYSTYRENE CAPACITORS

- High Temperature stability
- Long Life
- Power Factor less than .05%



Mallory type SX capacitors are manufactured from a unique form of stretched polystyrene dielectric and high purity aluminum foil. Polystyrene foil capacitors replace mica, film, paper and ceramic types in most applications.

Provide excellent temperature stability and humidity protection. Lightweight, low cost capacitors are perfect for applications requiring long life expectancy. Leakage resistance is greater than 100,000 megohms. Low capacitance drift. Power factor, less than 0.05%.

Best operating stability within temperature range of -10°C to +85°C. All are rated at 600 WVDC; surge, 1500 VDC. Capacitance tolerance is ±5%. Capacitance range is 5 pF to .01 µF in all standard ratings. Lengths: .395", .59", .59", .79". Av. shpg. wt., 1 oz.

### CAPACITANCE RANGE CHART

pF	pF	pF	pF	pF
5	56	240	1000	3900
10	62	270	1100	4300
12	68	300	1200	4800
15	75	330	1300	5000
18	82	360	1500	5100
20	91	390	1600	5600
22	100	430	1800	6200
24	110	470	2000	6800
27	120	510	2200	7500
30	130	560	2400	8200
33	150	620	2500	9100
36	160	680	2700	10000
39	180	750	3000	
43	200	820	3300	
47	220	910	3600	

### PRICE AND SIZE LOCATOR

Stock No.	Capacity pF	Dia. Inches	EACH
43 A 0400 C	5-300	*.165-.255	.12
43 A 0401 C	330-1000	†.194-.233	.12
43 A 0402 C	1100-3000	‡.238-.348	.15
43 A 0403 C	3000-5000	‡.366-.466	.18
43 A 0404 C	5100-10K	‡.470-.590	.21

## TAC SERIES SOLID TANTALUM CAPACITORS

High-reliability solid tantalum capacitors in precision-molded cases for high-density stacking in computers and similar equipment. Inert plastic tubular cases have high dielectric strength and provide excellent environmental

protection. Cat-d -55°C to +85°C. Low leakage currents, high stability. ±20% tolerance. Size .105x.290. Average shpg. wt., 1/10 oz.

Stock No.	Type TAC.	Cap. µF	VV DC	EACH
43 A 0781	126M006P02	12	6	.58
43 A 0782	106M006P02	10	6	.58
43 A 0783	825M006P02	8.2	6	.58
43 A 0784	685M010P02	6.8	10	.58
43 A 0785	565M010P02	5.6	10	.58
43 A 0786	475M010P02	4.7	10	.58
43 A 0787	395M010P02	3.9	10	.58
43 A 0788	335M010P02	3.3	10	.58
43 A 0789	275M015P02	2.7	15	.58

Stock No.	Type TAC.	Cap. µF	VV DC	EACH
43 A 0790	225M020P02	2.2	20	.58
43 A 0791	185M020P02	1.8	20	.58
43 A 0792	155M020P02	1.5	20	.58
43 A 0793	125M020P02	1.2	20	.58
43 A 0794	105M020P02	1.0	20	.58
43 A 0795	24M035P02	.82	35	.58
43 A 0796	684M035P02	.68	35	.58
43 A 0797	474M050P02	.47	50	.82
43 A 0798	334M050P02	.33	50	.82

## MTP ULTRAMINIATURE TANTALUM CAPACITORS

- Higher capacity-voltage product than wet slug
- Meets MIL-STD-202 environmental specifications

Sintered tantalum anode, polar wet slug capacitors offer higher capacity-voltage product than ordinary wet slug, solid or foil tantalum capacitors. Meet MIL-STD-202 specifications for high frequency vibration, shock, temperature cycling, moisture resistance, and sleeve

strength. Low-profile geometry, with silver case, closed on elastomer end seal. Insulated sleeve. Ambient temperature range -55°C to +85°C. Capacitance tolerance: ±20%. Maximum DC leakage, 2µA at 25°C. Average shpg. wt., 1 oz.

Stock No.	Type MTP.	Cap. µF	VV DC	EACH
43 A 0552	335M060P1D	3.3	60	2.57
43 A 0550	405M050P1D	4	50	2.57
43 A 0553	475M035P1D	4.7	35	2.57
43 A 0559	475M060P1A	4.7	60	2.59
43 A 0651	605M030P1D	6	30	2.57
43 A 0561	685M020P1D	6.8	20	2.57
43 A 0652	685M050P1A	6.8	50	2.59
43 A 0563	685M060P1A	6.8	60	2.59
43 A 0577	106M010P1D	10	10	2.57
43 A 0653	106M030P1A	10	30	2.59
43 A 0564	106M035P1A	10	35	2.59
43 A 0578	106M060P1D	10	60	3.11
43 A 0579	156M006P1D	15	6	2.57
43 A 0581	156M020P1A	15	20	2.59
43 A 0582	156M060P1B	15	60	3.11
43 A 0600	226M015P1A	22	15	2.59
43 A 0655	226M060P1B	22	60	3.11
43 A 0656	306M050P1B	30	50	3.11
43 A 0602	336M010P1A	33	10	2.59
43 A 0657	336M050P1B	33	50	3.11
43 A 0658	336M060P1C	33	60	3.11
43 A 0659	456M030P1B	45	30	3.11

Stock No.	Type MTP.	Cap. µF	VV DC	EACH
43 A 0605	476M006P1A	47	6	2.59
43 A 0607	176M020P1B	47	20	3.11
43 A 0608	476M060P1C	47	60	3.62
43 A 0659	606M020P1B	60	20	3.11
43 A 0609	686M015P1B	68	15	3.11
43 A 0610	686M050P1C	68	50	3.62
43 A 0660	786M050P1C	78	50	3.62
43 A 0661	806M015P1B	80	15	3.11
43 A 0662	107M010P1A	100	10	3.11
43 A 0663	107M035P1C	100	35	3.62
43 A 0664	127M010P1B	120	10	3.11
43 A 0613	157M060P1B	150	6	3.11
43 A 0614	157M020P1C	150	20	3.62
43 A 0665	127M030P1C	120	30	3.62
43 A 0666	187M060P1B	180	6	3.11
43 A 0667	207M015P1C	200	15	3.62
43 A 0668	227M015P1C	220	15	3.62
43 A 0669	307M010P1C	300	10	3.62
43 A 0616	337M010P1C	330	10	3.62
43 A 0670	457M006P1C	450	6	3.62
43 A 0618	477M060P1C	470	6	3.62



# Mica Capacitors and Capacitor Mounting Hardware

## ELMenco DM DIPPED "DUR-MICA" SILVERED MICA CAPACITORS

Most widely used mica capacitor. Highest levels of reliability, ruggedness, and electrical excellence. Ideal combination of optimum quality and small size. Special extra-tough epoxy coating resists extreme humidity and moisture. All are rated 500 WVDC, except 1300 WVDC and 1100 WVDC. Operates in temperatures from -55°C to +150°C without derating. Compact size of these capacitors makes them very suitable for delay lines, computers, test equipment, missiles and other electronic applications wherein entire system performance depends on reliable

operation of thousands of components. Subjected to "debugging" process to eliminate potential early failures. Capacitance drift = .05% ( $\pm 1$  pF) (Char. F). Meet or exceed MIL-C-56C and RETMA specifications for mica capacitor. Tolerance =  $\pm 5\%$ , except  $\pm 5$  pF. See table below for exact capacitor dimensions. Average ship. wt. 2 oz. Units are dual-marked in both MIL and Commercial Type Numbers.



Stock No.	Mfr's Type	pF	Size, LxWxT	EACH
43 A 2354	DM-10-100J	10	.358x.387x.183	.31
43 A 2356	DM-10-150J	15	.358x.387x.183	.22
43 A 2358	DM-10-200J	20	.358x.387x.183	.22
43 A 2359	DM-10-220J	22	.358x.387x.183	.22
43 A 2361	DM-10-270J	27	.358x.387x.183	.22
43 A 2363	DM-10-330J	33	.358x.387x.183	.22
43 A 2367	DM-10-470J	47	.358x.387x.183	.23
43 A 2368	DM-10-500J	50	.363x.395x.188	.23
43 A 2372	DM-10-680J	68	.363x.395x.188	.25
43 A 2373	DM-10-750J	75	.363x.395x.188	.25
43 A 2376	DM-10-101J	100	.370x.405x.197	.26
43 A 2378	DM-10-121J	120	.370x.405x.197	.28
43 A 2380	DM-10-151J	150	.377x.415x.203	.32
43 A 2383	DM-10-201J	200	.384x.425x.212	.39
43 A 2384	DM-10-221J	220	.384x.425x.212	.40
43 A 2386	DM-10-251J	250	.391x.438x.220	.45
43 A 2388	DM-10-301J	300	.391x.438x.220	.47
43 A 0716	DM-15-010D*	1	.446x.351x.163	.22
43 A 0717	DM-15-020D*	2	.446x.351x.163	.22
43 A 0718	DM-15-030D*	3	.446x.351x.163	.22
43 A 0719	DM-15-050D*	5	.446x.351x.163	.22
43 A 0720	DM-15-100J	10	.446x.351x.163	.22
43 A 0721	DM-15-120J	12	.448x.355x.166	.22
43 A 0722	DM-15-150J	15	.448x.355x.166	.22
43 A 0724	DM-15-200J	20	.448x.355x.166	.18
43 A 0725	DM-15-220J	22	.448x.355x.166	.18
43 A 0727	DM-15-270J	27	.448x.355x.166	.18
43 A 0728	DM-15-300J	30	.448x.355x.166	.18
43 A 0729	DM-15-330J	33	.448x.355x.166	.18
43 A 0731	DM-15-390J	39	.448x.355x.166	.18
43 A 0733	DM-15-470J	47	.451x.360x.175	.18
43 A 0734	DM-15-500J	50	.451x.360x.175	.18

Stock No.	Mfr's Type	pF	Size, LxWxT	EACH
43 A 0738	DM-15-680J	68	.451x.360x.175	.18
43 A 0739	DM-15-750J	75	.451x.360x.175	.18
43 A 0740	DM-15-820J	82	.451x.360x.175	.18
43 A 0742	DM-15-101J	100	.451x.360x.175	.18
43 A 0744	DM-15-121J	120	.457x.372x.190	.20
43 A 0745	DM-15-151J	150	.457x.372x.190	.21
43 A 0748	DM-15-181J	180	.457x.372x.190	.25
43 A 0749	DM-15-201J	200	.457x.372x.190	.25
43 A 0750	DM-15-221J	220	.470x.395x.220	.26
43 A 0752	DM-15-251J	250	.470x.395x.220	.28
43 A 0753	DM-15-271J	270	.470x.395x.220	.29
43 A 0754	DM-15-301J	300	.470x.395x.220	.31
43 A 0755	DM-15-331J	330	.470x.395x.220	.34
43 A 0756	DM-15-361J	360	.470x.395x.220	.36
43 A 0757	DM-15-391J	390	.470x.395x.220	.38
43 A 0759	DM-15-471J	470	.463x.371x.204	.42
43 A 0760	DM-15-501J	500	.463x.371x.204	.45
43 A 0761	DM-15-511J	510	.463x.371x.204	.45
43 A 0762	DM-15-561J	560	.463x.371x.204	.45
43 A 0764	DM-15-681J	680	.470x.378x.220	.53
43 A 0765	DM-15-751J	750	.470x.378x.220	.57
43 A 0766	DM-15-821J	820	.470x.378x.220	.62
43 A 0768	DM-15-102J	1000	.487x.382x.238	.58
43 A 0770	DM-15-122J	1200	.636x.495x.197	.41
43 A 0772	DM-19-122J	1200	.652x.506x.219	.47
43 A 0774	DM-19-152J	1500	.652x.506x.219	.56
43 A 0777	DM-19-202J	2000	.652x.506x.219	.68
43 A 0780	DM-19-252J	2500	.668x.520x.240	.81
43 A 2404	DM-30-502J	5000	.765x.855x.263	1.15
43 A 2407	DM-30-622J	6200	.773x.865x.287	1.35
43 A 0822	DM-30-103J	10,000	.783x.879x.323	2.12

## ELMenco CM MOLDED SILVERED MICAS

Molded silvered mica capacitors offer excellent stability, dielectric strength, longevity, and ruggedness. Meet MIL-C-5, EIA, RS-153. Phenolic cases. 500 WVDC, except \*300 WVDC. Tolerance =  $\pm 5\%$ .

Middle letter in Type number is temperature coefficient. C = 200 parts/million/°C. D = 10 parts. E = 20, +100 parts. Shpg. wt. 2 oz.



Stock No.	Mfr's Type	pF	Size, LxWxT	EACH
43 A 0427	CM-15-C-050J	5	1/2x3/4x3/16	.22
43 A 0428	CM-15-C-100J	10	1/2x3/4x3/16	.22
43 A 0436	CM-15-C-150J	15	1/2x3/4x3/16	.22
43 A 0438	CM-15-C-200J	20	1/2x3/4x3/16	.18
43 A 0469	CM-15-E-330J	33	1/2x3/4x3/16	.18
43 A 0473	CM-15-E-470J	47	1/2x3/4x3/16	.18
43 A 0474	CM-15-E-500J	50	1/2x3/4x3/16	.18
43 A 0480	CM-15-E-680J	68	1/2x3/4x3/16	.18
43 A 0479	CM-15-E-82J	82	1/2x3/4x3/16	.18
43 A 0497	CM-15-E-101J	100	1/2x3/4x3/16	.18
43 A 0499	CM-15-E-121J	120	1/2x3/4x3/16	.20
43 A 0515	CM-15-E-151J	150	1/2x3/4x3/16	.25
43 A 0518	CM-15-E-201J	200	1/2x3/4x3/16	.25
43 A 0519	CM-15-E-221J	220	1/2x3/4x3/16	.26
43 A 0543	CM-15-E-251J	250	1/2x3/4x3/16	.28
43 A 0544	CM-15-E-271J	270	1/2x3/4x3/16	.29
43 A 0545	CM-15-E-301J	300	1/2x3/4x3/16	.31
43 A 0546	CM-15-E-331J	330	1/2x3/4x3/16	.34

Stock No.	Mfr's Type	pF	Size, LxWxT	EACH
43 A 0548	CM-15-E-301J	390	1/2x3/4x3/16	.38
43 A 0554	CM-15-E-471J	470	1/2x3/4x3/16	.42
43 A 0555	CM-15-E-501J	500	1/2x3/4x3/16	.44
43 A 0566	CM-20-D-681J	680	25/32x7/16x7/32	.29
43 A 0568	CM-20-D-821J	820	25/32x7/16x7/32	.32
43 A 0583	CM-20-E-102J	1000	25/32x7/16x7/32	.38
43 A 0587	CM-20-E-152J	1500	25/32x7/16x7/32	.50
43 A 0594	CM-20-E-202J	2000	25/32x7/16x7/32	.59
43 A 0622	CM-20-E-252J	2500	25/32x7/16x7/32	.71
43 A 0619	CM-20-E-332J	3300	25/32x7/16x7/32	.91
43 A 0621	CM-30-E-392J*	3900	25/32x7/16x7/32	.91
43 A 0623	CM-20-E-472J*	4700	25/32x7/16x7/32	1.09
43 A 0624	CM-20-E-502J*	5000	25/32x7/16x7/32	1.16
43 A 0639	CM-30-E-562J	5500	13/16x13/16x3/32	1.25
43 A 0641	CM-35-E-682J*	6800	13/16x13/16x1/2	1.31
43 A 0645	CM-35-E-103J*	10,000	13/16x13/16x1/2	1.81
43 A 0686	VCM-35-E-103J	10,000	13/16x13/16x1/2	2.12

## CAPACITOR MOUNTING HARDWARE



Selection of mounting hardware for capacitors subject to moderate or acute vibration. Hold capacitors securely in position, positively eliminating any chance of wobble or strain on terminals or body. Straps are tinned steel; all others are cadmium-plated.

**A TUBULAR STRAPS** Wt., 1 oz.

Stock No.	Dia.	E.A.	Stock No.	Dia.	E.A.
43 A 7962	1/8"	.09	43 A 7966	7/16"	.12
43 A 7963	3/16"	.09	43 A 7967	1/2"	.12
43 A 7964	1/4"	.09	43 A 7968	5/8"	.12
43 A 7965	3/8"	.09	43 A 7969	1 1/8"	.12

**B "C" CLAMPS** Wt., 1 oz.

43 A 7970	5/8-3/4"	1.12	43 A 7971	7/8-1"	1.12
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**C MOUNTING RINGS** Wt., 1 oz.

Stock No.	Type	Size Dia.	EACH
43 A 7972	VR1	1-1 1/16"	.25
43 A 7973	VR5	1 1/2-1 3/16"	.25
43 A 7974	VR4	1 1/2-1 3/16"	.25
43 A 7975	VR8	2-2 1/16"	.50
43 A 7976	VR10	2 1/2"	.50
43 A 7977	VR12	3"	.60

**D MOUNTING CLIPS** Wt., 1 oz.

Stock No.	Type	Size Dia.	EACH
43 A 7978	21368-1	1/4"	.12
43 A 7979	21368-2	1/4"	.12
43 A 7980	21368-3	1 3/8"	.18

**E UNIVERSAL CLIPS** Wt., 2 oz.

43 A 7981	TH 13	3/4-1 1/4"	.12
43 A 7982	TH 15	3/4-1 1/4"	.12
43 A 7983	TH 17	3/4-1 1/4"	.12
43 A 7984	TH 19	3/4-1 1/4"	.15
43 A 7985	TH 21	3/4-1 1/4"	.15
43 A 7986	TH 23	1-1 1/4"	.15
43 A 7987	TH 25	1 1/4-1 3/4"	.15

**F** 43 A 7990, Mtg. Wrench. For twist-prongs Shpg. wt. 1 lb. . . . .1.49

**G MOUNTING SOCKETS** Wt., 1 oz.

47 A 0335	2C5	1"	.52
47 A 0336	2C7	1 1/4"	.76

**H MOUNTING PLATES**

\*Phenolic Metal Mount 1" dia. can over 1 1/4" dia. hole. Shpg. wt., 1 oz.

Stock No.	Dia.	Stock No.	Dia.
43 A 7945	1"	43 A 7948	1 1/4"
43 A 7946	1 1/8"	43 A 7949	1 3/8"
43 A 7947	1 1/4"	43 A 7950	1 1/2"

EACH . . . . .09

**KRAFT INSULATING SLEEVES**

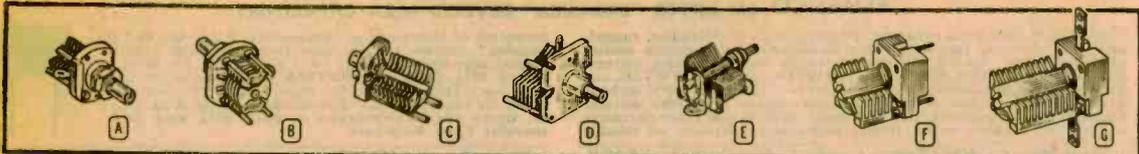
Offer positive insulation. Shpg. wt., 1 oz.

Stock No.	Dia.	Stock No.	Dia.
43 A 7510	1/2x2"	43 A 7517	1 3/8x2 1/2"
43 A 7511	1x2"	43 A 7514	1 1/2x3"
43 A 7515	1x2 1/2"	43 A 7988	1 3/4x3 1/2"
43 A 7512	1x3"	43 A 7518	1 3/4x4"
43 A 7513	1 1/2x2"	43 A 7989	1 3/4x4 1/2"

EACH . . . . .09

# Variable Capacitors and Noise Filters

E. F. JOHNSON CAPACITORS



## TYPE M MINIATURE VARIABLES

Bridge-type stator terminal provides low inductance; oversize bearing, heavily anchored stator supports insure rigidity.  $\frac{1}{4} \times \frac{3}{4}$ " panel mtg. space,  $\frac{1}{4}$ " hole. Slotted shaft takes  $\frac{1}{16}$ " knob. 1250 V approx. Peak break-down. Low-loss stearite insulation. Nickel-plated. 2 oz.

### A SINGLE SECTION

Stock No.	Mfr's Type	Max. pF	Min. pF	No. of Plates	EA.
43 A 3758	160-102	5.0	1.5	5	.90
43 A 3759	160-104	8.7	1.8	9	.95
43 A 3760	160-107	14	2.3	15	1.10
43 A 3761	160-110	19.6	2.7	21	1.10
43 A 3766	160-130	32	3	28	1.20

### B BUTTERFLY

43 A 3763	160-205	5.1	1.8	10	1.30
43 A 3764	160-208	8.0	2.2	16	1.45
43 A 3765	160-211	10.8	2.7	22	1.60

## C TYPE S VARIABLES

Compact and rugged; 850 V peak rating. Slotted hex-nut shaft. Panel space  $2\frac{3}{4} \times 2\frac{3}{4}$ ",  $1\frac{1}{16}$ " behind. Two 4-40 mtg. holes. 1 lb.

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3771	148-1	15-2.3	6	1.10
43 A 3772	148-2	25-2.6	10	1.15

## C TYPE S VARIABLES (Cont'd)

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3773	148-3	35-2.9	14	1.20
43 A 3774	148-4	50-3.2	19	1.25
43 A 3776	148-6	100-4.5	38	1.45

## TYPE L VARIABLES

Extremely stable; vibration and shock-proof. 1500 V peak rating. Panel space  $1\frac{1}{2}$ " sq., behind  $\frac{1}{4}$ " shaft. Wt., 1 lb.

### D SINGLE END PLATE

43 A 3777	167-1	10-2.2	3	2.05
43 A 3778	167-2	25-2.9	7	2.20
43 A 3779	167-3	50-4.0	13	2.50
43 A 3780	167-4	75-5.2	19	2.70

## E TYPE R VARIABLES

Extra-heavy rugged construction. Panel or base mtg. Panel space  $1\frac{1}{2} \times 1\frac{1}{2}$ ", up to  $2\frac{1}{2}$ " behind. 1200 V peak. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3754	149-3	50-5.9	7	2.95
43 A 3756	149-5	102-7.1	14	3.25
43 A 3757	149-6	140-8.0	19	3.50

## TYPE U SUBMINIATURE VARIABLES

Sub-miniature, air variable capacitors cut costs, improve performance, and save valuable space in compact equipment. Single section types. High Q. Low temperature coefficient.  $\frac{1}{8}$ " panel space, up to  $\frac{3}{4}$ " behind. 650 V peak breakdown. Screwdriver adjustment.  $\frac{1}{32}$ " terminals.  $\frac{1}{8}$ " Av. wt., 4 oz.

## F PRINTED CIRCUIT MOUNTING

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 4523	189-501-5	4.2-1.2	4	.56
43 A 4524	189-502-5	6.7-1.3	6	.58
43 A 4525	189-503-5	9.2-1.4	8	.60
43 A 4526	189-504-5	11.6-1.5	10	.59
43 A 4527	189-505-5	14.1-1.7	12	.60
43 A 4528	189-506-5	16.7-1.8	14	.62

## G TWO-HOLE MOUNTING

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 4548	189-501-4	4.2-1.2	4	.60
43 A 4549	189-502-4	6.7-1.3	6	.62
43 A 4589	189-503-4	9.2-1.4	8	.60
43 A 4591	189-504-4	11.6-1.5	10	.62
43 A 4592	189-505-4	14.1-1.7	12	.64
43 A 4593	189-506-4	16.7-1.8	14	.66

# RECEIVER-TYPE CAPACITORS AND ACCESSORIES

## TRF CAPACITORS

2-Gang. For use in superhets without RF stage or in 2-stage TRF receivers. Each section has 29 plates. Range 15.5 to 467.8 pF, each section. Counter-clockwise rotation increases capacity. With trimmers. End plates slotted for easy tracking adjustments. Spring brass wipers. Take series padder for oscillator use.  $\frac{3}{8}$ " dia. shaft. Requires the use of an extender in order to convert to  $\frac{1}{4}$ " shaft. See coil and 1F. section of this catalog for coils. Size,  $1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ ". Shpg. wt., 8 oz. 43 A 3528.....3.00

2- and 3-Gang Capacitors. Compact TRF 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 pF. Shaft diameter,  $\frac{3}{8}$ ". Size of 2-gang:  $2 \times 1\frac{1}{2} \times 1\frac{1}{2}$ ". Size of 3-gang:  $3\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ". Av. shpg. wt., 6 oz. 43 A 3521, 2-Gang.....3.22  
43 A 3522, 3-Gang.....4.95

## SUPERHET CAPACITOR

2-Section Superhet Variable. 19-plate oscillator section with 172.6 max.—10.6 min. pF; has one 2-17 pF trimmer. 27-plate RF section with 434 max. to 14.5 min. pF; has one 2-17 pF trimmer. Capacity increases with shaft.  $1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ ". Shpg. wt., 8 oz. 43 A 3529.....2.50

## 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 sec., 14.5 to 368 pF, 27 plates; osc. sec., 11.6 to 136.6 pF, 15 plates. Cap. increases CCW, 455 kHz. 1F. Trimmers.  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ". Shpg. wt., 6 oz. 43 A 3523.....2.08  
Miniature Superhet. RF section is 10.8 pF to 232.4 pF. Oscillator section is 8.5 pF to 106.3 pF.  $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ". Shpg. wt., 5 oz. 43 A 2605.....2.50

Midget TFF. Compact, 33-plate, single-section capacitor. Variable from 15 to 409 pF. Capacity increases clockwise.  $1\frac{1}{2}$ " deep.  $1\frac{1}{8}$ " wide.  $1\frac{1}{8}$ " high.  $\frac{3}{8}$ " diameter shaft. 1" long. Shpg. wt., 5 oz. 43 A 3524.....1.30

## MINIATURE 2-GANG CAPACITOR

For up-to-date miniature tube or transistor circuitry; also used as a direct replacement for most units used in current pocket-size transistor receivers. Fits both foreign and domestic models. Completely enclosed in clear polyethylene plastic case. Plates rotate 180°. Maximum capacity for use in antenna section is 148.1 pF, maximum in oscillator section, 65.2 pF. Trimmer capacity is variable to over 6 pF. Trimmer adjustments may be made through case.  $\frac{3}{8}$ " sq. by  $\frac{1}{2}$ " deep. Shpg. wt., 4 oz. 43 A 7092.....1.59

## MINIATURE SINGLE SECTION TUNING CAPACITOR WITH DIAL

Miniature single-gang capacitor for use in TRF, broadcast band and experimental receivers, transmitters, signal generators, wave traps and many other units. Ideal for transistor circuits. An excellent device for the hobbyist or experimenter building miniature electronic instruments. Capacity variable from 10 to 365 pF. Has  $1\frac{1}{2}$ " diameter, clear plastic tuning dial with milled edges. Calibrations in silver numerals, read from 530 to 1600 kHz. Full 180° rotation. Size,  $1\frac{1}{2}$ " sq. by  $\frac{1}{2}$ " deep.  $\frac{1}{4}$ " shaft. 5 oz. 43 A 7091......69

Allied has the world's largest selection of electronic components for experimenters, hobbyists, and builders. Use the handy, complete index in the back of this catalog.

# CORNELL-DUBILIER PLUG-IN NOISE FILTERS

Type IF-18. Effective type of filter for suppression of severe interference. For use wherever ventilating or air conditioning units, washing machines or machine tools interfere with radio-TV reception. Bakelite case,  $6 \times 3\frac{1}{2} \times 2\frac{1}{2}$ ". Line cord, plug, receptacle and ground terminal. 115 volts. AC-DC, 5 amps. 4 lbs. 43 A 3564.....4.67

Type IF-19. Smaller than above, yet has as much attenuation. Has line cord, plug, receptacle, and ground terminal. For 115 volts, AC-DC. Rated 5 amps.  $4 \times 2\frac{1}{4} \times 2\frac{1}{2}$ ". Shpg. wt., 3 lbs. 43 A 3565.....7.30

Type IF-4. Efficient plug-in, cylindrical filter for suppression of medium-intensity interference produced by fluorescent lighting fixtures, electric shavers, fans, food mixer, billing machines and similar devices. Well suited for use with small receivers such as DC midget sets, portable TV sets, etc. Filter plugs directly into wall; appliance or receiver plugs into filter. Rated at 115 volts, AC-DC, 5 amps.  $1\frac{1}{2}$ " dia., 2" long. Shpg. wt., 5 oz. 43 A 3568.....1.08

Type IF-6. Convenient plug-in filter designed for elimination of moderate interference. Especially suitable for suppression of interference caused by fluorescent lights, electric shavers and similar devices. For installation as an accessory of a portable or semi-permanent nature on radios, TVs, etc. Connects between power line and appliance or between power line and receiver. Rated at 115 volts, AC, 5 amps.  $1\frac{3}{4}$ " dia., 2" long. Shpg. wt., 6 oz. 43 A 3569.....1.87

# Littelfuse Fuses and Mallory Circuit Breakers

## TYPE 3AG SLO-BLO FUSES

Series 313000. Have high time-lag to withstand heavy surges, yet blow quickly on short-circuits. Excellent where high inductive or capacitive surges or heavy starting currents are present. Blowing specifications: 110% of rating, 4 hrs. minimum; 135%, 1 hour maximum; 200%, 5 seconds minimum. Employ anti-fatigue construction with spring and resistor. Fuses rated up to 5 amps are U.L. Component Program-Recognized. All are rated at 125 volts maximum except \*32 volts maximum. Size, 1/4x1/4". 2 oz. 5 FUSES PER PACKAGE



Amperes	Stock No.	6 PER PACKAGE	Amperes	Stock No.	6 PER PACKAGE
1/100	57 A 3073	1.68	1-2/10	57 A 3643	1.14
1/32	57 A 3074	1.68	1-1/4	57 A 3090	1.14
1/16	57 A 3075	1.23	1-1/2	57 A 3091	1.14
1/10	57 A 3076	1.23	1-6/10	57 A 3092	1.14
1/8	57 A 3077	1.23	2	57 A 3093	1.14
15/100	57 A 3078	1.23	2-1/2	57 A 3094	.90
.175	57 A 3079	1.23	2-3/10	57 A 3099	.90
3/16	57 A 3080	1.23	3	57 A 3095	.90
2/10	57 A 3081	1.23	3-2/10	57 A 3096	.90
1/4	57 A 3082	1.23	4	57 A 3097	.90
3/10	57 A 3083	1.23	5	57 A 3098	.90
3/8	57 A 3084	1.23	6-1/4	57 A 3100	.90
4/10	57 A 3641	1.23	7*	57 A 3644	.90
1/2	57 A 3085	1.23	8*	57 A 3101	.90
6/10	57 A 3086	1.23	10*	57 A 3102	.90
7/10	57 A 3642	1.23	15*	57 A 3103	.90
3/4	57 A 3087	1.23	20*	57 A 3104	.90
8/10	57 A 3088	1.23	25*	57 A 3105	.90
1	57 A 3089	1.23	30*	57 A 3106	.90

## TYPE 3AG STANDARD FUSES

Series 312000. Quick-acting standard fuses. Ideal for radios, amplifiers, transmitters, etc. Diagonal alignment of fuse element assures accurate blowing even when element is expanded by heat. Completely unaffected by high operating temperatures. Blowing specifications: 110% of rating, 4 hours min.; 135%, 1-hour max.; 200%, 10 sec. max. U.L. Component Program-Recognized. Rated at 250 volts, maximum, except \*125 volts and .32 volts. Size, 1/4x1/4". Shpg. wt., 2 oz. 5 FUSES PER PKG.



Amperes	Stock No.	6 PER PACKAGE	Amperes	Stock No.	6 PER PACKAGE
1/100	57 A 3600	2.25	3	57 A 3119	.39
1/32	57 A 3601	1.98	2-1/2	57 A 3657	.39
1/16	57 A 3107	.87	3	57 A 3120	.39
1/8	57 A 3108	.87	4	57 A 3121	.48
15/100	57 A 3654	.87	5	57 A 3122	.48
3/16	57 A 3110	.87	6	57 A 3125	.48
2/10	57 A 3656	.87	8*	57 A 3126	.69
1/4	57 A 3111	.57	4†	57 A 3703	.39
3/10	57 A 3112	.57	5†	57 A 3704	.28
3/8	57 A 3113	.57	6†	57 A 3709	.28
1/2	57 A 3114	.57	7-1/2†	57 A 3710	.28
6/10	57 A 3115	.57	10†	57 A 3705	.28
3/4	57 A 3116	.57	15†	57 A 3706	.28
1	57 A 3117	.39	25†	57 A 3707	.28
11/2	57 A 3118	.39	30†	57 A 3708	.28

## TYPE 3AB MEDIUM-LAG FUSES

Series 314000. Statite enclosed, arc quenching, powder-filled fuses. Smallest U.L. Component Program-Recognized units in these high ratings. Medium-time-lag. Shatter-proof against quick shorts. For amplifiers, etc. Maximum volts 250, except \*125. 1/4x1/4". W.L., 2 oz. 5 PER PKG.



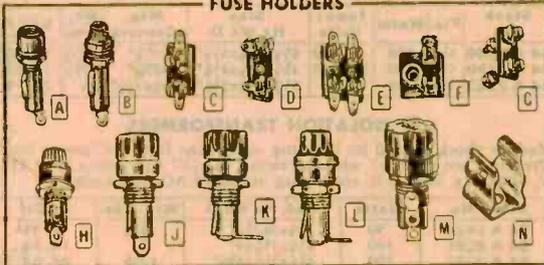
Amperes	Stock No.	6 PER PACKAGE	Amperes	Stock No.	6 PER PACKAGE
1/8	57 A 3711	.78	5	57 A 3719	.69
1/4	57 A 3712	.78	6	57 A 3720	.69
3/8	57 A 3713	.78	8	57 A 3721	.69
1/2	57 A 3714	.78	10	57 A 3722	.69
3/4	57 A 3715	.78	12	57 A 3723	.75
1	57 A 3716	.75	15	57 A 3724	.75
2	57 A 3717	.75	20*	57 A 3725	.75
3	57 A 3718	.75	25*	57 A 3726	.93

## FUSEMASTER RACK ASSORTMENT

Plastic rack displays 300 fuses. Includes 100 fuses, inventory control backboard, pressure-sensitive blank inventory labels, mounting screws. Includes: TYPE 3AG—ten 1/2-amp; ten 1/2-amp, five 1-amp, five 2-amp, five 5-amp, TYPE 3AG SLO-BLO—ten 1/2-amp, five 1/2-amp, five 1-amp, five 2-amp, five 3-amp, ten 5-amp. TYPE C—ten 3/10-amp, TYPE N—five 3/10-amp, five 4/10-amp, five 1/2-amp. 57 A 3071. Shpg. wt., 2 lbs. 16.57



## FUSE HOLDERS



INDUSTRIAL—FOR 3AG AND 3AB Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH
57 A 3000	341001	A	Screw slot	.57
57 A 3001	342001	B	Thumb knob	.57
57 A 3002	342012	H	Extractor post	.41
57 A 3003	342014	J	Miniature fuse post	.41
57 A 3004	342004	K	Miniature fuse post	.48
57 A 3005	342022	L	Miniature fuse post	.48
57 A 3006	350218	D	Single fuse mounting	.19
57 A 3007	353001	G	Panel-type mounting	.56
57 A 3008	356001	C	Screw terminals	.38
57 A 3009	357001	C	Lug terminals	.19
57 A 3010	357002	E	Double fuse mounting	.35
57 A 3238	101001	N	Phosphor bronze clips	.04

## FOR 3AG

57 A 3013	372001	B	Thumb knob	.57
57 A 3014	383002	F	"Meter-back" mounting	.37
57 A 3015	387001	C	Lug terminals	.19
57 A 3016	387002	E	Double fuse mounting	.35

## MILITARY—MIL-F-19207A (\*RF Shield)

Stock No.	Mfr's Type	MIL No.	Fig.	Post Description	EACH
57 A 3677	342025	FHN20G	K	3AG miniature	1.36
57 A 3676	342024	FHN26G	H	3AG miniature	1.32
57 A 3052	340255	FHN26*	H	3AG miniature	4.77
57 A 3678	342021	FHN26V	M	3AG waterproof	3.20
57 A 3680	372003	FHN31G	B	3AG extractor	2.65

## TYPE 3AG FAST-ACTION INSTRUMENT FUSES

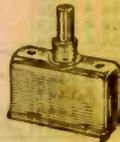
Series 361000. Reliable efficiency and high speed action of these fuses make them ideal for protecting delicate equipment—ammeters, wattmeters, radio "B" circuits, small rectifier and power tubes. 250-volt maximum except \*125 volts. 1x1/4". Av. shpg. wt., 2 oz. 5 PER PKG.



Amperes	Stock No.	6 PER PACKAGE	Amperes	Stock No.	6 PER PACKAGE
1/500	57 A 3214	6.00	3/8	57 A 3221	.57
1/200	57 A 3215	2.52	1/2	57 A 3222	.57
1/100	57 A 3216	2.25	1	57 A 3224	.39
1/32	57 A 3217	1.98	1 1/2	57 A 3225	.39
1/16	57 A 3218	1.23	2	57 A 3235	.39
1/10	57 A 3658	.87	3	57 A 3236	.39
1/8	57 A 3219	.87	5*	57 A 3237	.39
1/4	57 A 3220	.57			

## MALLORY CIRCUIT BREAKERS

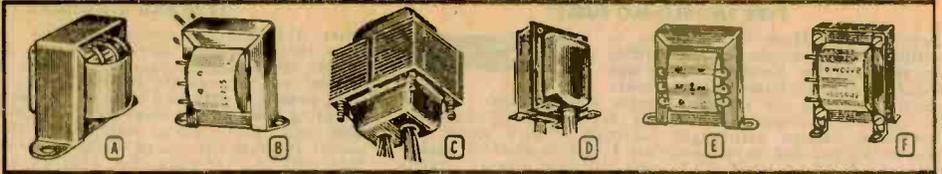
Stack-type circuit breakers available in ratings from 0.5 to 7.0 amperes to cover a wide variety of applications. Precision engineered, have "anti-cheat" reset action; non-cycling, constant pressure. Temperature compensated. Tripping time is within 10 seconds. Bushing mount. \*Heavy-duty contacts. Shpg. wt., 3 oz.



Stock No.	Type CBB-	A	Stock No.	Type CBB-	A	EACH	
57 A 3574	050	0.5	57 A 3579	200	2.0	.95	.84 .73
57 A 3575	075	0.75	57 A 3580	225	2.25	.95	.84 .73
57 A 3576	100	1.0	57 A 3581	250	2.5	.95	.84 .73
57 A 3577	150	1.5	57 A 3582	275	2.75	.95	.84 .73
57 A 3578	175	1.75	57 A 3583	300	3.0	.95	.84 .73
57 A 3584	325*	3.25	57 A 3588	450*	4.5	1.02	.91 .79
57 A 3585	350*	3.5	57 A 3589	500*	5.0	1.02	.91 .79
57 A 3586	375*	3.75	57 A 3590	600*	6.0	1.02	.91 .79
57 A 3587	400*	4.0	57 A 3591	700*	7.0	1.02	.91 .79

# knight Transformers—Exclusive at Allied

Knight Low-Cost Transformers Provide Dependability and Big Savings



## POWER TRANSFORMERS

For radio replacement use, etc. Fully shielded. Heavy-duty 5<sup>th</sup> coded leads. All plate windings are center-tapped, except \*half-wave type; for 6AX5, 6X4, 6X5 and similar 6.3 V filament rectifiers and for selenium rectifier. CT 6.3-V winding. †Not CT. ‡Static shield. #60 Hz only. \*\*22.5 volt at 5 amperes winding. For 110-120 volt, 50-60 Hz primaries.

Stock No.	Fig.	Plate VCT	mA	5 V at A	6.3 V at A	Mtg. Ctrs.	Wt. Lbs.	EACH
54 A 3710	A	115*	15	...	0.61†	2 $\frac{3}{8}$ "	1	5.30
54 A 1410	B	125*	15	...	0.61†	2"	1 $\frac{1}{4}$	2.52
54 A 1411	A	125*	50	...	2†	3 $\frac{1}{2}$ "	1 $\frac{1}{2}$	4.07
54 A 3708	C#	135*	200	...	5.5†	2 $\frac{1}{8}$ "x2 $\frac{1}{4}$ "	3 $\frac{1}{2}$ "	9.21
54 A 4720	D	230	40	...	1.5	1 $\frac{1}{4}$ "x1 $\frac{1}{8}$ "	1 $\frac{1}{2}$ "	5.57
54 A 2008	B	250	25	...	1.0†	2 $\frac{3}{8}$ "	1	3.02
54 A 2318	B	380*	20	...	2 $\frac{3}{8}$ "	2 $\frac{3}{8}$ "	1 $\frac{1}{2}$	3.90
54 A 3706	D	440	50	**	0.6†	2x1 $\frac{1}{16}$ "	2 $\frac{1}{4}$ "	7.47
54 A 1461	D	460	50	...	2.5†	2x1 $\frac{1}{8}$ "	2 $\frac{3}{4}$ "	5.44
54 A 2502	C	460	50	...	2.5†	2 $\frac{1}{2}$ "x2"	2 $\frac{3}{4}$ "	5.44
54 A 2034	C	480	40	2	2	2 $\frac{1}{2}$ "x2"	2 $\frac{3}{4}$ "	5.89
54 A 2503	C	480	55	2	2	2 $\frac{1}{2}$ "x2"	3	6.66
54 A 2504	C	480	70	3†	2	2 $\frac{1}{2}$ "x2"	3	5.23
54 A 1427	D	480	40	2	2	2x1 $\frac{1}{16}$ "	2 $\frac{3}{4}$ "	5.89
54 A 1462	D	480	55	2	2	2x1 $\frac{1}{8}$ "	3	6.21
54 A 1463	D	480	70	3†	2	2x1 $\frac{1}{8}$ "	3	6.23
54 A 2506	C	500	70	2.0	2.5	2 $\frac{1}{2}$ "x2"	3 $\frac{1}{2}$ "	7.18
54 A 2551	D	500	40	...	2	1 $\frac{3}{32}$ "x1 $\frac{1}{8}$ "	2 $\frac{1}{4}$ "	6.00
54 A 1464	D	500	76	2	2.5	2x2 $\frac{1}{8}$ "	3 $\frac{1}{2}$ "	7.18
54 A 1465	D	520	90	...	4†	2 $\frac{1}{4}$ "x1 $\frac{1}{16}$ "	3 $\frac{3}{4}$ "	7.26
54 A 1444	C	520	90	2	3	2 $\frac{1}{8}$ "x2 $\frac{1}{4}$ "	4	7.47
54 A 1412	D	520	90	2	3	2 $\frac{1}{4}$ "x2 $\frac{1}{4}$ "	4	7.47
54 A 1466	D	540	120	3	3.5	2 $\frac{1}{2}$ "x2 $\frac{1}{4}$ "	5	10.47
54 A 3704	D	600	65	...	2.7†	2x1 $\frac{1}{16}$ "	2 $\frac{3}{4}$ "	6.78
54 A 1468	C	600	70	2	3	2 $\frac{1}{2}$ "x2"	3 $\frac{3}{4}$ "	8.94
54 A 1469	C	600	120	3	5	3 $\frac{1}{8}$ "x2 $\frac{1}{2}$ "	6	10.97
54 A 4725	D	600	70	2	3	2x2 $\frac{1}{16}$ "	3 $\frac{3}{4}$ "	8.94
54 A 2526	D	600	120	3	5	2 $\frac{1}{2}$ "x2 $\frac{1}{8}$ "	6	10.97
54 A 3703	D	650	150	3	5†	2 $\frac{1}{2}$ "x2 $\frac{1}{8}$ "	6	11.08
54 A 1413	D	650	40	2	2	2x1 $\frac{1}{16}$ "	2 $\frac{1}{2}$ "	6.12
54 A 4730	D	650	150	3	5	2 $\frac{1}{2}$ "x3"	7 $\frac{1}{2}$ "	11.08
54 A 2042	C	650	70	3	3.5	2 $\frac{1}{2}$ "x2"	4 $\frac{1}{4}$ "	6.00
54 A 1428	D	650	70	3	3.5	2x2 $\frac{3}{8}$ "	4 $\frac{1}{4}$ "	6.00
54 A 1471	C	650	150	3	5	3 $\frac{1}{4}$ "x2 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "	11.08
54 A 1472	D	680	70	2	2.5	2 $\frac{1}{4}$ "x2 $\frac{3}{16}$ "	4	8.45
54 A 2043	C	700	90	3	3.5	2 $\frac{1}{8}$ "x2 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	8.45
54 A 2044	C	700	120	3	4.7	3 $\frac{1}{8}$ "x2 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	9.92
54 A 1430	D	700	120	3	4.7	2 $\frac{1}{2}$ "x3 $\frac{1}{16}$ "	5 $\frac{1}{4}$ "	9.92
54 A 2535	D	700	200	3	6	3x2 $\frac{1}{16}$ "	8	14.92
54 A 1414	D	800	200	3	5	3x2 $\frac{1}{16}$ "	7 $\frac{3}{4}$ "	13.36
54 A 2548	D	800	250	4	5	3x3 $\frac{1}{16}$ "	10 $\frac{1}{4}$ "	15.76

## A STANDARD OUTPUT TRANSFORMERS

Couple plate of output tube to speaker voice coil. For class A amplifiers. \*Fig. F. Shpg. wt.  $\frac{1}{4}$  lb.

Stock No.	Primary Imp.	mA	Sec. Imp.	Audio Watts	Size H x W x D	EACH
54 A 1401	2000	50	3.2	3	1 $\frac{1}{8}$ "x2 $\frac{1}{8}$ "x1 $\frac{1}{4}$ "	1.58
54 A 2065	2000	50	3.2	5	1 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	1.58
54 A 1402	2000	60	4	5	1 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	1.89
54 A 2063	2500	50	3.2	3	1 $\frac{1}{4}$ "x2 $\frac{1}{8}$ "x1 $\frac{1}{8}$ "	1.97
54 A 2064	5000	40	3.2	3	1 $\frac{1}{4}$ "x2 $\frac{1}{8}$ "x1 $\frac{1}{8}$ "	1.97
54 A 1403	5000	40	4	5	1 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	1.68
54 A 1446	*5000	40	6-8	10	2 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	2.64
54 A 1447	7000	30	4	5	1 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	1.79
54 A 1448	10,000	30	4	5	1 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	1.74
54 A 1449	25,000	5	4	5	1 $\frac{3}{8}$ "x2 $\frac{3}{8}$ "x1 $\frac{1}{8}$ "	2.08

Transformers listed on these pages are the most popular types manufactured by Knight. Built to Allied's own rigid standards of quality and performance, they carry a one-full-year warranty against defects in workmanship. Allied is your exclusive supplier for Knight transformers. When you order Knight transformers you get these extra Allied advantages: same-day shipment, complete one-order purchasing and money-saving prices.

## CONTROL TRANSFORMERS

For high-speed automatic equipment, relays, pilot lamps, solenoids, small motors. May be used in high current, low voltage power supplies. Secondary has two identical windings which permit series or parallel operation. Primary for 115 or 230 volts, 50-60 Hz.

Stock No.	Fig.	Parallel Sec. Volts/Amps	Series Sec. Volts/Amps	Size H x W x D	Wt. Lbs.	EACH		
54 A 2351	E	6	2	12	1	2 $\frac{1}{2}$ "x2 $\frac{1}{8}$ "x1 $\frac{1}{4}$ "	3.70	
54 A 2352	E	6	4	12	2	2 $\frac{1}{4}$ "x3 $\frac{1}{8}$ "x2"	1 $\frac{3}{4}$	4.50
54 A 2353	E	12	4	24	2	3 $\frac{1}{8}$ "x3 $\frac{1}{8}$ "x2 $\frac{1}{4}$ "	2 $\frac{1}{2}$	5.44
54 A 2354	F	12	8	24	4	3 $\frac{1}{2}$ "x2 $\frac{1}{8}$ "x3"	4 $\frac{1}{2}$	8.87

## F MULTI-TAP SELENIUM RECTIFIER TRANSFORMERS

Tapped primary and additional tapped winding permit a variety of output voltages in addition to those shown. 117 V, 50-60 Hz primaries. Include wiring diagram. \*Capacitive load.

Stock No.	Rect. Circuit	Range of AC Volts	Max DC Output*		Size H x W x D	Wt. Lbs.	EACH
			Volts	Amps			
54 A 2331	CT	11.5 to 29.5	13.6	2			
	Bridge	11.0 to 28.5	30.0	1.25	3x2 $\frac{1}{2}$ "x2 $\frac{1}{4}$ "	2 $\frac{3}{4}$	5.89
54 A 2332	CT	12.0 to 29.6	14.5	4			
	Bridge	12.0 to 29.6	33.0	2	3 $\frac{1}{2}$ "x2 $\frac{1}{8}$ "x3"	4 $\frac{1}{2}$	8.16
54 A 2333	CT	11.5 to 29.0	14.5	8			
	Bridge	11.5 to 29.0	32.2	4	3 $\frac{1}{4}$ "x3 $\frac{1}{8}$ "x3 $\frac{1}{2}$ "	6 $\frac{1}{4}$	10.24
54 A 2334	CT	12.0 to 29.5	14.2	12			
	Bridge	12.0 to 29.5	32.0	6	4 $\frac{1}{8}$ "x3 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "	9	14.56
54 A 2335	CT	12.0 to 29.0	14.5	15			
	Bridge	12.0 to 29.0	32.0	8	4 $\frac{1}{8}$ "x3 $\frac{3}{4}$ "x5"	13	18.56

## VARIABLE VOLTAGE AND ISOLATION TRANSFORMERS

Output, 115 V except \*105, 115, 125. 50-60 Hz. 6' cord, plug.

Stock No.	Fig.	Watts	Input Volts	Size H x W x D	Mtg. Centers	Wt. Lbs.	EACH
54 A 2080	G	150	90-250	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x5 $\frac{1}{2}$ "	3x3 $\frac{1}{8}$ "	9 $\frac{1}{2}$	19.36
54 A 1490	G	100	105-125	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x4 $\frac{3}{8}$ "	3x2 $\frac{1}{16}$ "	7 $\frac{1}{2}$	14.84
54 A 2563	H	*350	117	5 $\frac{1}{2}$ "x4 $\frac{1}{2}$ "x5 $\frac{1}{4}$ "	3 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "	16	28.19

## H ISOLATION TRANSFORMERS

Reduce shock hazard by isolating equipment from AC power line. Prevent "hot chassis" when servicing AC-DC equipment. For 115 V, 50-60 Hz. With 6-ft. cord, plug, standard AC receptacle.

Stock No.	Watts	Size, H x W x D	Wt., Lbs.	EACH
54 A 1426	50	3 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x3 $\frac{1}{8}$ "	3 $\frac{1}{2}$	8.36
54 A 2086	100	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x4 $\frac{3}{8}$ "	7	14.76
54 A 2087	250	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x4 $\frac{3}{8}$ "	12 $\frac{1}{2}$	25.84

## 230 TO 115-VOLT STEP-DOWN AUTOTRANSFORMERS

Well-built step-down transformers for reducing 220-230 volts, 50-60 Hz to 110-125 volts. For operating tape recorders, radios, amplifiers, household appliances, etc. Shielded construction. With 8-ft. cord and plug. Standard AC receptacle on case. \*No cord.

Stock No.	Fig.	Volt-Amps	Size, H x W x D	Wt., Lbs.	EACH
54 A 1494	J	8	3 $\frac{3}{4}$ "x1 $\frac{1}{16}$ "	1	4.01
54 A 2555	A*	20	2x3 $\frac{1}{4}$ "x2"	1 $\frac{1}{4}$	3.49
54 A 2556	A*	40	2 $\frac{1}{2}$ "x3 $\frac{3}{8}$ "x2 $\frac{1}{8}$ "	1 $\frac{3}{4}$	3.90
54 A 2510	H	80	3 $\frac{1}{2}$ "x3x3 $\frac{1}{4}$ "	3 $\frac{1}{4}$	8.41
54 A 2557	H	100	3 $\frac{1}{2}$ "x2 $\frac{1}{8}$ "x3 $\frac{1}{8}$ "	4	8.94
54 A 2511	H	150	4x3 $\frac{1}{8}$ "x3 $\frac{1}{8}$ "	4 $\frac{3}{4}$	10.70
54 A 2512	H	250	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x4 $\frac{1}{4}$ "	7 $\frac{3}{4}$	13.94
54 A 2513	H	500	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x4 $\frac{1}{4}$ "	11	19.15
54 A 1434	H	750	5 $\frac{1}{2}$ "x4 $\frac{1}{8}$ "x5"	13 $\frac{1}{4}$	24.12
54 A 1432	H	1000	5 $\frac{1}{2}$ "x4 $\frac{1}{8}$ "x5 $\frac{1}{4}$ "	14 $\frac{1}{4}$	31.66
54 A 1435	H	1500	6x4 $\frac{1}{2}$ "x5 $\frac{1}{4}$ "	20	35.41
54 A 1433	H	2000	6x4 $\frac{1}{2}$ "x5 $\frac{1}{8}$ "	25	40.07

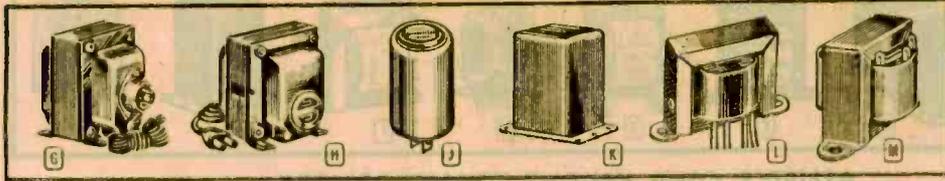
## H 115 TO 230-VOLT STEP-UP AUTOTRANSFORMERS

Increase 110-125 volts, 50-60 Hz, to 220-250 volts. Shielded construction. 8' cord, plug. Std. AC receptacle on case.

Stock No.	Volt-Amps	Size, H x W x D	Wt., Lbs.	EACH
54 A 2558	80	3 $\frac{3}{8}$ "x3x3 $\frac{1}{4}$ "	3 $\frac{1}{4}$	8.41
54 A 2559	150	4x3 $\frac{3}{8}$ "x3 $\frac{3}{8}$ "	4 $\frac{1}{4}$	10.38
54 A 2560	500	4 $\frac{1}{2}$ "x3 $\frac{1}{8}$ "x4 $\frac{1}{4}$ "	10 $\frac{1}{4}$	19.13

# Transformers for Low-Cost Dependability

# knight



Money-Saving  
Knight Trans-  
formers Are  
A Product of  
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## FILTER AND SMOOTHING CHOKES

All chokes are rated at 10 volts, 60 Hz with maximum DC in winding. Ratings have -15%, +50% tolerance. Insulation withstands 1500 volts, rms except †2000, †3000.

Stock No.	Fig.	H	mA	Res., Ohms	Mtg. Centers	Wt. Lbs.	EACH
54 A 2341	F	.01	12,500	.11	3/8x2 1/4"	6 1/2	10.74
54 A 2342	F	.025	4000	.425	2 3/8x2 1/4"	3 1/2	7.06
54 A 2343	F	.035	2000	.75	2 1/2x2"	3 1/2	4.03
54 A 4700	F	8/0.025	2500/5000	61/155	2 1/2x3 1/4"	6 1/2	12.17
54 A 4701	F	3/0.075	1000/2000	3/75	2 1/2x2 1/4"	4 3/4	8.77
54 A 4702	A	.33	600	10	2 1/4"	1 1/2	3.33
54 A 4703	A	.70	290	30	2 1/4"	3/4	1.86
54 A 1479	A	11.0	300	40	3 1/4"	1 1/2	3.35
54 A 1480	A	11.5	10	95	1 3/4"	3/4	1.40
54 A 1406	A	1.5	200	60	2 3/8"	3/4	1.91
54 A 1481	A	2.0	200	65	3 1/4"	1 1/2	3.26
54 A 3990	A	2.0	15	70	1 1/4"	1	1.76
54 A 1482	A	2.3	150	60	2 1/4"	1 1/2	2.66
54 A 2344	A	12.5	130	100	2 1/4"	1	2.58
54 A 1483	A	13.0	150	97	3 1/4"	1 1/2	3.08
54 A 1407	A	3.5	50	200	2 1/4"	3/4	1.85
54 A 3992	A	5.0	65	330	2 1/4"	3/4	2.65
54 A 2348	K	5.0	100	300	1 1/2x2 3/8"	2 1/2	3.97
54 A 2135	A	5.5	50	330	2"	1 1/2	4.38
54 A 4704	A	6.0	200	150	3 3/8"	2 1/2	4.38
54 A 1408	A	7.0	50	550	2"	1 1/2	1.53
54 A 1485	A	8.0	85	260	2 1/4"	1 1/2	2.74
54 A 2136	A	8.5	50	400	2 1/4"	1 1/2	1.66
54 A 3993	D	9.0	125	250	3 1/4"	1 1/2	1.63
54 A 4706	D	11.0	200	150	2 1/4x2 3/8"	4 1/2	8.64
54 A 4707	A	10.0	90	270	2 1/4"	1 1/2	3.10
54 A 2139	A	10.5	110	220	3 3/4"	2 1/2	3.79
54 A 1486	D	12/8/4	100/150/200	145	2x1 1/2"	2 1/2	5.30
54 A 2137	A	16.0	50	550	2 1/4"	1	2.29
54 A 1487	A	20.0	15	900	2 3/8"	3/4	2.39
54 A 2349	A	35.0	5	1600	2"	1 1/2	1.93
54 A 2350	A	†350.0	5	5500	2 3/8"	1	4.02

## HIGH-CURRENT CHOKES

54 A 3996	F	.01	80 amps	.15	3 1/4x2 1/4"	5 1/2	9.26
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## LOW-VOLTAGE RECTIFIER TRANSFORMERS

For silicon diode and transistor DC voltages with full-wave or bridge rectifier. 1500 volt test. Primaries, 115 V. Primaries of Fig. L types are tapped. All are Fig. L except \*Fig F and †Fig. D.

Stock No.	Fig.	Secondary Volts AC	Amps	Size H x W x D	Mtg. Ctrs.	Wt. Lbs.	EACH
54 A 4731	10-20 CT-40 CT	035	1 1/2	1 1/2x2 1/2x1 1/2"	2"	1 1/2	3.97
54 A 4732	10-20 CT-40 CT	100	1 1/2	1 1/2x2 1/2x1 1/2"	2 3/8"	1 1/2	4.62
54 A 4733	10-20 CT-40 CT	300	2 3/8	2 3/8x3 1/2x2 1/2"	3 1/4"	1 1/2	5.39
54 A 4734	10-20 CT-40 CT	†50	†1	†3 1/4x4 1/2x3 1/4"	†3 1/4"	2 1/2	6.85
54 A 4735	10-20 CT-40 CT	†1	†1	†3 1/4x2 5/8x3 1/4"	†2x2 1/4"	3 1/4	10.20
54 A 4736	0-17-18	*3	3 1/4	3 1/4x2 1/2x2 1/2"	2x2 3/4"	3 1/4	7.53
54 A 4737	0-17-18	*6	3 1/4	3 1/4x2 1/2x2 1/2"	2 1/2x2 3/4"	3 1/4	10.20
54 A 4738	0.65-13-19.5-26	*3	3 1/4	3 1/4x2 1/2x2 1/2"	2 1/2x2 3/4"	3 1/4	8.17
54 A 4739	0-24-27-30-33-36	*3	3 1/4	3 1/4x3 1/2x3 1/2"	2 1/2x2 3/4"	3 1/4	11.96
54 A 4740	0-24-27-30-33-36	*8	4 1/2	4 1/2x3 1/2x3 1/2"	3x3 3/4"	10 3/4	18.57

## MINIATURE INTERCOM/TRANSCIVER TRANSFORMERS

Transceiver and intercom transformers designed to replace original units. \*Transceiver input, mike or plate to grid; has 4.5% primary tap used in B + filter network for hum reduction. †Intercom input, voice coil to grid. ‡Line to voice coil. Av. shpg. wt., 1/2 lb.

Stock No.	Fig.	Impedance, Ohms	Audio Watts	Mtg. Ctrs.	EACH	
54 A 1491	A	*200/5000	60,000	5	2 3/8"	3.08
54 A 1492	A	†4	25,000	3	2"	2.39
54 A 1493	M	‡45/50	3-4, 6-8	3	2"	2.13

## 70.7-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

Secondaries: 4, 8, 16 ohms, except \*3.2-4, 6-8. †High-fidelity.

Stock No.	Fig.	Watt Taps	Max. Watt	Size	Wt. Lbs.	EA.
54 A 1440	M	2, 1, 5	*2	1 3/8x2 1/2x1 1/4"	1 1/4	2.87
54 A 2081	M	5, 2.5, 1.25, .62, .31	*5	1 1/2x2 3/8x1 1/2"	1 1/4	2.82
54 A 1422	E	8, 4, 2, 1, 0.5	8	2x2 3/8x1 1/2"	1 1/4	3.73
54 A 2077	M	10, 5, 2.5, 1.25, .62	10	1 1/2x2 1/2x1 1/4"	1 1/4	3.54
54 A 2078	E	18, 9, 4.5, 2.25, 1.12, .56	18	2 1/2x2 1/2x1 7/8"	1 1/2	4.36
54 A 1450	E	16, 8, 4, 2, 1, 0.5	16	2 1/2x3 1/2x2 1/4"	2	5.58
54 A 2079	M	24, 12, 6, 3, 1.5, .75	24	2 1/2x3 1/2x2 1/4"	1 1/2	5.30
54 A 1441	M	5, 2.5, 1.25, .625, .31	15	1 1/2x2 1/2x1 1/4"	1 1/4	3.74

Compare specifications and prices. Allied's own Knight components always give you more for your money!

## A AUDIO TRANSFORMERS

\*Single plate to P-P grid except, †single plate to single grid, ‡single or P-P plate to P-P grids, §P-P plate to voice coil. 1/2x1/2" cores. Av. shpg. wt., 2 lbs.

Stock No.	Impedance, Ohms	Turns Ratio	Max. mA	Size HxWxD	EACH	
54 A 2062	†7000	20/000	1:3	10	1 1/2x2 1/2x1 1/4"	2.21
54 A 1458	†10,000	40/000CT	1:2	10	1 1/2x2 1/2x1 1/2"	2.56
54 A 1460	†10,000CT	90/000CT	1:3	10	1 1/2x2 1/2x1 1/2"	3.21
54 A 3999	†10,000CT	8/4/2	1	40	1 1/2x2 1/2x1 1/4"	3.17
54 A 4114	†10,000CT	500/15/8/4	3	70	3 1/2x2 1/2x3 1/4"	7.57

## A TUBE TESTER FILAMENT TRANSFORMER

Has multi-tapped secondary. Primary: 125/115/105 volts, 60 Hz. Secondary output volts: 1.1, 1.4, 1.5, 2.0, 2.5/3.0/3.3/4.0, 5.0/6.3/7.0/7.5/12/20/25/30, 35/50/70/85/110/117. Mounting centers: 3 3/8". Overall size: 2 3/8x4x3 3/8". Shpg. wt., 2 1/2 lbs.

54 A 2083. Each 11.94

## MICROPHONE OR LINE-TO-GRID TRANSFORMERS

Stock No.	Fig.	Primary Ohms	Sec. Ohms	Mtg. Ctrs.	Wt. Lbs.	EACH
54 A 3980	A	100	70KCT	2 1/4"	1 1/2	3.92
54 A 3979	A	400CT	195K	1 1/4"	1 1/2	3.44

## M STANDARD LINE-TO-VOICE-COIL TRANSFORMERS

500 ohm primary, except \*2000/1500/1000/500 and †3000/2000/1500/1000/500 ohms. †Fig. E.

Stock No.	Secondary Imp., Ohms	Audio Watts	Size HxWxD	Wt. Lbs.	EACH
54 A 1442	4-8	*4	1 1/2x2 1/2x1 1/4"	1 1/2	2.50
54 A 1423	6-8/12	5	1 1/2x2 1/2x1 1/4"	1 1/2	2.00
54 A 1425	6-8/3/2	*8	1 1/2x2 1/2x1 1/4"	1 1/2	3.10
54 A 1443	4-8	*12	2x3 1/2x1 1/4"	1 3/4	3.38
54 A 1451	4/8/16	†10	2 3/8x2 1/2x1 1/4"	1 3/4	4.18
54 A 1424	15/8/6/4	†25	2 3/8x2 1/2x1 1/4"	1 3/4	3.66

## 25-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

Secondaries: 4, 8, 16 ohms, except \*3.2-4, 6-8.

Stock No.	Fig.	Watt Taps	Max. Watt	Size	Wt. Lbs.	EA.
54 A 1436	M	2, 1, 0.5	*2	1 3/8x2 1/2x1 1/4"	1 1/4	2.81
54 A 1437	M	5, 2.5, 1.25, 0.625, 0.31	*5	1 1/2x2 3/8x1 1/2"	1 1/4	2.99
54 A 1438	M	10, 5, 2.5, 1.25, 0.625	10	2 1/2x3 1/2x2 1/4"	1 1/4	4.61
54 A 1439	M	18, 9, 4.5, 2.25, 1.12	18	2 3/8x4x2 1/4"	2 1/2	4.46

## E LINE TO LINE OR VOICE COIL TRANSFORMER

Designed to operate one or more speakers, in parallel, across a 500-ohm line. Primary impedance: 500-1000-1500-2000-2500-3000 ohms. Secondary impedance: 06 to 8 ohms when primary is 500 ohms; 12 to 16 ohms when primary is 1000 ohms, etc. Size: 2 3/8x2 1/2x2". Mounting centers: 2 3/4". Audio power: 15 watts. Shpg. wt., 2 lbs.

54 A 3978. Each 4.74

## U.L. RECOGNIZED CONTROL TRANSFORMERS

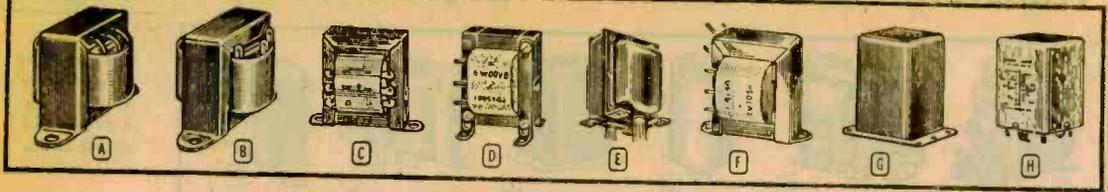


Industrial control transformers, recognized under the Component Program of Underwriter's Laboratories, Inc., for use where a 120-volt or low-voltage 24-volt line is required. For 50/60 Hz operation. †Mounts onto a standard conduit box.

Stock No.	Fig.	VA Rating	Size, H x W x D	Mtg. Ctrs. W x D	Wt. Lbs.	EACH
54 A 2275	P	50	4 3/4x4 3/4x4	3 1/2	3 1/2	6.70
54 A 2276	N	100	3 1/2x3 1/2x4 1/4	3 1/4x1 3/4	5	9.00
54 A 2277	N	150	3 1/2x3 1/2x5	3 1/4x2 3/4	6 1/2	9.30
54 A 2273	R	250	4x4 1/2x4 1/2	3 1/4x3 1/4	10 1/4	13.90

Knight has more transformers available than shown in this catalog. For prompt price quotations, write, wire, or phone us.

# Knight and Stancor Transformers



## ALLIED'S OWN KNIGHT TRANSFORMERS

Compare specifications and prices. Allied's own Knight transformers always give you more for your money

### FILAMENT TRANSFORMERS

Primaries, 117 volts, 50-60 Hz. \*107 V tap on primary. All center-tapped, except †. †Has electrostatic shield.

Stock No.	Fig.	V	Amps	Insul., rms V	Size H x W x D	Wt., Lbs.	EACH
54 A 2319	D	2.5	10.0	10000	3 3/8 x 2 7/8 x 2 1/2"	2 3/4	7.89
54 A 3712	A	2.5†	1.5	2500	1 1/8 x 2 1/4 x 1 3/16"	3/4	3.36
54 A 3711	F	2.5*	10.0	7500	3 1/8 x 3 3/8 x 3"	2 1/2	4.70
54 A 4132	A	2.5	3.0	1500	1 1/8 x 2 1/4 x 1 7/8"	3/4	3.11
54 A 1478	F	2.5	5.0	5000	2 3/4 x 3 1/8 x 2 1/8"	1 3/4	4.25
54 A 1474	E	2.5	10.0	2500	3 3/8 x 2 5/8 x 2 1/16"	2 3/4	5.74
54 A 1475	A	5.0	3.0	2500	2 x 3 1/4 x 2"	1 1/2	3.70
54 A 2028	A	5.0	6.0	2500	2 3/8 x 3 5/8 x 2 1/4"	1 3/4	4.45
54 A 3714	D	5.0	15.0	2500	3 x 2 1/2 x 3"	3	8.44
54 A 2320	D	5.0	10.0	2500	3 1/8 x 2 1/2 x 3"	3 1/2	6.13
54 A 2321	D	5.0	21.0	2500	3 3/4 x 3 1/4 x 3 1/4"	5	10.01
54 A 2322	E	5.0	30.0	2500	4 5/8 x 3 3/4 x 4"	7 1/2	13.77
54 A 2323	A	6.3†	1.2	5000	2 x 3 1/4 x 1 7/8"	1	3.10
54 A 2324	D	6.3†	3.0	2500	3 1/8 x 2 1/2 x 2 3/8"	2	5.10
54 A 2325	F	6.3	6.0	2000	3 1/8 x 3 1/8 x 2 1/2"	2 1/2	4.34
54 A 2326	D	6.3*	20.0	2500	4 5/8 x 3 3/4 x 2 7/8"	7 1/4	11.35
54 A 1416	A	6.3	0.6	1500	1 1/8 x 2 3/8 x 1 5/8"	1 1/2	1.91
54 A 2030	A	6.3	1.0	1500	1 3/8 x 2 1/8 x 1 3/4"	3/4	2.31
54 A 1419	A	6.3	1.2	3000	1 3/8 x 2 1/8 x 1 5/8"	3/4	2.10
54 A 2031	A	6.3	3.0	2500	2 x 3 1/4 x 2 3/8"	1 1/2	2.15
54 A 1477	E	6.3*	4.0	2500	3 1/8 x 2 5/8 x 2 1/16"	2 3/4	6.00
54 A 4134	E	6.3	6.0	1500	3 1/8 x 2 3/8 x 3 1/4"	2 1/2	7.31
54 A 1417	D	6.3	6.0	2500	3 x 2 1/2 x 2 1/4"	2 1/2	5.89
54 A 1418	D	6.3*	10.0	2500	3 3/8 x 2 1/8 x 2 7/8"	3 1/2	7.57
54 A 4135	E	6.3*	20.0	2000	3 7/8 x 3 3/8 x 4 1/8"	7	11.63
54 A 2327	D	7.5†	4.0	2500	3 1/8 x 2 1/2 x 2 1/16"	2 3/4	5.41
54 A 2328	D	7.5†	8.0	2500	3 3/4 x 3 1/8 x 2 7/8"	4 1/4	4.07
54 A 2329	D	10.0†	4.0	2500	3 3/8 x 2 1/8 x 2 3/4"	3 1/2	6.90
54 A 2330	D	10.0†	8.0	2500	3 3/4 x 3 1/8 x 3"	5	8.79
54 A 3720	D	10.0*†	5.0	2000	3 x 2 1/2 x 4 3/4"	3	5.57
54 A 3721	E	10.0	10.0	2000	3 7/8 x 3 1/4 x 3 3/8"	5 3/4	10.06
54 A 4709	A	12.6	3.0	1500	2 5/8 x 3 1/8 x 2 3/8"	1 3/4	5.07
54 A 4136	A	12.6	1.5	1500	2 x 3 1/4 x 2"	1 1/2	4.07
54 A 1420	A	12.6	2.0	1500	2 x 3 1/4 x 2 1/4"	1 1/2	3.68
54 A 4137	A	12.6	2.5	1500	2 1/4 x 3 5/8 x 2 1/4"	1 3/4	5.02
54 A 4710	A	24.0	1.0	1500	2 x 3 1/4 x 2"	1 1/2	4.49
54 A 1421	A	25.2†	1.0	1500	2 x 3 1/4 x 2 1/8"	1 1/2	3.63
54 A 4140	A	25.2	2.0	1500	2 5/8 x 4 x 2 3/8"	2 1/2	6.26
54 A 1476	A	26.5	0.6	3000	2 x 3 1/4 x 2"	1 1/2	3.33
54 A 4145	A	26.8	1.0	1500	2 x 3 1/4 x 2 1/4"	1 1/2	4.05

### UNIVERSAL OUTPUT TRANSFORMERS

CT primary, except \*single-ended output. 6 taps on secondary. Match single-ended or push-pull tubes to voice coil of speaker.

Stock No.	Fig.	Primary Impedances	Watts	Mtg. Ctrs.	Wt., Lbs.	EACH
54 A 2023	B	2000-14,000 ohms	4	2"	1/2	2.69
54 A 2021	B	2000-14,000 ohms	8	2 3/8"	3/4	3.02
54 A 2022	C	2000-14,000 ohms	18	2 3/8"	1 1/4	4.21
54 A 1453	B	6000-10,000 ohms	8	2 1/8"	1 1/4	3.78
54 A 1404	B	*7000-10,000 ohms	4	2"	1/2	1.97

### FIXED-IMPEDANCE OUTPUT TRANSFORMERS

For a wide variety of audio applications. All have center-tapped primary for push-pull operation.

Stock No.	Fig.	Impedance, Ohms	Audlo. Watts	Mtg. Centers	Wt., Lbs.	EACH	
54 A 1457	A	4000	8/16/32	7 1/2"	3 1/8"	1 3/4	4.48
54 A 1455	E	6600	4/8/16/250/500	35	2 1/2 x 2 1/4"	5 1/4	10.11
54 A 1456	A	25K	4	5	2"	1/2	2.55

### HIGH-FIDELITY PUSH-PULL OUTPUT TRANSFORMERS

For use in high-fidelity audio amplifiers. Screen taps on primary for ultra-linear operation, except \*no screen tap. Frequency response flat from 15 to 35,000 Hz, except types without screen tap flat 20-20,000 Hz. Secondaries 4, 8, 16 ohms, except 18, 16.

Stock No.	Fig.	Watts	P-P Imp.	m A	Size H x W x D	Wt., Lbs.	EACH
54 A 2082	H	12	8000	60	3 1/4 x 3 x 3 1/4"	3 1/2	11.69
54 A 2024	E	12	8000	60	3 1/8 x 2 5/8 x 2 3/4"	2 1/2	9.96
54 A 2058	A	*18	8000	65	2 3/8 x 4 x 2 1/2"	2 1/4	7.83
54 A 2054	E	24	6600	75	3 7/8 x 3 1/4 x 3 7/8"	6	16.76
54 A 2059	E	30	6600	100	3 7/8 x 3 1/4 x 4"	6	17.48
54 A 2395	E	*150	5100	150	4 1/4 x 3 1/2 x 4"	7	16.64
54 A 2397	E	*150	6600	125	4 1/4 x 3 1/2 x 4"	7 1/4	16.64

### OSCILLOSCOPE TRANSFORMERS

Pr. 117 V 60 Hz; \*50-60 Hz. †2.5 V @ 2.2A; or 6.3 V @ 0.6 A. †2.5 V @ 2.2 A.

Stock No.	Fig.	Plate Supply Volts AC	DC Volt.	mA	Reet. Volts	Fil. Amps	Mtg. Centers	Wt., Lbs.	EA.
54 A 3726	G	1550 halfwave	1.5	2.5	1.75	1 3/4	2 1/2 x 1 1/8"	1 3/4	10.29
54 A 3727*	E	1800 halfwave	2.0	2.5	1.8	1 1/2	2 1/2 x 2 1/8"	5	11.09
54 A 3728††	E	2400 halfwave	5.0	2.5	2.0	2 3/4	2 3/4 x 2 1/4"	6 1/2	14.40

## STANCOR TRANSFORMERS

### MINIATURIZED CONTROL TRANSFORMERS

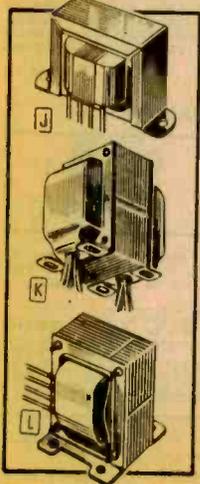
Miniaturized control transformers with applications for pilot lights, miniature relays, low-current, low voltage power supplies. Primary 117 volts, 60 Hz AC; secondary, 24 volts CT. Lead wire terminations.

Stock No.	Mfr's Type	Fig.	Secondary Amps			Size H x W x D	Wt., Lbs.	EACH
			rms	Bridge	Half-Wave			
54 A 3441	P-8394	J	.085	.135 DC	.065 DC	1 1/4 x 2 1/8 x 1 1/4"	1/4	3.57
54 A 3442	P-8395	J	.200	.275 DC	.135 DC	1 3/8 x 2 3/8 x 1 3/8"	1/2	3.72
54 A 3445	P-8396	J	.400	.550 DC	.270 DC	1 1/2 x 2 1/8 x 1 1/8"	3/8	3.87
54 A 3453	P-8397	J	.700	.925 DC	.450 DC	1 5/8 x 3 1/4 x 2"	1	4.80

### TRANSISTOR STEREO POWER TRANSFORMERS

Designed to provide the most popular DC voltage and current ratings for full wave center tap or bridge rectifier circuits. Each transformer has a tapped primary and a tapped additional winding. By using the primary taps and the aiding or bucking action of the additional winding, can provide a wide range of output voltages and currents. 1500 volts rms insulation tested. 117 volt, 60 Hz primary. Lead terminations for easy connections.

Stock No.	Mfr's Type	Fig.	Secondary #1		Secondary #2		Size, In. H x W x D	Wt. Lbs.	EACH
			Volts	Amps	Volts	Amps			
54 A 1275	P-8197	K	50 CT	1.0 rms			3 1/8 x 2 1/2 x 2 1/2"	2 1/4	6.46
54 A 1276	P-8198	K	54 CT	0.5 rms	6.3	.5 rms	2 5/8 x 2 1/4 x 2 3/8"	1 3/4	5.99
54 A 1277	P-8193	L	17/18	6.0 rms			3 1/8 x 3 1/8 x 3 1/8"	6	12.06
54 A 1278	P-8194	L	36	3.0 rms	36	3.0 rms	4 3/8 x 3 3/4 x 3 1/8"	10	19.41
54 A 1279	P-8196	K	80 CT	1.2 DC			3 1/2 x 2 1/8 x 3 1/8"	4 1/2	9.86



# Transformers, Yokes and Voltage Adjusters

**knight**



## TRANSISTOR TRANSFORMERS

Allied's own line of economically priced, ruggedly constructed, transistor transformers. All are made from high-quality materials and provide excellent power-handling capabilities and frequency response along with a minimum amount of distortion. Included are a wide selection of miniature input, output, interstage and driver transformers in a variety of impedance and ratio values for most transistor circuit requirements. In tables below, impedance and resistance-values are given in ohms. Av. shpg. wt. 6 oz. Write, wire or phone Allied for information on quantity purchases of ten or more transformers of one type.

### INPUT TRANSFORMERS

Stock No.	Fig.	Pr. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
54 A 4146	A	600 CT	10	.050	1 1/2 x 1 1/2 x 3/4"	1 7/8"	2.36
54 A 2355	C	30 CT	50K	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.03
54 A 2356	A	1K CT	200K CT	.300	1 1/2 x 1 1/2 x 3/4"	1 3/8"	4.03

### OUTPUT TRANSFORMERS

Stock No.	Fig.	Pr. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
54 A 2357	C	350 CT	4. 12	.150	1 1/2 x 1 1/2 x 3/4"	2 1/8"	3.90
54 A 2358	C	500 CT	4. 8. 16	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.03
54 A 2359	C	600 CT	4. 8. 16	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.24
54 A 2360	C	825 CT	4. 8. 16	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.03
54 A 2363	C	10K CT	4. 8. 16	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.15
54 A 4150	A	2000 CT	4. 8. 16	.200	1 3/4 x 1 1/2 x 3/4"	1 3/8"	6.11
54 A 2365	A	100 CT	4. 8. 16	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	4.16
54 A 2367	A	400 CT	4. 8. 16	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	4.07
54 A 2368	A	500 CT	4. 8. 16	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	4.07
54 A 2370	A	2500	4. 8. 16	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	4.07
54 A 2371	A	3000	4. 8. 16	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	4.07
54 A 2337	A	20 CT	8	10	1 7/8 x 2 1/2 x 1 1/2"	2 1/8"	2.28
54 A 4147	A	48 CT	2. 8. 16	10	2 1/2 x 2 1/2 x 2"	2 3/8"	3.70
54 A 4149	A	100 CT	2. 8. 16	10	2 1/2 x 2 1/2 x 2"	2 3/8"	3.70

### INTERSTAGE TRANSFORMERS

Stock No.	Fig.	Pr. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
54 A 2340	A	500 CT	5K CT	1.0	1 1/2 x 2 1/2 x 1 1/2"	2"	3.11
54 A 2373	C	500 CT	50	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	3.99
54 A 2374	A	500 CT	50K	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.07
54 A 2376	C	1500	500 CT	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	3.80
54 A 2377	C	5K CT	7500 CT	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	4.02
54 A 2378	C	5K CT	10K CT	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	3.97
54 A 2387	C	10K	2K CT	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	3.97
54 A 2390	C	500 CT	150 CT	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	3.90
54 A 4160	C	20K	800 CT	.150	2 1/2 x 1 1/2 x 3/4"	2 1/8"	3.29
54 A 2338	A	100 CT	10 CT	.250	1 1/2 x 1 1/2 x 1 1/2"	1 3/8"	2.29
54 A 2391	A	100K	1500 CT	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	4.05
54 A 4174	A	500 CT	500 CT	.300	1 3/4 x 1 1/2 x 3/4"	1 3/8"	3.78

### DRIVER TRANSFORMERS

Stock No.	Fig.	Pr. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
54 A 4153	A	100	200 CT	500	1 1/2 x 2 1/2 x 1 1/2"	1 3/8"	2.55
54 A 4165	A	500 CT	200 CT	500	1 1/2 x 2 1/2 x 1 1/2"	1 3/8"	2.51
54 A 4166	A	100	100 CT	500	1 1/2 x 2 1/2 x 1 1/2"	2 1/8"	2.26
54 A 4152	A	20	36 CT	1.0	1 1/2 x 2 1/2 x 1 1/2"	1 3/8"	2.01

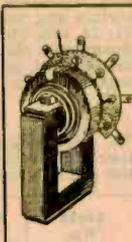
### POWER TRANSFORMERS WITH 117-VAC PRIMARIES

Stock No.	Description	Size H x W x D	Wt. Lbs.	EA.
54 A 3987	Sec. 13 or 18 VAC, 900 mA, DC	3 1/2 x 2 1/2 x 3 1/2"	3	5.72
54 A 3988	Sec. 80 VCT, 1.2 A	3 1/2 x 2 1/2 x 3 3/8"	4 1/2	7.82

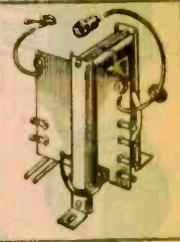
### AUDIO TRANSFORMER

Primary impedance: 2000 ohms, center tapped. Secondary impedance: 200 ohms, center tapped. Maximum primary DC current: 10 mA. Audio watts, 0.1. 5/8 x 1 1/2 x 1/2". Mtg. centers: 1 1/8". Shpg. wt. 1/2 lb. 54 A 3985 Each 6.36

## STANCOR REPLACEMENT TV HORIZONTAL OUTPUT TRANSFORMERS



- Far Replacement in Standard TV Receivers
- Designed to Provide Like-New Performance
- Constructed of Highest Quality Materials
- Minimum Alteration of Chassis or Circuit
- Same Characteristic as Original Unit



Top-quality flyback transformers for replacement in standard television receivers. Every transformer faithfully duplicates electrical characteristics of the original unit. Manufacturer's own specifications throughout; performance is identical in every respect. Minimum alteration of existing circuit or chassis is required; easy installation is assured. Stancor's high degree of quality material and production control insures the utmost in product reliability at the lowest possible cost. \*Color. Shpg. wt. per transformer, 1 lb.

Stock No.	Mfr. Type	Mfr. Part	EACH
54 A 1206	Admiral HO-104	79D47	11.42
54 A 1207	Admiral HO-204	79C30 1-4	8.94
54 A 3459	Admiral HO-242	79D63 1	8.94
54 A 1204	Admiral HO-301	79D65 2-4	9.84
54 A 1214	Admiral HO-397	750C647-3	9.00
54 A 1216	Admiral HO-404	79D117 1	6.67
54 A 3470	GE HO-254	RTO-129-183-190	8.94
54 A 1568	GE HO-377	WT-77x41, 42, 44, 45	9.90
54 A 1220	GE HO-378	WT-77x43, 46, 47, 48	9.90
54 A 1221	GE HO-389	ET77X74	8.10
54 A 1225	GE HO-402	ET-77X90	9.60
54 A 1227	Motorola HO-280	24K741938	11.42
54 A 1213	Motorola HO-293	24C736488	12.00
54 A 1194	Motorola HO-344	24K748197 W	9.90
54 A 1569	Olympic HO-315	TR-3599-A-D-1-2-3-4-5-6	9.00
54 A 1231	Zenith HO-363	49918, 50095, 50097	9.90
54 A 1232	Zenith HO-364	S51581, S5840-C, S58826	9.90
54 A 1233	Zenith HO-366	S46604	9.90
54 A 1563	Zenith HO-380	S5E350-S65352-S66717-S68398	11.90
54 A 1589	HO-600C*	Multipurpose	13.50
54 A 1188	HO-601C*	Multipurpose	14.40
54 A 1235	Admiral HO-607C*	Multipurpose	15.00

### DEFLECTION YOKES

For 110° deflection angle picture tubes except 90°, 170°. Have ferrite cores with cosine-wound windings. All have necklets and extra-long leads where needed. \*Color. Av. shpg. wt. per yoke, 1 1/2 lbs.



Stock No.	Type	Mfr. Part	EACH
54 A 4590	DY-9A1	Multipurpose	10.24
54 A 4596	DY 11A1	Multipurpose	11.24
54 A 3481	DY-13A	Multipurpose	11.42
54 A 1570	DY-16A1	Multipurpose	11.90
54 A 1576	DY-20A	RCA 906125-504	12.55
54 A 1245	DY-27A	RCA 109965	11.40
54 A 1247	DY-35A	Multipurpose	11.24
54 A 1251	DY-42A	RCA 103830	10.80
54 A 1274	DY-51A	Packard-Bell 29758, A	3.20
54 A 1259	DY-54A	Philco 7612530	3.20
54 A 1263	DY-59A1	Multipurpose	13.20
54 A 1264	DY-61A1	Multipurpose	13.22
54 A 1265	DY 63A	Multipurpose	13.17
54 A 1590	DY-90A1*	Multipurpose	23.70
54 A 1266	DY-91A1*	Zenith 95-2501	26.19

### TERADO LINE VOLTAGE ADJUSTERS

Model 50-172 "Saturn". Changes AC line input voltage by as much as 25 volts above or below the normal 110-120 volt AC range. Built-in AC volt meter provides accurate voltage control. Capacity: 300 watts continuous; 500 watts intermittent. Can be used to regulate the speed of any power tool with up to 1/2 hp rating. (Decreases speed without any noticeable power torque loss.) Dims or brightens incandescent lamps. Excellent for increasing or decreasing AC line voltage where exact voltages are needed for precision equipment. 5/2 x 3 1/2". Shpg. wt., 3 lbs. 21 A 4449 14.64



## ATTENTION BUYERS

Allied stocks more complete lines of Knight, Chicago/Stancor, Triad and UTC transformers. Not all of our transformers are listed in this catalog due to space limitations. For information on items not listed and

price quotations, write Allied. This catalog is your guide through the world's largest stock of electronic equipment. When you order from Allied you receive prompt shipment and low prices.

# Selected Variable Transformers

## SUPERIOR POWERSTAT® VARIABLE TRANSFORMERS

Deliver continuously adjustable output voltage from AC line. Zero waveform distortion, good regulation, conservative ratings. For 50-60 Hz. (360 Hz only.) Enclosed for plane-surface mtg. except 10B, 21, 22. Suffix "U" indicates open types for panel mtg. Series 21, 22, 126, 236B are for panel or surface mtg. Prefix "Q" same as Fig. C but 4-hole square mtg. plate. †Indicates amperage output when mounted on metal panel; for non-metal panel, or bracket mtg., derate to 1.75 amps with corresponding reduction in maximum kVa.

### SINGLE-PHASE TYPES

\*In table indicates unit is equipped with 3-wire plug and receptacle. Type 22 uses specially developed coil-winding technique for higher voltage rating without requiring size and weight increase.

Stock No.	Mfr's Type	Fig.	Input Volts	Output			Max. Size (DWH)	Wt., Lbs.	EACH
				Volts	Amps	kVA			
54 A 1667	117BU	B	120	0-120	12.0	1.4	5x5 1/8 x 5 3/4"	11	25.00
54 A 4310	Q117U	B	120	0-120	12.0	1.4	4 7/8 x 4 1/4 x 5 1/16"	11	25.00
54 A 1163	21	C	120	0-140	4.5	0.63	3 3/8 x 3 1/4 x 4 1/2"	6	18.00
54 A 2524	116BU	B	120	0-140	10.0	1.4	5x5 1/8 x 5 3/4"	11	23.00
54 A 4311	Q116U	B	120	0-140	9.0	1.3	4 7/8 x 4 1/4 x 5 1/16"	11	23.00
54 A 1669	126U	D	120	0-140	15.0	2.1	4 1/4 x 6 x 6 3/4"	16	43.00
54 A 4316	Q216U	B	240	0-280	3.5	0.98	4 7/8 x 4 1/4 x 5 1/16"	11	28.00
54 A 3024	22	C	240	0-280	2.25	0.63	4 3/8 x 3 3/4 x 4 3/8"	6	26.00
54 A 1678 X	236B	A	120-240	0-280	10.0	2.8	8 7/8 x 7 3/4 x 6 1/2"	23 3/4	68.00
54 A 1666	*3PN117B	F	120	0-120	12.0	1.4	7 1/4 x 5 1/8 x 6 1/2"	12	41.00
54 A 2536	110B	E	120	0-132	12.25	0.3	2 1/8 x 2 7/8 x 3 1/2"	2.4	12.00
54 A 2525	116B	F	120	0-140	10.0	1.4	7 1/8 x 5 1/8 x 6 1/2"	12	32.00
54 A 2527	216B	F	240	0-280	3.5	0.98	7 1/8 x 5 1/8 x 6 1/2"	12	36.00

## STACO VARIABLE AUTOTRANSFORMERS

Wide selection of variable transformers designed for efficiency, reliability and minimum maintenance. Where possible, all models have epoxy coated coils for increased commutator stability. Optimum core and coil design results in higher current ratings and greater overload capabilities. Units are designed to deliver output voltages of zero to line voltage or zero to 17% above line voltage. Terminals permit connection for increasing voltage with either clockwise or counterclockwise rotation of the knob. Regulation is substantially independent of the load; zero waveform distortion. Experiences only moderate temperature rise during operation. Precious metal plating of commutator surface. Operate at 50-60 Hz, except: \*60 Hz operation only at over voltage.

### 120-VOLT SINGLE-PHASE PANEL MOUNTING

Stock No.	Mfr's Type	Mfr's Old Type	Fig.	Output			Size	Wt., Lbs.	EACH
				Volts	Amps	kVA			
54 A 4307	171	175BU	G	*0-120/132	1.75	.23	2 1/16 x 2 9/16"	3	10.50
54 A 2579	251	250BU	G	*0-120/132	2.5	.33	2 1/16 x 2 9/16"	3.5	11.25
54 A 4306	371	375BU	H	*0-120/140	3.75	.53	3 3/4 x 3 3/4 x 3 1/4"	5	15.75
54 A 1614	501	451	H	0-120/140	5.0	.70	3 3/4 x 3 3/4 x 3 5/16"	5	16.00
54 A 1967	601	151U	H	0-120/140	6.0	.84	4 1/2 x 4 1/2 x 3 1/16"	6	21.00
54 A 1615	1010	1000	K	0-120/140	10.0	1.4	5 1/16 x 5 x 3 1/16"	11	21.00

### 120-VOLT SINGLE-PHASE PORTABLES WITH CORD AND RECEPTACLE

Models housed in rugged case and include pilot light, switch, fuse, line cord and plug with matching receptacle. 2PF model is equipped with 2-wire cord, plug and receptacle; 3PN has 3-wire grounded cord, plug and receptacle. \*\*60 Hz only.

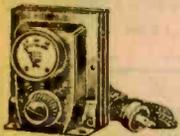
54 A 0977	2PF171	PA-175	J	**0-132	1.75	.23	3 7/8 x 3 7/8 x 3 1/2"	3.5	20.00
54 A 1618	3PN1010	3PN1000	L	0-120/140	10.0	1.4	6 7/8 x 5 x 4 1/16"	12.5	33.00

## OHMITE SMALL VARIABLE TRANSFORMERS

Three-bushing-mounted variable transformers offer six ratings from 1 to 3 amps. Wide frequency range extends from 60 to over 400 Hz on all models. Exclusive adjustable shaft makes it possible to extend shaft from either end. Shaft may also be removed, and a longer one substituted. Also features replaceable snap-in brush contact with built-in heat sink. Diameter (all models): 2 7/8". Length: VT1, 1 1/4"; VT02, 2 3/8"; VT3, 2 1/4".

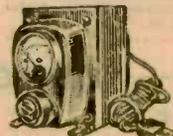
Stock No.	Mfr's Type	Max. Amps	Max. V Input	Output Volts	Wt., Lbs.	EACH
54 A 3800	VT1	1.0	120	0-120/132	1 1/2	9.00
54 A 3801	VT1N	1.2	120	0-120	1 1/2	9.00
54 A 3802	VT02	1.75	120	0-120/132	2 1/4	10.00
54 A 3803	VT02N	2.0	120	0-120	2 1/4	10.00
54 A 3804	VT3	2.6	120	0-120/132	3	11.50
54 A 3805	VT3N	3.0	120	0-120	3	11.50
54 A 3806	6507	Brush Contact Assembly			1 oz.	1.00

### ACME TYPE T8394M VOLTAGE ADJUSTER



Constant duty, tapped-winding transformer for use where line voltage is above or below normal for long periods of time. With regulating switch and built-in voltmeter. Rated 300 watts. Regulating input switch positions for 95, 100, 105, 110, 115, 120, and 125 volt 50-60 Hz. Has secondary receptacle and 8-ft. cord. 4 3/4 x 4 5/8". 54 A 2514. Shpg. wt., 6 lbs. .... 13.40

### ACME TYPE T10306 VOLTAGE ADJUSTER

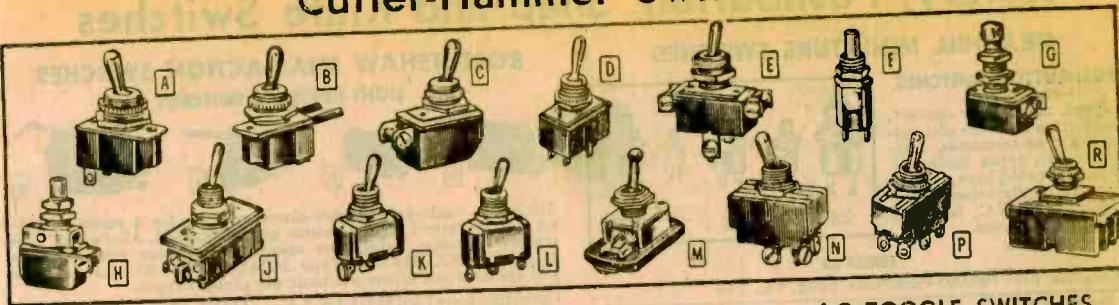


Constant-duty 150 watt step-up/step-down transformer. Built-in voltmeter shows secondary output. Primary winding tapped for 65, 75, 90, 115, 130, 145 volts, 50-60 Hz. Nonaging silicon steel laminations. Coils impregnated with high dielectric insulating material. With 8' cord, plug, output receptacle. 4 1/4 x 4 1/4 x 4 1/4". Mtg. center, 5 1/4 x 3 1/4". 54 A 2501. Shpg. wt., 7 lbs. .... 20.80

Allied handles the entire line of Staco and Superior variable transformers, and can supply you promptly with any model.

If you need a transformer not listed, simply contact Allied for complete price and delivery information.

# Cutler-Hammer Switches



## AC-DC PUSHBUTTON AND TOGGLE SWITCHES

### LIGHT-DUTY TYPES

Convenient one-hole-mounting switches for installation on flat surfaces. Phenolic case. 1/2" dia. threaded stem; 1 1/2" stem length, except 1/4", 16" wire leads. Screw terminals—others solder lug terminals. U.L. Recog., C.S.A. Listed. Av. wt., 3 oz.

SPST					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4527	8280K14*	A	3		.70
56 A 4500	8280K16	A	3		.70
56 A 4784	8290K16†	B	3		.84
56 A 4786	8295K8;	C	3		.84
56 A 4508	8381K8	B	6	3	.80
56 A 4789	8391K8†	C	6	3	.94
56 A 4791	8396K8;	C	6	3	.94

SPDT					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4528	8282K12*	D	3	1	.88
56 A 4501	8282K14	D	3	1	.88

DPST					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4529	8360K6*	D	3		1.25
56 A 4502	8360K7	D	3		1.25
56 A 4792	8370K7	D	6	3	1.35
56 A 4793	8372K7†	D	6	3	1.64

DPDT					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4530	8363K6*	D	3		1.44
56 A 4503	8363K7	D	3		1.44
56 A 4543	8365K7†	E	3		1.90
56 A 4632	8373K7	D	6	3	1.55
56 A 4795	8375K7†	E	6	3	1.99

### PUSHBUTTON AC-DC TYPES

Momentary-contact. For controlling current by opening or closing of a door—i.e., operate lights in refrigerators, closets, etc. Have solder lugs except \*screw-type. Black button, except 1/2" metal button. †Push-button type. U.L. Recog. Av. wt., 3 oz.

75 Amp @ 125 V—25 Amp @ 250 V					
Stock No.	Mfr's Type	Fig.	Action	Lgth. In.	EA.
56 A 4548	8411K11	F	SPST n.o.	1 1/2	.47
56 A 4631	8411K13	F	SPST n.o.	1 1/2	.47
56 A 5988	8411K7*	F	SPST n.c.	1 1/2	.40
56 A 4547	8411K8	F	SPST n.c.	1 1/2	.34

3 Amps @ 125 V—1 Amp @ 250 VAC					
Stock No.	Mfr's Type	Fig.	Action	Lgth. In.	EA.
56 A 4541	8440K3*	F	SPST n.o.	1 1/2	1.11

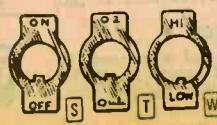
6 Amps @ 125 V—3 Amps @ 250 V					
Stock No.	Mfr's Type	Fig.	Action	Lgth. In.	EA.
56 A 4691	7196K1*	H	SPST n.o.	1 1/2	1.55
56 A 4519	7208K4*	G	SPST	1 1/2	1.20
56 A 3828	8442K4†	G	SPST n.o.	1 1/2	1.06

15 Amps @ 125 V—10 Amps @ 250 VAC					
Stock No.	Mfr's Type	Fig.	Action	Lgth. In.	EA.

### ON-OFF SWITCH PLATES

Designed to fit slot in threaded stem of toggle switches. 1/2" dia. hole. Shpg. wt., per pkg., 4 oz.

Stock No.	Mfr's Type	Fig.	Pkg. of 10
56 A 5613	827-228F3	S	.65
56 A 5614	827-228F13	T	.65
56 A 5615	827-228F16	W	.65



### AC-DC LIGHT-DUTY TYPES—PLAS TIC

Rugged, all-plastic construction for resistance to moisture. Have maximum insulation for added safety. Fast operating. Solder-lug terminals; 1/2" stem length. U.L. Recog., C.S.A. Listed. Av. wt., 3 oz.

SPST					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V/250V		
56 A 5664	8281K16	A	6	3	.80

SPDT					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 5665	8282K18	D	3	1	.88

DPST					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 5666	8360K12	D	3	1	1.25

### HEAVY-DUTY AC-DC TYPES

For control of moderate horsepower motors, etc. Have screw terminals; 1 1/2" threaded stem and length. U.L., except 8825K5 (Fig. P), which is JAN S-23; \*rated 20 amps @ 28 VDC. Wt., 3 oz.

DPST					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4545	7320K3	16	8	1.40	
56 A 4516	7360K8	20	10	2.41	
56 A 4517	7402K4	1 1/2 hp	20	3.24	

SPST					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4520	7321K3	16	8	1.50	
56 A 4714	7361K5	20	10	2.52	

DPDT					
Stock No.	Mfr's Type	Fig.	Amperes		EACH
			125V	250V	
56 A 4715	8690K2	15	10	5.05	
56 A 4555	8825K5	*20	10	1.79	

### "ROCKETTE" APPLIANCE SWITCHES

Actuator is of molded white nylon. 1 1/4 x 1 1/2 x 1 1/2", including flanges and terminals. Quick-connect "Faston" terminals, except \*screw. All AC 2-position except †center-off. U.L. Recog. Wt., 3 oz.



15 Amps @ 125 V—10 Amps @ 250 V				
Stock No.	Type	Action	EACH	
			125V	250V
56 A 5699	8144K21A1M52	SPST	.74	
56 A 5339	8144K21A1M50*	SPST	.81	
56 A 5704	8144K20A1M52	SPDT†	.84	
56 A 5718	8142K21E6M52*	DPST	1.13	
56 A 5540	8142K21E6M50	DPST	1.29	
56 A 5712	8142K20E6M52	DPDT†	1.38	

## AC TOGGLE SWITCHES

### LIGHT-DUTY TYPES

Slow make and break switches rated 6 amps @ 125 volts and 3 amps @ 250 volts, except Type 7140K6, 3 amps @ 125 volts. \*Center-off positions. Have threaded stem diameter of 1/2"; stem length, 1 1/2", except †1 1/2". Solder terminals, except †screw terminals. U.L. Recog. Av. shpg. wt., 3 oz.

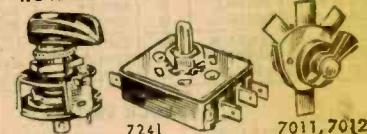
Stock No.	Mfr's Type	Fig.	Action	EACH	
				125V	250V
56 A 4640	7580K4†	K	SPST	.74	
56 A 4641	7580K6	K	SPST	.63	
56 A 4522	7140K6†	M	SPDT	.77	
56 A 4642	7581K4†	L	SPDT	.84	
56 A 4643	7581K6*	L	SPDT	.68	
56 A 4644	7582K4†	L	SPDT	.84	
56 A 4645	7582K6	L	SPDT	.68	
56 A 4646	7590K4†	N	DPST	1.04	
56 A 4647	7590K6	N	DPST	.91	
56 A 4648	7591K4†	P	DPDT	1.33	
56 A 4649	7591K6*	P	DPDT	1.02	
56 A 4689	7592K4†	P	DPDT	1.33	
56 A 4690	7592K6	P	DPDT	1.02	

### STANDARD-DUTY TYPES

For appliances, instruments, small motor-driven devices. Rated 10 A at 250 V and 15 A at 125 VAC. \*Center-off. 1 1/2" threaded stem, 1 1/2" long. †Screw terminals. †Solder terminals. Wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Action	EACH	
				125V	250V
56 A 4591	7500K14†	K	SPST	.84	
56 A 4534	7501K13†	K	SPST	.73	
56 A 4592	7502K13†*	L	SPDT	.99	
56 A 4796	7503K13*	L	SPDT	.84	
56 A 4593	7504K4†	L	SPDT	.99	
56 A 4536	7505K4†	L	SPDT	.84	
56 A 4594	7560K5†	N	DPST	1.33	
56 A 4537	7561K4†	N	DPST	1.12	
56 A 4595	7562K4†*	P	DPDT	1.63	
56 A 4539	7563K4*	P	DPDT	1.33	
56 A 4595	7564K6†	P	DPDT	1.63	
56 A 4538	7565K5†	P	DPDT	1.33	
56 A 4543	7611K2;	R	3PST	2.18	
56 A 4523	7613K2†*	R	3PDT	2.68	
56 A 4798	7615K2†	R	3PDT	2.68	

### ROTARY AC-DC AND AC SWITCHES



For fans, air conditioners, etc. Types 7011K1 and 7012K4 are AC-DC; have screw terminals; 3/8" stem. Types 8122K4 and 8123K4 are for AC; have solder-lug terminals; 1/2" stem. 7241K2 is for AC; has "quick connect" 1/4" terminals; 3/8" stem length. U.L. Recog., C.S.A. Listed. Av. shpg. wt., 6 oz.

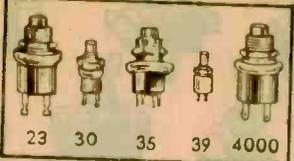
Stock No.	Mfr's Type	Action	Amperes		EA.
			125V	250V	
56 A 5658	7011K12	on, 1 off	5	2	1.63
56 A 5659	7012K43	on, 1 off	5	2	1.67
56 A 5660	8122K42	on, 1 off	3		.59
56 A 5661	8123K43	on, 1 off	3		.64
56 A 5662	7241K2	DPDT	1 hp	15	1.73

# Rotary, Pushbutton, Snap and Knife Switches

## GRAYHILL MINIATURE SWITCHES

### PUSHBUTTON SWITCHES

Rugged, momentary contact, pushbutton switches with solder-lug type terminals. Normally open types (indicated by N.O. in table) have red buttons. Normally closed types (indicated by N.C. in table) have black buttons.



#### SERIES 23

Miniature, over 500,000 operations. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4970	23-1	SPST N.O.	1/4	1 1/2 x 1/2"	2 3/64"	1.10

#### SERIES 30

Subminiature, over 1 million operations. Wt., 2 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4967	30-1	SPST N.O.	1	1" x 3/8"	1 7/64"	.95
56 A 4966	30-2	SPST N.C.	1	1" x 3/8"	1 7/64"	.95

#### SERIES 35

Miniature, over 100,000 operations. Wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4964	35-1	DPST N.O.	1/2	1 1/2 x 5/16"	3/16"	1.40

#### SERIES 39

Ultraminiature, over 1 million operations. Wt., 2 oz.

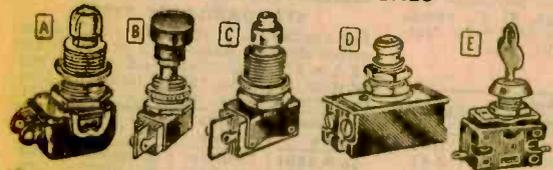
Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4968	39-1	SPST N.O.	1/2	3/64 x 1/4"	1 1/64"	1.15

#### SERIES 4000

Silent action, over 100,000 operations. Wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4870	4001	SPST N.O.	1	1 1/2 x 5/16"	3/16"	1.00
56 A 4871	4002	SPST N.C.	1	1 1/2 x 5/16"	3/16"	1.00

## ARROW-HART SWITCHES



Momentary contact types except "push-on, push-off." All for 125 V AC-DC, except "A" only. Have 1/32" dia. shanks; 5/16" long, except Type 80630, 3/16" long. Have solder lug terminals, except "F" screw-type. 3 oz.

Stock No.	Mfr's Type	Fig.	Action	Button Color	Amps	EACH
56 A 4159	3391-GL†	B	SPST-N.O.	Black	1	.98
56 A 3830	3391-GL†	B	SPST-N.O.	Red	1	.98
56 A 4124	3392-AE†	B	SP2-N.C.	Black	1	1.19
56 A 4129	3392-AE†	B	SP2-N.C.	Red	1	1.19
56 A 3846	80541-E†	A	SPST-N.O.	Black	3	.98
56 A 3847	80541-ER†	A	SPST-N.O.	Red	3	.98
56 A 4152	80630‡	D	DPST-N.O.	Nickel	6	2.05
56 A 4160	86710	C	SPST*	Nickel	3	1.24
56 A 4161	86710-C	B	SPST*	Red	3	1.46
56 A 4162	86710-C	B	SPST*	Black	3	1.46
56 A 4163	80863-R	D	DPST	Nickel	8	2.14
56 A 4187	3599-GF	L	DPDT	Red	3	2.41
56 A 4188	3599-GF	D	DPDT	Black	3	2.41

### LOCK SWITCHES

- Type 81715-L. For use on power tools, appliances, etc. SPST contacts, rated 3 amps @ 250 volts; 6 amps @ 125 volts. Sleeve diameter, 1/2". Fits panels to 3/32" thick. 1 1/4 x 2 3/32". Switch must be open to remove key. Shpg. wt., 4 oz.
  - 56 A 4156.....2.13
  - 56 A 4128. Extra Key. For above. Wt., 1 oz.....2.0
- Type 81715-LE. Same as 81715-L switch above, but key is removable in open or closed position. Wt., 4 oz.
  - 56 A 4158.....2.13
  - 56 A 3976. Extra Key. For above. Wt., 1 oz.....2.0

### F TYPE 41047 ROTARY SWITCH

Designed for replacement applications in lamps and other medium current AC-DC appliances. SPST action. Rated 3 amps at 125 V; 1 amp at 250 V. Has 6" leads for easy installation. 3/8" diameter, with 5/16" shank. Shpg. wt., 2 oz.

Stock No.	EACH
56 A 4165	.77

## ROBERTSHAW SNAP-ACTION SWITCHES

### LIGHT-PRESSURE SWITCHES

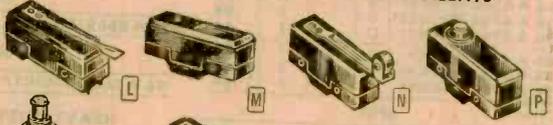


Miniature single-pole, double-throw switches for a variety of applications. Perfect for jobs where space is limited. Also when "pre-travel" distance, weight, or operating force are critical. Type 1CMD1-2AXX-A22 and Type 2CMD1-2AXX-A24 have a wire leaf actuator; all others are basic pin plunger types.

Operating force for 1MD1-1A, 3-6 oz.; 2MD3-1A, 6-10 oz.; 1CMD1-2AXX, 20-27 gr.; 2CMD1-2AXX, 33-44 gr.; 1CMD1-2AXX-A22, 2.5 gr.; 2CMD1-2AXX-A24, 4 gr. Pre-travel for 1MD1-1A, 2MD3-1A, 1/2"; 1CMD1-2AXX, 2CM1-2AXX, 0.040". Amp ratings for 125-250 volts AC are 3 amps except "10 amps. U.L. Component Program-Recognized. Shock resistant. Solder terminals. Av., 4 oz.

Stock No.	Mfr's Type	Fig.	Basic Switch Size	EACH	
				1-9	10-19
56 A 5009	1MD1-1A*	G	1 1/2 x 3/32 x 5/16"	1.32	1.19
56 A 5019	2MD3-1A*	G	1 1/2 x 3/32 x 5/16"	1.32	1.19
56 A 5020	1CMD1-2AXX	H	1 1/2 x 3/32 x 1 3/64"	1.32	1.19
56 A 5021	2CMD1-2AXX	H	1 1/2 x 3/32 x 1 3/64"	1.32	1.19
56 A 5024	1CMD1-2AXX-A22	K	3/32 x 3/32 x 1 1/8"	1.63	1.47
56 A 5030	2CMD1-2AXX-A24	J	2 3/32 x 2 3/32 x 1 1/8"	1.63	1.47

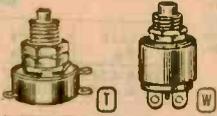
### B SERIES SWITCHES WITH MICRO EQUIVALENTS



Long-life replacements for micro-switch types shown in table below. All are SPDT with step base design and screw terminals, except Type BRD2-5L, which has flat base and solder terminals. Contacts rated 1/2 HP @ 125 V AC, 1/4 HP @ 250 V AC; and 0.5 amp at 120 volts DC. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Micro Equiv.	Fig.	Basic Size	EACH
56 A 3968	BRD2-5L	BZ-2RL	L	2 1/2 x 1 1/2 x 1 1/16"	1.85
56 A 3969	BRD2-1A-1S	BZ-2R-A2	M	1 1/2 x 1 1/2 x 1 1/16"	1.75
56 A 3970	BRD2-2M-1S	BZ-2RL-A2	N	2 1/2 x 2 1/2 x 1 1/16"	2.50
56 A 3972	BRD2-70-1S	BZ-2RD-A2	P	1 1/2 x 1 1/2 x 1 1/16"	2.15
56 A 3973	BRD2-1P-1S	BZ-2RQ1-A2	R	1 7/8 x 1 1/2 x 1 1/16"	3.65
56 A 3971	BRD2-5L-1S	BZ-2RL-A2	S	2 1/2 x 2 1/2 x 1 1/16"	2.00

### SNAP-ACTION PUSHBUTTON SWITCHES



Momentary contact pushbutton switches. Type 3D05-5P, normally open; 3DC5-5P, normally closed; QPD-5031 wires either way. All have overtravel plungers with solder terminals. Amp ratings at 125 VAC. Avg. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Action	Size	Amps	EACH
56 A 5328	QPD-5031	T	SPDT	1 5/8 x 2 3/32" dia.	10	3.25
56 A 5028	3D05-5P	W	SPST	1 3/8 x 1 1/8" dia.	12	1.87
56 A 5029	3DC5-5P	W	SPST	1 3/8 x 1 1/8" dia.	12	1.87

### EAGLE KNIFE SWITCHES



Rugged, low-cost knife switches for heavy-duty applications in power circuits. For motors, transmitters, mixing machines, or stage lighting. Provide smooth, easy action. All units rated 25 amps, 125 VAC. Have screw terminals and bakelite base except Type 617, porcelain. Av. wt., 2 oz.

Stock No.	Mfr's Type	Action	Size	EACH
56 A 4884	612	SPST	1 5/8 x 1"	.28
56 A 4886	613	SPDT	2 5/8 x 1"	.32
56 A 4887	614	DPST	1 3/4 x 1 1/2"	.44
56 A 4888	615	DPDT	2 5/8 x 1 5/8"	.48
56 A 4889	617	SPST	3 1/8 x 1 1/8"	.42

### EAGLE FLUSH-MOUNT PUSHBUTTON SWITCH



Type 188. Momentary contact. 6-leaf spider secures switch in 3/8" hole. Ideal for signaling bells, lights, etc. 5/16" shank depth, 2 5/8" overall. Screw terminals. Contacts are SPST, normally open. Pearl button. Shpg. wt., 2 oz.

Stock No.	EACH
56 A 4890	.46

# Switches by Switchcraft

## "LITTEL" SWITCHES



Miniature, non-locking pushbutton type switches for limited space applications. One-piece button and shaft. Red or black button.  $\frac{1}{8}$ " N.O. means normally open; N.C. means normally closed; Nickel silver contacts; spring sections are insulated,  $\frac{3}{4}$ " threaded stem;  $\frac{1}{4}$ " long. For low-level currents only. 3A @ 115 VAC non-inductive. Complete with hardware. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Button Color	Action	EACH
56 A 4944	101	Red	SPST N.O.	.60
56 A 4945	102	Red	SPST N.C.	.60
56 A 4946	103	Black	SPDT	.69
56 A 4947	201	Red	SPST N.O.	.60
56 A 4948	202	Black	SPST N.C.	.60
56 A 4949	203	Black	SPDT	.69

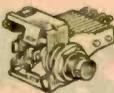
## ILLUMINATED "LITTEL-LITE" SWITCHES

Similar to above, but clear plastic pushbutton and shaft illuminated by 6 or 28 V. lamp (not supplied, see below right). 3 A, 300 W @ 115 VAC, maximum non-inductive load. With 4 color chips (red, amber, green, yellow). Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Action	EACH
56 A 4677	211S	SPST N.O.	1.26
56 A 4609	213S	SPDT	1.50

## ILLUMINATED "NF-LITE" SWITCHES

Series 4100. Pushbutton types indicate switching and circuit functions. Rated 3 amps, 300 W. max. AC non-inductive. With 4 color chips (red, amber, green, yellow). Need  $\frac{1}{4}$ " -  $\frac{3}{16}$ " behind panel; mount in  $\frac{1}{2}$ " hole in panels up to  $\frac{1}{4}$ " thick. Less lamp. See lamps, below right. Shpg. wt., 4 oz.



Stock No.	Mfr's Type	Action	EACH
56 A 4613	4106	DPDT	1.56
56 A 4614	4109	3PDT	2.01

## SWITCH WRENCHES

Well constructed special wrenches designed to fit knurled or milled-edge locknuts furnished with toggle, lever and button switches and jacks. Adjustable sleeve on shaft holds nuts tightly. Rugged knurled handle provides sure, firm grip and assures years of dependable service. Shpg. wt., 10 oz.



Stock No.	Mfr's Type	Nut Size	EACH
56 A 4605	A-1070	$\frac{15}{32}$ "-32	4.50
56 A 4606	A-1071	$\frac{1}{4}$ "-32	4.50

## "CORDETTE" CONTROL SWITCH



921 and 921K "CORDETTE"  
921 accepts standard phono plug. 921K with 6 ft cable. Pre-stripped and tinned.

Momentary-action pendant switch. Designed to provide remote switching of electrical devices. Fits comfortably in the hand, yet rugged enough for critical applications. One-piece body of high-strength molded plastic, encased to protect switching contacts.

Thermosetting plastic insulation. One-amp SPST circuit with integral brass, hard-gold-plated 500-mA contacts. 50 watts max., AC noninductive load. For low-voltage circuits.

Type 921 has Switchcraft Phono-Jax output molded direct to the body. Industry standard jack accepts most phono plugs; molded cable assemblies such as Switchcraft Part Nos. 25AC84, 25AF30, 25AC82. (See page 361 for cable assemblies).

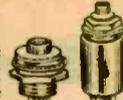
Type 921-K has 6-ft., 2-conductor unshielded cable, stripped and tinned.  $1\frac{1}{2}$ "x $2\frac{1}{2}$ ".

Stock No.	Mfr's Type	Wt. Oz.	EACH
56 A 5799	921	1	2.55
56 A 5800	921-K	4	3.00

## TYPE 900 MINIATURE SPDT

### "BUTTON" SWITCHES

Well-designed long-life momentary-action pushbutton switches in metal housing. Each type has black plastic button. Type 913 is  $\frac{1}{2}$ " long, fits  $\frac{1}{4}$ " hole, and provides behind-panel mounting. Type 933 is  $\frac{1}{4}$ " long, fits  $\frac{1}{4}$ " hole, and mounts from front. Both rated at 250 mA, 30 watts maximum, AC non-inductive. Both are SPDT. Shpg. wt., 2 oz.



56 A 5418, Type 913	.87
56 A 5420, Type 933	.93

## REMOTE-CONTROL SPDT PUSHBUTTON SWITCH

Useful hand-held switch has many fine applications such as remote control of recorders, lights, counters, etc. Momentary contact, SPDT switch in a nickel-plated sleeve. Rated 250 mA, 30 watts max. AC non-inductive.  $1\frac{1}{2}$ "x $2\frac{1}{2}$ " long. Shpg. wt., 4 oz.



Stock No.	Mfr's Type	Button Color	EACH
56 A 5422	E903	Red	1.41
56 A 5424	E913	Black	1.41

## "LEV-R" SWITCHES

Series 3000. Compact design requires only half the space needed for a lever switch. Silver contacts rated at 3 amps, 300 watts max. AC non-inductive load. Non-locking types have spring return.  $\frac{1}{4}$ " mtg. bushing;  $\frac{3}{8}$ " wide;  $2\frac{1}{4}$ " behind panel;  $\frac{1}{8}$ " mtg. hole. Type 3034 closes either of two circuits keeping the other open. \*Same contact form for both sections on each side of switch. Attractive mounting hardware, and removable black plastic knob. Shpg. wt., 3 oz.



### TWO-POSITION TYPES

Mfr's Type	Stock No.		Action	EACH
	Locking Type	Non-Locking Type		
3001	56 A 4471	56 A 4465	SPST	1.35
3003	56 A 4472	56 A 4466	SPDT	1.62
3004	56 A 4473	56 A 4467	DPST	1.77
3006	56 A 4474	56 A 4468	DPDT	1.95
3009	56 A 4484	56 A 4469	3PDT	2.52

### \*THREE-POSITION TYPES

3033	56 A 4475	56 A 4469	SPDT	1.77
3034	56 A 4459	56 A 4458	DPDT	1.83
3036	56 A 4476	56 A 4478	DPDT	2.04
3037	56 A 4476	56 A 4470	DPDT	2.10

## SERIES 41000 LEVER SWITCH

- Requires Just  $2\frac{1}{2}$ " Behind Mounting Panel
- Offers Long-Life Reliability, Multiple Circuitry
- Smallest Telephone-Type Lever Switch Available

Telephone-type lever switch with welded cross-bar palladium contacts rated 3 amps, 200 watts maximum, AC non-inductive load. For ground support, data processing, control panel, test, communications, instrumentation. Features "U" shaped frame which includes "Can't Cheat" detent guide to prevent accidental actuator bypass of a switching position. Built-in phenolic damping block minimizes transient leaf spring travel. Special long spring life. Frame provides integral ground terminal. Mounts on  $\frac{3}{8}$ " centers, in  $1\frac{1}{2}$ " hole size. (Including knob). Mounts on  $\frac{3}{8}$ " centers. Requires  $2\frac{1}{2}$ " behind mounting panel. Smart  $\frac{1}{2}$ "x $\frac{3}{4}$ "x $\frac{3}{8}$ " knob. In 2- or 3-position types, locking or non-locking. Contact assemblies refer to illustrations at right. \*Indicates 3-position switch contacts are for both Pos. 1 and 2. Av. shpg. wt., 1 oz.

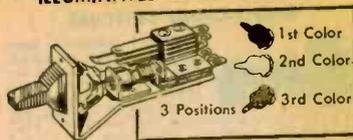
### TWO-POSITION SWITCHES

Mfr's Type	Stock No.		Contact Assembly	EACH
	Locking Type	Non-Locking Type		
41203	56 A 5775	56 A 5776	1-C	2.52
41206	56 A 5777	56 A 5778	2-C	3.15
41208	56 A 5779	56 A 5780	4-A	3.48
41212	56 A 5781	56 A 5782	4-C	4.26

### THREE-POSITION SWITCHES

41306	56 A 5783	56 A 5784	1-C*	3.15
41308	56 A 5785	56 A 5786	2-A*	3.48
41312	56 A 5787	56 A 5788	2-C*	4.26
41324	56 A 5789	56 A 5790	4-C*	6.30

## ILLUMINATED LEVER SWITCHES



Series 25000. Illuminated color-coded switches indicate function and or switch position. Smooth nylon-roller action of the lever assures reliability, dependability, and long life. Replace switch and up to 3 indicator lamps, saving space and wiring costs. Nickel-silver springs. Silver contacts: 3 amps, 300 watts max., AC non-inductive.  $1\frac{1}{2}$ " high,  $3\frac{1}{4}$ " wide, and  $2\frac{1}{4}$ " behind panel. With 6-volt lamp and 6 color chips (blue, red, amber, yellow, green, white). \*Same contact form for both sections on each side of switch: 1-A for Type 25201, 25304; 1-C for 25306; 2-A for 25308; 2-C for 25206, 25312; 3-C for 25209. Shpg. wt., 3 oz.

### TWO-POSITION TYPES

Mfr's Type	Stock No.		Action	EACH
	Locking Type	Non-Locking Type		
25201	56 A 6280	56 A 6272	SPST	2.76
25206	56 A 6282	56 A 6274	DPDT	3.45
25209	56 A 6283	56 A 6275	3PDT	3.96

### \*THREE-POSITION TYPES (Center-Off)

25304	56 A 6284	56 A 6276	SPST	3.12
25306	56 A 6285	56 A 6277	SPDT	3.45
25308	56 A 6286	56 A 6278	DPST	3.81
25312	56 A 6287	56 A 6279	DPDT	4.14

## "FF" PUSHBUTTON SWITCHES

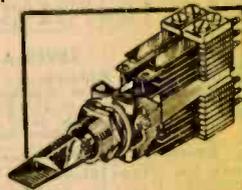
Non-locking type with rugged flat frame. Fine silver contacts rated 3 amps, 300 W. max. AC non-inductive. Insulated springs are form-free at flex point. One-piece non-locking molded shaft and (black) button allows installation into mounting panel without removing button.  $\frac{1}{2}$ " dia. mtg. shank is  $\frac{1}{8}$ " long. With locknut and washer. Shpg. wt., 3 oz.



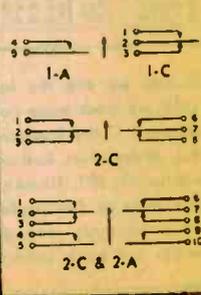
Stock No.	Mfr's Type	Action	EACH
56 A 4994	1001	SPST N.O.	.78
56 A 4996	1003	SPDT	.87
56 A 4997	1004	DPST N.O.	.96
56 A 4999	1006	DPDT	1.11
56 A 4969	1009	3PDT	1.59

## LAMPS FOR ILLUMINATED SWITCHES

For use with "Littel-Lite" and "NF-Lite" illuminated pushbutton switches, and Series 25000 illuminated lever switches. Wt., 2 oz.  
60 A 7359, Type 1768. 6-volt.....92  
60 A 7126, Type 336. 28-volt.....1.54



### Functional Diagrams



# Mallory and Centralab Switches

## MALLORY GANG SWITCHES AND DIAL PLATES

### SINGLE-GANG SWITCHES



Compact, enclosed, low-voltage rotary switches. For bandswitching in receivers, transmitters, etc. Have 2" notched shaft  $\frac{1}{8}$ " threaded bushing. Long. Two base diameters, 1 1/4" and 1 1/2" size has 30° indexing. 1 1/4" size, 20° 1 1/4" types have adjustable stops. Breaking current rating: 500 VDC or VAC. Max. breaking current into res. load: 125 mA @ 300 VDC, 3A @ 6 VDC; 200 mA @ 300 VAC, 5A @ 6 VAC. For use with dial plates listed in right hand column. \*Total Poles. Av. shpg. wt., 4 oz.

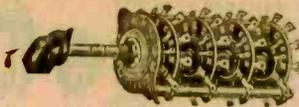
### SERIES 3100J SHORTING TYPE

Stock No.	Mfr's Type	* Positions	Base Dia.	EACH
56 A 4300	3115	1	5 1/4"	1.13
56 A 4301	3112	1	12 1/2"	1.17
56 A 4302	3122	2	2 1/2"	1.13
56 A 4303	3123	2	3 1/2"	1.13
56 A 4304	3126	2	6 1/4"	1.13
56 A 4305	3134	3	4 1/2"	1.17
56 A 4306	3142	4	2 1/2"	1.17
56 A 4307	3143	4	3 1/2"	1.17
56 A 4308	3117	1	2 1/2"	1.73
56 A 4311	3163	6	2-3	1.83

### SERIES 3200J NON-SHORTING

Stock No.	Mfr's Type	* Positions	Base Dia.	EACH
56 A 4350	3215	1	5 1/4"	1.13
56 A 4351	3212	1	12 1/2"	1.17
56 A 4352	3222	2	2 1/2"	1.13
56 A 4353	3223	2	3 1/2"	1.13
56 A 4354	3226	2	6 1/4"	1.13
56 A 4355	3234	3	4 1/2"	1.17
56 A 4356	3242	4	2 1/2"	1.17
56 A 4357	3243	4	3 1/2"	1.17
56 A 4358	3217	1	2-17	1.73
56 A 4359	3229	2	2-9	1.73
56 A 4360	3236	3	2-6	1.83
56 A 4361	3263	6	2-3	1.83

### MULTI-GANG SWITCHES



Versatile switches recommended for test equipment, meter switching and all types of low current applications. Heavily silver-coated contacting members have self-cleaning, contact-wiping action. 1 fixed and 1 adjustable stop, solid silver rotor contact slugs and phosphor-bronze springs. 3- and 4-gang types spaced 1"; all others, 1/2", 2" notched shaft. Shorting types make before break. Require 1/4" mtg. hole. With bar knob and hardware, less mtg. plate (use 56 A 4600 C plates at right). \*Additional "off" positions with all circuits open. †Total Gangs. Av. shpg. wt., 8 oz.

### SERIES 1200L SHORTING TYPE

Stock No.	Mfr's Type	† Total Poles	Pos./Pole	EACH
56 A 4201	1211L	1	1	2.11
56 A 4206	1221L	2	2	2.33
56 A 4207	1225L*	2	4	2.5
56 A 4214	1241L	4	4	2.11

### SERIES 1300L NON-SHORTING TYPE

Stock No.	Mfr's Type	† Total Poles	Pos./Pole	EACH
56 A 4251	1311L	1	1	2-11
56 A 4252	1315L*	1	2	2-5
56 A 4253	1313L	1	3	2-3
56 A 4256	1321L	2	2	2-11
56 A 4257	1325L*	2	4	2-5
56 A 4258	1323L*	2	6	2-3
56 A 4261	1311L	3	3	2-11
56 A 4264	1341L	4	4	2-11
56 A 4265	1345L*	4	8	2-5
56 A 4266	1351L	5	5	2-11
56 A 4267	1361L	5	10	2-6
56 A 4268	1361L	6	6	2-11

### DIAL PLATES

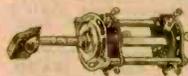


Wide selection of dial plates for switches, potentiometers and rheostats. Designed for use with Series 1200L, 1300L, and for 3100J and 3200J with 1 1/4" bases. Etched aluminum. Black bakulium. Shpg. wt., 1 oz.

Type	Marking	Type	Marking
372	1 to 2	382	1 to 2
373	1 to 3	383	On 1 to 3
374	1 to 4	384	Off 1 to 4
375	1 to 5	385	Off 1 to 5
376	1 to 6	386	Off 1 to 6
377	1 to 7	387	Off 1 to 7
378	1 to 8	388	Off 1 to 8
379	1 to 9	389	Off 1 to 9
381	1 to 10	390	Off 1 to 10
381	1 to 11		

56 A 4600 C, Specify Type. Each .21

### 151L "HAMSWITCH"



For switching a single meter between 1 to 5 circuits. 2 sections, 5 positions - 1 pole per section. Non-shorting; 2 1/4" spacing between sections; 60° indexing. Rated 1000 VAC, 150V VDC. 3 1/2" mtg. depth. 1/4"x3/4" bushing, 2 1/4" shaft. With knob, nut, lockwasher. Shpg. wt., 6 oz.

56 A 4318. Each 3.00

### 13124L 24-POINT TAP SWITCH



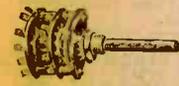
Single circuit, 24 position non-shorting switch. 3/4" bushing. 2" grooved shaft. Knob, dial plate, hardware. Shpg. wt., 6 oz.

56 A 4295. Each 3.07

## CENTRALAB ROTARY AND LEVER SWITCHES

### MINIATURE PHENOLIC SWITCHES

PA-1000 Series. Rated 2.75 amps @ 15 VDC, 230 mA @ 115 VAC. 30° indexing adjustable stop. 1 1/2"x1 1/4" diameters; 1/2" spacing between sections. Shaft, 2 1/4" FMS 1/4"; bushing 3/8"x3/4". With 1 1/4" pointer knob and mtg. hdwe. 3 oz.



Shorting				Non-Shorting			
Stock No.	Type	Stock No.	Type	Sections	Total Poles	Pole Pos.	EACH
56 A 5050	1000	56 A 5065	1001	1	1	2-11	2.08
56 A 5051	1002	56 A 5066	1001	1	2	2-5	2.08
56 A 5052	1004	56 A 5067	1005	2	2	2-11	2.96
56 A 5053	1006	56 A 5068	1007	1	3	2-3	2.08
56 A 5054	1008	56 A 5069	1009	3	3	2-11	3.76
56 A 5055	1010	56 A 5070	1011	1	4	2	2.08
56 A 5056	1012	56 A 5071	1013	2	4	2-9	2.96
56 A 5059	1018	56 A 5074	1019	2	6	2-3	2.96
56 A 5060	1020	56 A 5075	1021	3	6	2-5	3.76
56 A 4975	1024	56 A 5077	1025	2	8	2	2.96
56 A 5063	1026	56 A 5078	1027	4	8	2-5	4.38

### LEVER-ACTION PHENOLIC SWITCHES

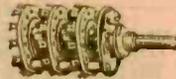
Budget-priced phenolic-insulated switches featuring nylon rotor design. Rated 2.75 amps @ 15 VDC, 230 mA @ 115 VAC. Silver-plated clips and contacts. 1 1/2"x1 1/4" (1 1/4" behind panel). Mtg. bracket has two 6/32 tapped holes. With knob, hardware. 4 oz.



Shorting		Non-Shorting		Poles	Positions	Action	EACH
Stock No.	Type	Stock No.	Type				
56 A 4021	1452	56 A 4026	1454	2	3	Positive	1.60
56 A 4023	1466	56 A 4027	1455	2	3	Moment.	1.60
56 A 4025	1456	56 A 4028	1467	2	3	Pos./Mom.	1.60
56 A 4024	1459	56 A 4030	1457	4	2	Moment.	1.78
		56 A 4029	1458	4	2	Positive	1.78

### MINIATURE STEATITE SWITCHES

PA-2000 Series. Ceramic rotary switches. Rated 2.75 amps @ 15 VDC, 230 mA @ 115 VAC. 1 1/2"x1 1/4" dia.; 1/2" spacing between sections. 30° indexing. Shaft 2 1/4" FMS long, 1/4" dia.; bushing 3/8" x 3/4" long. 1/2" long. \$2.042 pointer knob, hdwe. \*Switch sections. †Total Poles. Av. wt., 3 oz.



Shorting			Non-Shorting			
Stock No.	Type	Stock No.	Type	* Positions	Pole Pos.	EACH
56 A 5095	\$2042	56 A 4921	2001	1	1	2-10
56 A 4901	2000	56 A 4922	2003	1	2	2-6
56 A 4902	2004	56 A 4923	2005	2	2	2-12
56 A 4903	2006	56 A 4924	2007	1	3	2-5
56 A 4904	2008	56 A 4925	2009	3	3	2-12
56 A 4905	2010	56 A 4926	2011	2	4	2-6
56 A 4906	2012	56 A 4927	2013	4	5	2-12
56 A 4908	2016	56 A 4928	2015	1	5	2-3
		56 A 4929	2017	5	5	2-12
56 A 4910	2020	56 A 4930	2019	1	6	2-5
56 A 4911	2022	56 A 4931	2021	2	6	2-5
56 A 4912	2024	56 A 4932	2023	3	6	2-6
56 A 4913	2026	56 A 4933	2025	6	6	2-12
		56 A 4934	2027	4	8	2-6
56 A 4916	2030	56 A 4935	2029	3	9	2-5
		56 A 4936	2031	2	10	2-3
		56 A 4940	2039	1	15	2-3
		56 A 4941	2041	3	18	2

### UNIVERSAL AND INTERCOM SWITCHES

Phenolic-insulated rotaries. Cadmium-plated. Breakdown 1000 VAC. Rated 2.75 amps at 15 VDC, 350 mA at 115 VAC. Non-shorting; 30° indexing. Shaft, 1 1/2"x1/4" dia. Bushing, 3/4" x 3/4" long. 1" or 1 1/4" behind panel. \$ Positive in 2. spring return in 3rd. With knob. Shpg. wt., 5 oz.

Stock No.	Type	Description	EACH
56 A 4085	1450†	4PDT	1.74
56 A 4087	1451†	3PDT	2.52
56 A 4054	1488†	6P, 3 pos., spring-return	3.78
56 A 4055	1489†	6P, 3 pos.	3.78

Intercom and Radio Switches. Phenolic, cadmium-plated switches. Same ratings and shafts as above. Silver-plated spring brass clips. Both shorting and \*non-shorting types. 1472 is for AM-FM-phono-selector. Av. shpg. wt., 2 oz.

Stock No.	Type	Description	EACH
56 A 4080	1460†	SPST phono-radio switch	1.14
56 A 4081	1461†	SP-3-position selector	1.14
56 A 4082	1462†	DPDT bandswitch	1.14
56 A 4083	1463†	SPDT spring return	1.14
56 A 4084	1464†	DPDT spring return	1.14
56 A 5235	1472†	DP 3 position	1.14

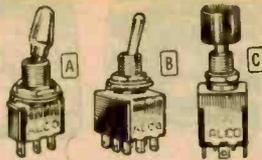
Because we are the largest electronics distributor in the world, we stock more complete lines of the following manufacturers: Cutler-Hammer, George Risk Industries, Ohmite, Alco, Arrow-Hart, Rowan, Centralab, Grayhill, Robertshaw, Switchcraft, JBT, Hamlin. For prompt quantity-price quotations, write us. Our professionally trained staff will promptly and courteously expedite your order. With Allied you always get quick service and low prices.

# Miniature, Slide, Reed and Foot Switches

## ALCOWITCH MINIATURE SWITCHES AND ACCESSORIES

### TOGGLE SWITCHES

• DPDT Only 1/2" Square • Solid Silver Contacts  
Ideal miniature switches for high-density applications where space is at a premium. Meet high standards of quality. Solid silver contacts carry a full 5 ampere-rating at 115 volts AC. Insulation rating test, 1000 megs at 500 volts DC. All types listed have breakdown ratings of 1000 volts at 60 Hz. 1/4" mounting bushings. \*Momentary contact. †Special switch with 3 "On" positions. ‡"On-None-On" configuration. §"On-Off-On" positioning. 30° throw. With or without cap. From Japan. Av. shpg. wt., 1 oz.



### A WITH WHITE PLASTIC CAP

Stock No.	Type MST.	Action	EACH
56 A 3201	115D	SPDT†	1.70
56 A 3202	215N	DPDT†	2.20
56 A 3203	315D	3PDT†	3.90
56 A 3204	415N	4PDT†	4.90

### WITHOUT PLASTIC CAP (Cont'd)

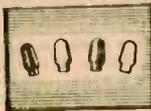
Stock No.	Type MST.	Action	EACH
56 A 3210	205N	DPDT†	2.15
56 A 3211	205P	DPDT†	2.55
56 A 3212	205R	DPDT†	2.55
56 A 3213	205S	DPDT*	2.55
56 A 3214	205T	DPDT*	2.55
56 A 3217	205PA	DP3T†	2.85
56 A 3218	205TA	DP3T†	3.15
56 A 3215	305D	3PDT†	3.85
56 A 3235	305E	3PDT†	4.15
56 A 3236	405H	3PDT*§	4.15
56 A 3216	405N	4PDT†	4.85
56 A 6408	405P	4PDT†	5.35

### B WITHOUT PLASTIC CAP

Stock No.	Type MST.	Action	EACH
56 A 3205	105D	SPDT†	1.65
56 A 3206	105E	SPDT†	1.95
56 A 3207	105F	SPDT†	1.95
56 A 3208	105G	SPDT†	1.95
56 A 3209	105H	SPDT*§	1.95

### C-10 COLORED PLASTIC CAPS FOR ABOVE TOGGLE SWITCHES

Switch identification made easy with bright colored plastic caps. Available in white, red, black or blue. 25 per pkg. Specify color. Shpg. wt., 2 oz. per package.



Stock No.	For MST.	Per Pkg. of 25
56 A 3237 C	-105 Series	.70
56 A 3237 C	-115 Series	.70

### C PUSHBUTTON SWITCH AND RED OR BLACK BUTTONS

Usable normally open or normally closed. 5 amps at 115 volts AC. All types listed have solid silver contacts. Size, 1/2x1/2x3/4". \*Momentary contact. †Push on/off. Order buttons separately, below. Av. shpg. wt., 1 oz.

Stock No.	Type MSP.	Action	EA.
56 A 3248	105F	SPDT*	1.95
56 A 3249	205R	DPDT*	2.85
56 A 3297	205N	DPDT†	2.85
56 A 3298	C-12 Black Button	Pkg. of 25	.90
56 A 3299	C-12 Red Button	Pkg. of 25	.90

## CONTINENTAL-WIRT STANDARD SLIDE SWITCHES

AC-DC, for transmitters, receivers, etc. Cadmium-plated steel housing. Solderlug terminals. Dimensions, 3/4x1 1/2". U.L. Recog. Av. shpg. wt., 3 oz.



Stock No.	Mfr's Type	Action	Amps @ 125V	EACH
56 A 5917	G 141	DP4T	0.5	1.00
56 A 5023	GF 323	SPST	3.0	.50
56 A 5025	GF 324	SPDT	3.0	.50
56 A 5920	GF 325	DPST	3.0	.50
56 A 5921	GF 326	DPDT	3.0	.50
56 A 5039	GH 328	DP3T	3.0	.50
56 A 5032	G 338L	DP4T	3.0	1.00
56 A 5036	GF 342	4PDT	3.0	1.00
56 A 5913	GG 350	DPDT	3.0	.50
56 A 5915	GH 360	4P3T	3.0	1.00
56 A 5918	GF 361	3PDT	3.0	1.00
56 A 5914	GF 368	3P3T	3.0	1.00
56 A 5026	GF 623	SPST	6.0	.50
56 A 5027	GF 624	SPDT	6.0	.50
56 A 5033	GF 625	DPST	6.0	.50
56 A 5084	GF 626	DPDT	6.0	.50
56 A 5022	GF 1123	SPST	11.0	.50

### SWIDGET SUBMINIATURE SWITCHES

Standard Swidgets fit into approximately 1/2 the volume of a conventional slide switch, while Swidget, Jr. occupies less than 1/5 the volume. Actuating force, 8-32 oz., except G 111, 5-20 oz. Rated 0.5 A AC-DC at 125 V. Dielectric strength, 900 VAC, 60 Hz for one minute. G 124, G 126, 1x1/2"; G 128 L, 1 1/2x1/2". G 111, 3/4x3/8". U.L. Recog. Av. wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 125V	EACH
56 A 5916	G 111	SPDT	0.5	1.25
56 A 5034	G 124	SPDT	0.5	.50
56 A 4424	G 126	DPDT	0.5	.75
56 A 5035	G 128L	DP3T	.05	.75

### DRY REED SWITCHES

Stock No.	Mfr's Type	Form	Size, Dia. x Lgth.	Max. DC Contact Watts	Max. Amps	Max. DC Volts	Actuat- ing Magn	EACH
56 A 6603	MRR-2-185	A	.130x.800"	10	5	200	H-33	1.15
56 A 6605	MSRR-2-185	A	.090x.800"	10	5	200	H-33	1.15
56 A 6606	MTRR-2-185	A	.092x.615"	3	250	100	H-33	1.32
56 A 6607	MRG-DT-175	C	.130x.610"	3	250	28	H-33	4.20
56 A 6608	MMRR-2-185	A	.090x.175"	1	.010	28	H-31	1.84
56 A 6609	DRG-2-425	A	.210x1.950"	15	1.0	250	H-34	.79
56 A 6610	DRR-1-425	A	.210x1.950"	15	1.0	400	H-34	.89
56 A 6611	DR-T-5-425	A	.210x1.950"	50	3.0	1000	H-34	2.10
56 A 6612	SRR-2-425	A	.195x1.425"	15	1.0	400	H-32	.89
56 A 6613	DRG-DTH-445	C	.218x1.562"	10	.5	250	H-32	2.63
56 A 6614	DRVT-10-658	C	.218x1.950"	50	3.0	5000	H-34	4.20

### MERCURY-WETTED REED SWITCHES

Stock No.	Mfr's Type	Form	Size, Dia. x Lgth.	Max. DC Contact Watts	Max. Amps	Max. DC Volts	Actuat- ing Magn	EACH
56 A 6616	HRC-1-535	A	.218x1.950"	50	3.0	400	H-34	2.10
56 A 6617	MRC3-387	A	.130x.710"	28	1.0	100	H-33	4.20

### MAGNETS FOR ABOVE SWITCHES

Stock No.	Mfr's Type	D. x L.	EACH	Stock No.	Mfr's Type	D. x L.	EACH
56 A 6618	H-31	1/2x1/2x1/2"	.30	56 A 6620	H-33	1/2x1/2x3/4"	.30
56 A 6619	H-32	3/4x3/4x1/2"	.35	56 A 6621	H-34	1/2x1/2x1"	.40

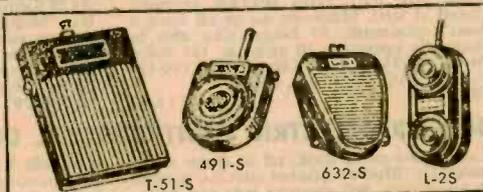
### LINEMASTER FOOT SWITCHES

Model 491-S. Lightweight, momentary-contact switch with SPDT contacts rated 10 amps at 115 V, or 230 V, AC. Steel housing, skidproof base. 2 1/2x 2 1/2x1 1/2". Wt., 7 oz.  
56 A 6685.....3.25

Model 491-SC. Above, but with 6-ft. cord and 2-prong series plug. 1 1/4 lbs.  
56 A 6686.....5.00

Model 632-5 "Clipper." Momentary-contact industrial switch. SPDT contacts rated 20 amps at 125-150 VAC. Cast iron housing has rubber anti-skid pad, black wrinkle finish. Size, 4 1/2x3 1/2x1 1/2". Shpg. wt., 2 1/4 lbs.  
56 A 6687.....8.25

56 A 6689. Model L-25 "Lektro-Lok." 15-amp, 125 VAC contact on each side. Teeter-totter principle. Interlock prevents operating both circuits at once. Steel. 1 lb.  
56 A 6684.....5.80

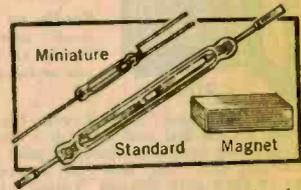


Model T-61-S. Compact switch for low current loads. SPDT momentary-contact switch rated 7 amps at 110-250 volts. Has skidproof rubber base. 1x2 1/2x1 1/2". Shpg. wt., 7 oz.  
56 A 6683.....2.75

Model T-61-SC. Same as above, except with 6-ft. cord and 2-prong series plug. 15 oz.  
56 A 6684.....4.00

### HAMLIN MAGNETIC REED SWITCHES

- Hermetically Sealed
- Actuating Time—One ms or Less
- Life—10,000,000 Operations
- High Sensitivity
- Compact Size



Premium-quality dry reed and mercury wetted switches for reliable operation under all operating conditions. They are hermetically sealed for safe, dependable use in any type of atmosphere or even under explosive conditions. Switches are unaffected by high or low temperature extremes or pressure.

Compact size, high sensitivity and rapid cycling rate make them ideal for applications in position indicators, counting instruments, limiting switches, flow meters, commutating instruments and reed relays. Fully inspected.

Actuating time of one millisecond or less. Dry reed switches have life expectancy of ten million operations; mercury wetted switches have life expectancy of one billion operations. All switches may be actuated by permanent or electro magnets. Order optional permanent magnets from the table listed at left. Average shpg. wt. per switch, 1 oz.

### TAPESWITCH FOOTSWITCHES

- Operates Doors, Other Devices
- Easy to Operate
- Weatherproof
- Installed Anywhere



Type 111 100-Watt Footswitch. Easy to install, convenient and safe to use. Uses Controlflex ribbon switches (momentary, normally open) sealed in weatherproof, molded flat pad. Size, 2x3 1/2x1/2" thick. Footswitch can be taped or cemented to the floor. With 6-ft. U.L. Listed line cord. Shpg. wt., 8 oz.  
56 A 6681..... Each 3.80

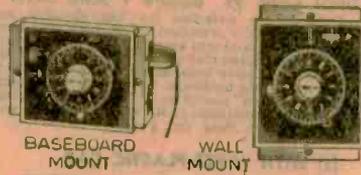
You Can Depend on Allied for All Your Electrical Needs

# Intermatic Timers and Photoelectric Controls



- Automatically Turns lights On or Off
- U.L. Listed
- Handles Loads of 1875 Watts

## "TIME-ALL" IN WALL AUTOMATIC TIMERS WITH A BUILT-IN LOOK



BASEBOARD MOUNT WALL MOUNT

- Control lights, appliances, everything
- Full 24 hour timer resets automatically
- Override switch allows manual control

In wall Time-All automatic timers mount in wall switch or outlet box—so easy to install you can do-it-yourself. Provides automatic control of circuits for lamps, ceiling or wall fixtures, appliances, air conditioners, everything electrical up to a maximum load of 1875 watts at 15 amps. Override switch allows manual control.

Great for stores and offices to control display lighting. Discourages prowlers while you're away from home. Full 24 hour timer resets itself automatically. Minimum on time, 15 min.; maximum off time, 23 hours, 45 min. 5 1/2 x 3 1/2 x 2 1/4". Requires minimum 2x3x2" box, 120 VAC. U.L. Listed.

58 A 8309. Model E-1010. Wall switch installation. Wt., 1 1/2 lbs. . . . . 7.97

58 A 8308. Model E-1012. Baseboard or counter installation. 1 1/2 lbs. . . . . 9.07

## "TIME-ALL" MODEL A911-6 AUTOMATIC APPLIANCE TIMER

You can easily set the "Time-All" to turn lights and appliances on and off at times you designate. The minimum "on" time is 15 minutes; maximum "on" time is 23 3/4 hours. Can be set to skip operation for a day or longer. Device to be controlled plugs into AC outlet on back of timer. Has manual control with automatic reset. Timer handles 15-amp, 1875-watt load. With 6-ft. cord, plug. Champagne White Plaskon case. 5x4x7 1/2". U.L. Listed. 110-120 V, 60 Hz AC. Shpg. wt., 2 lbs.

58 A 8311 . . . . . 8.64

MODEL A921-6. Same as above, but designed to handle 7-amp, 875-watt load. For light duty applications, as control of music systems, house, garage, or yard lights, and most smaller electrical appliances. Dove Gray Plaskon case. Shpg. wt., 2 lbs.

58 A 8397 . . . . . 7.97

## PORTABLE INTERVAL TIMERS

MODEL PT-301. Convenient and easy to use. Automatically shuts off lamps, sterilizers, etc. Time range: 0-60 min., 1 min. minimum. 15 amps, 1875 watts. Cyclocac® case. 110-120 V, 60 Hz AC. 5x4x3". Wt., 2 lbs.

58 A 8821. 1-5 Each 7.29 6-Up Each 6.57

MODEL PT-304. Similar to above except time range span is 0-24 hrs. minimum setting 30 minutes. 5x4x3". Wt., 2 lbs.

58 A 8822. 1-5 Each 7.29 6-Up Each 6.57

## MODEL A501 MUSIC-MINDER

Electric clock with Sleep Switch and Buzzer Alarm. Lets radio play up to 60 minutes before automatically shutting it off. Automatically turns radio on again in morning. Buzzer alarm sounds 10 minutes later to ensure arousing heavy sleepers. AC outlet on back takes 1875-watt load (15 A). Plaskon case. 6-ft. cord. 4 1/2 x 4 3/4 x 2 1/4". U.L. Listed. 110-120 V, 60 Hz AC.

58 A 8267. Wt., 2 lbs. . . . . 8.64

## TIME SWITCHES



### "SKIPPER" TIME SWITCHES

Handle up to 12 on-off operations. Can be set to skip one or more days

T171

Permit "skipping" control cycle. Have two dials: a time dial and a day dial. Days are skipped by inserting small skipping screws into day dial. "On" and "off" trippers are set in time dial. Special "cutout" tripper advances the day dial every 24 hours. Up to 12 operations per day can be obtained by adding trippers. Range: minimum "on" or "off," 1 hour; maximum 23 hours. Silver contacts rated 40 amps (4375 watts, tungsten) at 125 V. 7 3/4 x 5 x 3". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.

Stock No.	Type	Action	EACH
58 A 8315	T171	SPST	12.97
58 A 8316	T173	DPST	14.27
58 A 8317	T175	SPDT	14.27

### TRIPPERS AND SKIPPING SCREWS

TYPE 107T19GR. "On" Cutout Trippers. For "Skipper" switches only. Shpg. wt., 3 oz.

58 A 8319 . . . . . Each .33

TYPE 79T8A. Skipping Screws. For "Skipper" switches only. Shpg. wt., 8 oz.

58 A 8364 . . . . . 2 for .13

TYPE 107T8A. "On and Off" Trippers. For all switches except T185 at right.

58 A 8324. Shpg. wt., 2 oz. . . . . Per Set .33



T101



P101



T185



T1975

### TYPE T101 TIME SWITCH

SPST time-switch turns equipment on and off once in 24 hours. Can be activated up to 12 times a day with extra trippers (see Type 107T8A listed at the lower-left of page). Minimum time between settings is one hour. Long-lasting Alloy-T contacts, resist pitting and welding. Motor is visible for inspection. Contacts handle 40 amps (4375 watts, tungsten rated) at 125 volts. Size, 5x3x7 7/8". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.

58 A 8322 . . . . . 9.72

TYPE T103. As above, but DPST

58 A 8321 . . . . . 11.02

### TYPE P101 TIME SWITCH

Portable. SPST plug-in time switch has numerous applications. Easily set for from 1 (as is) to 12 on-and-off operations per day when used with extra 107T8A trippers. (listed at left). Minimum on or off time, 1 hour; maximum, 23 hours. Can also be manually operated. 10 amps at 125 volts. Size, 5x3x7 7/8". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 4 lbs.

58 A 8314 . . . . . 11.02

### TYPE T185 TIME SWITCH

Provides up to 12 on-and-off cycles daily, with extra trippers (listed below). Each cycle is independently controlled and can vary from 5 to 60 minutes. Minimum interval between cycles, 1 1/4 hours. Can be used as SPST normally open, SPST normally closed, or SPDT. The perfect switch for applications requiring more than one on-and-off cycle of the same or different duration within a 24-hour period. Rated 40 amps (4375 watts, tungsten rated) at 125 V. Supplied with 3 trippers. 7 3/4 x 5 x 3". U.L. Listed. For 110-120 V, 60 Hz AC.

58 A 8313. Shpg. wt., 4 lbs. . . . . 13.62

EXTRA TRIPPERS. For above. Shpg. wt., 4 oz.

58 A 8336 . . . . . Each 1.27

### TYPE T1975 PROGRAM TIMER

96 trippers for 48 on-and-off operations every 24 hours. Minimum interval, 15 minutes. Has "skipper" feature for omitting operation on selected days. SPDT switch, rated 20 amps at 125 V. Industrial-type motor. U.L. Listed. 7 3/4 x 5 x 3". For 110-120 V, 60 Hz AC. Shpg. wt., 3 3/4 lbs.

58 A 8378 . . . . . 24.24/34

## INDOOR-OUTDOOR PHOTOELECTRIC LIGHT-CONTROL DEVICES



- Weather-Resistant Aluminum Housings
- Modern, Dependable Printed Circuits
- Operate from Artificial or Natural Light

Turn lights on at dusk, off at dawn automatically. Modern printed circuits, housed in aluminum. Self-cleaning lens and moisture-proof photocell. Handle tungsten, mercury vapor, or fluorescent lights.

**A** MODEL K1611. Complete photocell and Par lamp holder in one unit. External switch leg provides instantaneous control of other light clusters. 1000 watts. For 125 V, 60 Hz AC. Shpg. wt., 1 lb.

58 A 8337 . . . . . 11.02

**B** SERIES K1100. Adjustable stem permits mounting angle to 80°. Light selective louvers handle tungsten mercury vapor or fluorescent lights. (2 FC on; 5 FC off). 1500 watts. Shpg. wt., 1/2 lb.

58 A 8347. K1100, 105-130 V . . . . . 13.62

58 A 8797. K1122, 208-240 V . . . . . 13.62

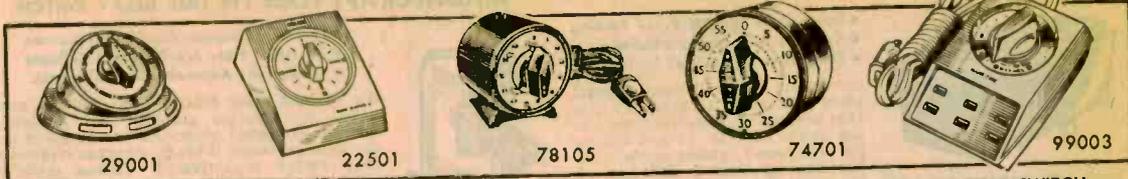
SERIES K1111. As above, but 650 watts.

58 A 8345. K1111, 105-130 V . . . . . 12.32

58 A 8798. K1112, 208-240 V . . . . . 12.32

# Timers for New Convenience in Home and Shop

## MARK-TIME AUTOMATIC TIMER AND TIME SWITCHES



**Model 29001 Bell Timer.** Spring-driven timer accurately times intervals up to 60 minutes. Bell rings at end of timing interval. White molded-plastic finish. Size, 2½x4½" dia. Wt., 10 oz. 58 A 8380. 1-11. . . . . Each 2.96 12-up. . . . . Each 2.63

**Model 22501 Long Ring Bell Timer.** Spring-driven timer. Times intervals up to 60 minutes with loud, clear bell tones. Excellent for kitchen, office or laboratory. Stands on a table or easily mounts on a wall. Bracket furnished. Beige finish. 2x2x2". 10 oz. 58 A 8258. 1-11. . . . . Each 4.46 12-up. . . . . Each 3.97

**Series 78100 Time Switches.** Turn-off devices after preset time. Have AC receptacle. \*For timing developers, enlargers, etc.; adjustable stop for repeat settings; has "hold" feature. Rated at 10 A, 125 VAC. 3¼x3¼x3½". For 110-120 V, 60 Hz AC. Wt., 1 lb. 58 A 8294. 1-11. . . . . Each 5.96 12-up. . . . . Each 5.30

### MODEL 99003 "ALL IN ONE" TIME SWITCH

- Consists of Time Switch, Extension Cord, 3-Way AC Outlet
- Automatically Turns Off Devices After Up to 4 Hours
- Convenient "Hold" Feature • Rated 10 Amps, 125 VAC

Ideal for controlling TV sets, lamps, radios, etc. Insert plug into any wall outlet; plug up to 4 devices into outlet; and set knob for desired time cycle up to 4 hrs. After predetermined time has passed, switch automatically shuts devices off. In "hold" position, devices remain in operation. SPST switch, rated 10 amps, 125 VAC. Cream base; brass-finished dial plate. Has 5½-foot cord. For 110-120 V, 60 Hz AC. Shpg. wt., 1 lb. 58 A 8294. 1-11. . . . . Each 5.96 12-up. . . . . Each 5.30

Stock No.	Type	Maximum Setting	Ea., 1-11	Ea., 12-Up
58 A 8264	78174*	30 Seconds	7.46	6.33
58 A 8265	78104	30 Minutes	7.13	6.33
58 A 8263	78105	60 Minutes	7.13	6.33
58 A 8266	78126	12 Hours	7.13	6.33

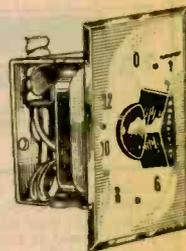
**Standard-Built-In Time Switches.** Easily set for "off-type" or "on-type" use. Easy to install. With hardware. Rated at 20 amps, 125-240 VAC. U.L. Listed.

Stock No.	Type	Timing Range	Dia. x Depth	Oz.	EACH
58 A 8259	74701	0 to 15 min.	2½x1½x½"	9	6.38
58 A 8261	74702	0 to 30 min.		9	6.38
58 A 8268	74703	0 to 60 min.		9	6.38

### WALL-BOX TIME SWITCHES

Fit std. wallbox. Replaces light switch. Automatically turns off after preset time. 20 amps, 125 V. "Hold" feature for continuous use. C.S.A. Listed. 117 VAC. 9 oz.

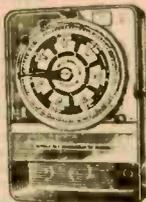
Stock No.	Mfr's Type	Max. Setting	EACH	
			1-11	12-Up
58 A 8269	90004	5 Minutes	5.63	5.00
58 A 8270	90005	15 Minutes	5.63	5.00
58 A 8274	90006	30 Minutes	5.63	5.00
58 A 8275	90021*	3 Minutes	5.63	5.00
58 A 8276	90024*	60 Minutes	5.63	5.00
58 A 8277	90015*	12 Hours	5.63	5.00



## PARAGON MULTI-PURPOSE TIME CONTROLS



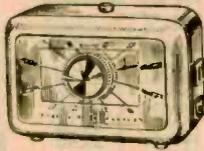
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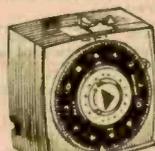
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APT15-0



AT45-0



DELUXE HOME AUTOMATIC TIMER WITH RANDOM OFF

### 4000 SERIES 24-HOUR CONTROLS

Up to 7 on-off operations per day—1½-hour minimum between settings. Double pole type switches 9600 watts on 3-wire load. "Skip-A-Day" feature (on 4003-OS and 4005-OS) eliminates operation for preselected days. 40 amps. U.L. Listed. 7¼x4¼x2½". 110-120 volts, AC. 2½ lbs. 58 A 8000. Type 4001-O. SPST. . . . . 9.72  
58 A 8002. Type 4003-OS. DPST. . . . . 14.27  
58 A 8003. Type 4005-OS. SPDT. . . . . 14.27

### 7000 SERIES 7-DAY CONTROLS

Deluxe version of above. 28 on-off combinations per week or 4 per day—3-hour minimum between operations. Permits up to 4 hours each day. You can omit one or more days completely if desired. T-rated action of 40 amps for Type 7007-0, 4PST, and 40 amps non-inductive on 7008-0, 2 N.O.—2 N.C. U.L. Listed. 10¾x7¾x3¾". 110-120 V, 60 Hz. AC. Shpg. wt., 6½ lbs. 58 A 8013. Type 7007-0. 4 N.O. . . . . 22.39  
58 A 8014. Type 7008-0. 2N.O.—2N.C. . . . . 22.39

### APT15-0 HOUSEHOLD TIMER

Wake to fresh, hot coffee—let music lull you to sleep. You decide on and off time—timer doesn't forget. Skip a schedule without resetting. Makes virtually all home appliances automatic. 1800-watt capacity. U.L. and C.S.A. Listed. 4¾x4¾x2¼". For 110-120 V, 60 Hz. AC. Wt., 2 lbs. 58 A 8055. . . . . 8.88

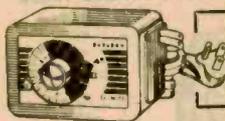
### AT45-0 INTERVAL TIMER

Excellent for sun lamps, vibrator pillows, heating pads, cooking appliances, and lab equipment. Buzzer signals end of timed period. Use with or without buzzer. One minute dial graduations for setting accuracy. Simple friction setting. Time range 0-60 minutes. 3¼x5¼x2¾". 1600 watt capacity. U.L. Listed. With 4-foot cord set. 110-120 V, 60 Hz. AC. 1½ lbs. 58 A 8008. . . . . 10.64

Model AT3160-O. As above, without buzzer. 840-watt capacity. 2¾x4¼x2¾". 1½ lbs. 58 A 8009. . . . . 7.29

### FA-FF SERIES FLUSH-MOUNT TIMER

For attic or window fans, yard lights, small air conditioners, or other applications where permanent control installation is desired. Designed to mount in a standard single outlet box, like a light switch. Handsome molded ivory wall plate has gold dial with black numerals, and a gold knob. Available in \*15 min., \*60 min., and †20 hr. timer ranges. ¾ hp rated. Size, 4½x2¼x1¾". For 110-120 volt, 60 Hz. AC. Wt., 12 oz. 58 A 8010. Type FF15-0. . . . . 6.47  
58 A 8011. Type FF60-0. . . . . 6.47  
58 A 8012. Type FA51-0.††. . . . . 6.47



Makes Every Air Conditioner Automatic

### TYPE AC AIR CONDITIONER TIMERS

Turns air conditioners on and off automatically. Time ON and time OFF are set on 24-hour dial. Minimum time between ON and OFF settings is 2 hours. SPST switch contacts rated 12 amps full load at 120 V and 240 V, 60 Hz AC. Four non-fer feet for desk use, 2 holes on backplate for wall mounting. Beige case. 2¾x4½x2¾". With 5-ft. cord, right-angle grounding plug, 3-wire grounded receptacle. Wt., 1¾ lbs. 58 A 8810. Type AC1-0. 120 V. . . . . 10.88  
58 A 8811. Type AC4-20. 208-240 V. . . . . 11.88

# Timers, Time Switches, Clocks and Counters

## PARAGON PLTI-O TI MITE TIMER

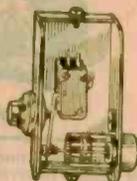


- Turns Lights On/Off Every Evening
- Cuts Wasteful All Night Lighting
- Plugs Directly into Wall Outlet

Automatic home lighting control gives you the "lived in" look that discourages prowlers when you are away. Easy to set and change for year-round lighting needs. Simply line up desired ON-time on knob with correct time of day. Plug timer into nearest outlet. Plug lamp into timer. Lights will automatically go ON at selected time and OFF five hours later. Timer repeats this ON-OFF schedule once every 24 hours. Convenient as your nearest outlet. Eliminates cord clutter. Compact design allows operation of other appliances at the same wall receptacle. 300 watts capacity (lighting only). Black with grey case. 3 5/8 x 2 3/8 x 2". For 120 V, 60 Hz AC.

58 A 8015. Shpg. wt., 10 oz. Price, \$4.95

## MAGNECRAFT CLASS 113 TIME DELAY SWITCH

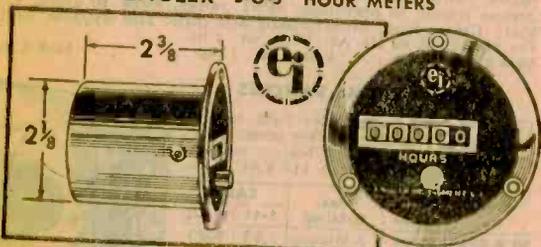


- Ideal for Consumer Control Applications
- All Metal Parts Are Corrosion Resistant
- Timing Fully Adjustable to Two Minutes

Air dashpot time delay switch built of non-aging, low friction graphite and precision-ground, tempered glass. All metal parts are corrosion resistant. When pushbutton is pressed, snap switch is activated. Timing cycle is initiated when pushbutton is released. At end of timing period, output contacts are instantly reset, ready for another timing cycle. Rated at 10 amps. Insulation to ground: 100 VAC. rms standard. Shpg. wt., 8 oz.

Stock No.	Mfr's Type	Contact Comb.	Timing Range	Button Diam.	EACH
58 A 8125	113CX-1	SPDT	1 to 180 sec.	1/2"	12.96

## ENGLER "S-O-S" HOUR METERS

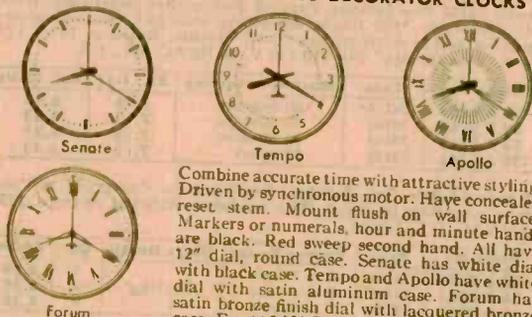


"Service-on-Signal" hour meters eliminate the need for costly maintenance time records; light up when maintenance is due. After resetting, light goes out for duration of maintenance time cycle. Can be programmed at machine or set up for remote control (in central maintenance office, etc.). Protected side-reset; easy-to-read figures. Metal case, standard 3-hold 2 1/2" dia. bolt circle. Shpg. wt., 12 oz.

NOTE: Meters are available factory preset in times from 10-90 hours (in 10-hour increments) from 100-1000 hours (in 100 hour increments). Specify time setting required.

Stock No.	Mfr's Type	Range In Hours	Volts	EACH
58 A 8674 C	SOS10N-1-2	10-90	115 VAC	36.50
58 A 8675 C	SOS10N-1-2	100-1000	115 VAC	36.50
58 A 8676 C	SOS12N-2	10-90	12 VDC	39.50
58 A 8677 C	SOS12N-2	100-1000	12 VDC	39.50
58 A 8678 C	SOS24N-2	10-90	24 VDC	39.50
58 A 8679 C	SOS24N-2	100-1000	24 VDC	39.50

## STANDARD SYNCHRONOUS DECORATOR CLOCKS



Combine accurate time with attractive styling. Driven by synchronous motor. Have concealed reset stem. Mount flush on wall surface. Markers or numerals, hour and minute hands are black. Red sweep second hand. All have 12" dial, round case. Senate has white dial with black case. Tempo and Apollo have white dial with satin aluminum case. Forum has satin bronze finish dial with lacquered bronze case. For 115 VAC. Shpg. wt., 9 lbs.

Stock No.	Mfr's Type	Description	EACH
58 A 8843	Senate	12-inch Clock (No Numerals)	16.95
58 A 8844	Tempo	Above, Arabic Numerals	16.95
58 A 8846	Apollo	Above, Roman Numerals	16.95
58 A 8845	Forum	Above, Roman Numerals	20.95

## INDUSTRIAL TIMER ELECTRIC STOP CLOCKS



Measure time intervals for process and test, measurement, production control, time and motion studies—wherever precise short-timing measurements are required. Incorporate synchronous motor, cone clutch for exceptional pull-in speed, 360° engagement, and automatic wear compensation. Remote start-stop and reset receptacles on side of case. Can be started with pushbutton on cord or by a limit switch in a piece of equipment. Reset with front-panel reset button or remotely through a series switch. Reset time, 010 sec. 5x5x4 3/8". For 115 V, 60 Hz AC only. Shpg. wt., 5 lbs.

58 A 8441, Model SC-100, Measures 1/100 second to 60 seconds.	1-5	Each 68.50	4-5	Each 65.08	6-11	Each 61.65
58 A 8445, Model SC-60, Measures 1 second to 60 minutes.	1-3	Each 68.50	4-5	Each 65.08	6-11	Each 61.65

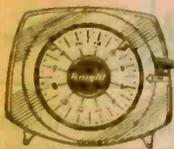
## ENGLER ELECTRIC STOP CLOCK



Timer (115 VAC) registers split-second elapsed time. Instantaneous start-stop feather-touch pushbutton. Immediately resettable. Metal cased instrument never needs servicing. Model CS60 reads in seconds and tenths. Model CS24 in minutes, hundredths.

58 A 8654, Model CS60, 1-4	10-24	Each 40.00
5-9	10-24	Each 30.50
58 A 8655, Model CS24, 1-4	10-24	Each 40.00
5-9	10-24	Each 30.50

## KNIGHT ALL-PURPOSE TIMER



Handles Loads  
Up to  
1875 Watts.

Designed specifically for Allied for use in home or shop. Controls a wide variety of devices—makes virtually any electrical appliance automatic. Handles up to 1875 watts (15 amps). Minimum ON time is 15 minutes; maximum ON time is 23 1/4 hours. Can be set to skip a day. Manual control with automatic reset. Dove Gray case with Midnight Blue dial. 5x4x2 1/4". 6 foot cord, plug, instructions. 117 VAC, U.L. Listed. 58 A 8420. Shpg. wt., 2 lbs. Price, \$8.77

## SETH-THOMAS

### ACROTYNE COMMERCIAL WALL CLOCK



- Cordless Operation
- Durable Steel Case

Attractive cordless wall clock combines superb performance with truly economical operation. Operates about a year on one "D" cell. Features accurate, silent transistorized movement with precision electronic circuit tuning fork and magnetic coupling. Adjustable within ±2 seconds per day. Has white convex dial, black numerals and hands, red sweep second hand. Durable steel case. 14 1/2" diameter. 2 3/4" depth. Big 12" dial. Less battery.

58 A 8243, No. 612 Bronze, 4 1/2 lbs.	\$32.50
58 A 8244, No. 613 Chrome, 4 1/2 lbs.	\$35.00

## IIT GENERAL CONTROLS

### HAND AND DESK TALLY COUNTERS



Hand Tally

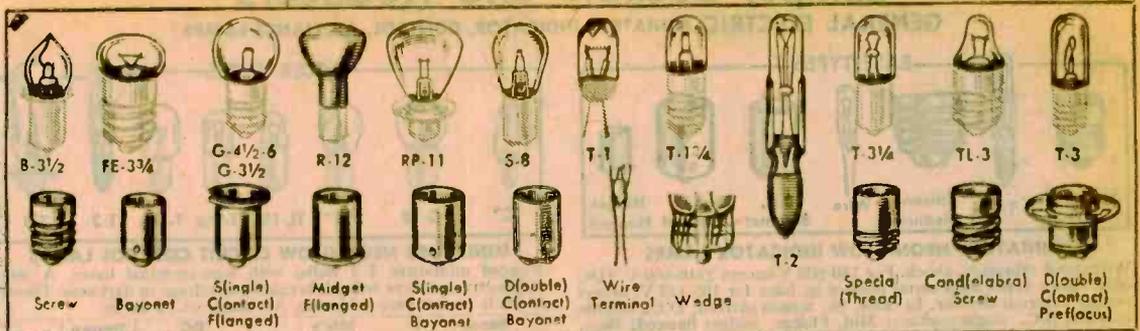


Desk Tally

For blood counts, traffic control surveys, engineering surveys, factory or meeting attendance checks, inventories, any general-purpose counting applications. Hand Tally is 4-digit, pushbutton, knob reset counter, 1 3/4" dia. Fits comfortably in palm of hand. Chrome-plated to resist perspiration. Desk Tally has mounting base.

Stock No.	Mfr's Type	Desc.	EA.
58 A 8887	CM4CS454	Hand Tally	3.25
58 A 8888	CM4CS454D	Desk Tally	4.40

# Miniature and Subminiature Lamps



## WE WILL SUPPLY LAMPS BY G.E. OR CHICAGO-MINIATURE, WHICHEVER ARE IN STOCK

Wide variety of miniature and subminiature incandescent lamps for such applications as aircraft, annunciators, appliances, automotive, bicycles, coin machines, flashlights, marine, medical, indicators, signs and house numbers, radio and TV, telephone, toys

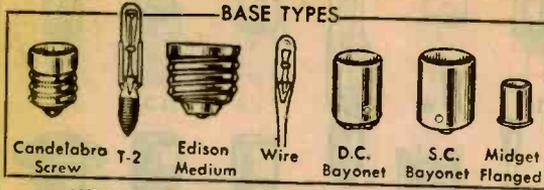
and novelties. Offer extra-long life, reliability, low cost, high light output for amount of current consumed, low operating cost. For illustrations of bulb and base styles referred to in table, and explanation of abbreviations, refer to Figure above.

LAMPS WITHOUT "EACH" PRICE ARE AVAILABLE ONLY IN PACKAGES OF 10

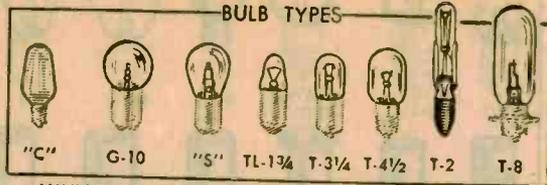
Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	EACH	Pkg. of 10	Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	EACH	Pkg. of 10
60 A 7300	PR-2	2.4	.50	S.C.F.	B-3/2	1.30	1.30	60 A 6743	346	18	.04	S.C. Mid. F.	T-1 1/4	.92	8.30
60 A 7301	PR-3	3.6	.50	S.C.F.	B-3/2	1.30	1.30	60 A 7377	363	14	.20	Bayonet	G-3/2	1.50	1.50
60 A 7302	PR-4	2.3	.27	S.C.F.	B-3/2	1.30	1.30	60 A 8900	367X	10	.04	S.C. Mid. F.	T-1 1/4	1.75	10.60
60 A 7303	PR-6	2.47	.30	S.C.F.	B-3/2	1.30	1.30	60 A 8901	368	25	.20	S.C. Mid. F.	T-1 1/4	.53	4.80
60 A 7305	PR-12	5.95	.50	S.C.F.	B-3/2	1.30	1.30	60 A 6744	370	18	.04	S.C. Midget	T-1 1/4	1.09	9.90
60 A 7306	PR-13	4.75	.50	S.C.F.	B-3/2	1.30	1.30	60 A 6748	375	3	.015	S.C. Mid. F.	T-1 1/4	1.81	16.40
60 A 7367	6	6.4	3.0	D.C. Bayonet	S-8	.40	3.60	60 A 7400	380	6.3	.04	Mid. Flanged	T-1 1/4	1.54	14.00
60 A 7307	12	6.3	.15	Min. 2-pin	G-3/2	1.70	1.70	60 A 7401	381	6.3	.20	Mid. Flanged	T-1 1/4	.84	7.60
60 A 7308	13	3.7	.30	Screw	G-3/2	1.10	1.10	60 A 7402	382	14	.08	Mid. Flanged	T-1 1/4	.96	8.70
60 A 7309	14	2.5	.30	Screw	G-3/2	1.10	1.10	60 A 6745	386	14	.08	Mid. Grooved	T-1 1/4	1.11	10.00
60 A 7310	24E	24	.035	Tel. Slide	T-2	.49	4.40	60 A 6746	387	28	.04	Mid. Flanged	T-1 1/4	.61	5.50
60 A 7369	24X	24	.035	Tel. Slide	T-2	.49	4.40	60 A 6747	388	28	.04	Mid. Grooved	T-1 1/4	1.12	10.10
60 A 7312	39	6.3	.36	Bayonet	T-3/4	2.01	2.01	60 A 7378	405	6.5	.50	Screw	G-4 1/2	1.77	1.77
60 A 7313	40	6.8	.15	Screw	T-3/4	1.90	1.90	60 A 7379	406	2.6	.30	Screw	G-4 1/2	1.41	1.41
60 A 7314	41	2.5	.50	Screw	T-3/4	1.70	1.70	60 A 7380	407	4.9	.30	Screw	G-4 1/2	1.60	1.60
60 A 7315	43	2.5	.50	Bayonet	T-3/4	1.70	1.70	60 A 7344	425	5	.50	Screw	G-4 1/2	1.46	1.46
60 A 7366	44	6.3	.25	Bayonet	T-3/4	1.40	1.40	60 A 7346	432	18.0	.25	Screw	G-4 1/2	1.90	1.90
60 A 7316	45	3.2	.35	Bayonet	T-3/4	1.40	1.40	60 A 7347	433	18	.25	Bayonet	G-4 1/2	1.90	1.90
60 A 7317	46	6.3	.25	Screw	T-3/4	1.00	1.00	60 A 7383	509K	24	1.18	Cond. Screw	G-6	2.70	2.70
60 A 7318	47	6.3	.15	Bayonet	T-3/4	.90	.90	60 A 7393	680	5	.060	Wire Term.	T-1	2.17	19.70
60 A 7319	48	2.0	.06	Screw	T-3/4	1.70	1.70	60 A 7394	682	5	.060	Sub-Mid. F.	T-1	2.75	25.00
60 A 7320	48C	48	.035	Tel. Slide	T-2	.53	4.80	60 A 7395	683	5	.060	Wire Term.	T-1	2.17	19.70
60 A 7321	49	2.0	.06	Bayonet	T-3/4	1.40	1.40	60 A 7396	685	5	.060	Sub-Mid. F.	T-1	2.75	25.00
60 A 7322	50	7.5	1 c.p.	Screw	G-3/2	1.60	1.60	60 A 7397	715	5	.115	Wire Term.	T-1	2.17	19.70
60 A 7323	51	7.5	1 c.p.	Bayonet	G-3/2	.90	.90	60 A 7403	755	6.3	.15	Min. Bay.	T-3/4	2.10	2.10
60 A 7370	52	14.4	.10	Screw	G-3/2	2.20	2.20	60 A 7404	756	14	.08	Min. Bay.	T-3/4	.32	2.90
60 A 7324	53	14.4	.12	Bayonet	G-3/2	.90	.90	60 A 7405	757	28	.08	Bayonet	T-3/4	.35	3.10
60 A 7325	55	7.0	2 c.p.	Bayonet	G-4 1/2	1.50	1.50	60 A 6600	1133	6.2	3.91	S.C. Bayonet	RP-N	3.50	3.50
60 A 9432	55C	55	.050	Tel. Slide	T-2	.53	4.80	60 A 6749	1252	21	.23	D.C. Bayonet	G-6	4.40	3.60
60 A 7326	57	14	2 c.p.	Bayonet	G-4 1/2	.90	.90	60 A 7384	1183	12	20w	S.C. Bayonet	R-12	2.12	19.20
60 A 7327	63	6.8	1 c.p.	S.C. Bayonet	G-6	1.50	1.50	60 A 7349	1445	18	.15	Bayonet	G-3/2	1.20	1.20
60 A 7328	67	13.5	4 c.p.	S.C. Bayonet	G-6	1.10	1.10	60 A 7350	1446	12	.20	Screw	G-3/2	1.90	1.90
60 A 7329	67K	13.5	4 c.p.	Cond. Screw	G-6	.39	3.50	60 A 7351	1447	1 80	.15	Screw	G-3/2	1.40	1.40
60 A 7330	81	6.8	6 c.p.	S.C. Bayonet	G-6	1.60	1.60	60 A 7353	1458	20	.25	Bayonet	G-5	2.20	2.20
60 A 7331	82	6.8	6 c.p.	D.C. Bayonet	G-6	1.60	1.60	60 A 7385	1174	14	.17	Screw	T-3	.35	3.10
60 A 9707	93	12.8	1.04	S.C. Bayonet	S-8	2.00	2.00	60 A 7354	1477	24	.17	Screw	T-3	.48	4.30
60 A 7332	112	1.2	.22	Screw	TL-3	1.10	1.10	60 A 7355	1487	12 16	.20	Screw	T-3/4	1.70	1.70
60 A 6737	137	6.3	.25	Min. Bay.	G-3/2	1.40	1.40	60 A 7356	1488	14	.15	Bayonet	T-3/4	1.80	1.80
60 A 6738	157	5.8	1.1	Screw	G-6	.70	6.32	60 A 7357	1490	3.2	0.16	Bayonet	T-3/4	1.40	1.40
60 A 7334	158	12	.24	Wedge	T-3/4	1.20	1.20	60 A 7357	1493	6.5	2.75	D.C. Bayonet	S-8	.93	8.40
60 A 7335	159	6.3	.15	Wedge	T-3/4	1.70	1.70	60 A 7386	1630	6.5	2.75	D.C. Pref.	S-8	1.30	11.20
60 A 7336	222	2.2	.25	Screw	TL-3	1.10	1.10	60 A 7359	1768	6	.20	Midget Screw	T-1 1/4	.66	6.00
60 A 7337	223	2.2	.25	Screw	FE 3/4	1.30	1.30	60 A 7388	1769	2.5	.20	Midget Screw	T-1 1/4	.81	7.30
60 A 7338	224	2.15	.22	Special Screw	TL-2 1/2	1.40	1.40	60 A 7360	1813	14.4	.10	Min. Bayonet	T-3/4	1.80	1.80
60 A 7339	233	2.3	.27	Screw	G-3/2	1.60	1.60	60 A 7361	1815	12 16	.20	Min. Bayonet	T-3/4	1.60	1.60
60 A 6739	240	6.3	.36	Bayonet	T-3/4	1.80	1.80	60 A 7389	1816	13	.33	Min. Bayonet	T-3/4	1.50	1.50
60 A 7340	248	2.5	.80	Screw	G-5/2	2.20	2.20	60 A 7362	1819	28	.10	Min. Bayonet	T-3/4	2.40	2.40
60 A 7373	259	6.3	.25	Wedge	T-3/4	1.30	1.30	60 A 7363	1820	28	.10	Min. Bayonet	T-3/4	2.10	2.10
60 A 6740	307	28	.67	S.C. Bayonet	S-8	.58	5.20	60 A 7390	1822	36	.10	Min. Bayonet	T-3/4	.48	4.30
60 A 7341	313	28	.17	Bayonet	T-3/4	2.00	2.00	60 A 7391	1828	37.5	.05	Min. Bayonet	T-3/4	.51	4.60
60 A 6741	324	3	.19	Wire Term.	T-1 1/4	.46	4.10	60 A 7364	1829	28	.07	Min. Bayonet	T-3/4	2.30	2.30
60 A 7342	327	28	.04	Mid. Flanged	T-1 1/4	.48	4.30	60 A 7392	1835	55	.05	Min. Bayonet	T-3/4	.57	5.10
60 A 7343	328	6	.20	Mid. Flanged	T-1 1/4	.38	3.40	60 A 7365	1847	6.3	.15	Min. Bayonet	T-3/4	1.20	1.20
60 A 7374	330	14	.08	Mid. Flanged	T-1 1/4	.63	5.70	60 A 7596	1869	10	.014	Wire Term.	T-1 1/4	.84	7.60
60 A 7145	331	1.35	.06	Mid. Flanged	T-1 1/4	.77	6.40	60 A 7542	1891	12.0	0.24	Min. Bayonet	T-3/4	1.10	1.10
60 A 7146	334	28.0	.04	Mid. Flanged	T-1 1/4	.59	5.30	60 A 7543	1892	14.0	0.12	Min. Bayonet	T-3/4	1.70	1.70
60 A 6742	337	6	.20	S.C. Mid. F.	T-1 1/4	1.26	11.40	60 A 7399	2128	3	.0125	Wire Term.	T-1	2.40	21.80
60 A 7147	338	2.7	.06	Mid. Flanged	T-1 1/4	.64	5.80	60 A 7406	2180	6.3	.04	Wire Term.	T-1 1/4	.80	7.20
60 A 7375	344	10	.014	Mid. Flanged	T-1 1/4	1.02	9.20	60 A 7407	2181	6.3	.20	Wire Term.	T-1 1/4	.44	4.00
60 A 7376	345	6	.04	Mid. Flanged	T-1 1/4	1.12	10.10	60 A 7408	2182	14	0.8	Wire Term.	T-1 1/4	.48	4.30

# Lamps, Sockets and Reducers

GENERAL ELECTRIC MINIATURE INDICATOR, CONTROL, APPLIANCE LAMPS



BASE TYPES



BULB TYPES

## MINIATURE NEON-GLOW INDICATOR LAMPS

Withstand vibration, shock. For 150-600 V except 1210-600 V. †DC only. Screw types have series resistor in base for 105-125 V, others require external resistor. In table, Sk. means skirted; D.C., double contact; S.C., single contact; Mid. Flange, midget flanged; Bay., bayonet; Cand., candelabra; others self-explanatory. \*AC starting V; DC starting V 40% more. †High brightness. Av. wt., 2 oz. ea.

Stock No.	Mfr's Type	Watts	*AC Volt	Bulb Style	Base	EA.
60 A 8516	A1B	1/25	65	T-2	Wire Term.	.13
60 A 8517	†A1C	1/10	95	T-2	Wire Term.	.13
60 A 8518	A1A (NE-2)	1/17	65	T-2	Wire Term.	.10
60 A 8519	C7A (NE-2D)	1/15	65	T-2	S.C. Mid. Flange	.78
60 A 8520	A9A (NE-2E)	1/15	65	T-2	Wire Term.	.10
60 A 8521	†C2A (NE-2H)	1/4		T-2	Wire Term.	.11
60 A 8522	†C9A (NE-2J)	1/4	105	T-2	S.C. Mid. Flange	.78
60 A 8523	B4A (NE-7)	1/4	55	T-4 1/2	Wire Term.	.69
60 A 8524	7AA (NE-16)	1/4	†67	T-4 1/2	D.C. Bay. Cand.	.86
60 A 8525	B5A (NE-17)	1/4	55	T-4 1/2	D.C. Bay. Cand.	.86
60 A 8526	H6A (NE-21)	1/4	55	T-4 1/2	S.C. Bay. Cand.	.90
60 A 8527	J5A (NE-30)	1	65	S-11	Edison	1.14
60 A 8528	L5A (NE-32)	1	65	G-10	D.C. Bay. Cand.	1.14
60 A 8529	R2A (NE-34)	2	65	S-14	Edison	1.76
60 A 8530	R6A (NE-40)	3	60	S-14	Edison	2.56
60 A 8531	R9A (NE-42)	3	60	S-14	Sk. D.C. Bay. Cand.	2.52
60 A 8532	B7A (NE-45)	1/4	65	T-4 1/2	Cand. Screw	.81
60 A 8533	B9A (NE-48)	1/4	65	T-4 1/2	D.C. Bay. Cand.	.67
60 A 8534	B1A (NE-51)	1/25	65	T-3 1/4	S.C. Bay. Min.	.20
60 A 8535	†B2A (NE-51H)	1/7		T-3 1/4	S.C. Bay. Min.	.22
60 A 8536	†J9A (NE-56)	1	60	S-11	Edison	1.19
60 A 8537	F3A (NE-57)	1/4	65	T-4 1/2	Cand. Screw	.94
60 A 8538	†F4A (NE-58)	1/4	65	T-4 1/2	Cand. Screw	.90
60 A 8929	F5A (NE-66)	1 1/4	65	T-4 1/2	Cand. Screw	1.25
60 A 8930	K1A (NE-84)	1/4	95	T-2	Special Tel. Slide	.64

## MINIATURE NEON-GLOW CIRCUIT CONTROL LAMPS

Rugged miniature T-2 bulbs with wire-terminal bases. A mild radioactive additive reduces breakdown voltage in darkness. Tinned 1" leads permit easy soldering. Av. shgp. wt., 2 oz. ea.

Stock No.	Mfr's Type	DC Start Volts	Design DC mA	EACH
60 A 7950	5AB (NE-23)	60-90	3	.16
60 A 7951	5AG-A (NE-76)	68-76	4	.50
60 A 7953	5AH (NE-83)	60-100	10.0	.20
60 A 7954	5AJ (NE-86)	55-90	1.5	.16
60 A 7955	4AB (NE-96)	120-150	.5	.20
60 A 7956	4AC (NE-97)	110-140	.5	.20

## ARGON GLOW LAMPS

Long-life lamps emit pale blue-violet light, near-ultraviolet radiation. Clear glass. Type AR-3 has average life of 1000 hours. AR-1 average life of 3000 hours. For 110-120 V. Av. shgp. wt., 2 oz.

Stock No.	Mfr's Type	Watts	Bulb	Base	EACH
60 A 8541	AR-3	1/4	T-4 1/2	Candelabra Screw	.85
60 A 8542	AR-1	2	S-14	Edison Medium	1.90

## SIGN AND APPLIANCE LAMPS

Rated 1500 hours, average use. Clear glass envelopes, except \*white glass. †Night light. All are miniature, except †large. For 120 volts. Av. shgp. wt., 2 oz. each.

Stock No.	Watts	Bulb	Base	EACH
60 A 7600	6	S-6	Candelabra	.21
60 A 7601	7	†C-7	Candelabra	.21
60 A 7602	7	*C-7	Candelabra	.25
60 A 7603	7 1/2	†S-11	Medium	.34
60 A 7604	10	C-7	D.C. Bayonet Cand.	.29
60 A 7605	15	T-7	D.C. Bayonet Cand.	.49
60 A 7606	25	T-8	D.C. Bayonet Cand.	.49

## TUNGAR BULBS

Argon and argon-mercury filled tungar bulbs for rectification of AC to DC in battery chargers, etc. \*For use in movie projectors. †Amps. Av. shgp. wt., 1 1/4 lbs.

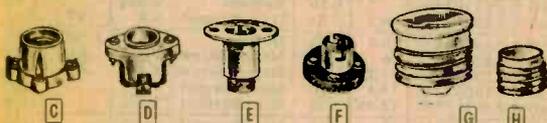
Stock No.	Mfr's Type	Fig.	† EACH	Stock No.	Mfr's Type	Fig.	† EACH
60 A 7592	12X825	2	7.90	60 A 7595	189048	B	6 8.05
60 A 7593	206501	A	2 7.95	60 A 7597	189049	B	6 8.05
60 A 7594	20X672	5	10.85	60 A 7598	*217283	B	15 14.95

## HIGH-OUTPUT LENS-END MINIATURE LAMPS

Focused beam, ideal for activating photoconductors in card or tape operations. 0.35 amp at 2.5 V, AC-DC. Midget grooved base. Overall diameter, .250". 1 1/4" long. Wt., 3 oz.

Stock No.	Type	Style	Life (hrs.)	EACH
60 A 7957	253	GTL-1 1/4	10,000	2.66
60 A 7958	253X	GTL-1 1/4	10,000	3.52
60 A 7959	261	GTL-1 1/4	5,000	7.67

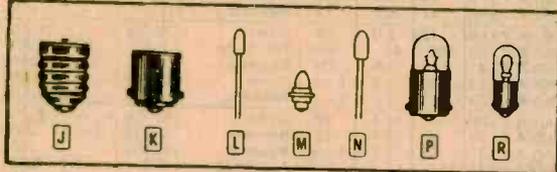
## SOCKETS, REDUCERS FOR NEON, ARGON, PILOT LAMPS



Reducer fits into socket to convert to more commonly used types of bulb bases. \*Indicates socket with built-in hard rubber insert in metal shell. Av. shgp. wt., 3 oz.

Stock No.	Fig.	Description	EACH
60 A 7661	C	Edison socket	.24
60 A 7662	D	Miniature screw socket	.18
60 A 7663	C	Candelabra screw socket	.61
60 A 7664	C	Candelabra screw socket	.18
60 A 7665	E*	D.C. bay, candelabra socket	.40
60 A 7666	F	D.C. bay, candelabra socket	.94
60 A 7667	F	S.C. bay, candelabra socket	.90
60 A 7668	H	Edison-to-Cand. reducer	.25
60 A 7669	H	Candelabra-to-Min. reducer	.11
60 A 7670	H	Intermediate-to-Cand. reducer	.18

## CHICAGO-MINIATURE



## STANDARD VOLTAGE LAMPS

Stock No.	Mfr's Type	Fig.	Volts	Watts	Bulb Style	EACH	Pkg. of 10
60 A 7475	3S6/5	J	120	3	S-6	.41	3.70
60 A 7477	6S6	J	115	6	S-6	.25	2.20
60 A 7479	6S6	J	145	6	S-6	.49	4.40
60 A 7480	6S6/DC	K	120	6	S-6	.36	3.20
60 A 7481	6T4 1/2	J	115-125	6	T-4 1/2	.75	6.80
60 A 7482	7C7	J	115-125	7	C-7	.25	2.20
60 A 7483	10C7	J	115-125	10	C-7	.30	2.70
60 A 7484	10C7/DC	K	115-125	10	C-7	.32	2.90
60 A 7485	10S6/10	J	230	10	S-6	.56	5.10

## LONG LIFE LAMPS

Designed for exceptionally long life, reliability and low replacement rate. Resistant to deteriorating effects of vibration, shock. Ideal for critical applications where replacement is difficult or impossible. M. F., midget flanged. W. T., wire terminal. S. F., submidget flanged. M. Bay., miniature bayonet. Av. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Bulb Style	EA.	Pkg. of 10
60 A 9406	327LSV	P	28.0	06	M. F.	T-1 1/4	1.16	10.50
60 A 9411	713	N	5.0	.075	W. T.	T-1	2.17	19.70
60 A 9412	714	M	5.0	.075	S. F.	T-1	2.75	25.00
60 A 9415	7153	L	5.0	115	W. T.	T-3/4	2.28	20.70
60 A 9417	CM8-801	R	5.0	06	M., Bay.	T-3/4	2.37	21.50
60 A 9418	CM8-802	R	5.0	06	M., Bay.	T-3/4	2.37	21.50
60 A 9419	CM8-803	R	5.0	.104	M., Bay.	T-3/4	2.37	21.50
60 A 9421	1866	R	6.3	25	M., Bay.	T-3/4	1.15	1.34

# Dialco Pilot Light Assemblies, Switches, Indicators

## LIGHT ASSEMBLIES AND PUSHBUTTON SWITCHES



### LOW-V ENCLOSED SIGNAL ASSEMBLIES

**A** Series 81-9110. Convex lens, smooth face, frosted back. 1/2" white, nickel-plated brass holders. Use bayonet lamp, replaceable from front. 2 1/4" long. 1/4" mtg. hole. Panels up to 1/4" thick. \*Translucent, unfrosted. Solder terminals. Less lamp. Shpg. wt. 2 oz.

Stock No.	Type	Color	EACH
60 A 7780	-0111-102	Red	.82
60 A 7781	-0112-102	Green	.82
60 A 7782	-0113-102	Amber	.82
60 A 7786	-0114-102	Blue	.82
60 A 7785	-0135-102*	White	.82

### HALF-INCH OPEN MIN. BAYONET TYPES

**B** Series 502-8140. Have 1/2" lens and mounting hole. Faceted and unfrosted. 2 1/4" long. Shpg. wt. 2 oz.

Stock No.	Type	Color	EACH
60 A 7889	-2131-100	Red	.63
60 A 7890	-2132-100	Green	.63
60 A 7891	-2133-100	Amber	.63

### T-3/4 LAMPS FOR ABOVE

Single contact miniature bayonet lamps for Series 81-9110 and 502-8140. Shpg. wt. 2 oz.

Stk. No.	V	EA.	Stk. No.	V	EA.
60 A 7366	6-8	.15	60 A 7341	78	.33
60 A 7316	3.2	.22	60 A 7361	12.16	.20

### ENCLOSED NEON LIGHT ASSEMBLIES

Series 95-9108\* and 95-9131\*. With built-in 50K resistor for NE-31, 110-125 V circuit; or 22K for NE-51H high-brightness neon glow lamp. 110-125 VAC or DC. 1/4" long. 1/4" mtg. hole. \*Solder terminals. †Screw terminals. U.L. Recog. Less lamp. 2 oz.

Stock No.	FOR	Type	Color	EA.
60 A 7838	NE-31	-0931-142	Red	.87
60 A 7839	NE-31	-0933-142	Amber	.87
60 A 7840	NE-31	-0935-142	White	.87
60 A 7841	NE-31	-0917-142	Clear	.87
60 A 7697	NE-51H	-0931-112	Red	.87
60 A 7698	NE-51H	-0933-112	Amber	.87
60 A 7699	NE-51H	-0935-112	White	.87
60 A 7732	NE-51H	-0937-112	Clear	.87
60 A 8534	NE-51B1A Lamp	2	0.18	.20
60 A 8535	NE-51HB2A Lamp	2	0.22	.22

## LENS CAPS FOR ASSEMBLIES, SWITCHES AND INDICATORS



### SERIES 0512 AND 1012 PANEL-MOUNTING LENS CAPS

Panel-mounting lens caps are 1/4" long. Require 1/4" behind panel. Mounting holes: Series 0512, 3/32" threads; Series 1012, 1/8"-27 thread. Shpg. wt. 2 oz.

Stock	Mfr's Type	Dia.	Color	EACH
60 A 8018	1012-2131-102	1/4"	Red	.18 .16
60 A 8019	1012-2132-102	1/4"	Green	.18 .16
60 A 8020	1012-2133-102	1/4"	Amber	.18 .16
60 A 8023	0512-2131-102	1/4"	Red	.17 .15
60 A 8024	0512-2132-102	1/4"	Green	.17 .15
60 A 8025	0512-2133-102	1/4"	Amber	.17 .15
60 A 8026	0512-2134-102	1/4"	Blue	.17 .15
60 A 8027	0512-2135-102	1/4"	White	.17 .15

### 1/2" LENS CAPS FOR PUSHBUTTON SWITCHES AND INDICATOR LIGHT

Round rotatable types permit alignment after installation. Keyed square types push on for permanent positioning. Have solid-color translucent face and sides. High-strength plastic lens. Shpg. wt. 2 oz.

Color	Round Rotatable	Square Keyed	EA.
Red	60 A 8857 183-1471	60 A 8878 184-1871	.59
Green	60 A 8858 183-1472	60 A 8879 184-1872	.59
Amber	60 A 8859 183-1473	60 A 8880 184-1873	.59
Blue	60 A 8860 183-1474	60 A 8881 184-1874	.59
White	60 A 8861 183-1475	60 A 8882 184-1875	.59
1/4 Vel.	60 A 8862 183-1476		.59
Ivory	60 A 8863 183-1477		.59

### ENCLOSED NEON LIGHT ASSEMBLIES

Series 95-9110. Same as 95-9163, below left, but less resistor. For miniature bayonet lamps. Solder terminals. 2 oz.

Stock No.	Type	Color	EACH
60 A 7846	-0931-102	Red	.73
60 A 7847	-0932-102	Green	.73
60 A 7848	-0933-102	Amber	.73
60 A 7850	-0935-102	White	.73

### OPEN TYPES—FACETED JEWEL LENSES

**C** Series 502-1015, 502-1024. 1/4" lens. Min. screw for T-3/4 bulb; bayonet (not illus.), T-3/4 bulb. 1/4" clearance hole. 2 oz.

Color	502-1015 Min. Screw	502-1024 Bayonet
Red	60 A 7938	60 A 7940
Green	60 A 7941	60 A 7943
Amber	60 A 7944	60 A 7946

Any Color..... Each .34

### D Series 502. 1/2" lens. For T-3/4 bulb. 1/4" clearance hole. \*Not illus. 2 oz.

Color	Min. Screw -8137	Bayonet* -8136	EACH
Red	60 A 7966	60 A 7967	.50
Green	60 A 7968	60 A 7969	.50
Amber	60 A 7970	60 A 7971	.50
Blue		60 A 7990	.50
White		60 A 7992	.50

### E Series 502. 1" lens. 3245 requires T-3/4 bulb; -3214, 56 bulb. 1/4" clearance hole. \*Not illustrated. Shpg. wt. 2 oz.

Color	-3214 Cand.	-3241 Bay.
Red	60 A 7975	60 A 7947
Green	60 A 7976	60 A 7948
Amber	60 A 7977	60 A 7949

Any Color..... Each .88

Lamps for Above. †Miniature Screw. †Candelabra. †Bayonet. Wt., 2 oz.

Stock No.	V	EA.	Stock No.	V	EA.
60 A 7317	6-8	.15	60 A 7383	724	.32
60 A 7355	12-16	.26	60 A 7366	16-3	.15
60 A 7329	11-35	.52	60 A 7361	12.16	.20

### 115-V ONE-INCH MOUNT-ASSEMBLIES

**F** Series 502-3228. Open type. Faceted jewel. Chromed solid-brass holder. Candelabra screw socket. Less lamp, below. 2 oz.

Stock No.	Type	Color	Stock No.	Type	Color
60 A 7860	-0431	Red	60 A 7862	-0433	Amber
60 A 7861	-0432	Green			

Any Color..... Each .98

### G Series 31-2901. Enclosed. Frosted back. Brass; chromed cap. 6" leads. \*Translucent. Less lamp, below. 3 oz.

Stock No.	Type	Color	EACH
60 A 7934	0111-302	Red	1.74
60 A 7935	0112-302	Green	.74
60 A 7936	0113-302	Amber	.74
60 A 7937	0117-302	Clear	.74
60 A 7866	0135-302	White*	1.74

### H Series 31-3101. Enclosed. Faceted. Black phenolic; brass; chromed cap. 6" leads. \*U.L. Recog. Less lamp, below. 2 oz.

Stock No.	Type	Color	EACH
60 A 7928	-0431-302	Red	.46
60 A 7929	-0432-302	Green	.46
60 A 7930	-0433-302	Amber	.46
60 A 7931	-0434-302	Blue	.46
60 A 7932	-0435-302	White	.46
60 A 7931	-0437-302	Clear	.46

60 A 7600. 656-125V Lamp. 1 oz. Each .21

### 6-V INCANDESCENT LAMP CARTRIDGES

Series 607-3906. Unbased T-1 1/4 lamps in aluminum sleeves capped with plastic lenses. Operating life: 1000 hours. Stainless steel pins, nylon insul. 6 volts, 300 mA

Stock No.	Type	Color
60 A 8429	507-3906-1471-600	Red
60 A 8430	507-3906-1472-600	Green
60 A 8431	507-3906-1473-600	Amber
60 A 8432	507-3906-1474-600	Blue
60 A 8433	507-3906-1475-600	White

### J SHORT CYLINDER

Stock No.	Type	Color
60 A 8423	507-3906-0971-600	Red
60 A 8424	507-3906-0972-600	Green

Any Color..... Each 1.15

### 14-V LAMP CARTRIDGES

**K** Series 507-3914. For 14-volt, 80-milliamperes operation. Short-cylinder type lamp cartridge. Mounts in 1/4" clearance hole. Operating life: 50,000 hours.

Stock No.	Type	Color
60 A 8464	507-3914-1471-600	Red
60 A 8465	507-3914-1472-600	Green
60 A 8466	507-3914-1473-600	Amber
60 A 8467	507-3914-1474-600	Blue
60 A 8468	507-3914-1475-600	White

Any Color..... Each 1.28

### 115-125-V ASSEMBLY

**L** Series 250-8758. Indicator light for 115-120 volts, 60 Hz. With refractive inner surfaces. Use cartridge below. Rear-mount holder for 1/4" clearance.

Stock No.	Type	Color
60 A 6630	250-8758-8331-504	Red
60 A 6631	250-8758-8332-504	Green
60 A 6632	250-8758-8333-504	Amber
60 A 6633	250-8758-8335-504	White

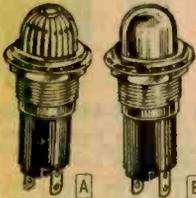
Any Color..... Each 1.68

**M** Lamp Cartridge 507-5824-0747-000. Order for the 250-8758 Series above and have correct light and cartridge for immediate use. 60 A 6634..... Each 1.38

# Pilot and Indicator Lights; Lamp Sockets

## DIALCO INDICATORS

### NEON INDICATORS WITH BUILT-IN RESISTORS



has built-in 22K resistor brightness lamp; add suffix wt., 2 oz.

**A** Series 52-0408\*, 52-0463†. For T-3/4 neon lamp. Same as Series 95-9108 but with fluted stovepipe lens. Meets MIL-L-3661. Solder terminals. \*Series 52-0408 has built-in 56K resistor for B1A lamp; add suffix -241. †Series 52-0463 for B2A high-light; add suffix -211. Av. shpg. wt., 2 oz.

Lens Color	B1A* Stock No.	B2A† Stock No.	Mfr's Type #†	EACH
Red	60 A 7806	60 A 7810	-0991-	1.26
Amber	60 A 7807	60 A 7811	-0993-	1.26
White	60 A 7808	60 A 7812	-0995-	1.26
Clear	60 A 7809	60 A 7813	-0997-	1.26

Series 52-1308\*, 52-1363†. As above, but with screw terminals.

Red	60 A 7814	60 A 7818	-0991-	1.34
Amber	60 A 7815	60 A 7819	-0993-	1.34
White	60 A 7816	60 A 7820	-0995-	1.34
Clear	60 A 7817	60 A 7821	-0997-	1.34

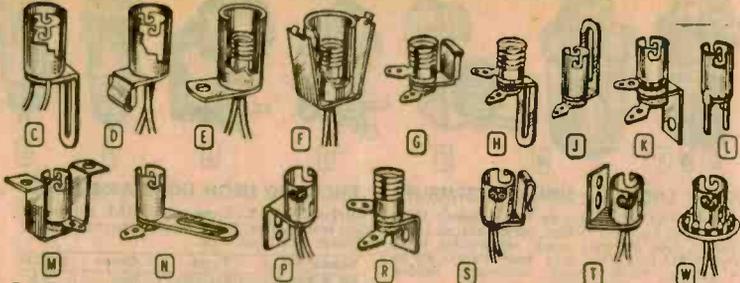
**B** Series 95-0408\*, 95-0463†. For T-3/4 neon lamp. Meet MIL specs. Smooth stovepipe lens. 110-125V, AC-DC. Black nickel finish. 2 1/8" long. \*U.L. Recog. C.S.A. Listed. Solder terminals. †Prefix 95-0408 for B1A; add Suffix -142. †Prefix 95-0463 for B2A; add Suffix -211. Av. shpg. wt., 2 oz.

Red	60 A 7822	60 A 7826	-0931-	1.26
Amber	60 A 7823	60 A 7827	-0933-	1.26
White	60 A 7824	60 A 7828	-0935-	1.26
Clear	60 A 7825	60 A 7829	-0937-	1.26

**B** Series 95-9108\*, 95-9163†. Same as Series 95-0408 above, but with plastic head and phenolic body. \*U.L. Recognized. Solder terminals. \*Use Prefix 95-9108 for B1A lamp; add Suffix -142. †Prefix 95-9163 for B2A lamp; add Suffix -112. For 110-125 V, AC-DC. Av. shpg. wt., 2 oz.

Red	60 A 7838	60 A 7697	-0931-	.87
Amber	60 A 7839	60 A 7698	-0933-	.87
White	60 A 7840	60 A 7699	-0935-	.87
Clear	60 A 7841	60 A 7732	-0937-	.87

## LEECRAFT LAMPHOLDER ASSEMBLIES



Sturdy lampholder assemblies for every requirement. Tables below indicate which sockets and brackets combine to make up each lampholder. Av. shpg. wt., 5 oz.

Series 2-00. Miniature bayonet sockets with insulating sleeves. .025 to .032" steel brackets; cadmium-plated. Built-in #22 wire leads.

Stock No.	Type	Socket	Bracket	EACH
60 A 8054	2-01	C	S	.46
60 A 8055	2-04	D	D	.46
60 A 8056	2-06	C	D	.46
60 A 8057	2-13	C	F	.46
60 A 8058	2-15	C	N	.46

Series 4-00. Candelabra screw sockets in molded bakelite. #18 black and white wire, 6" long with ends stripped 1/2". For both incandescent and neon glow lamps.

60 A 8066	4-01	F	S R	.50
60 A 8068	4-05	F	R	.50
60 A 8069	4-06	F	R C	.50
60 A 8070	4-08	F	R	.50

Series 5-00. Miniature screw sockets. Tinned solder terminals. For low-voltage incandescent lamps. Cadmium-plated steel brackets.

60 A 8072	5-01	G	S	.35
60 A 8073	5-04	G	D	.35
60 A 8074	5-05	G	H	.35
60 A 8075	5-06	G	J	.35
60 A 8076	5-07	G	NONE	.35
60 A 8077	5-08	G	R	.35
60 A 8078	5-13	G	N	.35

Series 6-00. Candelabra sockets. Tinned solder terminals. .025 to .032" steel brackets; cadmium-plated for corrosion resistance. For G6, S6 incandescent lamps.

60 A 8080	6-01	H	S	.39
60 A 8081	6-04	H	D	.39
60 A 8082	6-05	H	H	.39
60 A 8083	6-06	H	J	.39
60 A 8084	6-07	H	NONE	.39
60 A 8085	6-08	H	R	.39
60 A 8086	6-11	H	M	.39
60 A 8087	6-13	H	N	.39

Series 7-00. Miniature bayonet sockets with solder terminals for low-voltage incandescent lamps as T-3/4, G-3/4, and G-4 1/2. \*Designed for printed circuits.

Stock No.	Type	Socket	Bracket	EACH
60 A 8089	7-01	M	S	.40
60 A 8090	7-04	M	D	.40
60 A 8091	7-05	I	I	.40
60 A 8092	7-06	J	C	.40
60 A 8093	7-07	M	NONE	.40
60 A 8094	7-08	M	R	.40
60 A 8095	7-11	N	M	.40
60 A 8096	7-13	N	N	.40
60 A 8097	7-15	M	F	.40
60 A 8098	7-20	K	K	.40
60 A 8099	*7-35	L	L	.61

Series 11-200. Single-contact candelabra bayonet socket with one wire lead. Comes with #18 wire and .035 to .042" thick steel brackets; cadmium-plated for high corrosion resistance.

Stock No.	Type	Socket	Bracket	EACH
60 A 8100	11-271	P	T	.46
60 A 8101	11-272	P	P	.46

Series 12-200. Double-contact candelabra bayonet sockets. Contacts are mounted in a bakelite disk and separated by small coils. Disk is spring-loaded to assure positive contact. Can be used with incandescent and neon glow lamps as NE-48, S6, and 10C7. \*Type 12-240 has plug-in bracket. \*U.L. Recognized and C.S.A. Listed.

Stock No.	Type	Socket	Bracket	EACH
60 A 8102	12-201	S	S	.55
60 A 8104	12-212	T	E	.55
60 A 8105	*12-213	W	W	.55
60 A 8106	12-271	V	V	.55
60 A 8107	12-272	P	P	.55

## LEECRAFT NEON PILOT LIGHTS AND INDICATORS

### NEON INDICATOR LIGHTS



Rectangular neon indicator lights—excellent for new equipment design or for modernizing existing equipment. White nylon housing with chromed bezel. Have 6" insulated leads. Require 1.281-.395" mtg. hole. Built-in series resistor. Rated 1/2 watt at 125-250 volts. Size, 1 1/4 x 1 3/8 x 1 1/2". Shpg. wt., 5 oz.

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### SERIES 31—110-125 VOLTS

Stock No.	Type	Color	EACH
60 A 6018	31-2111	Red	.92
60 A 6019	31-2113	Amber	.92
60 A 6021	31-2115	White	.92

### SNAP-IN NEON INDICATOR LIGHTS



Series 47. One-piece, high-heat plastic units snap easily and securely into 1 1/8 x 3/4" panel opening with no additional hardware required. Suitable for up to 1/4" thick panels. Have long-life, high-brightness neon lamps with built-in current-limiting resistors. Tinned solder lug terminals. Type 47-3 rated 1/2 watt, 110-125 volts; Type 47H-3 rated 1/2 watt, 210-250 volts. \*U.L. Recog. Shpg. wt., 5 oz.

60 A 6623	Type 47-3	Red	Each 1.08
60 A 6624	Type 47-H-3	Red	Each 1.08

### SNAPLITE NEON PILOT LIGHTS



Snap into 1/2" diameter holes in panels of any thickness without additional hardware. White nylon housing contains long-life neon lamp and built-in resistor for proper circuit voltage. 1/2 watt. Series 32 is for 110-125 volts; Series 35 is for 210-250 volts. Plastic lens caps for 110-200°C. Series 32 has up to 15,000-hour life; Series 35, up to 25,000 hours. \*U.L. Recog. 5 oz.

### CYLINDRICAL-CAP TYPES

Stock No.	Mfr's Type	Color	EACH
60 A 7921	32-2111	Red	.86
60 A 7922	32-2113	Amber	.86
60 A 7923	32-2117	Clear	.86
60 A 8124	32-2115	White	.86
60 A 7925	35-2111	Red	.86
60 A 7926	35-2113	Amber	.86

### DOME-CAP TYPES

60 A 7758	32-2211T	Red	.86
60 A 7783	32-2213T	Amber	.86
60 A 7882	32-2215T	Clear	.86
60 A 7911	32-2217T	White	.86

### FLUSH-CAP TYPES

Stock No.	Mfr's Type	Color	EACH
60 A 7982	32-2311	Red	.86
60 A 7983	32-2313	Amber	.86
60 A 7984	32-2315	White	.86
60 A 7985	32-2317	Clear	.86
60 A 7986	32-2311T	Red	.86
60 A 8749	32-2313T	Amber	.86

### "TINEON" INDICATORS

Extremely long-life, high-brightness neon indicator lights press-fit quickly and firmly into 1/2" diameter holes. Have durable nylon housing and plastic lens. Lamp housing is 1 1/2" long. Complete with speed nut for maximum security. Lamp and built-in resistor to suit the applied circuit voltage and ensure maximum lamp life. Rated 110-125 volts. Have #18 gauge insulated wire leads, 6" long. \*U.L. Recognized. C.S.A. Listed. Shpg. wt., 5 oz.

### STANDARD BEZEL TYPES

Stock No.	Mfr's Type	Color	EACH
60 A 8698	36N-2311	Red	.81
60 A 8699	36N-2313	Amber	.81
60 A 8700	36N-2315	White	.81
60 A 8701	36N-2317	Clear	.81

### ALUMINUM-BEZEL HI-HAT-LENS TYPES

Stock No.	Mfr's Type	Color	EACH
60 A 7000	36EN2111	Red	.97
60 A 7048	36EN2113	Amber	.97
60 A 7052	36EN2115	White	.97
60 A 7053	36EN2117	Clear	.97

### ALUMINUM-BEZEL FLUSH-LENS TYPES

Stock No.	Mfr's Type	Color	EACH
60 A 7066	36EN2311	Red	.97
60 A 7068	36EN2313	Amber	.97
60 A 7069	36EN2315	White	.97
60 A 7498	36EN2317	Clear	.97

# Potter & Brumfield Relays and Accessories

On these pages, you'll find the most popular contact arrangements, ratings, terminations, enclosures, and coil voltages listed.

Contact us for prices and other product information on any types not listed—you'll receive a prompt reply.

## PR HEAVY-DUTY POWER RELAYS

SPST normally open. Heavy screw terminals. All U.L. Recognized and C.T. type also C.S.A. Listed, except PR11ALS, neither. All have 25-amp silver contacts except PR11ALS with 20-amp contacts. \*Equipped with auxiliary DPDT 5-amp contacts. Sizes all are 2 1/2" wide. PR3, PR5, 7 1/2 x 2 1/2". PR7, 2 1/2 x 1 1/2". PR11, 2 1/2 x 3 1/4". Dust covers, below right. Av. shpg. wt., 42 oz.



Stock No.	Type	Volts	Action	EACH
41 A 5846	PR3AY	6 AC	SPST	4.55
41 A 6751	PR3AY	12 AC	SPST	4.55
41 A 5961	PR3AY	24 AC	SPST	4.55
41 A 5601	PR3AY	120 AC	SPST	4.55
41 A 5652	PR3AY	240 AC	SPST	5.00
41 A 6509	PR3DY	12 DC	SPST	4.55
41 A 6101	PR3DY	24 DC	SPST	4.55
41 A 5968	PR3DY	110 DC	SPST	5.25
41 A 5847	PR5AY	6 AC	SPDT	4.80
41 A 5878	PR5AY	12 AC	SPDT	4.80
41 A 5962	PR5AY	24 AC	SPDT	4.80
41 A 5602	PR5AY	120 AC	SPDT	4.80
41 A 5966	PR5AY	240 AC	SPDT	5.25
41 A 6750	PR5DY	6 DC	SPDT	4.80
41 A 6510	PR5DY	12 DC	SPDT	4.80
41 A 6754	PR5DY	24 DC	SPDT	4.80
41 A 6969	PR5DY	110 DC	SPDT	9.45
41 A 5848	PR7AY	6 AC	DPST	5.40
41 A 5979	PR7AY	12 AC	DPST	5.40
41 A 5963	PR7AY	24 AC	DPST	5.40
41 A 5603	PR7AY	120 AC	DPST	5.40
41 A 5654	PR7AY	240 AC	DPST	5.90
41 A 6102	PR7DY	6 DC	DPST	5.40
41 A 6511	PR7DY	12 DC	DPST	5.40
41 A 6513	PR7DY	24 DC	DPST	5.40
41 A 5970	PR7DY	110 DC	DPST	6.10
41 A 5849	PR11AY	6 AC	DPDT	7.10
41 A 6752	PR11AY	12 AC	DPDT	7.10
41 A 5964	PR11AY	24 AC	DPDT	7.10
41 A 5604	PR11AY	120 AC	DPDT	7.10
41 A 5655	PR11AY	240 AC	DPDT	7.65
41 A 6103	PR11ALS	6 AC	*DPDT	9.00
41 A 6109	PR11ALS	12 AC	*DPDT	9.00
41 A 6753	PR11ALS	24 AC	*DPDT	9.00
41 A 6755	PR11ALS	120 AC	*DPDT	9.00
41 A 6756	PR11ALS	240 AC	*DPDT	9.45
41 A 6508	PR11DY	6 DC	DPDT	7.10
41 A 6512	PR11DY	12 DC	DPDT	7.10
41 A 6514	PR11DY	24 DC	DPDT	7.10
41 A 5971	PR11DY	110 DC	DPDT	7.75

## MR MEDIUM-DUTY POWER RELAYS

For general applications. Silver contacts rated 8 amps except MR3 types rated 10 amps. AC coils for 60 Hz. ST actions normally open. Size: MR3 and MR5, 1 1/2 x 1 1/2 x 2 1/2"; MR11, 2 1/2 x 2 1/2 x 2 1/2"; MR14, 2 x 2 1/2 x 2 1/2". Av. shpg. wt., 5 oz.



Stock No.	Type	Volts	Action	EACH
41 A 5975	MR3A	6 AC	SPST	4.30
41 A 5978	MR3A	24 AC	SPST	4.30
41 A 5665	MR3A	120 AC	SPST	4.30
41 A 5983	MR3D	6 DC	SPST	3.90
41 A 5187	MR3D	12 DC	SPST	3.90
41 A 5988	MR3D	24 DC	SPST	3.90
41 A 5610	MR5A	6 AC	SPDT	3.85
41 A 6757	MR5A	12 AC	SPDT	3.85
41 A 5979	MR5A	24 AC	SPDT	3.85
41 A 5614	MR5A	120 AC	SPDT	3.85
41 A 5657	MR5A	240 AC	SPDT	4.20
41 A 5618	MR5D	6 DC	SPDT	3.55
41 A 5619	MR5D	12 DC	SPDT	3.55
41 A 5989	MR5D	24 DC	SPDT	3.55
41 A 6760	MR5D	110 DC	SPDT	4.10
41 A 5612	MR11A	6 AC	DPDT	5.40
41 A 6758	MR11A	12 AC	DPDT	5.40
41 A 5981	MR11A	24 AC	DPDT	5.40
41 A 5616	MR11A	120 AC	DPDT	5.40
41 A 5659	MR11A	240 AC	DPDT	5.85
41 A 5985	MR11D	6 DC	DPDT	5.15
41 A 5190	MR11D	12 DC	DPDT	5.15
41 A 5991	MR11D	24 DC	DPDT	5.15
41 A 6761	MR11D	110 DC	DPDT	5.65
41 A 5976	MR14A	6 AC	3PDT	6.45
41 A 6759	MR14A	12 AC	3PDT	6.45
41 A 5982	MR14A	24 AC	3PDT	6.45
41 A 5972	MR14A	120 AC	3PDT	6.45
41 A 5974	MR14A	240 AC	3PDT	6.85
41 A 5986	MR14D	6 DC	3PDT	6.10
41 A 5191	MR14D	12 DC	3PDT	6.10
41 A 5992	MR14D	24 DC	3PDT	6.10
41 A 6762	MR14D	110 DC	3PDT	6.60

## KRP ENCLOSED RELAYS

Completely enclosed compact, relays in hi-impact, transparent, plastic cases. Fully dustproof and weatherproof for long, trouble-free operation. Types KRPS and KRPI1 plug-into standard octal sockets; Type KRPI4 plugs into 11-pin socket. Gold-flashed silver contacts rated 8 amps at 120 VAC, 60 Hz resistive. 1 1/2 x 1 1/2 x 2 1/2". Av. shpg. wt., 5 oz.



Stock No.	Type	Volts	Action	EACH
41 A 5214	KRP5A	6 AC	SPDT	6.00
41 A 5215	KRP5A	24 AC	SPDT	6.00
41 A 5213	KRP5A	120 AC	SPDT	6.00
41 A 5217	KRP5D	6 DC	SPDT	5.95
41 A 5244	KRP5D	12 DC	SPDT	5.95
41 A 5243	KRP5D	24 DC	SPDT	5.95
41 A 5240	KRP5D	110 DC	SPDT	6.60
41 A 5920	KRP11A	6 AC	DPDT	6.65
41 A 5524	KRP11A	12 AC	DPDT	6.65
41 A 5166	KRP11A	24 AC	DPDT	6.65
41 A 5921	KRP11A	120 AC	DPDT	6.65
41 A 6597	KRP11A	240 AC	DPDT	7.10
41 A 5922	KRP11D	6 DC	DPDT	6.60
41 A 5246	KRP11D	12 DC	DPDT	6.60
41 A 5247	KRP11D	24 DC	DPDT	6.60
41 A 6352	KRP11D	110 DC	DPDT	7.30
41 A 5091	KRP14A	6 AC	3PDT	8.30
41 A 6525	KRP14A	12 AC	3PDT	8.30
41 A 5092	KRP14A	24 AC	3PDT	8.30
41 A 5993	KRP14A	120 AC	3PDT	8.30
41 A 5557	KRP14A	240 AC	3PDT	8.70
41 A 5094	KRP14D	6 DC	3PDT	8.20
41 A 5095	KRP14D	12 DC	3PDT	8.20
41 A 5096	KRP14D	24 DC	3PDT	8.20
41 A 6998	KRP14D	110 DC	3PDT	8.85

## KCP ENCLOSED RELAYS

Plate circuit relays. In high-impact, weatherproof plastic cases. Fits standard octal or 11-pin socket (at right, below). 2 amp resistive, silver contacts. 1 1/2 x 1 1/2 x 2 1/2". Wt., 4 oz.



Stock No.	Type	Ohms	mA	Action	EACH
41 A 5287	KCP5	2500	7.2	SPDT	6.50
41 A 5288	KCP5	5000	5.0	SPDT	6.60
41 A 5289	KCP5	10,000	3.6	SPDT	7.05
41 A 5290	KCP11	2500	10.0	DPDT	6.95
41 A 5291	KCP11	5000	7.2	DPDT	7.05
41 A 5292	KCP11	10,000	5.0	DPDT	7.50
41 A 5097	KCP14	2500	12.3	3PDT	8.55
41 A 5098	KCP14	5000	8.7	3PDT	8.65
41 A 5099	KCP14	10,000	6.1	3PDT	9.10

## KT ANTENNA-SWITCHING RELAYS

For selecting either of two antennas or for switching single antenna from receiver to transmitter and vice-versa. Designed for RF applications; glass base insulation for minimum loss. Will switch 300-ohm line. All are DPDT. Mfg. 6-32 stud. Silver 5 amp contacts. Size: 1 1/2 x 1 1/2 x 1 1/4". Shpg. wt., 2 oz.



Stock No.	Type	Volts	EACH
41 A 6373	KT11A	6 AC	4.10
41 A 6374	KT11A	120 AC	4.10
41 A 6375	KT11D	6 DC	4.10
41 A 6376	KT11D	12 DC	4.10

## KR3 POWER RELAYS

Open double-break relay with copper alloy contact arms and silver-cadmium oxide contacts rated at 20 amps, 120 VAC, 60 Hz resistive, or 20 VDC-1 SPST-20/240V, 60 Hz. (SPST-120/240V, 60 Hz. action). Stud mts. 1/8" x 1/8" x 3/16". Same coil ratings as KA type, above right. \*Enclosed, type, similar to KRP plus, above. Av. shpg. wt., 8 oz.



Stock No.	Type	Volts	EACH
41 A 5132	KR3AH	24 AC	4.30
41 A 5133	KR3AH	120 AC	4.30
41 A 5134	KR3DH	6 DC	4.10
41 A 5135	KR3DH	12 DC	4.10
41 A 5136	KR3DH	24 DC	4.10
41 A 5137	KR3DH	110 DC	4.70
41 A 5138	KRP3AH*	24 AC	7.00
41 A 5139	KRP3AH*	120 AC	7.00
41 A 5175	KRP3DH*	12 DC	6.75
41 A 5176	KRP3DH*	24 DC	6.75

## 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 Hz. All are 1 1/2 x 1 1/2 x 2 1/2" mounting std. 1 1/2 x 1 1/2 x 1 1/2" Shpg. wt., 6 oz.



Stock No.	Type	Volts	Action	EACH
41 A 5158	KASAY	6 AC	SPDT	3.50
41 A 6790	KASAY	12 AC	SPDT	3.50
41 A 5161	KASAY	24 AC	SPDT	3.50
41 A 5164	KASAY	120 AC	SPDT	3.50
41 A 5153	KASAY	240 AC	SPDT	4.00
41 A 5167	KASDV	6 DC	SPDT	3.35
41 A 5170	KASDV	12 DC	SPDT	3.35
41 A 5173	KASDV	24 DC	SPDT	3.35
41 A 6792	KASDV	110 DC	SPDT	4.05
41 A 5159	KAI1AY	6 AC	DPDT	4.25
41 A 6781	KAI1AY	12 AC	DPDT	4.25
41 A 5162	KAI1AY	24 AC	DPDT	4.25
41 A 5165	KAI1AY	120 AC	DPDT	4.25
41 A 6793	KAI1AY	240 AC	DPDT	4.65
41 A 5168	EAI1DY	6 DC	DPDT	3.75
41 A 5171	EAI1DY	12 DC	DPDT	3.75
41 A 5174	EAI1DY	24 DC	DPDT	3.75
41 A 6522	EAI1DY	110 DC	DPDT	4.40
41 A 5160	KAI4AY	6 AC	3PDT	4.65
41 A 6779	KAI4AY	12 AC	3PDT	4.65
41 A 5163	KAI4AY	24 AC	3PDT	4.65
41 A 5166	KAI4AY	120 AC	3PDT	4.65
41 A 5152	KAI4AY	240 AC	3PDT	5.15
41 A 5169	EAI4DY	6 DC	3PDT	4.25
41 A 5172	EAI4DY	12 DC	3PDT	4.25
41 A 5175	EAI4DY	24 DC	3PDT	4.25
41 A 6523	EAI4DY	110 DC	3PDT	4.90

## PC IMPULSE RELAYS

Compact, pulse-operated relay. For on-off or reversing applications. Pulses may be as short as 60 milliseconds at 5 Hz. Gold-flashed, silver contacts, rated 7.5 amps at 120 volts AC, resistive load. Size: 1 1/2 x 2 1/2 x 2 1/2". Shpg. wt., 2 oz.



Stock No.	Type	Volts	Action	EACH
41 A 6504	PC11A	6 AC	DPDT	6.20
41 A 6728	PC11A	12 AC	DPDT	6.20
41 A 6502	PC11A	24 AC	DPDT	6.20
41 A 6500	PC11A	120 AC	DPDT	6.20
41 A 6726	PC11D	6 DC	DPDT	6.00
41 A 6711	PC11D	12 DC	DPDT	6.00
41 A 6506	PC11D	24 DC	DPDT	6.00
41 A 6503	PC17A	24 AC	4PDT	8.55
41 A 6501	PC17A	120 AC	4PDT	8.55
41 A 6507	PC17D	24 DC	4PDT	8.55

## RELAY CASES AND SOCKETS

PR Relay Case, Steel base with aluminum cover. 4-knockouts for 1/2" conduit. Mfg. 5-No. 10 holes on 1 1/2 x 1 1/2" centers. Size: 3 1/2 x 5 1/2 x 3 1/4". Shpg. wt., 1 lb. 41 A 6777..... 3.45



MR Relay Case, Steel base with a slip-on aluminum cover. 2-knockouts for 1/2" conduit. Mounts on pre-drilled holes. Wt., 1 lb. 41 A 6778..... Each 2.20

Amphenol 77M1P8 Socket. For KRP and KCP relays. For all relays except KRPI4 and KCP14. Octal type. Requires 1 1/2" hole. Mfg. centers, 1 1/2". Wt. 1 oz. 47 A 0028..... Each .21

Amphenol 77M1P11 Socket. For KRPI4 and KCP14 types. Milled bakelite. Mounts in 1 1/2" hole. 1 1/2" mfg. ctrs. 11-pin-4 oz. 47 A 0033..... Each .29

## TYPE "P" RELAY CASES

Model 35 D070. Clear, cellulose acetate. For mtg. resistors, capacitors, etc. Octal-type plug. Same case as used with KRP and KCP relays. 4 mts. screws. Use with 9-KR-15 hold-down spring. (Below) for special applications. 1 1/2 x 1 1/2 x 2 1/2" Shpg. wt., 1 oz. 41 A 5558..... Each .65



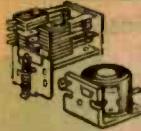
41 A 5559, Type D072 Same as above but with 11-pin plug. Shpg. wt., 1 oz. Each .80

Type 9-KR-15 Hold-Down Spring. For horizontal, inverted, and vibration-secure mounting of KCP and KRP relays. Stainless steel. Two 1/8" mfg. holes on 1 1/2" ctrs. 3 oz. 41 A 5554..... Box of 50. 58.00

# Knight® and Potter & Brumfield Relays

## POTTER & BRUMFIELD RELAYS

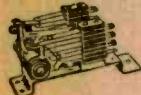
### GP "PIC AND BUILD" SERIES



Unless available can be combined to produce twenty different relays, each easily converted to an alternative sensitivity or switching arrangement in minutes. The 24 V DC coil is approximately 300 ohms. The 2500 ohm and 10,000 ohm coils may be used in plate circuit applications and can be adjusted to operate on 13 mA and 6.5 mA respectively. 1/4" diameter switch contacts are rated at 5 amps. Has tapped core to permit mounting with single 8-32 screw. Size, 1x1 1/4x1 3/8". Av. wt., 4 oz.

Stock No.	Mfr's Type	Description	EA.
41 A 6333	GPA	6 V AC Coil	1.85
41 A 6339	GPA	12 V AC Coil	1.85
41 A 6334	GPA	24 V AC Coil	1.85
41 A 6335	GPA	120 V AC Coil	1.85
41 A 6337	GPD	6 V DC Coil	2.30
41 A 6338	GPD	12 V DC Coil	2.30
41 A 6339	GPD	24 V DC Coil	2.30
41 A 6341	GPD	2500-ohm Coil	1.70
41 A 6342	GPD	10,000-ohm Coil	1.70
41 A 6343	GP11	4PDT Switch	3.25
41 A 6344	GP17	4PDT Switch	3.25

### AP RATCHET IMPULSE RELAYS



Fast acting for uses requiring on-off or reversing action on alternate impulses. Operates on impulses as short as 60 ms. Intermittent duty. Contacts are 3/16" 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" diam. holes on 3/2x3/4" triangular centers. Size: 2 1/2x3 3/4". AC types for 50-60 Hz. 12 oz.

Stock No.	Type	Volts	Action	EACH
41 A 5997	API1A	6 AC	DPDT	9.65
41 A 6581	API1A	12 AC	DPDT	9.65
41 A 5993	API1A	120 AC	DPDT	9.65
41 A 6583	API1A	240 AC	DPDT	10.20
41 A 6585	API1D	6 DC	DPDT	9.65
41 A 5999	API1D	24 DC	DPDT	9.65
41 A 6589	API1D	110 DC	DPDT	10.40
41 A 5994	API1A	120 AC	4PDT	11.70
41 A 6588	API1D	12 DC	4PDT	11.70
41 A 5778	API1D	24 DC	4PDT	11.70

### RS5D LIGHTWEIGHT RELAYS



Compact, sensitive relays designed for radio-sonde, light-dimmer, and model applications. Sensitivity of 60 milliwatts. Life of over 10 million operations. Operate in 25 milliseconds and release in less than 5 milliseconds. SPDT contacts are bar palladium, rated at 2 amps. Current actuated, except \*voltage actuated. Insulation resistance of 100 megs minimum. Two 4-40 tapped holes on 1/2x3/4" diagonal centers. May be mounted in Type "P" craze-resistant transparent plastic case, or with KCP-KRP hold-down spring. Size: 1 1/2x1 1/4". Av. shpg. wt., 2 oz.

Stock No.	Coil Ohms	mA	VDC*	EACH
41 A 5896	335	6	5	2.90
41 A 5804	1350	12	5	2.95
41 A 5897	2500	5.0	3	3.15
41 A 5898	5000	3.5	3	3.45
41 A 5899	10,000	2.5	3	4.00

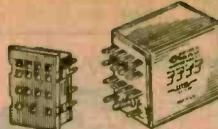
### KM SUBMINIATURE RELAYS



For multiple switching use in small business machines, alarm systems, communications. Withstand 30g shock. Weight 0.58 oz. 3/2" silver contacts rated 2 amps. Solder terminals. Mfg. by 2-56 tapped core, locating half-punch. Size 1 1/2x 3/4x 3/8". Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH
41 A 6361	KM5D	6 DC	SPDT	3.80
41 A 6362	KM5D	12 DC	SPDT	3.80
41 A 6363	KM5D	24 DC	SPDT	3.80
41 A 6365	KM11D	6 DC	DPDT	4.15
41 A 6366	KM11D	12 DC	DPDT	4.15
41 A 6367	KM11D	24 DC	DPDT	4.15
41 A 6369	KM14D	6 DC	3PDT	4.80
41 A 6370	KM14D	12 DC	3PDT	4.80
41 A 6371	KM14D	24 DC	3PDT	4.80

## KHP MINIATURE 4PDT RELAYS



Compact, rugged 4PDT relays for data processing, computer control, etc. Come with nylon dust cover. Gold-flashed silver contacts rated 3 amps at 30 V DC or 120 V AC resistive, except types with suffix "12" have silver-cadmium-oxide contacts. Coil power: DC, 900 milliwatts; AC, 1.2 VA. Solder terminals with 3-48 mtg. stud. 3/8" long. Fit sockets (below) with either printed circuit or solder lug terminals. Contacts rated for 100,000 operations. Size: 1 1/2x1 1/4x3/8". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Coil		EA.
		Volts	Ohms	
41 A 4252	KHPI7A11	6 AC	10.5	5.55
41 A 4253	KHPI7A11	12 AC	43	5.55
41 A 4254	KHPI7A11	24 AC	160	5.55
41 A 4255	KHPI7A11	120 AC	3900	6.05
41 A 4757	KHPI7D11	6 DC	40	5.05
41 A 4756	KHPI7D11	12 DC	160	5.05
41 A 4757	KHPI7D11	24 DC	650	5.05
41 A 4758	KHPI7D11	48 DC	2600	5.25
41 A 4759	KHPI7D11	90 DC	9000	5.90
41 A 4759	KHPI7D11	110 DC	11000	5.90
41 A 6045	KHPI7D12	24 DC	650	5.20
41 A 6046	KHPI7D12	110 DC	11000	6.05

### SOCKETS FOR KHP RELAYS

41 A 5940	9KHI	Solder Term.	.70
41 A 5990	9KH2	PC terminal	.70



BU AC-OPERATED BUZZERS  
Spring-steel armature buzzes when coil is energized. 1/2x1 1/2x1 1/8". Mfg., 6-32 tapped core. 2 oz.

Stock No.	AC Volts	Power VA	Coil Ohms	EACH
41 A 6005	6	4.6	2.75	1.95
41 A 6006	12	4.6	13.25	1.95
41 A 6007	24	4.6	50.00	1.95
41 A 6008	115	4.6	1250.00	1.95

### LB-5 SENSITIVE RELAYS



Small, fast-acting circuit relays. For any circuit supplying only a few milliwatts of DC. Breakdown: 500 volts rms minimum. Silver contacts are rated 5 amps at 120 V AC, 60 Hz resistive. All units have SPDT action. Adjusted by bending tail-spring hook. Size, 2 1/2x1 1/2x1 1/8". For DC operation only. Shpg., wt., 5 oz.

Stock No.	Ohms	mA	EACH
41 A 5625	2500	9	2.85
41 A 5626	5000	6.3	3.05
41 A 5774	10,000	4.5	3.30

## KUP PLUG-IN 10 AMP RELAYS



Reliable 10 ampere relay for industrial control applications. Designed for continuous operation. Silver-cadmium oxide contacts for long life. Enclosed in clear, high impact plastic dust cover. Coil Power: 1.2 watts DC; 2 VA AC except KUPI4, 2.75 VA. Quick-connect, .187" solder terminals. For use with type 9KUI molded nylon socket (below) with pierced solder terminals. Size: 1.531x1.406x1.906" max. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EA.
41 A 4972	KUP5A15	6 AC	SPDT	3.90
41 A 4973	KUP5A15	12 AC	SPDT	3.90
41 A 4974	KUP5A15	24 AC	SPDT	3.90
41 A 4975	KUP5A15	120 AC	SPDT	3.90
41 A 4976	KUP5A15	240 AC	SPDT	4.30
41 A 4977	KUP5D15	6 DC	SPDT	3.75
41 A 4978	KUP5D15	12 DC	SPDT	3.75
41 A 4979	KUP5D15	24 DC	SPDT	3.75
41 A 4980	KUP5D15	110 DC	SPDT	4.35
41 A 4981	KUPI1A15	6 AC	DPDT	4.75
41 A 4982	KUPI1A15	12 AC	DPDT	4.75
41 A 4983	KUPI1A15	24 AC	DPDT	4.75
41 A 4984	KUPI1A15	120 AC	DPDT	4.75
41 A 4985	KUPI1A15	240 AC	DPDT	5.15
41 A 4986	KUPI1D15	6 DC	DPDT	4.25
41 A 4987	KUPI1D15	12 DC	DPDT	4.25
41 A 4988	KUPI1D15	24 DC	DPDT	4.25
41 A 4989	KUPI1D15	110 DC	DPDT	4.90
41 A 4990	KUPI4A15	6 AC	3PDT	5.30
41 A 4991	KUPI4A15	12 AC	3PDT	5.30
41 A 4992	KUPI4A15	24 AC	3PDT	5.30
41 A 4993	KUPI4A15	120 AC	3PDT	5.70
41 A 4994	KUPI4A15	240 AC	3PDT	5.70
41 A 4995	KUPI4D15	6 DC	3PDT	4.90
41 A 4996	KUPI4D15	12 DC	3PDT	4.90
41 A 4997	KUPI4D15	24 DC	3PDT	4.90
41 A 4998	KUPI4D15	110 DC	3PDT	5.30
41 A 4999	9KU1	[Solder term. socket]		.79

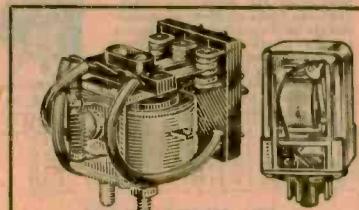
### 1M SENSITIVE RELAYS



For photoelectric and similar circuits. Medium-cost, high quality, current-actuated relays. Pull-in adjustable by tail spring adjusting screw. DC coils only. Silver contacts rated 5 amps, 120 V 60 Hz, non-inductive load. Have 100 milliwatt sensitivity for single pole, 200 mW for double-pole. \*SPDT; †DPDT. Sizes are: LMS, 2 1/2x1 1/2x2 1/8"; LM11, 2 1/2x2 1/2x2 1/8". Av. shpg. wt., 9 oz.

Stock No.	Type	Ohms	mA	EACH
41 A 5673	LM5*	2500	6.3	4.35
41 A 5674	LM5*	5000	4.5	4.55
41 A 5675	LM5*	10,000	3.2	4.90
41 A 5682	LM11†	2500	9.0	6.20
41 A 5683	LM11†	5000	6.3	6.40
41 A 5684	LM11†	10,000	4.5	7.05

## KNIGHT RELAYS



Open Type

Enclosed Type

- Life Expectancy Exceeds 5,000,000 Operations
- Molded Nylon Bobbins
- Modular Construction

Meet exacting requirements over a tremendous range of applications. In either open or enclosed plug-in types. Built-in contact wipe with riveted contacts. Phenolic terminal blocks. Independently riveted coil terminals. Enclosed types have crackproof dust covers of clear, poly carbonate resin. Silver alloy gold-flashed contacts rated 10 amps at 115 VAC or 32 VDC, noninductive.

### OPEN TYPES

Tinned solder terminals. 6-32 mtg. hole. U.L. Comp. Prog. Recog. 1 1/2x1 1/2x1 1/8". 2 oz.

Stock No.	Coil		Action	EACH
	Volts	Ohms		
41 A 4650	12 AC	20	SPDT	3.15
41 A 4651	24 AC	75	SPDT	3.15
41 A 4652	115 AC	1500	SPDT	3.15
41 A 4653	12 DC	150	SPDT	3.00
41 A 4654	24 DC	600	SPDT	3.00
41 A 4655	12 AC	20	DPDT	3.70
41 A 4656	24 AC	75	DPDT	3.70
41 A 4657	115 AC	1500	DPDT	3.70
41 A 4658	12 DC	150	DPDT	3.35
41 A 4659	24 DC	600	DPDT	3.35
41 A 4660	110 DC	10,000	DPDT	3.95
41 A 4661	115 AC	1500	3PDT	4.20
41 A 4662	24 DC	600	3PDT	3.85

### PLUG-IN ENCLOSED TYPES

SPDT and DPDT use std. octal plug; 3PDT, 11-pin plug. 1 1/2x1 1/2x1 1/8". 3 oz.

Stock No.	Coil		Action	EACH
	Volts	Ohms		
41 A 4663	12 AC	20	SPDT	5.45
41 A 4664	24 AC	75	SPDT	5.45
41 A 4665	115 AC	1500	SPDT	4.25
41 A 4666	12 DC	150	SPDT	5.40
41 A 4667	24 DC	600	SPDT	5.40
41 A 4668	12 AC	20	DPDT	6.05
41 A 4669	24 AC	75	DPDT	6.05
41 A 4670	115 AC	1500	DPDT	6.05
41 A 4671	12 DC	150	DPDT	6.10
41 A 4672	24 DC	600	DPDT	6.10
41 A 4673	110 DC	10,000	DPDT	6.70
41 A 4677	115 AC	1500	3PDT	7.50
41 A 4678	24 DC	600	3PDT	7.45

# Relays, Photorelays, and Motors

## ALCO REMOTE-CONTROL ISOLATION RELAYS

- Low-Voltage Control Up to 110 Volts
- Free Booklet Gives Typical Uses for Relay

**MODEL FR-101 AND FR-102 BASIC RELAYS.** Provide low-voltage control of high-voltage circuits. Combine step-down transformer and sensitive AC relays in a single laminated core construction: 110 VAC operation, but relay portion is activated by shorting the safe low-voltage provided by transformer. With dust cover. Av. shpg. wt., 5 oz.

**MODEL FRE-103 PLUG-IN.** Similar to SPDT FR-102, but with plug for standard AC wall outlet, and 3-way receptacle for selection of N. O. or N. C. controlling circuit. Miniature jack on side serves as plug-in for remote-controlling unit. Av. shpg. wt., 5 oz.

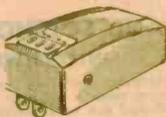
### SPECIFICATIONS

Maximum Load: 5 amps at 117 volts.  
Operating Voltage: 95 to 125 volts.  
Current Consumed: Under 40 mA.  
Isolated Voltage: Under 30 volts.  
Terminals: Types FR-101 and FR-102, 6" leads;  
Type FRE-103, plug-in.  
Life: Over 50,000 operations.  
Size with Cover: 2½x1½x1¼".

Stock No.	Mfr's Type	Contact Action	EACH
41 A 4292	FR-101	SPST Basic	3.85
41 A 4293	FR-102	SPDT Basic	4.45
41 A 4294	FRE-103	SPDT Plug-in	4.95



FR-101, FR-102



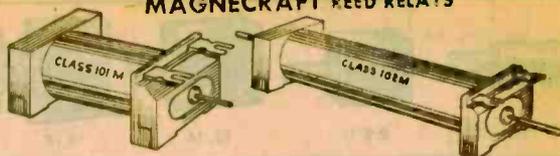
FRE-103

**FREE! Booklet**



With Each Relay.  
Describes 28  
Basic Design  
Ideas. Clear,  
Complete.

## MAGNECRAFT REED RELAYS



Rugged design at minimum cost. Reed leads fastened to molded bobbin for stress relief. High-speed operation, sealed contacts.  
**TYPE 101M:** SPST, normally open. Cont. rated 12 VA @ ¼ amp or 100 VAC max. Coil, 600 mW. Operating time, 1 ms, release, ½ ms. Avg. life, 5 million cycles. 1½x1½x¾".  
**TYPE 102M:** Cont. rated 15 VA @ 1 amp or 250 VAC max. Coil, 300 mW. Oper. time, 3 ms, release, ½ ms. Avg. life, 20 million cycles. 3½x1½x¾". Shpg. wt.: 101M, 2 oz.; 102M, 3 oz.

### CLASS 101M SPST—N.O. MINIATURE REED RELAY

Stock No.	Mfr's Type	Coil			EACH
		mA	VDC	±10% Ohms	
41 A 4440	W101MX-1	...	6	100	2.20
41 A 4441	W101MX-2	...	12	250	2.25
41 A 4442	W101MX-3	...	34	500	2.25
41 A 4443	W101MX-4	...	9	2500	2.43

### CLASS 102M SPST—N.O. STANDARD-SIZE REED RELAY

Stock No.	Mfr's Type	mA	VDC	±10% Ohms	EACH
41 A 4445	W102MX-2	...	6	200	2.25
41 A 4446	W102MX-3	...	12	500	2.25
41 A 4447	W102MX-4	...	24	2000	2.47
41 A 4448	W102MX-5	5.5	...	5000	2.63

## SIGMA RELAYS AND PHOTORELAY COMPONENTS

### RELAYS

**TYPE 4F.** Plate circuit relays for any 20 or 50 mW sensitivity application. SPDT contacts rated 2 A. For smoke detection, burglar alarms. 1½x1½x1½". Av. shpg. wt., 3 oz.



Stock No.	Mfr's Type	Ohms	mA DC	EACH
41 A 6377	4F-1000-S/SIL	1000	4.5	6.85
41 A 6378	4F-2500-S/SIL	2500	3.0	6.85
41 A 6379	4F-5000-S/SIL	5000	2.0	7.20
41 A 5285	4F-8000-S/SIL	8000	1.6	7.45
41 A 6127	4F-10000-S/SIL	10,000	1.4	7.45

**TYPE 65.** Small, sensitive relays. SPDT contacts rated 1A. Screw mtg. (2—4-40 holes spaced .888" apart). Solder terminals. 1 oz.

Stock No.	Mfr's Type	Ohms	Contacts	EACH
41 A 6612	65F1A-12 DC	1640	SPDT	1.50
41 A 6613	65F1A-24 DC	6560	SPDT	1.50

**TYPE 11.** For on-off circuits with gradually changing current; SPDT silver contacts: 1 A at 28 VDC/120 VAC. Sens., 50 mW. U.L. Recog., C.S.A. Listed. Solder terms. 1½x1½x1½". 3 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH
41 A 7681	11F-250-G/SIL	14.0	2.45
41 A 7683	11F-550-G/SIL	9.5	2.45
41 A 5068	11F-1000-G/SIL	7.0	2.45

### INTEGRAL 2-PART PHOTORELAY SYSTEMS

Ideal for materials handling, packaging, production, processing. Solid-state, with high reliability cells.

**TYPE 8P3.** Will provide up to 600 operations per minute. Has a 5-A resistive rating at 28 VDC or 115 VAC, and 5 A at 230 VAC. Designed to give up to 10 million mechanical operations. Operates up to 12 feet from light source. Has SPDT contact arrangement.

**LIGHT SOURCE 8L3-115.** May be used with your own light source, or with the 8L3-115 Light Source listed in the table below. Leads are #18 AWG, with an average 18" length. Operating temperature range, +32° to +122°F.

Stock No.	Mfr's Type	Mounting and Size	Wt. Oz.	EACH 1-9
41 A 6190	8P3-115	½" conduit fitting, mounting bracket. 2½x1½x3½"	13	20.90
41 A 6191	8L3-115	Light source for 8P3-115 listed above	13	15.20

**TYPE 8R PHOTORELAYS.** Use CdS photocells. Tubeless. For applications requiring "light-no-light" conditions. 5 ft.-candles are needed to operate. \*0.1, \*0.5 to release. Contacts are rated 5 amps. Aluminum dust covers. 1½x1½x1½". 115 V, 60 Hz AC. Wt., 4 oz.

Stock No.	Mfr's Type	Contacts	Base	EACH
41 A 6108	8RC01A*	SPDT	5-pin	17.25
41 A 6251	8RC02A†	SPDT	5-pin	17.25

## WORNER PHOTORELAYS

**MODEL 103 PHOTOCCELL-AMPLIFIER-RELAY.** Operates up to 450 times per minute with a 2" object interrupting light beam. Photocell operates relay rated at 1½ amps. Shield protects photocell from extraneous light. Steel case, removable cover. 5x5x5½". For 110-120 V, 50-60 Hz. AC. Shpg. wt., 5 lbs.  
41 A 7349..... 46.68



## WORNER 4000 "WATCHMAN"



Two-unit photoelectric system for actuating burglar alarms. Light-source has infrared filter for invisible beam. Switch for continuous or momentary alarm. Sensitivity control. 6-V output for alarm. For indoor use at distances to 50 ft. 5x5x5½". For 110-120 V, 50-60 Hz AC. 11½ lbs.  
41 A 7232 U..... 96.30

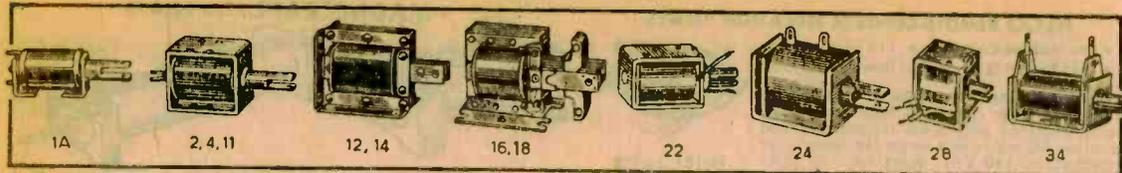
**MODEL 5100.** (Not illus.) As above, but has meter jack for plate-circuit test and alarm setting protected by lock. For up to 100 ft. For 110-120 V, 50-60 Hz AC. 14 lbs.  
41 A 7441 U..... 134.67

## HANSEN "SYNCHRON" MOTORS



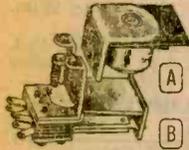
Hysteresis-synchronous timing motors. Sealed gear case, brass gears, 1-piece steel pinions with phenolic first gear. Has positive direction of rotation. Double bearings on rotor shaft, reduction train and output shaft. Can be stalled without damage at speeds of 1 rpm or faster. K12RC: has 4-W "K" coil; 20 in.-oz. torque at 1 rpm. I12RC: 3-W "I" coil; 30 in.-oz. torque at rated speed. All have Type 12 flattened shaft, ½" dia. x ¾" long. Clockwise rotation (facing shaft). Two mtg. holes, .142" dia., spaced 1.875". 110 V, 60 Hz AC. Specify Motor Speed K12RC: 1, 2, 3, 4, 6, 10, 30, 50, 60 rpm; I12RC: 1, 2, 4, 10, or 12 rpm. Av. shpg. wt., 12 oz.  
41 A 5800 C. K12RC. 1-60 rpm... Each 5.10  
41 A 5801 C. I12RC. 1 or 2 rpm... Each 5.02  
41 A 5802 C. I12RC. 4-12 rpm... Each 5.02

# Relays, Solenoids and Motors



## GUARDIAN RELAYS AND SOLENOIDS

### UNIVERSAL "200" SERIES COILS



Universal interchangeable parts for assembling custom relays. Listings include AC, DC and plate coils (A), and switch contact assemblies (B). 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 Hz AC, non-inductive load. Size, with standard contact assembly, 2 1/2 x 1 1/2 x 1 1/2"; midjet assembly, 2 3/8 x 1 1/2 x 1 1/2". Av. shpg. wt., 4 oz.

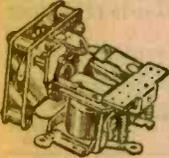
AC Coils			DC Coils		
Stock No.	Volts	EACH	Stock No.	Volts	EACH
41 A 5709	6	1.85	41 A 5713	6	2.00
41 A 5710	12	1.85	41 A 5714	12	2.00
41 A 5711	24	1.85	41 A 5715	24	2.00
41 A 5712	120	2.15	41 A 5717	110	2.65
41 A 5888	240	2.85			

41 A 5779. Type 200-5000 D Plate Coll. 5000 ohms. 3 oz. . . . . 2.30  
 41 A 5109. Type 200-10,000 D Plate Coll. 10,000 ohms. 3 oz. . . . . 2.65

### SERIES 200 SWITCH CONTACT ASSEMBLIES FOR USE WITH COILS ABOVE

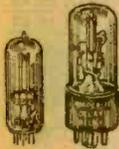
Stock No.	Mfr's Type	Description	EACH
41 A 5707	200-1	SPDT std. contact assembly. 8 amps	1.60
41 A 5708	200-2	DPDT std. contact assembly. 8 amps	2.10
41 A 5724	200-4	DPDT std. contact assembly. 12.5 amps	2.35
41 A 5889	200-5	4PDT std. contact assembly. 8 amps.	3.70
41 A 5718	200-M1	SPDT midjet contact assembly. 8 amps	1.50
41 A 5719	200-M2	DPDT midjet contact assembly. 8 amps	1.85
41 A 5826	200-M5	4PDT midjet contact assembly. 8 amps	3.00

### MER-115 MIDJET STEPPING RELAY



Electrical-reset stepping relay with 21 active positions. Resets from an external control on its own contacts. Contacts are rated at 1 amp at 115 V, 60 Hz, non-inductive. Stepping and reset coils 115 V, 60 Hz AC. Minimum set pulse. 50 ms; reset. 10 ms. Recommended for experimental purposes, original equipment or replacement. 3 1/2 x 2 3/4 x 3 1/4".  
 41 A 5282. Shpg. wt., 13 oz. . . . . 15.75

### AMPERITE TIME DELAY RELAYS

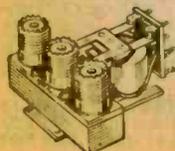


Hermetically sealed in glass envelope with octal base. Heater draws 2 watts. Contacts: SPST, 3 amps at 115 VAC. 1 amp at 220 VAC. Voltage Breakdown: Contacts, 800 V; Heater-to-Contact, 800 V, except\* 250 V and 500 V for delays of 10 sec. or less. Ambient temperatures from -55° to +70° C. Diameter, 1 3/8". Height less prongs, 2 7/8". Shpg. wt. 4 oz. Be sure to specify Type Number as well as Stock No.

Delay Seconds	Type No. Normally Open			Type No. Normally Closed		
	6.3 V	26 V	116 V	6.3 V	26 V	116 V
2*	6N02	26N02	116N02	6C2	26C2	116C2
3*	6N05	26N05	116N05	6C5	26C5	116C5
10*	6N010	26N010	116N010	6C10	26C10	116C10
15	6N015	26N015	116N015		26C15	116C15
20	6N020	26N020	116N020		26C20	116C20
30	6N030	26N030	116N030	6C30	26C30	116C30
45	6N045		116N045			116C45
60	6N060	26N060	116N060	6C60	26C60	116C60
120	6N0120	26N0120	116N0120	6C120	26C120	116C120
180	6N0180	26N0180	116N0180	6C180	26C180	116C180

41 A 5295 C. . . . . Each 2.40  
 Miniature Relays. All types listed in above table, are also available in miniature size except 150 and 180-second units. 9-pin, 3/4 x 2 3/4". Shpg. wt., 3 oz. Specify Type No., adding letter "T" following Type Number. Example: 6N02T.  
 41 A 5296 C. . . . . Each 2.40

### MAGNECRAFT COAXIAL RELAYS



SPDT silver cadmium oxide, gold flashed contacts. 100 watts RF power; 50 ohms impedance, VSWR 1.25. 1 maximum. 0-500 MHz. Operate, release time: 25 ms average. Overall size, 2 1/2 x 1 1/2".

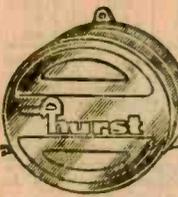
Stock No.	Mfr's Type	Volts	EACH
41 A 4000	W128X-11	115 VAC	20.85
41 A 4001	W128X-14	12 VDC	20.02

### INTERMITTENT-DUTY INDUSTRIAL SOLENOIDS

\*Intermittent-duty types for applications not requiring energization for more than 5 minutes with sufficient time between cycles for cooling. Should not be permitted to rise more than 85°C above 24°C ambient without time to cool. †Continuous duty types will not rise more than 85°C above 24°C ambient temp. when operated at rated load. SPDT molded switch rated 10 A at 115 VAC. For switching SPDT contacts without addition of a relay in circuit. Intermittent duty solenoid switch can give continuous duty performance with the use of an external resistor in conjunction with the switch. HD—heavy-duty.

Stock No.	Type	Volts	Stroke	Lift Oz.	Size	Lbs.	E.A.
41 A 5890	1A1†	115AC	3/8" x 1/2"	8	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.15
41 A 5891	1A1†	115AC	3/8" x 1/2"	3	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.15
41 A 5154	2†	115AC	3/8" x 1/2"	27	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.68
41 A 5155	2†	115AC	3/8" x 1/2"	10 1/2	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.68
41 A 5892	4*	115AC	3/8" x 1/2"	24	1 1/2 x 2 1/2 x 1 1/2"	1	4.20
41 A 5893	4†	115AC	3/8" x 1/2"	8	1 1/2 x 2 1/2 x 1 1/2"	1	4.20
41 A 5828	12*	115AC	3/8" x 1/2"	42	1 1/2 x 1 1/2 x 1 1/2"	3/4	4.46
41 A 5829	12†	115AC	3/8" x 1/2"	22	1 1/2 x 1 1/2 x 1 1/2"	3/4	4.46
41 A 5895	11*	6DC	3/8" x 1/2"	39	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.12
41 A 6318	11†	6DC	3/8" x 1/2"	26	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.12
41 A 5896	11*	24DC	3/8" x 1/2"	39	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.12
41 A 6319	11†	24DC	3/8" x 1/2"	26	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.12
41 A 5894	14†	115AC	3/8" x 1 1/2"	110	2 1/2 x 2 1/2 x 1 1/2"	1 1/2	6.04
41 A 5895	14†	115AC	3/8" x 1 1/2"	65	2 1/2 x 2 1/2 x 1 1/2"	1 1/2	6.04
41 A 5156	16†	115AC	3/8" x 1/2"	96	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.68
41 A 5885	16†	115AC	3/8" x 3/4"	54	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.69
41 A 6320	16†	230AC	3/8" x 3/4"	54	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.94
41 A 5157	18*	115AC	3/8" x 1/2"	304	2 1/2 x 2 1/2 x 1 1/2"	1 1/2	4.99
41 A 5886	18†	115AC	3/8" x 1/2"	145	2 1/2 x 2 1/2 x 1 1/2"	1 1/2	4.99
41 A 6321	18†	230AC	3/8" x 1/2"	145	2 1/2 x 2 1/2 x 1 1/2"	1 1/2	5.25
41 A 7554	24†	115AC	3/8" x 3/4"	16	3/8 x 2 3/4 x 1 1/2"	3/8	3.41
41 A 6099	28†	24DC	3/8" x 3/4"	24	1 1/2 x 1 1/2 x 1 1/2"	3/4	2.94
41 A 7566	22†	24DC	3/8" x 3/4"	13	3/8 x 2 3/4 x 1 1/2"	3/8	2.94
41 A 7402	34*	6DC	3/8" x 1/2"	17	1 1/2 x 1 1/2 x 3/4"	3/4	2.31
41 A 7549	11*	115AC	3/8" x 1/2"	26	1 1/2 x 1 1/2 x 1 1/2"	3/4	3.15
41 A 7409	4HD†	24DC	3/8" x 3/4"	86	1 1/2 x 1 1/2 x 2 1/4"	1 1/2	6.41

### HURST SYNCHRONOUS MOTORS



- CA, SM, PC-SS and EA Series
- Accurate, Cool-Running

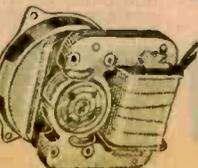
**CA Series—100 Inch-Ounce Reversible.** For continuous timing applications such as alarm systems, displays, process controls, etc. Instantly reversible with SPDT switching; maintain accuracy both clockwise and counter-clockwise. Torque: 100 inch-ounce at 1 1/7 min. Case, 2 1/2" dia. x 2 1/8". Shaft, 3/8" dia. 1" long flattened. Power drain: 5 watts. For 95-130 V, 60 Hz AC. Shpg. wt., 18 oz.

**SM Series—40-Inch-Ounce Unidirectional.** Shaded pole, clockwise rotation. Instant start at full torque of 40 inch-ounce at 1 1/7 min. Power drain: 5 watts. Case, 2 1/4" dia. x 1 3/4". Shaft, 3/8" dia. by 1" long. For 95-130 V, 60 Hz AC. Shpg. wt., 1 lb.

OUTPUT SPEEDS IN REVOLUTIONS PER MINUTE									
1/2	2 1/4	8†	20†	33 1/3	64	100	200	400	800
1 1/2*	3*	10†	21	40	80	200	400	1000	1000
1*	4*	12†	25	48	100	210	400	3600	
1 1/2*	5*	15*	30†	50	120†	400			
2*	6*	16*	32	60†	150	600			

41 A 7154 C. CA Series. All speeds in table above available. —Specify Speed, 1-9 . . . . . Ea. 13.76 10-24 . . . . . Ea. 12.39  
 41 A 7152 C. SM Series. Available only in speeds indicated by asterisk\* in table above.—Specify, 1-9 . . . . . Ea. 13.51 10-24 . . . . . Ea. 12.16

**PC-SS Positive Clutch Series.** Basic SM motor as described above, with positive clutch and instantaneous brake. Clutch will stop output shaft within 20 milliseconds and brake will stop output shaft within 1.5° at 1 rpm or within 12° at 60 rpm; other speeds proportional. Shpg. wt. 1 1/4 lbs. Available only in speeds indicated by asterisk (\*) in table above.—Specify Speed. . . . . Each 19.65 10-24 . . . . . Each 17.68  
 41 A 7153 C. 1-9 . . . . . Each 19.65 10-24 . . . . . Each 17.68



**EA Series.** Synchronous motor, with 150 inch-ounce rating at 1 1/7 min. Open frame, shaded pole. Completely accurate, cool-running timing motor with clockwise rotation. Case measures 1 1/2 x 2 3/4 x 3 3/4". 3/8" x 1" output shaft, except 3/4" x 1". Wt., 1 1/4 lbs.

Stock No.	rpm	EACH	
41 A 7155 C	120†	10.29	9.25
41 A 7156	3600†	7.62	6.86

Available only in speeds indicated by dagger (†) in table above.—Specify.

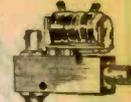
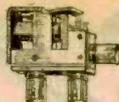
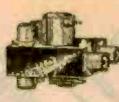
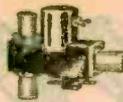
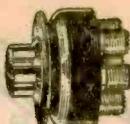
# Coaxial Relays and Relay Cleaning Tools

## DOW-KEY MANUAL COAXIAL

### ANTENNA SWITCHES

78 Series. For manual switching of antenna modes. Provide outstanding RF characteristics. Silver contacts are  $\frac{3}{16}$ " diameter in shielded RF cavity. All are rated at 1 kW, with antenna impedance of 50 ohms. VSWR is less than 1.05:1 at 150 MHz. Isolation is greater than 50 dB at 500 MHz and 8 dB at 30 MHz. Silver UHF antenna connectors. Require  $\frac{29}{64}$ " mounting hole and  $\frac{1}{2}$ " hole for key. \*In listings below indicates unit has transfer-crossover switch. Complete with mounting nut, dial plate and knob. Rugged black anodized finish. 3" diameter, 1 $\frac{1}{2}$ " depth. Av. shpg. wt., 5 oz.

41 A 5900. 78-0204. SPDT..... 14.00  
 41 A 5901. 78-0304. SP3T..... 14.45  
 41 A 5902. 78-0604. SP6T..... 15.65  
 41 A 5904. 78-0904. \*T-C..... 16.65

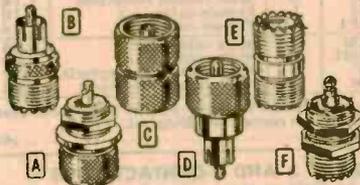


60 Series. Heavy-duty SPDT 50-ohm coaxial relays. Handle 1 kW. VSWR less than 1.15:1. 0-500 MHz. Types with \* have patented automatic receiver protecting connector for greater than 100 dB isolation between receiver and transmitter lines, from 0-500 MHz. Types ending in 2 include external DPDT contacts for switching auxiliary circuits 5 A @ 110 VAC. UHF conn. 2 $\frac{3}{4}$ x3 $\frac{3}{4}$ x1 $\frac{1}{2}$ ". Av. wt., 10 oz.

71. SP6T weatherproof type for remote switching of RF sources. Common connector may be switched directly in any one of six positions. Range. 0-500 MHz; rating, 1 kW; VSWR, 1.1:1 at 100 MHz; isolation, 40 dB at 100 MHz; life, greater than 1 million operations. 50 ohms impedance. 5 $\frac{3}{4}$ " dia., 2 $\frac{3}{4}$ " deep. UHF conn. 3 lbs.

Stock No.	Mfr's Type	Coil Volts	EACH	
			1-4	5-9
41 A 5957	71-260402	115 AC	61.85	56.25
41 A 5958	71-290402	24 AC	61.85	56.25

## DOW-KEY COAXIAL CONNECTORS



- A 41 A 5905. C-201. Male UHF panel type. Single  $\frac{3}{8}$ " hole mounting. 1 oz. .... 1.07
- B 41 A 5907. A-210. Female UHF to male phono type connector. Wt., 1 oz. .... 1.24
- C 41 A 5946. A-F2. Double male UHF locking type connector. Wt., 1 oz. .... 76
- D 41 A 5908. A-211. Male UHF to male phono type connector. Wt., 1 oz. .... 1.32
- E 41 A 5906. A-202. Double female UHF type connector. Wt., 1 oz. .... 82
- F 41 A 5903. C-60P. Female UHF type. Single  $\frac{3}{8}$ " hole panel mounting. 1 oz. .... 69

Stock No.	Mfr's Type	Coil Volts	EACH	
			1-4	5-9
41 A 6114	60-2204	12 DC	14.85	13.50
41 A 6115	60-2604	115 AC	14.85	13.50
41 A 5953	60-2228*	12 DC	16.35	14.85
41 A 5955	60-2628*	115 AC	16.35	14.85
41 A 6118	60-22842*	12 DC	18.00	16.35
41 A 6119	60-262842*	115 AC	18.00	16.35
41 A 6116	60-220442	12 DC	16.50	15.00
41 A 6117	60-260442	115 AC	16.50	15.00

260. DPDT coaxial unit for switching two lines simultaneously. Frequency range is 0-500 MHz; power rating, 1 kW. VSWR, less than 1.15:1 from 0 to 500 MHz; isolation greater than 30 dB at 500 MHz; loss is less than 0.03 dB at 30 MHz. Long life—over 1 million operations. 50 ohms. 2 $\frac{3}{4}$ x3 $\frac{3}{4}$ x1 $\frac{1}{2}$ ". UHF connector. Shpg. wt., 12 oz.

41 A 6149 260-2604 115 AC 24.75 22.50

260B. Similar to Type 260, above, but internally connected in the de-energized position. UHF conn. Shpg. wt., 12 oz.

41 A 5956 260B-2604 115 AC 23.90 21.75

61. High-performance SPDT type switch. Range. 0-1000 MHz. VSWR, 1.1:1 at 400 MHz. Crosstalk, -40 dB at 400 MHz. Capacity, 100 watts. Plated per MIL-QQS-365, QQP-416. Life, over 1 million operations. 1 $\frac{1}{4}$ x $\frac{3}{8}$ x1 $\frac{1}{2}$ ". BNC conn. 6 oz.

41 A 6148 61-2302 28 DC 28.95 26.30

72. SP3T multi-position switch; weatherproof type. Same high-quality features as Type 71 switch listed above, except has only three positions. Supplied complete with mounting bracket that accommodates two standard TV mounting straps for quick, easy installation on antenna mast. UHF conn. Size, 4x3 $\frac{1}{2}$ x3 $\frac{3}{8}$ ". Shpg. wt., 1 $\frac{1}{2}$  lbs.

41 A 5960	72-260402	115 AC	31.35	28.50
41 A 5965	72-290402	24 AC	31.35	28.50
41 A 5967	72-220402	12 DC	31.35	28.50

77 Series. Miniature 50-ohm SPDT types with Type BNC connectors. Frequency range, DC to 1000 MHz; power rating up to 250 watts; VSWR, less than 1.1:1 at 500 MHz; isolation, greater than 30 dB at 500 MHz; insertion loss, less than .03 dB at 500 MHz; life, over 1 million operations. Models with 32 in Type No. have SPDT auxiliary switches rated 5 A @ 110 VAC resistive. 2 $\frac{3}{8}$ x2 $\frac{1}{8}$ x1 $\frac{1}{8}$ " with connector. Wt., 5 oz.

Stock No.	Mfr's Type	Coil Volts	EACH	
			1-9	10-24
41 A 5910	77-220202	12 DC	11.50	10.50
41 A 5911	77-230202	28 DC	11.50	10.50
41 A 5914	77-220232	12 DC	12.75	11.60
41 A 5919	77-230232	28 DC	12.75	11.60

## JONARD RELAY TOOLS AND SERVICE KITS

### POCKET CONTACT BURNISHERS



Contact tools for cleaning and burnishing relay contacts. Replaceable steel blades. Leaves no residue. Chrome-plated barrel with pocket clip, aluminum chuck. Plastic cap permits use with live contacts. Size,  $\frac{3}{8}$ x5 $\frac{1}{2}$ ". With blades. Shpg. wt., 5 oz.

41 A 7355. P-4 Burnisher. With 12 RB4 (1 $\frac{1}{4}$ x1 $\frac{1}{4}$ " blades)..... 3.90  
 41 A 7356. P-6 Burnisher. With 12 RB6 (3 $\frac{1}{16}$ x1 $\frac{3}{8}$ " blades)..... 3.90  
 41 A 7357. RB4 Replacement Blades. 2 oz. .... Pkg. of 25 for 3.75  
 41 A 7358. RB6 Replacement Blades. 2 oz. .... Pkg. of 25 for 3.75

### KR-6 COMPACT 8-PIECE RELAY SERVICE TOOL KIT

Handy relay service tool kit designed to fit easily in the serviceman's pocket or tool box. Ideal for "in-plant" and emergency service calls. Includes all the major tools needed to accurately adjust, calibrate and service relays, contacts, and many other electro-mechanical devices. All tools are precision-made of the finest quality carbon steel. Heavily insulated dielectric tools permit adjusting or repairing even high-voltage equipment without the necessity of costly and time-consuming power shutdowns. Kit includes: spring adjuster; armature arm and stop benders; duck-bill pliers; contact burnisher; 0-50 gram relay spring-tension gauge; fine point tweezer; swivel head screwdriver. All tools are in handy zippered leather carrying case with special holders for each tool. Shpg. wt., 2 lbs.

41 A 7351..... 22.00



### K-55 MASTER 15-PIECE RELAY SERVICE TOOL KIT

Precision-made, professionally designed tool outfit contains everything needed for full adjustment and maintenance of relays, contactors, switches, other electro-mechanical devices. Kit includes: two spring adjusters (Types SA-7, SA-17); duckbill pliers; service inspection mirror; armature arm bender; "PENFILE" contact burnisher; 0-50 gram relay-spring tension gauge; screwdriver; 4-in-one tool; back-stop bender; angle thickness gauge; tweezers; selector switch brush; pkg. of 12 replacement blades for contact burnisher; "Kontakt 60" spray. All tools and spray are packaged in deluxe zippered leather carrying case for complete protection. Shpg. wt., 3 $\frac{1}{2}$  lbs.

41 A 7350..... 37.60



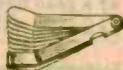
### DIAMOND-FACED RELAY CLEANERS



Diamond-impregnated spatulas specifically designed for cleaning relay contacts. Require only a gentle, even pressure to do a thorough cleaning job—contact gap is left unchanged. Types 200: .019" diamond grain; 300: .017". Have two diamond faces. Type 400 has .011" diamond grain. Type 234 is set of one each of the three types, in plastic case. 6" long. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	EACH
41 A 7328	D 200	For industrial relays	4.95
41 A 7329	D 300	For intermediate relays	4.95
41 A 7330	D 400	For sensitive relays	4.95
41 A 7285	K 234	Set of one ea.: 200, 300, 400	14.85

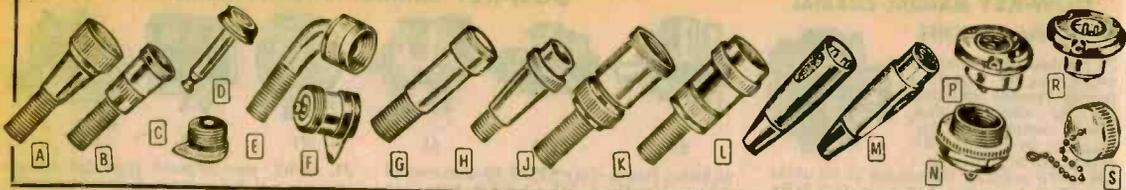
### RELAY CONTACT THICKNESS GAUGE



Type T-255. Extremely useful gauge accurately measures thickness of contact spacing on relays and switches. Has 9 swing-out blades that measure thickness from .009" to .020". Complete with 4" long,  $\frac{1}{2}$ " wide case to protect blades when not in use. Wt., 5 oz.

41 A 6939..... 2.24

# Amphenol Microphone and RF Cable Connectors



## MICROPHONE CONNECTORS

Most 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. Precision construction assures con-

nectors free from noise, leaks or shorts. Cable plugs are equipped with spring-type cord protectors. When splicing 2 cords, use one 75-MC1F and one 75-MC1M connector for a strong, reliable connection.

### SERIES 75 SINGLE-BUTTON CONTACT TYPES

Standard connectors  $\frac{3}{4}$ " 27 threads;  $\frac{3}{16}$ " mounting holes. †Indicates miniature connectors that are approximately half the size and weight of standard counterparts with same specifications. Durable bright chrome finish. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	E.A.
47 A 1958	75-MC1F	A	Cable plug	.64
47 A 1955	75-MC1M	B	Cable plug	.46
47 A 1965	*75-PC1M	C	Chassis receptacle, non-shorting	.41
47 A 1962	75-MC1P	D	Phone plug adapter	.52
47 A 1959	75-MC1FA	E	90° angle cable jack	1.31
47 A 1967	*75-CL-PC1M	F	Chassis receptacle, closed circuit	.67
47 A 2660	175-3	F	Locknut receptacle	.50

### SERIES 80 SINGLE AND DOUBLE-PIN CONTACT TYPES

For shielded cables, single and two-conductor coax, etc. Center contacts are pin and socket type. \*Single-contact type. †Polarized, double-contact type. Mount in  $\frac{3}{4}$ " hole with max. panel thickness of  $\frac{1}{4}$ ". Durable bright chrome finish. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	E.A.
47 A 2084	*80-C	N	Female chassis receptacle	.54
47 A 2081	*80-M	H	Male cable plug	.67
47 A 2082	*80-MC2F	G	Female cable jack	.71
47 A 2664	*80-MC2F1	H	Female cable plug	.75
47 A 2083	*80-MC2M	H	Male cable plug	.65
47 A 2665	*80-MC2M1	G	Male cable jack	.60
47 A 2085	*80-PC2F	N	Female chassis receptacle	.65
47 A 2666	*80-PC2M	N	Male chassis receptacle	.57

† Type 75-CCC1 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.

47 A 0361 . . . . . 45

### SERIES 91 3 AND 4-CONTACT TYPES

For portable equipment. Polarized. Clamps eliminate stress on soldered connections. \*3-contact type. †4-contact. Panel  $\frac{1}{8}$ " thick, max. Receptacles mount in  $\frac{2}{32}$ " hole. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	EACH
47 A 1970	*91-MC3F	J	Female cable jack	1.07
47 A 2667	*91-MC3F1	K	Female cable plug	1.10
47 A 1971	*91-MC3M	J	Male cable plug	1.01
47 A 2668	*91-MC3M1	J	Male cable jack	.97
47 A 1972	*91-PC3F	N	Female chassis receptacle	1.73
47 A 2669	*91-PC3M	N	Male chassis receptacle	1.14
47 A 1977	*91-MC4F	J	Female cable jack	1.10
47 A 2670	*91-MC4F1	K	Female cable plug	1.14
47 A 1976	*91-MC4M	K	Male cable plug	1.03
47 A 2672	*91-MC4M1	J	Male cable jack	.99
47 A 1978	*91-PC4F	N	Female chassis receptacle	.72
47 A 2673	*91-PC4M	N	Male chassis receptacle	.98

† Type 91-CCC3 Cap and Chain. Protects chassis jacks from dust. Used for series 91 microphone connectors. Shpg. wt., 3 oz.

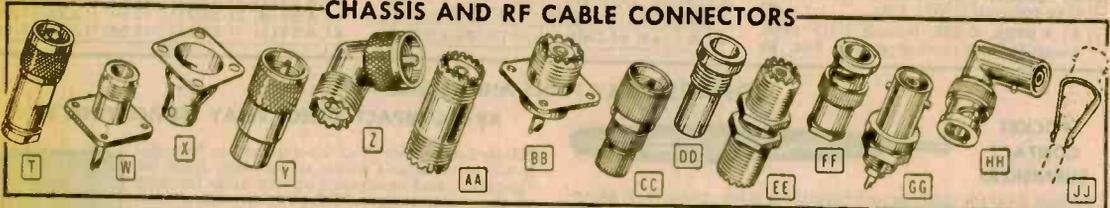
47 A 2674 . . . . . 48

### 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 contacts are polarized. Satin nickel-plated, zinc-alloy shells. \*3-contact type. †4-contact type. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	E.A.
47 A 2065	*91-853	L	Male cable plug	1.73
47 A 2066	*91-854	B	Female cable plug	2.27
47 A 2067	*91-855	R	Male chassis receptacle	3.18
47 A 2068	*91-856	P	Female chassis receptacle	3.14
47 A 2069	*91-857	L	Male cable plug	1.82
47 A 2070	*91-858	M	Female cable plug	2.52
47 A 2071	*91-859	R	Male chassis receptacle	1.49
47 A 2072	*91-860	P	Female chassis receptacle	3.37

## CHASSIS AND RF CABLE CONNECTORS



Series 31 BNC Coaxial Connectors. Small, weatherproof connector with bayonet coupling. Low-voltage, single contact. \*For 50-ohm RG-58/U and RG-58/U cables. †For 70-ohm RG-59/U, RG-62/U and RG-71/U. Plugs mate with 31-003 or jacks. Tarnish-proof finish available on Stock Nos. with Suffix "C." Specify -1050 after Mfr's Type No. Av. shpg. wt., 3 oz.

Stock No.	Military No.	Mfr's Type	Fig.	Description	E.A.
47 A 2512 C	UG-88/U	*31-002	FF	Plug	.70
47 A 2513 C	UG-88B/U	*31-018	FF	Plug	.75
47 A 2516 C	UG-88CU	*31-202	FF	Plug	.70
47 A 0393	UG-89/U	*31-005	GG	Receptacle	1.09
47 A 2519 C	UG-260/U	*31-012	FF	Plug	.83
47 A 2520 C	UG-260A/U	*31-021	FF	Plug	.83
47 A 0397	UG-261/U	*31-015	GG	Jack	1.23
47 A 0395	UG-262/U	*31-011	GG	Panel Jack	1.36
47 A 2508 C	UG-274/U	*31-008	GG	"T" Adapter	2.29
47 A 2509 C	UG-290/U	*31-003	GG	Receptacle	.79
47 A 2510 C	UG-290A/U	*31-203	GG	Receptacle	1.85
47 A 0399	UG-291/U	*31-001	GG	Panel Jack	1.21
47 A 0394	UG-306/U	*31-009	HH	Adapter, Right-Angle	2.06
47 A 2486	UG-491A/U	31-218	HH	Male Adapter	2.36
47 A 2500 C	UG-625/U	5573	GG	Receptacle	.72
47 A 2502 C	UG-657/U	31-102	GG	Receptacle	.72
47 A 2506 C	UG-1094/U	31-221	GG	Receptacle	.70
47 A 2441 C	UG-1094/U	31-759	JJ	Shield Grounding Lug	1.15

Series 82 N Coaxial Connectors. Low-voltage. 70 ohms. \*50 ohms. 3 oz.

Stock No.	Military No.	Mfr's Type	Fig.	Description	E.A.
47 A 0313	UG-21B/U	82-61	T	Plug	1.33
47 A 2603	UG-57B/U	*82-100	T	Adapter, Straight Male	2.76
47 A 0312	UG-58/U	82-24	W	Receptacle	1.00
47 A 0529	UG-58AU	*82-97	W	Receptacle	1.02
47 A 2116	UG-536/U	34000	T	Plug	1.93

Series 83 UHF Coaxial Connectors. Small single contact. Widely used for RF applications. All exposed metal is silver plated for superior performance. Polystyrene insulation. †Mica-filled. Tarnish-proof finish available on Stock Nos. with Suffix "C." Specify -1050 after Mfr's Type No. Av. shpg. wt., 3 oz.

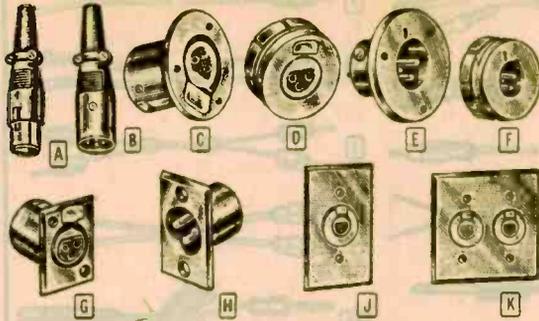
Stock No.	Military No.	Mfr's Type	Fig.	Description	E.A.
47 A 0357	UG-106/U	83-1H	X	Hood	.45
	M-360 49193	83-750	T	Plug	.96
47 A 2450	UG-111/U	83-185	DD	Adapter, Reducing	1.17
47 A 2521 C	UG-175/U	83-168	TT	Adapter, Reducing	.41
47 A 2530 C	UG-176/U	83-765	X	Hook	1.53
47 A 0351	UG-177/U	83-776	Y	Plug	2.65
47 A 0373	UG-203/U	83-1F	EE	Adapter, Bulkhead	1.62
47 A 2531 C	UG-363/U	83-1F	EE	Adapter, Bulkhead	2.95
47 A 2534 C	UG-646/U	83-TAP	Z	Adapter, Rt. Angle	2.08
47 A 2455 C	M-358 49199	*83-1RT	TT	"T" adapter	1.15
47 A 2452	M-359A	83-58	AA	Adapter, Angle	1.15
47 A 2546 C	PL-258, 49191	83-1SP	AA	Straight adapter	.59
47 A 2437 C	PL-259, 49190	83-1SP	BB	For RG/UG, 9, 10, 11, 12, 13, 63, 65	.56
47 A 2439 C	SO-239, 49194	83-1R	BB	Recept. chassis type	1.45
47 A 2454	PL-259A, 49195	83-756	T	Plug	1.02
47 A 2438 C	PL-259A	*83-1RTY	BB	Receptacle	.81
47 A 2455 C	SO-239	83-798	BB	Receptacle	1.30
47 A 2453	SO-239A	83-822	Y	Plug	1.45
47 A 2440 C	PL-259, 49190	83-22SP	Y	Plug	1.17
47 A 0361	UG-102/U	83-22R	Y	Receptacle	1.17
47 A 0362	UG-103/U	83-22R	Y	Receptacle	1.17

Solderless Type UHF Plug Connectors. Av. shpg. wt., 3 oz.

Stock No.	Military No.	Mfr's Type	Fig.	Description	E.A.
47 A 0509		83-850	CC	Plug for RG/U 11	3.10
47 A 0510		83-851	CC	Plug for RG/U 8, 9, 10, 11, 12, 13, 63, 65, 2, 23	1.17

# Audio Connectors and Adapter Kit

## ITT-CANNON XLR AUDIO 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, 3-contact types rated at 15 amps; 4-contact types rated at 10 amps. \*Wall-type receptacles; †panel-type receptacles. ‡Indicates steel shell, others are die-cast zinc. Av. shpg. wt., 4 oz.

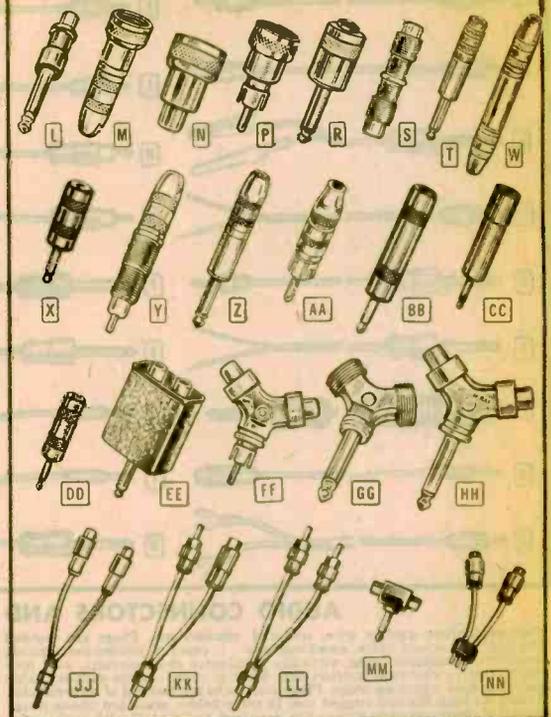
### STRAIGHT CORD PLUGS

Stock No.	Mfr's Type	Fig.	Description	1-9 EA.	10-49 EA.
47 A 0790	XLR-3-11C	A	Female (socket insert)	1.57	1.44
47 A 1212	XLR-4-11C	A	Female (socket insert)	1.99	1.82
47 A 0983	XLR-3-11SC†	A	Female (socket insert)	4.99	4.58
47 A 0984	XLR-4-11SC†	A	Female (socket insert)	5.08	4.66
47 A 0791	XLR-3-12C	B	Male (pin insert)	1.36	1.25
47 A 1213	XLR-4-12C	B	Male (pin insert)	1.45	1.33
47 A 0985	XLR-3-12SC†	B	Male (pin insert)	3.98	3.65
47 A 0986	XLR-4-12SC†	B	Male (pin insert)	4.10	3.76

### WALL AND PANEL RECEPTACES

47 A 1214	XLR-3-13†	C	Female (socket insert)	2.25	2.06
47 A 1215	XLR-4-13†	C	Female (socket insert)	2.33	2.14
47 A 1216	XLR-3-13N†	D	Female (socket insert)	3.05	2.80
47 A 1217	XLR-4-13N†	D	Female (socket insert)	3.15	2.89
47 A 1218	XLR-3-14*	E	Male (pin insert)	1.03	.94
47 A 1219	XLR-4-14*	E	Male (pin insert)	1.06	.97
47 A 1223	XLR-3-14N†	F	Male (pin insert)	2.48	2.28
47 A 1224	XLR-4-14N†	F	Male (pin insert)	2.68	2.46
47 A 0792	XLR-3-31*	G	Female (socket insert)	2.35	2.15
47 A 1225	XLR-4-31*	G	Female (socket insert)	2.41	2.21
47 A 0793	XLR-3-32*	H	Male (pin insert)	1.33	1.22
47 A 1226	XLR-4-32*	H	Male (pin insert)	1.75	1.61
47 A 0987	XLR-3-35*	J	Female (socket insert)	5.77	5.29
47 A 0988	XLR-3-35-2G*	K	Female (socket insert)	10.61	9.72

## SWITCHCRAFT ADAPTER CONNECTORS

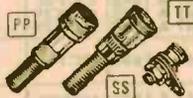


Provide quick, sure interconnection of audio equipment whose existing connectors do not mate. Positive mating contacts prevent resistive line losses. All are shielded to assure reduction of hum. Types 332A, 334A, 338B may be used with either male or female types—coupling ring is removable. Nos. 369, 374, 375, 376, 377 have shielded, nickel-plated brass handles. No. 378 for two separate earphones. Av. wt., 6 oz.

Stock No.	Type	Fig.	Description	EA.
47 A 0382	345A	L	Phone plug out; phono jack in.	.87
47 A 1768	332A	M	2-cond. phono jack input to female or male mike output; main body 1/2".	1.20
47 A 1769	334A	N	Phono jack input to female microphone connector output.	.99
47 A 1795	338B	P	Phono plug to female mike connector.	.87
47 A 0940	364A	R	2-cond. "tini-jack" input; standard phono plug out.	1.05
47 A 1774	349A	S	Phono jack coupler mates with phono plug at each end; gray plastic.	.72
47 A 1779	369	T	Std. 2-cond. phone plug to 2-cond. short extension jack (used on late models Reverse and Wollensak recorders).	1.41
47 A 0938	361	W	2-cond. phono jack coupler mates with phone plug at each end.	1.56
47 A 1799	377	X	"Micro-jax" input to 2-cond. "tini-plug".	1.08
47 A 1772	336A	Y	2-conductor phone jack input to phono plug output; main body 1/2".	1.20
47 A 1619	352	Z	3-cond. phone jack to 2-cond. phone plug output.	1.41
47 A 1619	365	AA	2-cond. "tini-jack" input to standard phono plug output.	1.05
47 A 1789	374	BB	Phone jack to 2-cond. "tini-plug".	1.20
47 A 1788	370	CC	Phono jack to 2-cond. "tini-plug".	1.81
47 A 1797	375	CC	Phono jack to 2-cond. "tini-plug".	1.08
47 A 1798	376	DD	Tini-jax input to 2-cond. micro-plug.	1.08
47 A 1721	353	EE	Adapter for using 2 stereo headsets from single 3-cond. jack; 3-cond. phone plug to two 3-cond. phone jacks.	2.91
47 A 0939	340	EE	2 std. phone jack inputs paralleled to 2-cond. phone plug output	2.46
47 A 1764	330F	FF	2 phono jacks connected in parallel to standard phono plug.	1.23
47 A 1994	330M	GG	Y-adapter, 2 male mike connectors to standard 2-cond. phone plug.	1.41
47 A 1229	330PJ	HH	Y-adapter, standard phone plug to 2 phono jacks.	1.41
47 A 1686	330F1	JJ	Flexible V-connector; 2 phono jacks to std. phono plug. Shielded 3/4".	1.88
47 A 1699	330F2	KK	Same as above, but phono plug and phono jack to phono plug.	1.88
47 A 1722	330F3	LL	Same as above two types, but 1 phono plug to two phono plugs.	1.88
47 A 1732	378	MM	"Tini-Tee" Adapter. 2-cond. "Tini-Jax" input to two 2-cond. "Tini-Jax" outputs.	1.41
47 A 1734	330B	NN	Adapts Lear Jet Model HSA-900 tape recorder to RCA, or units with a 3 contact in-line socket assembly.	1.41

## SWITCHCRAFT MINI-CON MIKE CONNECTORS

About one-half size of standard mike connectors. For use with single-conductor shielded bodies to 3/16" O.D. Nickel-plated brass bodies. Coupling ring on 5501F re-type. Cable-braid spring clamped to body by hollow set screw. 5501MP mounts in 3/16" hole. Av. shpg. wt., 2 oz.



Stock No.	Type	Fig.	Desc.	EACH
47 A 4920	5501F	PP	Female	.45
47 A 4925	5501M	SS	Male	.36
47 A 4927	5501MP	TT	Male	.33

## SWITCHCRAFT HANDY ADAPTER KIT

Type 331A, 11 audio adapters, 1 cable in plastic box. One each: 25A F25, 36" shielded cable with phono plug each end; 25Y mike connector Y-adapter; 330F1, Fig. 3J at right; 332A, Fig. M at right; 334A, Fig. N at right; 336A, Fig. Y at right; 336B, phono jack input to phono jack output; 345, phono jack input to phono plug output; Two each: Type 44 adapter, make mike input to phone plug output; Type 349 coupler, phono jacks at each end.  
47 A 4906. Shpg. wt., 1 lb. . . . . 10.56



## SWITCHCRAFT AUDIO CONNECTOR

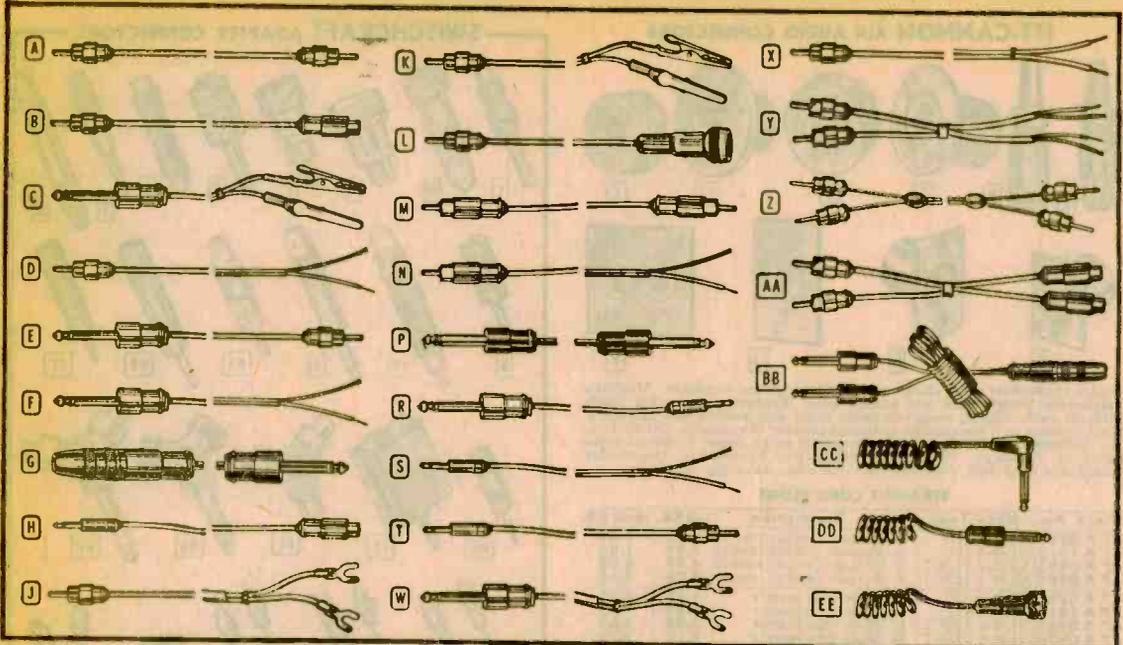
Type 384. Adapts standard 2-conductor phone plug (Switchcraft Nos. 240 and 250) to equipment using a 3-contact audio receptacle. (Switchcraft Nos. A3F, C3F, D3F; Cannon XLR-3-11C, XLR-3-13C, etc.). Has electrically integral ground terminal, "captive design" insert screw. Wt., 4 oz.  
47 A 1490. . . . . 2.46



Type 383. Similar to above. Has same quality features, but uses a three-pin audio receptacle (Switchcraft Nos. A3M, B3M, C3M, D3M and Cannon Nos. XLR-3-12C, XLR-3-14, etc.). Adapts standard 2-conductor phone plug (Switchcraft Nos. 240 and 250) to components that do not have mating connectors—mixers, microphones, amplifiers, etc.  
47 A 1733. Shpg. wt., 4 oz. . . . . 2.85



# Switchcraft Audio Connectors and Molded Cables



## AUDIO CONNECTORS AND MOLDED CABLE ASSEMBLIES

Feature highest quality wire, soldered connections. Plugs are molded directly to various cable combinations . . . ensures protection against moisture, minimizes noise, virtually eliminates short-circuits, and provides positive electrical connections. Built-in cable clamps support cable and eliminate strain on plugs. Plugs and jacks are molded of unbreakable Tenite for long-life and rugged use. In table below, standard phone plugs have 1/4" diameter sleeve; handles designed to "mate" with jacks even when jacks are recessed below panel surface. Tiny plugs (Series 40DF,

DK, and DN) are 1/8" standard size to be used with late-model recording equipment, pocket radios, etc. Series 25FF, FK, and FN are special stereo cable assemblies providing two completely isolated channels, with color-coded insulated cables inside a chrome gray plastic jacket, separate plugs for easy connections regardless of jack spacing. Type 05FH81 (Fig. BB) adapts 3-cond. plugs on stereo headphones to 2 separate 2-cond. jacks used on most stereo recorders. Wires are shielded or unshielded as indicated. Av. shpg. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	Feet	Description	EACH
47 A 1509	25AC25	A	1 1/2	Straight Phono Plug at each end of Gray Shielded Cable.	.92
47 A 1510	25AF25	A	3		1.04
47 A 1512	25AK25	A	6		1.32
47 A 1538	25AN25	A	10		1.84
47 A 1541	25AF82	B	3	Straight Phono Plug to Phono Extension Jack; Gray Shielded Cable.	1.20
47 A 1542	25AK82	B	6		1.60
47 A 1543	25AN82	B	10		1.32
47 A 1578	05CK86	C	6	Straight Phone Plug to Alligator Clips; Gray Parallel Cable; Unshielded.	1.72
47 A 1544	05CN86	C	10		2.20
47 A 1547	05CT86	C	20		2.80
47 A 1548	25AP84	D	3	Straight Phono Plug to Stripped and Tinned Ends; Gray Shielded Cable.	.80
47 A 1549	25AK84	D	6		1.00
47 A 1550	25AN84	D	10		1.48
47 A 1551	05AK25	E	6	Straight Phone Plug to Straight Phono Plug; Gray Shielded Cable.	1.80
47 A 1552	05AN25	E	15		2.52
47 A 1570	05AR25	E	15		2.80
47 A 1600	05AK84	F	6	Straight Phone Plug to Stripped and Tinned Ends; Gray Shielded Cable.	1.60
47 A 1601	05AN84	F	10		2.08
47 A 1602	05AR84	F	15		2.52
47 A 1596	10BK81	G	6	Straight 3-Cond. Phone Plug to Straight 3-Cond. Extension Jack. Gray Shielded Cable.	4.56
47 A 1597	10BN81	G	10		5.68
47 A 1598	10BU81	G	15		8.36
47 A 1605	05AK80	G	6	Straight 2-Cond. Phone Plug to Straight 2-Cond. Extension Jack. Gray Shielded Cable.	2.40
47 A 1615	05AN80	G	10		3.28
47 A 1620	05AR80	G	15		3.76
47 A 1622	40DF82	H	3	Straight Tiny Plug to Phone Extension Jack; 2-Cond. Shielded Cable.	1.56
47 A 1623	40DK82	H	6		2.32
47 A 1624	40DN82	H	10		2.68
47 A 1626	25CN85	J	10	Straight Phono Plug to Spade Lugs; Gray Parallel Cable; Unshielded.	1.32
47 A 1726	25CT85	J	20		2.00
47 A 2443	25CK86	K	6	Straight Phono Plug to Alligator Clips; Gray Parallel Cable; Unshielded.	1.60
47 A 1627	25CN86	K	10		2.08
47 A 1628	25CT86	K	25		2.40
47 A 1629	25AK87	L	6	Straight Phono Plug to Microphone Conn. 2501F; Gray Shielded Cable.	2.28
47 A 1631	26AR26	M	15	Straight Phono Plug with Long Handle on Each End; Gray Shielded Cable.	2.40
47 A 1632	25AR84	N	15	Straight Phono Plug to Stripped and Tinned Ends; Gray Shielded Cable.	2.16
47 A 1638	05AK05	P	6	Straight 2-Cond. Phone Plug at Each End; Gray Shielded Cable.	2.40
47 A 1633	05AN05	P	10		3.28
47 A 1727	05AU05	P	25		4.36
47 A 1593	10BK10	P	6	Straight 3-Cond. Phone Plug at Each End; Gray Shielded Cable.	4.56
47 A 1594	10BN10	P	10		5.68
47 A 1595	10BU10	P	25		8.36

Stock No.	Mfr's Type	Fig.	Feet	Description	EACH
47 A 1634	40DF05	R	3	Straight Tiny Plug to Straight Phone Plug; 2-Cond. Shielded Cable.	2.16
47 A 1637	40DK05	R	6		2.52
47 A 1639	40DN05	R	10		2.80
47 A 1645	40DF84	S	3	Straight Tiny Plug to Stripped and Tinned Ends; 2-Cond. Shielded Cable.	1.60
47 A 1646	40DK84	S	6		1.80
47 A 1647	40DN84	S	10		2.32
47 A 1648	40DF25	T	3	Straight Tiny Plug to Straight Phono Plug; 2-Cond. Shielded Cable.	1.92
47 A 1655	40DK25	T	6		2.32
47 A 1675	40DN25	T	10		2.64
47 A 1683	05CT85	W	20	Straight Phone Plug to Spade Lugs; Gray Parallel Cable; Unshielded.	2.16
47 A 1685	25CN84	X	10	Straight Phono Plug to Stripped and Tinned Ends; Parallel Cable; Unshielded.	1.24
47 A 1728	25CT84	X	20		2.12
47 A 1497	25FF84	Y	3	Two Straight Phono Plugs on One End to Stripped and Tinned Leads; Gray Shielded Stereo Cable.	2.68
47 A 1498	25FK84	Y	6		3.04
47 A 1499	25FN84	Y	10		3.52
47 A 1494	25FF25	Z	3	Two Straight Phono Plugs at Each End; Gray Shielded Stereo Cable.	3.04
47 A 1495	25FK25	Z	6		4.24
47 A 1496	25FN25	Z	10		
47 A 1723	25FF82	AA	3	Two Straight Phono Plugs on 1 End to Two Straight Phono Exten. Jacks; Gray Shielded Stereo Cable.	2.76
47 A 1724	25FK82	AA	6		3.20
47 A 1725	25FN82	AA	10		3.80
47 A 1531	05FH81	BB	4	Two 2-Cond. Phone Plugs on One End to 3-Cond. Phone Extension Jack. Shielded Gray Stereo Cable. Color-Coded.	4.12
47 A 2445	25FH81	BB	4		3.32
47 A 1505	15LH84	CC	4	Right Angle Phone Plug to Stripped and Tinned Ends; Shielded Coiled Cord.	2.40
47 A 1504	05LH84	DD	4	Straight Phone Plug to Stripped and Tinned Ends; Shielded Coiled Cord.	2.40
47 A 1506	87LH84	EE	4	Type 2501F Connector to Stripped and Tinned Ends; Shielded Coiled Cord.	2.48
47 A 1532	05LP05	DD/DD	12	Straight Phone Plug at Each End. Shielded Coiled Cord.	4.96
47 A 1535	05LT05	DD/DD	20		6.92
47 A 1533	05L.P15	DD/CC	12	Straight Phone Plug to Right Angle Phone Plug; Shielded Coiled Cord.	4.96
47 A 1536	05LT13	DD/CC	20		6.92
47 A 1534	05LP87	DD/EE	12	Straight Phone Plug to Type 2501F Connector; Shielded Coiled Cord.	5.08
47 A 1537	05LT87	DD/EE	20		7.04

# H. H. Smith Test Leads, Patchcords and Jumpers

## SHIELDED AND UNSHIELDED JUMPER CABLES



Wide selection of single test leads for quality control labs, servicemen, etc. Provide firm mechanical and electrical contact. Feature No. 18 AWG 20,000 volt insulated wire that is extra-flexible and kinkless. Handles are of molded tenite and/or molded bakelite. Cadmium-plated

steel clips and nickel-plated brass tips for excellent contact and durability. Vinyl plastic boots. Coaxial patch cords use RG-58C/U coaxial cable, except \*low-capacity cable. †Pair, red and black ‡20 wire, 5 kV. §Twisted pair. Av. shpg. wt., 5 oz

### UNSHIELDED JUMPERS

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1851	1596-12-102	1	Red	A	.47
47 A 1850	1596-12-103	1	Black	A	.47
47 A 1856	1596-36-102	3	Red	A	.51
47 A 1855	1596-36-103	3	Black	A	.51
47 A 1861	1596-60-102	5	Red	A	.55
47 A 1860	1596-60-103	5	Black	A	.55
47 A 1863	1597-12-102	1	Red	B	.47
47 A 1862	1597-12-103	1	Black	B	.47
47 A 1865	1597-36-102	3	Red	B	.51
47 A 1864	1597-36-103	3	Black	B	.51

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1867	1597-60-102	5	Red	B	.55
47 A 1866	1597-60-103	5	Black	B	.55
47 A 1901	1863-12-102	1	Red	C	.72
47 A 1874	1863-12-103	1	Black	C	.72
47 A 1904	1863-36-102	3	Red	C	.76
47 A 1903	1863-36-103	3	Black	C	.76
47 A 1909	1863-60-102	5	Red	C	.80
47 A 1908	1863-60-103	5	Black	C	.80
47 A 1923	1865-36-102	3	Red	F	.56
47 A 1922	1865-36-103	3	Black	F	.56

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1925	1865-60-102	5	Red	F	.60
47 A 1924	1865-60-103	5	Black	F	.60
47 A 1961	1868-36-103	3	Black	D	.71
47 A 1930	1866-36-102	3	Red	E	.61
47 A 1929	1866-36-103	3	Black	E	.61
47 A 1935	1866-60-102	5	Red	E	.65
47 A 1931	1866-60-103	5	Black	E	.65
47 A 4371	1625	3	Black	G	1.50
47 A 1793	1531-36	4	Gray	H	5.25
47 A 1794	1531-60	5	Gray	M	5.75

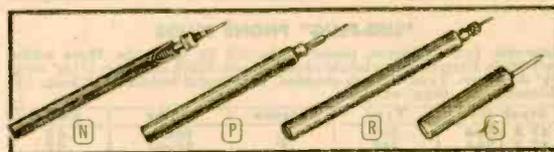
### COAXIAL-CABLE SHIELDED PATCH CORDS

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1969	1589-12	1	Black	J	5.35
47 A 1973	1589-36	3	Black	J	5.55
47 A 1974	1589-60	5	Black	J	5.75

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1979	1869-36	3	Black	K	6.30
47 A 1980	1869-60	5	Black	K	6.50
47 A 1984	*1537-12	1	Gray	L	5.55

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1987	*1537-36	3	Gray	L	5.55
47 A 1990	*1537-60	5	Gray	L	5.75
47 A 1985	1580-60	5	Black	K	4.75

### TEST PRODS



**N** 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. Secured by knurled collar. Shpg. wt., 4 oz.  
47 A 2110, Red. 47 A 2111, Black. Each .30

**P** Type 323 Solderless Fiber Test Prod. Has 4" bone fiber handle with extra large 1/4" inside diameter for heavy-duty wire. Body is nickel-plated brass. Wire fits through handle and body of plug, wraps around screw portion. Secured by knurled collar. Wt., 4 oz.  
47 A 2258, Red. 47 A 2259, Black. Each .30

**R** Type 319 Heavy-Duty Test Prod. Threaded type with extra-sturdy brass, nickel-plated tip. Molded plastic handle, overall length 5 3/4" long, 3/4" outer dia. Fits standard phone tip jacks. Shpg. wt., 3 oz.  
47 A 2375, Red. 47 A 2376, Black. Each .30

**S** Type 317 Phono Needle Test Prod. Brass, nickel-plated body with steel, nickel-plated phono type needle. Has removable chuck for replacing broken needles. Needle pierces plating or corrosion to insure positive readings. Plastic handle 4 1/4" long overall, 3/8" O.D. Wt., 4 oz.  
47 A 2373, Red. 47 A 2374, Black. Each .30

**S** Type 363 Short Tip Jack. Threaded type with brass, nickel-plated phone tip. Tip inserts flush in 4" long, 3/8" diameter insulated molded handle—reduces possibility of shock or grounding. Shpg. wt., 4 oz.  
47 A 2223, Red. 47 A 2224, Black. Each .25

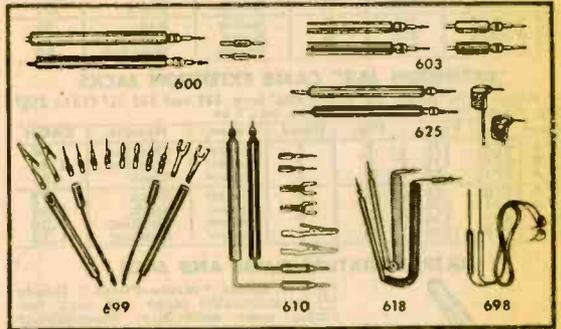
### ALLIGATOR TEST LEADS

Cadmium-plated steel clips. Have vinyl plastic boots. \*Have midjet clips. Av. shpg. wt., 4 oz.

Stock No.	Type	Wire Lgth.	PER PAIR
47 A 4383	629	12"	.92
47 A 4384	657	24"	.96
47 A 4385	716*	12"	.92
47 A 4386	717*	18"	.94
47 A 4387	718*	24"	.96



### TEST LEADS AND TEST LEAD KITS



Unless otherwise indicated, leads have 50" red and black kinkless, rubber-covered wire; butyrate prod handles (one red, one black) 4" long; 3/8" outer dia. Brass phone tips, nickel plated.

**Type 600. Solderless Phone Tips.** Meter end; phone tips on prod. 47 A 4359, Shpg. wt., 4 oz. Per Pair 1.05

**Type 603 All-Solderless.** Red and black plugs, meter end. Solderless phone tips both ends. Shpg. wt., 3 oz. 47 A 4375. Per Pair 1.35

**Type 610 Test-Lead Kit.** Test leads with solderless phone tips on prods; banana plugs meter end. Tenite handles. Phone tips. Alligator clips, spade lugs that snap-on banana plugs. Shpg. wt., 4 oz. 47 A 4395. 1.90

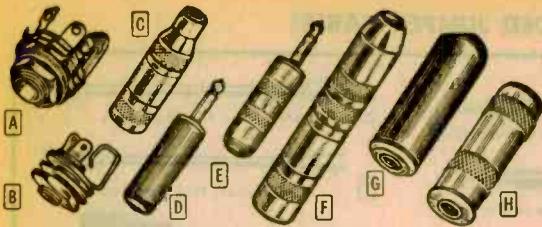
**Type 618 Stretch.** 12" coil extends to 6'. Tenite handles. Phone tips both ends. Shpg. wt., 6 oz. 47 A 4398. Per Pair 3.00

**Type 625 Meter Leads.** Solderless phone tips. Red and black elbows, right-angle phone tips. Shpg. wt., 3 oz. 47 A 4371. Per Pair 1.50

**Type 698 Sillm-Jim.** 3/4" cadmium-plated steel probes. Vinyl spazhetti insulator. Red and black plastic elbows with phone tips. 47 A 4378, Shpg. wt., 4 oz. Per Pair 1.35

**Type 699 Universal Kit.** 5 1/4" leads. 4 phone tips, 2 alligator clips, 2 needle tips, 2 banana plugs, 2 spade lugs. In plastic kit. 47 A 4376, Shpg. wt., 5 oz. 3.00

# Switchcraft Plugs and Jacks



## "LITTEL-JAX" PHONE JACKS

**A** Take standard  $\frac{1}{4}$ " phone plugs except S-11, which takes S250, S280 and 385 plugs, and C-12B which takes 480 Military-type, "Littel-Plug"  $\frac{1}{4}$ " dia.,  $1\frac{1}{4}$ " overall, with a  $\frac{3}{8}$ " dia. threaded shank,  $\frac{1}{2}$ " long. L-11 and L-12A have bushing  $\frac{3}{8}$ " long. SCC indicates single closed circuit; OC indicates open circuit. Av. shpg. wt., 3 oz.

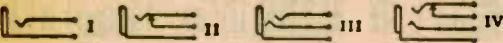
Stock No.	Type	Diag.	Cond.	Circuit	JAN Type	EACH
47 A 4955	11	I	2	OC		.30
47 A 4957	C-11	I	2	OC	JJ-034	.45
47 A 4959	L-11	I	2	OC		.36
47 A 4961	S-11	I	2	OC		.33
47 A 4963	12A	II	2	SCC		.33
47 A 4965	C-12A	II	2	SCC	JJ-089	.54
47 A 4967	L-12A	II	2	SCC		.39
47 A 4969	12B	III	3	OC		.39
47 A 4971	C-12B	III	3	OC	JJ-033	.69
47 A 4973	13B	IV	3	SCC		.57

## "TINI-JAX" SUBMINIATURE PHONE JACKS

**B** Extra-small 2-conductor jacks for "Tini-Plugs",  $\frac{1}{4}$ " long; fit  $\frac{1}{4}$ " hole. OC, open circuit; CC, closed circuit. Av. shpg. wt., 2 oz.

Stock No.	Type	Diag.	Cond.	Circuit	EACH
47 A 4983	41	I	2	OC	.30
47 A 4985	42A	II	2	CC	.33

## JACK SCHEMATIC DIAGRAMS



**C** Type 126 "Tini-Extension Jax." Two-conductor; solder lug terminals. Mates with "Tini-Plugs," below. Wt., 2 oz.  
47 A 1472..... Each .84

## "TINI-PLUGS" SUBMINIATURE PHONE PLUGS

For use with "Tini-Jax".  $1\frac{1}{4}$ " overall length. 2-conductor. Wt., 2 oz.

Stock No.	Type	Fig.	Term.	Handle	EACH
47 A 1518	740	D	Solder	Black	.54
47 A 1519	745	D	Screw	Red	.54
47 A 1520	750	D	Solder	Black	.51
47 A 1521	755	D	Solder	Red	.51
47 A 1522	770	E	Screw	Shielded	.72
47 A 1523	780	E	Solder	Shielded	.69

## "EXTENSION JAX" CABLE EXTENSION JACKS

Fit standard  $\frac{1}{4}$ " plugs.  $\frac{1}{4}$ " O.D.;  $2\frac{1}{2}$ " long. 121 and 131  $\frac{1}{2}$ " O.D.;  $2\frac{1}{2}$ " long. All are open circuit type. Shpg. wt., 3 oz.

Stock No.	Type	Fig.	Cond.	Term.	Handle	EACH
47 A 1473	121	F	2	Solder	Shielded	1.14
47 A 1474	131	F	3	Solder	Shielded	1.41
47 A 1571	80	G	2	Screw	Black	.81
47 A 1718	88	G	2	Solder	Black	.72
47 A 2971	830	G	3	Screw	Black	1.08
47 A 1572	120	H	2	Screw	Shielded	1.38
47 A 1717	1230	H	3	Screw	Shielded	1.38

## ULTRAMINIATURE PLUGS AND JACK

**J** TR Series "Micro-Plugs." Handy ultraminiature plugs and jack featuring same uniformity, dependability and quality construction as famous "Littel-Plugs" and "Tini-Plugs." Extremely small, only  $\frac{1}{16}$ " long;  $\frac{1}{4}$ " O.D.— $\frac{1}{2}$  the size of standard plugs! Have nylon insulation between tip and sleeve circuits; sleeve terminal is tinned brass. Tip and sleeve are nickel-plated machined brass. All have screw circuit cable clamp; accommodate cables to  $\frac{1}{16}$ " dia. With screw-on anodized aluminum handle. Shpg. wt. 2 oz.

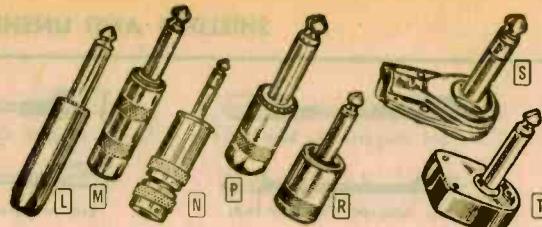
47 A 2554. Type 850. Red Handle..... Each .48  
47 A 2555. Type 855. Red Handle..... Each .48  
47 A 2556. Type 880. Natural Handle..... Each .48

**K** TR-2A "Micro-Jax." For "Micro-Plugs." 2 cond. agl. closed circuit; also usable as 2 cond. open circuit. Requires .190" mounting hole. Fits panels up to  $\frac{1}{2}$ " thick. Shpg. wt., 2 oz.  
47 A 4995..... Each .36

## THICK-PANEL PHONE JACKS

Have extra long bushings for use in panels up to  $1\frac{1}{2}$ " thick. Ideal for wall paneling, hi-fi installations, etc. Shielded for microphone use. Require  $\frac{3}{8}$ " mounting hole. Wt., 2 oz.

47 A 4908. Type 151. 2 Conductor..... Each .93  
47 A 4912. Type 152B. 3 Conductor..... Each 1.02



## "LITTEL-PLUG" PHONE PLUGS

Small-size phone plugs; fit standard  $\frac{1}{4}$ " phone jacks, except Types S250 and S280. 206" sleeve for S-11 "Littel Jax" and for Bell & Howell equipment; Type R280 which has short sleeve for Revere recorders. Plugs with solder terminals feature built-in cable clamp; others do not include cable clamp. Metal (shielded) handles are nickel-plated brass; for use in microphone or other input leads as well as outputs requiring continuous shield. All handles are  $1\frac{1}{16}$ " long and  $\frac{1}{2}$ " in diameter. Av. shpg. wt., 4 oz.

Stock No.	Type	Fig.	Cond.	Color	Terminals	EACH
47 A 1553	240	L	2	Black	Screw	.54
47 A 1554	245	L	2	Red	Solder	.51
47 A 1611	250	L	2	Black	Solder	.54
47 A 1614	S250	L	2	Black	Solder	.54
47 A 1612	255	L	2	Red	Solder	.51
47 A 1555	260	L	3	Black	Screw	.84
47 A 1616	267	L	3	Black	Solder	.75
47 A 1573	270	M	2	Metal	Screw	.75
47 A 1613	280	M	2	Metal	Solder	.72
47 A 1556	R280	M	2	Metal	Solder	.93
47 A 1719	S280	M	2	Metal	Solder	.72
47 A 1967	290	M	3	Metal	Screw	.99
47 A 1617	297	M	3	Metal	Solder	.93

## STANDARD PHONE PLUGS

Standard-size  $\frac{1}{4}$ " 2- and 3-conductor type phone plugs to fit all standard jacks. Metal (shielded), red or black molded bakelite handles;  $2\frac{1}{16}$ " long,  $\frac{1}{4}$ " diameter, except #1" long. Type 170 is similar to 70, but has 2-piece handle with cable clamp for  $\frac{1}{4}$ " cable. No. 190A is similar to 90, but has same handle as 170. Metal (shielded) handle types are for use in microphone or input cables and wherever continuous shielding is required. Av. shpg. wt., 5 oz.

Stock No.	Type	Fig.	Cond.	Color	Terminals	EACH
47 A 1557	40	L	2	Black	Screw	.57
47 A 1447	45	L	2	Red	Screw	.57
47 A 1558	60	L	3	Black	Solder	.75
47 A 1559	70	M	2	Metal	Screw	.90
47 A 1562	170	N	2	Metal	Screw	1.17
47 A 1563	190A	N	3	Metal	Solder	1.38
47 A 1560	90*	R	3	Metal	Solder	.96
47 A 1561	160*	R	2	Metal	Screw	.72

## "LUG-PLUG" PHONE PLUGS

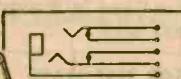
Low-cost two-conductor, phone plugs. All fit  $\frac{1}{4}$ " jacks. Have solder terminals. Exterior parts bright nickel plated. Black handle is  $1\frac{1}{16}$ " long,  $\frac{1}{2}$ " diameter. Type 380 has shielded, bare metal handle  $1\frac{1}{16}$ " long,  $\frac{1}{2}$ " diameter. Av. shpg. wt. 4 oz.

Stock No.	Type	Figure	Color	EACH
47 A 1564	350	L	Black	.45
47 A 1566	380	P	Metal	.57

## FLAT PHONE PLUGS

$\frac{1}{4}$ " 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. Fig. T units have easily removable plastic handle; Fig. S units have shielded steel handle, bright nickel plated. Types 220 and 225 will accept standard phone tips. Type S230 is commercial version of Military Type PJ-068 plug; has 206" diameter sleeve and tip. Terminals and body are mechanically interlocked. Av. shpg. wt. 4 oz.

Stock No.	Type	Fig.	Cond.	Color	Terminals	EACH
47 A 2969	238	S	3	Metal	Solder	1.02
47 A 2968	228	S	2	Metal	Solder	.69
47 A 1621	220	T	2	Black	Screw	.78
47 A 1567	225	T	2	Red	Screw	.78
47 A 1502	227	T	2	Black	Solder	.63
47 A 1568	230	T	3	Black	Screw	.96
47 A 1569	235	T	3	Red	Screw	.96
47 A 1503	237	T	3	Black	Solder	.93
47 A 2970	S230	T	3	Black	Solder	1.23



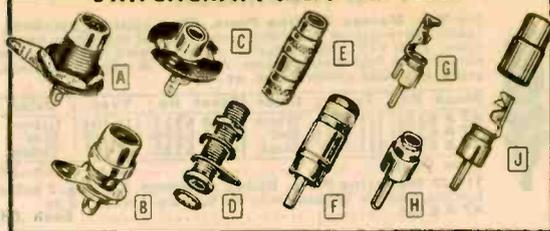
## STEREO "LITTEL-JAX"

Three-conductor jack for switching-out speakers when connecting stereo headphones and for switching three-wire stereo input circuits.

Mates with Switchcraft  $\frac{1}{4}$ " "Littel-Plugs" such as 260, 267, 269 and 297. Insulation XPP phenolic. Spring-tempered nickel-silver alloy. Integral contacts standard in the separate switching circuits. Nickel-plated brass bushing mounts in  $\frac{3}{8}$ " dia. hole. Length behind panel, 1".  
47 A 4924. Type 14B..... Each .72

# Connectors, Jacks and Plugs

## SWITCHCRAFT JACKS AND PLUGS



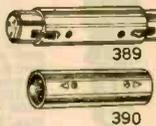
Easy-to-install phonograph jacks, phono pin plugs, and extensions. 3 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH
47 A 4900	3501FR	A	Jack, rear-panel mtg. 1/8" mtg. hole	.27
47 A 4902	3501FP	B	Jack, front-panel mtg. 1/8" dia.	.21
47 A 1574	3501F	C	Standard 2-cond. audio jack	.09
47 A 4904	371	D	Adapter to mount 3501FP in panels up to 1 1/4" thick	.66
47 A 1778	3503	E	Extension jack, shielded. Removable 1/8" O.D. shell w/ cable clamp	.39
47 A 1762	3502	F	Plug, shielded. 1/8" O.D. easy-grip handle	.30
47 A 1763	3501MC	G	Plug, unshielded, 3/8" O.D. shell, cable clamp	.09
47 A 1599	3501M	H	Plug for 3501F, 3501FP, 3501FR, 3503	.06
47 A 1575	3508-1	J	Phono plug, red handle	.15
47 A 1576	3508-2	J	Phono plug, black handle	.15
47 A 1577	3508-3	J	Phono plug, white handle	.15

## AUDIO CONNECTOR ADAPTERS

**389 Audio Adapter.** Adapts a three-pin audio connector input (such as Switchcraft A3M, B3M, C3M, D3M and Cannon XLR-3-12C, XLR-3-14, etc.) to equipment or cable assemblies which have the same type of output termination. Wired 1-1, 2-2, 3-3.  
47 A 4263, Shpg. wt., 3 oz. .... Each 2.85

**390 Audio Adapter.** Adapts three-contact audio connector input to equipment or cable assemblies which have the same type of output termination.  
47 A 4264, Shpg. wt., 3 oz. .... Each 2.40



## H. H. SMITH MOTOROLA AND RCA-TYPE PLUGS, JACKS

**Fig. K.** Antenna lead-in plug to connect auto antenna lead-in to radio. Pin dia. 1/16". Fig. L. Jack to mate with Fig. K plug. 1/8" mtg. ctrs. Fig. M. Jacks to mate RCA-type phono plugs. 1 1/2 x 1", 1 oz.

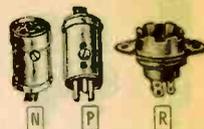


Stock No.	Mfr's Type	Fig.	Description	PER PKG. OF 5	
				1-19	20-up
47 A 1135	1200	K	Motorola-Type Plug	.70	.53
47 A 1137	1207	L	Motorola-Type Jack	.60	.51
47 A 1138	1214	M	Double Phono Jack	1.08	.90

## AMPHENOL CONNECTORS

### SERIES 78 AND 91 MINIATURE CABLE CONNECTORS

Compact connectors for shielded or unshielded cables. Polarized contacts prevent incorrect insertion. For cables up to 1/8" dia. Last letter in Type No. indicates: L, long (1 1/2"); S, short (1 1/4"). Last fig. in Type No. denotes no. of contacts. PCG—chassis type. Figs. N and R are female types; Fig. P, male type. Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	Fig.	EA.	Stock No.	Type	Fig.	EA.
47 A 0320	91-MPP3L	N	.47	47 A 0574	91-MPM4S	P	.39
47 A 0571	91-MPP3S	N	.41	47 A 0570	91-MPM5L	P	.44
47 A 0321	91-MPP4L	N	.49	47 A 0328	91-MPM6L	P	.47
47 A 0572	91-MPP4S	N	.46	47 A 0330	78-PCG3	R	.31
47 A 0325	91-MPM3L	P	.42	47 A 0331	78-PCG4	R	.35
47 A 0573	91-MPM3S	P	.37	47 A 0332	78-PCG5	R	.39
47 A 0326	91-MPM4L	P	.43	47 A 0333	78-PCG6	R	.40

## SERIES 143 PRINTED-CIRCUIT RECEPTACLES

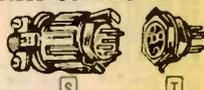
For PC networks. Mate with standard .055" to .073" PC board. "Circle Lip" contact entrance ensures firm contact with varying thicknesses of board; will not set. Diallyl phthalate dielectric; nonmarking, gold-plated contacts. Contacts on 150° centers. Maximum card insertion length is 1.097" for 143-006; 3.597" for 143-022. Average breakdown voltage: 5400 volts DC at sea level; 1150 volts DC at 60,000 feet. All are rated at 5 amps. \*Polarizing key. Av. wt., 3 oz.



Stock No.	Type 143-	Con-tacts	EACH	Stock No.	Type 143-	Con-tacts	EACH
47 A 1090	006-01	6	1.04	47 A 0501	018-01	18	1.44
47 A 0503	010-01	10	1.16	47 A 0502	022-01	22	1.68
47 A 2675	012-01	12	1.21	47 A 2676	953	*	.02
47 A 0500	015-01	15	1.25				

## MINIATURE RACK PANEL AND CABLE CONNECTORS

Molded of diallyl phthalate dielectric material. Solder contacts gold finished over silver plating. Fig. T is hex nut type with threaded body for direct mounting to panel. Has locking clip for mating with Fig. S hood and cable-clamp type. Fig. S is two-piece for easy wiring, has cable clamp for strain relief of soldered connections. Locking ring engages locking clip on mating unit. Both Fig. S and Fig. T available with either socket or pin contacts. Voltage breakdown, 2000 volts rms 60 Hz at sea level. Current ratings, 7.5 amps. Diameter of locking clip type, 3/8"; hood and clamp type, 1/4". Length of cable-clamp type 1 3/4". \*Female version of Fig. S; male version of Fig. T. 5 oz.



## MALE CONNECTORS

Stock No.	Mfr's Type	Con-tacts	Fig.	EA.	Stock No.	Mfr's Type	Con-tacts	Fig.	EA.
47 A 0644	126-217	5	S	1.40	47 A 0638	126-216	5	†	.67
47 A 0646	126-195	7	S	1.54	47 A 0640	126-197	7	†	.80
47 A 0648	126-220	9	S	1.66	47 A 0642	126-219	9	†	.92

## FEMALE CONNECTORS

47 A 0645	126-223	5	*	1.81	47 A 0639	126-218	5	T	1.08
47 A 0647	126-196	7	*	2.09	47 A 0641	126-198	7	T	1.35
47 A 0649	126-222	9	*	2.39	47 A 0643	126-221	9	T	1.66

## MALLORY PHONE JACKS

### LONG-FRAME PHONE JACKS

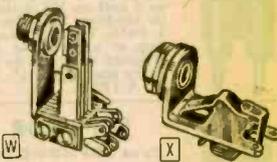
Industrial-type jacks are ideal for headphones, microphone cord and plug connections, etc. Take standard 1/8" phone plugs. Mount in 1/2" dia. hole in panels up to 1/4" thick by means of a 3/8" threaded shank. Cadmium-plated frames; bushings and springs are nickel plated. Silver contacts for low contact resistance. Size, 3 1/8 x 1 1/2 x 3/8" wide. \*Indicates number of conductors in mating plug. Av. shpg. wt., 4 oz.



Stock No.	Mfr's Type	*Cond.	Circuit	Diagram	EACH	
					1-9	10-49
47 A 1745	1	2	Open	I	.50	.45
47 A 1747	2A	2	Closed	II	.63	.57
47 A 1055	5	2	Closed & Transfer	VII	.99	.89

### JUNIOR PHONE JACKS

Compact jacks for standard 1/8" phone plugs. Require only 1 1/2" behind panel. Cadmium-plated frames; nickel-plated brass shank, springs, mtg. hardware. 3/8" dia. threaded shank for panels 1/4" thick. Silver contacts. \*Conductors in mating plug. Wt., 3 oz.



Stock No.	Mfr's Type	*Cond.	Circuit	Diagram	EACH	
					1-9	10-49
47 A 1054	701	2	Open	I	.50	.45
47 A 1751	702A	2	Closed	II	.63	.57
47 A 1058	702B	3	Open	III	.63	.57
47 A 1059	703B	3	Closed-Transfer 1	IV	.66	.59
47 A 1060	704B	3	Closed-Transfer 2	V	.76	.68

## MIDGET AND INFANT PHONE JACKS

Extremely small "Midget" and "Infant" type jacks for limited-space applications. All take 1/8" phone plugs. "Midget" type jacks require only 1 1/2" mounting space behind panel; "Infant" type requires only 3/8" behind panel. Cadmium-plated steel frames with nickel-plated brass shank, springs, and mounting hardware. 3/8" threaded shank for mounting in panels up to 1/4" thick. \*Conductors in mating plug. All are "Midget" type except A-1 "Infant" type jack (not illustrated). Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	*Cond.	Circuit	Diagram	EACH	
					1-9	10-49
47 A 1056	A-1	2	Open	I	.36	.33
47 A 1051	A-2	2	Shorting	VI	.53	.48
47 A 1053	A-2A	2	Closed	II	.63	.57
47 A 1056	A-3A	2	Closed-Transfer 1	VII	.73	.65

**JACK SCHEMATIC DIAGRAMS**

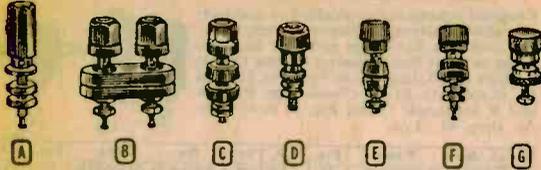
Jacks shown in normal or non-operated positions

I	IV	VI
II	V	VII
III		

# Binding Posts, Plugs and Jacks

H. H. SMITH

## 5-WAY AND MULTI-PURPOSE BINDING POSTS



**A** Type 208. Five-way metal binding post. Accepts banana plug, phone tip, spade lug, alligator clip or wire strand. Mounts in .171" hole in panels from  $\frac{1}{8}$ " to  $\frac{1}{4}$ " thick. Body: brass, nickel-plated. Head: captive, hex brass nickel-plated. Has wrap-around solder stud. With 2 mounting nuts. Shpg. wt., 3 oz.  
47 A 1327..... Each .40

**B** Type 224 BB. Dual 5-way binding post assembly with black, insulated fluted heads. Accepts single or dual banana plugs. Mounts in two  $\frac{1}{8}$ " holes on  $\frac{1}{4}$ " mounting centers in panels up to  $\frac{1}{4}$ " thick. Has solder stud,  $\frac{3}{8}$ "x $\frac{1}{4}$ " base. Body: brass, nickel-plated. With 4 mtg. nuts. Wt., 4 oz.  
47 A 1328..... Each .77

**B** Type 269BB. Similar to Type 224, above, but has black hex-grip insulated heads. Shpg. wt. 4 oz.  
47 A 1329..... Each .83

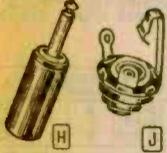
47 A 1324, Type 269 RB. Above, but one black, one red head Each .83

**Multi-Purpose Posts.** Rated 2000 V., 30 amps. Captive heads. Length shown is total closed. For panels  $\frac{1}{8}$ "- $\frac{1}{4}$ " thick. \*Locking edge. †Banana-plug jack in head; also accepts phone tip, lug, etc. ‡Grounding types. †Take solder connection to stud. Av. shpg. wt., 2 oz.

Stock No.	Type	Fig.	Mounting	Length	Color	EACH
47 A 1368	257*†‡	C	$\frac{1}{2}$ "	1 $\frac{1}{2}$ "	Red	.44
47 A 1367	257*†‡	C	$\frac{1}{2}$ "	1 $\frac{1}{2}$ "	Black	.44
47 A 1366	220†‡	D	$\frac{1}{2}$ "	1 $\frac{1}{2}$ "	Red	.26
47 A 1365	220†‡	D	$\frac{1}{2}$ "	1 $\frac{1}{2}$ "	Black	.26
47 A 1388	260*†‡	D	$\frac{3}{8}$ "	1 $\frac{1}{2}$ "	Red	.49
47 A 1389	260*†‡	E	$\frac{3}{8}$ "	1 $\frac{1}{2}$ "	Black	.49
47 A 1394	377‡‡	F	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	Red	.42
47 A 1395	377‡‡	F	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	Black	.42
47 A 1397	378‡‡	F	2 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	Red	.42
47 A 1398	378‡‡	F	2 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	Black	.42

**G** Type 110. Brass, for heavy-duty use.  $2\frac{1}{2}$ " long.  $\frac{3}{8}$ " mounting hole. Rated at 50 amps, 60 Hz AC. Shpg. wt., 2 oz.  
47 A 1371..... Each .29

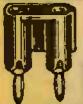
## STANDARD $\frac{1}{4}$ " PHONE PLUGS AND JACK



2-conductor phone plugs and jack. Plugs have screw-type terminals and are available with either red or black break-resistant Tenite plastic handles; all metal parts, except screws, have nickel plating. Terminals, insulation, plus body and tip rod are mechanically interlocked to prevent turning. Overall length,  $2\frac{1}{2}$ ". Open circuit, 2-conductor jack has  $\frac{1}{4}$ " diameter threaded shank  $\frac{1}{2}$ " long; requires only 1" behind panel. Interlocked for dependable operation. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	EACH
47 A 1017	222	H	Standard Phone Plug (black)	.61
47 A 1018	222	H	Standard Phone Plug (red)	.61
47 A 1019	275	J	Standard Phone Jack	.32

## DOUBLE PLUG



Type 210. Dual plug for standard banana jacks. Molded as a unit on  $\frac{1}{4}$ " centers. Jacks in top permit use of units in tandem. Body: molded polystyrene, per Fed. Spec. L-P416. Type I. Brass plug, nickel plated. Accepts phone tips or wire up to #12, held with internal set screw. Polarity indicated on top and side. Has 15-ampere rating. Body size,  $1\frac{1}{2}$ "x $1\frac{1}{4}$ ". Shpg. wt., 3 oz.  
47 A 1792..... Each .72

## SUPERIOR AC 5-WAY BINDING POST



Type DAPI5BWC Dual-Adapter Binding Post. Facilitates line voltage connections from AC output receptacles to binding posts. Has integral parallel-blade plug. Rated at 15 amps, 125 volts. Brass parts are gold-plated. Accepts spade lugs, banana plugs, clip leads, up to No. 12 wire through .098" dia. holes, or wire wrapped around shafts. Has black body with 1 white and 1 black thumbnut. Shpg. wt., 3 oz.  
47 A 1041 1-9..... Each 2.00 10-99..... Each 1.50

## SUPERIOR HEX-NUT TYPE BINDING POSTS



Exceptionally versatile posts take spade lugs, banana plugs, clip leads, up to No. 12 wire through center hole, or looped and clamped around shaft. All have gold-plated brass current-carrying parts and durable nylon plastic insulator and captive nut except type GP30NC, which is nickel-plated grounding-type binding post. All rated 30 amps at 1000 volts. Mount in  $\frac{1}{4}$ " holes in panels  $\frac{1}{8}$ " to  $\frac{1}{4}$ " thick. Size,  $2\frac{3}{8}$ "x $\frac{1}{2}$ " diameter. With hexagonal thumbnut. Shpg. wt., 2 oz.

Stock No.	Type	Color	Stock No.	Type	Color
47 A 1172	DF30YC	Yellow	47 A 1178	DF30RC	Red
47 A 1173	DF30NC	Green	47 A 1198	DF30BLC	Blue
47 A 1174	DF30WTC	White	47 A 1000	GP30NC	Nickel
47 A 1177	DF30WC	Black			

Your Choice..... Each .50

E. F. JOHNSON

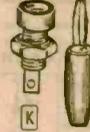
**Six-Way Molded Binding Posts.** Silver-plated brass shank. Insulation resistance over 200 megohms. Rated at 15 amps, breakdown, 8000 VDC. Size,  $1\frac{1}{4}$ "x $\frac{3}{8}$ " diameter with  $\frac{3}{8}$ "x $\frac{1}{2}$ " nut for mounting in  $\frac{3}{4}$ " diameter hole. Available in white, red, black, green, blue, and yellow. Shpg. wt.,  $\frac{1}{2}$  oz.

Stock No.	Type	Color	Stock No.	Type	Color
47 A 6323	111-101	White	47 A 6333	111-104	Green
47 A 6329	111-102	Red	47 A 6290	111-110	Blue
47 A 6332	111-103	Black	47 A 6335	111-107	Yellow

Your Choice..... Each .30

111-20 Mounting Plate. Etched aluminum. For mtg. 2 nylon binding posts or banana jacks on  $\frac{3}{4}$ " ctrs.  $1\frac{1}{4}$ "x $\frac{1}{2}$ ". 2 oz.  
47 A 6336..... Each .03

## BANANA JACKS AND PLUGS



Series 108. Low-loss body. Capacity to  $\frac{1}{2}$ " metal panel, 2.4 pF. Breakdown test 10,000 VDC. Jacks (fig. K) have cadmium-plated insert. Supplied with  $\frac{3}{8}$ "x $\frac{1}{2}$ " nut for mtg. jacks in  $\frac{3}{4}$ " dia. hole. Plugs (fig. L) have one-piece nickel-plated brass body with nickel-silver springs. Solderless connection takes up to No. 16 stranded wire. Insulating sleeve on plug 6 colors. Overall lengths: jack,  $\frac{3}{8}$ "; plug,  $1\frac{1}{4}$ ". Av. shpg. wt., 2 oz.

Color	Stock No.	Type	Fig.	EA.	Stock No.	Type	Fig.	EA.
White	47 A 6371	108-901	K	.10	47 A 6379	108-301	L	.19
Red	47 A 6372	108-902	K	.10	47 A 6380	108-302	L	.19
Black	47 A 6373	108-903	K	.10	47 A 6381	108-303	L	.19
Green	47 A 6374	108-904	K	.10	47 A 6382	108-304	L	.19
Blue	47 A 6297	108-910	K	.10	47 A 6298	108-310	L	.19
Yellow	47 A 6377	108-907	K	.10	47 A 6384	108-307	L	.19

## ACI UNIVERSAL "ADLOC" BINDING POST



- "Push" for Quick Positive Lock and Disconnect
- Secure Connections Are Made from the Top

Push down on top, insert wire (up to 12 gauge), release and positive contact is made instantly. To disconnect, just push again. Can take several wires at same time. Also accepts spade lugs, plugs, clamps and probes. Brass nickel-plated post, nylon plastic insulator. Rated 30 amps at 1000 V rms. Mounts in .314" hole in panels  $\frac{1}{8}$ " to  $\frac{1}{4}$ ". Size,  $2\frac{1}{2}$ "x $\frac{3}{4}$ ". Wt., 3 oz.  
24 A 9025, Type AL2000B, Black..... Each .55  
24 A 9026, Type AL2000R, Red..... Each .55

## AMPHENOL MINIATURE AND STANDARD PLUGS

### TYPE 71 MINIATURE HIGH-DIELECTRIC PLUGS



Compact, efficient, high-dielectric plugs. Excellent for transmitters, receivers, intercoms and speaker connections. Securely anchored, nickel-plated brass prongs; deeply recessed to prevent shorts caused by pulled back insulation. Easily soldered. For cables with up to six conductors. Brass nickel-plated to assure proper connections. Fit Amphenol 78-S3S, 78-S4S, 78-S5S, 78-S6S retainer-ring type miniature sockets listed on page 371. Rated 5 amps @ 500V. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	EA.	Stock No.	Mfr's Type	Prongs	EA.
47 A 0177	71-3S	3	.11	47 A 0149	71-5S	5	.15
47 A 0169	71-4S	4	.14	47 A 0179	71-6S	6	.17

### TYPE CP STANDARD BAKELITE PLUGS



Bakelite plugs for chassis connectors with plug-in units. Use adapter plate below for replacement mounting. rms voltage ratings: 86-CP4 2000 V; CP-11 and CP-12, 500 V; all others, 1250 V. With mounting ring of  $1\frac{1}{4}$ " holes. Have guide post and aligning key. CP7S has small pins. Fit Amphenol MIP standard tube sockets, page 371. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EA.	Stock No.	Mfr's Type	Pins	EA.
47 A 0015	86-CP4	4	.23	47 A 0020	86-CP8†	Oct.	.25
47 A 0016	86-CP5	5	.23	47 A 0021	86-CP9†	9	.26
47 A 0017	86-CP6	6	.25	47 A 0022	86-CP11†	11	.27
47 A 0019	86-CP7S	7	.26	47 A 2654	86-CP12†	12	.28

Type 12-001-03 Adapter Plate. Nickel-plated steel. For use with all CP plugs above.  $1\frac{1}{4}$ " to  $1\frac{1}{2}$ " mtg. centers. 2 oz.  
47 A 0023..... Each .05

## G-C ELECTROCRAFT SOLDERLESS PHONO PLUGS



Handy right-angle design for fast, positive connections. Plastic shells. For std. shielded cable with  $\frac{3}{8}$ " O.D. Overall length,  $1\frac{1}{2}$ ". Pin dia.,  $\frac{1}{8}$ ". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Shell Color	EACH	
			1-9	10-99
47 A 6117	33-776	Gray	.31	.28
47 A 6118	33-778	Black	.31	.28
47 A 6119	33-780	Red	.31	.28

## NATIONAL TEL-TRONICS PIN PLUG AND JACK



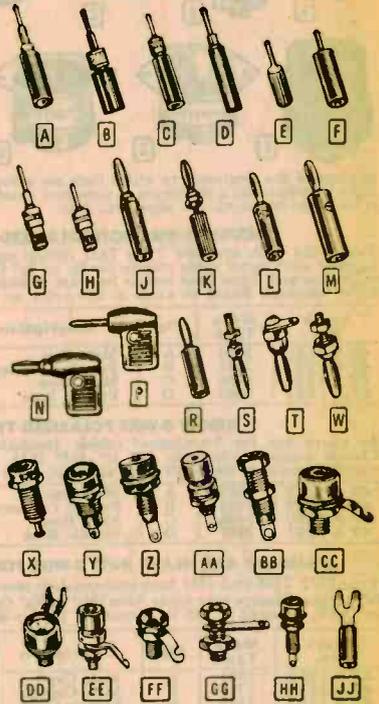
Standard phono pin plug and jack used in most hi-fi equipment. Take size conductor shielded cable. Av. shpg. wt., 2 oz. 10 per pkg.  
47 A 6057, Pin Plug 36C..... Per Pkg. .31  
47 A 6058, Pin Jack 31B..... Per Pkg. .43

# Plugs, Jacks, Sockets and Connectors

## GC ELECTRONICS TOP-QUALITY PLUGS AND JACKS

Quality plugs and jacks for a wide range of applications in radio and hi-fi equipment, test instruments, etc. All feature highest-quality construction for long-life reliability. Nickel-plated brass bodies for higher current applications. Unbreakable plastic handles. Order from table at left. Shpg. wt., 10 oz.

Stock No.	Type	Fig.	Connector	Color	Length	Pkg. Of 6
24 A 9600	33-110-1	A	Insulated heavy-duty phone tip plug	Red	2 1/4"	.98
24 A 9601	33-110-2	A	Insulated heavy-duty phone tip plug	Black	2 1/4"	.98
24 A 9602	33-106	B	"Senior" solderless insulated phone tip plug	Black	2 1/4"	.98
24 A 9603	33-108	B	"Senior" solderless insulated phone tip plug	Black	2 1/4"	.98
24 A 9604	33-144-1	C	"Junior" solderless insulated phone tip plug	Red	1 3/4"	.98
24 A 9605	33-144-2	C	"Junior" solderless insulated phone tip plug	Black	1 3/4"	.98
24 A 9606	33-112	D	Subminiature insulated phone tip plug	Red	1 3/4"	1.18
24 A 9607	33-114	D	Subminiature insulated phone tip plug	Red	1 3/4"	1.18
24 A 9610	33-116-1	E	Hollow insulated phone tip plug	Red	1 1/2"	.75
24 A 9611	33-116-2	E	Hollow insulated phone tip plug	Black	1 1/2"	.75
24 A 9612	33-118	F	Insulated short phone tip plug	Red	1 1/2"	.85
24 A 9613	33-120	F	Insulated short phone tip plug	Black	1 1/2"	.85
24 A 9614	33-146	G	Non-insulated "Senior" phone tip plug	....	1 3/4"	.85
24 A 9615	33-142	H	Non-insulated "Junior" phone tip plug	....	1 3/4"	.85
24 A 9616	33-000	I	Insulated spring-tip banana plug	Red	1 1/2"	1.60
24 A 9617	33-002	J	Insulated spring-tip banana plug	Black	1 1/2"	2.10
24 A 9618	33-028-1	K	Insulated spring tip banana plug	Red	1 1/2"	2.10
24 A 9619	33-028-2	K	Insulated spring tip banana plug	Black	1 1/2"	1.10
24 A 9620	33-006	L	Insulated spring tip banana plug	Red	1 1/2"	1.10
24 A 9621	33-008	L	Insulated spring tip banana plug	Black	1 1/2"	1.10
24 A 9622	33-018	M	Insulated split tip banana plug	Red	1 1/2"	1.10
24 A 9623	33-020	M	Insulated split tip banana plug	Black	1 1/2"	1.10
24 A 9624	33-032-1	R	Insulated spring tip banana plug	Red	1 1/2"	1.10
24 A 9625	33-032-2	R	Insulated spring tip banana plug	Black	1 1/2"	1.85
24 A 9626	33-046	N	Right-angle banana-type meter plug	Red	1 3/4"	1.85
24 A 9627	33-048	N	Right-angle banana-type meter plug	Red	1 3/4"	1.75
24 A 9628	33-128	P	Right-angle meter tip plug	Red	1/2"	1.50
24 A 9629	33-130	P	Right-angle meter tip plug	Black	1/2"	1.75
24 A 9635	33-034	S	Non-insulated spring-tip banana plug	....	1 3/4"	1.10
24 A 9636	33-062	T	Non-insulated spring-tip banana plug	....	2 3/4"	1.30
24 A 9637	33-064	W	Non-insulated spring-tip banana plug	....	1 3/4"	1.75
24 A 9638	33-240	X	Miniature nylon tip jack	Red	3/8"	1.75
24 A 9639	33-242	X	Miniature nylon tip jack	Black	3/8"	1.18
24 A 9640	33-216	Y	Insulated nylon tip jack	Red	1 1/2"	1.18
24 A 9641	33-218	Y	Insulated nylon tip jack	Black	1 1/2"	.98
24 A 9644	33-210	Z	Insulated nickel-plated brass tip jack	Red	1 1/2"	.98
24 A 9645	33-212	Z	Insulated nickel-plated brass tip jack	Black	1"	1.50
24 A 9646	33-208-1	AA	Insulated nylon tip jack	Red	1"	1.50
24 A 9647	33-208-2	AA	Insulated nylon tip jack	Black	1"	.85
24 A 9648	33-226	BB	Non-insulated tip jack	....	1"	.98
24 A 9649	33-180	CC	Non-insulated banana jack	Red	1"	.98
24 A 9650	33-182	CC	Non-insulated banana jack	Black	1"	.98
24 A 9651	33-186	DD	Insulated banana jack	Red	1"	1.60
24 A 9653	33-188	DD	Insulated banana jack	Black	1"	1.60
24 A 9654	33-220-1	EE	Insulated banana jack	Red	1"	.60
24 A 9655	33-220-2	EE	Insulated banana jack	Black	1"	.85
24 A 9656	33-184	FF	Non-insulated banana jack	....	1"	.85
24 A 9658	33-02	GG	Non-insulated banana jack	....	1"	1.10
24 A 9659	33-194	HH	Insulated combination jack	Red	1 1/2"	1.10
24 A 9662	33-196	HH	Insulated combination jack	Black	1 1/2"	.85
24 A 9663	33-300	JJ	Banana plug to spade-lug adapter	Red	1 1/2"	.85
24 A 9664	33-302	JJ	Banana plug to spade-lug adapter	Black	1 1/2"	.85



### ARROW H&H MIDGET CONNECTORS



Midget 2-prong cord connectors and receptacles. Especially suited for applications where space is at a premium. Types illustrated in Figures KK and LL have housings of durable molded bakelite. Others have rust-resistant metal housings and insulation of bakelite. All units are rated at 10 amperes at 250 volts. A 1" diameter hole is required for all receptacles. Contact spacing is 1/4". Receptacle terminals are exposed. All units take threaded covers. Types 80326 and 80328 are furnished with plate for screws. Types 80327 and 80329 are furnished with plate and lock ring. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH
47 A 2191	80324	KK	Male cable connector	1.07
47 A 2192	80325	LL	Female cable connector	1.07
47 A 2193	80326	MM	Female flush receptacle	1.27
47 A 2194	80328	NN	Male flush receptacle	1.42
47 A 2195	80327	PP	Female flush receptacle	2.09
47 A 2196	80329	RR	Male flush receptacle	2.15

### AMPHENOL CABLE CONNECTORS

Matching male and female cable connectors. Take cables up to 7/16" O.D. Series 78-PF are female connectors; series 86-PM are male. "S" in type number indicates small pins. Size 1 3/4 x 1 1/2". Av. wt., 3 oz.

Stock No.	Mfr's Type	Con-acts	EACH	Stock No.	Mfr's Type	Con-acts	EACH
47 A 0524	78-PF4	4	.41	47 A 0505	86-PM5	5	.45
47 A 0525	78-PF5	5	.43	47 A 0506	86-PM6	6	.47
47 A 0526	78-PF6	6	.45	47 A 0507	86-PM7S	7S	.57
47 A 0527	78-PF7S	7S	.47	47 A 0508	86-PM8	8	.47
47 A 0528	78-PF8	8	.47	47 A 0512	86-PM9	9	.48
47 A 0516	78-PF9	9	.46	47 A 0513	86-PM11	11	.49
47 A 0517	78-PF11	11	.50	47 A 2655	86-PM12	12	.50
47 A 0504	86-PM4	4	.45				

Amphenol Cable Clamp. Type 79-CC4. For use with above connectors. Relieves strain on soldered connections. Shpg. wt., 5 oz. 47 A 0670. Each .09

### CINCH-JONES SERIES 202 PLUGS AND SOCKETS

Cadmium-plated brass plugs and sockets. Type P-202-CCT is polarized. Knurled nut. Type S-202-B socket nut; hole No. 30 drill on 1" centers. All units have 1/8"-27 thread. Type P-202-CCT and S-202-CCT-THR have cable clamp. Av. shpg. wt., 3 oz.



Stock No.	Type	Fig.	Description	EACH
47 A 0980	P-202-CCT	SS	Plug, 2 contact	1.09
47 A 0982	S-202-B	TT	Socket, base mounting	1.32
47 A 0981	S-202-CCT-THR	WW	Socket, extension	1.46

### PLUGS AND SOCKETS

**Type 2R2 Chassis-Mounting AC Socket.** Molded, black bakelite AC socket excellent for radio, TV chassis, phono, and similar applications. Rated at 15 amps at 110 volts or 10 amps at 250 volts. Accepts any 2-prong standard electric plug. Solder-lug terminals. Mounts in 2 3/4 x 2 3/8" hole. Has 3/8" diameter mounting holes on 1 1/2" centers. Size 1 1/2 x 1/2". Recognized Under the Component Program of Underwriter's Laboratories, Inc. Shpg. wt., 2 oz. 47 A 0830. .21



**Type 8PB 8-Contact Plug.** For making up to 8 connections between chassis. Molded from high-dielectric black bakelite. Nickel-plated pins have tapered ends for easy insertion. Fits any standard octal socket. Use with 16F shield, below. Shpg. wt., 2 oz. 47 A 0846. .24



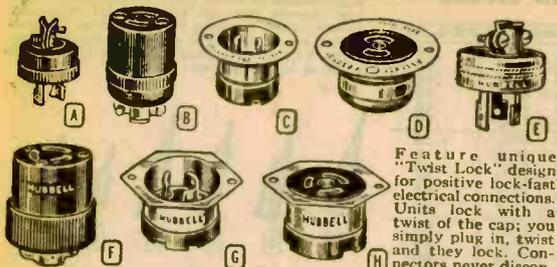
**Type 11PB 11-Contact Plug.** Same as above, but with 11 contacts. Fits 11RB socket, below. Use with 16F snap-on shield below. Shpg. wt., 2 oz. 47 A 0847. .31

**Type 16F Steel Snap-On Shield.** (Not illus.) Cadmium-plated steel plug cap. Snaps on 8PB and 11 PB sockets, above. Has screwdriver slot at bottom to facilitate removal. Rubber grommet with 3/8" diameter hole protects cable. Shpg. wt., 2 oz. 47 A 0848. .77

**Type 11 RB 11-Contact Socket.** Use with 11 PB 11-contact plug above, for making up to 11 contacts between chassis. Molded black bakelite. Mounts on 1/2" thick chassis using retaining ring. Use with 16F shield (above) on extension cables. Wt., 2 oz. 47 A 0849. .33

# Connectors, Plugs, Sockets and Terminal Strips

## HUBBELL "TWIST-LOCK" CONNECTORS



Feature unique "Twist Lock" design for positive lock-fast electrical connections. Units lock with a twist of the cap; you simply plug in, twist and they lock. Connectors never disconnect accidentally regardless of the treatment to which they are subjected. Ensures a maximum of safety and a minimum of time loss. Conform to National Electrical Code Standard. Av. shpg. wt., 3 oz.

gardless of the treatment to which they are subjected. Ensures a maximum of safety and a minimum of time loss. Conform to National Electrical Code Standard. Av. shpg. wt., 3 oz.

### MIDGET 2-WIRE NON-POLARIZED TYPES

Type 7428 male cap and Type 7427 female connector are of brown bakelite with metal cable clamps for  $\frac{3}{16}$  to  $\frac{1}{2}$ " O.D. cords. Type 7466 male base and Type 7468 female base are of bakelite with brass nickel finish housings. Rated 10 amps at 250 volts or 15 amps at 125 volts.

Stock No.	Mfr's Type	Fig.	Description	EACH	
				1-9	10-49
47 A 1282	7428	A	Male Cap	.53	.47
47 A 1283	7427	B	Female Connector	.97	.86
47 A 1284	7466	C	Male Base	1.15	1.02
47 A 1287	7468	D	Female Base	1.40	1.24

### MIDGET 3-WIRE POLARIZED TYPES

As above but for 3-conductor cables. Insulation is black bakelite. Clamps accept cords from .281 to .421" O.D. Polarization prevents wrong connection. Rated 10 amps at 250 V. or 15 amps at 115 V.

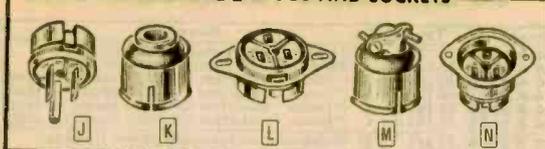
Stock No.	Mfr's Type	Fig.	Description	EACH	
				1-9	10-49
47 A 1288	7485	A	Male Cap	1.26	1.12
47 A 1289	7484	B	Female Connector	1.81	1.61
47 A 1290	7486	C	Male Base	1.61	1.43
47 A 1291	7487	D	Female Base	1.96	1.74

### STANDARD AND HEAVY-DUTY 3-WIRE POLARIZED TYPES

Type 7572, 7556 and 7557 have rust-resistant metal housings. Type 7555 is bakelite. Clamps take cords from  $\frac{1}{16}$ " to  $\frac{3}{16}$ " O.D. All rated 10 amps at 250 V. 15 amps at 125 V. \*Armored, heavy-duty. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH	
				1-9	10-49
47 A 1292	7572	E	Male Cap*	1.49	1.33
47 A 1296	7311	E	Male Cap*	2.15	1.91
47 A 1293	7555	F	Female Conn.	2.36	2.10
47 A 1297	7313	F	Female Conn.†	3.30	2.94
47 A 1294	7556	G	Male Base	1.96	1.74
47 A 1295	7557	H	Female Base	2.17	1.93

## AMPHENOL PLUGS AND SOCKETS



### SERIES 61 AND 160 STANDARD AND GROUNDING-TYPE AC PLUGS AND SOCKETS

Series 61 comprises standard two-pole AC plugs and sockets. Series 160 consists of heavy-duty grounding types that are especially recommended for grounding appliances and power tools. Rated 15 amps at 120 volts, AC-DC, and 10 amps at 220 volts. Plugs and sockets are black phenolic and U.L. Recog., except Types 160-10 and 160-11 which must be grounded after mounting. Av. shpg. wt., 3 oz.

**J Retainer Ring Mounting Types.** For mounting in  $\frac{11}{16}$ " keyed hole in chassis up to  $\frac{1}{8}$ " thick. 61-M is standard type; 61-F is universal type. \*Includes prong and third terminal for ground wire. All units listed are 2-pole types.

Stock No.	Type	Descrip.	EA.	Stock No.	Type	Descrip.	EA.
47 A 0675	61-M	Male	.37	47 A 2522	*160-10	Female	.85
47 A 0677	61-F	Female	.37	47 A 2523	*160-11	Male	1.01

**L Mounting Plate Types.** All require  $\frac{1}{2}$ " mtg. holes and have  $\frac{3}{16}$ " slotted holes on  $\frac{1}{2}$ " to  $\frac{1}{4}$ " centers except Type 61-MIP-61F which requires  $\frac{3}{16}$ " mtg. hole and has  $\frac{3}{16}$ " holes on  $\frac{1}{2}$ " centers. Types 61-M1 and 61-F1 have removable mtg. plates. \*With terminal for ground wire. All 2-pole.

47 A 0680	61-M1	Male	.46	47 A 2525	*160-3	Male	1.10
47 A 0682	61-F1	Female	.44	47 A 0085	61-MIP-		
47 A 2524	*160-2	Female	.93		61F	Female	.40

**Type 61-61 Recessed Shell Only.** (Not illus.) Converts Type 61, 86 and 160 connectors to recessed types. Fits  $\frac{1}{16}$ " hole; two  $\frac{3}{16}$ " screw holes on  $\frac{1}{4}$ " centers. Lowers connector 1 1/2". Wt., 2 oz.

47 A 0086..... Each .14

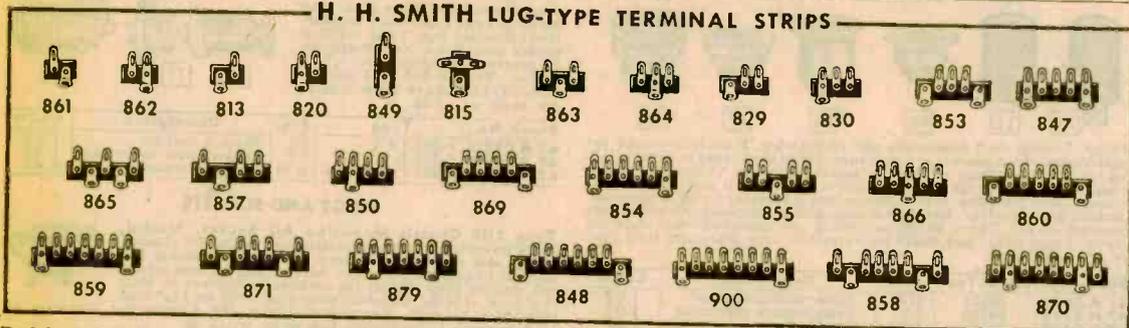
**N Recessed Mounting Types.** For below-surface mounting. Mount in  $\frac{1}{16}$ " hole; have two  $\frac{3}{16}$ " screw holes on  $\frac{1}{4}$ " ctrs. All are 2-pole types. \*With grounding lug.

Stock No.	Type	Descrip.	EA.	Stock No.	Type	Descrip.	EA.
47 A 0685	61-M10	Male	.57	47 A 2526	*160-4	Female	1.08
47 A 0687	61-F10	Female	.56	47 A 2527	*160-5	Male	1.25

**K M Drawn Steel Plug Caps.** For use with plugs, sockets and connectors indicated. Type 3-13 (Fig. K), has rubber grommet for up to  $\frac{1}{4}$ " cable Type 3-24 (Fig. M), has adjustable clamp for cables up to  $\frac{1}{4}$ " diameter. Have black japan finish. Shpg. wt., 2 oz.

Stock No.	Type	Fig.	Use with Plugs and Sockets Types	EACH
47 A 2537	3-13	K	61, 86-CP, and S (Series 78)	.14
47 A 2538	3-24	M	61, 86-CP, and S (Series 78)	.23

## H. H. SMITH LUG-TYPE TERMINAL STRIPS



Dark brown bakelite strips,  $\frac{1}{16}$ " thick x  $\frac{3}{8}$ " wide. Solder-coated steel lugs have  $\frac{3}{16}$ " centers.  $\frac{1}{16}$ " dia. mtg. holes. Av. wt., 2 oz. 10 per pkg.

Stock No.	Type	PER PKG.	Stock No.	Type	PER PKG.	Stock No.	Type	PER PKG.	Stock No.	Type	PER PKG.
47 A 4320	861	.27	47 A 4327	864	.36	47 A 4334	850	.48	47 A 4341	871	.66
47 A 4321	862	.29	47 A 4328	829	.34	47 A 4335	869	.61	47 A 4342	879	.78
47 A 4322	813	.30	47 A 4329	830	.36	47 A 4336	854	.66	47 A 4343	848	.80
47 A 4323	820	.30	47 A 4330	853	.54	47 A 4337	855	.42	47 A 4344	900	.78
47 A 4324	849	.36	47 A 4331	847	.66	47 A 4338	866	.48	47 A 4345	858	.86
47 A 4325	815	.38	47 A 4332	865	.54	47 A 4339	860	.72	47 A 4346	870	.86
47 A 4326	863	.36	47 A 4333	857	.48	47 A 4340	859	.72			

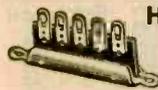
### H. H. SMITH SCREW-TYPE TERMINAL STRIPS



Screw-type terminal strips for chassis and breadboarding applications. Have solder-coated brass terminal lugs on  $\frac{1}{16}$ " centers; .136" dia. mounting holes.  $\frac{1}{16}$ " thick bakelite strips; except\*  $\frac{3}{16}$ ". Av. wt., 2 oz.

Stock No.	Mfr's Type	Term.	Pkg. of 5	Stock No.	Mfr's Type	Term.	Pkg. of 5
47 A 4079	872	2	.44	47 A 4084	877	7	1.36
47 A 4080	873	3	.66	47 A 4085	928	8	1.44
47 A 4081	874	4	.80	47 A 4086	929	9	1.68
47 A 4082	875	5	1.02	47 A 4087	930*	10	1.92
47 A 4083	876	6	1.18				

### H. H. SMITH SERIES 3000 TERMINAL STRIPS



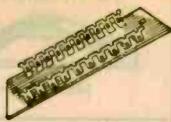
Selection of compact terminal strips, of .019 brass, tin-plated, and spaced on  $\frac{3}{16}$ " centers. Molded bakelite insulation. Mounting brackets are made of cadmium-plated steel. Mounting holes at each end of bracket. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Term	Mtg. Ctrs.	Pkg. of 5	Stock No.	Mfr's Type	Term	Mtg. Ctrs.	Pkg. of 5
47 A 1462	3002	2	1"	.36	47 A 1466	3006	6	2 1/4"	.60
47 A 1463	3003	3	1 1/8"	.42	47 A 1468	3008	8	2 1/4"	.68
47 A 1464	3004	4	1 1/4"	.48	47 A 1470	3010	10	3 1/4"	.79
47 A 1465	3005	5	1 1/2"	.54	47 A 1475	3012	12	4 1/4"	.90

# Terminal Strips, Board, Terminals, Insulators

## ELGIN ELECTRONICS STRIP PACK®

Strip pack component boards consist of Phenolic boards with continuous metal terminals inserted. Prior to component insertion, terminal connections are cutout in accordance with the required circuitry, leaving connector jumpers where needed. Type 205, 1 1/4" wide, .875" between rows; Type 228, 1 1/2" wide, 1 1/4" between rows. 3/32" mounting holes.



Stock No.	Mfr's Type	No. Term.	EACH	Stock No.	Mfr's Type	No. Term.	EACH
47 A 2697	205-1	5	.36	47 A 2704	228-1	5	.54
47 A 2698	205-2	10	.42	47 A 2710	228-2	10	.60
47 A 2699	205-3	15	.45	47 A 2717	228-3	15	.66
47 A 2700	205-4	20	.50	47 A 2718	228-4	20	.71
47 A 2701	205-5	25	.60	47 A 2719	228-5	25	.80
47 A 2703	205-6	30	.66	47 A 2724	228-6	30	.86

## NATIONAL TEL-TRONICS SOLDERLESS TERMINAL BLOCKS



SERIES 900



SERIES 915 920



Series 900 molded of hard polyvinylchloride. Red polyvinylchloride pushbuttons. 27 amps maximum, 440 V. 70° C maximum. Beryllium copper contacts. Series 915 and 920 flexible blocks are for use with 1/4" width terminals. Transparent polyvinylchloride. 20 amps maximum, 250 V. 80° C maximum. \*Number of terminals. 1 oz.

Stock No.	Mfr's Type	Description	Size, In., L x W x D.	EACH	
				1-9	10-24
47 A 1857	900-12*	Pushbutton	4 1/4 x 3/4 x 3/4	1.23	1.11
47 A 1858	900-24*	Pushbutton	9 3/4 x 1/2 x 3/4	2.31	2.08
47 A 1859	915-12*	Flexible	5 1/2 x 1/4 x 1 1/4	.52	.46
47 A 1868	915-24*	Flexible	11 1/2 x 1/4 x 1 1/4	1.03	.92
47 A 1869	920-12*	Flexible	5 1/2 x 1/4 x 1 1/2	.52	.46
47 A 1870	920-24*	Flexible	11 1/2 x 1/4 x 1 1/2	1.03	.93

## NT-T 905 SOLDERLESS BLOCKS

Bend in any direction to fit contours, sharp angles. Polyester. 30 amps max., 380 V. 60° C max. Each 1/2 x 3/4 x 3/4" width 1/2" between term. centers. 1 oz.



47 A 1871, 1-9 ..... Each 1.95  
10-24 ..... Each 1.76

## CINCH-JONES BARRIER TERMINAL STRIPS

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-in-finish brass. When used with fanning strips, insure positive contact and firm connections. No. 140 terminal strips have 5-40x 3/4" binder head screws, 1/4" metal-to-metal spacing. No. 141 types have 6-32x 3/4" binder head screws, 1/2" metal-to-metal spacing. No. 142 types have 8-32x 3/4" binder head screws, 1/4" metal-to-metal spacing. Av. shpg. wt., 5 oz.



Series 140. Metal-to-metal spacing over bakelite 1/4". Base 7/8" wide x 3/2" high. 3/16" centers.

Stock No.	Type	Term.	EACH	Stock No.	Type	Term.	EACH
47 A 1800	2-140	2	.23	47 A 1804	8-140	8	.63
47 A 1801	3-140	3	.27	47 A 1582	9-140	9	.70
47 A 1803	4-140	4	.34	47 A 1805	10-140	10	.77
47 A 1807	5-140	5	.42	47 A 1583	11-140	11	.83
47 A 1802	6-140	6	.48	47 A 1806	12-140	12	.92
47 A 1581	7-140	7	.55				

Series 141. Metal-to-metal spacing over bakelite 3/8". Base 1 1/8" wide x 1/2" high. 3/16" centers.

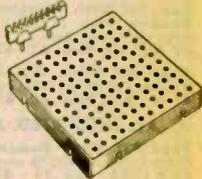
Stock No.	Type	Term.	EACH	Stock No.	Type	Term.	EACH
47 A 1835	2-141	2	.26	47 A 1838	6-141	6	.61
47 A 1836	3-141	3	.34	47 A 1839	8-141	8	.80
47 A 1837	4-141	4	.44	47 A 1840	10-141	10	.99
47 A 1842	5-141	5	.54	47 A 1841	12-141	12	1.16

Series 142. Metal-to-metal spacing over bakelite 3/8". Base 1 3/8" wide x 1/2" high. 3/16" centers.

Stock No.	Type	Term.	EACH	Stock No.	Type	Term.	EACH
47 A 1670	2-142	2	.30	47 A 1674	6-142	6	.75
47 A 1671	3-142	3	.41	47 A 1676	8-142	8	.98
47 A 1672	4-142	4	.53	47 A 1678	10-142	10	1.21
47 A 1673	5-142	5	.64	47 A 1680	12-142	12	1.43

## ALCO CB-1 CIRCUIT BOARD

Provides an excellent base for various types of breadboard. Designed to accept Alco-strip series MEI-NB, which may be inserted and removed as desired. Two or more units may be fastened together to form larger board. Rugged high-impact material. Size, 5x6". Shpg. wt., 4 1/2 oz.



CB-2 Kit. Complete ceramic kit includes 16 strips (8 sizes), and above 5x6" mating circuit board to form a base for experimental design work. Wt., 1 lb. 47 A 0001 ..... 10.95

## E. F. JOHNSON INSULATORS



A Wide Selection of Quality Insulators for Every Need

Stand-Off Insulators. High-glass porcelain (except \*steatite). Long leakage path, low capacity and freedom from moisture absorption. Nickel-plated brass hardware includes screw, flat washer, two nuts. Type 135-65 is ribbed; others have drawn bases. \*Similar to Figure B, but square base and 4 mounting holes. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Body Ht.	Min. Dia.	Max. Dia.	Mtg. Ctrs.	Hardware	EACH
47 A 6235	135-20*	A	1 3/4"	3/8"	1 1/4"	1 3/8"	10-32	.43
47 A 6237	135-22*	A	1"	1 1/8"	1 3/8"	1 1/8"	8-32	.26
47 A 6239	135-24*	A	3/4"	3/8"	1"	1 1/8"	6-32	.21
47 A 6240	135-60	†	4 1/2"	1 3/8"	2 1/2"	1 1/8"	1/4-20	1.40
47 A 6241	135-62	†	2 3/4"	7/8"	1 1/4"	1 3/8"	1/4-20	.81
47 A 6242	135-65	B	1 1/2"	5/8"	1 1/4"	1 1/8"	10-32	.44
47 A 6248	135-68	C	2 1/4"	1 1/8"	1 5/8"	1 1/8"	1/4-20	.99
47 A 6251	135-67	C	4 1/2"	1 3/8"	2 1/4"	1 1/8"	1/4-20	1.40

Thru-Panel Types. Porcelain except \*steatite. #108-740 jack. 12 oz.

Stock No.	Mfr's Type	Fig.	Body Ht.	Min. Dia.	Max. Dia.	Panel Hole	Hardware	EACH
47 A 6200	135-40*	G	1 1/4"	1 1/8"	1 3/4"	1 1/8"	10-32	.55
47 A 6202	135-42*	G	1 1/2"	1 1/8"	1 3/4"	1 1/8"	10-32	.50
47 A 6203	135-42-2	H	1 1/2"	1 1/8"	1 3/4"	1 1/8"	†	.66
47 A 6205	135-44*	G	1 1/2"	1 1/8"	1 3/4"	1 1/8"	6-32	.39
47 A 6206	135-45	J	2 1/2"	1 1/8"	1 1/2"	1 1/8"	10-32	.77
47 A 6210	135-46	G	3 3/4"	1 1/8"	1 1/2"	1 1/8"	1/4-20	1.69
47 A 6211	135-47	G	6"	1 1/8"	2 1/8"	3/16"	1/4-20	2.80
47 A 6215	135-48	J	2 1/2"	1 1/8"	1 1/2"	1 1/8"	10-32	1.19
47 A 6216	135-48-2	K	2 1/2"	1 1/8"	1 1/2"	1 1/8"	†	1.35

Lead-in Bushings. Ideal high-voltage terminals. All are constructed of steatite for excellent RF insulating characteristics. Supplied complete with nickel-plated brass rod and nuts. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Fig.	Body Ht.	Min. Dia.	Max. Dia.	Panel Hole	EACH
47 A 6217	135-50	E	1"	3/8"	1 1/4"	1 1/8"	.46
47 A 6219	135-51	E	1 1/2"	3/8"	1 1/4"	2 1/8"	.76
47 A 6220	135-52	E	2"	3/8"	1 1/4"	1 3/8"	.99
47 A 6223	135-55	D	1 1/2"	1/2"	1 1/4"	1 3/8"	.37

Ultra-Steatite Cone Insulators. Non-ribbed. With nickel-plated, brass hardware. Av. shpg. wt., 5 oz.

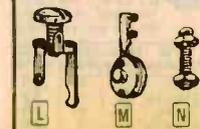
Stock No.	Mfr's Type	Body Ht.	Min. Dia.	Max. Dia.	EACH
47 A 6224	135-500	3/4"	7/8"	1 1/2"	.26
47 A 6231	135-501	1"	7/8"	1 1/2"	.35
47 A 6232	135-502	1 1/2"	1"	1 1/2"	.65
47 A 6233	135-503	2"	1 1/2"	1 1/2"	.96
47 A 6234	135-504	3"	1 1/2"	1 1/2"	1.68

## ANTENNA-FEEDER SPREADERS

(Not illus.) For constructing high efficiency, open-wire antenna feeders and transmission lines. Silicone impregnated, moisture-proof porcelain. 3/8x 1/2". Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Length	EACH
47 A 6257	136-122	2"	.20
47 A 6258	136-124	4"	.34
47 A 6259	136-126	6"	.50

## TERMINAL LUGS, SNAPS AND STUDS



L Terminal Lugs. Screw-mount to chassis. 2 solder lugs. 10 per pkg. Shpg. wt., 10 oz.

47 A 1767 ..... Per Pkg. .51

M Nu-Way Snaps. For temporary or permanent connections. 3/16x 3/8" dia. 10 per pkg. 12 oz.

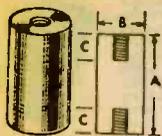
24 A 9034 ..... Per Pkg. .98

N Nu-Way Snaps. For panel or chassis mtg. Fit snaps. Size, 6-32 x 1/2". 10 per pkg. Shpg. wt., 12 oz.

24 A 9031 ..... Per Pkg. .79

# Insulators, Coil Forms, Clips, Spacers, Tube Caps

## H. H. SMITH CERAMIC STAND-OFF INSULATORS



Commercial-grade threaded insulators specially designed for a wide variety of RF applications where leakage loss must be held to a minimum. Grade L-5 ceramic is employed and outside is highly glazed to prevent absorption of moisture and avoid leakage losses. All except Type 2640 are threaded at both ends to accept 6-32 or 1/4-20 machine screws. Type 2640 is threaded throughout. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Dimensions			Thread	PER PKG. OF 10	
		A	B	C		1-4	5-9
47 A 4347	2640	1/4"	1/4"	Thru	6-32	1.60	1.34
47 A 4348	2641	3/8"	3/8"	3/32"	6-32	1.64	1.37
47 A 4349	2642	1/2"	1/2"	3/32"	6-32	1.70	1.42
47 A 4350	2643	5/8"	5/8"	3/16"	6-32	2.03	1.69
47 A 4351	2644	3/4"	3/4"	3/16"	6-32	2.22	1.85
47 A 4352	2645	3/4"	1/2"	1/4"	6-32	2.34	1.95
47 A 4353	2646	1"	1/2"	1/4"	6-32	2.58	2.15
47 A 4355	2647	1 1/4"	1/2"	3/8"	6-32	2.94	2.45
47 A 4356	2648	2 1/2"	1/2"	1/4"	6-32	3.10	2.67
47 A 4357	2649	2 1/2"	3/4"	1/4"	1/4-20	4.32	3.60

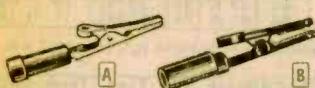
## H. H. SMITH LEATHER EQUIPMENT HANDLES



Sturdy equipment handles available in two styles. Rugged construction makes them stand up to even the most frequent and hard usage. Each handle is black leather with matching stitching. **Spring Glide** style has contoured handle which moves up for carrying and down when not in use. Will not rattle under extreme sound conditions. Chrome plated caps. **Retracto-Link** style has handles which attach with rivets or screws; drop down when not in use. Assemble in minutes. Heavy nickel-plated steel hardware included. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	Length	EACH
47 A 4354	2089	Spring Glide	6"	3.00
47 A 4365	2093	Retracto-Link	4 1/2"	2.70
47 A 4366	2094	Retracto-Link	5 1/2"	2.70
47 A 4367	2095	Retracto-Link	6 1/4"	2.70

## H. H. SMITH ADAPTER CLIPS



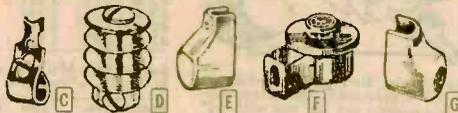
Alligator clips with jacks in handle to accept tip and/or banana plugs. Cadmium-plated steel.

### A PLASTIC-HANDLE ALLIGATOR CLIPS

Type 306 With Combination Tip-Jack and Banana Jack. Ideal for use with test prods. Adds servicing, 2 oz.  
47 A 1168, Red .47 47 A 1169, Black .47  
Type 304 With Tip Jack. Accommodates standard tip-plug only, 2 oz.  
47 A 1300, Red .40 47 A 1305, Black .40

### B ALL-INSULATED ALLIGATOR CLIPS

Type 337 With Banana Jack. Accommodates banana plug-in receptacle end, 2 oz.  
47 A 1382, Red .29 47 A 1383, Black .29  
Type 336 With Tip Jack. Accommodates standard tip plug in receptacle end, 2 oz.  
47 A 1373, Red .43 47 A 1374, Black .43



## TRANSMITTING STANDARD TUBE CAPS

Heat dissipating types (Fig. D) have set-screw. Type 46011 (Fig. F) gives tight grip to insure good contact. Shpg. wt., per package, 3 oz.

Stock No.	Fig.	Description and Application	Pkg. of	PER PKG.
47 A 2514	C	National Type GG-24-2. For standard tubes, 3/8" dia. grid caps.	5	.25
47 A 2515	C	National Type 8. For octal tubes, 1/4" diameter grid caps.	5	.40
47 A 2518	C	National Type GG-12-2 grid and plate cap, 3/8"	3	1.24
47 A 2096	D	Eimac HR-6 heat dissipating cap for 4-250A, 304TH, etc. 3/4" hole.	1	2.20
47 A 3086	D	Bud TC-487 heat dissipating cap for UH50, HK24, 304B, 832A, 834, 1/4" hole.	1	.90
47 A 3089	D	Bud TC-1921 heat dissipating cap for 866, T125, HF100, 450TH, 750TH, 809, 811, 812, 813, 828, 866, etc. 3/4" hole.	1	1.00
47 A 2175	E	National SPP-9 ceramic-insulated grid and plate cap, 3/8"	1	.24
47 A 3243	F	Millen 36011 industrial snap-action-release, self-locking plate cap, 3/8"	1	.90
47 A 3244	G	Millen Type 36002 steatite tube cap, 3/8"	1	.33
47 A 3245	G	Millen Type 36004 steatite tube cap, 1/2"	1	.39
47 A 3246	G	Millen 36001 steatite plate cap for 866, etc. 3/8"	1	.34

## H. H. SMITH BRASS SPACERS



Round spacers designed for use in raising sub panels, chassis, condensers, transformers, other electronic parts and assemblies. Constructed of durable cadmium-plated brass. Precision machined—lengths and outer diameters accurately controlled to  $\pm 1/32$ " tolerance. Available in your choice of round, non-threaded type or round, threaded types; in lengths from 1/4" to 1". Tapped bushings for threads indicated in table below. Packed 10 spacers per package. Av. shpg. wt. per pkg., 6 oz.

### ROUND—NON-THREADED 1/4" O.D.

Stock No.	Mfr's Type	Screw Size	Length	PKG. OF 10
47 A 4718	2340	4	1/4"	.33
47 A 4720	2342	4	1/2"	.53
47 A 4721	2343	4	3/4"	.63
47 A 4632	8701	6	1/4"	.25
47 A 4724	2100	6	3/4"	.33
47 A 4725	2101	6	3/8"	.44
47 A 4726	2102	6	1/2"	.53
47 A 4728	2103	6	3/4"	.63
47 A 4729	2104	6	1"	.72
47 A 4730	2105	8	1/4"	.33
47 A 4634	8702	8	3/8"	.37
47 A 4731	2107	8	1/2"	.53
47 A 4734	2109	8	3/4"	.72

### ROUND—THREADED 1/4" O.D.

Stock No.	Mfr's Type	Tap	Length	PKG. OF 10
47 A 4755	2370	4-40	1/4"	.39
47 A 4756	2371	4-40	3/8"	.50
47 A 4758	2372	4-40	1/2"	.60
47 A 4759	2373	4-40	3/4"	.84
47 A 4760	2374	4-40	1"	1.04
47 A 4650	8773	6-32	3/8"	.65
47 A 4761	2109	6-32	1/2"	.39
47 A 4765	2121	6-32	3/4"	.60
47 A 4766	2122	6-32	1"	.80
47 A 4767	2123	6-32	3/4"	.84
47 A 4768	2124	6-32	1"	1.04
47 A 4774	2129	8-32	1"	1.04

## H. H. SMITH HEAVY-DUTY STRIPS



Made of 1/2" thick black bakelite, 7/8" wide. Have 8-32x3/4" nickel-plated screw terminals and cadmium-plated brass solder lugs. Drilled for 2-hole mtg. Av. wt., 4 oz.

Stock No.	Mfg.	Term.	EACH
47 A 1875	902	2	.24
47 A 1880	903	3	.26
47 A 1885	904	4	.32
47 A 1895	906	6	.48
47 A 1898	908	8	.60

## MILLEN 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 1/2" winding length; 2 3/8" overall. Shpg. wt., 2 oz.  
47 A 3217.....58

Type 46006. Same as 45004, but has 5 prongs. Shpg. wt., 2 oz.  
47 A 3218.....58

Type 46000. Same as Type 45005 above, but without prongs. Designed for screw mounting. Shpg. wt., 2 oz.  
47 A 3219.....45

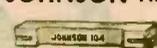
## MAYFAIR POLYSTYRENE COIL FORMS



A selection of coil forms for winding RF coils of all types. Low-loss polystyrene construction. 5 and 6-prong standard forms fit standard tube sockets; 5-prong miniature type fits Amphenol Type 78-SSS miniature socket (see under "Retainer Ring Sockets" in socket section). Av. wt., 2 oz.

Stock No.	Mfr's Type	Description	Size L.X.Dia.	EA.
47 A 6693	24-5H	5-Prong Min.	1 1/2"x1 1/2"	.28
47 A 6696	24-5P	5-Prong Std.	2 1/4"x1 1/4"	.27
47 A 6697	24-6P	6-Prong Std.	2 1/4"x1 1/4"	.40

## JOHNSON ANTENNA INSULATORS



Strain-type insulators. All are porcelain-glazed to prevent moisture absorption, and prevent RF leakage. Superior quality units with heavily glazed surfaces and heavy, nickel-plated brass hardware suitable for exposed applications. Type 136-107 insulator is wet process 1" diameter round design with 800 lbs. breaking strength. Type 136-104 is dry process, 3/4" square with 400 lbs. breaking strength.

Stock No.	Mfr's Type	Size	Shpg. Wt.	EACH
47 A 6254	136-104	4"x3/4" sq.	4 oz.	.30
47 A 6255	136-107	7"x1" dia.	10 oz.	1.35

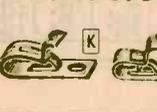
## CONSOLIDATED ANTENNA INSULATORS



Dependable glazed porcelain insulator. Efficient ribbed construction provides long leakage path. 2 1/2" long. Shpg. Wt., 2 oz. 4 per pkg.  
47A6051, Pkg./40

White porcelain strain insulator. 1 1/2"x3/4" dia. Breaks up guy lines into non-resonant lengths. 2 oz. 4 per pkg.  
47 A 6052, Per Pkg.....48

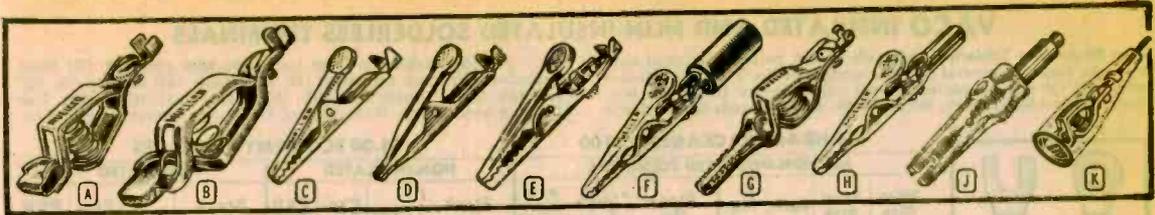
## FAHNESTOCK SPRING CLIPS



Positive, reliable contact. Easy to connect and disconnect. Made of brass, except #bronz. Av. shpg. wt., 3 oz. per pkg.

Stock No.	Mfr's Type	Fig.	LxW Inches	Max. Mta.	Wire Hole	PKG. OF 10
47 A 1700	2	K	1x3/4"	10	8	.25
47 A 1702	3	K	1 1/2x3/4"	10	8	.32
47 A 1705	10	K	3/4x3/4"	14	6	.20
47 A 1703	5	L	1 1/2x3/4"	10	8	.36
47 A 1707	15*	L	1 1/2x1/2"	16	4	.20

# Assorted Test Clips, Terminals, Crimping Tools



## MUELLER CLIPS AND FLEXIBLE INSULATORS

### MESH-TEETH TEST CLIPS

**A** For general-purpose use. Interlocking necks prevent jaw offset. Type 45C, solid copper; Type 45, cadmium-plated steel. Av. shpg. wt. per 100 pieces, 1 lb.

Stock No.	Mfr's Type	Amps	Size	Per Pkg. of 10
47 A 5001	45	5	1 1/2"	.61
47 A 5006	45C	10	1 1/2"	1.07

### LEAD-PLATED BATTERY CLIPS

**A** For moderately heavy current work, battery charging, electroplating, and light welding. Stands erect. Shpg. wt., per 100; 76¢, \$15, \$36 lbs. \*Marking.

Stock No.	Mfr's Type	Amps	Size	EACH
47 A 5021	24A	25	+ 2 7/8"	.26 .177
47 A 5022	24A	25	None 2 1/2"	.26 .177
47 A 5023	21A	50	+ 4"	.46 .32
47 A 5024	21A	50	None 4"	.46 .32
47 A 5027	11A	100	None 6"	1.27 .89

### SOLID-COPPER CLIPS

**A** Heavy-duty, high-conductivity clips constructed of solid copper. Compact design. Shpg. wts. per 100 pieces: Type 25C, 6 1/4 lbs.; 21C, 18 lbs.; 11C, 41 lbs.

Stock No.	Mfr's Type	Amps	Size	EACH
47 A 5073	25C	75	None 3"	.49 .34
47 A 5031	21C	100	+ 4 1/2"	1.20 .84
47 A 5032	21C	100	None 4 1/2"	1.20 .84
47 A 5033	11C	200	+ 6"	2.34 1.64
47 A 5034	11C	200	None 6"	2.34 1.64

### 3-SIDED MESH-TEETH CLIPS

**B** Good jaw spread and current carrying capacity. †Indicates cadmium-plated steel; \*solid copper. †Insulation-piercing needle. Jaws open 3/4". Wt., per 100, 3/4-inch maximum. Av. shpg. wt. per 100, 3 1/4 lbs.

Stock No.	Mfr's Type	Amps	Size	EA. MULTIPLES
47 A 5010	48B	10	2"	1.9 OF 10, EA.
47 A 5078	*48C	20	2"	.13 .09
47 A 5087	*150C	20	2 1/4"	.20 .14
47 A 5015	†27	20	2 1/4"	.32 .22
47 A 5088	*51C	20	2 1/4"	.16 .11
47 A 5074	25	40	3 1/4"	.22 .15
47 A 5097	*27C	40	2 1/4"	.27 .19



**TYPE 60-NS ALLIGATOR NEEDLE CLIP**

Ideal for any application where it is desirable to pierce the insulation of a wire to make a more direct connection. Slim jaws open 3/8" maximum and have beryllium copper needle. Wire centering notches hold conductor securely. Screw type. Shpg. wt., per 100, 1 lb. Prices per pkg. of 10.

47 A 5014, 1-9. Ea. 1.32 10-49. Ea. 1.12

### A-MP CRIMPING TOOLS



**L** Type 47100-1 "Super Champ" Crimping Tool. Crimps insulated solderless terminals, shears machine screws, measures stud sizes, cuts and strips wire from standard AWG 22 thru 10. Shears bolts in 10-24, 10-32, 8-32, 6-32 and 4-40 sizes. Constructed of rugged tool steel, with comfortable insulated plastic handles. Length, 7 1/2". Shpg. wt., 1 lb. 47 A 5321

**M** Type 49835-1. For crimping non-insulated terminals. Otherwise has same versatile features as above—shears machine screws, measures stud sizes, cuts and strips wire. Shpg. wt., 1 lb. 47 A 4453

### "MINI-GATOR" CLIPS

**C** 3/8" jaw opening, 1 1/4" O.D. tip, including insulator. Type 30, cadmium-plated steel; 30C, solid copper. Per 100, 4 oz. Pkg. of 10.

Stock No.	Mfr's Type	Amps	Size	Per Pkg. of 10
47 A 5140	30	5	1 1/4"	.50 .43
47 A 5141	30C	10	1 1/4"	.61 .53

### "MICRO-GATOR" CLIPS

**D** Similar to "Mini-gators" but with tiny tip for small terminals, etc. †Cadmium-plated steel; ‡solid copper. 1/4 lbs. per 100 pcs.

Stock No.	Mfr's Type	Amps	Size	Per Pkg. of 10
47 A 5178	‡34	.....	1 1/2"	.41 .36
47 A 5179	*34C	.....	1 1/2"	.53 .46

### 70 SERIES ALLIGATOR CLIPS

**E** †Cadmium-plated steel; \*solid copper; ‡solder connection; †screw connected. Wt. per 100 pieces, 1 lb.

Stock No.	Mfr's Type	Amps	Size	Per Pkg. of 10
47 A 5173	‡70	5	1 1/4"	.45 .38
47 A 5174	‡70S	5	1 1/4"	.54 .46
47 A 5175	*70CS	10	1 1/4"	.85 .73

### INSULATED BARREL ALLIGATOR CLIPS

**F** Cad.-plated steel, except \*solid copper. Jaws open 3/4". Per 100, 1 1/2 lbs. †Handle.

Stock No.	Mfr's Type	Size	Per Pkg. of 10
47 A 5081	60HS	2 1/2"	Red .89 .76
47 A 5082	60HS	2 1/2"	Black .89 .76
47 A 5083	*60CHS	2 1/2"	Red 1.18 1.01
47 A 5084	*60CHS	2 1/2"	Black 1.18 1.01

### 85 SERIES CROCODILE CLIPS

**G** †Phone tip on one jaw. Screw connections. Wt., per 100, 1 1/4 lbs.

Stock No.	Mfr's Type	Size	Material	Ea.	Multiples of 10, Ea.
47 A 5060	85	2 1/2"	Cad.-plated	.11	.08
47 A 5062	85C	2 1/2"	Solid copper	.21	.15
47 A 5098	185T	2 1/2"	Cad.-plated	.27	.19

### 60 SERIES ALLIGATOR CLIPS

**H** †Solder type; ‡S—screw type. Per 100, 1 lb. Prices per pkg. of 10.

Stock No.	Mfr's Type	Size	Material	Ea.	Multiples of 10, Ea.
47 A 5011	160	2"	Cad.-plated	.54	.47
47 A 5012	60S	2"	Cad.-plated	.63	.54
47 A 5013	60CS	2"	Solid copper	.96	.82

### INSULATED ALLIGATOR CLIPS

**J** No. 63 clip, cadmium-plated steel; No. 63C clip, solid-copper type. \*Red or black insulator. Size, 2 1/4". Av. shpg. wt., per 100 pcs., 1 1/2 lbs.

Stock No.	Type	Amps	Size	Each	Multiples of 10, Ea.
47 A 5145	63	5	Red	.19	.13
47 A 5146	63	5	Black	.19	.13
47 A 5147	63C	10	Red	.22	.15
47 A 5148	63C	10	Black	.22	.15

### SLIP-ON INSULATORS FOR CLIPS

**K** Tough, flexible vinyl plastic insulators for maximum protection. High dielectric strength; holds clip firmly; resistant to oils and grease. Insulator covers entire clip except for end of nose. Long tail affords extra protection and prevents breakage of wire. Available in both red and black. Av. shpg. wt., 5 oz. \*Manufacturer's type.

Stock No.	For Series	Color	EACH
			1-9 10-99
47 A 5036	13	Red	.81 .57
47 A 5037	13	Black	.81 .57
47 A 5038	23	Red	.41 .28
47 A 5039	23	Black	.41 .28
47 A 5041	26	Red	.23 .16
47 A 5042	26	Black	.23 .16
47 A 5043	29	Red	.17 .12
47 A 5044	29	Black	.17 .12
47 A 5046	32	Black	.05 .03
47 A 5047	32	Red	.05 .03
47 A 5051	36	Red	.05 .03
47 A 5052	36	Black	.05 .03
47 A 5053	47	Red	.07 .05
47 A 5054	47	Black	.07 .05
47 A 5056	49	Red	.10 .06
47 A 5057	49	Black	.10 .06
47 A 5058	62	Red	.06 .04
47 A 5059	62	Black	.06 .04
47 A 5061	72	Red	.06 .04
47 A 5063	72	Black	.06 .04
47 A 5064	87	Red	.07 .05
47 A 5066	87	Black	.07 .05

### HIPPO AND PIGMY HIPPO HIGH-CURRENT CLIPS

Plier clips for fast battery chargers and battery booster cables. Tough vinyl insulating sleeves marked for polarity. Solder strap and cable clenching ears. Locks on battery terminal in any position. 1 1/2" jaw spread; 6" long. Copper-plated steel. Rated 100 amps. Wt., per 100, 41 lbs.

47 A 5076, Red. Positive. Ea. .51  
47 A 5077, Black. Negative. Ea. .51

Type 46-A, Pigmy-hippo clip. Above, but 1 1/2" spread; 3" long. 50 amps. 5 1/4 lbs. per 100.  
47 A 5071, Red. Positive. Ea. .17  
47 A 5072, Black. Negative. Ea. .17



### TRIPLE A BATTERY BINDING POST

Versatile battery binding post with 250 amp rating. Separate threaded terminal for cables with lugs. Shpg. wt., 5 oz.

47 A 1785.....\$6



### A-MP TERMINAL KIT

Type 29033. Terminal kit includes an assortment of the most popular insulated terminals used for general wiring applications, a heavy-duty type 47100-1 Super-Champ crimping tool (shown at left), plus a transparent plastic storage case. Storage case has individual compartments for different size terminals and crimping tool—makes it easy to select the proper terminal at a glance. Ideal for radio-TV and electrical servicemen. Saves time by eliminating the necessity of soldering. Crimping tool makes it easy to wire with a firmly affixed terminal. Crimping tool makes a very satisfactory electrical connection. Tool may also be used with all wire sizes from No. 10 gauge to No. 22 gauge. Will also shear machine screws, measure stud sizes, cut and strip wire from No. 22 gauge through 10. Storage case, 9 1/4 x 5 1/2 x 2". 47 A 5322. Shpg. wt., 2 lbs.....\$24.00

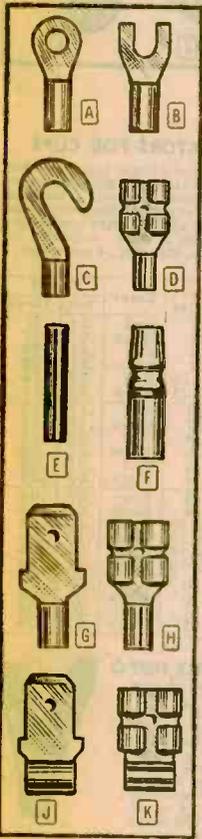


# Solderless Terminals, Tools, Sockets, Test Prods

## VACO INSULATED AND NON-INSULATED SOLDERLESS TERMINALS

Vaco Single-Grip Solderless Terminals. Form perfect electrical connections. Ideal for general-purpose work or radio, TV and appliance servicing. Of chrome-plated copper alloy. Series 10000 are one-piece non-insulated types. Series 50000 are insulated; heavy plastic

sleeve provides insulation from tongue to wire covering. (E) Butt connector; (F) snap terminal; (D, H) female tab socket; (G) 1/4" male tab; (I) 1/4" angle male tab; (K) angle female tab socket. Use crimping tool, below. Wts., pkg. of 100. 8-oz.; economy pack. 3 oz.



### STANDARD PACKAGES OF 100

#### ALL NON-INSULATED TERMINALS

Wire Size	Stud Size	Length	Fig.	Stock No.	Mfr's Type	PER PKG. of 100
22-18	4	1 1/2"	A	47 A 4200	11204	2.71
22-18	5-6	1 1/2"	A	47 A 2800	11205	2.71
22-18	5-6	3/4"	A	47 A 2801	11206	2.71
22-18	8	1 1/2"	A	47 A 4201	11208	2.71
22-22	10	3/4"	A	47 A 2802	11210	2.71
16-14	5-6	1 1/2"	A	47 A 2803	11305	2.71
16-14	5-6	2 1/2"	A	47 A 2804	11306	2.71
16-14	8	2 1/2"	A	47 A 4204	11308	2.71
16-14	10	2 1/2"	A	47 A 2805	11310	2.71
12-10	10	3/4"	A	47 A 2807	11410	3.38
12-10	12-1/4	2 1/2"	A	47 A 2808	11414	4.49
22-18	4	1 1/2"	B	47 A 4205	13204	2.42
22-18	4-6	1 1/2"	B	47 A 2812	13206	2.42
22-18	8	4 1/4"	B	47 A 4206	13208	2.71
22-18	10	1 1/2"	B	47 A 4207	13210	2.71
16-14	4-6	4 3/4"	B	47 A 2810	13306	2.71
16-14	8	2 1/2"	B	47 A 4208	13308	2.71
16-14	10	4 3/4"	B	47 A 2811	13310	2.71
22-18	4-6	9/16"	B	47 A 2809	14206	2.42
22-18	8	5/8"	C	47 A 2819	15208	2.71
22-18	8	9/16"	E	47 A 2816	17202	2.71
16-14	8	9/16"	E	47 A 2817	17302	2.71
12-10	8	1 1/2"	E	47 A 2818	17402	3.38
16-14	8	5/8"	F	47 A 2813	19301	2.10
22-18	8	1 1/2"	D	47 A 4213	18204	2.71
16-14	8	2 1/2"	G	47 A 2820	18301	2.71
16-14	8	2 1/2"	H	47 A 2821	18302	2.71
16-14	8	9/16"	J	47 A 2822	18303	2.71
16-14	8	1 1/2"	K	47 A 2823	18304	2.71

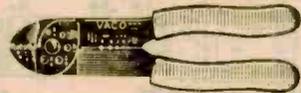
### \$1.00 ECONOMY PACKAGES

NON-INSULATED		INSULATED					
Stock No.	Type	Pkg. Qty.	PER PKG.	Stock No.	Type	Pkg. Qty.	PER PKG.
47 A 4476	11205	32	1.00	47 A 4269	51205	16	1.00
44 A 4481	11206	32	1.00	47 A 4270	51206	16	1.00
47 A 4482	11210	32	1.00	47 A 4272	51210	16	1.00
47 A 4486	11310	32	1.00	47 A 4277	51310	16	1.00
47 A 4489	11410	25	1.00				
47 A 4490	11414	19	1.00				
47 A 4265	13206	16	1.00	47 A 4279	53206	16	1.00
47 A 4266	13208	32	1.00	47 A 4280	53208	16	1.00
47 A 4492	13306	32	1.00	47 A 4282	53306	16	1.00
47 A 4493	13310	32	1.00	47 A 4304	53310	16	1.00
47 A 4498	14206	36	1.00	47 A 4305	54206	16	1.00
47 A 4499	15208	32	1.00	47 A 4306	55208	16	1.00
47 A 4287	17202	32	1.00	47 A 4310	57202	16	1.00
47 A 4288	17302	32	1.00	47 A 4311	57302	16	1.00
				47 A 4312	57402	13	1.00
47 A 4294	18204	32	1.00				
47 A 4295	18301	32	1.00	47 A 4313	58301	16	1.00
47 A 4297	18302	32	1.00	47 A 4314	58302	13	1.00
47 A 4302	18304	32	1.00				

### SERVICE KIT



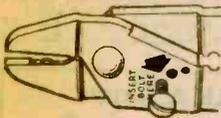
Model 2195. Contains approx. 170 non-insulated terminals and crimping tool (at right). Tool cuts, strips wire and crimps terminals. Includes assortment of these single-grip terminals: 11205, 11206, 11210, 11305, 11306, 11310, 14206, 13306, 13310, 15208. In clear plastic box, 8 1/2 x 6 x 1 1/4", with individual compartments. Shpg. wt., 2 lbs. 47 A 4427.....8.95



CRIMPING TOOL

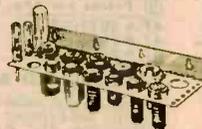
Model 1900. A quality tool designed for fast, effective crimping of non-insulated solderless terminals, above. Tool is furnished with three different crimping dies. Also quickly strips insulation from No. 22 to No. 10 size wires. Has durable steel jaws for heavy-duty use. Insulated plastic handles assure a comfortable grip at all times. Shpg. wt., 1 lb. 47 A 4233.....3.95

### VACO 1963 CRIMPING TOOL



Easy handling all-purpose tool has crimping dies for insulated and non-insulated terminals. Cuts and strips wire. Wire cutter at tip for close work. Strips No. 10, 12, 14, 16, 18, 20, 22 wire. Shears six sizes of bolts: 10-32, 6-32, 5-40, 10-24, 8-32, and 4-40. Improved-action bolt slicing principle requires less hand pressure. Jumbo plastic handles. 47 C 4237. Shpg. wt., 2 lbs.....4.95

### POMONA TEST ADAPTER HOLDER



Model 2878. Handy rack mounted holder keeps tube adapters and service tools neatly organized and readily accessible. The holder accommodates up to seven socket adapters of 7/8" in diameter or less, and six adapters of 1 1/2" diameter or less. Holes at both ends hold 12 service tools. Mounting holes provided for easy installation. Rolled steel with baked enamel finish. 3 1/2 x 1 1/2". 47 A 2228. Shpg. wt., 14 oz.....2.50

### G-C ELECTROCRRAFT "KLIPZON



#### MINIPRODS"

Fit standard tip jacks. Clip to any terminal, lug, etc. Point pierces insulation. Solderless connection inside 1/4" plastic handle. Specify \*Black or \*Red. Wt., 2 oz.

Stock No.	Type	EACH
47 A 1435C	*33-138, *33-140	.55

### JAMES MILLEN TUBE SOCKETS



Low-loss steatite 4 and 5-prong tube sockets for UHF use. For 866 rectifiers, transmitting tubes, etc. 1 1/16" mtg. ctr. Wt., 4 oz.

Stock No.	Type	Prongs	EACH
47 A 3200	33004	4	.85
47 A 3201	33005	5	.85

### VECTOR SOCKET TURRETS



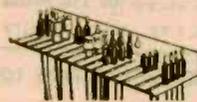
Terminal structures for single or multi-stage sub-assemblies. Mount on phenolic form; 7-pin miniature in 3/8" hole; 9-pin novel in 3/4" hole. 1/2-in. diameter. Shpg. wt., 3 oz.

Stock No.	Type	Socket	EACH
47 A 0217	8-M-9T	7-Pin Min.	.79
47 A 0233	8-N-9T	9-Pin Noval	.79

Stock No.	Type	Socket	EACH
47 A 0218	6-M-6T	7-Pin Min.	.72
47 A 0234	6-N-6T	9-Pin Noval	.72

1 1/2" Turrets. 6 terminals in one ring. 47 A 0218 6-M-6T 7-Pin Min. .72 47 A 0234 6-N-6T 9-Pin Noval .72 Type S9 Shield Base. For use with miniature 9-pin sockets above. Fastens above chassis on socket mounting centers. Use with standard bayonet shield. Shpg. wt., 2 oz. 47 A 0236......05

### POMONA TEST LEAD HOLDERS



For test leads, patch cords, and cable assemblies. Items can be filed for instant selection within easy reach. Cold-rolled steel, with baked enamel finish. \*For cable dia. 11x3 1/2". 14 oz.

Stock No.	Type	Dia.	Color	EACH
47 A 2414	1508	.210"	Orange	2.95
47 A 2415	2708	.450"	Blue	2.95

### POMONA TUBE ADAPTERS



110-S Sylvania Type. For duo-decal equipment. No rewiring—plug in for 110S socket. Converts to 7FA basing. Shpg. wt., 4 oz. 47 A 0683.....1.95 110-R RCA Type. As above, but converts to 8HR basing. Shpg. wt., 5 oz. 47 A 0684.....1.95

# Sockets, Adapters, Test-Lead and Socket Holders

## POMONA SOCKET SAVERS

For tube checkers and other equipment. Specially designed to reduce wear of tube sockets. Have beryllium copper tin alloy-plated contacts for long-term dependability. Av. shpg. wt., 3 oz.



Stock No.	Type	Use With	EACH
47 A 0668	SS-7	7-pin miniature	1.75
47 A 0669	SS-8	8-pin octal	1.75
47 A 0678	SS-9	9-pin miniature	1.75
47 A 2240	SS-12	12-pin compactron	2.25
47 A 2416	1751	9-pin novar	2.25

## AMPHENOL

### STANDARD TUBE SOCKETS



**A** Type MIP. Bakelite body with molded-in steel plate. \*Require 1 1/4" hole; mounting centers, 1 1/2". All others have 1 1/2" mounting centers, 1 1/2" hole; others 1 1/2" hole. †Mica-filled bakelite. Av. shpg. wt., 4 oz.

Stock No.	Type	Prongs	EACH
47 A 0024	77MIP4	4	.21
47 A 0025	77MIP5	5	.21
47 A 0026	77MIP6	6	.25
47 A 0027	77MIP7S	7 Small	.25
47 A 0029	†77MIP7L	7 Large	.28
47 A 0028	77MIP8	Octal	.21
47 A 0126	*88-8	Octal	.23
47 A 0030	*88-8X	Loktal	.33
47 A 0034	†77MIP8T	Octal	.25
47 A 0032	77MIP9	9	.25
47 A 0033	77MIP11	11	.29
47 A 0069	77MIP12	12	.30
47 A 0070	77MIP20	20	.67

**B** Type RS. High dielectric bakelite body with removable steel mounting plate. Designed for mounting in size 1 1/4" hole. Employ slotted mounting holes to fit centers from 1 1/2 to 1 3/4". Av. shpg. wt., 4 oz.

Stock No.	Type	Prongs	EACH
47 A 0004	78RS4	4	.26
47 A 0005	78RS5	5	.28
47 A 0006	78RS6	6	.30
47 A 0007	78RS8	Octal	.29
47 A 0071	78RS11	11	.35



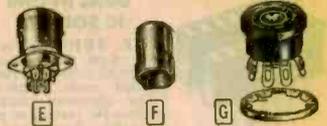
**C** Type RSS. Ultra-low-loss steatite replaceable sockets. Ruggedly constructed. Adaptable to a wide variety of uses. Excellent for use in high-frequency transmitting equipment, etc. All are universal type; have removable mounting plate with slotted holes 1 1/2 to 1 3/4". Mounting hole, 1 1/2" except Type 49RSS7L, which requires 1 1/4". Av. shpg. wt., 5 oz.

Stock No.	Type	Prongs	EACH
47 A 0074	49RSS4	4	.92
47 A 0075	49RSS5	5	.94
47 A 0079	49RSS7L	7 Large	1.69
47 A 0078	49RSS8	Octal	1.12

**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. Require keyed 1 1/4" mounting hole. Av. shpg. wt., 4 oz.

Stock No.	Type	Prongs	EACH
47 A 0054	78S4	4	.18
47 A 0055	78S5	5	.20
47 A 0056	78S6	6	.22
47 A 0057	78S7S	7 Small	.25
47 A 0058	78S8	Octal	.21
47 A 0062	78S9	9	.24
47 A 0060	78S8L	Loktal	.32
47 A 0072	78S11	11	.28

## AMPHENOL MINIATURE SOCKETS AND SHIELDS



Finest quality. The 147 series mount in 3/8" diameter holes, and have 7/8" mounting centers with 1/2" holes. The 59 series mount in 1/4" holes, and have 1 1/4" mounting centers with .095" holes (except Type 59-403, which is .125"). †Mica-filled. ‡Constructed of black bakelite. Av. shpg. wt., 3 oz.

### E WITH TUBE SHIELD BASE

Stock No.	Type	Prongs	EACH
47 A 0194	†147-905	7	.35
47 A 0173	†147-913	7	.34
47 A 0103	‡39-403	9	.51
47 A 0176	‡39-407	9	.41
47 A 0196	‡39-406	9	.40

### F TUBE SHIELDS

Made of cold rolled cadmium-plated steel, 5 oz.

Stock No.	Type	Height	EACH
47 A 0189	5-408	1 1/4"	.25
47 A 0190	5-409	2 3/4"	.31

### G RETAINER RING SOCKETS

Mount in 3/4" round or "D" shaped hole with retainer rings provided. May be used with AmpHENOL Series 91-MPM plugs. Made of black bakelite. Shpg. wt., 5 oz.

Stock No.	Type	Prongs	Pkg. of
47 A 0121	78-S3S	3	.61
47 A 0123	78-S4S	4	.79
47 A 0124	78-S5S	5	1.05
47 A 0128	78-S6S	6	1.10
47 A 0129	78-S7	7	1.47

### ACS SOCKET SHELL

Type 23-1S. Lightweight aluminum shell for Type RSS, RS and S sockets (except Type 49RSS7L). Permits extension of sockets 1/8" above or below chassis. Body dia., 1 1/4". 2 1/2" base. For 1 1/2" hole. Socket not supplied. 47 A 0127. Wt., 5 oz.



### SOCKETS FOR SCR'S



77-115 77-116  
3-contact nylon receptacle. Nickel-silver contacts; nylon insulator. 500 V rms. 5 A. \*Press-fits into rect. panel or chassis cut-out, 3/40/330 x 164/161". †Has molded mtg. flange with two .125" dia. mtg. holes on .625" ctrs. Req. .325x.200" cut-out. Wt., 2 oz.

Stock No.	Mfr's Type	PER PKG. OF 5		
		1-	10-	100-
47 A 0093	†77-115	1.05	.89	.735
47 A 0094	†77-116	1.03	.86	.725

## TEST SOCKET TUBE ADAPTERS

Permits circuit measurements from top of chassis. Plug-in test socket tube adapter has extended test tabs which make it easy to take readings. TVS-7, TVS-8, TVS-9, TVS-12 have mica-filled molded design per MIL-M-14. Breakdown voltage 1700 volts AC or DC. Manufacture's Types 1447, 1449 and 2610 for use with sockets having captive or telescoping tube shields. Breakdown 1800 volts AC or DC. Av. shpg. wt., 5 oz.



TVS-9 1447, 9

Stock No.	Types	Pins	Description	EACH
47 A 0035	TVS-7	7	Miniature	1.85
47 A 0036	TVS-8	8	Octal	1.95
47 A 0037	TVS-9	9	Miniature	1.95
47 A 2211	TVS-12	12	Compactron	2.55
47 A 0038	1447	7	Miniature	1.95
47 A 0039	1449	9	Miniature	2.15
47 A 0045	2610	10	Decal	2.55
47 A 2417	2497	9	Magnoval	2.25
47 A 2286	1779	9	Novar	2.25

## 11-PIN RELAY SOCKET

Model 2811. For industrial control equipment requiring an 11 contact configuration. Above chassis mounting. Socket and base molded of diallyl phthalate. Numbered connections. Heat treated beryllium copper contacts. 40 VRMS @ 10 amps. 2x2x.88". Wt., 5 oz. 47 A 2420



## SURFACE-MOUNTING BREADBOARD SOCKETS

Eliminate double chassis design. Insulated base. Circuits may be wired in enclosed unit. Base connections numbered. Phosphor-bronze spring contacts. Std. center-to-center mtg. holes. XS-7 and XS-8 mount in center or side, XS-9 on side. 1 oz.

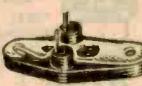


XS-8

Stock No.	Type	Pins	EACH
47 A 2215	XS-7	7	.65
47 A 2216	XS-8	8	.85
47 A 2217	XS-9	9	.75

## EBY TO-3 TRANSISTOR SOCKET

Socket for power transistors with TO-3 cases. One-piece design. High impact general purpose bakelite. Contacts are cadmium-plated brass. Special design mounting base and terminal for complete electrical isolation of the base connection from the chassis. Shpg. wt., 1 oz. 47 A 0262



## EBY SOCKETS AND ADAPTERS

### TUBE SOCKET

Above-Chassis Type 12-8. Octal. One-piece, molded bakelite construction, for top-of-chassis or panel mounting. Mtg. ctrs. 1 1/4". Wt., 2 oz. 47 A 0258



### NUVISTOR SOCKETS

Type NU. For use with RCA Nuvistor electron tubes. NU-5 is a 5-pin type with mica-filled bakelite dielectric. NU-7 (not illus.) is a 7-pin saddle-mounting type of bakelite, 1 oz. 47 A 0260, NU-6, Ea., .24 47 A 0289, NU-7, Ea., .90



### COLOR TV SOCKET ADAPTER

Type CA-1. Test point adapter for 21" color TV picture tubes. Lets any serviceman test color CRT under actual conditions without removing tube or chassis from cabinet. Shpg. wt., 8 oz. 47 A 1384



### B & W SOCKET ADAPTER

Type 1000. Socket adapter for testing black-and-white TV duo-decal picture tubes. Easy to install or remove. External lugs permit check of all CRT pin voltages while set is operating. Wt., 3 oz. 47 A 0273



### NOVAR ADAPTER

Type 9330. Keep your servicing equipment up-to-date by adding this adapter. Permits testing of the 6DW4 Novar tube on existing test equipment. Each adapter supplied with complete instructions. Shpg. wt., 3 oz. 47 A 1399



### NUVISTOR ADAPTER

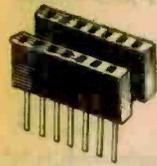
Type 9326. Permits testing of RCA 7-pin Nuvistor tubes using existing test equipment. Simply plug adapter into standard octal socket. Instruction sheet. Shpg. wt., 4 oz. 47 A 1359



# Sockets and Experimenter Kits

## CINCH-JONES SOCKETS

### DUAL IN-LINE IC SOCKETS



**D.I.P. SERIES.** For 14 lead dual in-line integrated circuits with round or flat leads. High-stability precision package sockets for testing or production. Resistant to corrosive atmosphere, extremes of temperature and humidity. Bowed contacts provide high contact retention, permit easy insertion and removal. Contact resistance, .006 ohm max. Can be mounted on printed circuit boards designed for direct socket insertion, soldered in place; or chassis mounted. Type 14-DIP-1 has electro-tin plated beryllium copper contacts with GP black phenolic body. Type 14-DIP-1, gold plated beryllium copper contacts with diallyl phthalate. 1 amp. 1800 V rns between adjacent contacts. Temp. range, -65° to +150°C. Size, .770x.424x1/2" incl. lead. 1 oz.

Stock No.	Mfr's Type	EACH	
		1-24	25-49
47 A 2152	14-DIP	.81	.65
47 A 2154	14-DIP-1	1.06	.85

### 6, 8 AND 10-ICS SOCKETS FOR INTEGRATED CIRCUITS



Socket designed for integrated circuits that mount in 6, 8, or 10-lead TO-5 cases. For printed circuit board mounting. Gives convenient means for installation, removal of integrated circuit. Diallyl phthalate. Shpg. wt., 1 oz.

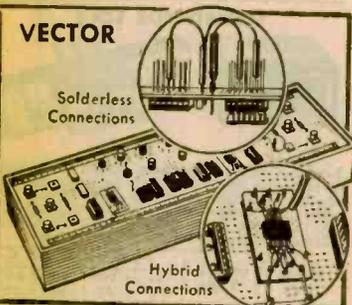
Stock No.	Mfr's Type	No. of Contacts	EACH
47 A 0154	6-ICS	6	.55
47 A 0155	8-ICS	8	.66
47 A 0195	10-ICS	10	.73

### POWER TRANSISTOR SOCKET



Type 2-T51. Rugged socket designed especially for power transistors. Made of wax-impregnated XP bakelite. Has formed thread for 6-20 screw. With 104/110" dia. hole in CR plate. Wt., 2 oz. 47 A 0713. Each .12

### VECTOR



### EXPERIMENTER'S BREADBOARD KIT

Type 29X. Complete deluxe integrated circuit breadboarding kit provides fast, convenient means of interconnecting most configurations of integrated circuit packages for experimental uses. Fully compatible for use even in hybrid circuits. Top-quality mounting surface is of pre-punched Micro-Vectorboard with .042" diameter holes on .100" grid spacing; firmly supported by 2" high Vector aluminum Frame-Loc rails.

Kit includes both 14 and 16-pin dual in-line integrated circuit sockets, plus circular lead pattern TO-5 integrated circuit sockets with adapters for mounting to rectangular grid. Contains Vector's T42-1 push-in Micro-Klips and K24C push-in pins for fast, easy connections. Wiring of component leads may be done with either polyurethane coated wire, solderable through insulation, or "Daisy Chain" patch cords for quick and easy solderless connections (both are included for your convenience). Flat bus strip is also supplied. Kit size, 4 1/4 x 4 1/2". 47 A 2733. Shpg. wt., 2 lbs. .... 59.75



### BOTTOM-MOUNTING MINIATURE SOCKETS

- Durable Molded Bakelite
- Cadmium Steel Saddle

Top-quality miniature sockets designed for mounting on bottom of chassis. Durable constructed of molded bakelite. Solder-coated brass contacts; cadmium plated steel saddle. Type 7EB mounts in 3/8" hole, has 7/8" mounting centers. Type 9EB mounts in 1/2" hole, has 1 1/4" mounting centers. Shpg. wt., 5 oz.

Stock No.	Type	Fig.	Description	EA.
47 A 1126	7EB	A	7-pin, bakelite	.12
47 A 1128	9EB	B	9-pin, bakelite	.14

### WAFER-TYPE TUBE SOCKETS



Laminated-bakelite tube sockets widely used in radio and TV sets, mobile units, etc. Have solder-coated brass contacts. \*With center shield. Pkg. of 5. Shpg. wt., 4 oz.

Stock No.	Type	Contacts	Pins	Pkg. of 5
47 A 0414	8W1	1 1/2"	8	.65
47 A 0415	8W2	1 1/2"	8	.65
47 A 0416	9W1*	1 1/2"	9 (min.)	.75



### TOP-MOUNTING MINIATURE SOCKETS

- Durable Molded Bakelite
- Cadmium Steel Saddle

Miniature sockets for top of chassis mounting. Constructed of durable molded bakelite. Solder-coated brass contacts assure easy soldering. Cadmium plated steel saddle. Type 7AB1 mounts in 3/8" hole, has 7/8" mounting centers. Type 9AB mounts in 1/2" hole, has 1 1/4" mounting centers. Av. shpg. wt., 2 oz.

Stock No.	Type	Fig.	Description	EA.
47 A 1117	7AB1	A	7-pin, bakelite	.14
47 A 1119	9AB	B	9-pin, bakelite	.14

### NOVAR TUBE SOCKET



Type 9NS-B. Accepts 9-pin novar tubes. Designed for top of chassis mounting. Meets or surpasses EIA standards. Molded from dielectric black bakelite. Has cadmium plated brass contacts. Provides maximum fatigue strength and mating force with tube pins. Mounts in 1 1/2" hole, has 1 1/2" mounting center. Pkg. of 5. Shpg. wt., 3 oz. 47 A 1356. .... Pkg. of 5 for .80

## ELCO PRINTED CIRCUIT AND TRANSISTOR SOCKETS

### RETAINER MOUNT SOCKETS

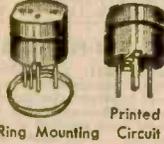


In-line sockets of mica-filled phenolic. For transistors and subminiature tubes. Contacts are gold flashed. Require retainers listed below. Shpg. wt., 3 oz. Sold in Packages of 5.

Stock No.	Type	Contacts	Pins	Pkg. of 5
47 A 1071	05-0799	3	3	.77
47 A 1089	05-0803	3	4	.96

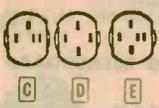
Retainer Ring For Above Sockets. Designed for Type 05-0799 and 05-0803 transistor and miniature tube sockets above. 2 oz. 47 A 1096. .... Pkg. of 5 for .10

### TRANSISTOR SOCKETS



Saddle Mounting

Ring Mounting Circuit



Subminiature 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" dia. circle of any configuration. Conform to MIL-P-14. \*Requires ring listed. Wt., 2 oz.

Stock No.	Type	Fig.	Mtg.	Pkg. of 5
47 A 1042	05-3301	C	Saddle	1.22
47 A 1043	05-3303	C	PC	1.00
47 A 1044	05-3304	C	*RM	1.00
47 A 1045	05-3305	D	PC	1.00
47 A 1046	05-3307	C	*RM	1.19
47 A 1047	05-3308	D	PC	1.17
47 A 1048	05-3313	E	*RM	1.39
47 A 1049	65-00047202		Mtg. ring	.19

### PRINTED CIRCUIT SOCKETS



Sub-miniature, mica-filled phenolic socket for use on printed circuit boards. For transistors and sub-miniature type tubes. All contacts gold flashed. Shpg. wt., 2 oz.

Stock No.	Type	Prongs	Pkg. of 6
47 A 5562	05-0786	3	.82

### UHF PRINTED CIRCUIT STANDOFF SOCKETS



For 7 and 9-pin miniature tubes. Have low-loss, mica-filled insulators. Silver-plated, phosphor-bronze contacts. 4 oz.

Stock No.	Mfr's Type	Pins	Pkg. of 5
47 A 5521	05-0730-01	7	1.45
47 A 5526	05-0910-01	9	1.44



### JAN CRYSTAL SOCKETS

\*MIL TS0205C01. For .486" pin spacing. .050" pin dia. 2 oz.

Stock No.	Mfr's Type	Pkg. of 5
47 A 5542	*05-0210-01	.82
47 A 5543	05-0210-04	.91

## AUGAT CRYSTAL SOCKET ASSEMBLIES



Resist vibration. Take HC-6/U, HC-13/U crystals. Gold-over-nickel contact plating, beryllium copper holding clips, except \*cadmium, steel. Clips cadmium plated. \*Anti-rotation tab. Wt., 1 oz.

Stock No.	Mfr's Type	Descript.	Insul.	Contact Mater.	EA.
47 A 6149	8000-AG2	Horiz or vert. mtg.	Teflon Nylon	Phosphor bronze	.70
47 A 6150	8000-AG6*				.40
47 A 6151	8000-AG3†	Horiz.	Teflon Nylon	Phosphor bronze	.70
47 A 6152	8000-AG7**	PC mtg.			.40
47 A 6154	8000-DG1†	PC mtg. rd. cou. tails	Teflon Nylon	Beryllium copper	1.00
47 A 6155	8000-DG2†				1.00

### VERO MODEL BK-6 BOARD KIT



Basic circuit board kit with six Vero-boards and spot face cutter. Laboratories, experimenters, training institutes, hobbyists will find that this new modular approach to circuit construction will save time, labor and offer valuable training in the most advanced method of circuitry. With Vero-boards you can use components to virtually write a schematic diagram on to the circuit board using the copper strips as supply lines. Lay parts on board with leads in holes, break strips with cutter and solder. In minutes you have a finished circuit without clips, terminals, wire or tools. Complete with instruction sheet. Shpg. wt., 2 lbs. 47 A 6001. .... 5.95

# Vector Adapter and Breadboard Kits

## VECTOR-PAK 28X HIGH-FREQUENCY CIRCUIT BREADBOARDING KIT

Complete "RF tight" kit for packaging circuits operating at VHF frequencies, and up through UHF ranges where "plumbing" type lines are generally required. Virtually duplicates circuit performance achieved by more expensive construction techniques. Also permits making circuit and component changes very quickly and easily. Circuit may be slipped out without effort and replaced with another.

Kit consists of two parts: an 8 1/2 x 3 1/2" aluminum case with 2 slide-out shield sides for ready access to the enclosed copper-clad circuit board; and the circuit assembly hardware. Circuit assembly hardware includes: 1 pre-punched, copper-clad, epoxy glass Vectorboard (8 1/2 x 3 1/2"); 4 standoff terminal strips with 8 terminals; 2 standoff terminal strips with 12 terminals; 3 punched wall strips (.64 x 1.94") with "L" mounting brackets, no terminals; 3 copper-clad punched strips for internal shielding (.90 x 2.85"); 50 "Minklip" terminals; 1 terminal inserting tool; 1 pad cutter tool; 3 tetrode type transistor sockets, no saddle; 3 right-angle-mounting tetrode type transistor sockets; 2 power transistor sockets; 36 mounting screws (#0-80 x 3/16") with nuts; 1 socket wrench for nuts; 15 steel spacers; 10 epoxy glass transistor mounting pads; 1 roll of #24 copper wire, vinyl covered; 1 roll of tinned copper wire; 18 pieces of plastic tubing for copper wire with 1/8" O.D.; 50 eyelets (3/16 x 1/2").

All circuit components mount close to copper ground plane by using terminal strips, sockets and hardware. Less case, below. Shpg. wt., 2 lbs.

47 A 6034, Complete 28X Kit..... 27.50  
47 A 6036, Type HF-20-86/31 Case Only. With 2 sliding sides. Sturdy aluminum. Shpg. wt., 8 oz. 5.50



Vector-Pak 28X



Pod Cutter



568-1C



B-20

## BREADBOARD ACCESSORIES

**Solderless Sockets.** Reliable solderless "Springclips" are soldered to socket contacts. Up to 6 leads connect to each "Springclip" for fast, reliable connection. Sockets mount on any "A" or "AA" pattern. Vectorboard with furnished hardware. 1/4 oz.

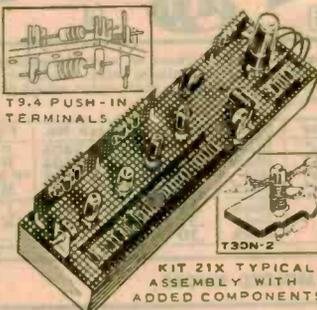
Stock No.	Mfr's Type	Description	EACH
47 A 5614	567-1C	8-Pin Octal	1.50
47 A 5615	568-1C	9-Pin Novol	1.65
47 A 5616	569-1C	7-Pin Miniature	1.35
47 A 5617	570B	4-Lead Transistor	1.20

**B20 Pot and Switch Brackets.** Aluminum brackets fit any "A" or "AA" Vectorboard. 2 1/2 x 1/4".  
47 A 5618, Shpg. wt., 4 oz. .... Pkg. of 4 for .48

**Bus Stripping.** Brass strips 2" wide, .093" holes, .265" ctrs. Mount with T-9.4 terminals, T-30 clips or #4 self-tap screws. ("A" or "AA" pattern).  
47 A 5620, T 58 8" Strips. 1/4 oz. Pkg. of 10 1.05  
47 A 5619, T 67, 16" Strips. 1/4 oz. Pkg. of 10 1.69

## EXPERIMENTERS' CHASSIS KITS

Designed for rapid setup of experimental circuits with simple hand tools. For tube or transistor circuits. Include push-in terminals, perforated XXX P phenolic decks, aluminum supports, T 30 N 2 installation tool, necessary mounting hardware. Terminals: T 9.4 supplied with insert tool (push-in type requires soldering); T 30N2 "Springclip" with winged washer for easy push-down, holds up to 6 wires tightly, without soldering, crimping, bending. New patchcords slip in between spring coils of solderless terminals and speed wiring. Type 20X has 1 deck; Type 21X has 1 large and 2 small decks, 8 patchcords; Type 22X has 1 large and 2 small decks, 6 patchcords; Type 22XA has 1 large deck plus 2 smaller decks, 14 patchcords; Type 25X has 1 large and 2 small decks, 10 patchcords, wood, aluminum parts. Shpg. wts.: 20X, 1 lb.; 21X, 2 1/4 lbs; 22X, 1 1/4 lbs; 22XA and 25X, 3 1/2 lbs.



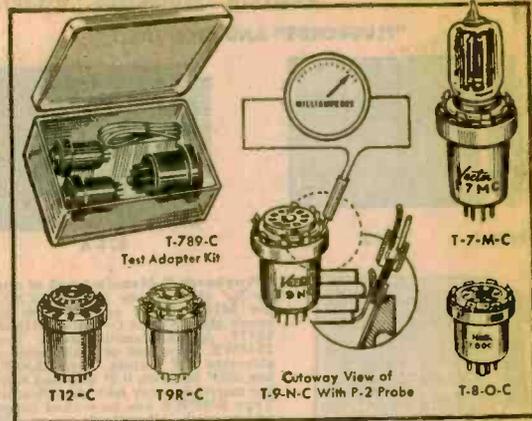
KIT 21X TYPICAL ASSEMBLY WITH ADDED COMPONENTS

Stock No.	Type	1/2 Deck	Small Deck	EACH
47 A 0906	20X	4 1/2 x 8 1/2"	1 1/2 x 1 1/2 x 3 1/2"	6.75
47 A 0907	21X	4 1/2 x 17"	1 1/2 x 1 1/2 x 3 1/2"	16.70
47 A 0908	22X	4 1/2 x 8 1/2"	1 1/2 x 1 1/2 x 3 1/2"	11.70
47 A 0945	22XA	8 1/2 x 17"	1 1/2 x 1 1/2 x 3 1/2"	29.00
47 A 0909	25X	8 1/2 x 17"	1 1/2 x 1 1/2 x 3 1/2"	21.45

## KITS ABOVE INCLUDE THE FOLLOWING

Mfr's Type	Terminals	Patch-cords	Tube Sockets	Trans. Sks.
Type	T 9.4	T30 N2 T32A	7P 8P 9P	3, 4P Power
20X	75	0	3	2
21X	50	0	3	2
22X	75	0	3	0
22XA	100	18	14	0
25X	100	90	13	3

## CURRENT/VOLTAGE-TEST TUBE-SOCKET ADAPTERS



**Type T-7-M-C Socket Test Adapter.** Fits shield base for 7-pin miniature tube socket. Lets you make accurate voltage, current and waveform measurements from top-side of chassis. Tabs are a pair of spring contacts which separate electrically when optional Dual Side P-2 Probe (see table below) is inserted. Probe "breaks" circuit, and gives current or voltage reading to your meter. Electrostatic capacity approx. 1pF. Flash-over voltage, over 1500 VDC. Has phenolic shell, socket and plug. Length, less prongs, 1.47". Shpg. wt., 3/4 oz.

**T-8-O-C Socket Test Adapter.** Fits 8-pin octal tube clamps. Same specs as T-7-M-C test adapter except lgth. less prongs is 1.5". Wt., 1 1/2 oz.

**T-9-N-C Socket Test Adapter.** Fits into shield base for 9-pin miniature types. Has same specs as T-7-M-C test adapter. Shpg. wt., 3/4 oz.

**Type T-9-R-C Socket Test Adapter.** Fits 9-pin Novar socket. Has same spec as T-7-M-C except length less prongs, 1.56". Shpg. wt., 2 oz.

**Type T-12-C Socket Test Adapter.** Fits 12-pin Compactron socket. Has same spec as T-7-M-C except length less prongs, 1.56". Wt., 2 oz.

Stock No.	Type	Socket	Body Dia.	Skirt Dia.	Oz.	EACH
47 A 6035	T-7-M-C	7-Pin Min.	.75"	1.03"	3/4	2.53
47 A 6037	T-8-O-C	8-Pin Oct.	1.26"	1.56"	1 1/2	3.19
47 A 6038	T-9-N-C	9-Pin Min.	.87"	1.16"	3/4	2.70
47 A 6039	T-9-R-C	9-Pin Nov.	1.26"	1.56"	2	3.65
47 A 4527	T-12-C	12-Pin Comp.	1.26"	1.56"	2	3.85
47 A 6040	P-2	Dual Sided Plug-in Probe			1/2	.79

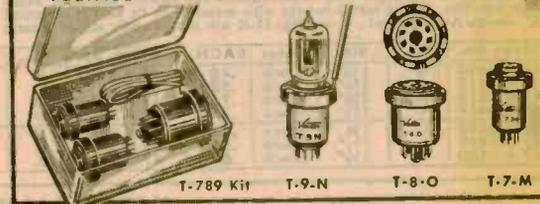
## TYPE T-789-C COMPLETE 3-SOCKET ADAPTER KIT

Has T-7-M-C, T-8-O-C, T-9-N-C adapters, P-2 Probe, plastic case.  
47 A 6039, Shpg. wt., 6 oz. .... 9.74

## TYPE T-912-C COMPLETE 2-SOCKET ADAPTER KIT

Has T-9-R-C, T-12-C adapters, P 2 probe, plastic case.  
47 A 1902, Shpg. wt., 6 oz. .... 8.29

## VOLTAGE-TEST TUBE-SOCKET ADAPTERS and KIT



**Type T-7-M Socket Adapter.** Similar to T-7-M-C above, but without current-measuring feature. Fits 7-pin miniature tube socket. Tabs on adapter designed to grip optional P-1 Probe, listed below. Flashover voltage in excess of 1500 VDC. Length, less prongs, 1.5". Wt., 1/2 oz.

**Type T-8-O Socket Adapter.** Fits standard 8-pin octal tube clamps. Has same specifications as T-7-M above. Shpg. wt., 3/4 oz.

**Type T-9-N Socket Adapter.** Fits into shield base for 9-pin miniature types. Has same specifications as T-7-M above. Shpg. wt., 1/2 oz.

Stock No.	Mfr's Type	Socket	Shell Body Dia.	Shell Skirt Dia.	EACH
47 A 0040	T-7-M	7-Pin Min.	.75"	1.03"	1.65
47 A 0041	T-8-O	8-Pin Oct.	1.25"	1.56"	1.75
47 A 0042	T-9-N	9-Pin Min.	.87"	1.16"	1.85
47 A 0044	P-1	Plug-in Probe			.52

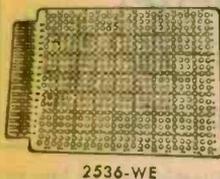
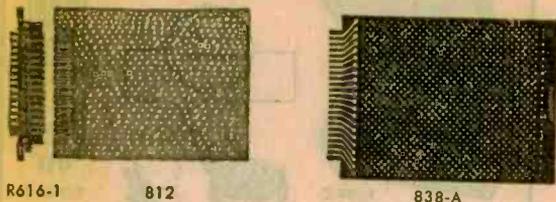
## TYPE T-789 COMPLETE 3-SOCKET KIT

Includes all 3 of the voltage-test tube socket adapters described above - Types T-7-M, T-8-O and T-9-N - plus a handy P-1 probe. Comes in sturdy plastic case. Shpg. wt., 6 oz. .... 5.90  
47 A 0210.

# Terminal Boards, Terminals, and Knobs

## VECTOR "PLUGBORDS," RECEPTACLES, "VECTORBORD" AND TERMINALS

### "PLUGBORDS" AND RECEPTACLES

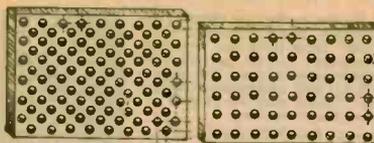


"Plugboards." Manufactured of sturdy 1/8" thick epoxy paper, EXXXP per MIL-P-22324 except \* are 1/8" epoxy glass, Grade G-10 per MIL-P-18177. All plugboards except Type 2536WE have grid of .062" holes on alternate 0.1" centers. Type 2536WE has .093" holes on 0.2" grid and number matrix for easy hole identification. Type 838PWE has an etched copper pad network. All contacts are on .156" centers and .072" wide except 1.090" wide. Av. shgp. wt., 2 oz.

Stock No.	Mfr's Type	Size	No. of Contacts	EACH
47 A 0928	812	4 1/2 x 6 1/2"	16	2.98
47 A 5606	812WE*	4 1/2 x 6 1/2"	16	3.53
47 A 0927	837	3 x 4 1/2"	12	2.33
47 A 5607	837WE	3 x 4 1/2"	12	2.58
47 A 5609	838A†	4 1/2 x 6 1/2"	22	2.81
47 A 5611	838PWE*‡	4 1/2 x 6 1/2"	22	3.65
47 A 5608	848WE*	4 1/2 x 6 1/2"	35	6.09
47 A 5622	838‡	4 1/2 x 6 1/2"	43	3.89
47 A 6023	2536WE*	4 1/2 x 6 1/2"	35	6.97

Receptacles. All types come equipped with solder and taper tab leads. Av. shgp. wt., 3 oz.

Stock No.	Mfr's Type	No. of Contacts	For	EACH
47 A 6024	R612-1	12	837, 837WE	1.80
47 A 6026	R616-1	16	812, 812WE	2.24
47 A 5612	R644	44	838PWE, 838WE and A	2.62
47 A 5635	R635	35	848WE, 2536WE	4.91

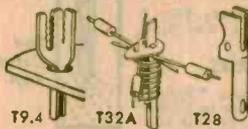


Pattern G

Pattern A, AA, B, F

"Vectorbord." For breadboard or production applications. No suffix letters indicate boards are phenolic, XXXP per MIL-P-3115B; Suffix EP indicates epoxy paper, EXXXP per MIL-P-22324, suffix WE indicates epoxy glass, G-10 per MIL-P-18177. Patterns A, B, F, G are 1/8" thick; AA is 1/4" thick. Patterns A and AA have .093" holes on .265" grid; B has .062" holes on .180" grid; C has .062" holes on staggered 0.1" grid; F has .062" holes on .2" grid. 17" long except \*8 1/2". Push-in T9.4 and T32A terminals, below, fit Pattern A and AA. T-28 fit B, F and G. Av. wt., 7 oz.

Stock No.	Mfr's Type	Width	Pattern	No. Holes	EACH
47 A 0916	85G24EP	4 1/2"	G	(85x23)x2	2.14
47 A 0917	32AA18	4 1/2"	AA	32x18	.87
47 A 0918	64A18	4 1/2"	A	64x18	1.30
47 A 0919	64AA18	4 1/2"	AA	64x18	1.66
47 A 0926	32AA9*	2 1/2"	AA	32x9	.62
47 A 5601	64A18WE	4 1/2"	A	64x18	3.87
47 A 5604	85G24WE	4 1/2"	G	(85x23)x2	3.96
47 A 5605	85F24EP	4 1/2"	F	85x23	2.14
47 A 6008	64AA18EP	4 1/2"	AA	64x18	2.84
47 A 6009	42G24WE*	4 1/2"	G	(42x24)x2	1.97
47 A 6005	45B30*	5 1/2"	B	45x30	.87
47 A 6006	90B30	5 1/2"	B	90x30	1.68
47 A 6007	64AA32	8 1/2"	AA	64x82	2.86



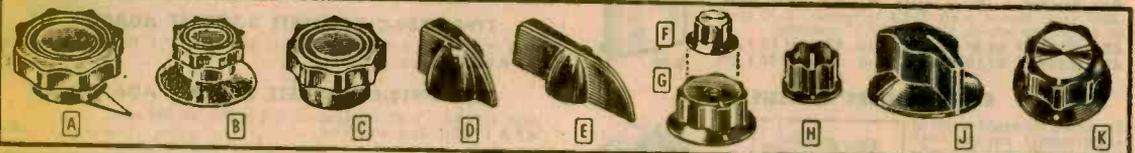
### PUSH-IN TERMINALS

Hold multiple leads, need no staking. Type T9.4 have slots for small and large leads. Type T32A spring clips hold up to six .05" dia. wires without soldering. T28 terminals are designed for subminiature components. Shgp. wt., per pkg. of 100, 3 oz.

Mfr's Type	Fits Holes	Stock No.	PER PKG. OF 100	Stock No.	PER PKG. OF 1000
T9.4	.093"	47 A 0878	1.44	47 A 1437	10.18
T28	.062"	47 A 0879	1.61	47 A 1438	11.44
T32A	.093"	47 A 6046	10.30	47 A 6047	78.00

Insertion Tools. Simplify insertion of push-in terminals. Av. wt., 2 oz.  
 47 A 0601. Type P-91. For T28 terminals ..... .50  
 47 A 6004. Type P-136. For T32A terminals ..... 1.20  
 47 A 0607. Type P-122. For T9.4 terminals ..... 1.40

### KURZ-KASCH MOLDED KNOBS

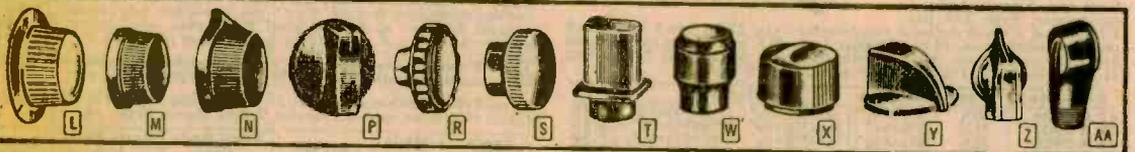


Figs. A-C are quality fluted knobs. Functionally designed—add custom appearance to Amateur and experimental equipment. Durable, high-gloss bakelite. †Have metal inserts with set-screw to fit flatted or round 1/4" shafts. Av. shgp. wt., 4 oz. Fig. D-K are handsomely styled plastic

knobs for replacement or original equipment use. \*Black base, red top with inlay. ‡Aluminum inlay. All other knobs are equipped with set-screws to permit use with either round or flatted 1/4" shafts. Av. shgp. wt., 3 oz.

Stock No.	Fig.	Size	Color	EACH	Stock No.	Fig.	Size	Color	EACH	Stock No.	Fig.	Size	Color	EACH
47 A 3414	A	1 1/2"	Black	.48	47 A 3421	B	1 1/2"	Black	.71	47 A 3406	F	3/4"	Black	.18
47 A 3415	A	2 1/2"	Black	.52	47 A 3398	D	1 1/2"	Black	.12	47 A 3404	F	1 1/2"	Black	.19
47 A 3416	A	1 1/2"	Black	.71	47 A 3399	D	1 1/2"	Red	.18	47 A 3405	*F & G	3/4" - 1 1/4"	R & B	.58
47 A 3417	C	1 1/2"	Black	.25	47 A 3400	†D	1 1/2"	Black	.19	47 A 3409	H	3/4"	Black	.44
47 A 3418	C	1 1/2"	Black	.34	47 A 3401	E	2"	Black	.31	47 A 3410	J	1 1/2"	Black	.48
47 A 3419	C	2 1/2"	Black	.52	47 A 3402	E	2"	Red	.30	47 A 3411	‡K	1 1/2"	Black	.40
47 A 3420	B	1 1/2"	Black	.68	47 A 3403	†E	2"	Black	.30					

### HARRY DAVIES MOLDED KNOBS



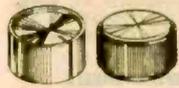
Handsomely designed molded plastic knobs for replacement or original equipment use. Knobs are ideal for volume and tone controls on television receivers, radios, high fidelity systems, test instruments, almost all types of electronic equipment. Fig. M and N are for small radios.

\*For knurled shafts; †screws onto 8-32 threaded shaft; ‡screws onto 6-32 threaded shafts; †locating friction fit for flat wire shafts; ‡all others equipped with set-screws to permit use with either round or flatted 1/4" shafts. Shgp. wt., 3 oz.

Stock No.	Fig.	Size	Color	EACH	Stock No.	Fig.	Size	Color	EACH	Stock No.	Fig.	Size	Color	EACH
47 A 4127	L	1 1/2"	Black	.16	47 A 4140	N	1"	Black	.15	47 A 4166	†T	5 1/2" x 1 1/2"	Black	.08
47 A 4129	L	1 1/2"	Black	.17	47 A 4141	P	1 1/2"	Black	.13	47 A 4168	†W	3 1/4" x 1 1/2"	Black	.07
47 A 4136	*M	1 1/2"	Black	.06	47 A 4142	R	1 1/2"	Red	.13	47 A 4170	X	3/4"	Black	.13
47 A 4134	*M	1 1/2"	Black	.10	47 A 4143	R	1 1/2"	Black	.14	47 A 4171	Y	1 1/2"	Black	.12
47 A 4137	M	1 1/2"	Black	.14	47 A 4145	R	1 1/2"	Black	.20	47 A 4175	Z	1 1/2"	Black	.13
47 A 4138	N	1 1/2"	Black	.10	47 A 4146	†S	3/4"	Black	.09	47 A 4184	AA	1 1/2"	Black	.22

# Dials and Accessories, Knobs Couplings

## ALCO ANODIZED ALUMINUM KNOBS



Smartly-styled, modern anodized aluminum control knobs enhance the appearance of any type of equipment. An excellent choice for reset placement use, or for incorporation in original equipment design. Type KHF has unique saw-cut indicator for precise positioning. Available in gold or clear finish. Type KN has hairline indicator and straight knurls for firm, positive gripping. Choice of natural aluminum body and black top, or black anodized body with natural top. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Color	Dia.	Shaft Size	EACH
47 A 6780 C	KHF-500	Specify gold or clear.	1/2"	1/8"	.45
47 A 6782 C	KHF-700	Specify gold or clear.	3/8"	1/8"	.50
47 A 6784 C	KHF-900	Specify gold or clear.	1/2"	1/8"	.55
47 A 6786 C	KHF-1250	Specify gold or clear.	1 1/2"	1/2"	.65
47 A 6675	KN-500AB	Aluminum body, black top.	1/2"	1/8"	.75
47 A 6676	KN-500BA	Black body, aluminum top.	1/2"	1/8"	.75
47 A 6677	KN-700AB	Aluminum body, black top.	3/8"	1/8"	.80
47 A 6678	KN-700BA	Black body, aluminum top.	3/8"	1/8"	.80

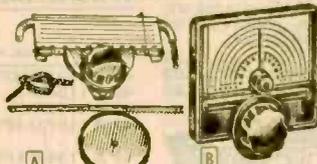
## MILLEN MULTISCALE DIALS

**A** Type 10037 No-String Slide-Rule Dial. Versatile dial features positive pointer travel and resetability. Has velvet-smooth friction drive with 180° rotation of the output shaft. Teflon bearings assure smooth, easy operation for life—never need lubrication. Shaft has anti-backlash flexible coupling. Drive Ratio, 11:1. Dial has 0-100 logging scale, plus blank scales for added convenience. 5 3/4 x 9 x 1 3/8" behind panel. Bezel, 7 3/8 x 2 1/2".

47 A 3236 Shpg. wt., 6 oz. 13.05

**B** Type 10035 Multiscale Dial. Deluxe illuminated slide-rule dial with self-contained mechanism. Drive Ratio, 12:1. Has one 0-100 logging scale and four blank scales. 8 1/2 x 6 1/2". Black finish.

47 A 3241 Shpg. wt., 6 oz. 10.54



## WALDOD DIAL PLATES

**Square.** Attractive anodized aluminum dial plates with black scales. Use with 1 1/4" bar knob. Gives custom look to hi-fi and P.A. amps, preamps, recorders, etc. Size, 2 3/4 x 2 1/2", with 1 3/8" center hole. Wt., 2 oz.

Stock No.	Type	Description	EACH
47 A 3121	426	Volume, 0-10	.41
47 A 3130	410	No title, 0-10	.41

**Round.** Etched aluminum scale with black background. 1 3/4" dia. Type 23 has clockwise arrow labeled "Volume." One-hole mtg. For amplifiers, modulators, phonos, etc. Use with 1 1/4" bar knobs. 1 3/8" center-hole. Av. shpg. wt., 2 oz.

Stock No.	Type	Description	EACH
47 A 3131	25	Volume	.34
47 A 3135	909	0-100, 180°	.34
47 A 3136	565	0-100, 270°	.34

## WALDOD SWITCH PLATE

Etched aluminum with black background. 1 1/2 x 1 1/4". Shpg. wt., 2 oz.

47 A 3139 20

## H. H. SMITH FLEXIBLE SHAFTS

Non-rusting phosphor-bronze flexible shafts with 3/8" hubs. Ideal for connecting out-of-line shafts together. Handy accessory for Amateurs, labs, etc. Permit up to 90 degrees angular control. Av. wt., 2 oz.

47 A 4088, Type 151. Length, 3', .60  
47 A 4089, Type 152. Length, 6', .65

## SMITH PANEL BEARING ASSEMBLY

For use with couplings at right on panels up to 3/8" thick mounted away from controls. Brass bearing has stub for knob with 1/4" shaft on other side. Av. shpg. wt., 7 oz.

47 A 4090, Overall length, 3". Pkg. of 2 / 70  
47 A 4091, Overall length, 6". Pkg. of 2 / 100  
47 A 4092, Bearing only. Pkg. of 6 / 75

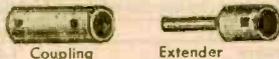
## WALSCO DIAL CORD SPOOLS

Dial cords with nylon sleeves over fiberglass or linen cores. Ideal for replacement use. Prestretched to prevent stretching and slipping; maintain proper tension. Provide long life and smooth, easy tuning. Av. shpg. wt., 4 oz.



Stock No.	Mfr's Type	Dia.	Length (Lbs.)	Loth. (Ft.)	E.A.
47 A 3194	652-Med.	.040"	35	25	.83
47 A 3198	656-Thin	.025"	15	25	.83
47 A 3199	654-Std.	.032"	20	25	.83
47 A 3197	652-Med.	.040"	35	100	2.59

## SMITH SHAFT FITTINGS



Couplings for extending shafts, or for ganding single units, even when shafts are not same diameter. Extenders for decreasing or increasing shaft diameter and for extending shaft length. 1st size is opening; 2nd, shaft dia. Extenders, 3/8" shaft length; overall, 1 1/4". Av. wt., 4 oz. \*brass; finished.

Stock No.	Type	Size	EACH
47 A 1105	Coupling*	1/4 to 1/2"	.22
47 A 1108	Extender*	1/4 to 1/2"	.30
47 A 1109	Extender*	3/8 to 1/2"	.30
47 A 1111	Coupling*	1/2 to 1/2"	.32
47 A 1113	Extender*	1/2 to 1/2"	.35

## HAMMARLUND COUPLINGS

Type FC-46S. Sturdy, slip-proof insulated flexible coupling. 4 set screws (2 on each side). For 1/4" dia. shafts. Shaft clearance, 3/32". Flash voltage, 5000 V. Size 1 1/2 x 1 3/8". Shpg. wt., 3 oz.

47 A 2403 1.50

Type FNC-46S. As above, but non-insulated type. Nickel-plated brass ring. 1 1/4" dia. x 1 3/8".

47 A 2404. Shpg. wt., 3 oz. 1.20

## ACCURATE ELECTRIC

### INSULATED COUPLING

10158. Connects shafts to switches, control, etc. Bakelite insulation. For 1/4" shafts. With setscrews. Shpg. wt., 2 oz.

47 A 2405 .53

## NATIONAL TYPE MCN VERNIER DIAL

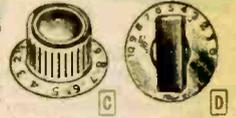
Small vernier dial with 5:1 drive. Perfect for mobile gear and small converters and tuners. Mechanism extends 1/4" below frame. Offers three blank calibrating scales and 0-100 logging scale. Black wrinkle finish. With hardware, and hub for 1/4" shafts 2 3/4" high; 3 7/8" wide. Shpg. wt., 10 oz.

47 A 2171 7.20



## NATIONAL CALIBRATED KNOBS

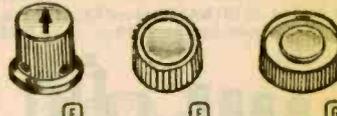
For any equipment. Types R, HRS-3, and HRS-5 are numbered 0-10 over arcs shown in scale column of table below. HRS-4 has single, etched center line. All fit 1/4" shafts. HRS types of molded Tenite with chromed bevel dial; Type R of molded bakelite, flat aluminum dial. Av. shpg. wt., 2 oz.



Stock No.	Type No.	Fig.	Color	Scale	Dia.	EACH
47 A 2106	HRS-3	C	Black	0-10; 300°	1 7/8"	.66
47 A 2107	HRS-3	C	Gray	0-10; 300°	1 7/8"	.66
47 A 2125	HRS-4	C	Black	1-line	1 7/8"	.66
47 A 2126	HRS-4	C	Gray	1-line	1 7/8"	.66
47 A 2126	HRS-5	C	Black	0-10; 180°	1 7/8"	.66
47 A 2136	R	D	Black	0-10; 180°	1 7/8"	.69

## NATIONAL HR SERIES KNOBS

A matched line for industrial and consumer use. Made of molded Tenite in a variety of styles and sizes. All knobs in this series share a family resemblance, giving job a unitized appearance.

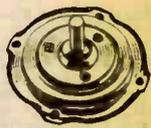


Stock No.	Type	Fig.	Description	Wt.	E.A.
47 A 2180	HRM	E	Satin chrome finish, 3/8" dia.	2 oz.	.96
47 A 2176	HR	F	Black; white dot, 1/8" dia.	2 oz.	.39
47 A 2177	E	G	Black; same as above	3 oz.	1.04
47 A 2178	HRT	G	Black; chrome insert, 2 1/4" dia.	3 oz.	1.04
47 A 2185	HRT-M	G	Same as above, but 1 1/2" dia.	2 oz.	.58

## NATIONAL TYPE AVD-250 PLANETARY DIAL DRIVE

Popular velvet-vernier planetary dial-drive mechanism with 5:1 reduction ratio. Famous for smoothness, accuracy and ease of operation. Has been used successfully in many types of equipment. Offers durability as well as fine performance, plus years of dependable service. Provides output torque of 1-3 inch-pounds. Designed for convenient front-of-panel mounting with four 3/8" holes on 2 1/2" mounting centers. For use with 1/4" control shafts. Output hub is uninsulated. Overall length, 1 1/4". Overall Diameter, 2 1/2". Drive Shaft Diameter, 1/4". Shpg. wt., 2.63.

47 A 2026 2.63



## MILLEN COMPONENTS FLEXIBLE COUPLINGS

Provide high flexibility, no backlash, high breakdown voltages, small diameter, accurate alignment. 39001 insulated, 39006 slide-action type for eccentric shaft motion. 39005 (high torque) like 39001 but not insulated. 39016 (illus) molded as single unit to resist shock. All for 1/4" shafts. Shpg. wt., 2 oz.

Stock No.	Type	Description	E.A.
47 A 3208	39001	Universal joint	.75
47 A 3212	39005	Universal joint	.75
47 A 3213	39006	Slide action	.75
47 A 3214	39016	Barrier	.75

## MINIATURIZED COUPLINGS

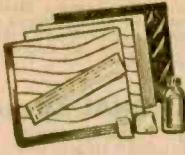
For limited space use, Type M006 (illus) is universal joint style made of nickel-plated brass with steatite ceramic insulation and spring fingers. Type 39003 is solid brass for 1/4" shafts; M006 for 1/8" shafts. Av. shpg. wt., 2 oz.

Stock No.	Type	Description	E.A.
47 A 3205	M006	Univ. joint coupling	1.05
47 A 3207	39003	Solid brass coupling	.30



# Graphic Art, Printed Circuit and Lettering Kits

## KEPRO NAMEPLATE, PRINTED CIRCUIT, PHOTO REVERSING KITS



Simple Two-Step Photo Reversing Process

**A** P-101A Etched Circuit Kit. Uses photo-engraving process to produce professional-quality etched circuits. (With 3 XXXP phenolic boards (two 3x6", one 3x3"); 2 sheets mechanical negatives; solutions and accessories. Shpg. wt., 3 lbs. 47 A 1036.....5.85

47 A 1037. P-101A-G Kit. As above, but with G-10 glass epoxy boards. 3 lbs.....7.40

S-101A Standard Etched Circuit Kit. Resist applied by marking pen or tape to copper. Tape, pen and 3 panels 3x6" XXXP. 47 A 1100. Shpg. wt., 2 lbs.....3.95

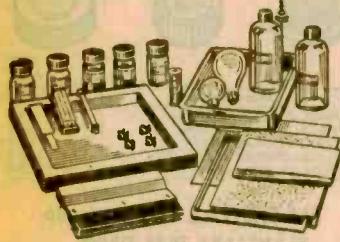
47 A 1101. S-101A-G Standard Kit. As above, but glass epoxy boards. 2 lbs.....5.25

**B** NP-303A Enamel Nameplate Kit. Photo process makes aluminum letters on blue enamel. With two 8x10x.007" plates; solutions, accessories. 47 A 1206. Shpg. wt., 1 lb.....7.25

NP-404 Anodized Aluminum Nameplate Kit. Aluminum letters on anodized black background. Three 3x6x.025" plates, solutions. 47 A 1207. Shpg. wt., 1 1/2 lbs.....6.55

**C** FK-701 Photo Reversing Kit. Makes line negatives, positives from taped or ink art; reverses existing negatives, positives. Two 10x24" reversing films, chemicals. 47 A 0160. Shpg. wt., 1 1/2 lbs.....7.20

47 A 0161. Extra Reversing Film. 2 oz.....3.00  
47 A 0162. Extra RFD-2 Developers. 2 oz. .60



### COMPLETE SILK SCREEN KIT

Model SC-601A. Everything for making three 7x9" silk screens. Produces lacquer resistant, film-type photo stencils for screen printing of etched circuit boards, nameplates, instrument panels, or decorative printing. With 10x12" screen frame with silk; two 14x16" screen silks; package of three 8x10" stencil film; #2 photo flood lamp; 8 1/2x11 1/2" print frame; complete set of chemicals; tray, thermometer and ink. 47 A 1033 U. Shpg. wt., 13 lbs.....35.00

### KEPRO KITS FOR MAKING ETCHED CIRCUITS



### PRINTED-CIRCUIT LAB KIT

Model L-505A. For PC boards to 70 sq. in. from prototypes to short production runs. Has: 15 ass'd. photo-sensitized, copper-clad phenolic XXXP boards; trays; safe-light; photo-flood lamp; printing frame; PL-2A Layout Kit; mechanical negative; solutions; pen, eyelets, cleaning pad. 47 A 1034 U. Wt., 18 1/4 lbs.....34.75  
47 A 1035A-G. As above, but with G-10 glass epoxy circuit boards. 19 1/2 lbs. 47 A 1035 U.....42.95

## KEPRO PC KIT SUPPLIES

Replacement materials for Kepro PC kits, or for those already engaged in PC work. Type S-2 and P-2 have foil on both sides, S-1 and P-1, one side only. S is photosensitized coated. 5 sheets per package.

### G-10 1/8" GLASS EPOXY SHEETS

Av. shpg. wt., 1/2 lb. per pkg.

Stock No.	Type	Description	Size	PKG.
47 A 0930	S1-335G	Light sens.	3x3"	3.70
47 A 0932	S1-365G	Light sens.	3x6"	6.65
47 A 1007	S2-335G	Light sens.	3x3"	4.55
47 A 1012	S2-365G	Light sens.	3x6"	8.15

### XXXP 1/8" PHENOLIC SHEETS

Av. shpg. wt., 1/2 lb. per pkg.

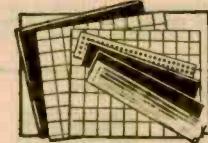
Stock No.	Type	Description	Size	PKG.
47 A 0594	PI-365PB	Perf. Unsen.	3x6"	2.40
47 A 0599	P2-365	Perf. Unsen.	3x6"	2.55
47 A 0679	S1-335	Light sens.	3x3"	2.15
47 A 0681	S1-365	Light sens.	3x6"	3.55
47 A 0731	S2-365	Light sens.	3x6"	5.05

### CHEMICALS

Shpg. wt., 6 oz. except pints, 3 lbs.

Stock No.	Description	Size	Price
47 A 1102	RMP-700 Resist pen	2 oz.	.75
47 A 1104	R-2 Paint resist	2 oz.	.60
47 A 1106	T-2 Resist thin	2 oz.	.50
47 A 1107	D-1PT Developing solution	Pint	1.15
47 A 1159	E-1PT Etching solution	Pint	.85

### KEPRO PHOTO LAYOUT KIT



PL-2A. Eliminates inking and lettering through use of mechanical negative and pressure-sensitive characters. Layout time is reduced and errors easily corrected. Kit includes tape dots, two tape strips, letters and numerals, acetate sheet, mechanical negative, layout paper, and instructions.

47 A 1016. Shpg. wt., 1 lb.....3.95

### MICRO-CIRCUITS 5-21 KIT



Make Electronic Printed Circuits With This Complete Kit

All necessary materials to paint electronic circuits. Comes complete with brush, conducting paint, resistance paints, lacquer, solvent and accessories.

47 A 0164. Shpg. wt., 1 1/4 lbs.....23.11

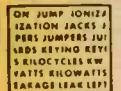
### KEPRO AND BRADY PHOTO LAYOUT SUPPLIES

\*Brady, black, self-sticking strips for PC drafting. Photographs opaque without highlights.

Stock No.	Mfr's Type	Description	EACH
47 A 1025	MN-1212	12x12" Mechanical Negative	1.25
47 A 0166	TC125-031	Terminal Circles 1/8" O.D. (112 per card)	.55
47 A 0200	TC250-062	Terminal Circles 1/4" O.D. (96 per card)	.55
47 A 0263	TC500-125	Terminal Circles 1/2" O.D. (42 per card)	.55
47 A 1027	AT-810	Pressure-Sensitive Letters and Numerals on transparent base. (3 sizes, 4 fonts). 4 oz.	2.50
47 A 1752	*CSR062	Connector strips 1/16" wide (Pkg./5; 18 yds. per roll)	4.00
47 A 1758	*CSR125	Connector strips 1/8" wide (Pkg./5; 18 yds. per roll)	4.00
47 A 1773	*CSR250	Connector strips 1/4" wide (Pkg./2; 18 yds. per roll)	1.80

### RUSSELL INDUSTRIES DRY TRANSFER LETTERING

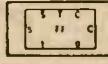
(Each "Markit" has 27 3x6" looseleaf pages bound with plastic spiral ring.)



Easy to Apply to Smooth or Many Rough Surfaces



Special Wax-Free Adhesive Assures Permanence



Once Applied, Will Not Peel, Crack or Blister

### ELECTRONICS WORDS

EM-1. Over 1000 words arranged in alphabetical order. Specify black or white. 47 A 3550 C. Shpg. wt., 4 oz..... Each 4.95

ALPHABET (Specify black or white)			
Stock No.	Mfr's Type	Size	EACH
47 A 3551 C	AM-1	1/8"	4.95
47 A 3552 C	AM-2	1/4"	4.95
47 A 3553 C	AM-3	3/8"	4.95
47 A 3554 C	AM-4	1/2"	4.95

### DIAL MARKING KIT

DM-1. 14 pages of black markings, 13 pages of white. Has arcs, dots, lines, etc. 47 A 0243. Shpg. wt., 4 oz..... Each 4.95

NUMERALS (Specify black or white)			
Stock No.	Mfr's Type	Size	EACH
47 A 3556 C	NM-1	1/8"	4.95
47 A 3557 C	NM-2	1/4"	4.95
47 A 3558 C	NM-3	3/8"	4.95
47 A 3559 C	NM-4	1/2"	4.95

### PC PADS AND LOGIC SYMBOLS

PC-1 Printed Circuit Pads. Black. Thousands of pads: circles with center hole, teardrops, teardrops with vanishing point, double-end teardrops, double-end teardrops with vanishing point, elbows and more. 47 A 3560. Shpg. wt., 4 oz..... Each 4.95

LD-1 Logic Diagram Symbols. Black. Contains flip-flops, arrows, arrow heads, time delays, and, hand, or, nor, registers, shift registers, connection dots and more. 47 A 3561. Shpg. wt., 4 oz..... Each 4.95

# RF Chokes, Adjustable Coils and Coil Winder

J. W. MILLER COILS AND CHOKES

## ADJUSTABLE CERAMIC RF COILS

Silicone-impregnated ceramic forms. Powdered iron cores. Ideal for transmitters and receivers, etc. With mtg. hardware. **Standard:** Form size,  $\frac{3}{8}$ " diameter and  $1\frac{1}{2}$ " long; for  $\frac{1}{4}$ " hole. **Miniatur:**  $\frac{1}{4} \times \frac{1}{4}$ " for  $\frac{3}{16}$ " hole. Av. shpg. wt., 2 oz.



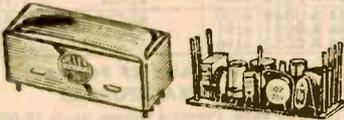
### STANDARD

Stock No.	Mfr's Type	Min. $\mu$ H	Max. $\mu$ H	EACH
54 A 0982	4400-2	Form only	1.38	
54 A 0983	4401	1.00	1.50	1.83
54 A 0974	4404	1.60	3.10	1.86
54 A 0985	4405	3.30	6.50	1.89
54 A 0986	4406	7.30	14.0	1.95
54 A 0987	4407	16.0	29.0	2.01
54 A 0988	4408	33.0	66.0	2.10
54 A 0989	4409	74.0	124	2.16
54 A 0990	4410	138	238	2.19
54 A 0991	4411	270	451	2.22
54 A 0992	4412	495	76.0	2.25
54 A 0778	4414	1.40	2.00	2.28

### MINIATURE

Stock No.	Mfr's Type	Min. $\mu$ H	Max. $\mu$ H	EACH
54 A 0870	4500-2	Form only	1.23	
54 A 3930	4501	.44	.76	1.69
54 A 0871	4502	1.10	1.50	1.68
54 A 0872	4503	1.70	2.70	1.68
54 A 0873	4504	3.10	4.80	1.68
54 A 0874	4505	5.50	8.60	1.74
54 A 0875	4506	9.90	15.0	1.80
54 A 0876	4507	17.0	23.0	1.86
54 A 0877	4508	26.0	33.0	1.89
54 A 0878	4509	38.0	57.0	1.92
54 A 0879	4511	66.0	114	1.95
54 A 0882	4514	350	475	2.04
54 A 0781	4514-1	528	760	2.10

## PRE-PACKAGED AND PRE-TUNED 455-KHZ IF STRIP



Complete 455-kHz IF strip simplifies construction of many projects. Offers excellent gain (55 dB) and selectivity (6 dB down at 8 kHz). Consists of a Miller Type 8901-B Input Matching Transformer and 8902-B IF Strip mounted on one board. Total of 21 components on PC board, including mechanical filter, two transistorized amplifiers and diode detector that can drive earphones. No alignment required. Size,  $\frac{1}{2} \times \frac{1}{2} \times 1\frac{1}{2}$ ". Shpg. wt., 3 oz.

54 A 0099 5.75

## HIGH "Q" BROADCAST RF COILS

Unshielded, iron-core coils. Adjustable core. Range indicated obtained using 365 pF variable capacitor. Mount in  $\frac{1}{4}$ " hole. \*Padded values for 455 kHz IF.  $\frac{1}{2} \times 2$ " Av., 4 oz.

Stock No.	Mfr's Type	Use	kHz Range	EACH
54 A 4398	A-5495-A	Antenna	550-1700	1.89
54 A 4399	A-5495-RF	RF	550-1700	1.89
54 A 4400	A-5495-C	Std. Osc.	*400 pF	1.89
54 A 4401	A-5496-C	Tap'd Osc.	*400 pF	1.89

## MOISTURE-RESISTANT RF CHOKES

Single layer or 3-pi universal winding insures low distributed capacity. Lossless molded phenolic or powdered iron core forms. Impregnated with moisture and fungus-resistant varnish. Operate into UHF region. Inductance tolerance  $\pm 20\%$ .  $1\frac{1}{2}$ " leads. Phenolic form,  $\frac{3}{4} \times \frac{3}{4}$ " dia. Iron core,  $\frac{1}{8} \times \frac{1}{2}$ " dia. Av. wt., 2 oz.



### PHENOLIC FORM—SINGLE LAYER

Stock No.	Mfr's Type	$\mu$ H	Q	Min. $F_o$ (MHz)	E.A.
54 A 3828	4602	1.00	60	190	.54
54 A 3829	4604	1.50	58	149	.54
54 A 3830	4606	2.40	56	120	.54
54 A 3831	4608	3.90	60	93	.54
54 A 3833	4609	5.50	57	80	.54
54 A 3834	4610	6.20	57	76	.57
54 A 3835	4611	8.20	57	65	.57
54 A 3836	4612	10.0	36	61	.57

### IRON-CORE FORM—SINGLE LAYER

Stock No.	Mfr's Type	$\mu$ H	Q	Min. $F_o$ (MHz)	E.A.
54 A 3833	4624	15.0	62	33	.63
54 A 3840	4628	39.0	70	20	.66
54 A 3841	4629	10.0	72	17	.69
54 A 3844	4632	100.0	107	12	.69

### PHENOLIC FORM—3-SECTION

Stock No.	Mfr's Type	$\mu$ H	Q	mH	mA	E.A.
54 A 3845	4642	100	49	11.0		.69
54 A 3846	4644	150	53	8.80		.69
54 A 3850	4646	240	56	7.20		.69
54 A 3856	4652	1000	59	3.70		.75

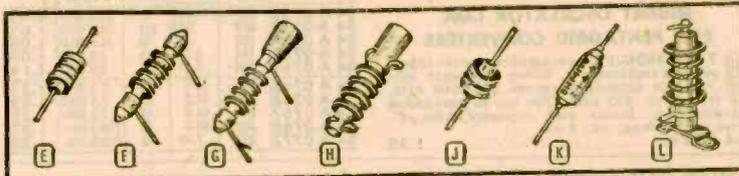
## FERRITE CORE CHOKES

High permeability, small size. For transmitters, receivers, etc. Low DC resistance.  $\frac{1}{4}$ " dia.,  $\frac{1}{2}$ " long.  $1\frac{1}{2}$ " axial leads. Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	mH	Ohms	mA	E.A.
54 A 1893	6302	2.5	8.3	200	.99
54 A 1894	6304	5	13.5	200	1.14
54 A 1895	6306	10	28	125	1.26
54 A 1896	6308	25	70	75	1.26
54 A 1897	6310	50	110	75	1.50

## NATIONAL AND OHMITE GENERAL-PURPOSE RF CHOKES



R-175A for transmitters with plate supply up to 3000 volts modulated or 4000 volts unmodulated. For all bands from 80 through 6 meters. R-154U for 20 to 80 meter transmitters. R-33 types have 2 sections; R-50 types, 3 or 4 sections. Vertical mtg.  $\frac{1}{2}$  Microhenries. 2 oz.

### NATIONAL CHOKES

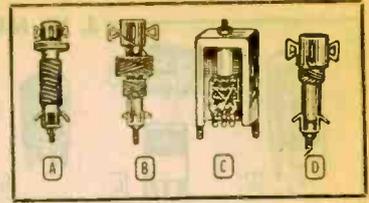
Stock No.	Mfr's Type	Fig.	mH	mA	Ohms	E.A.
54 A 1115	R-33	J	11	350	1.8	.36
54 A 1116	R-33	J	50	225	3.5	.36
54 A 1117	R-33	J	100	200	5.0	.36
54 A 1118	R-33	J	750	125	16	.36
54 A 1119	R-50	E	0.5	150	15	.42
54 A 1160	R-50	E	1.0	135	23	.42
54 A 1161	R-50	E	2.5	125	38	.42
54 A 1162	R-50	E	10.0	115	36	.72
54 A 1169	R-60	E	4	700	.15	.29
54 A 1301	R-100	F	2.5	115	44	.44
54 A 1368	R-1000	G	2.5	115	44	.74
54 A 1495	R-100S	H	2.5	115	44	.99

### NATIONAL CHOKES (Cont'd)

Stock No.	Mfr's Type	Fig.	mH	mA	Ohms	EACH
54 A 1503	R-154U	L	1.0	600	6.0	2.01
54 A 1505	R-300	F	0.5	400	7.0	.57
54 A 1506	R-300	F	1.0	400	11	.57
54 A 1507	R-300	F	2.5	375	17	.74
54 A 1508	R-300	F	5.0	325	24	.90
54 A 1511	R-300U	G	2.5	375	17	.92

### OHMITE CHOKES

Stock No.	Mfr's Type	Fig.	$\mu$ H	mA	MHz	EACH
54 A 1548	Z-460	K	0.2	1000	320-520	.45
54 A 1549	Z-235	K	0.84	1000	160-350	.45
54 A 1550	Z-144	K	1.8	1000	80-200	.45
54 A 1551	Z-50	K	7.0	1000	35-110	.48
54 A 1552	Z-28	K	21	600	20-60	.60
54 A 1553	Z-14	K	44	600	7-35	.71



## MINIATURE ADJUSTABLE RF COILS

Variable-inductance RF coils designed for the most exacting requirements. Use with tuning capacitors of 250 to 450 pF capacity. Type 70-OSC coil has tapped secondary. 70 series installed self-supported. 71-OSC has 2-tap primary. Both track 100 to 550 kHz IF. Maximum size,  $\frac{1}{4} \times \frac{1}{4}$ " diameter. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Use	kHz Range	EACH
54 A 1972	69-OSC	Osc.	540-1600	1.20
54 A 0866	70-A	Ant.	540-1600	1.35
54 A 0867	70-RF	RF	540-1600	1.35
54 A 0868	70-OSC	Osc.	540-1600	1.20
54 A 0869	71-OSC	Osc.	540-1600	1.74

## UNIVERSAL REPLACEMENT COILS

Compact, variable-inductance iron-core coils for general replacement use in receivers where manufacturers' coils are no longer available. Shielded type. Use with 250-450 pF variable capacitors. Oscillator coil has tapped secondary.  $1\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$ ". \*Tapped sec., primary. 5 oz.

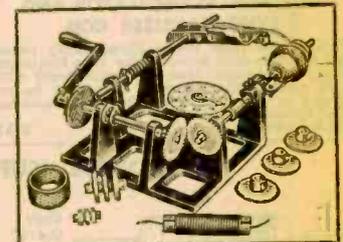
Stock No.	Mfr's Type	Use	kHz Range	EACH
54 A 0748	73-A	Ant.	500-1800	2.49
54 A 0752	73-OSC	Osc.	*100-550	2.49

## PRINTED-CIRCUIT RF CHOKES

Air-core RF chokes specifically designed for printed circuits. Offer wide range of inductances for use in transmitters, receivers, and test equipment. All are varnish-impregnated to resist moisture and corrosion. Have printed-circuit mounting lugs. Forms are  $\frac{1}{2}$ " long. Maximum current rating: Types 970-978, 125 mA; 982, 100 mA; 994, 50 mA. Av. shpg. wt., 1  $\frac{1}{2}$  oz.

Stock No.	Mfr's Type	mH	Ohms	Dia.	EACH
54 A 1061	970	1	20.6	$1\frac{1}{2}$ "	.28
54 A 1063	972	1.5	26.4	$\frac{3}{4}$ "	.78
54 A 1067	975	2.7	37.4	$\frac{3}{4}$ "	.84
54 A 070	978	4.7	51.8	$\frac{7}{8}$ "	.87
54 A 1074	982	10.0	81.6	$\frac{7}{8}$ "	.90
54 A 1086	994	100	473	$1\frac{1}{2}$ "	1.38

## MORRIS "COILMASTER" COIL WINDER



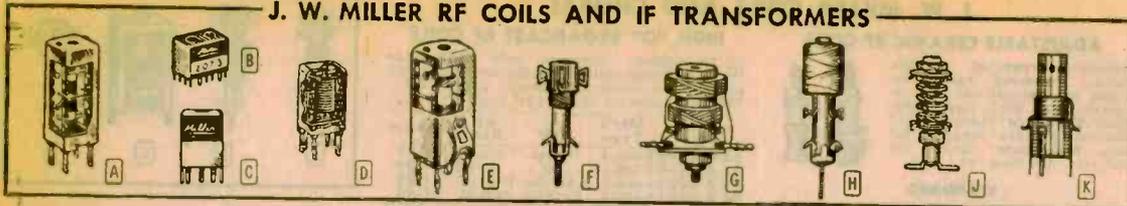
- Produces Self-Supporting, Universal and Honeycomb Coils
- Can be Used With #22 to #40 Wire

Accurate, easy-to-use hand-operated coil winder produces self-supporting, universal and honeycomb coils, plus solenoids, single-layer coils, etc. It's a big time-saver and gives you work a professional appearance. Indicator counts number of coil turns. Easily adjustable for pitch-spacing and various diameter coil forms. Extremely versatile, it accepts No. 22 through No. 40 wire. 3 cams and 4 gears permit winding virtually all types of coils. Wire and coil forms not included. With instructions. Base size 5x5". Shpg. wt., 4 lbs.

54 A 1033 .8.50

# J. W. Miller and Nytronics Components

## J. W. MILLER RF COILS AND IF TRANSFORMERS



### MINIATURE IF TRANSFORMERS

**A** Shell-core, permeability-tuned IF transformers. Tunable powdered-iron cores. Built-in diode filter capacitor. Size:  $\frac{3}{4}$ " square x 2". With all necessary mounting hardware. Av. shpg. wt., 4 oz.

Stock No.	Type	Freq.	Use	EACH
54 A 0727	12-C1	455 kHz	IF Input	1.74
54 A 0728	12-C2	455 kHz	IF Output	1.74
54 A 0787	12-C6	455 kHz	IF Output*	1.80
54 A 0718	12-C9	455 kHz	Input (AC-DC)	1.74
54 A 0719	12-C10	455 kHz	Output (AC-DC)	1.74
54 A 1317	12-C12	455 kHz	Tapped Pri. Discriminator	2.04
54 A 1320	12-C45	455 kHz	IF Input	1.85
54 A 1321	12-H1	262 kHz	IF Output	1.83
54 A 0731	12-H2	262 kHz	IF Input	1.83
54 A 0788	12-H6	262 kHz	IF Output*	1.89
54 A 1321	13-W1	1500 kHz	Input or Inter.	1.74
54 A 1322	13-W2	1500 kHz	IF Output	1.74
54 A 0732	1463	10.7 mHz	Input or Inter.	2.04
54 A 0733	1464	10.7 mHz	Discriminator	2.37
54 A 1323	1464-WB	10.7 mHz	Discriminator	2.52
54 A 0734	1465	10.7 mHz	Ratio Detect.	2.46
54 A 1324	1465-WB	10.7 mHz	Ratio Detect.	2.46
54 A 0789	6203	4.5 mHz	Input or Inter.	2.07
54 A 0790	6204	4.5 mHz	Discriminator	2.37
54 A 0791	6205	4.5 mHz	Ratio Detect.	2.37

### MINIATURE IF PRINTED-CIRCUIT TRANSFORMERS

**A** For replacement and experimental use in receivers. Shell-core, permeability tuned. Tune from top and bottom of shield.  $\frac{3}{4}$ " sq. x 2". Supplied complete with mounting hardware. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Freq.	Use	E.A.
54 A 1359	13-PC1	455 kHz	IF Input	1.74
54 A 1360	13-PC2	455 kHz	IF Output	1.74
54 A 1364	13-PC9	455 kHz	Input (AC-DC)	1.74
54 A 1365	13-PC10	455 kHz	Output (AC-DC)	1.74
54 A 1712	1463-PC	10.7 mHz	Input or Inter.	2.04

### 10.7-MHz TRANSFORMERS FOR TRANSISTOR CIRCUITS

**B** Subminiature Style. IF and ratio detector transformers. IF transformers are  $\frac{1}{2}$ " high x  $1\frac{1}{2}$ " square; ratio detector,  $\frac{1}{2}$ " x  $\frac{1}{2}$ " x  $\frac{1}{2}$ ". Supplied with mounting hardware. Av. shpg. wt., 2 oz.

Stock No.	Type	Use	E.A.
54 A 0025	2070	1st IF Input	2.37
54 A 0028	2071	2nd IF Interstage	2.37
54 A 0029	2072	3rd IF Output	2.37
54 A 0038	2073	Ratio Detector	2.82

### HORIZONTAL OSCILLATOR AND SYNC-STABILIZER COIL

**Type 6183.** (Not Illus.) Permeability tuned coil features dual windings for sync frequency and phase circuit. Has aluminum shield with phase bolt mounting. Coil may be reversed in shield for top or bottom mounting.  $1\frac{1}{2}$ " square by  $2\frac{1}{2}$ ". Shpg. wt., 5 oz. 2.37

### "MINI TRANSFORMER" TRANSISTOR IF TRANSFORMERS (455 kHz)

**C** Only  $\frac{1}{2}$ " high by  $1\frac{1}{2}$ " sq. Same type of threaded tuning as microminiatures, above. For use with RCA 2N218 and 2N219 or 2N139 and 2N140; transistors. \*Type 2065 is matching oscillator requiring tuning capacitor from 78 to 110  $\mu$ F maximum tolerance. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Impedance	Use	E.A.
54 A 2484	2066	50K-800 ohms	Input	2.22
54 A 2485	2067	30K-500 ohms	Interstage	2.22
54 A 2486	2068	20K-3K ohms	Output	2.22
54 A 2488	2065	Matching Oscillator*	2.22	

### 455-kHz IF TRANSFORMERS FOR TRANSISTOR CIRCUITS

**D** Miniature Style. Hi-Z tapped primary winding coupled to low-Z secondary.  $\frac{3}{4}$ " high by  $\frac{1}{2}$ " square. \*Primary-secondary. Av. shpg. wt., 3 oz.

Stock No.	Type	*Ohms	Use	EACH
54 A 0002	2031	10K-600	Input	2.64
54 A 0003	2032	10K-1000	Output	2.64
54 A 0896	2041	25K-600	Input	2.64
54 A 0973	2042	25K-1000	Output	2.64

### MINIATURE "J-TRAN" TOP-TUNED IF TRANSFORMERS

**E** Units have hollow hexagonal-hole cores for either double or single-ended tuning. Mount by snap fastener.  $\frac{3}{4}$ " square by 2". Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Freq.	Use	E.A.
54 A 1954	14-C1	455 kHz	IF Input	1.74
54 A 1955	14-C2	455 kHz	IF Output	1.74
54 A 2467	14-C9	455 kHz	Input (AC-DC)	1.74
54 A 2468	14-C10	455 kHz	Output (AC-DC)	1.74
54 A 2469	1270	4.5 mHz	Input or Inter.	1.89

### TRANSISTOR OSCILLATOR COILS

**F** Type 2020. Use in one-transistor osc. circuit for 365 pF capacitor, 455 kHz IF,  $\frac{3}{4}$ " x  $\frac{1}{2}$ ". Shpg. wt., 3 oz. 1.74

Type 2022. Similar to above, except for use with variable capacitor 78-100 pF, maximum. Shpg. wt., 3 oz. 1.74

### MIDGET OSCILLATOR COIL FOR PENTAGRID CONVERTERS

**G** Type 6480C. For pentagrid converter tubes; general replacement. When used with 365-pF variable capacitor, covers 540-1600 kHz. IF frequency, 455 kHz. For use in unshielded applications. Series pad capacity, 0.004  $\mu$ F. Size, 1x1". Shpg. wt., 4 oz. 1.35

### CAPACITY-OPERATED RELAY COIL



Type 696. For alarm systems, window displays and other capacity-operated devices. Consists of center-tapped oscillator winding; adjustable grid coupling capacitor; RT choke on bakelite form.  $\frac{1}{2}$ " x  $\frac{1}{2}$ " high. Supplied with wiring diagram. Shpg. wt., 4 oz. 54 A 1057..... 2.49

### TV OSCILLATOR SYNC STABILIZER (RINGING) COIL

**H** Type 6210. Has bakelite form with  $\frac{3}{8}$ " mounting clip. 16-42 mH range. Size,  $\frac{1}{2}$ " x  $\frac{1}{2}$ ". Shpg. wt., 2 oz. 54 A 1092..... 1.74

### HORIZONTAL LINEARITY AND WIDTH CONTROLS

**H** Iron-core variable inductance coils for horizontal sweep circuits. Permit adjustments over a wide inductance range to obtain the proper match for best operating characteristics. Mounting clip fits  $\frac{3}{8}$ " hole; clip for  $\frac{1}{4}$ " hole with adapter also supplied. Size,  $\frac{3}{4}$ " x  $\frac{1}{2}$ " high (maximum) on phenolic coil forms. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Millihenries Range	E.A.
54 A 1093	6313	5-5	1.38
54 A 1094	6314	2.0-18	1.38
54 A 1095	6315	4.0-30	1.38
54 A 1098	6319	8.0-60	1.74
54 A 0049	6330	45-215	1.89
54 A 0051	6195	185-1	1.14
54 A 0052	6196	.054-245	1.02

### HIGH-VOLTAGE RF POWER SUPPLY TRANSFORMER

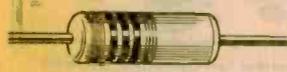
**J** Type 4626. Provides voltage up to 10,000 VDC (30,000 when used in a voltage rectifier-triplex circuit).  $2\frac{1}{4}$ " dia. x 6" high. 54 A 1102. Shpg. wt., 4 oz. .... 9.45

### VERTICAL-MOUNTING PRINTED CIRCUIT COILS

**K** "Velvetork" adjustable RF coils. Can be adjusted from either end of coil form. \*RPC suffix omitted from Type No. Maximum inductance at minimum core position. Coil forms are  $\frac{1}{2}$ -inch diameter and  $\frac{1}{4}$ -inch long. Av. shpg. wt., 3 oz.

Stock No.	Type 23A.*	$\mu$ H†	Q Min.	Test Freq.	EACH
54 A 0755	107	.695	77	25.0 MHz	1.05
54 A 0758	827	.640	101	25.0 MHz	1.05
54 A 0759	106	.760	98	25.0 MHz	1.05
54 A 0760	156	1.20	65	7.9 MHz	1.05
54 A 0761	336	2.40	64	7.9 MHz	1.14
54 A 0765	475	31.0	58	2.5 MHz	1.23
54 A 0766	685	43.5	56	2.5 MHz	1.23
54 A 0767	825	61.0	48	2.5 MHz	1.23
54 A 0768	224	160.0	63	79.0 kHz	1.23
54 A 0773	823	7.40	42	250.0 kHz	1.32

## NYTRONICS "SUPER WEE-DUCTORS" SUBMINIATURE RF INDUCTORS



Standard subminiature RF inductors offering the design engineer or serviceman a quality component suitable for a wide variety of electronic applications. Combine best features of epoxy molding and shielding techniques for reliability, top performance, and minimum inductance in high density packaging. High altitude operation: up to 70,000 feet. Inductive tolerance:  $\pm 10\%$ . Less than 3% coupling. Operating Temperature Range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ . Dielectric Strength: withstands an applied voltage of 1400 volts rms. Marking: standard color-code per governing specifications. Length: 0.140". Diameter: 0.157". AWG #22 leads, T termination. Av. shpg. wt., 1 oz.

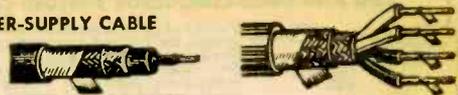
Stock No.	Type SWD.	Ind. $\mu$ H	Q @ MHz	EACH
54 A 0100	100,000	100,000	18 .079	1.50
54 A 0101	68,000	68,000	23 .079	1.50
54 A 0102	47,000	47,000	23 .079	1.50
54 A 0103	33,000	33,000	27 .079	1.50
54 A 0104	22,000	22,000	27 .079	1.50
54 A 0105	15,000	15,000	31 .079	1.50
54 A 0106	10,000	10,000	39 .25	1.50
54 A 0107	6800	6800	43 .25	1.40
54 A 0108	4700	4700	44 .25	1.40
54 A 0109	3300	3300	43 .25	1.40
54 A 0110	2200	2200	50 .25	1.40
54 A 0111	1500	1500	49 .25	1.40
54 A 0112	1000	1000	65 .79	1.40
54 A 0113	680	680	60 .79	1.40
54 A 0114	470	470	60 .79	1.40
54 A 0115	330	330	54 .79	1.40
54 A 0116	220	220	58 .79	1.40
54 A 0117	150	150	56 .79	1.40

Stock No.	Type SWD.	Ind. $\mu$ H	Q @ MHz	EACH
54 A 0118	100	100	52 2.5	1.40
54 A 0119	68	68	51 2.5	1.40
54 A 0120	47	47	52 2.5	1.40
54 A 0121	33	33	45 2.5	1.40
54 A 0122	22	22	46 2.5	1.40
54 A 0123	15	15	44 2.5	1.20
54 A 0124	10	10	49 7.9	1.20
54 A 0125	6.8	6.8	50 7.9	1.20
54 A 0126	4.7	4.7	44 7.9	1.20
54 A 0127	3.3	3.3	44 7.9	1.20
54 A 0128	2.2	2.2	45 7.9	1.20
54 A 0129	1.5	1.5	45 7.9	1.20
54 A 0130	1.0	1.0	47 25	1.20
54 A 0131	.68	.68	42 25	1.20
54 A 0132	.47	.47	44 25	1.20
54 A 0133	.33	.33	46 25	1.20
54 A 0135	.15	.15	51 25	1.20
54 A 0136	.10	.10	50 25	1.20

# Belden Microphone and Special-Purpose Cable

## RUBBER-COVERED MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

Recommended for greater abrasion resistance and extra flexibility. Especially suited for installations where cable must make tight bends around corners or lie perfectly flat. Available in single or multiple (up to 8) conductors. Type 8428 has heavy-duty neoprene jacket; Type 8413 is miniature-sized cable. Av. shpg. wt., per 100 ft., 6 lbs.



SINGLE

MULTIPLE

Mfr's Type	No. Cond.	AWG Stranding	Cap. pF	O. D.	Working Volts	50-FT. SPOOL		100-FT. SPOOL		250-FT. SPOOL	
						Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8410	1	25(7x33)	33	.245"	3000	55 A 7798	5.25	55 A 7799	9.75	55 A 7814	22.65
8412	2	20(26x34)	42	.268"	600	55 A 7827	5.80	55 A 7828	10.75	55 A 7829	24.70
8426	6	20(26x34)	40	.349"	600			55 A 7843	20.65	55 A 7844 U	51.00
8427	7	20(26x34)	40	.360"	600			55 A 7845	22.20		
8418	8	20(26x34)	42	.386"	600			55 A 7846	25.50	55 A 7847 K	61.80
8428	2	18(41x34)	47	.295"	600			55 A 7848	14.65		
8413	2	24(45x40)	38	.185"	300	55 A 7853	5.50	55 A 7855	10.15		

## VINYL PLASTIC-COVERED MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

Lower capacitance and loss figures than standard rubber-covered cables. Resist ozone deterioration; have high resistance to oil, gasoline, and other chemicals. All are relatively light weight with small diameters. 8411 is suited for lapel or lavalier microphones. 8420 is a miniature type cable. Av. shpg. wt., per 100 ft., 3 1/2 lbs.



SINGLE

MULTIPLE

Mfr's Type	No. Cond.	AWG Stranding	Cap. pF	O. D.	Working Volts	50-FT. SPOOL		100-FT. SPOOL		250-FT. SPOOL	
						Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8401	1	25(7x33)	25	.200"	5000	55 A 7863	2.91	55 A 7864	5.35	55 A 7865	11.35
8411	1	25(7x33)	34	.144"	3500	55 A 7868	2.25	55 A 7869	4.20	55 A 7870	8.95
8422	2	22(16x34)	18	.231"	1000	55 A 7874	4.50	55 A 7875	7.85	55 A 7876	17.40
8403	3	20(26x34)	25	.245"	600	55 A 7878	5.60	55 A 7879	10.35	55 A 7880	23.25
8404	4	20(26x34)	25	.255"	600			55 A 7882	11.40	55 A 7883	26.25
8405	5	20(26x34)	25	.275"	600			55 A 7884	13.00	55 A 7884	31.00
8420	2	24(45x40)	20	.185"	500	55 A 7888	4.00	55 A 7889	7.45	55 A 7890	17.50

## STANDARD AND MINIATURE BROADCAST AUDIO CABLES

Two-conductor, color-coded cables. High insulation resistance and effective shielding eliminate noise and cross-talk. Have free stripping jackets, fast shield termination and small diameters. Tinned drain-wire prevents current loops. †Spiral-wrapped. ‡Braided. Specify both Stock No. and Mfr's Type when ordering.



MINIATURE CABLE

STANDARD CABLE

Mfr's Type	Type	AWG Stranding	O. D. Inches	Wkg. Volts	Shields	Jacket	Lbs., 100 ft.	100-FT. SPOOL		500-FT. SPOOL	
								Stock No.	EACH	Stock No.	EACH
8437	CBS	22(solid)	.200	200	Copper†	Black Vinyl	3 1/2			55 A 7451	22.65
8441	CBS	22(16x34)	.210	200	Copper†	Black Vinyl	3	55 A 7893	5.85	55 A 7474	25.90
8450	Miniature	22(solid)	.118	200	Alum. "Mylar" ‡	Black Vinyl	1 1/2	55 A 7894	3.85	55 A 7895	14.20
8451	Miniature	22(7x30)	.135	200	Alum. "Mylar" ‡	Black Vinyl	1 3/4	55 A 8562	4.38	55 A 7898	17.85

## RG HIGH-FREQUENCY COAXIAL CABLE

Low-loss, flexible polyethylene inner jacket, copper-braid shield, black vinyl jacket. Constant electrical characteristics regardless of changes in freq. or temp. Type 8214 is excellent for use in CB and amateur Radio as 50-ohm antenna cable. \*Indicates cable has

cellular polyethylene foam core for very low losses even at ultra-high frequency. Black outer covering. 100-ft. spool only. Specify Stock Number and Manufacturer's Type when ordering.



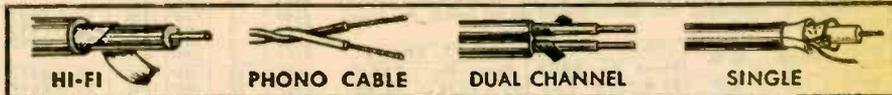
Stock No.	Mfr's Type	RG No.	AWG (Stranding)	O. D. (In.)	Imp. Ohms	Cap. pF/Ft.	Conductor	Lbs.	100-FT. SPOOL
55 A 7923	8237	8/U	13(7x21)	.405	52	29.5	Bare Copper	11 1/4	13.75
55 A 7387	8214*	8/U	11(7x19)	.403	50	26	Bare Copper	12	15.30
55 A 7927	8240	58/U	20(Solid)	.195	53.5	28.5	Bare Copper	3 1/4	4.95
55 A 7931	8216	174/U	26(7x34)	.100	50	30.4	Bare Copper	1	3.75

## 75-OHM AND 73-OHM RG COAXIAL CABLE FOR COLOR-TV LEAD-IN

55 A 7264	8238	11/U	18(7x26)	.405	75	20.5	Tinned Copper	10 1/4	11.85
55 A 7928	8241	59/U	22(Solid)	.242	73	21	Bare Copper	4	5.75

## HI-FI, STEREO AND PHONO CABLES

Make Allied Radio headquarters for all your electronic needs. You can depend on Allied for prompt service.



HI-FI

PHONO CABLE

DUAL CHANNEL

SINGLE

Have stranded conductors of tinned copper with vinyl or rubber insulation. Type 8421: Hi-fi cable, spiral wrap. Types 8430 and 8431: for mono phono pickup applications. 8419 and 8429: dual channel,

for stereo phono pickups. 8416: for stereo and language labs. 8417: single, miniature mono phono connecting cable. \*Use two cables for maximum channel separation. †.106x.213.

Mfr's Type	Outer Jacket	No. Cond. & AWG	O. D.	Lbs., 100 ft.	25-FT. SPOOL		50-FT. SPOOL		100-FT. SPOOL		250-FT. SPOOL	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8421	Chrome Vinyl	1-25(7x33)	.180	2 1/4	55 A 8781	1.71	55 A 8782	3.10	55 A 8783	5.05	55 A 8784	11.20
8431	Rubber	1-24(16x36)	.095	1/4	55 A 9930	1.38			55 A 9931	4.38		
*8430	Vinyl	2-32(7x40)	.050	1 1/4	55 A 9927	.87					55 A 9928	4.80
8416	Chrome Vinyl	2-25(7x33)	†	2 1/2	55 A 9382	1.86	55 A 9390	3.40	55 A 9391	5.95	55 A 9412	13.65
*8429	Vinyl	2-32(7x40)	.057	1 1/4	55 A 9933	1.47					55 A 9934	10.05
8419	Vinyl	3-32(7x40)	.067	1 1/2	55 A 8330	1.71					55 A 8333	12.25
8417	Chrome Vinyl	1-25(7x33)	.140	1 1/4	55 A 7671	1.41	55 A 7672	2.27	55 A 7673	4.30	55 A 7674	9.30

# Belden Sound-System and Intercom Cable

## TWO AND THREE-CONDUCTOR SHIELDED CABLE



Variety of gauges, insulations, shieldings and jackets for PA and intercom use. All types listed in table below have tinned copper conductors. \*Polyethylene, insulated conductors, aluminum \*\*Mylar\*\* wrapped shield, stranded tinned copper ground wire. †Chrome vinyl jacket. ‡Spiral-wrapped tinned shield. §Braided tinned shield as jacket. ¶Vinyl insulated conductors. Type 8641, No. 24 stranded; 8752, 8772 (7x28), No. 18 stranded; 8760, 8770 (16x30), No. 22 solid; 8731, No. 16 stranded; 8780, (19x29). Specify Stock No. and Mfr's Type. Av. shpg. wt., 100 ft., 3/4 lbs.

Mfr's Type	Cond.	O. D.	100-FT. SPOOL		600-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8208†	2	.255"	55 A 7555	7.90	55 A 7315 X	34.80
8641	2	.160"	55 A 7676	3.75	55 A 7677	15.00
8731*†§	3	.178"			55 A 7559	18.70
8735†	3	.199"	55 A 7563	5.70	55 A 7565	24.30
8760*†	2	.222"			55 A 7398	24.00
8761*†	2	.167"			55 A 7568	24.00
8762*†	2	.196"	55 A 7575	4.80	55 A 7577	19.90
8770*†	3	.236"			55 A 7401 U	30.40
8771*†	3	.175"			55 A 7442	19.65
8772*†	3	.200"			55 A 7489	24.75
8780†§	3	.260"			55 A 7430 X	34.45
8790†§	2	.231"	55 A 7572	6.25	55 A 7573 U	26.70

## TWO AND THREE-CONDUCTOR UNSHIELDED CABLE

High-quality cable for PA and intercom installations, speaker extensions, alarm systems, etc. High insulation resistance. Have vinyl insulated, unshielded conductors, except † which are tinned, and ‡ stranded (19x29). Jackets of chrome vinyl, except 8794 which has rose-gray vinyl jacket and 8481, 8482, 8460, and 8470 which are twisted pair types without jacket. 8483 is cabled and without jacket. \*Solid copper conductors. †Stranded (10x30). Be certain to specify both Stock No. and Mfr's Type when ordering.

Mfr's Type	Cond. & AWG	O. D.	Lbs., 100 ft.	Mfr's Type	Cond. & AWG	O. D.	Lbs., 100 ft.
8794*	3-22	.168"	1 1/2	8460†	2-18	.175"	1
8205‡	2-20	.190"	1 1/2	8461†	2-18	.226"	3
8482*	2-19	.130"	1 1/2	8470‡	2-16	.195"	2 3/4
8483*	3-19	.132"	1 1/2	8471‡	2-16	.256"	4
8486*	2-19	.162"	2	8473‡	2-14	.332"	6

### COST PER SPOOL

Mfr's Type	100-FT. SPOOL		600-FT. SPOOL	
	Stock No.	EACH	Stock No.	EACH
8481	55 A 7612	1.95	55 A 7614	6.25
8794			55 A 7642	12.15
8205	55 A 7597	3.10	55 A 7600	11.40
8482	55 A 7616	2.45	55 A 7631	8.80
8483	55 A 7633	3.15	55 A 8563	12.45
8486			55 A 7636	11.35
8487			55 A 7639	15.40
8460	55 A 7602	3.45	55 A 7603	13.35
8461	55 A 7610	4.40	55 A 7434	17.85
8470			55 A 7436	12.85
8471			55 A 7611	12.85
8473			55 A 7327 U	36.75

## TWO-CONDUCTOR SHIELDED CABLE



For speaker systems, intercoms. All have vinyl plastic insulation and jackets except 8758 which has copper braid jacket. Tinned conductors. \*Tinned copper, spiral-wrapped shield. Black/Red coding. Shpg. wt., per 100 ft. of cable, 2 1/2 lbs.

Mfr's Type	AWG Stranding	O. D.	100-FT. SPOOL		500-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8737*	22 (7x30)	.170"	55 A 7644	4.05	55 A 7447	17.85
8758	20 (7x28)	.165"	55 A 7647	4.70	55 A 7649	19.05
8759*	20 (7x28)	.195"	55 A 7649	5.05	55 A 7666	21.00
8739*	22 (Solid)	.160"	55 A 7645	3.85	55 A 7449	16.20

## VINYL "JUKE BOX" CABLE

Stranded, color-coded, tinned copper conductors. Type 8783: 1—#20, 2—#16. Type 8786 (oval): 4—#24 twisted unshielded, 4—#24 twisted unshielded, shield, wt. per 100-foot spool, 5 lbs.

Mfr's Type	Cond.	O. D.	100-FT. SPOOL		600-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8783	3	.250"	55 A 7775	6.45	55 A 7776 U	28.90
8786	6	.256"	55 A 7777	7.65	55 A 7778	34.50

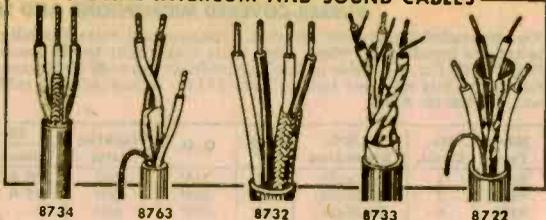
## VINYL "JUKE BOX" SPEAKER CABLE

Type 8782, Two parallel conductors, 1 tinned, 1 bare; #24, 7x32 stranding. Vinyl insulation. Vinyl jacket. In chrome, clear or white color, specify choice. O.D., .058x115". Wt., 100 ft., 10 oz.

55 A 8828 C, 50-ft. Spool. 1.11  
55 A 8829 C, 100-ft. Spool. 1.65 55 A 7051 C, 500-ft. Spool. 5.50  
55 A 7052 C, 1000-ft. Spool. 10.95

Type 8649 Two-Conductor "Juke-Box" Cable. Same as above but #20, 7x38 stranding. In chrome or clear. Specify color choice when ordering. 100-ft. spools only. Wt., 10 oz.  
55 A 7678 C, 100-ft. Spool. 2.43

## SPECIAL INTERCOM AND SOUND CABLES



Type 8734, 3 cond. (vinyl-ins.). Tinned copper shield on one; 2 unshielded. AWG: 22(7x30). Chrome vinyl jacket. Wt., 100 ft., 2 1/4 lbs.

Type 8763, 3 cond. (polyethylene-ins.). Aluminum-Mylar shield on 2, 1 unshielded, #20 stranded grd. wire. Chrome vinyl jacket overall. AWG: 20 (7x28). Shpg. wt. per 100 ft., 3 1/4 lbs.

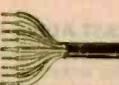
Type 8732, 4 cond. (polyethylene-ins.). 1 pr. tinned copper, shielded; 1 pr. unshielded, 22 (7x30). Chrome vinyl plastic jacket. Shpg. wt., per 100 ft., 3 lbs.

Type 8733, 3 cond., separately aluminum-Mylar shielded. Ground wire tinned cadmium-bronze. "Beldfoil Z" foil. AWG: 22 (7x30). Shpg. wt., per 100 ft., 3 lbs.

Type 8722, 4 cond. (vinyl-ins.); 2 alum.-Mylar shield on 2; unshielded. Tinned grd. 20 (7x28). Chrome vin. jacket 100 ft., 4 1/2 lbs.

Mfr's Type	Cond.	O. D.	100-FT. SPOOL		500-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8734	3	.194"	55 A 7685	5.05	55 A 7445	21.00
8763	2	.210"			55 A 7471	24.30
8732	4	.188x.296"	55 A 7684	6.55	55 A 7465	27.60
8733	3	.205"	55 A 7687	6.55	55 A 7329	27.60
8722	4	.260"			55 A 7675	30.75

## MULTIPLE-CONDUCTOR CABLE (NOT PAIRED)



Top-quality multiple-conductor cable for permanent installations of intercoms, speakers and control circuits—as well as other applications requiring a highly durable flexible and lightweight cable. Conductors are non-paired, plastic-insulated, flexible tinned stranded copper wire, with color-coded plastic insulation—all cabled together and enclosed in an overall tear-resistant—for long life under difficult environmental conditions. Cables are flexible and easily stripped. \*Have 2 conductors of No. 18 stranded wire (16x30); other conductors are No. 22 stranded. Specify both Stock No. and Mfr's Type when ordering.

Mfr's Type	Cond.	AWG Stranding	O. D.	Mfr's Type	Cond.	AWG Stranding	O. D.
8444	4	22 (7x30)	.168"	*8448	8	18 (16x30)	.250"
8445	5	22 (7x30)	.180"	*8449	9	18 (16x30)	.261"

### COST PER SPOOL

Mfr's Type	Weight Per 100-Ft.	100-FT. SPOOL	
		Stock No.	EACH
8443	2 lbs.	55 A 7498	3.10
8444	2 1/2 lbs.	55 A 7504	4.15
8445	2 1/2 lbs.	55 A 7510	4.80
8446	4 lbs.	55 A 7524	7.15
8448	4 1/2 lbs.	55 A 7536	8.55
8449	5 lbs.	55 A 7539	9.25



## PAIRED VINYL UNSHIELDED CABLE

For intercom and telephone wiring. No. 22 solid tinned copper except \*No. 22 stranded (7x30). Color-coded vinyl plastic insulation. Conductors cabled in twisted pairs; chrome vinyl plastic overall. Provide a quiet circuit, free from crosstalk. Vinyl plastic insulation for high dielectric strength. Be certain to specify both the Mfr's Type and the spool size desired when ordering.

Mfr's Type	Cond.	O. D.	Lbs., 100 ft.	100-FT. SPOOL		500-FT. SPOOL	
				Stock No.	EACH	Stock No.	EACH
8442*	2	.165"	1 1/2			55 A 7690	10.05
8740	2	.150"	1 1/2	55 A 7691	2.40	55 A 7692	8.55
8741	4	.201"	2 1/2	55 A 7693	4.05	55 A 7455	16.20
8742	6	.240"	3 1/2	55 A 8565	5.35	55 A 7458	22.75
8757	8	.225"	4			55 A 7407 X	28.90
8743	12	.305"	4 3/4	55 A 8572	8.40	55 A 7460 K	38.85
8747*	12	.340"	5 1/2	55 A 7697	10.45	55 A 7698 X	48.00
8744	18	.354"	6 1/2	55 A 8552	12.00	55 A 8553 U	56.25
8748*	18	.389"	8	55 A 7699	14.70	55 A 7002 U	70.50
8753	22	.384"	8	55 A 7700	14.85	55 A 7467 U	71.25
8754	26	.409"	11	55 A 8555	16.80	55 A 7476 Z	81.00
8745	30	.420"	10	55 A 7696	20.65	55 A 7462 Z	73.25
8755	38	.480"	15			55 A 7478 Z	123.75
8756	46	.510"	17 1/4			55 A 7480 Z	145.50

## BELDEN LITZ WIRE



Type 8817, 5x44 stranded copper Celanese 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". Shpg. wt., 2 oz.  
55 A 8981, 100-Ft. Spool. 7.1

# Belden Wire and Cable

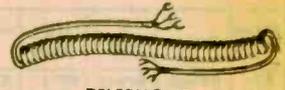
## RETRACTILE (COILED) MICROPHONE AND TELEPHONE CABLE

Strong, coiled cables extend up to six times their normal length. Conveniently retract out-of-way when not in use. Have tinned cadmium-bronze conductors.

Mike cables have braided shield, except #5 unshielded. Types 8494 and 8495 are unshielded telephone cords with spade terminals and strain relief. Wt., 1/4 lb.



MICROPHONE



TELEPHONE

Mfr's Type	No. Cond.	Description	Jacket	AWG Stranding	O. D. Inches	Extends		Stock No.	EACH
						From	To		
8497	3	Microphone Cable	Neoprene	23(21x36)	.250	11 1/2"	6'	55 A 7279	1.56
8499	1	Microphone Cable	Neoprene	24(45x40)	.160	7 1/2"	4'	55 A 7286	1.05
8490	5	Microphone Cable	Neoprene	23(21x36)	.265	11 1/2"	6'	55 A 7613	1.62
8494	4	Telephone Cord	Vinyl	23(21x36)	.245	10"	4 1/2"	55 A 7276	1.80
8495	3	Telephone Cord	Vinyl	23(21x36)	.220	10"	4 1/2"	55 A 7277	1.41

## #18 RUBBER-COVERED FLEXIBLE TEST-PROD WIRE

65x36 stranded, tinned copper, cotton wrap. 8898: .230-inch O.D.; .088-inch insulation; 10,000 WV; 29,000 puncture volts. 8899: .144-inch O.D.; .045-inch insulation; 5000 WV; 20,000 puncture volts; available in green and yellow for patch cord use. Shpg. wt., per 25' spool, 8 oz.; 100' spool, 2 lbs.; 500' spool, 9 lbs.



Type 8898—Red			Type 8898—Black		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7737	25'	2.10	55 A 7744	25'	2.10
55 A 7738	100'	5.40	55 A 7750	100'	5.40
55 A 7739	500'	22.65	55 A 7751	500'	22.65

Type 8899—Red			Type 8899—Black		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7759	25'	1.23	55 A 7763	25'	1.23
55 A 7760	100'	3.90	55 A 7764	100'	3.90
55 A 7761	500'	14.05	55 A 7765	500'	14.05

Type 8899—Yellow			Type 8899—Green		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7659	25'	1.23	55 A 7660	25'	1.23
55 A 7623	100'	3.90	55 A 7624	100'	3.90
55 A 7625	500'	14.05	55 A 7626	500'	14.05

## STRANDED AND SOLID ANTENNA WIRE

High-conductivity copper wire features maximum tensile strength, minimum stretch. Polythelmerize type insulation protects against mechanical abuse. Av. shpg. wt., 100-ft., 1 lb.



### STRANDED BARE COPPER

Type 8000—7x22			Type 8002—7x24		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7680	50 ft.	1.32	55 A 7654	50 ft.	.96
55 A 7681	75 ft.	1.91			
55 A 7682	100 ft.	2.40	55 A 7656	100 ft.	1.65
55 A 7683	1000 ft.	21.90			

### SOLID HEAVY POLYTHELMERIZE-INSULATED COPPER

Type 8008 No. 12			Type 8009 No. 14		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7670	100 ft.	4.50	55 A 7740	100 ft.	2.85
55 A 7661	150 ft.	6.40	55 A 7662	150 ft.	3.90
55 A 7736	500 ft.	19.80	55 A 7741	500 ft.	11.55

## INDOOR ANTENNA 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.

55 A 7930, 25-ft.	62
55 A 7933, 600-ft.	3.60

## RADIO/MARINE ANTENNA WIRE

Type 8201, Tinned copperweld #20(7x28) antenna wire, for marine and other applications. Encased in brown weather resistant polyethylene. O.D., .278". Shpg. wt. per 100 ft., 3 1/2 lbs.

55 A 7663, 100-ft. Spool	4.50
55 A 7664, 600-ft. Spool	18.60

## HEAVY POLYTHELMERIZE MAGNET WIRE

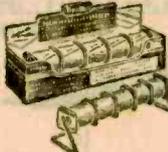
High temperature magnet wire for a wide variety of coil winding applications. Features heavy polythelmerize insulation; withstands winding abuse and forming operations; resists the solvent action of all types of thinners; resists softening and brittleness when used at extreme temperatures. Temperature rating, 180°C. Excellent moisture resistance.



1/2-lb. Spool				1-lb. Spool			
Stock No.	Size	Feet	EACH	Stock No.	Size	Feet	EACH
55 A 8036	14	40	1.29	55 A 8086	14	80	2.16
55 A 8037	16	63	1.29	55 A 8087	16	126	2.28
55 A 8038	18	100	1.32	55 A 8088	18	199	2.30
55 A 8039	20	157	1.35	55 A 8089	20	315	2.37
55 A 8040	22	250	1.37	55 A 8090	22	501	2.37
55 A 8041	24	396	1.41	55 A 8091	24	793	2.45
55 A 8042	26	630	1.49	55 A 8092	26	1260	2.61
55 A 8043	28	995	1.61	55 A 8093	28	1990	2.87
55 A 8044	30	1570	1.79	55 A 8094	30	3140	3.03
55 A 8045	32	2440	1.94	55 A 8095	32	4880	3.23
55 A 8046	34	3930	2.19	55 A 8096	34	7860	4.12
55 A 8047	36	6200	2.63	55 A 8097	36	12400	5.13
55 A 8048	38	9700	3.11	55 A 8098	38	19400	6.18
55 A 8049	40	16050	3.83	55 A 8099	40	32100	8.04

## ASSORTED WIRE KITS

Type 8822, Handy kit contains ten 25-ft. spools of Type 8529 hookup wire (described in table above) set in a convenient dispenser rack. Wire is supplied in the following colors: black, blue, green, red, white, yellow, orange, brown, gray, and violet. Shpg. wt., 2 1/2 lbs. 6.60



Type 8824, Eight 25-ft. spools of Type 8523 hookup wire (see table above) and a dispenser rack. Colors supplied; black, blue, green, red, white, yellow, orange, and brown. Shpg. wt., 2 1/4 lbs. 5.76

## SHIELDED HOOKUP AND GRID WIRE

Type 8885, Single conductor #20 stranded (10x30) tinned copper conductor; .015" rubber insulation; cellulose acetate yarn braid; lacquered, tinned copper braid shield. Break-down voltage, 4000 volts. Outside diameter 1.17". Wt., 100 ft., 1 1/4 lbs. Available only in lengths shown. 55 A 7779, 15-ft. Spool . . . 1.13 55 A 7780, 25-ft. Spool . . . 1.50 55 A 7781, 100-ft. Spool . . . 4.50

## COPPER BRAID SHIELDING AND BONDING CABLE

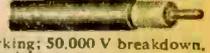
Flexible, braided and tinned copper for shielding conductors and cables. Braided in tubular form for easy slip-on. Av. shpg. wt. per 50 ft., 1 1/2 lbs.



Mfr's Type	Oval Max. I. D.	Stranding	50-Ft. Spool	
			Stock No.	EACH
8660	3/8"	96x34	55 A 9350	2.25
8668	1/2"	120x34	55 A 9355	3.06
8661	5/8"	192x34	55 A 9360	3.65
8669	3/4"	336x34	55 A 9365	7.60
8662	7/8"	576x34	55 A 9380	10.75
8663	1"	160x34	55 A 9843	3.60

## CATHODE-RAY-TUBE CABLE

High dielectric, corona resistant, minimum surface leakage CRT cables. No. 22 (7x30) tinned copper polyethylene insulated. 8868 has red vinyl jacket; rated 25,000 V working; 50,000 V breakdown. 8869, black vinyl jkt.; 17,000 V; 35,000 V breakdown.



Mfr's Type	Insul.	Outside Diameter	100-Ft. Spool		
			Stock No.	Wt., Lbs.	EA.
8868	.065"	.150"	55 A 7770	1 1/4	2.93
8869	.029"	.120"	55 A 7773	1 1/4	2.43

# Dearborn Wire and Cable

## RUBBER (SP), PLASTIC (SPT) LAMP CORD



Two parallel No. 18 stranded copper wires for lamps and small appliances. Polarity ribbed. Meets U.L. requirements. 25-ft. and 100-ft. lengths. When ordering—specify length. Wt., per 100', 3 lbs.

Mfr's Type	Jacket	Color	U.L. Type	25-Ft. Spool		100-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.
SP	Rubber	Brown	SP-1	55 A 7983	1.31	55 A 7984	3.91
SP	Rubber	Black	SP-1	55 A 7998	1.31	55 A 7999	3.91
SPT	Vinyl	Brown	SPT-1	55 A 7988	1.23	55 A 7989	3.21
SPT	Vinyl	Black	SPT-1	55 A 7978	1.23	55 A 7979	3.21
SPT	Vinyl	Gray	SPT-1	55 A 8275	1.23	55 A 8289	3.21
SPT	Vinyl	White	SPT-1	55 A 7993	1.23	55 A 7994	3.21



## "JUKE BOX" SPEAKER CABLE

Two parallel conductors of No. 24, 7x32 stranded wire—1 tinned, 1 bare. Vinyl insulation. O.D., .058x.115". In choice of gray or clear—specify color desired. Shpg. wt., per 100', 10 oz.

55 A 9905 C.	25-ft. Spool.	.70	55 A 9906 C.	50-ft. Spool.	1.05
55 A 9912 C.	100-ft. Spool.	1.56	55 A 9913 C.	500-ft. Spool.	5.18
55 A 9919 C.	1000-ft. Spool.	10.35			



## MIL-W-76B THERMOPLASTIC HOOK-UP WIRE

Type MW heavy-duty, thermoplastic-insulated hook-up wire. Rated 1000 volts rms at 80°C. Tinned copper conductor with polyvinylchloride insulation; wall thickness, .016". In choice of brown, red, orange, yellow, green, white, black, gray, violet or blue—specify color. Av. shpg. wt., 25' spool, 6 oz.; 100' spool, 1 lb.

Size	Strands	Nom. O. D.	25-Ft. Spool		100-Ft. Spool	
			Stock No.	EACH	Stock No.	EACH
#22	7x30	.056"	55 A 9723 C	.58	55 A 9724 C	1.39
#22	solid	.051"			55 A 9735 C	1.17
#20	7x28	.064"	55 A 9726 C	.65	55 A 9727 C	1.58
#20	solid	.058"			55 A 9737 C	1.40
#18	16x30	.075"	55 A 9729 C	.77	55 A 9730 C	1.98
#16	19x29	.091"	55 A 9732 C		55 A 9733 C	2.66

## ASSORTED RADIO-TV HOOK-UP WIRE



Stranded, and solid copper—some tinned and some untinned. Resistant to heat and moisture. Offers high conductivity with negligible loss. In assorted gauges, colors and types of insulation. Unlimited number of applications in chassis and subchassis wiring of radio and television receivers, transmitters, high-fidelity and public address equipment, kit building, etc.

55 A 9344.	Six 25-ft. Coils.	Shpg. wt., 1 lb.	Per Pkg. 1.45
55 A 9345.	Five 100-ft. Coils.	Shpg. wt., 2 1/2 lbs.	Per Pkg. 3.35

## FLEXIBLE TEST-PROD WIRE



Limp, rubber-covered wire ideal for test leads. Designed to withstand extremely high voltages; puncture test voltage, 12,000 volts. Insulation thickness, .046". No. 20 conductor is 41x36 stranded. O.D., .137". Choice of red or black in 100-ft. spools only. Wt., 2 lbs.

55 A 9474.	Red.	100-ft. Spool.	Each 3.35
55 A 9475.	Black.	100-ft. Spool.	Each 3.35

## RUBBER-JACKETED SERVICE CORD



Quality-made, rubber-sheathed service cord. Stranded copper conductors have rubber insulation with black rubber jackets. Excellent for a wide variety of applications, including household appliances, garden and power tools, or wherever rough-usage extension cords are required. All types meet U.L. requirements and have maximum voltage ratings of 300 volts except types S #14 and S #10, 600 volts. Current capacity in amperes: SV #18 and SJ #18, 5 amps; SJ #16 (2 and 3 cond. types), 7 amperes; S #14, 15 amperes; S #10, 25 amperes. Available in standard 25', 50' and 100' spools only—specify spool length desired. \*No. of conductors. Av. shpg. wt., 100' spool, 3 lbs.

U.L. Type	Ga.	O. D.	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
SV	#18	2.250"	55 A 8336	1.95	55 A 8337	2.65	55 A 8349	5.29
SJ	#16	2.330"	55 A 8353	2.50	55 A 8354	4.57	55 A 8361	9.14
SJ	#18	3.330"	55 A 8380	5.00	55 A 8381	5.04	55 A 8382	10.08
SJ	#16	3.360"	55 A 8384	4.05	55 A 8438	7.15	55 A 8450	14.30
S	#14	3.560"	55 A 8628	10.85	55 A 8629	11.37	55 A 8630	22.74
S	#10	3.690"	55 A 8631	14.50	55 A 8632	19.58	55 A 8633	39.15

## MICROPHONE CABLE



Single-Conductor



Multiple-Conductor

Plastic and rubber-jacketed mike cable with tinned, stranded copper conductors. All have tinned copper braided shield except \*tinned copper spiral shield. Plastic-jacketed types have plastic insulation and rubber-jacketed types, rubber insulation. Multiple-conductor types are color coded. Single-conductor type is especially suitable for lapel or lavalier mikes; 2-conductor types, for low-impedance mikes; 6-conductor type, for power supply cable. †No. Conductors. Av. shpg. wt.: 25' spool, 1 lb.; 100' spool, 6 lbs.

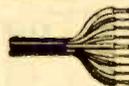
## PLASTIC JACKET

† Size	O. D.	WV DC	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool		
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.	
1*	.22	.155	2500	55 A 9420	1.49	55 A 9421	2.90	55 A 9422	5.20
2	.22	.231"	600	55 A 9423	3.55	55 A 9424	6.75	55 A 9425	10.35

## RUBBER JACKET

† Size	O. D.	WV DC	100-Ft. Spool		250-Ft. Spool		500-Ft. Spool		
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.	
2	.20	.268"	600	55 A 9427	11.66	55 A 9428	28.25	55 A 9429	56.30
6	.20	.349"	600	55 A 9430	23.30	55 A 9431	55.55		

## MULTIPLE-CONDUCTOR INTERCOM CABLE (Not Paired)



Quality plastic-jacketed cable with multiple, non-paired, plastic insulated conductors. Excellent for permanent installation of speakers, control and intercom circuits, and other applications. Conductors are of No. 22 stranded copper wire; all are color-coded. Conductors have .010 insulation; grey jacket has .020.

No. Cond.	Nom. O. D.	Lbs. 100'	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
3	.145"	2	55 A 9850	1.45	55 A 9851	2.50	55 A 9458	3.84
4	.170"	2 1/4	55 A 9852	2.00	55 A 9853	3.25	55 A 9854	4.80
5	.175"	2 1/2	55 A 9855	2.10	55 A 9856	3.30	55 A 9857	5.88
6	.185"	3	55 A 9858	3.25	55 A 9859	5.50	55 A 9860	7.80
8	.200"	3 1/4	55 A 9861	3.90	55 A 9862	5.90	55 A 9461	9.86

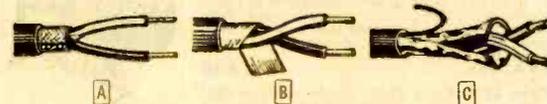
## PAIRED UNSHIELDED INTERCOM CABLE (JACKETED)



For intercom and telephone wiring. Color-coded conductors are No. 22 solid copper, cabled in twisted pairs with high-dielectric plastic jacket overall.

No. Cond.	Nom. O. D.	Lbs. 100'	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
2 (1 pr.)	.130"	1 1/2	55 A 9863	1.56	55 A 9864	2.65	55 A 9453	4.26
6 (3 pr.)	.220"	3 1/2	55 A 9865	2.75	55 A 9866	4.55	55 A 9867	6.00
8 (4 pr.)	.255"	4	55 A 9868	3.95	55 A 9869	6.00	55 A 8772	9.55

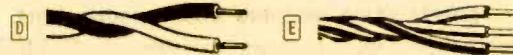
## SHIELDED PLASTIC INTERCOM CABLE



Two-conductor shielded cable for intercoms, sound and PA systems. All have plastic jackets with color-coded conductors. Fig. A has tinned copper shield; Fig. B, spiral-type tinned copper shield; Fig. C, aluminum-wrapped shield with ground wire.

Size	Nom. O. D.	Fig.	Lbs. 100'	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
#22	.185"	A	4	55 A 9876	2.45	55 A 9877	4.15	55 A 9878	6.81
#22	.195"	C	1 1/2	55 A 9879	2.10	55 A 9880	3.15	55 A 9442	4.80
#20	.210"	C	3	55 A 9881	2.30	55 A 9467	3.90	55 A 9468	5.25
#20	.195"	B	3 1/2	55 A 9882	2.35	55 A 9438	4.00	55 A 9440	5.46
#22	.175"	B	3	55 A 9883	2.05	55 A 9432	3.05	55 A 9433	5.25

## PAIRED UNSHIELDED INTERCOM CABLE (UNJACKETED)



For speakers, alarm systems and other electronic applications. Conductors are No. 22 solid copper, plastic insulated and individually color-coded. Av. shpg. wt., 100' spool, 1 1/4 lbs.

No. Cond.	O. D.	Fig.	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
2	.112"	D	55 A 9870	1.07	55 A 9871	1.50	55 A 9455	2.49
3	.132"	E	55 A 9872	1.52	55 A 9873	2.15	55 A 9874	3.27

# Dearborn Wire and Cable

## PLAIN ENAMELED MAGNET WIRE

Enamel-insulated, soft-drawn copper wire. Especially manufactured for all types of coil winding applications—transformers, RF coils, chokes, etc. All sizes are standard B&S gauge. Available in 1-pound spools only. Average shipping weight, per spool, 1 lb. 4 oz.



Stock No.	Size	Feet	Per Spool	Stock No.	Size	Feet	Per Spool
55 A 9995	#36	12,800	3.17	55 A 9990	#26	1200	2.02
55 A 9994	#34	7950	2.60	55 A 9989	#24	798	1.89
55 A 9993	#32	4900	2.39	55 A 9986	#22	501	1.69
55 A 9992	#30	3200	2.27	55 A 9979	#20	313	1.61
55 A 9991	#28	1999	2.21	55 A 9978	#18	198	1.56

## HEAVY FORMVAR MAGNET WIRE

Copper magnet wire covered with Formvar; a tough, abrasion-resisting film. Stable dielectric is maintained under cumulative drying and aging effects of heat—does not fail after two hours at 105°C. Resists acid and alkali, impervious to effects of petroleum solvents. Infinite moisture resistance. Takes little winding space. Has many applications for technical service and industrial work. Specially useful in transformers, chokes, transmitters, and the repair and construction of electric motors. Replaces enamel, paper, cotton, silk, double cotton and double silk. Available in 1-lb. spools only. Av. shpg. wt., 1 lb. 4 oz.

Stock No.	Size	Feet	PER SPOOL
55 A 8661	#26	1200	3.30
55 A 8365	#24	798	2.84
55 A 8265	#22	501	2.64
55 A 8258	#20	313	2.38

## 75-OHM LOW-LOSS FOAM-TYPE COAXIAL CABLE FOR COLOR TV

RG-59/U-Type. Recommended by manufacturers as best antenna lead-in for color TV. Impedance, 75 ohms. Moisture resistant poly-foam dielectric keeps moisture out, reduces signal loss by 35%, and assures better picture quality. Ends strip quickly for connection to TV antenna and set. Suitable for Amateur and Citizens Band

Foam construction for extremely low loss. Features cellular polyethylene inner dielectric which reduces signal attenuation by as much as 35% over standard RG coax. Excellent choice for use in community TV installations, and many other UHF and VHF trans-

Type	Imp. Ohms	Conductor	O.D.	pF per Ft.	Lbs. per 100'	50-Ft. Spool	100-Ft. Spool	500-Ft. Spool	1000-Ft. Spool
RG-8/U	50	13 (7x21)	.405"	26.0	10½	55 A 9354	7.50	55 A 9342 X	14.30
RG-58/U	53.5	20 solid	.195"	28.5	3	55 A 9357	3.50	55 A 9347	5.67

Rugged, high-quality coaxial cable for RF transmission line, antenna lead-in, test equipment leads, and similar communications uses. All have an efficient, low-loss, polyethylene inner dielectric. Outer plastic jackets are virtually impervious to acids, alkalis, oils, chemicals, humidity and weathering effects—suitable for under-

Type	Imp. Ohms	Conductor	O.D.	pF per Ft.	Lbs. per 100'	25-Ft. Spool	50-Ft. Spool	100-Ft. Spool	500-Ft. Spool
RG-8/U	50	13 (7x21)	.405"	29.5	10½	55 A 9886	4.70	55 A 9887	7.50
RG-11/U	75	18 (7x26)	.405"	20.5	10	55 A 9888	4.75	55 A 9889	7.50
RG-58/U	53.5	20 solid	.195"	28.5	3	55 A 9894	2.00	55 A 9897	3.10
RG-59/U	73	22 solid	.242"	21.0	4	55 A 9848	2.40	55 A 9849	3.50

## STANDARD RG HIGH-FREQUENCY COAXIAL CABLE

ground applications. RG-8/U and RG-11/U types are for series N, C, HN and UHF connectors; RG-58/U and RG-59/U are for series TNC, BNC, BN, C, UHF, N and push-on connectors. RG-8/U and RG-58/U have bare copper conductors. RG-11/U has tinned copper conductor. RG-59/U has bare copperweld conductor.

## 7mm IGNITION WIRE

Specially designed for spark plug connections. Single conductor tinned, stranded copper with high dielectric insulation. Available in your choice of two types: select the black neoprene jacket for severe operating conditions in automobiles, boats and trucks; choose clear polyvinylchloride insulation for standard duty use on

all cars, boats and trucks. The clear jacket also provides a "dress up" appearance for the motor in "Hot Rods," racing cars, and custom motors. Available in 50, 100 and 500-ft. spools. Shpg. wts.: 50 foot spools, 2 lbs.; 100-foot spools, 4 lbs.; 500-foot spools, 9 lbs.

Insulation	Size	O.D.	Wall Size		Color	50-Ft. Spool		100-Ft. Spool		500-Ft. Spool	
			Inner	Outer		Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
Rubber and Neoprene	#16 Stranded	.276"	.075"	.032"	Black	55 A 8601	5.30	55 A 8603	9.55	55 A 8514	43.50
Polyvinylchloride	#20 Stranded	.269"	.116"	.....	Clear	55 A 8602	5.30	55 A 8513	8.95	55 A 8515	38.50
Polyvinylchloride	#20 Stranded	.269"	.116"	.....	Red	55 A 8460	5.45	55 A 8461	8.95	55 A 8462	38.50

## AUTOMOTIVE AND MARINE WIRE

Specifically designed for electrical connections in autos, trucks, and boats. Single conductor, stranded bare copper primary wire with color-coded polyvinylchloride insulation. Resists the damaging

effects of flame, oil, gasoline, grease, acid and fungus. Also impervious to the deterioration caused by most solvents.

Conductor		O.D.	Wall Size	Color	Lbs. per 100'	50-Ft. Spool		100-Ft. Spool		500-Ft. Spool	
Size	Strands					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
#16	19x29	.102"	.102"	Brown	1¼	55 A 8604	1.80	55 A 8615	2.30	55 A 8608	10.50
#14	19x27	.117"	.023"	Green	2	55 A 8605	2.50	55 A 8616	3.20	55 A 8619	14.75
#12	19x25	.142"	.026"	Red	3	55 A 8606	2.70	55 A 8617	3.80	55 A 8620	17.95
#10	19x23	.175"	.031"	Black	4¼	55 A 8607	3.90	55 A 8618	5.75	55 A 8621 X	27.00

## ASSORTED AUTOMOTIVE PRIMARY WIRE

Handy assortment of primary wire for automobile and boating applications. Each package includes five 25-foot coils of stranded No. 14 and No. 16 gauge wire in a variety of colors. Tough, colorful outer insulation permits quick identification of wiring systems and adds distinction to engine appearance in car or boat. This automotive wire resists flame, oil, gasoline, grease, acid, fungus, moisture absorption, and most solvents. Has high temperature stability and remains flexible at low temperatures. Automotive wiring applications include: horn button, radio, headlights, stop lights, tail lights, gasoline gauges, primary of distributor to primary of coil, cigarette lighter, heater, starter to generator or switch to starter. Package includes five 25-ft. coils. Shpg. wt., 1½ lbs. 55 A 9875..... Per Pkg. 3.45



## TINNED BUS-BAR WIRE

Finest quality, soft-drawn solid copper wire. Tinned for easy soldering. Well suited for making non-insulated hook-ups in all types of electronic equipment. Excellent choice for ground- and tie-in circuits in high-fidelity and PA amplifiers. 18-gauge and 20-gauge types suitable for shortwave antennas.

Size	O.D.	100-Ft. Spool			1000-Ft. Spool		
		Stock No.	Lbs.	EACH	Stock No.	Lbs.	EACH
#26	.016"	55 A 7059	¼	.71	55 A 7053	1	3.45
#24	.020"	55 A 9183	¼	.75	55 A 9149	1½	3.75
#22	.025"	55 A 9168	¼	.73	55 A 9159	2¼	4.45
#20	.032"	55 A 9173	½	.88	55 A 9161	3½	6.10
#18	.040"	55 A 9178	¾	1.15	55 A 9163	5¼	8.55

applications. Use Series TNC, BNC, BN, C, UHF, N, and push-on connectors. Per 100 ft., 4 lbs. 55 A 9363..... 50-Ft..... 3.95 55 A 9352, 100-Ft..... 5.67 55 A 9353, 500-Ft..... 22.82



# tubing, Wire, Cable, Wire Markers and Heat Guns

## ALPHA SHRINKABLE TEFLON TUBING

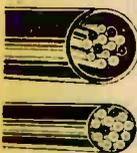
### PVC 105 PLASTIC TUBING

Plastic tubing features high tensile strength per MIL-I-631D, ASTM-D876, ASTM-D922 (Type F, Form U, Grade C, Class 1, Category 1) specs. Available in sizes 24 to 12. Designed for general electronic, aircraft, electrical uses. Available in choice of Clear, Black or Red—specify color when ordering. Av. wt. per 100 ft., 5 oz.

Stock No.	Size	Nom. I.D.	Nominal Wall Thick.	Per 100-ft. Coil
55 A 9269 C	24	.022"	0.012"	2.43
55 A 9270 C	22	.027"	0.012"	2.44
55 A 9271 C	20	.034"	0.016"	2.49
55 A 9272 C	18	.042"	0.016"	2.58
55 A 9273 C	16	.063"	0.016"	2.72
55 A 9274 C	14	.066"	0.016"	2.89
55 A 9275 C	12	.085"	0.016"	3.07

Sizes 10 to 2. Available in choice of Clear, Black, Red—specify color. Av. shpg. wt., per 100 ft., 10 oz.

Stock No.	Size	Nom. I.D.	Nominal Wall Thick.	Per 100-ft. Coil
55 A 9281 C	10	.106"	.016"	3.27
55 A 9282 C	8	.133"	.020"	4.57
55 A 9283 C	6	.166"	.020"	5.19
55 A 9284 C	4	.208"	.020"	6.00
55 A 9285 C	2	.263"	.020"	6.91



### FIT-105 FLEX TUBING

Irradiated polyvinylchloride (PVC) provides snug, flexible insulation. Excellent for insulation over splices. Supplied at "Min. I.D." size shrinks to "Recov. I.D." size in only 7 seconds when heated to 325°F. Supplied in black only. Write, Wire or Phone for Quantities Larger Than Those Listed.

Size	Min. I.D.	Recov. I.D.	Wall Thick.	Stock No.	Wt. Lbs.	Per 25' Coil
3/64"	.046"	.023"	.020"	55 A 8635	.1	2.40
1/16"	.062"	.031"	.020"	55 A 8646	.1	2.55
3/32"	.093"	.046"	.020"	55 A 8637	.1	2.95
1/8"	.125"	.062"	.020"	55 A 8638	.2	3.10
3/16"	.178"	.093"	.025"	55 A 8639	.3	3.80
1/4"	.250"	.125"	.025"	55 A 8640	.4	4.80
3/8"	.375"	.178"	.030"	55 A 8641	.5	5.30
1/2"	.500"	.250"	.030"	55 A 8642	.8	6.00
3/4"	.750"	.375"	.035"	55 A 8643	1.3	8.05
1"	1.000"	.500"	.040"	55 A 8644	2.2	11.60
1 1/2"	1.500"	.750"	.045"	55 A 8645	3.9	19.05
2"	2.000"	1.000"	.050"	55 A 8646	4.5	28.05

### SHRINKABLE TUBING ASSORTMENT

Type PVC FIT-105-MS-1 Assortment. Irradiated polyvinylchloride. Provides snug, flexible insulation for cable jacketing, cable markers. Use as insulation over splices. Supplied at "Min. I.D." size; shrinks to "Recov. I.D." in only 7 seconds when heated to 325°F. Black. Each tube 10" long. Includes ten each: 3/64, 1/16, 3/32, 1/8, 3/16, 1/4, 3/8, 1/2, 5/8, 3/4, 1, 1 1/2, 2". Shpg. wt., 8 oz. 55 A 8658.....4.00



Shrinks to Cover Irregular Shapes

55 A 8659. FIT-105-MS-2 Assortment. Each tube 10" long. Includes ten 6" lengths each of four sizes from 3/8" through 1" (forty pieces). Black only. Shpg. wt., 1/2 lb. ....8.00

### TALK-A-PHONE INTERCOM CABLE

No. Cond.	Mfr's Type	Lbs.	50 Roll	100' Roll	200' Roll			
6	5506	3 1/2	55 A 8063	5.50	55 A 8067	11.00	55 A 8068	22.00
11	9911	12	55 A 8064	10.50	55 A 8073	21.00	55 A 8074	42.00

### MASTER HEAT GUNS

Two heat-gun models that feature delivery of controlled heat up to 1000 degrees Fahrenheit without the danger of an open flame. Perfect for use with "shrinkable" tubing, forming plastics, and forced drying. Mfr's Type HG-501 produces heat from 500 to 750 degrees Fahrenheit, and Mfr's Type HG-751 from 750 to 1000 degrees Fahrenheit. For 115-120 volts, 60 Hz AC. Shpg. wt., 5 lbs.

55 A 8576. Type HG-501. 14 amps. ....49.90  
55 A 8574. Type HG-751. 20 amps. ....59.95

## CONSOLIDATED WIRE AND CABLE

### INTERIOR AND EXTERIOR TELEPHONE WIRE



No. 22 solid, tinned copper wire. Interior: 1/2" insulation, cotton braid. Exterior: black rubber, weatherproof braid.

Conductors	Stock No.	100' Coil	Stock No.	500' Coil	Stock No.	1000' Coil
2 Int.	55 A 8362	5.50	55 A 8363	25.90	55 A 8364	51.50
2 Ext.	55 A 8752	5.24	55 A 8760	24.20	55 A 8761	47.20
3 Ext.	55 A 8175	7.90				

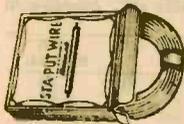
### STEREO PHONO PICKUP ARM CABLE



Type 1478 unshielded; 1479 braided tinned-copper shield. No. 32 (7x40) copper 2-conductor cable with .009" vinyl plastic insulation, O.D., .055". Av. wt.: 10' spool, 4 oz.; 25', 6 oz.; 250', 1 lb.

Mfr's Type	25-Ft. Spool		250-Ft. Spool	
	Stock No.	EACH	Stock No.	EACH
1478	55 A 8524	.72	55 A 8525	5.84
1479	55 A 8536	1.42	55 A 8537	8.98

### PUSH-BACK HOOK-UP WIRE



Tinned hook-up wire. No. 20. Pure copper wire; insulation easily pushed back. Available in both solid and stranded type. Double-cotton covered with paraffin-treated damp-proof braid. 5 different colors. Wt., 25 ft., 4 oz.; 100 ft., 1 lb.

### STRANDED TYPE, 10x30

Spool	Red	Black	Yellow	Blue	Green	EA.
25 ft.	55 A 8442	55 A 8440	55 A 8444	55 A 8441	55 A 8443	.52
100 ft.	55 A 8447	55 A 8445	55 A 8449	55 A 8446	55 A 8448	2.03

### SOLID TYPE

Spool	Red	Black	Yellow	Blue	Green	EA.
25 ft.	55 A 8472	55 A 8470	55 A 8474	55 A 8471	55 A 8473	.49
100 ft.	55 A 8477	55 A 8475	55 A 8479	55 A 8476	55 A 8478	1.76

### HEATER CORD



Black and white marker heater cord. 2 conductor, U.L. type HPD. Nominal insulation thickness 1/2". Ideal for all heater cord applications.

Mfg. Type	Size	Strd.	O.D. (In.)	Stock No.	100' Coil	Stock No.	250' Coil
4087	16	65x34	.275	55 A 8747	8.22	55 A 8850	20.09
4092	18	41x34	.250	55 A 8898	7.47	55 A 8899	18.02

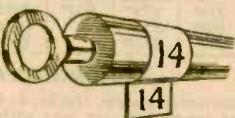
### TINNED COPPER BUS BAR WIRE



High quality aerial and bus bar solid tinned wire. Solid soft drawn copper and brightly tinned for all types of soldering connections and excellent for applications requiring a conductor for heavy current. Standard spool put-up, 100-ft., and 1000-ft.

Mfr's Type	AWG (In.)	O.D.	100-ft. Spool			1000-ft. Spool		
			Stock No.	Lbs.	EA.	Stock No.	Lbs.	EA.
3848	30	.010	55 A 8550	.3	.62	55 A 8551	.9	2.47
3847	28	.013	55 A 8560	.3	.62	55 A 8573	1.0	2.78
3846	26	.016	55 A 8581	.4	.62	55 A 8582	1.3	3.00
3810	24	.020	55 A 8583	.3	.63	55 A 8584	1.3	3.31
3818	22	.025	55 A 8585	.3	.67	55 A 8586	2.0	3.86
3817	20	.032	55 A 8588	.4	.77	55 A 8589	3.6	5.32
3816	18	.040	55 A 8590	5	1.00	55 A 8591	5.0	7.54
3815	16	.051	55 A 8592	8	1.46	55 A 8593	8.0	12.04

### BRADY SELF-STICKING WIRE MARKERS



Self-sticking, preprinted 1/2" long (1 1/2") markers for permanent identification of wires and cables under .150". Provide positive coding of circuits, panels, etc. Resists heat (to 250° F), oil solvents. Thin for confined areas. Stocked in cards of consecutive numbers or letters. Shpg. wt., 1 oz.

Stock No.	Description	Markers per Card	PER CARD
55 A 7009	Consecutive numbers 0-49	150	.27
55 A 7010	Consecutive numbers 50-99	150	.27
55 A 7011	Consecutive numbers 100-132	99	.27
55 A 7012	Consecutive numbers 133-165	99	.27
55 A 7013	Consecutive numbers 166-198	99	.27
55 A 8395	Consecutive letters A-Z	26	.20

# Knight and Emico Panel Meters

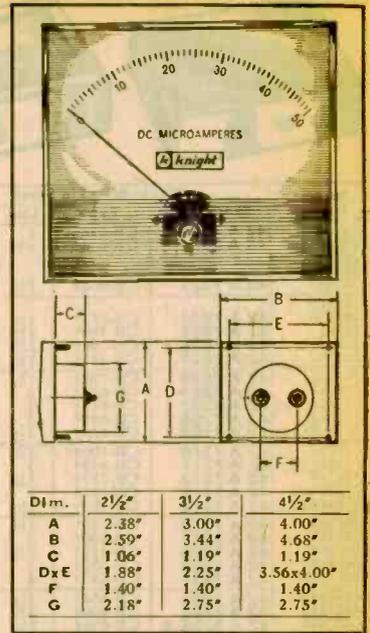
## ALLIED'S OWN KNIGHT® AC AND DC PANEL METERS

- Choice of 2 1/2", 3 1/2" or 4 1/2" Square Meters • Easy Reading, Knife-Edge Pointer
- Completely Shielded Meter Movements • Complete With All Hardware

Allied's own full line of Knight panel meters. These dependable low-cost, clear-view meters are styled to give your equipment a modern appearance. Feature completely shielded meter movements in both AC and DC models—can be mounted on ferrous panels without loss of accuracy. Modern

face, knife-edge pointer and crystal-clear plastic cover for easy reading. All mounting and terminal hardware is included for easy installation. Choice of 2 1/2", 3 1/2" or 4 1/2" size—dimensions shown in table at right, below. Terminals: 1/4-28x.42". Mounting studs: 1/2". Av. shpg. wt., 1 lb.

Range	2 1/2" Square Meter		3 1/2" Square Meter		4 1/2" Square Meter	
	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
0-50 µA DC	52 A 6726	17.65	52 A 7201	18.00	52 A 7205	19.40
0-100 mA DC	52 A 6728	15.70	52 A 7202	16.55	52 A 7206	18.35
0-200 µA DC	52 A 6730	14.40	52 A 7203	15.10	52 A 7207	16.55
25-0-25 µA DC	52 A 6725	17.75	52 A 7204	18.10	52 A 7208	19.55
0-1 mA DC	52 A 6731	13.70	52 A 7209	14.15	52 A 7214	15.10
0-3 mA DC	52 A 6732	13.70	52 A 7210	14.15	52 A 7215	15.10
0-15 mA DC	52 A 6734	13.70	52 A 7211	14.15	52 A 7216	15.10
0-100 mA DC	52 A 6737	13.90	52 A 7212	15.40	52 A 7217	15.70
0-200 mA DC	52 A 6738	13.90	52 A 7213	15.40	52 A 7218	15.70
0-10 amps DC	52 A 6741	13.90	52 A 7225	15.40	52 A 7227	15.70
0-15 amps DC	52 A 6742	13.90	52 A 7226	15.40	52 A 7228	15.70
0-15 V DC	52 A 6746	14.50	52 A 7275	15.10	52 A 7276	16.55
0-50 V DC	52 A 6748	14.50	52 A 7219	15.10	52 A 7222	16.55
0-100 V DC	52 A 6749	14.50	52 A 7220	15.10	52 A 7223	16.55
0-150 V DC	52 A 6750	14.50	52 A 7221	15.10	52 A 7224	16.55
0-5 amps AC			52 A 7340	13.20	52 A 7342	15.35
0-10 amps AC			52 A 7341	14.00	52 A 7343	15.35
0-150 V AC	52 A 6752	17.40	52 A 7229	15.80	52 A 7231	16.70
0-300 V AC	52 A 6753	17.40	52 A 7230	15.80	52 A 7232	16.70

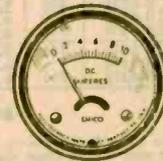


Dim.	2 1/2"	3 1/2"	4 1/2"
A	2.38"	3.00"	4.00"
B	2.59"	3.44"	4.68"
C	1.06"	1.19"	1.19"
Dx E	1.88"	2.25"	3.56x4.00"
F	1.40"	1.40"	1.40"
G	2.18"	2.75"	2.75"

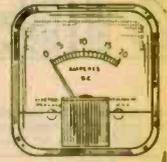
## EMICO LOW-COST PANEL METERS—ACCURATE WITHIN 5%

DC MILLIAMMETERS								
Model NF-2C			Model RF-2C		Model RF-2 1/4 C		Model 13	
Range	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
0-1	52 A 7609	4.05	52 A 7614	4.05	52 A 8012	4.20	52 A 6023	4.05
0-10	52 A 8970	3.00	52 A 8971	3.00	52 A 6022	3.15	52 A 6024	3.25
0-100	52 A 7600	2.85	52 A 7615	2.85	52 A 8013	3.00	52 A 6025	3.10
0-20	52 A 7601	2.50	52 A 7616	2.50	52 A 8014	2.75	52 A 6026	2.85
0-30	52 A 7602	2.50	52 A 7617	2.50	52 A 8016	2.75	52 A 6028	2.85
0-50	52 A 7603	2.50	52 A 7618	2.50	52 A 8017	2.75	52 A 6029	2.85
0-100	52 A 7604	2.50	52 A 7619	2.50	52 A 8018	2.75	52 A 6030	2.85
0-150	52 A 7605	2.50	52 A 7620	2.50	52 A 8019	2.75	52 A 6031	2.85
0-200	52 A 7606	2.50	52 A 7621	2.50	52 A 8020	2.75	52 A 6032	2.85
0-300	52 A 7607	2.50	52 A 7622	2.50	52 A 8021	2.75	52 A 6033	2.85
0-500	52 A 7608	2.50	52 A 7623	2.50				
AC VOLTMETERS								
0-15	52 A 7665	3.70	52 A 7670	3.70	52 A 8022	3.90	52 A 6034	4.00
0-50	52 A 8978	3.70	52 A 8979	3.70	52 A 6038	3.90		
0-150	52 A 7666	4.25	52 A 7671	4.25	52 A 8023	4.60	52 A 6035	4.65
0-300	52 A 7667	4.80	52 A 7672	4.80	52 A 8024	5.10	52 A 6036	4.95
DC AMMETERS								
0-1	52 A 8972	2.40	52 A 8973	2.40	52 A 8025	2.85		
0-5	52 A 8974	2.40	52 A 8975	2.40	52 A 6043	2.85		
0-10	52 A 7650	2.40	52 A 7656	2.40	52 A 6044	2.85	52 A 6070	2.85
0-15	52 A 6039	2.40	52 A 6041	2.40	52 A 6045	2.85	52 A 6073	2.85
0-25	52 A 8976	2.40	52 A 8977	2.40	52 A 6046	2.85		
0-30	52 A 6040	2.40	52 A 6042	2.40	52 A 6047	2.85	52 A 6080	2.85
3-0-3	52 A 7651	2.40	52 A 7657	2.40				
20-50-20	52 A 7652	2.40			52 A 8027	2.85	52 A 6082	2.85
30-0-30	52 A 7653	2.40	52 A 7659	2.40	52 A 8028	2.85	52 A 6083	2.85
DC VOLTMETERS								
0-3	52 A 7630	2.50	52 A 7635	2.50	52 A 8082	2.75	52 A 6168	2.85
3-0-3	52 A 7631	2.50	52 A 7636	2.50	52 A 8083	2.75		
0-10	52 A 7632	2.50	52 A 7637	2.50	52 A 8084	2.75	52 A 6188	2.85
0-15	52 A 6030	2.50	52 A 6169	2.50	52 A 6092	2.75	52 A 6189	2.85
0-20	52 A 6091	2.50	52 A 6193	2.50	52 A 6093	2.75	52 A 6190	2.85
0-30	52 A 8980	2.50	52 A 8981	2.50	52 A 6096	2.75	52 A 6191	2.85
0-50	52 A 8982	2.50	52 A 8983	2.50	52 A 6097	2.75	52 A 6192	2.85
AC AMMETERS								
0-1	52 A 8984	3.70	52 A 8985	3.70				
0-5	52 A 7646	3.70	52 A 7648	3.70	52 A 8085	3.90	52 A 6195	4.00
0-10	52 A 7647	3.70	52 A 7649	3.70	52 A 8086	3.90		
AC MILLIAMMETERS								
0-500	52 A 7640	3.70	52 A 7643	3.70	52 A 8029	3.90	52 A 6212	4.00

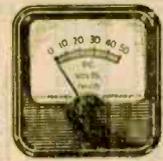
All Meters are Calibrated in Steel Panels—Precision Accuracy Is Not Affected by Metal Panels



NF-2C



RF-2 1/4 C



RF-2C



13

Edgewise

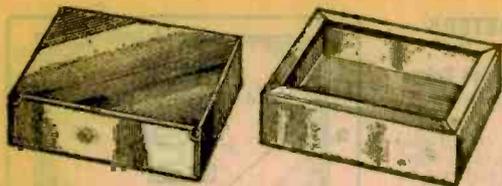
- 5% Accuracy, Even in Magnetic Metal Panels
- "Hi-Tork" DC and Moving-Iron AC Movements
- Black Enameled or Zinc Iridite Steel Cases

Offer accuracy and prestige appearance. DC meters have "HI-TORK" magnetic movements; AC meters, moving-iron movements. Work trouble-free even under severe conditions. Calibrated in steel cases, meters need no further adjustments. 5% accuracy is not affected by mounting in magnetic metal panels. Black-enameled or zinc-iridite steel cases. Dimensions (overall depth and flange size): Model NF-2C, 1 1/4x2 1/4"; Model RF-2C, 1 3/4x2 1/4"; Model RF-2 1/4 C, 1 1/2x2 3/4"—each model fits in 2 1/4" diameter hole; Model 13 (all plastic), 3/4x1 1/4x2 1/8". Screw-terminal binding posts and/or lugs for solder connections. With mounting hardware. Av. shpg. wt., 9 oz.

CHOOSE FROM OUR GIANT STOCK OF PANEL METERS

Allied offers the largest selection of panel meters found anywhere. Knight, Simpson, Triplett, API, and Emico meters are stocked in depth. Write for information on any meter application.

# Bud Metal Products and Davies Plastic Cases



## STANDARD CHASSIS BASES

Have one-piece construction; corners are reinforced and spot-welded. The four sides are folded at the bottom for additional strength. Aluminum types are spot-welded. Steel chassis gauges: \*No. 22; †No. 20; §No. 18. Aluminum chassis gauges: ‡No. 18; \*\*No. 16; ††No. 14. Order bottom plates, below. AC-403: 2x9½x5"

Allied stocks the complete line of Bud Metal Products for immediate shipment. Bud items not listed in this catalog are available from Allied. Contact us for prices or other information.

HxWxD Inches	Black-Wrinkle Steel				Zinc-Plated Steel				Natural-Finish Aluminum			
	Stock No.	Type	Lbs.	EACH	Stock No.	Type	Lbs.	EACH	Stock No.	Type	Lbs.	EACH
2x7x5	42 A 7820	CB-628*	1.40		42 A 7884	CB-629*	1.80		42 A 7846	AC-402†	1/2	1.70
2½x9½x5	42 A 7821	CB-644*	1 1/4	1.80	42 A 7898	CB-645*	1 1/4	2.30	42 A 7847	AC-403†	1/2	1.80
3x7x5									42 A 7905	AC-429**	3/4	1.90
3x9½x5									42 A 7848	AC-421†	3/4	2.20
3x10x5	42 A 7823	CB-604*	1 1/4	1.80	42 A 7878	CB-605*	1 1/4	2.40	42 A 7855	AC-404†	3/4	2.20
3x13x5									42 A 7906	AC-422†	3/4	2.50
3x14x6	42 A 7824	CB-755†	1 1/4	2.30	42 A 7900	CB-756†	1 1/4	2.80	42 A 7139	AC-1414**	1 1/4	3.30
2x7x7	42 A 7825	CB-789†	1 1/2	1.80	42 A 7879	CB-1191†	1 1/2	2.10	42 A 7849	AC-405†	1 1/2	1.80
2x9x7	42 A 7826	CB-790†	1 1/2	1.80	42 A 7880	CB-1192†	1 1/2	2.10	42 A 7850	AC-406†	1 1/2	1.90
2x11x7	42 A 7827	CB-791†	1 1/2	1.90	42 A 7881	CB-1193†	1 1/2	2.30	42 A 7851	AC-407†	1	2.20
3x12x7	42 A 7828	CB-792†	1 1/2	2.10	42 A 7882	CB-793†	1 1/2	2.80	42 A 7852	AC-408†	1 1/4	2.70
2x13x7	42 A 7829	CB-646	2	2.00	42 A 7883	CB-1194†	2	2.90	42 A 7853	AC-409†	1 1/4	2.30
2½x13½x5	42 A 7207	CB-647†	2	2.30	42 A 7320	CB-1198†	2	2.90				
3x15x7	42 A 7208	CB-649†	3	2.70	42 A 7321	CB-1189†	2 1/2	3.30	42 A 7340	AC-411**	1 1/2	3.70
3x15x8½	42 A 7209	CB-665†	3 1/2	2.90	42 A 7322	CB-666†	3	3.70	42 A 7145	AC-1420**	2 1/4	3.50
3x17x4	42 A 7210	CB-1068†	2 1/4	2.40	42 A 7323	CB-1066†	2 1/4	2.80	42 A 7341	AC-432**	1 1/4	3.10
2½x14½x7	42 A 7211	CB-648†	3	2.70	42 A 7324	CB-1199†	2 1/4	3.10	42 A 7142	AC-1417**	1 1/2	3.40
3x17x7	42 A 7212	CB-757†	3	2.90	42 A 7325	CF-758†	3	3.40	42 A 7342	AC-423**	1 1/4	3.70
2½x10x8	42 A 7213	CB-701†	2 1/2	2.30	42 A 7326	CB-702†	2	2.70	42 A 7143	AC-1418**	2 1/2	2.80
2½x12x8	42 A 7214	CB-703†	2 1/2	2.30	42 A 7327	CB-704†	2 1/2	2.90	42 A 7144	AC-1419**	2 1/2	3.30
3x12x8	42 A 7215	CB-759†	2 1/2	2.40	42 A 7328	CB-760†	2 1/4	3.10	42 A 7907	AC-424**	1 1/2	3.20
2x17x8	42 A 7217	CB-650†	3	2.80	42 A 7329	CB-774†	3	3.10	42 A 7345	AC-425**	1 1/2	3.30
3x17x8	42 A 7220	CB-651†	3 1/2	2.30	42 A 7330	CB-775†	3 1/2	3.40	42 A 7257	AC-412**	1 1/2	3.80
3x17x10	42 A 7830	CB-652†	3	2.50	42 A 7901	CB-1195†	3	3.20	42 A 7854	AC-413**	1 1/4	3.80
3x14x10	42 A 7831	CB-653†	4	2.80	42 A 7902	CB-779†	4	3.20	42 A 7908	AC-414**	1 1/4	3.80
2x17x10	42 A 7221	CB-654†	3 1/4	2.70	42 A 7284	CB-769†	3	3.20	42 A 7346	AC-415**	1 1/4	3.70
3x17x10	42 A 7222	CB-656†	3 1/4	2.70	42 A 7331	CB-1196§	4 3/4	4.00	42 A 7347	AC-416**	2	4.30
3x23x10	42 A 7223 X	CB-657§	3 1/2	3.90	42 A 7332 X	CB-1197§	5 1/2	4.60	42 A 7148 X	AC-1423††	1 1/4	6.30
2x17x11	42 A 7224 X	CB-658§	4 1/2	3.10	42 A 7333 X	CB-770§	4 3/4	3.80	42 A 7258 X	AC-426††	2 1/4	4.60
3x17x11	42 A 7228 X	CB-658§	5 1/4	3.70	42 A 7280 X	CB-771§	5 1/4	4.70	42 A 7259 X	AC-417††	2 1/2	5.30
2x17x12	42 A 7229 X	CB-663§	4 1/4	3.40	42 A 7334 X	CB-661§	4	4.10	42 A 7150 X	AC-1425**	1 1/2	4.80
3x17x12	42 A 7230 X	CB-664§	5 1/4	3.70	42 A 7281 X	CB-662§	5 1/4	4.80	42 A 7263 X	AC-418††	2 1/4	5.40
2x17x13	42 A 7231 X	CB-659§	5 1/4	3.80	42 A 7282 X	CB-772§	5 1/4	4.90	42 A 7348 X	AC-419††	2 1/4	4.80
3x17x13	42 A 7232 X	CB-660§	6 1/4	4.50	42 A 7283 X	CB-773§	6 1/2	5.40	42 A 7260 X	AC-420††	2 1/4	5.70
4x17x10	42 A 7233 X	CB-640§	5 1/4	4.30	42 A 7335	CB-641§	6 1/2	4.80	42 A 7261	AC-427††	2 1/4	6.00
4x17x13	42 A 7234 X	CB-642§	7 1/2	5.30	42 A 7336 X	CB-643§	7 1/2	6.30	42 A 7262 X	AC-428††	3 1/4	7.00
5x17x10	42 A 7235 X	CB-623§	7	6.00	42 A 7337 X	CB-624§	6 1/4	7.10	42 A 7147 X	AC-1422**	3 1/4	8.70
5x17x13	42 A 7236 X	CB-625§	7 1/4	6.60	42 A 7338 X	CB-624§	7 1/2	7.80	42 A 7151 X	AC-1426††	2 1/4	9.50

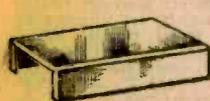
## BOTTOM PLATES FOR CHASSIS BASES

Bottom plates to fit the chassis bases listed above. Ideal for shielding and for protecting components and wiring from dust and damage. In black-wrinkle finish or zinc-plated heavy-gauge steel and natural-finish

aluminum (Alloy 5005 H-14). Have four embossed feet in corners to prevent marring and scratching table-tops, shelves, or other surfaces. Drilled for use with No. 6 self-tapping screws.

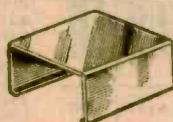
Size WxL	Wt., Lbs.	Black Wrinkle			Zinc Plated			Natural-Finish Aluminum			
		Stock No.	Type No.	EACH	Stock No.	Type No.	EACH	Stock No.	Type No.	Lbs.	EACH
5x7	1/4	42 A 7654	BP-705	.80	42 A 7674	BP-706	.80	42 A 7694	BPA-1589	1/2	.90
5x9½	1/4	42 A 7655	BP-680	.80	42 A 7675	BP-667	.80	42 A 7695	BPA-1590	3/4	.90
5x10	3/4	42 A 7656	BP-536	.90	42 A 7676	BP-538	1.00	42 A 7696	BPA-1591	3/4	.90
7x7	1	42 A 7657	BP-681	1.30	42 A 7677	BP-668	1.30	42 A 7697	BPA-1592	3/4	.90
7x9	1	42 A 7658	BP-682	1.30	42 A 7678	BP-669	1.30	42 A 7698	BPA-1593	3/4	1.00
7x11	1	42 A 7659	BP-683	1.30	42 A 7679	BP-670	1.30	42 A 7699	BPA-1594	3/4	1.10
7x12	1 1/4	42 A 7660	BP-537	1.40	42 A 7680	BP-539	1.60	42 A 7700	BPA-1595	3/4	1.10
7x13	1 1/4	42 A 7661	BP-684	1.40	42 A 7681	BP-671	1.50	42 A 7701	BPA-1596	3/4	1.40
5x13½	1 1/4	42 A 7662	BP-685	1.00	42 A 7682	BP-672	1.30	42 A 7167	BPA-1510	1 1/2	1.40
4x17	1 1/4	42 A 7663	BP-1069	1.10	42 A 7683	BP-1067	1.50	42 A 7163	BPA-1532	3/4	1.00
7x17	1 1/4	42 A 7664	BP-686	1.10	42 A 7684	BP-673	1.70	42 A 7174	BPA-1517	3/4	1.60
8x10	1 1/4	42 A 7668	BP-707	1.10	42 A 7685	BP-708	1.30	42 A 7175	BPA-1518	3/4	1.50
8x12	1 1/4	42 A 7665	BP-709	1.30	42 A 7686	BP-710	1.60	42 A 7176	BPA-1519	1 1/2	1.80
8x17	1 1/4	42 A 7666	BP-687	1.30	42 A 7687	BP-674	1.80	42 A 7177	BPA-1520	1 1/2	1.90
10x12	1 1/4	42 A 7667	BP-688	1.30	42 A 7688	BP-675	1.90	42 A 7180	BPA-1523	3/4	1.80
10x14	1 1/4	42 A 7669	BP-517	1.80	42 A 7689	BP-514	1.80	42 A 7181 X	BPA-1524	3/4	1.80
10x17	1 1/4	42 A 7670	BP-689	1.50	42 A 7690	BP-676	1.90	42 A 7702	BPA-1597	3/4	2.00
11x17	1 1/4	42 A 7671 X	BP-690	1.50	42 A 7691 X	BP-677	1.90	42 A 7183	BPA-1526	3/4	2.00
12x17	2	42 A 7672 X	BP-691	1.80	42 A 7692 X	BP-678	2.30	42 A 7185	BPA-1528	3/4	2.40
13x17	2 1/4	42 A 7673 X	BP-692	1.80	42 A 7693 X	BP-679	2.70	42 A 7703	BPA-1598	3/4	2.60

## OPEN-END ALUMINUM CHASSIS



Heavy-gauge. U-shaped construction with ends folded over 3/8". For any cabinet, but ideally match Bud units listed in table, below. Av. shpg. wt., 1 lb.

## MINIATURE ALUMINUM CHASSIS



Open-end aluminum chassis for limited space applications. For any cabinet, but ideally match Bud units listed in table below. One-piece construction. 1/4" mounting flanges. Av. shpg. wt., 3/4 lb.

Stock No.	Type	HxWxD	For	EACH
42 A 7801	CB-30	1½x7x5"	C-973	1.30
42 A 7802	CB-41	1½x7x7"	C-973	1.50
42 A 7804	CB-996	1½x9x5½"	C-993	1.50
42 A 7805	CB-976	1½x9x7½"	C-999	1.80
42 A 7807	CB-997	1½x11x7"	CD-1481	1.80
42 A 7808	CB-998	1½x13x7"	CD-1482	1.80
42 A 7800	CB-38	2x6x7"	CD-1483	2.10
42 A 7803	CB-39	2x8x7"	C-1584	1.30
42 A 7806	CB-40	2x10x7"	C-1585	1.80

Stock No.	Type	HxWxD	For	E.A.
42 A 7810	CB-1624	1x3½x1¼"	CU-883	.60
42 A 7816	CB-1617	1x3½x2¼"	C-1606	.60
42 A 7812	CB-1626	1x4x2¼"	CU-728	.70
42 A 7817	CB-1618	1x4x2¼"	C-1607	.70
42 A 7818	CB-1619	1x5½x2¼"	C-1608	.80
42 A 7819	CB-1620	1x6x2¼"	C-1609	.80
42 A 7809	CB-1623	1½x2¼x2½"	.....	.50
42 A 7814	CB-1628	1½x6½x3"	C-1788	.80
42 A 7813	CB-1627	1½x4½x3½"	CU-729	.70
42 A 7815	CB-1629	1½x4½x5½"	CU-1098	.80
42 A 7811	CB-1625	2x1½x3½"	C-1788	.70

## HARRY DAVIES PLASTIC CASES AND PANELS



Molded black plastic cases and panels designed for test instrument mounting. Sturdily constructed to protect components. Recessed bosses for flush mounting of covers. Drilled for 1/8" No. 6 self-tapping screws except \*stapped for 4-36x1/2" screws. Walls and covers are 1/8" thick.

Stock No.	Size HxWxD	Wt., Lbs.	EACH
42 A 7895	*2½x4x1½"	1	.39
42 A 7885	6½x3¾x2"	1 1/4	.66
42 A 7886	6½x5½x2½"	2	.89

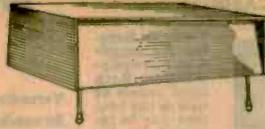
  

MATCHING COVERS			
Stock No.	Size HxWxD	Wt., Lbs.	EACH
42 A 7887	6x3½x2"	3/4	.45
42 A 7888	6½x3¾x2"	1	.61
42 A 7896	4½x2½"	1/2	.30

# Bud Metal Cabinets and Cases

## TILT-A-VIEW CABINETS

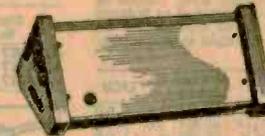
Slanted front face and vertical rear face of cabinet provide a number of viewpoints to allow accurate, no-glare reading of equipment. Detachable legs, 18-ga. steel construction. Scratch-resistant gray and brown finish.



Stock No.	Mfr's Type	HxWxD	Wt., Lbs.	EACH
42 A 7377 X	TV-2155	4 1/2 x 15 x 10"	7	8.10
42 A 7378 X	TV-2156	6 1/2 x 16 x 12"	12 1/2	9.50
42 A 7379 X	TV-2157	8 1/2 x 17 x 14"	17	13.80

## MARK-T CABINETS

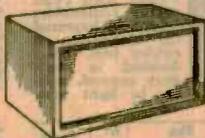
Entire contents are visible and accessible through opening door. Door and front panel can be removed. Self-adjusting latch, 16-ga. all-welded steel construction. Rubber feet, recessed carrying handles. Charcoal-gray finish, light gray panel and door.



Stock No.	Mfr's Type	Width	Panel Size	Wt., Lbs.	EACH
42 A 7384 X	MT-214	16"	5 1/4 x 14"	9	30.40
42 A 7385 X	MT-219	21"	5 1/4 x 19"	12	33.30
42 A 7386 X	MT-224	26"	5 1/4 x 24"	14 1/2	39.20

## MULTI-PURPOSE FUTURA CABINETS

Cabinet has removable top and side. The front panel is flange held, no screws required. Body and rear panel are of 20-gauge steel; front panel, both vertical and 15° incline, are of 18-gauge steel. Each has four rubber feet mounted on base. Chassis may be mounted to the base, front or to the rear panel. Cabinet comes with a smooth blue or gray finish. Spotly finish desired.



Stock No.	Type	Size, HxWxD	Panel Style	Wt., Lbs.	EACH
42 A 8732 CX	1960	7x13x8"	Vertical	6 1/4	9.00
42 A 8737 CX	1965	8x16x9"	Inclined	8 1/4	12.00

## STREAMLINED CABINETS

Ideal for small electrical and electronic devices. Ruggedly built. Recessed hinged-cover has convenient finger-lift for easy opening. Complete access to components. Front panel fits flush with embossed, rounded front corners. Panel is removable for chassis installation or cutouts. 3/4" high opening in rear for cables or controls. Louvered sides provide ample ventilation. Steel, 20-gauge body and 18-gauge panel, 8" high x 8 1/2" deep, except \*12" high x 12" deep.



Stock No.	Mfr's Type	Width	Panel Space	Wt., Lbs.	EACH
42 A 7592 C	CD-1480	10 1/2"	8x8"	6 1/4	7.60
42 A 7593 C	CD-1481	12 1/2"	8x10"	6	7.70
42 A 7594 CX	CD-1482	14 1/2"	8x12"	7 1/2	8.20
42 A 7595 CX	CD-1483	16 1/2"	8x14"	8 1/2	8.80
42 A 7596 CX	CD-1484	18 1/2"	8x16"	9 1/2	9.40
42 A 7597 CX	CD-1485*	20 1/2"	12x18"	16 1/4	19.20

## WALL-TYPE SPEAKER CASES

Rugged, versatile steel speaker cases for use on wall or table. Will not warp or split. Designed and built to be unaffected by weather and temperature conditions. Keyway holes are provided for wall-mounting and four embossed feet for table-mounting. Brown wrinkle enamel finish.



Stock No.	Mfr's Type	Hole Size	Spkr. Size	Size HxWxD	Wt., Lbs.	EACH
42 A 8771	CS-1948	3 1/2"	4"	7 1/2 x 6 1/2 x 4 1/2"	1 3/4	3.60
42 A 8772	CS-1939	4"	5"	7 1/2 x 6 1/2 x 4 1/2"	1 3/4	3.80
42 A 8773	CS-1940	4 1/2"	6"	9 1/2 x 8 x 5 1/2"	3	4.30
42 A 8774	CS-1941	6 1/2"	8"	11 1/2 x 9 1/2 x 7"	4	5.50

## ALUMINUM COWL-TYPE MINIBOXES

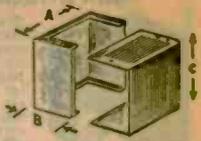
Bud's cowl-type miniboxes. Attractively styled; easily drilled or punched. Have projecting cover which reduces glare on the panel from overhead lighting. Also provide protection for knobs, switches, and meter faces. May be used for housing receivers, transmitters, test equipment, etc. Cover has two 1/2" box braces to which bottom is attached with #6 sheet metal screws provided. This construction results in a sturdy, rigid housing. All are made of long-lasting, 18-gauge aluminum. Choice of handsome, gray hammertone finish or natural aluminum.



Size HxWxD	Shpg. Wt., Lbs.	Gray Hammertone	Type SC-	EACH	Natural Aluminum	Type SC-	EACH
6x10x7"	2	42 A 8684	2130	7.30	42 A 8688	3030	5.30
7x12x8"	2 1/4	42 A 8685	2131	8.00	42 A 8689	3031	5.80
3x8x6"	1	42 A 8686	2132	4.30	42 A 8690	3032	3.00
5x5x5"	1	42 A 8687	2133	4.30	42 A 8691	3033	3.20

## ALUMINUM MINIBOXES

Two-piece aluminum boxes with gray hammertone or natural aluminum finish. Particularly suited for sub-assemblies. May be used for amplifiers, converters, TVI filters, test units, etc. Two-piece construction permits easy access to circuitry. Flanges assure low RF leakage and high rigidity. Dual-purpose snap locks permit quick assembly and disassembly; also permit use with self-tapping screws (supplied).



Size AxCxH	Shpg. Wt., Lbs.	Gray Hammertone	Type CU-	EA.	Natural Aluminum	Type CU-	EACH
2 1/4 x 2 1/2 x 1 3/8"	1/4	42 A 7616	2100A	.90	42 A 7634	3000A	.80
3 1/4 x 2 1/2 x 1 1/2"	1/4	42 A 7633	2117A	1.10	42 A 7651	3017A	.80
3 1/2 x 2 1/2 x 1 1/2"	1/4	42 A 7617	2101A	.90	42 A 7635	3001A	.80
4x2x2 1/2"	1/4	42 A 7631	2115A	1.10	42 A 7649	3015A	1.00
4x2 1/2 x 1 1/2"	1/4	42 A 7618	2102A	1.00	42 A 7636	3002A	.80
4x2 1/4 x 2 1/4"	1/4	42 A 7619	2103A	1.10	42 A 7637	3003A	1.10
4 1/4 x 2 1/4 x 1 1/2"	1/4	42 A 7632	2116A	1.10	42 A 7650	3016A	1.00
5x2 1/4 x 2 1/4"	1/4	42 A 7620	2104A	1.20	42 A 7638	3004A	1.10
5x4x3"	1/2	42 A 7621	2105A	.50	42 A 7639	3005A	1.10
5 1/4 x 3 x 2 1/4"	1/2	42 A 7622	2106A	1.30	42 A 7640	3006A	1.10
6x5x4"	3/4	42 A 7623	2107A	1.90	42 A 7641	3007A	1.40
7x5x3"	3/4	42 A 7624	2108A	2.20	42 A 7642	3008A	1.80
8x8x3 1/2"	1	42 A 7625	2109A	2.60	42 A 7643	3009A	2.30
10x2x3 1/2"	1 1/2	42 A 7629	2113A	1.60	42 A 7647	3013A	1.30
10x6x3 1/2"	1 1/2	42 A 7626	2110A	3.00	42 A 7644	3010A	2.50
12x7 1/2 x 2 1/4"	1 3/4	42 A 7630	2114A	2.10	42 A 7648	3014A	1.80
12x7 1/2 x 2 1/4"	1 3/4	42 A 7627	2111A	4.20	42 A 7645	3011A	3.50
17x5x4"	2 1/4	42 A 7628	2112A	4.20	42 A 7646	3012A	3.50

## 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. \*Gray aluminum.



Size, HxWxD	Mfr's Type	Wt., Lbs.	Black Steel	Gray Steel	EACH
4x4x2"	CU883	3/4	42 A 7856	42 A 7606	1.40
4x4x3"	CU248	1	42 A 7857	42 A 7607	1.60
6x5x4"	CU729	1 1/4	42 A 7858	42 A 7608	1.80
6x6x6"	CU1098	2 1/2	42 A 7859	42 A 7609	2.80
9x6x5"	CU1099	3	42 A 7860	42 A 7610	3.00
10x8x7"	CU879	5	42 A 7861	42 A 7611	4.30
10x10x8"	CU880	5 1/2	42 A 7863	42 A 7613	5.20
12x12x6"	CU1124	4	42 A 7862	42 A 7612	4.20
12x12x8"	CU881	6	42 A 7864	42 A 7614	5.70
15x9x7"	CU882	7 1/2	42 A 7865	42 A 7615	5.80

Size, HxWxD	Mfr's Type	Wt., Lbs.	Natural Aluminum	EACH	*Hammertone Aluminum	EACH
4x4x2"	AJ-1083	3/4	42 A 8543	1.80	42 A 8548	2.00
4x4x3"	AJ-1084	1	42 A 8544	1.80	42 A 8549	2.30
6x5x4"	AJ-1029	1 1/2	42 A 8545	2.00	42 A 8550	2.40
6x6x6"	AJ-1039	2 1/2	42 A 8546	2.90	42 A 8551	3.20
9x6x5"	AJ-1040	3	42 A 8547	3.30	42 A 8552	4.00

## UNIVERSAL SLOPING-PANEL CABINETS

Versatile, streamlined sloping-panel cabinets available in steel or aluminum. Offer enough space to house a two or three-miniature-tube amplifier or gadget. Sides and one-piece detachable back fasten to the 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 are 4" high, 4 1/4" deep. Finished in attractive gray hammertone.



Width	Steel Stock No.	Type	Shpg. Wt., Lbs.	EA.	Aluminum Stock No.	Type AC-	Shpg. Wt., Lbs.	EA.
4"	42 A 8642	1606	3/4	1.90	42 A 8646	1610	1/2	2.40
5"	42 A 8643	1607	3/4	2.00	42 A 8647	1611	1/2	2.30
6"	42 A 8644	1608	1 1/8	2.20	42 A 8648	1612	3/4	2.50
7"	42 A 8645	1609	1 1/8	2.50	42 A 8649	1613	3/4	2.80

## 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 1/2"; Type C-1585, 7x8x2 1/2"; Type 1586, 7x10x2 1/2"; Type C-1587, 7x12x2 1/2"; Type C-1588, 7x9x2"; Type C-1892, 8x12x2 1/2"; Type C-1893, 10x17x3 1/2"; Type C-1894, 7x13x2 1/2"; Type C-1896, 7x17x3 1/2".



## SPECIFY BLACK WRINKLE OR LIGHT GRAY HAMMERTONE

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH
42 A 7466 C	C-1584	6 1/2 x 7 1/4 x 7 1/2"	2 1/4	4.30
42 A 7467 C	C-1585	6 1/2 x 9 1/4 x 7 1/2"	3	4.70
42 A 7468 C	C-1586	6 1/2 x 11 1/4 x 7 1/2"	3 1/2	5.40
42 A 7469 C	C-1892	8x13 1/2 x 3 1/2"	5 1/4	7.40
42 A 7470 CX	C-1893	10x18 1/2 x 10 1/2"	12	9.80
42 A 7471 C	C-1587	8x8 1/2 x 7 1/4"	2 1/4	5.70
42 A 7472 C	C-1588	8x10 1/2 x 7 1/4"	3 1/4	6.30
42 A 7474 C	C-1894	8x14 1/2 x 7 1/4"	6 1/4	6.70
42 A 7475 CX	C-1896	9x18 1/2 x 8 1/4"	6 1/2	9.40



# Select the best in TV-FM Antennas and Rotators from Allied's complete extra-value lines

GET FINEST COLOR AND BLACK-AND-WHITE TV PICTURES

## OUTDOOR ANTENNA

**Allied's Antennas Offer Better Color-TV Pictures**—good color-TV demands an antenna with flat frequency response. Color antennas in Allied's catalog have this flat response, plus sharp directivity to fight unwanted signals that spoil color pictures.

**Worn-Out Antennas Destroy Picture Quality**—ghosts, snow, and other interference can be caused by a weather-worn antenna system. Before blaming your TV, check your antenna.

**It's Easy to Install Your Own TV Antenna**—all antennas in this catalog are designed for easy installation. Use regular household tools. You can usually use your present antenna mast. But check your present lead-in-wire—worn lead-in spoils pictures.

## PRECISION ROTATOR

**Color TV Comes Alive with a Good Antenna Rotator**—only a well-aimed antenna gets the lifelike color pictures you expect. If your picture varies in quality from station-to-station, or you live in a fringe area, a rotator may be a "must."

**Rotators Improve Stereo-FM Reception**—if you live in a difficult or fringe area, a rotator can tune out unwanted multipath (ghost) signals for superior channel separation, freedom from interference, and reduced distortion. Improves monophonic FM, too.

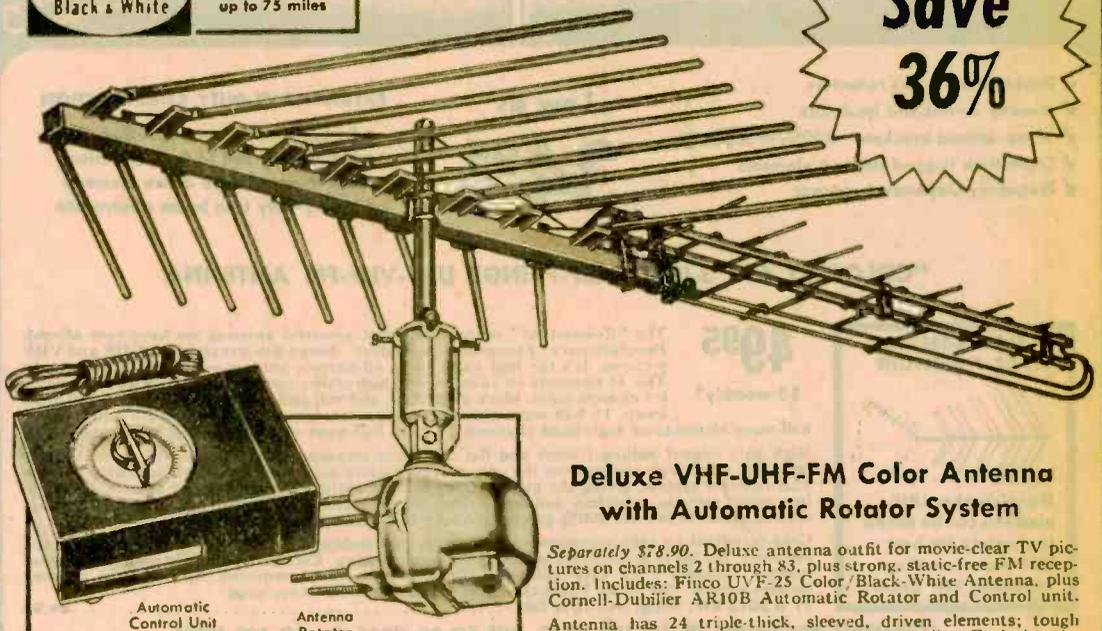
**Receive Stations from More than One City**—many communities receive signals from more than one locale. A rotator makes it easy to zero-in on each station, no matter where it's located.

## Extra Savings on This 82-Channel Finco Antenna with CDE Automatic Rotator

DESIGNED for **COLOR** and **Black & White**

VHF-FM up to 125 miles... UHF up to 75 miles

Save 36%



### Deluxe VHF-UHF-FM Color Antenna with Automatic Rotator System

Separately \$78.90. Deluxe antenna outfit for movie-clear TV pictures on channels 2 through 83, plus strong, static-free FM reception. Includes: Finco UVF-25 Color/Black-White Antenna, plus Cornell-Dubilier AR10B Automatic Rotator and Control unit.

Antenna has 24 triple-thick, sleeved, driven elements; tough 143½" square boom; continuous one-piece drive line. Exclusive air-insulated crossover spacer. Lock-tite, no-tilt saddle bracket; double contact to drive line; revolutionary step-staggering UHF section; rust-fighting weatherproof "Gold Corodized" finish. Requires only one down-lead. UHF-VHF splitter included.

Automatic rotator assures best possible reception from each station, especially in fringe areas. Just set pointer on control unit's compass dial to desired direction and antenna turns automatically. Turning radius up to 6½ feet. Rotator adapter gives added support to mast. Thrust bearing permits mounting of antenna 5 feet above rotator for easier movement. Mounts on chimney, etc. Less mast. Sent express.

11 A 0468 L22 W, Shpg. wt., 27 lbs. . . . . 49.95

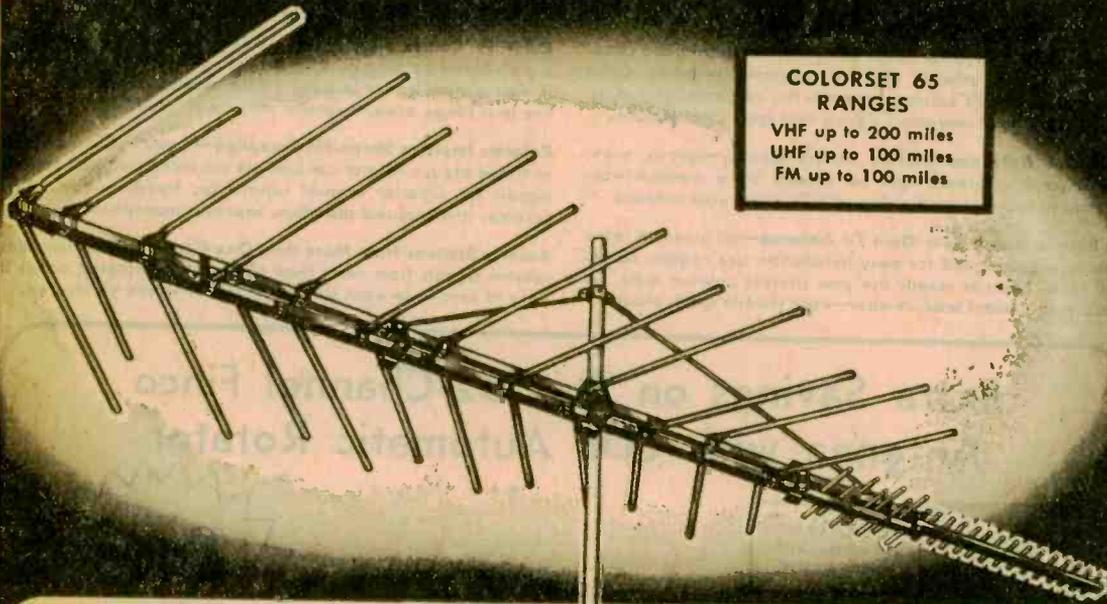
### COMPLETE OUTFIT

**49<sup>95</sup>** \$5 monthly (SEE PAGE 438) **Save \$28.95**

- Movie-clear TV pictures and static-free FM
- Zeros-in on stations from more than one city
- Gold-Corodized to fight rust and corrosion



# Allied Super Power "Colorset" UHF-VHF-FM Antennas... our best!



**COLORSET 65  
RANGES**  
VHF up to 200 miles  
UHF up to 100 miles  
FM up to 100 miles

- ✓ Double dual-action reflectors
- ✓ Massive arrowhead insulators
- ✓ Wrap-around brackets—300% stronger
- ✓ Triple-thick rugged sleeved elements
- ✓ Frequency-Dependent concept

Low as

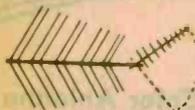
**34<sup>95</sup>**

**EXTRA-HEAVY-DUTY CONSTRUCTION**

- Bridge-type boom suspension
- Gold-corodized to fight corrosion
- Super-power—68 active elements
- Heavy-duty twin boom construction

## "COLORSET 65" 3-IN-1 DEEP-FRINGE UHF-VHF-FM ANTENNA

**SIGNAL-SEEKER  
FOR FINEST UHF**



Signal-Seeker UHF elements can be aimed separately for best UHF pictures without sacrificing VHF quality

**49<sup>95</sup>**

\$5 monthly\*

The "Colorset 65" is the best, most powerful antenna we have ever offered. Revolutionary "Frequency-Dependent" design delivers sharpest UHF and VHF pictures. It's the best value in an all-purpose antenna—compare other brands. The 34 elements on twin boom construction operate as 68 half-wave elements for clearest color, black-and-white, and will pull in FM stations up to 100 miles away. 11 half-wave elements operate on low band channels 2-6 and FM, 35 half-wave elements on high-band channels 7-13; 22 half-wave elements on UHF channels 14-83. High gain (signal pulling power) and flat frequency response assure clearest pictures. Greatly improved directivity results from the very narrow pattern achieved. This, combined with the new dual reflector system, giving the highest front-to-back ratio, fights ghosts and assures distortion free color, even in suburban and deep-fringe areas. Massive arrowhead insulators with wrap-around brackets provide 300% greater strength than ordinary construction. Gold-corodized to fight corrosion and maintain its handsome appearance. Triple-thick, sleeved elements. Bridge-type boom construction prevents sagging. Exclusive boom support and sideway control. Includes UHF-VHF splitter—only one down-lead is required. Special filter network isolates signals. 300 ohms. Foam-type lead-in recommended. Less mast. 11 A 2013 ZW. Shpg. wt., 16¼ lbs. .... 49.95

## "COLORSET 60A"—VHF UP TO 190 MILES, UHF TO 90 MILES, FM TO 100 MILES

**39<sup>95</sup>**

\$5 monthly\*

Similar to the advanced design of the "Colorset 65" but for use in mid-to-far fringe areas. Vivid true-to-life color, plus sharp black-and-white TV and clear FM. Twin-boom construction with 30 physical elements operating as 9 half-wave elements on Ch. 2-6, 28 half-wave elements on Ch.

7-13, and 20 half-wave elements operating on the UHF channels. Boom length is 178". You get sharp pictures all channels—VHF and UHF, plus distortion-free FM and FM stereo reception. Gold corodized. Includes UHF-VHF signal splitter. 300 ohms. Foam type lead-in recommended. Less mast. 11 A 2014 ZW. Shpg. wt., 14 lbs. .... 39.95

## "COLORSET 55A"—VHF UP TO 180 MILES, UHF TO 80 MILES, FM TO 90 MILES

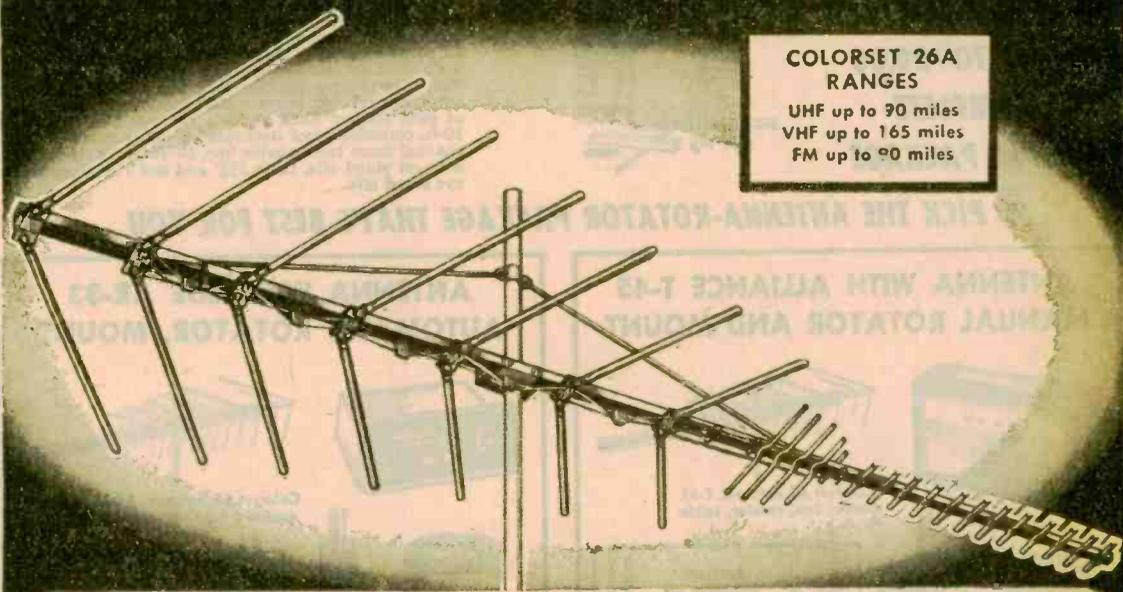
**34<sup>95</sup>**

\$5 monthly\*

"Frequency Dependent" design for true-to-life color, sharp black-and-white and clear FM. Twin boom construction with 28 physical elements operating as 7 half-wave elements on the Ch. 2-6, 22 half-wave elements on Ch. 7-13 and 20 half-

wave elements on UHF. You are assured of sharp pictures on all VHF and UHF channels, plus FM or FM stereo reception. Boom length is 159". Gold corodized to fight rust. Includes UHF-VHF signal splitter. 300 ohms. Less mast. 11 A 2015 ZW. Shpg. wt., 11½ lbs. .... 34.95

# Allied Extra-Value "Colorset" UHF-VHF-FM Antennas . Priced Low



## COLORSET 26A RANGES

UHF up to 90 miles  
VHF up to 165 miles  
FM up to 90 miles

- ✓ Patented Frequency-Dependent design
- ✓ Excellent for FM and FM stereo
- ✓ Sharp, clear true color reception
- ✓ 3-in-1 antenna serves all needs
- ✓ Heavy-duty one-inch square boom
- ✓ Powerful multiple-drive elements

Low as

**14<sup>95</sup>**

### HEAVY-DUTY CONSTRUCTION

- Protective gold corodized finish
- One-piece UHF and VHF drive lines
- Offers years of trouble-free service
- High-impact crossover spacers

## "COLORSET 26A" POWERFUL DEEP-FRINGE UHF-VHF-FM ANTENNA

**29<sup>95</sup>** This powerful deep-fringe antenna boasts "Frequency Dependent" design, a new concept in antenna design. Gain on UHF channels 14-83 is greatly improved. Just one antenna serves all your needs—VHF channels 2-13, UHF channels 14-83, and FM stereo. Has 26 active elements so that even in problem or fringe areas you get more signal power and flat response. Multiple drive elements provide increased power. Sharply directive design fights ghosts. One-piece UHF

and VHF drive lines; bracket reinforced elements for extra strength; snap-lock brackets; high-impact crossover spacers; channel type UHF elements of spring-temper aluminum. Suspension support for 1" square 123½" long boom. Preassembled. Maximum width open is 9". Adaptable to 75-ohm cable using Allied 75-ohm Conversion Kit. For 300 ohms, use foam-type lead-in; for 75 ohms, coax. Requires only one down-lead; includes UHF-VHF splitter. Impedance, 300 ohms. Less mast. 11 A 2016 ZW. Shpg. wt., 9½ lbs. . . . . 29.95

### "COLORSET 20A" FRINGE ANTENNA

**24<sup>95</sup>** Receive clear pictures with this fringe area antenna. Delivers high power and flat response from suburban and problem areas. UHF up to 70 miles. **\$5 monthly** \* VHF up to 135 miles, FM up to 70 miles. Heavy-duty 1" square boom, 93" long. Snap-lock bracket.

ets. Preassembled. Foam-type lead-in recommended. Gold-corodized for protection from rust and corrosion. Only one down-lead required. With UHF-VHF signal splitter for easy connection of leads to TV set terminals. 300 ohms. Less mast. 11 A 2017 ZW. With splitter Shpg. wt., 7¼ lbs. . . . . 24.95

### "COLORSET 15A" NEAR-FRINGE ANTENNA

**14<sup>95</sup>** UHF up to 60 miles, VHF up to 75 miles, FM up to 60 miles. Channel-type UHF elements. 1" square heavy-duty 69" boom. Spring temper

aluminum drive lines. Gold-corodized to fight corrosion. Preassembled. Foam-type lead-in recommended. 300 ohms. Less mast. 11 A 2019 ZW. Shpg. wt., 5¼ lbs. . . . . 14.95

### ALLIED 75-OHM CABLE CONVERSION KIT

Convert Colorset Series 300-ohm antennas to use 75-ohm coaxial cable down-lead for improved reception. Includes 75-ohm transformer that mounts in prepunched holes on Colorset antennas. Behind set transformer matches 75-ohm coax down-lead and splits UHF and VHF for 300-ohm terminals. Complete. 11 A 1337. Shpg. wt., 1 lb. . . . . 5.95



### ALLIED UHF-VHF-FM SPLITTER-COUPLER

For use with Colorset Series, or other UHF-VHF-FM antennas using single down-lead. "Splits" signal from antennas to permit running 3 independent leads to receiver terminals—UHF and VHF TV, and FM. Comes complete with instructions and hardware for mounting on mast or behind receiver. 11 A 1340. Wt., 5 oz. . . . . 4.95



\*Buy with no money down . . . full credit details on page 438

# Get Better TV-FM Reception and Save Money with an Allied VHF-UHF-FM Antenna/Rotator Outfit

**DO IT YOURSELF AND SAVE UP TO \$20.00 ON A COMPLETE ANTENNA PACKAGE**



Get everything you need to make your complete VHF/UHF TV-FM antenna installation and save money too. Antennas are engineered by Allied for ease of installation and top performance. Receive all TV channels from 2 to 83, plus FM. Each of the antenna packages below includes a Colorset antenna—Model 65, 60A, 55A, 26A, or 20A. You may order a package including manual rotator or automatic rotator. Rotator lets you aim antenna directly at each station. Each antenna package also includes a 10-ft. corrosion-proof steel mast, chimney mount, 50' all-channel foam transmission line, 50' rotator cable, 2 mast snap-on stand offs, three 3 1/2" and one 7 1/2" wood screw eye stand offs.

**PICK THE ANTENNA-ROTATOR PACKAGE THAT'S BEST FOR YOU**

## ANTENNA WITH ALLIANCE T-45 MANUAL ROTATOR AND MOUNT



Colorset 65 antenna, T-45 control box, rotator, cable

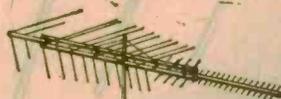


Accessory Mounting Kit

COMPLETE OUTFIT

Low as **46<sup>88</sup>**

## ANTENNA WITH CDE AR-33 AUTOMATIC ROTATOR, MOUNT



Colorset 65 antenna, AR-33 control box, rotator, cable



Accessory Mounting Kit

COMPLETE OUTFIT

Low as **69<sup>85</sup>**

### SUPER-POWER ANTENNA/MANUAL ROTATOR SYSTEM

Separately, \$79.88. Includes: Colorset 65 Antenna; Alliance T-45 Manual Rotator with control box and cable; Finco 10-ft. corrosion-proof steel mast with chimney mount, 50' all-channel foam transmission line, 2 snap-on stand offs, three 3 1/2" and one 7 1/2" wood screw eye stand offs, instructions. Antenna features frequency-dependent design for sharper-than-ever UHF and VHF reception. The 34 physical elements on the twin-boom construction operate as 68 half-wave elements to provide movie-clear pictures in color and black-and-white, and extra-clear FM. Maximum mile range: VHF, 200; UHF, 100; FM, 100. 300 ohms. Just touch the control bar on the control unit, and rotator turns antenna at 1 rpm clockwise or counter-clockwise until you release—pointer shows direction. Extra control units may be added. U.L. Listed. 117 VAC.

11 A 0420 L3Z W. Shpg. wt., 38 1/4 lbs. .... 63.88

### FAR-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 60A Antenna, T-45 Rotator, all access. above. 30 elements. Max. mile range: VHF, 190; UHF, 90; FM, 100. Wt., 36 lbs.

11 A 0421 L3Z W. Separately, \$69.88 ..... 58.88

### MID-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 55A Antenna, T-45 Rotator, all access. above. 28 elements. Max. mile range: VHF, 180; UHF, 80; FM, 90. Wt., 33 1/2 lbs.

11 A 0422 L3Z W. Separately, \$64.88 ..... 54.88

### SUBURBAN ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 26A Antenna, T-45 Rotator, all access. above. 13 elements. Max. mile range: VHF, 165; UHF, 90; FM, 90. Wt., 31 1/2 lbs.

11 A 0423 L3Z W. Separately, \$59.88 ..... 50.88

### METROPOLITAN ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 20A Antenna, T-45 Rotator, all access. above. 10 elements. Max. mile range: VHF, 135; UHF, 70; FM, 75. Wt., 29 1/2 lbs.

11 A 0424 L3Z W. Separately, \$54.88 ..... 46.88

### SUPER-POWER ANTENNA/AUTOMATIC ROTATOR SYSTEM

Separately, \$105.85. System includes: Colorset 65 Antenna; Cornell-Dubilier AR-33 Automatic Rotator with control box and cable; 10-ft. corrosion-proof steel mast with chimney mount, 50' all-channel foam transmission line, 2 snap-on stand offs, three 3 1/2" and one 7 1/2" wood screw eye stand offs, instructions. Antenna boasts swivel UHF section for independent orientation of VHF and UHF. Dual reflectors give high front-back ratio for maximum ghost rejection. Antenna boom length, 210". 300 ohms. Solid-state automatic rotator system allows you to preset antenna direction for up to 5 channels. Then sit back in your chair, press the button on the control unit for the desired channel, and the antenna rotates automatically to the preset direction for the sharpest possible color or black-and-white picture. U.L. listed. For 117 VAC.

11 A 0425 L3Z W. Shpg. wt., 43 1/4 lbs. .... 85.85

### FAR-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 60A Antenna, AR-33 Rotator, and all accessories above. Antenna boom length, 178". Mileage ranges at left. Wt., 41 lbs.

11 A 0427 L3Z W. Separately, \$95.85 ..... 81.85

### MID-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 55A Antenna, AR-33 Rotator, and all accessories above. Antenna boom length, 159". Mileage ranges at left. Wt., 38 1/2 lbs.

11 A 0428 L3Z W. Separately, \$90.85 ..... 77.85

### SUBURBAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 26A Antenna, AR-33 Antenna, and all accessories above. Antenna boom length, 123 1/2". Mileage ranges at left. Wt., 36 1/2 lbs.

11 A 0429 L3Z W. Separately, \$85.85 ..... 73.85

### METROPOLITAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 20A Antenna, AR-33 Antenna, and all accessories above. Antenna boom length, 104". Mileage ranges at left. Wt., 34 1/2 lbs.

11 A 0430 L3Z W. Separately, \$80.85 ..... 69.85

# Save up to 11% on a JFD Antenna plus Rotator 82-Channel UHF-VHF-FM Antenna Outfit

## PICK THE JFD ANTENNA SYSTEM THAT FILLS YOUR SPECIAL NEEDS

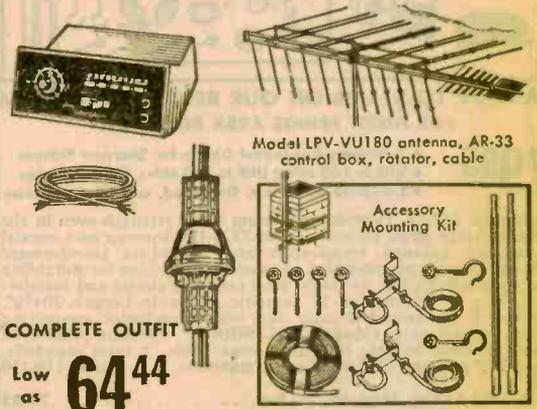
Enjoy best possible TV and FM coverage with a deluxe antenna system. There's nothing else to buy—you get everything you need for a complete installation. Available in two different combinations—manual-control rotator outfit or pushbutton rotator outfit. And

you save money, too. Outfit prices are less than the total price of individual components purchased separately. Take advantage of this Allied offer and enjoy improved reception with a complete antenna outfit.

### ANTENNA WITH ALLIANCE T-45 MANUAL ROTATOR AND MOUNT



### ANTENNA WITH CDE AR-33 AUTOMATIC ROTATOR, MOUNT



#### EXTRA-POWER ANTENNA/MANUAL ROTATOR SYSTEM

Separately, \$78.63. Includes: JFD LPV-VU180 Antenna; Alliance T-45 Manual Rotator with control box and cable; 10-ft. corrosion-proof steel mast with chimney mount, 50' all-channel foam transmission line, 2 snap-on stand offs, three 3/4" and one 7/2" wood screw eye stand offs, instructions. Antenna features frequency independent log-periodic design for broad-band performance without discriminating against any channel or frequency. Receives channels 2-83 plus FM. Preassembled. Has 35 elements. Max. mile range: VHF, 150; UHF, 90; FM, 60. 300 ohms. Rotator turns antenna clockwise or counter-clockwise. Just touch the control bar on the unit, antenna rotates at 1 rpm until you release bar—pointer shows direction. Extra units may be added. U.L. Listed. 117 VAC.  
11 A 0431 L3Z W. Shpg. wt., 42 lbs. . . . . 71.63

#### EXTRA-POWER ANTENNA/AUTOMATIC ROTATOR SYSTEM

Separately, \$104.60. JFD LPV-VU180 Antenna; Cornell-Dubilier AR-33 Automatic Rotator with control box and cable; 10-ft. corrosion-proof steel mast with chimney mount, 50' all-channel foam transmission line, 2 snap-on stand offs, three 3/4" and one 7/2" wood screw eye stand offs, and instructions. Antenna boom length, 206". Maximum width, 92". Impedance, 300 ohms. Rotator system features all-silicon transistor circuit. Each of five pushbuttons on control unit can be set for a specific TV station. Just press the button for the desired channel—antenna rotates automatically to the preset direction for the finest possible picture. Completely silent—accurately positions antenna within ±1% for precise directivity. U.L. Listed. 117 VAC.  
11 A 0438 L3Z W. Shpg. wt., 47 lbs. . . . . 93.60

#### FAR-FRinge ANTENNA/MANUAL ROTATOR SYSTEM

LPV-VU150 Antenna, T-45 Rotator, all access. above. 30 elements. Max. mile range: VHF, 125; UHF, 80; FM, 50. Wt., 37 lbs.  
11 A 0432 L3Z W. Separately, \$71.68 . . . . . 65.68

#### FAR-FRinge ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU150 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 175 1/2". Maximum width, 92 1/2". Wt., 42 lbs.  
11 A 0439 L3Z W. Separately, \$97.65 . . . . . 87.65

#### MID-FRinge ANTENNA/MANUAL ROTATOR SYSTEM

LPV-VU120 Antenna, T-45 Rotator, all access. above. 26 elements. Max. mile range: VHF, 110; UHF, 70; FM, 50. Wt., 37 lbs.  
11 A 0433 L3Z W. Separately, \$64.70 . . . . . 59.70

#### MID-FRinge ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU120 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 157". Maximum width, 92 1/2". Wt., 42 lbs.  
11 A 0440 L3Z W. Separately, \$90.67 . . . . . 81.67

#### NEAR-FRinge ANTENNA/MANUAL ROTATOR SYSTEM

LPV-VU90 Antenna, T-45 Rotator, all access. above. 21 elements. Max. mile range: VHF, 70; UHF, 60; FM, 40. Wt., 34 lbs.  
11 A 0434 L3Z W. Separately, \$57.75 . . . . . 52.75

#### NEAR-FRinge ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU90 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 119". Maximum width, 92 1/2". Wt., 39 lbs.  
11 A 0441 L3Z W. Separately, \$83.72 . . . . . 75.72

#### SUBURBAN ANTENNA/MANUAL ROTATOR SYSTEM

LPV-VU60 Antenna, T-45 Rotator, all access. above. 14 elements. Max. mile range: VHF, 70; UHF, 40; FM, 30. Wt., 32 lbs.  
11 A 0435 L3Z W. Separately, \$50.35 . . . . . 46.35

#### SUBURBAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU60 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 97". Maximum width, 91". Wt., 37 lbs.  
11 A 0450 L3Z W. Separately, \$76.32 . . . . . 68.32

#### METROPOLITAN ANTENNA/MANUAL ROTATOR SYSTEM

LPV-VU40 Antenna, T-45 Rotator, all access. above. 11 elements. Max. mile range: VHF, 50; UHF, 30; FM, 25. Wt., 29 1/2 lbs.  
11 A 0436 L3Z W. Separately, \$46.20 . . . . . 43.20

#### METROPOLITAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU40 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 67 1/2". Maximum width, 88". Wt., 34 1/2 lbs.  
11 A 0451 L3Z W. Separately, \$72.17 . . . . . 65.17

#### CLOSE-RANGE ANTENNA/MANUAL ROTATOR SYSTEM

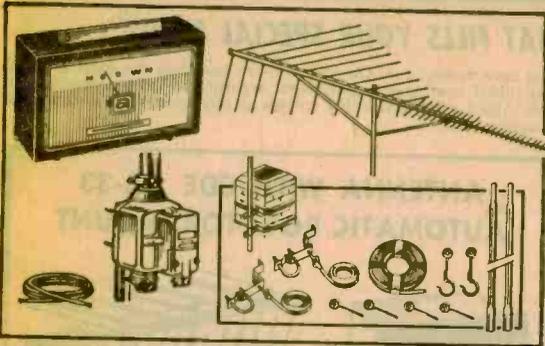
LPV-VU30 Antenna, T-45 Rotator, all access. above. 9 elements. Max. mile range: VHF, 40; UHF, 30; FM, 20. Wt., 27 1/2 lbs.  
11 A 0437 L3Z W. Separately, \$44.37 . . . . . 41.87

#### CLOSE-RANGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU30 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 46 1/2". Maximum width, 91". Wt., 32 1/2 lbs.  
11 A 0452 L3Z W. Separately, \$70.44 . . . . . 64.44

**SHIPPING NOTE:** Items with suffix U, W or Z in stock no. are sent truck or express. See Ordering Information pages.

# Finco VHF-UHF-FM Color Spectrum 75-ohm Coax Antenna - Rotator Systems for Better Reception



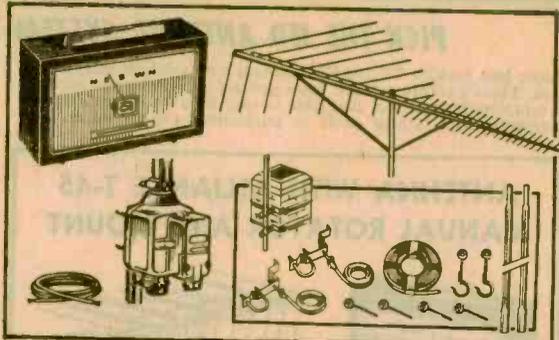
**SAVE UP TO \$15.26 ON OUR BEST FINCO SYSTEM FOR FINEST FRINGE AREA RECEPTION**

**7995**

- Frequency-Dependent Design for Sharpest Pictures
- VHF to 160 Miles, UHF to 100 Miles, FM to 70 Miles
- Complete with Mast, Downlead, and all Accessories

*Separately, \$89.24.* Provides maximum signal strength even in the weakest fringe areas. Includes Finco XCS-D3 Antenna with coaxial connectors, antenna transformer and behind-set transformer/splitter. Sturdy, preassembled snap-out construction for durability and easy installation. Isolation stub prevents ghosts and interference. Has 19 driven, and 17 parasitic, elements. Length, 204 1/4". Alliance T-45 Manual Rotator has 100' 5-conductor connecting cable. Control unit, 4 1/2 x 6 1/4 x 2 1/2". With 10' corrosion-proof steel mast, chimney mount, 100' foam coax cable, 2 mast standoffs, three 3 1/2" and one 7 1/2" wood screw standoffs. U.L. Listed, 110-120 VAC.

11 A 0456 L4Z W. Shpg. wt., 43 lbs. .... 79.95  
 11 A 0457 L4Z W. *Separately, \$115.21.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 48 lbs. .... 99.95



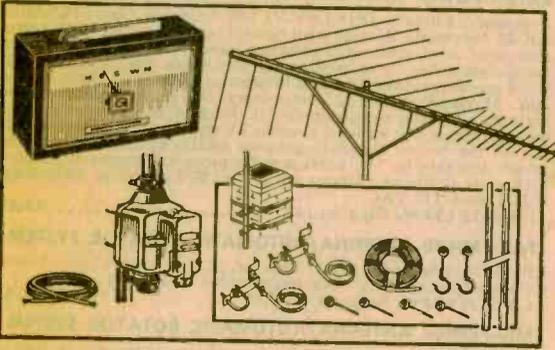
**SAVE UP TO \$11.03 ON POWERFUL FINCO SYSTEM FOR IMPROVED COLOR TV AND STEREO FM**

**7494**

- VHF to 135 Miles, UHF to 100 Miles, FM to 60 Miles
- Frequency-Dependent Design for Finest Performance
- High Front-to-Back Ratio for Best Reception

*Separately, \$82.94.* For weak VHF and very weak UHF fringe areas. Includes Finco XCS-C3 Antenna with coaxial connectors, antenna transformer and behind-set transformer/splitter. Features frequency-dependent design and isolation stub for strong signals. Has 17 driven, and 13 parasitic, elements. Gold-corodized for long-lasting beauty. Length, 166 1/2". Alliance T-45 Manual Rotator rotates clockwise or counter-clockwise at the touch of the control bar, includes 100' 5-conductor cable. With 10' corrosion-proof steel mast, chimney mount, 100' foam coax cable, two mast standoffs, three 3 1/2" and one 7 1/2" wood screw standoffs. U.L. Listed, 110-120 VAC.

11 A 0458 L4Z W. Shpg. wt., 39 lbs. .... 74.94  
 11 A 0459 L4Z W. *Separately, \$108.91.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 44 lbs. .... 97.88



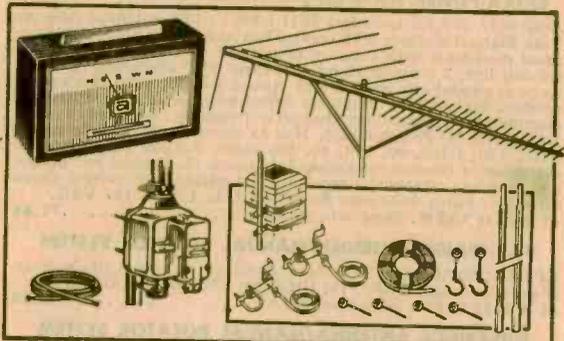
**SAVE UP TO \$11.00 ON VALUE-PRICED SYSTEM FOR SUPERIOR LONG-DISTANCE RECEPTION**

**6990**

- Frequency-Dependent Design for Sharpest Pictures
- VHF to 135 Miles, UHF to 80 Miles, FM to 60 Miles
- Complete with Mast, Downlead, and all Accessories

*Separately, \$77.00.* For weak VHF and UHF fringe areas. Includes Finco XCS-C2 Antenna with coaxial connectors, antenna transformer and behind-set transformer/splitter. Frequency-dependant design assures maximum antenna gain for the higher TV channels and stereo FM, assures greatest signal power where it's needed most. Gold-corodized elements and one-piece drive line. Boom length, 138 1/4". Alliance T-45 Manual Rotator rotates at 1 rpm, includes 100' 5-conductor cable. With 10' corrosion-proof steel mast, chimney mount, 100' foam coax cable, two mast standoffs, three 3 1/2" and one 7 1/2" wood screw standoffs. U.L. Listed, 110-120 VAC.

11 A 0462 L4Z W. Shpg. wt., 38 lbs. .... 69.90  
 11 A 0463 L4Z W. *Separately, \$103.87.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 43 lbs. .... 92.87



**SAVE UP TO \$12.66 ON LOWEST PRICED SYSTEM FOR FINE FRINGE AREA RECEPTION**

**6979**

- Frequency-Dependent Design for Best Performance
- VHF to 95 Miles, UHF to 100 Miles, FM to 50 Miles
- With All Connectors, Transformers, Accessories

*Separately, \$76.64.* Provides good fringe area reception. Includes Finco XCS-B3 Antenna with coaxial connectors, antenna transformer and behind-set transformer. Features frequency-dependent design with isolation stub to provide vivid, ghost-free TV and FM reception. Has 15 driven, and 13 parasitic, elements. Antenna boom length, 139 1/4". Alliance T-45 Manual Rotator orients your antenna at the touch of the control bar for strongest signal and best reception, includes 100' 5-conductor cable. With 10' corrosion-proof steel mast, chimney mount, 100' foam coax cable, two mast standoffs, three 3 1/2" and one 7 1/2" wood screw standoffs. U.L. Listed, 110-120 VAC.

11 A 0464 L4Z W. Shpg. wt., 36 lbs. .... 69.79  
 11 A 0465 L4Z W. *Separately, \$102.61.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 41 lbs. .... 89.95

DESIGNED  
for **COLOR** and  
Black & White

# JFD VHF-UHF-FM Television Antennas

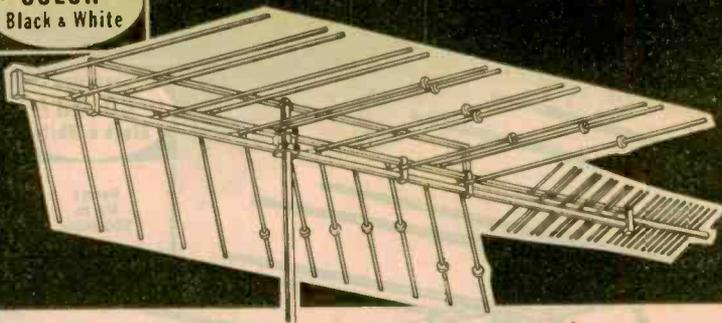
## HERE'S WHY JFD ANTENNAS OFFER SO MUCH VALUE

Built for color or black-and-white TV, plus stereo FM. Deliver excellent TV pictures in virtually every locale. LPV antennas feature harmonically resonant V-elements operating on the log-periodic cellular principle in the fundamental and 3rd harmonic modes.

Provide up to 14 dB gain with extra power on high channels, where it's needed most. Frequency-independent log-periodic design delivers broadband performance without discriminating against any channel or frequency. Response is flat within  $\pm 1/2$  dB on all bands. Sharpest directivity of any all-band antenna fights noise, ghosts and interference for superb reception.

Planar-grid design increases gain, flattens response and narrows beam width for better UHF reception. Capacitor-coupled dipoles vastly increase the number of working elements for maximum gain and directivity on all channels.

"Flip-Quick" lets you snap elements into place in seconds. Gold Alodized finish is electrically conductive and fights corrosion. Life-time stainless-steel take-off terminals. Oversize "tank-turret" element bracket; ultra-durable Polypropylene "X" insulators; twin U-bolts with 6" mast grip span; and permanently riveted aluminum drive-line rod.



## LOG-PERIODIC VHF-UHF-FM ANTENNAS

Low as **1454**

- Receive TV Channels 2-83 plus FM
- Sharp Directivity Fights Ghosts
- Gold-Alodizing Fights Corrosion
- Finest Reception on All Bands
- Sharp Black-and-White Pictures
- With UHF-VHF-FM Splitter

Today's most popular log-periodic design offers extra color sensitivity and efficiency (see description at right). Sturdy, twin square aluminum crossarms, solid aluminum matching transformers, LPV-VU180, LPV-VU150, and LPV-VU120 have boom braces for crossarm support. All log-periodic antennas below have line splitters to run separate leads to VHF, UHF, FM terminals. All antennas are 300 ohms impedance. Foam-type lead-in recommended. Less mast and 300-ohm lead-in cable.

Stock No.	Model No.	Elements	Boom Lgth.	Max. Width	Max. Range Miles			Shpg. Wt. Lbs.	EACH
					VHF	UHF	FM		
11 A 1666 ZW	LPV-VU180	35	206"	92"	150	90	60	20	48.70
11 A 1667 ZW	LPV-VU150	30	175 3/4"	92 1/2"	125	80	50	15	41.75
11 A 1668 ZW	LPV-VU120	26	157"	92 1/2"	110	70	50	15	34.77
11 A 1669 UW	LPV-VU90	21	119"	92 1/2"	90	60	40	12	27.82
11 A 1670 UW	LPV-VU60	14	97"	91"	70	40	30	10	20.42
11 A 1671 UW	LPV-VU40	11	67 1/2"	88"	50	30	25	7 1/2	16.27
11 A 1672 XW	LPV-VU30	9	46 1/2"	91"	40	30	20	5 1/2	14.54

DESIGNED  
for **COLOR** and  
Black & White

# Finco "Color Spectrum" VHF-UHF-FM Antennas



Low as **1887**

- Frequency-Dependent Design for Finest TV or FM
- Sturdy One-Piece Drive Line
- Low-Loss 75-Ohm Coax and 300-Ohm Twin-Lead Types
- Isolation Stub Prevents Ghosts

Swept-element Ve-Log antennas offer superb VHF and UHF reception of color and black-and-white. Drive system features increased spacing toward the high end of VHF and UHF bands for flat response and highest power on each channel. High front-to-back ratio plus built-in isolation stub fights ghosts. Choice of six sizes for either 75 or 300 ohm down lead, plus UVF-25 listed below. 75-ohm models assure superior color pictures with low signal loss and excellent shielding for low noise.

Construction features include heavy-duty 1" square boom in "lock-tite" no-tilt saddle and heavily sleeved elements to combat high winds. Gold-codized to fight corrosion and give long-lasting beauty. Pre-assembled snap-out construction simplifies installation. 300-ohm antennas include behind-set splitter—foam-type lead is recommended. 75-ohm models include coaxial cable connectors and antenna transformer plus behind-set transformer/splitter. All antennas require down lead. Less mast.

## EXCLUSIVE FEATURES OF FINCO ANTENNAS

All Finco antennas have these quality features: One Piece Drive Line with air insulated crossover spacer, triple thick sleeved elements, drive line pedestals to assure positive spacing, double contact to drive line, built-in isolating stub system, non-breakable side-to-side red-color terminals, metal reinforced insulators with insert cups and heavy-duty rivets, 1" square boom with "lock-tite" no-tilt saddle bracket to fight high winds.

75-Ohm Coaxial Cable Color-Spectrum VHF/UHF/FM Antennas

300-Ohm Ve-Log VHF/UHF/FM Antennas

Stock No.	Mfr's Type	Elements			Max. Range Miles			Boom Lgth.	Wt. Lbs.	EACH	Stock No.	Mfr's Type	Elements	EACH
		VHF	UHF	FM	VHF	UHF	FM							
11 A 1458 ZW	XCS-D3	10	26	160	100	70	204 1/2"	14	49.42	11 A 1464 ZW	CS-D3	36	43.50	
11 A 1459 ZW	XCS-C3	8	22	135	100	60	166 1/2"	10	43.12	11 A 1465 ZW	CS-C3	30	37.77	
11 A 1460 ZW	XCS-C2	8	12	135	80	60	138 1/2"	9	38.08	11 A 1466 ZW	CS-C2	20	32.73	
11 A 1461 ZW	XCS-B3	6	22	95	100	50	139 1/2"	7	36.82	11 A 1467 ZW	CS-B3	28	31.47	
11 A 1462 ZW	XCS-B2	6	12	95	80	50	111 1/8"	6 1/2	30.52	11 A 1468 ZW	CS-B2	18	25.17	
11 A 1463 ZW	XCS-B1	6	7	95	50	50	93"	6	24.22	11 A 1469 ZW	CS-B1	13	18.87	

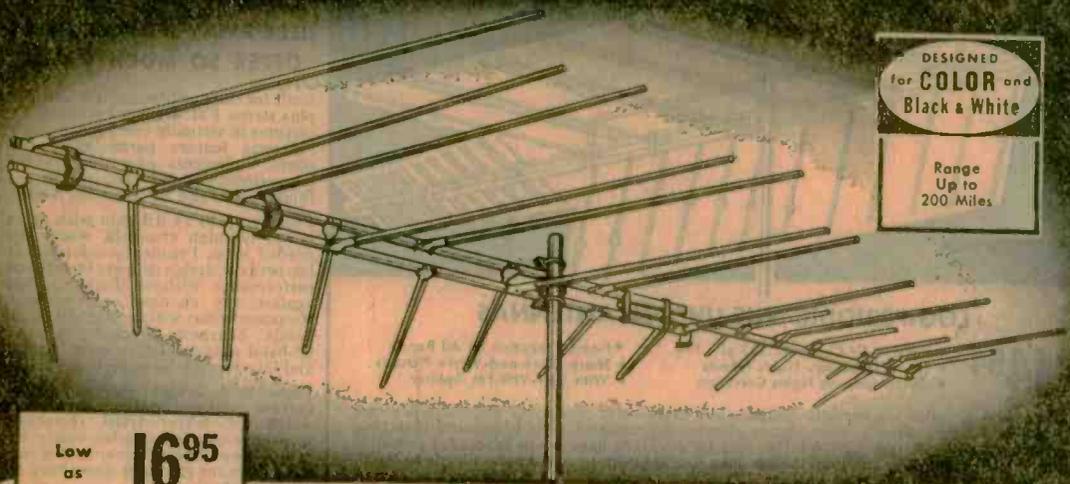
11 A 1457 ZW, Finco UVF-25 Ve-Log VHF/UHF/FM Antenna, 24 elements, 300 ohms. (See page 383 for illus.). 11 lbs. .... 49.95

**NOTE:** 300-Ohm Antennas Have Some Range, Boom Length and Shpg. Wt. as 75-Ohm Antennas with the Same Number of Elements

# Allied VHF Antennas . . . Up to 200-mile Range

DESIGNED  
for **COLOR** and  
**Black & White**

Range  
Up to  
200 Miles



Low  
as **16<sup>95</sup>**

## SUPER STAR DEEP-FRIDGE VHF ANTENNA VALUES

- Advanced Theory of Increasing Gain versus Frequency
- Dual Band Vee Elements for Optimum Performance

**5-STAR.** Allied's most popular VHF antenna. This super-powered model has high sensitivity to provide superior reception of color and black-and-white. Dual vee-type elements operate as ten half-wave elements on low-band channels 2 to 6, and 28 half-wave elements on high-band channels 7 to 13. High-impact, box girder design insulators. Double U-bolt assembly for greater clamping strength and perfect alignment.

Sagproof suspension system features a big 11 3/4-foot twin boom with sturdy bracing rods that increase boom strength almost ten times. Flanged quadri-lock double snap action element brackets for extra strength and positive alignment. Reinforced sleeve elements at point of snap-out action give extra protection against effects of high winds and ice. Advanced theory of increasing gain versus frequency insures highest quality reception, even in suburban and deep-fringe areas. Gold-corodized finish, even on the brackets, fights corrosion. Corodizing does not obstruct but rather enhances current flow—another plus for fringe

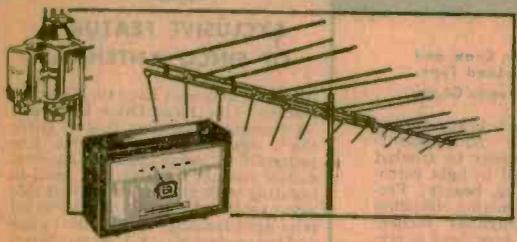
- 11 3/4" Boom with Sagproof Suspension Rods
- Weather Protected by Gold-Corodized Finish

area reception. Since corodizing acts as a conductor, it need not be removed at contact points (unlike anodizing, which acts as an insulator). All these elements work together to pull in signals up to 200 miles. Impedance, 300 ohms. Less mast.

- 11 A 1014 ZW, Shpg. wt., 15 lbs. . . . . **29.95**
- 4-STAR.** High-gain for semi-fringe areas and difficult terrain. Twin 95" boom of square high-strength aluminum alloy. Nine "V" elements operate as 7 half-wave elements on Ch. 2-6 and 20 half-wave elements on Ch. 7-13. Range up to 150 miles. Quadri-lock double snap action brackets. 300 ohms. Less mast.
- 11 A 1016 ZW, Shpg. wt., 8 1/2 lbs. . . . . **24.95**
- 3-STAR.** High-sensitivity and directivity for excellent performance in suburban and semi-fringe areas. Seven "V" elements operate as 5 elements on Ch. 2-6, 14 elements on Ch. 7-13. Range up to 100 miles. Twin 65" boom. Gold-corodizing. 300 ohms.
- 11 A 1072 ZW, Shpg. wt., 7 lbs. . . . . **16.95**

## SAVE UP TO 17% ON COMPLETE ANTENNA AND ROTATOR OUTFITS

### HEAVY-DUTY FRIDGE AREA VHF ANTENNA AND MANUAL ROTATOR SYSTEM OUTFIT

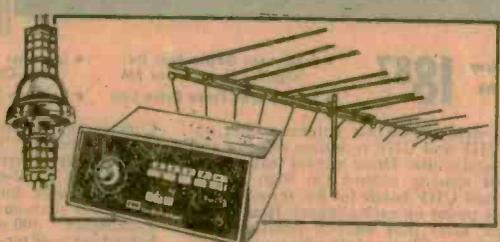


Low  
as **36<sup>93</sup>** • Perfect antenna adjustment  
• Extra control units

Allied antenna and Alliance T-45 manual rotator system. Rotates at 1 rpm until you release the bar. Special feature lets you add extra control units if you have more than 1 TV set—control antenna from each set. Rotator unaffected by motor current, cable length or line voltage. Rotates clockwise or counter-clockwise. Takes 5-conductor cable. Control unit, 4 1/2 x 6 1/2 x 2 1/2". T-45 listed alone on page 39 6. 110-120 VAC. U.L. Listed.

- 11 A 0071 L2Z W, T-45 with 5-Star, Separately, \$53.93 . . . **50.93**
- 11 A 0072 L2Z W, T-45 with 4-Star, Separately, \$38.93 . . . **41.93**
- 11 A 0073 L2Z W, T-45 with 3-Star, Separately, \$30.93 . . . **36.93**

### FRINGE AREA VHF ANTENNA AND FULLY-AUTOMATIC SOLID-STATE ROTATOR SYSTEM



Low  
as **58<sup>90</sup>** • Transistorized design  
• Pushbutton control box

Allied antenna and Cornell-Dubilier AR-33 automatic pushbutton rotator system. Has 5 pushbuttons which can be set for a specific station. When you switch channels, just press the button, antenna rotates automatically. Compass dial for manual control. Solid-state circuitry. Silently, accurately positions within ±1%. Weather protected. High torque motor, low temperature operation. Takes 5-conductor cable. U.L. Listed, 115 VAC.

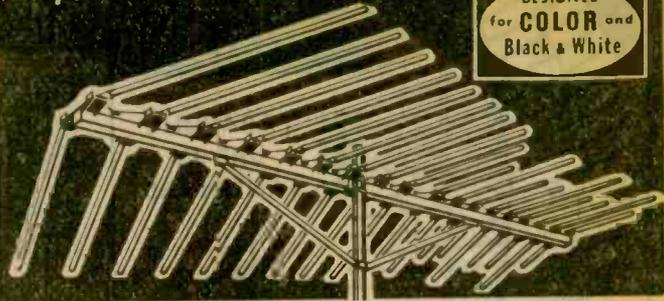
- 11 A 0074 L2Z W, AR-33 with 5-Star, Separately, \$79.00 . **71.90**
- 11 A 0418 L2Z W, AR-33 with 4-Star, Separately, \$74.00 . **63.90**
- 11 A 0419 L2Z W, AR-33 with 3-Star, Separately, \$66.00 . **58.90**

# Finco, JFD VHF-TV/FM Antennas

DESIGNED  
for **COLOR** and  
Black & White

## FREQUENCY-DEPENDENT DESIGN

Frequency-Dependent concept gives you maximum performance on every VHF-TV channel. Increased element spacing toward high-frequency end of band assures highest signal-pulling power on highest channels, where it's needed most. You get sharp color and black-and-white reception even in fringe areas. Flat response on every channel; high front-to-back ratio. And there is a rugged, powerful model for every signal area and budget.



## FINCO FREQUENCY-DEPENDENT VHF-TV/FM COLOR ANTENNAS—COAX OR 300-OHM

- Low as **1098**
- Extra-sharp color and black-and-white pictures
  - Low-loss coax or 300-ohm twin-lead models
  - One-piece drive line with isolating stub

Ve-log antennas feature Frequency-Dependent design for highest power and flat response on each channel. Provides high front-to-back ratio. Super-sharp pictures in color or black-and-white on channels 2-13, plus outstanding FM and stereo FM performance. Ten models give choice of range (up to 200 miles) and lead-in impedance—standard 300 ohms or 75-ohm shielded coaxial cable.

75-ohm antennas offer finest color reception, require no lead-in stand offs. Rugged construction, with 1" square boom in "lock-tite" no-tilt saddle, triple-thick sleeved elements. Continuous one-piece low-loss drive line has insulated crossover spacer—pedestals assure positive spacing. Boom and elements are gold-corroded to fight corrosion. All antennas are 100% preassembled for easier installation. Foam-type lead-in recommended for 300-ohm antennas. 75-ohm models include coax connectors, antenna transformer and behind-set transformer. Less mast. Accessory kit listed below is perfect for installation of all 300-ohm models. *Antennas on this page sent by truck or express.*

75-Ohm Coaxial Cable Color-Spectrum Antennas

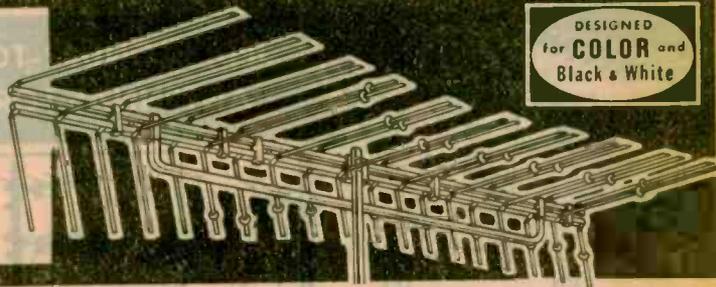
Stock No.	Mfr's Type	Elo-ments	TV Range Up to	FM Range Up to	Boom Lgth.	Wt., Lbs.	EACH
11 A 1712 ZW	XCS-V18	18	200 miles	90 miles	181"	15	40.42
11 A 1713 ZW	XCS-V15	15	175 miles	75 miles	155"	14	35.38
11 A 1714 ZW	XCS-V10	10	125 miles	50 miles	119"	10	28.32
11 A 1715 UW	XCS-V7	7	100 miles	50 miles	81"	7	20.95
11 A 1716 XW	XCS-V5	5	75 miles	50 miles	54"	5	16.35

300-Ohm Ve-Log Antennas†

Stock No.	Mfr's Type	Elo-ments	EACH
11 A 1717 ZW	CS-V18	18	35.60
11 A 1718 ZW	CS-V15	15	30.65
11 A 1719 ZW	CS-V10	10	22.65
11 A 1720 UW	CS-V7	7	15.72
11 A 1721 XW	CS-V5	5	10.98

## LOG-PERIODIC DESIGN

Delivers broadband performance without discriminating against any channel or frequency. Antennas are designed to deliver camera-lens sharpness in virtually every location. Developed at the University of Illinois Research Laboratories and proved in Air Force satellite telemetry. LPV antennas feature harmonically resonant V-elements operating on the log-periodic cellular principle in the fundamental and 3rd harmonic modes.



DESIGNED  
for **COLOR** and  
Black & White

## JFD LOG-PERIODIC VHF-TV/FM COLOR ANTENNAS FOR UP TO 200-MILE RANGE

- Low as **1298**
- Sharp directivity fights snow and ghosts
  - Gold-alodized finish prevent corrosion
  - Antennas supplied completely preassembled

Antennas feature frequency-independent log-periodic design for sharp, clear pictures free from snow and ghosts on all VHF-TV channels. Deliver both color and black-and-white TV, plus stereo and mono FM. Boast consistently flat ( $\pm 1/2$  dB) response for top

color reception. Sharp directivity fights noise, ghosts, interference and all other unwanted signals. Capacitor-coupled dipoles give uniform gain on all VHF channels. Twin square aluminum booms, "Flip-Quick" lets you snap elements into place in seconds. Gold-alodized finish fights corrosion, is electrically conductive. Lifetime stainless-steel take-off terminals. LPV-TV190, LPV-TV160, LPV-TV130, and LPV-TV100 antennas have boom braces. Others listed have same rugged construction, need no boom braces. Foam-type lead-in recommended. Less mast. Accessory kit listed below is perfect for installation. *Sent truck or express.*

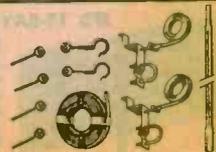
Stock No.	Model No.	Elements	Boom Length	Maximum Width	Range in Miles	Impedance in Ohms	Wt., Lbs.	EACH
11 A 1680 ZW	LPV-TV190	19	205"	92"	Up to 200	300	25	52.67
11 A 1681 ZW	LPV-TV160	16	176"	92"	Up to 175	300	19	40.59
11 A 1682 ZW	LPV-TV130	13	143"	92"	Up to 150	300	15	33.81
11 A 1683 ZW	LPV-TV100	10	112 1/2"	92"	Up to 125	300	11	27.90
11 A 1684 ZW	LPV-TV80	8	81"	91"	Up to 100	300	8	21.46
11 A 1685 ZW	LPV-TV60	6	70 3/4"	91"	Up to 75	300	6	16.13
11 A 1686 ZW	LPV-TV50	5	56"	86"	Up to 50	300	4	12.98

## COMPLETE ACCESSORY KIT FOR INSTALLATION OF ANTENNAS

**595**

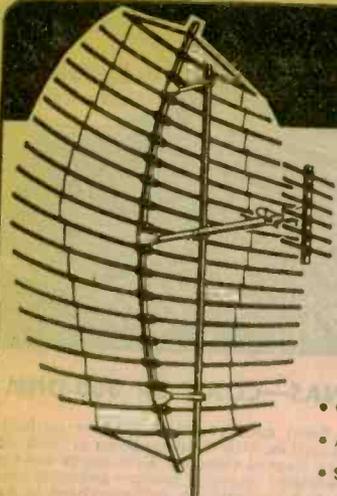
Vine-piece accessory kit includes everything you need to install your own antenna. Package contains one chimney mount, one 50-ft. UHF/VHF foam transmission line, one 10-ft. corrosion-proof steel mast;

two mast snap-on stand offs; three 3 1/2-inch wood screw eye stand offs; one 7 1/2-inch wood screw eye stand off, and complete instruction sheet.  
11 A 1050 XW, Shpg. wt., 12 lbs. . . 5.95



NOTE: † 300-Ohm Antennas Have Same Range, Boom Length and Shpg. Wt. as 75-Ohm Antennas with the Same Number of Elements

# Allied UHF Television Antennas



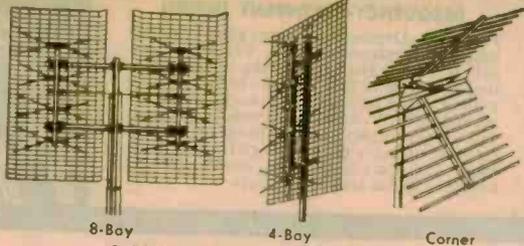
## PARABOLIC UHF TV ANTENNAS

Low as  
**16<sup>95</sup>**

- Choice of 7-ft. or 5-ft. Screen
- All-Aluminum, Gold-Corodized
- Snap-Out design for Fast Installation

**7-FT. DIAMETER.** Boasts the same type of configuration used for satellite tracking. Radar-type design with parabolic screen offers extremely sharp directivity for good reception of UHF channels 14-83, up to 130 miles away. Screen is curved to focus signals on special collector elements, offering maximum signal strength with excellent rejection of ghosts and other unwanted signals. Gain ranges from 17 dB on Channel 14, to 21 dB on Channel 83. 300 ohms. Foam-type lead-in recommended. Less mast.  
11 A 1706 UW. Shpg. wt., 1 1/2 lbs. .... 29.95

**5-FT. DIAMETER.** Same snap-out parabolic design as above. Effective range up to 80 miles. Gain: 14 to 18.6 dB. 300 ohms. Foam-type lead-in recommended. Less mast.  
11 A 1015 XW. Shpg. wt., 6 1/2 lbs. .... 16.95



## 8-BAY UHF BOW-TIE ANTENNA

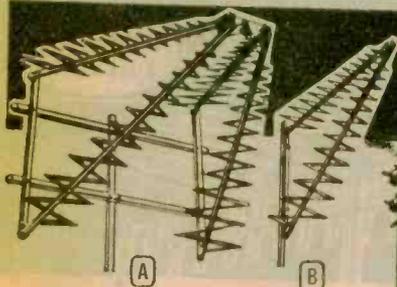
"Fidelity-phased" colinear design antenna with synchronized elements for sharp directivity and high gain on UHF channels 14 through 83. Reception up to 75 miles. For excellent color or black-and-white reception. Consists of two 4-bay units with solid aluminum-rod harness. Double cross member. Rustproof aluminum hardware. Preassembled. Fits any size mast. 300 ohms. Foam-type lead-in recommended. Less mast.  
11 A 1709 UW. Shpg. wt., 12 lbs. .... 9.95

## 4-BAY UHF BOW-TIE ANTENNA

Provides excellent color and black-and-white reception of channels 14 through 83. Range to 55 miles. Rugged aluminum. 300 ohms. Foam-type lead-in recommended. Less mast.  
11 A 1064 XW. Shpg. wt., 5 lbs. .... 3.95

## CORNER-REFLECTOR ANTENNA

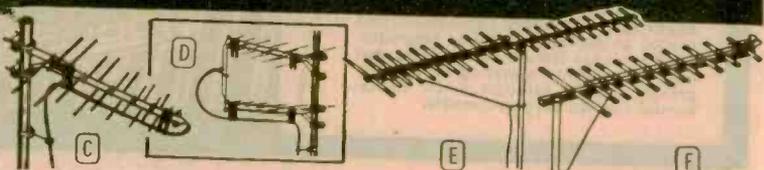
Large screen for extra-sharp directivity and high gain. Fights ghosts, snow and other annoying interference. Range up to 45 miles. All-aluminum with corrosion-resistant gold-corodized finish. 300 ohms. Less mast. Foam-type lead-in recommended.  
11 A 1070 XW. Shpg. wt., 5 lbs. .... 3.95



## JFD "ZIG-A-LOG" UHF ANTENNAS

- A** MODEL LPV-ZU20 TWO-BAY ANTENNA. Features advanced log-periodic design for excellent color or black-and-white UHF. Range up to 125 miles. Two vertically-angled narrow-width conductors are sealed according to log-periodic formula. Frequency-independent horizontal and vertical beam patterns for sharp directivity and 16-17 dB gain. High front-to-back ratio helps prevent ghosts. Gold-alodized to fight corrosion. Crossarm, 45°. 300 ohms. Foam-type lead-in recommended. Less mast.  
11 A 1179 W. Wt., 6 lbs. .... 19.88
- B** MODEL LPV-ZU10 SINGLE BAY "ZIG-A-LOG." Log-periodic single-bay antenna for high-contrast color or black-and-white UHF reception up to 75 miles. Gain: 13.5 to 14 dB. Gold-Alodized aluminum. Pre-assembled. 300 ohms. Less mast.  
11 A 1180 XW. Wt., 4 lbs. .... 9.38

## JFD, BLONDER-TONGUE AND FINCO UHF ANTENNAS FOR SUPERIOR RECEPTION



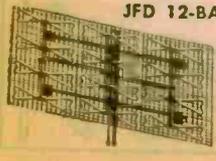
## BLONDER-TONGUE UHF ANTENNA AND STACKING HARNESS

- C** GOLDEN DART UHF ANTENNA. Delivers uniform peak performance on UHF channels 14 through 83. Features advanced periodic design principle for excellent color or black-and-white reception. Element arrangement provides a narrow forward beam for sharpest directivity, to cut ghosts, snow and other annoying interference. Eleven elements deliver uniform 10 dB gain. Welded steel construction. Gold-iridite finish fights corrosion. 300 ohms. Foam-type lead-in recommended. Less mast, with U-bolts.  
11 A 1494 XW. Wt., 2 lbs. .... 4.69
- D** 2-DART STACKING HARNESS. Stacks two Blender-Tongue Golden Dart UHF antennas, for extra 3 dB gain. Order two antennas separately (above).  
11 A 1497 XW. Wt., 1 lb. .... 93¢

## FINCO COLOR SPECTRUM ANTENNAS

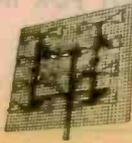
- E** MODEL CS-U3 22-ELEMENT UHF ANTENNA. For excellent color or black-and-white UHF reception in very weak signal areas. Ten driven UHF elements, 12 parasitic elements. Frequency Dependent design features increased spacing between elements toward the high end of the UHF band for highest gain and flat response on each UHF channel. High front-to-back ratio for sharp directivity. One-piece drive line, positive element spacing. Boom length, 69 1/4"; turning radius, 40°. Less mast.  
11 A 1778 XW. Wt., 4 lbs. .... 13.56
- F** MODEL CS-U2 11-ELEMENT UHF ANTENNA. For fine performance in weak signal areas. Has 10 driven UHF elements, one parasitic element, with Frequency Dependent design for highest gain. Boom, 38 1/4"; turning radius, 34 1/2°. Less mast.  
11 A 1779 XW. Wt., 2 1/2 lbs. .... 9.23

## JFD 12-BAY BOW-TIE UHF ANTENNA



MODEL UHF 212. For deep-fringe areas. Super-sensitive "cardioid" dipole design for very high gain, averaging 15 dB. For color or black-and-white, up to 125 miles, with sharp directivity. Wire grid for high signal-to-noise ratio. Preassembled. 300 ohms. Foam lead-in recommended. Less mast.  
11 A 2551 ZW. Wt., 15 lbs. .... 22.14

## JFD 8-BAY BOW-TIE ANTENNA

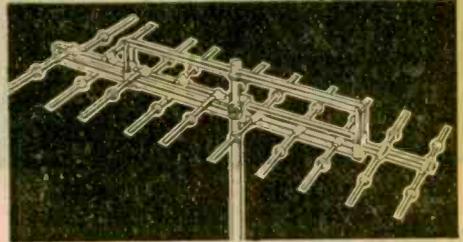


MODEL UHF 208. For outstanding UHF reception in fringe areas, with range up to 100 miles. Galvanized steel reflector, solid aluminum bows. For color or black-and-white with 12 dB average gain over channels 14-83. Preassembled. 300 ohms. Foam-type lead-in recommended. Less mast.  
11 A 2550 ZW. Wt., 8 lbs. .... 13.14

# Improve FM Reception with an Outdoor Antenna

## JFD DIRECTIONAL LOG-PERIODIC ANTENNAS FOR STEREO FM

Log-periodic antennas help pull in strong signals that are important for best stereo-FM channel separation and fade-free performance. Get clear full-strength reception of more stations, thanks to wideband response and uniform high gain across the FM broadcast band. Up to 41% higher gain than yagis with comparable number of elements. Full-wave L-dipoles have higher front-to-back ratio for horizontal beam 10° to 25° narrower than yagis, providing extra-sharp directivity. Eliminate or reduce "ghost" signals to bring you undistorted stereo reception. Have boom supports for rigidity even in 100-mph winds (not required on Model LPL-FM-4A). Gold anodized aluminum resists corrosion. Reinforced elements. 300 ohms impedance. Less lead-in.



Stock No.	Model	Elements	Range Up to	Wt., Lbs.	EACH
11 A 1186 ZW	LPL-FM-10A	10	175 miles	10	31.47
11 A 1192 ZW	LPL-FM-8A	8	150 miles	8	25.52
11 A 1188 ZW	LPL-FM-6A	6	125 miles	6	18.87
11 A 1145 UW	LPL-FM-4A	4	75 miles	5	12.57

Low as

**1257**

- Full-Strength FM Reception
- Wide-Band Response
- Reduces "Ghost" Signals
- Weather-Resistant Finish

## FINCO HIGH-PERFORMANCE STEREO-FM ANTENNAS



**1557**

### 6-ELEMENT DIRECTIONAL

MODEL FM-4G. Receive FM stations up to 125 miles away with this gold-corodized 6-element antenna. Twin-driven double-wall aluminum elements, with impedance control "T" match stubs, offer high gain across full 88-108 MHz band. "Geomatic" design for high front-to-back ratio—stronger signals, sharper directivity. Strong, square aluminum boom is 7-ft., 9-in. long. "Lock-Tite-No-Tilt" mounting and "box girder" snap-out brackets, ready for quick installation. Requires mast and 300-ohm lead. 11 A 2503 ZW. Wt., 6½ lbs. .... 15.57

**2277**

### 10-ELEMENT DIRECTIONAL

MODEL FM-5. Superb 10-element antenna for peak FM reception up to 175 miles. "Geomatic" design—twin-driven elements and precisely-spaced directors for highest gain. Gold-corodized finish is weather resistant. Rigid 10-ft. long square boom has suspension-type bracing. All elements are sleeve-reinforced; lock into open position in "snap-lock" brackets. Self-aligning brackets and double-wall aluminum elements are pre-assembled for easy installation. Requires mast and 300-ohm twin lead. 11 A 1329 ZW. Wt., 8½ lbs. .... 22.77



Complete

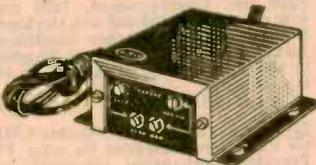
**837**

### ALL-DIRECTIONAL ANTENNA

MODEL FMT-A. Preassembled "turnstile" antenna does not require rotation or aiming to receive stations from all directions. Two elements accurately matched with special quarter-wave directional pick-up pattern. Provides good reception over entire FM band. Gold corodized for complete weather protection. Kit includes: antenna, 50 ft. 300-ohm lead-in, mast, stand-off, insulator, 3 screw-in insulators, bracket for mounting to your present TV mast. 11 A 1330 ZW. Wt., 3¼ lbs. .... 8.37

## FINCO ACCESSORIES FOR BETTER FM RECEPTION

### FM INTERFERENCE FILTER



**438**

MODEL 3007. Blocks all signals except 88-108 MHz band. Eliminates or reduces TV, CB, Hand and other frequencies to improve FM signal reception. Easily mounted at antenna terminals or receiver. Complete with universal mount and standoff insulator. Size, 1½x4½x2". Shpg. wt., 5 oz. 11 A 1167 ..... 4.38

### TV-FM ANTENNA SPLITTER



**410**

MODEL 3005. For TV-FM reception from one broad-band antenna. Triple-tuned bandpass filter separates signals—sends FM to radio and TV signals to TV set. Loss of only 1 dB. Easy to install. Complete with universal mount and standoff insulator. Size, 4¼x1½x1¼". Shpg. wt., 4 oz. 11 A 1665 ..... 4.10

### INDOOR FM SIGNAL AMPLIFIERS FOR DEEP & MEDIUM FRINGE AREAS

**1665**

- Behind-Set Mounting
- 20 dB Nominal Gain
- Passive Filter Input

MODEL 65-7. High-gain, low-noise transistorized amplifier has a passive filter input circuit that rejects interfering signals outside the FM band. Improves reception of weak FM signals in deep or medium fringe areas, even where strong local signals are present. Also eliminates common overload characteristics. Isolation transformer eliminates shock hazard. 300-ohm input with output for one or two FM receivers. 117 VAC. 1½x4x4½". Wt., 1½ lbs. 11 A 1225 ..... 16.65

*Rembrandt*

"STEREO KING" INDOOR FM ANTENNA

**695**

- Improves Stereo Separation
- Built-In Noise Filter

Model 1000. Indoor antenna pulls in more FM stations, improves signal quality on present stations. Ideal for stereo-FM. Four-section dipoles with induction coil an 12-position element selector for best possible reception. Includes noise filter for clear, pleasant FM listening. Walnut-finish base. Wt., 2½ lbs. 11 A 1385 ..... 6.95

# Rembrandt Indoor TV-FM Antennas



## A "COLOR-CHAMPION" UHF-VHF

- For VHF and UHF Channels 2-83
- For Black-White and Color, FM Stereo
- 12-position Picture Correction Control

This Rembrandt indoor UHF-VHF antenna challenges roof antenna performance for reception and clarity. Separate UHF-VHF isolation network filters out picture-interfering feedback for consistent true-to-life color and sharper color register. For all channels UHF-VHF 2 through 83.

Specially engineered 12-position picture correction control with silver-plated contacts and color transmission line eliminate color fading caused by the relative movement of separate UHF-VHF leads. Clear reception up to 30 miles, also fine for stereo FM. 100.

The combined action of the special color tuning loops and "power booster" make it possible to get better reception with less arm adjustment. Tunes out ghosts, snow and distortion even in many fringe areas. New decorator styling will complement the decor of any room. Shpg. wt., 4 lbs.

11 A 1775 XW..... 19.95

## B "COLOR-TUNER" ANTENNA

Decorator-styled antenna has advanced color-circuit which makes it possible to get the clear distortion-free TV picture you have always wanted. Just turn orientation knob instead of whole antenna to get superb color and black-and-white. 12-position switch. Built-in isolation network delivers superior rejection of interference. For all channels, UHF and VHF, 2-through-83. For FM stereo also. Shpg. wt., 3 lbs.

11 A 1776 XW..... 14.95

## C "COLOR-KING" UHF-VHF

Combined action of special color phasing loops and color filter control remove picture impurities for consistent true-to-life reception. 12-position picture correction control to clear up ghosts and snow. Separate low-loss UHF-VHF leads with matched impedance. Walnut finished base.

11 A 1722 XW. Shpg. wt., 3½ lbs. 12.95

"DELUXE" UHF-VHF ANTENNA. Gives you clearer, sharper color, black-white. Channels 2-83. Dual control 12-position switch.

11 A 1371 XW. Shpg. wt., 3 lbs. 9.95

## D ECONOMICAL "POWER-KING"

Performance and economy combined. The dual action of unique rings and long telescoping arms bring in clearer, sharper pictures. For all channels UHF-VHF 2-83, color and black-and-white, stereo FM. Twelve-position direction control helps clear up ghosts and snow even in difficult areas. Finer quality materials, superior design and construction assure better reception and longer life. Shpg. wt., 2½ lbs.

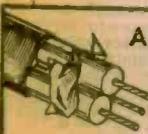
11 A 1777 XW..... 4.98

## E TV "COLOR-COMPUTER"

A flock of a dial gives you instant picture improvement and effectively matches your roof antenna to your TV set under all weather conditions. Operates equally well on UHF and VHF channels. Strengthens and regulates your picture's color, contrast, and brightness. Helps to eliminate ghosts and shadows. You connect it yourself in minutes, just place the computer on top of your TV set, attach roof antenna lead to computer and computer lead to TV set.

11 A 1750. Shpg. wt., 4 lbs. 12.95

## ALLIED UHF-VHF MYLAR SHIELDED CABLE



300-ohm twin line for color, black-and-white. Low line loss for strong, clear pictures. Shielding cuts possibility of picking up unwanted interference. No. 20 stranded copfer.

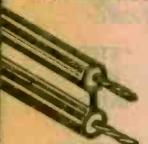
per wire. Shpg. wt., 7 lbs. per 100 ft.

11 A 1189. 50-ft. Coil..... 4.89

11 A 1200 XW. 100-ft. Coil..... 8.95

11 A 1201 XW. 250-ft. Coil..... 21.95

## 300-OHM UHF-VHF FOAM TUBULAR CABLE



UHF-VHF 300-ohm foam-tubular twin line cable is ideal for color. Moisture resistant black polyethylene tubing; copper stranded conductors.

Shpg. wt., 2¼ lbs. per 100 ft.

11 A 1656. 50-ft. Coil..... 1.98

11 A 1657. 100-ft. Coil..... 3.79

11 A 1658 XW. 250-ft. Coil..... 9.49



F UHF-VHF 300-OHM OPEN LINE. Loss, 0.5 dB per 100 ft. at 200 MHz. Shpg. wt., 100 ft., 2¼ lbs. 250 ft., 3½ lbs. Minimum, 100 ft. coil.

11 A 1473. 100 ft. Coil..... 3.29

11 A 1474 XW. 250 ft. Coil..... 7.89

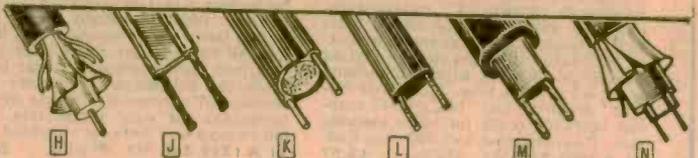
G RG-59/U TV COAXIAL CABLE. 75-ohm. Mylar shielded. Connector each end. Wt., 3 lbs.

11 A 1659. 50-ft. Coil..... 4.49

11 A 1660 XW. 100-ft. Coil..... 8.95

11 A 1661 XW. 250-ft. Coil..... 15.95

## BELDEN TWIN LINE AND COAXIAL CABLE



### TWIN-LINE

H TYPE 8228. New Duofoil® 75-ohm 82 channel coax cable for improved color. Four spiralling drain wires provide equal distribution of stresses, 100% shielded. Moisture resistant. .242" O.D.

11 A 1751. 100-ft. Coil, 3½ lbs. 6.17

J TYPE 8230. Weldohm design for increased strength and conductivity, 7x28 stranded, copper-coated steel wire. Almost twice as strong as plain copper. Perfect for long lead-ins. 70-mil web. 300 ohms. 2 lbs. per 100'.

11 A 1445. 50-ft. Coil..... 1.34

11 A 1447. 100-ft. Coil..... 2.22

11 A 1553 XW. 250-ft. Coil..... 5.50

TYPE 8225. (Not illus.) For TV and FM antennas. 7x28 stranded copper conductors. Flat polyethylene jacket, 58-mil web thickness. 300 ohms. Outdoor use. Wt. per 100 ft., 1¾ lbs.

11 A 1441. 50-ft. Coil..... 1.20

11 A 1443. 100-ft. Coil..... 1.97

11 A 1531 XW. 250-ft. Coil..... 4.85

K TYPE 8275. UHF-VHF type. High-quality, low-loss lead-in for all TV and FM installations. Ideal for color TV. Cellular polyethylene core is filled with inert gas. Polyethylene jacket. 7x28 copper-coated steel conductors. 300 ohms. 3½ lbs. per 100 ft.

11 A 1448. 50-ft. Coil..... 2.70

11 A 1450. 100-ft. Coil..... 4.65

11 A 1536 XW. 250-ft. Coil..... 11.05

### TWIN-LINE (Cont'd)

L TYPE 8235. 300-ohm oval twin line. Low-loss type for both UHF and VHF use. Copper-coated, 7x26 steel wire conductors. 185-mil web thickness. Resists extreme weather conditions. Jacket of 100% polyethylene. Supplied in 100-ft. coils only. Shpg. wt. per 100 ft., 4½ lbs.

11 A 1451. 100-ft. Coil..... 5.35

M TYPE 8285. Low-loss 300-ohm UHF-VHF. Recommended for color TV. Provides unchanging electrical and physical characteristics. Durable, for any application. 22-gauge (7x30) copper-weld conductors. Polyethylene insulation and webbing. Cellular polyethylene jacket. Outside diameter, ¼x1½". Shpg. wt., 3½ lbs. per 100 ft.

11 A 1452. 50-ft. Coil..... 2.85

11 A 1454. 100-ft. Coil..... 4.90

11 A 1539 XW. 250-ft. Coil..... 11.65

N TYPE 8290. Shielded ultra-low-loss lead-in is ideal for color. Mylar shielding cuts interference from ignition and other annoying electrical gear and appliances. May be run through conduit or run adjacent to metal. Extra-durable construction. 300 ohms. Shpg. wt., 3 lbs. per 100 feet.

11 A 1603. 50-ft. Coil..... 5.95

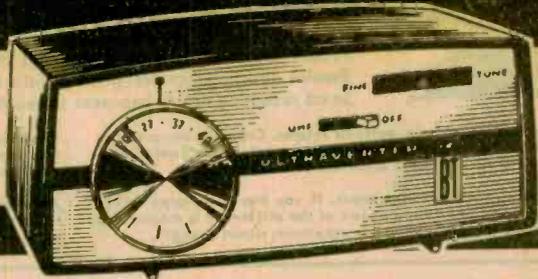
11 A 1605. 100-ft. Coil..... 10.15

11 A 1655 XW. 250-ft. Coil..... 47.90

# Blonder-Tongue UHF Converters and Antennas



MODEL  
BTX-99B  
MODEL  
BXT-11A



## IT'S EASY AND INEXPENSIVE TO ADD UHF WITH BLONDER-TONGUE CONVERTERS

New TV stations going on the air will be on UHF channels 14-83. You can easily equip your VHF set to tune them . . . just mount a UHF antenna (usually on your present mast), and plug-in a UHF converter. For color and black-and-white.

### LOW-PRICED BATTERY POWERED SOLID-STATE UHF CONVERTER

**1345**

- Connects in Minutes
- Range Up to 20 miles
- 70-channel UHF

MODEL BTD-44. An amazing low price for this solid-state UHF converter. Adds 70-channel UHF tuning to VHF set, dials just like a radio. Gives sharp undistorted pictures within a 20-mile range. Patented tuner and exclusive tunnel diode circuit spell highest reliability, finest performance.

Highly selective, tuner RF stage minimizes multiple tuning problems, allowing no drift or distortion. Performance is excellent on all channels from 14 to 83. Provides excellent reception even in fringe areas.

UHF wire-loop antenna. Patented stripless, stainless steel terminals are used at all 300-ohm inputs and outputs. In handsome walnut case. Size, 3x6½x3¼".

11 A 1324. Shpg. wt., 3 lbs. . . . 13.45  
18 A 5779. "D" Batteries. 14 oz. 2/33

### OUR LOWEST-PRICED AC UHF CONVERTER

**1985**

- Channels 14-to-83
- Illuminated Dial
- Precise Vernier Tuning

MODEL BTX-99B. Economy and good-performance are only two of the features you get in this one-transistor UHF converter. Provides excellent reception in color and black-and-white TV—often with only an indoor antenna. Gives drift-free performance and low-noise figure which means a clearer picture.

No matter what channel you tune performance is excellent on all channels from 14 to 83. Vernier tuning and illuminated dial make it possible to pinpoint any channel easily and rapidly. Eliminates ghosts, snow and distortion by tuning in even weak signals.

Stainless steel, rustproof terminals are used at all 300-ohm inputs and outputs. Wire-loop antenna. Size, 3x6½x3¼". 110-120 V, 60 Hz AC. U.L. Listed. Shpg. wt., 3 lbs.  
11 A 1395 . . . . . 19.85

### "DELUXE" TWO-TRANSISTOR UHF CONVERTER-BOOSTER

**2995**

- Calibrated Dual-Speed Vernier Dial
- Powerful Low-Noise Amplifier

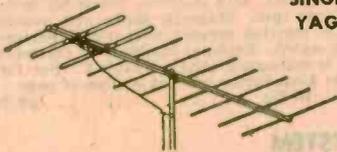
MODEL BXT-11A. Solid-state converter lets you tune all 70 UHF channels, with booster amplifier for good reception even in fringe areas. Two transistor circuit has high signal-to-noise ratio for sharp, clear pictures and static-free sound. Provides excellent color as well as black-and-white. Calibrated dual speed vernier dial with 100:1 ratio to zero-in on any channel.

Double tuned UHF input circuits and shielded oscillators insure interference-free reception. TV performance is uniformly good on each and every channel from 4-to-83—even on higher channels where other converters perform poorly. Powerful low-noise amplifier removes snow and ghosts for consistent true-to-life viewing.

Balanced 300-ohm input and output. Stripless screw terminals, pilot light. Includes wire-loop antenna. Installs in minutes using only a screw-driver. Size, 3x6½x3¼". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.  
11 A 1394 . . . . . 29.95

# Finco Single-Channel Yagi and Trailer Antenna

## SINGLE-CHANNEL SENSITIVE "GEOMATIC" YAGI-TYPE VHF TELEVISION ANTENNAS



High-quality yagi-antennas for color or black-and-white reception in fringe areas. Provide maximum gain, sharp directivity, flat response and high front-to-back ratio. Gold-corodized aluminum fights corrosion. Single-channel or broad-band models for high (7-13) or low (2-6) channels.

### YOUR CHOICE OF CHANNELS

#### GOLD CORODIZED SINGLE-CHANNEL Y10 SERIES

For reception up to 125 miles. Ten elements. Av. shpg. wt., 4½ lbs.

Stock No.	Model	Channel	EACH	Stock No.	Model	Channel	EACH
11 A 2236 XW	Y10-2	2	15.90	11 A 1384 XW	Y10-8	8	5.55
11 A 2237 XW	Y10-3	3	15.57	11 A 1387 XW	Y10-9	9	5.55
11 A 2238 XW	Y10-4	4	14.70	11 A 1388 XW	Y10-10	10	5.55
11 A 2240 XW	Y10-5	5	14.10	11 A 1389 XW	Y10-11	11	5.55
11 A 2241 XW	Y10-6	6	13.50	11 A 1390 XW	Y10-12	12	5.55
11 A 1380 XW	Y10-7	7	5.55	11 A 1393 XW	Y10-13	13	5.55

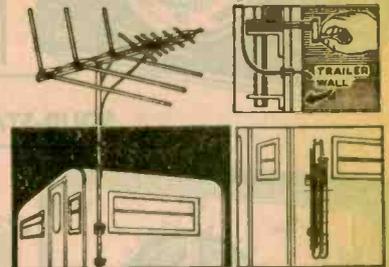
#### GOLD CORODIZED YAGI BROADBAND ANTENNAS

Miles	Stock No.	Model	Channels	Boom	Elements	Lbs.	EACH
To 125	11 A 2559 XW	Y10-713	7-13	83"	10	4½	7.50
To 125	11 A 1710 XW	L-26	2-6	118"	6	3	16.77

#### STACKING KITS

Stock No.	Type	Application	Lbs.	EACH
11 A 2086 XW	GA	For stacking 2 same chan. High Band (7-13) or 2 Y10-713 antennas	1	1.50
11 A 2075 XW	GB	For stacking 2 same chan. Low Band (2-6) antennas	1	1.56
11 A 1711 XW	GC	For stacking 2 L-26 antennas	6	2.10

## TRAILER ANTENNA



UP . . . a far-reaching broadband antenna  
DOWN . . . locks out of the way

**3995**

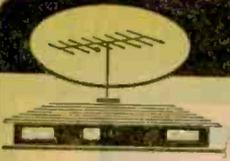
- For 82-Channel VHF/UHF
- Rotates From In Trailer
- Folds Down for Travel

MODEL TTR-1. All-channel Color Spectrum antenna manually rotates 360° from inside trailer for superb color and black-and-white TV. Goes up in seconds, telescopes and folds down for travel. 9-element, gold-corodized. Easily mounted with single lead-in and splitter. Shpg. wt., 8 lbs.

11 A 1073 XW . . . . . 39.95  
MODEL TTW-1. Same, but without rotator feature. Wall mounting. 6½ lbs.  
11 A 1074 XW . . . . . 18.95

Buy Your Antenna on Allied's Credit Fund Plan—Full Details on Page 438

# Antenna Rotators for Ultra-Clear TV



Proper antenna direction is essential for better all-around reception—especially color TV. Precise directional control gives you the best signal from every station for the clearest picture, in all reception areas. Improves stereo FM, too.

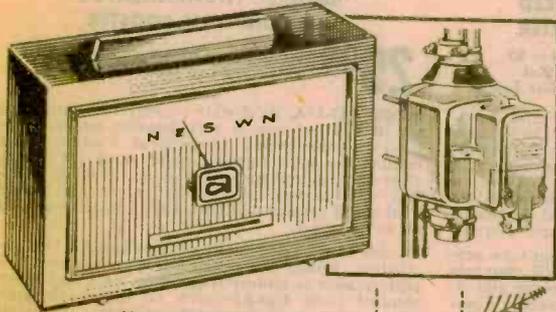
Color comes alive with an antenna rotator. Color signals are complex. A perfectly aimed color antenna is the only way to get true-to-life color pictures, free from distortion or unnatural color.

Better color pictures in fringe areas. If you live in an area where reception is poor, you'll be amazed at the difference a rotator can make. Locks in distant stations for maximum signal strength.

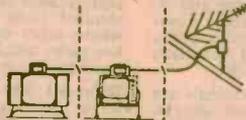
Pin-point every TV station for sharper color. Many times a reception area is surrounded by stations. A rotator system pinpoints each one. Pushing a button, or flicking a switch will do it.

Antenna/rotator system for natural color. If your color picture has ghosts, distortion or smearing; if it doesn't give the type of pictures you think it should, a rotator can be the answer for you.

## alliance Rotators for Clearer "All Around" TV Reception MANUAL ANTENNA ROTATOR SYSTEM



You can add extra control units for more than one TV

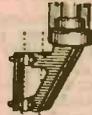


**2398**

Our lowest-priced, big value manual antenna rotator system

Model T-45. Our lowest priced rotator. Just touch the control bar on control unit, and antenna rotates at one rpm until you release bar—pointer shows direction. You can add extra control units if you have more than one TV set—control antenna from each set. Rotator is unaffected by motor current, cable length or line voltage. Rotates clockwise or counter-clockwise. Order 5-conductor cable below. Control unit, 4½x6½x2½", 110-120 VAC. U.L. Listed. 11 A 1555 XW. Shpg. wt., 10 lbs. . . . . 23.98  
11 A 1690 XW. Extra Control Unit. Shpg. wt., 4 lbs. . . . . Each 13.95

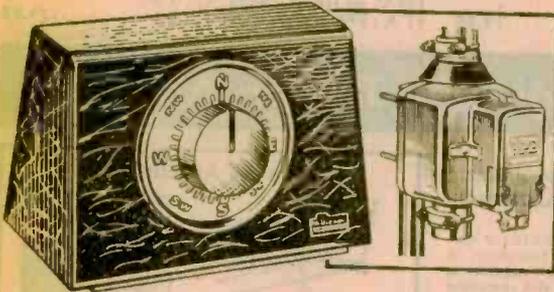
### ANTENNA THRUST-BEARING BRACKET



Model T882. Eliminates possibility of damage to rotator systems. Designed for use with heavier-type antennas. Minimizes strain on rotator by relieving it of antenna's weight. Protects gears against lateral strain. For masts to 1½" diameter.

11 A 1246 XW. Shpg. wt., 3 lbs. . . . . 2.91

## ECONOMICAL AUTOMATIC ANTENNA ROTATOR SYSTEM

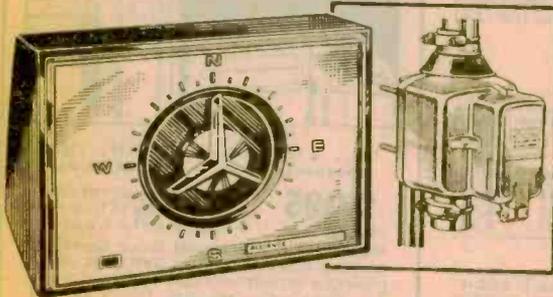


**2878**

Automatically positions antenna for reception of strongest possible signals

Model U-100. This heavy-duty unit provides positive instant control of antenna rotation. Simply turn pointer on control unit's compass dial, and antenna automatically turns itself to the direction you have chosen, then stops. Permits positioning antenna for reception of strongest possible signals, and reduces interference. Rotates 360° in just 60 seconds, with instantly reversible motor operating at a speed of one rpm. Magnetic brake and positive mechanical stop at end of rotation prevent over-travel. Factory-lubricated and moisture-sealed. External hardware is corrosion-protected. Control unit is mahogany plastic. 7x4½x4". For 110-120 volts, 50-60 Hz. Order 4-conductor cable at bottom of page. 11 A 2442 XW. Shpg. wt., 10 lbs. . . . . 28.78

## SOLID-STATE AUTOMATIC ROTATOR SYSTEM



**3597**

Transistorized control unit provides extra precision important for color TV

Model C-225. Transistorized control unit assures positive, stepless synchronous antenna control throughout the full 360° rotation. Just set the dial—automatically aims your antenna to direction indicated. Completely silent. Accurately zeros-in on desired stations. Has patented phase-sensing electronic bridge circuit for movie-clear pictures without interference. Thermostatically protected primary circuit. Magnetic brake and sensing circuit eliminate over-travel. Positive mechanical stop at end of rotation. Instantly reversible motor rotates at a speed of one rpm. External hardware is made of corrosion-protected materials. Plastic control unit is 5x6½x4¼". 110-120 VAC. U.L. Listed. Order 5-conductor cable at bottom of page. 11 A 1512 XW. Shpg. wt., 9½ lbs. . . . . 35.97

## FOUR-AND FIVE-CONDUCTOR ROTATOR CABLE

FOUR-CONDUCTOR CABLE. For use with Alliance U-100 rotator system above; Cornell-Dubilier AR-22R and AR-10B and RCA 10W505 rotator systems on facing page. Shpg. wt., per 100-ft., 3 lbs.  
11 A 1237. 100-Ft. Coil . . . . . 2.99  
11 A 1241. 250-Ft. Coil . . . . . 7.29

FIVE-CONDUCTOR CABLE. For use with Alliance C-225 and T-45 rotator systems above; Cornell-Dubilier AR-33 and RCA 10W707 on facing page. Shpg. wt., per 100-ft., 3 lbs.  
11 A 1513. 100-Ft. Coil . . . . . 3.89  
11 A 1515. 250-Ft. Coil . . . . . 9.95

# Rotators for Best Color and Black-and-White TV



Automatic Rotators for All Reception Areas

**ADVANCED ROTATOR LETS YOU SIMPLY PUSH BUTTONS FOR 5 SPECIFIC STATIONS**

**49<sup>95</sup>**

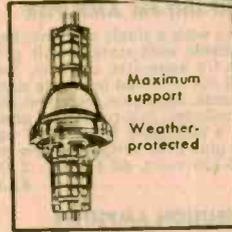
Automatically positions antenna for reception of strongest possible signals

**Model AR-33.** Fully automatic rotator system for perfect antenna control with the push of a button. Each of the five pushbuttons can be set for a specific TV station. When you switch channels, just press the button for desired channel—antenna rotates automatically to the preset direction for finest possible picture. Pin-point directivity for true-to-life color, sharper black and white. Compass dial allows manual control, too.

All solid-state circuit gives positive stepless operation. Rugged silicon transistors for reliable performance. Heavy duty relay contacts. Thermally-protected transformers. Completely silent—accurately positions antenna within  $\pm 1\%$  for precise directivity.

Heavy-duty Bell Housing Rotator has rugged in-line design and ball thrust bearings for maximum antenna support. Weather-protected, with high-torque motor and low-temperature operation. Cannot be blown off-station when control is energized. Contemporary-styled control unit. For masts  $\frac{1}{4}$ " to  $2\frac{1}{4}$ " dia. Requires five-conductor cable on opposite page. U.L. Listed. For 110-120 VAC. Shpg. wt., 15 lbs.

11 A 1745 XW ..... 49.95



Maximum support  
Weather-protected



Solid-state circuit  
pushbutton control

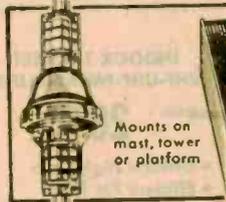
## ROTATOR SYSTEM WITH AUTOMATIC CONTROL

**34<sup>95</sup>**

Easy dial setting for precise rotation  
.. Turns a full 360° in just 45 seconds

**Model AR-22R.** Simple dial setting automatically positions antenna in 6° increments for precision tuning. Set control for desired direction, then rotator takes over and turns antenna accurately to desired point. Magnetic brake prevents over-travel. Reset switch in control base. Precision ball bearings and gears in die-cast, reinforced "Bell" housing. Reversible clamps for masts  $\frac{1}{4}$ " to  $2\frac{1}{4}$ " O.D. With 3 guy lugs. Vinyl-covered control unit. Order 4-conductor cable on opposite page. 110-120 VAC.

11 A 1396 XW. Shpg. wt., 15 lbs. .... 34.95



Mounts on mast, tower or platform



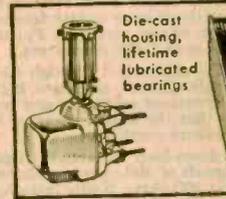
## BUDGET-PRICED AUTOMATIC ANTENNA ROTATOR

**28<sup>95</sup>**

Automatic control for in-line antennas, plus secure, direct mounting of large arrays

**Model AR 10B.** Turn knob to direction desired, rotator turns antenna quickly and accurately for the finest possible picture. Built-in stub mast and die-cast adapter provides secure, direct mounting of large arrays. Mechanical brake prevents over-travel. High-torque motor. Die-cast zinc housing, life-time lubricated bronze bearings. Not for stacked antennas. Requires four-conductor cable listed on opposite page. Control unit is vinyl covered. For 110-120 VAC.

11 A 1744. XW. Shpg. wt., 10 lbs. .... 28.95



Die-cast housing, lifetime lubricated bearings



## Newly Designed Antenna Rotator Systems



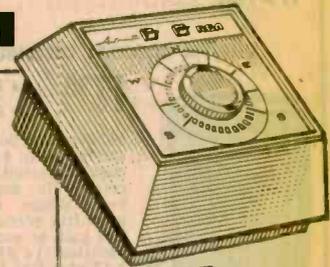
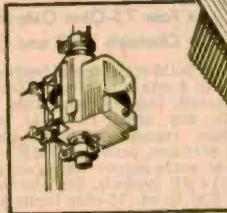
### MANUAL ROTATOR FOR QUALITY RECEPTION

**29<sup>95</sup>**

Eliminates ghosts, distortion and smearing .. Has corrosion resistant materials throughout drive unit

**Model 10W505.** Whether aligning for distant stations or stations in different directions, the dynamic turning power of this rotator assures pin-point accuracy. Positive braking action locks the antenna in the correct position and prevents it from windmilling. Main drive gear is integrally cast with a high strength shaft mounted on stainless steel bearings. Heavy-duty rugged clamps prevent mast slippage in bad weather. Handsome beige control unit,  $6\frac{1}{2}$ "x7"x3 $\frac{3}{4}$ ". 110-120 VAC.

11 A 1564 XW. Shpg. wt., 10 lbs. .... 29.95



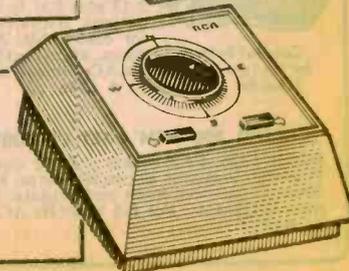
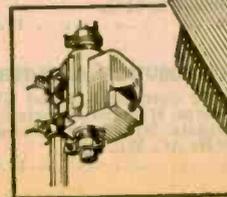
### SOLID-STATE FULLY AUTOMATIC ROTATOR SYSTEM

**39<sup>95</sup>**

Just set dial to direction, rotator turns .. High strength, light-weight aluminum housing

**Model 10W707.** This transistorized and fully automatic rotator system is designed to assure maximum reception from your outdoor antenna. Has pre-turning momentum that develops the torque necessary to handle icing, wind, or unusual stress and heavy loads. The largest TV antenna and Amateur arrays can be turned and accurately positioned for pin-point reception. Heavy-duty rugged clamps prevent mast slippage. Elegantly-styled completely silent control unit,  $6\frac{1}{2}$ "x7"x3 $\frac{3}{4}$ ". For 115 VAC.

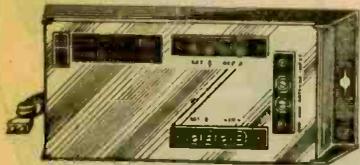
11 A 1005 XW. Shpg. wt., 14 lbs. .... 39.95



**SHIPPING NOTE:** Items with suffix U, W or Z in Stock No. are sent truck or express. See Ordering Information pages.

# Blonder-Tongue Antenna Amplifiers

## INDOOR DISTRIBUTION AMPLIFIERS



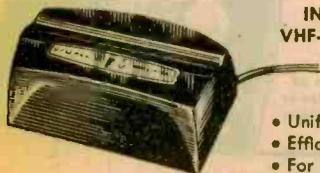
All-Channel  
**4142**

### 4-SET DISTRIBUTION VHF-UHF-FM AMPLIFIER

**MODEL 4572.** Use up to four sets with a single antenna, both UHF and VHF plus FM. Reliable solid-state circuit gives maximum signal-to-noise ratio for snow-free pictures, both color and black-and-white. Will not overload in strong signal areas, up to 0.2 volt. Flat response, high gain, excellent output isolation. Has 3 silicon transistors. Self-contained power supply. Single 300-ohm input, 4 combined UHF/VHF outputs. For TV channels 2 to 83 plus FM. Stripless screw terminals.  $8\frac{1}{2} \times 3\frac{1}{4} \times 1\frac{1}{4}$ ". For 110-120 volts, 60 Hz AC. 2 lbs. **11 A 1734.**.....41.42

### VHF/FM 4-SET DISTRIBUTION AMPLIFIER

**MODEL 4571.** Same as 4572, but with two transistors for VHF television channels 2-13 and FM band only. 300-ohm.  $8\frac{1}{2} \times 3\frac{1}{4} \times 1\frac{1}{4}$ ". For 110-120 volts, 60 Hz AC. Shpg. wt., 2 lbs. **11 A 1735.**.....16.75



INDOOR TWO-SET  
VHF-UHF-FM AMPLIFIER  
**2685**

- Uniform High Gain
- Efficient FM Filter
- For Single Down-Leads

**MODEL 1238.** Provides high gain for bright color and sharp, steady black-and-white pictures without snow or interference. Can be used with a single receiver, or two receivers. For use with all-channel sets or VHF sets with UHF converters.

Obsolescence-proof—covers all TV channels 2 through 83—present as well as future channels. Circuit uses two high-stability silicon transistors for the utmost reliability and cool operation. Draws so little power that the unit need never be turned off. Built-in FM filter prevents overload.

Designed for use with single down-lead antennas. Input accepts combined UHF/VHF signals of 300-ohm impedance. Output is two combined signals at 300 ohms. Easily installed, for indoor mounting. Compact size,  $2\frac{1}{2} \times 4 \times 1\frac{1}{4}$ ". For 110-120 volts, 60 Hz AC. Shpg. wt., 1 lb. **11 A 1342.**.....26.85

### VHF/FM COAXIAL DISTRIBUTION AMPLIFIER

**1790** • Four 75-Ohm Outputs  
• Channels 2-13 and FM

**MODEL 4569.** Solid-state model feeds signal for up to 4 sets from single 75-ohm coax downlead. Insures top-quality reception in any area. Powerful low-noise silicon transistor circuit gives snow-free pictures, provides 5 dB typical gain at each output. High output isolation (14 dB typical). For channels 2-13 plus FM band. 75-ohm input and outputs. With five solderless connectors for coax cable. Mounts anywhere indoors.  $4\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$ ". For 115 volts, 60 Hz AC. Shpg. wt.,  $\frac{3}{4}$  lb. **11 A 1736.**.....17.90



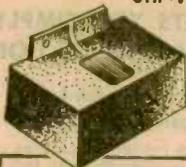
Coaxial Splitter  
for Up to 4 Sets—  
Ideal for MATV

### VHF/FM 300-OHM 4-SET DISTRIBUTION AMPLIFIER

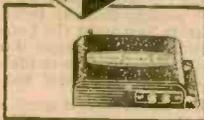
**MODEL 1436.** Four-output unit for channels 2-13 and FM. Powerful, low-noise silicon transistor. High output isolation. 300-ohm balanced input and outputs. Stripless screw terminals.  $3 \times 4\frac{1}{4} \times 1\frac{1}{2}$ ". For 115 V, 60 Hz AC. Wt., 1 lb. **11 A 1737.**.....13.40

## MAST-MOUNTING AMPLIFIERS

### UHF-VHF-FM ANTENNA AMPLIFIER



**3237** • Weatherproof  
• Low Power Drain



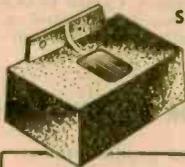
Mast-Mount Amplifier  
with Indoor Remote  
Power Supply

**MODEL 4565.** Covers 82 TV channels, for clearer, sharper pictures. Mounts on mast for best signal-to-noise ratio. For single set. Single all-channel input for use with all-channel antenna. High-stability silicon transistors for brilliant color and black-and-white. Indoor remote power supply has separate 300-ohm UHF/VHF outputs. Filter prevents FM overload. Amplifier,  $2\frac{1}{2} \times 4 \times 1\frac{1}{2}$ "; power supply,  $2\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ ". For 110-120 VAC. 1 $\frac{1}{2}$  lbs. **11 A 1733.**.....32.37

4566. As above, but separate UHF and VHF inputs, outputs. **11 A 1343.**.....35.25

### SOLID-STATE VHF ANTENNA AMPLIFIER

**2517** • High-Gain Circuit  
• Silicon Transistors

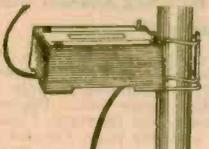


Mast-Mount Amplifier  
with Indoor Remote  
Power Supply

**MODEL 4567.** 300 OHMS. Has two-transistor circuit for sharp color and black-and-white pictures. Pulls in weaker channels without overloading from strong local TV or FM stations. Provides 17 dB gain. Can be used with one or two TV sets. Silicon transistors provide the utmost in circuit stability and reliability. Uses little power. Amplifier mounts on mast, power supply indoors. Amplifier,  $2\frac{1}{2} \times 4 \times 1\frac{1}{2}$ "; power supply,  $2\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ ". 110-130 V, 60 Hz AC. Shpg. wt. 1 $\frac{1}{2}$  lbs. **11 A 1344.**.....25.17

### SOLID-STATE UHF ANTENNA AMPLIFIER

**2965** • 2 Silicon Transistors  
• Triples Signal Strength

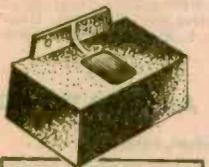


Indoor Power Supply

**MODEL 4568.** Powered for weak channels, yet does not overload strong channels. Average gain of 10 dB triples signal strength. Offers maximum signal-to-noise ratio for clear, strong pictures. Two ultra-stable silicon transistors for uniform high gain across entire UHF band. "Jiffy Mount" snaps onto antenna mast—amplifier slips over prongs for fast, secure installation. Remote power supply plugs into AC outlet. 300-ohm balanced input and output. Amplifier and power supply each  $1\frac{1}{2} \times 2\frac{1}{2} \times 4$ ". 110-120 V, 60 Hz AC. 1 $\frac{1}{4}$  lbs. **11 A 1508.**.....29.65

### HIGH-GAIN VHF-TV AND FM ANTENNA AMPLIFIER

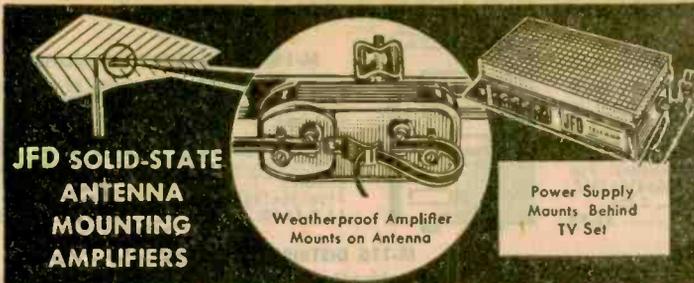
**9115** • For Far-Fringe Areas  
• 300 or 75 Ohms



Power  
Supply

**MODEL 1206.** 25 dB gain on channels 2-13 and FM broadcast band. Increases signal voltage at least 18 times. Excellent for color reception. May be mast-mounted a mile away from set and AC power source (with open lead-in)—amplifies signal with no increase in line noise from lead-in. Needs no separate power line. Operation is automatic—amplifier turns on and off at RP-3 remote power supply. 300-ohm balanced input; 300 and 75-ohm outputs. Broadband circuit for high S/N ratio. Amplifier,  $5 \times 3 \times 3$ "; supply,  $8 \times 3 \times 2$ ". 115 V, 60 Hz AC. Wt., 7 lbs. **11 A 1159.**.....91.15

# JFD and Jerrold TV Antenna Amplifiers



## INDOOR AMPLIFIERS

**JFD**

**DIRECTOR-82 UHF-VHF-FM**

**2850** • Installs Anywhere  
• Solid-State Circuit

MODEL PC-4382. All-channel antenna amplifier improves reception on UHF and VHF channels 2-83, plus FM. "Neverload" silicon transistor; broadband design. 4-output splitter network; 8 dB gain per output. 300-ohm input, outputs. Size 5x3 1/2x1 1/4". For 110-120 V, 60 Hz AC. Shpg. wt., 2 lbs.

11 A 1264..... 28.50

### DIRECTOR-12 VHF-FM ONLY

MODEL PC-4312. Same fine features as above, but operates on VHF channels 2-13. Excellent for color TV. Mounts in any position. 110-120 V, 60 Hz AC. 2 lbs.

11 A 1266..... 18.00

## "SNOW PLOW" MAST-MOUNT AMPLIFIERS

VHF/ UHF/FM **3750**

VHF TV **2850**

UHF TV **2850**

MODEL SP-2382CD. Offers bright, sharp UHF-VHF color or black-and-white TV; clear, brilliant FM reception. Three-silicon-transistor "Neverload" design—15 dB VHF gain; 18 dB UHF gain; 12 dB FM gain. 300-ohm input, two 300-ohm outputs. Weather and lightning protected PC amplifier unit mounts on antenna mast for highest S/N ratio. No-strip terminals. Compact power supply with built-in splitter mounts conveniently near TV receiver. Preamplifier, 6 1/2x2 1/4x3 1/4". Power supply; 5 1/2x3 1/2x1 1/4". 110-120 V, 60 Hz AC. 11 A 1262. Wt., 2 lbs..... 37.50

MODEL SP-2300CD. VHF mast-mounted amplifier increases picture clarity on channels 2-13; reduces ghosts, snow and interference. Same fine features as SP-2382 at left. 15 dB gain. 110-120 VAC. 11 A 1743. Wt., 2 lbs..... 28.50

MODEL SP-2314. UHF-only mast-mounted amplifier offers full 15 dB gain on UHF channels 14-83. Improves overall performance of any UHF antenna. VHF bypass circuit reduces interference. Other features same as SP-2382. 110-120 VAC. 11 A 1263. Wt., 2 lbs..... 28.50

## JERROLD TELEVISION AMPLIFIERS AND ACCESSORIES

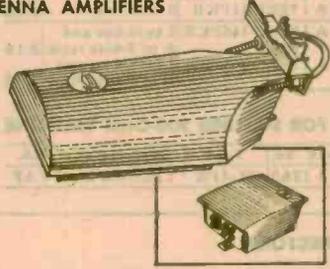
### MAST-MOUNTING ANTENNA AMPLIFIERS



**"DESNOWER" HIGH-OUTPUT VHF PREAMPLIFIER**

**5970** Can Drive Small Distribution System

MODEL DSB-107. High-output VHF antenna preamplifier with built-in tunable FM trap. Output capability is +40 dB mV per channel, for up to 7 channels at -46 dB cross-modulation, sufficient to drive small antenna distribution systems. FM trap may be tuned to 10 dB attenuation on band 1.25 MHz wide, within FM Band. If no strong interference exists, trap can be tuned off FM band. Uses set-mounted power supply, 4 3/4x3 1/4x1 1/4". Mast-mounted preamp unit, 2 3/4x6 1/4x4 1/4". 300 ohms. For 110-120 V, 60 Hz AC. 11 A 2076. Shpg. wt., 2 lbs..... 59.70



**"POWERMATE PLUS" VHF-UHF ANTENNA AMPLIFIER**

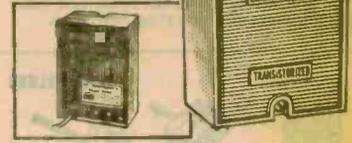
**2660** Single or Dual 300-Ohm Outputs

MODEL 4283. Functionally styled mast-mounting preamplifier features full 82-channel operation, tunable FM trap. Special lightning protection circuit eliminates danger to your TV set if lightning strikes antenna. 300-ohm antenna input with choice of single or dual 300-ohm TV set outputs. VHF gain, 13.0 dB; UHF gain, 10.0 dB. Uses remote wall or set-mounting power supply. 2 1/4x6x4". Preamplifier, 3 1/2x8x3 1/4". With all mounting hardware, cable connectors. For 110-130 V, 60 Hz AC. 11 A 2077. Shpg. wt., 2 1/2 lbs..... 26.60

### INDOOR TV AMPLIFIERS

#### POWERMATE TV/FM FOUR-SET COUPLER

**1662**



MODEL TA-24DP. Amplified coupler has sufficient gain (2.2 dB at low-band, 3.6 dB at high band) to supply up to 4 TV sets from single antenna. (Higher gain with less than 4 sets.) Improves VHF-TV channels, plus FM. 300-ohm input and outputs. 3 1/4x4 1/2x2". Mounts on any surface. 110-120 V, 60 Hz AC. 2 lbs.

11 A 1270..... 16.62

MODEL TAC-4. UHF/VHF 4-way splitter/amplifier improves UHF-VHF TV reception, plus FM. Total gain, 10 dB, 3 dB for each output. 75-ohm input, outputs. 7 1/2x4 3/8x1 1/8". Shpg. wt., 1 1/2 lbs.

11 A 1738..... 30.60  
11 A 1724, TAC-1. Above, Gain: VHF, 11 dB; UHF, 12 dB. Wt., 2 lbs... 28.60



MODEL TC83. VHF amplifier. Same as above but for VHF-TV, plus FM. Silicon transistor, nverse feedback circuit. 4 outputs, 75 ohms. 7 1/2x4 3/8x1 1/8". 2 lbs.

11 A 1739..... 19.95

MODEL TA-66A. VHF amplifier. Above, but with 300 ohm input and outputs. 8 3/8x4 3/8x6 1/8". Shpg. wt., 1 1/2 lbs.

11 A 1217..... 23.28

### VHF 2-TRANSISTOR AMPLIFIER

SPM-106L. As above, 300-ohm input and outputs. 16.9 dB gain. Mast-mounted preamp, 2 1/4x6 1/4x3 3/4"; power supply; 4 3/4x3 1/4x1 1/4". 110-120 V, 60 Hz AC. 2 lbs.

11 A 1416..... 29.95

### UHF 2-TRANSISTOR AMPLIFIER

UPM-104L. As above, 300-ohm input and outputs. 13.7 dB gain on UHF channels 14-83. Preamp, 2 1/4x6 1/4x3 3/4"; power supply, 4 3/4x3 1/4x1 1/4". 110-120 V, 60 Hz AC. 11 A 1318. Wt., 2 lbs..... 24.61

### VHF ANTENNA AMPLIFIER

MODEL SPC-107L. 75-ohm impedance, as above, for VHF only. Great for color TV. Offers gain of 16 dB. Preamp, 2 1/4x6 1/4x3 3/4". Power supply, 4 3/4x3 1/4x1 1/4". 2 lbs.

11 A 1502..... 29.95

### 75-OHM CONNECTORS

MODEL F-59A. Male RG-59/U connector for Jerrold 75-ohm equipment. 1 oz.

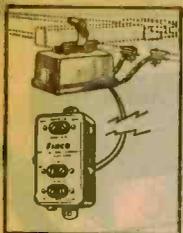
11 A 1742..... Each 36¢

MODEL F-56A. For Belden 8828 cable. 11 A 1272. Wt., 1 oz..... Each 36¢

**NOTE:** Antenna Amplifiers Will Improve and Boost TV Pictures or FM Only When Used With Lead-in and Antenna in GOOD Condition. Check Your Lead-in and Antenna Before Ordering.

# TV Amplifiers and Installation Accessories

## FINCO 82-CHANNEL SILICON TRANSISTOR AMPLIFIERS



**M-22 300-OHM ANTENNA AMPLIFIER**  
Silicon transistor amplifier provides 15dB gain. For VHF-UHF. Amplifier unit, in die-cast housing, mounts on antenna boom with stainless steel clamp. Power supply fastens behind TV receiver. Provision for 1 receiver. 300-ohm input and output. For 110-120 VAC. Amplifier,  $3\frac{1}{4} \times 4\frac{1}{2} \times 2\frac{3}{4}$ ". Power Supply,  $4 \times 2\frac{1}{2} \times 2\frac{1}{4}$ ". Wt., 2 lbs.  
11 A 1116. . . . . 39.95



**M-118 DISTRIBUTION AMPLIFIER**  
Fully silicon transistorized 82-channel broadband amplifier with 9 dB gain VHF and 7 dB UHF at each of four 75-ohm outputs. Input: 75 ohms. High stability and low noise figure. Ideal for deluxe multi-set systems. Snow-free color or black-and-white pictures. "F" connectors. 110 VAC, 60 Hz.  $5\frac{1}{2} \times 3\frac{3}{4} \times 1\frac{1}{4}$ ". Shpg. wt., 1 lb.  
11 A 1148. . . . . 29.95

### M-23 75-OHM ANTENNA AMPLIFIER

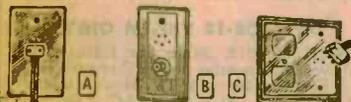
Same as M-22, but for 75-ohm coaxial, low-interference download. Provides high gain for bright color and sharp steady black-and-white. Pulls in weaker channels without a signal overloading problem. Requires matching transformer for use at 300-ohm television set. Amplifier:  $3\frac{1}{4} \times 4\frac{1}{2} \times 2\frac{3}{4}$ ". Power Supply:  $4 \times 2\frac{1}{2} \times 2\frac{1}{4}$ ".  
11 A 1140. Shpg. wt., 2 lbs. . . . . 41.95

### M-115 DISTRIBUTION AMPLIFIER

Silicon transistor broadband distribution amplifier provides gain of 15 dB UHF/VHF. Single 75 ohm "F" connector output. High degree of stability while retaining exceptionally low noise figure of 4.5 dB VHF, 8 dB UHF. Channels 2-63, plus FM. Input, 75 ohms. For 110 VAC, 60 Hz. Size,  $5\frac{1}{2} \times 3\frac{3}{4} \times 1\frac{1}{4}$ ".  
11 A 1162. Shpg. wt., 1 lb. . . . . 29.95

## MOSLEY CUSTOM ANTENNA INSTALLATION ACCESSORIES

### CUSTOM WALL MOUNTING ANTENNA OUTLETS



#### A FOR FLAT, OVAL AND ROUND 300-OHM TWIN-LINE

\*Type FD-1PK includes a built-in switch to eliminate any open-end line losses when more than one plate is connected to the same twin-line.

Stock No.	Type No.	Connections For	EA.
11 A 1753	F-1PKB	1 twin-line	1.23
11 A 1754	*FD-1PKB	1 twin-line	1.39
11 A 1755	F-11PKB	2 twin-lines	1.46
11 A 1756	F-145PKB	1 twin-line and 4- or 5-wire rotor	2.16
11 A 1757	F-245PKB	2 twin-lines and 4- or 5-wire rotor	2.48

#### A FOR SHIELDED 300-OHM TWIN-LINE

Stock No.	Type	Description	EA.
11 A 1760	BL-1PK	1 sh. twin-line	1.67

#### B FOR RG59/U 75-OHM COAX

Stock No.	Type	Description	EA.
11 A 1761	FCC-1-PK	1 coax outlet	2.64
11 A 1762	FCC-145-PK1	1 coax outlet and 4 or 5-wire rotor	3.63

#### B FOR BC6/U 75-OHM COAX

Stock No.	Type	Description	EA.
11 A 1007	FCC-61-PK	1 coax outlet	2.64
11 A 1018	FCC-6145-PK1	1 coax outlet, 4 or 5 wire rotor	3.63

#### C FOR CABLE AND AC OUTLETS

Metal barrier-plate for mounting with standard 2-gang electrical outlet box.

Stock No.	Type	Description	EA.
11 A 1763	AC-1PKB	1 twin-line	1.87
11 A 1764	AC-11PKB	2 twin-lines	2.28
11 A 1765	AC-145PKB	1 twin-line, 4or5Wire rotor	3.24
11 A 1766	AC-245PKB	2 twin-lines, 4or5Wire rotor	3.82

- Attractive Ivory Colored Plastic
- Plates for Every Requirement
- Include All Rotor and Line Plugs

Ivory-colored plastic wall plates, complete with matching plugs for black-and-white and color VHF UHF TV (or FM) transmission line. Can be flushed-mounted on wall with bracket supplied, or over standard electrical outlet box. Types include those for flat, oval and round 300-ohm twin-line; shielded 300-ohm twin-line; 75-ohm coaxial cable; and types with provision for AC outlet. Some types have connections for antenna rotor cable, in addition to antenna transmission line. All plugs needed for each type are included plus hardware and complete instructions. Av. shpg. wt., 8 oz.

### SOLDERLESS CONNECTORS



A wide selection of solderless plugs, sockets, and connectors. Specially designed for use with flat, oval, round, and shielded antenna twin-line and multiple conductor rotor cables. Easy to assemble without soldering—just strip wires, insert, tighten screws. Provide sure, fast contact, permit quick connect and disconnect. All are molded of low-loss polystyrene for constant impedance. All units listed are clear except \*ivory color. †Pair. Av. shpg. wt., 2 oz.

Stock No.	Type	Fig.	Description	EA.
11 A 1482	27-S	D	Twin-line splicer	.17
11 A 1688	*BL-3S	D	Sh'd. t.-l. splicer	.90
11 A 1767	*303B	F	T-line male plug	.29
11 A 1768	*BL-300	F	Sh'd. t.-l. m. plug	.65
11 A 1769	*345B	F	4-5 wire male plug	.76
11 A 1636	*365	E	4-5 wire female pl.	.93
11 A 1511	301	H	Male twin-line	.31
11 A 1506	311	G	Female twin-line	.25
11 A 1635	†321	J	Polarized connect.	.56

### MOSLEY ACCESSORIES WITH SOLDERLESS CONNECTIONS



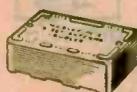
**K** TYPE 343-PKB TRANSMISSION LINE SOCKET WITH PLUG. Solderless. Mounts on baseboard or wall. With twin-line plug and mounting screws. Ivory.  
11 A 1770. Shpg. wt., 2 oz. . . . . 71

**L** TYPE 263S "Y-TV". Strain relief conn. for use where distance between ant. terms. is 4" or less. Solderless.  
11 A 1771. Shpg. wt., 2 oz. . . . . 64

**M** TYPE 304-PK ANTENNA CONNECTOR. For twin lead at TV set. Solderless.  
11 A 1430. Shpg. wt., 2 oz. . . . . 66

**N** TYPE F-42 2-WAY ANTENNA SWITCH. Switch one antenna to either of 2 receivers, or 2 ants. to one rec. 300 ohms. UHF-VHF-FM. Ivory finish.  
11 A 1571. Shpg. wt., 8 oz. . . . . 1.83

### TV COUPLERS



For multiple TV-FM set installations in apartments, motels, schools, homes, etc. Low-loss printed circuit couplers isolate output and equally distribute signal. Four-set coupler may be used with 2, 3, or 4 receivers. Wt., 6 oz.

#### FOR FLAT, OVAL AND ROUND TWIN-LINE

Stock No.	Type	Description	EACH
11 A 1287	PC-4	4-set coupler	1.95
11 A 1288	PC-2	2-set coupler	1.12

#### FOR SHIELDED 300-OHM TWIN-LINE

11 A 1687	BL4PK	2, 3, or 4 sets	2.51
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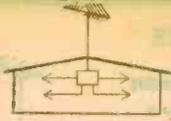
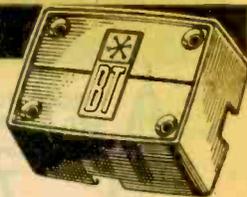
### WALL-THRU AND ROOF-THRU INSULATORS



**P** TYPE 625 WALL-THRU INSULATOR. For walls up to 13". Tube 14" long with inside plate and outside cap. Ivory plastic.  
11 A 1022. Shpg. wt., 1 lb. . . . . 1.16

**R** TYPE M-60 ROOF-THRU AND WALL-THRU. Weatherproof. For wall or sloped roof. For all twin lead, coax, rotor cables.  
11 A 1772. Shpg. wt., 4 oz. . . . . 1.12

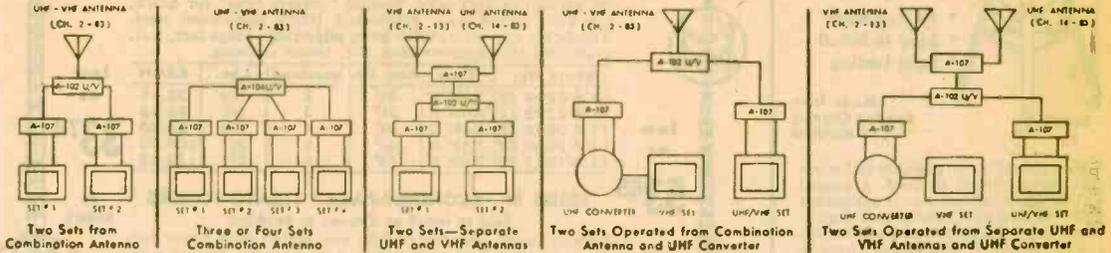
# TV-FM Couplers, Splitters, Arresters



## OPERATE UP TO FOUR SETS FROM A SINGLE ANTENNA

Low-loss couplers and splitters let you connect more than one TV or FM set to a single antenna, or split the signal for VHF and UHF terminals, while still receiving the full signal strength delivered to your antenna.

### TYPICAL HOOKUPS USING SPLITTERS AND COUPLERS



## BLONDER-TONGUE UHF/VHF/FM COUPLERS AND SPLITTERS

**3325 UHF/VHF-TV SPLITTER.** For connecting one UHF and one VHF TV antenna to a single downlead. Can also be used to split signal from a single antenna for feeding a TV set with separate UHF-VHF antenna input terminals. 15 dB isolation; 0.5 dB insertion loss. No-strip 300-ohm terminals. Size,  $1\frac{1}{4} \times 2\frac{1}{4} \times 2\frac{1}{4}$ ".  
**11 A 1432.** Shpg. wt., 5 oz. .... 3.60

**4561 TWO-SET UHF/VHF COUPLER.** Has one input from antenna and two combination UHF/VHF outputs. Feeds UHF-VHF signals (channels 2 to 83) from a single downlead to two TV sets, each having a single UHF or VHF antenna input terminal. No-strip terminals. Size,  $1\frac{1}{4} \times 2\frac{1}{4} \times 2\frac{1}{4}$ ". Shpg. wt., 5 oz.  
**11 A 1078.** .... 2.20

**4562 FOUR SET UHF/VHF COUPLER.** Has one input from antenna and four combination UHF/VHF outputs. Feeds UHF-VHF signal from a single downlead to up to 4 TV sets. Size,  $1\frac{1}{4} \times 2\frac{1}{4} \times 2\frac{1}{4}$ ".  
**11 A 1076.** Shpg. wt., 5 oz. .... 3.35

**4563 VHF/UHF ECONOMY SPLITTER.** Splits signal from single VHF/UHF downlead for feeding TV set with separate VHF-UHF terminals. 300 ohm resistance. Loss: 5.5 dB (VHF), 7.0 dB (UHF).  
**11 A 1572.** Shpg. wt., 4 oz. .... .86

**3392 UHF/VHF TV SPLITTER.** Splits signal from a single UHF/VHF downlead for feeding a TV set with separate UHF-VHF antenna input terminals. Size,  $1\frac{1}{4} \times 2\frac{1}{4} \times 2\frac{1}{4}$ ".  
**11 A 1620.** Shpg. wt., 4 oz. .... 2.25

## JFD INDOOR SIGNAL SPLITTERS FOR FM, COLOR OR BLACK & WHITE TV

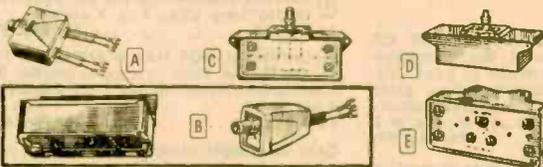
• VHF/UHF Splitter assures sharp, clear pictures in color or Black/white

**JFD SS21 VHF/UHF TV SPLITTER.** Splits signal from a single UHF/VHF downlead for feeding a TV set with separate UHF-VHF antenna terminals. Shpg. wt., 4 oz.  
**11 A 1036** ..... 2.60

• VHF/UHF/FM Splitter allows one antenna to do the job of three

**JFD SS83 VHF/UHF/FM SPLITTER.** Splits signal from single VHF/UHF/FM downlead for a TV set with UHF-VHF antenna terminals plus a separate FM receiver. Shpg. wt., 4 oz.  
**11 A 1037.** ..... 3.32

## SWITCHES, ATTENUATORS, TRANSFORMER-SPLITTER



**A JERROLD T-380A-DP. TRANSFORMER-SPLITTER.** Handy transformer for all-channel coaxial antenna system. Matches 75-ohm coaxial cable to 300-ohm TV sets, to use 75-ohm cable for improved color TV reception. Splits antenna signals to provide separate UHF and VHF antenna inputs to TV sets. Isolates line from AC-DC receivers. Low loss. Hardware for back of set mount.  $3 \times 3 \times 2\frac{1}{2}$ ".  
**11 A 1643.** Shpg. wt., 4 oz. .... 4.77

**B JERROLD CAT-2-DP. MATCHING TRANSFORMER KIT.** Adapts VHF/UHF TV and FM antenna installations for 75-ohm coaxial cable. Mast-mount transformer that matches 300-ohm antenna, mounting bracket, strap, plus set-mount transformer. Wt.,  $\frac{1}{2}$  lb.  
**11 A 1258.** ..... 4.92  
**11 A 1740. T-379. UHF/VHF 75/300-ohm transformer.** 4 oz. .... 1.50

**C JFD AS-1 3-WAY ANTENNA SWITCH.** Bat-handle switch for connecting any one of three separate antennas to one set; or one antenna to any of three sets. Ideal for multiple installations where one antenna or one set is used at a time.  $5 \times 2 \times 1\frac{1}{4}$ ".  
**11 A 1291.** Shpg. wt., 4 oz. .... 2.69

**D JFD AS-5 3-WAY ATTENUATOR SWITCH.** Three-way switch reduces TV or FM overloading problems. Bat-handle switch selects two levels of attenuation—15 or 25-dB—or no attenuation. Eliminates picture "tear-out." 300 ohms. Back-of-set mtg.  $5 \times 2 \times 1\frac{1}{4}$ ".  
**11 A 1622.** Shpg. wt., 4 oz. .... 3.19

**E JFD AS-2 2-WAY ANTENNA SWITCH.** Two-way slide switch connects one of two antennas to one set; or connects one antenna to either one of two sets. For multiple installations where one antenna or one set is used at a time. No-strip terminals.  $5 \times 2 \times 1\frac{1}{4}$ ".  
**11 A 1305.** Shpg. wt., 4 oz. .... 1.99

## LIGHTNING ARRESTERS

**F AT-1105 TUBULAR LINE ARRESTER.** Protects receiver from damage in the event of lightning striking the antenna by providing a ground path over which the high current will pass. For 300-ohm tubular twin-line. Supplied complete with 10" hanger strap, hardware. U.L. Listed. Size,  $2\frac{1}{4} \times 1 \times 1\frac{1}{4}$ ". Shpg. wt., 8 oz.  
**11 A 1001.** ..... 1.69

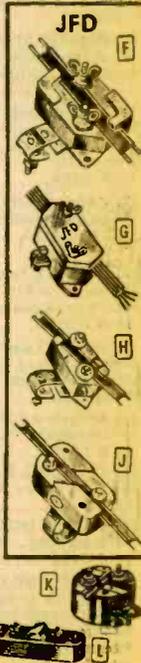
**G AT-1045 ROTATOR LINE ARRESTER.** For 4-wire rotator lead-in. Makes positive contact with conductors. With ground lug and 10" hanger strap. U.L. Listed. Size,  $1\frac{1}{4} \times 2 \times 2$ ". Shpg. wt., 8 oz.  
**11 A 1109.** ..... 2.09  
**11 A 1094. AT-1065.** Similar to above but for 5-wire lead-in. Wt., 8 oz. .... 2.79

**H AT-1055. FLAT-LINE ARRESTER.** Can be mounted on mast or pipe. With 10" hanger strap. U.L. Listed. Size,  $1\frac{1}{4} \times 2 \times 2$ ". Shpg. wt., 15 oz.  
**11 A 1110.** ..... 1.29

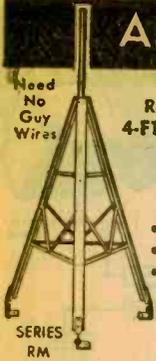
**J AT-1025 FLAT-LINE ARRESTER.** For flat-type twin lead. Waterproof. Mounts on mast or pipe. Supplied complete with 10" hanger strap, 4" ground wire, and necessary hardware. U.L. Listed.  $1\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{4}$ ". Wt., 15 oz.  
**11 A 1530.** ..... 2.49

**K G-C TELCO 8642 TELEVISION LIGHTNING ARRESTER.** Use with any twin-line lead-in. Single screw mounting. U.L. Listed. Size,  $2 \times 2 \times \frac{1}{4}$ ". Shpg. wt., 6 oz.  
**11 A 1082.** ..... .82

**L RADIO LIGHTNING ARRESTER.** For series insertion in single-wire antenna lead-in. Made of moisture-proof porcelain. U.L. Listed.  $1 \times 3\frac{1}{2} \times 1$ ". Shpg. wt., 6 oz.  
**11 A 1091.** ..... .59



# Antenna Towers and Installation Accessories



Need No Guy Wires

## ROOF-MOUNTING 4-FT. to 8-FT. TOWERS

Low as **785**

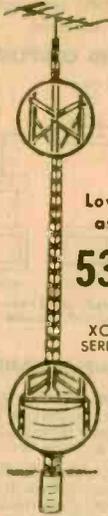
- Fit Any Roof
- Easy to Install
- Long Lasting

Made from Beaded Channel Leg Material

SERIES RM

Self-supporting; no guys needed when securely anchored to roof. 3 hinged feet fit any roof; antenna is assembled and "walked-up" into place. Galvanized, beaded steel channel withstands rough weather. Packages include tower with mast and mast kit (RM4 and RM8 less mast). Mast recesses 2 feet into tower. Permits antenna heights of 10 ft., or 14 ft. above roof. Shipped knocked down; assemble quickly and easily. With complete instructions.

- 11 A 2358 ZW, RM4-8, 4-ft. tower, 8-ft. mast, mast kit, 20 lbs. .... 10.20
- 11 A 2359 ZW, RM4, 4-ft. tower, mast kit, 14 lbs. .... 7.85
- 11 A 2364 ZW, RM8-8, 8-ft. tower, 8-ft. mast, mast kit, 30 lbs. .... 16.95
- 11 A 2365 ZW, RM8, 8-ft. tower, mast kit, 24 lbs. .... 14.50



Low as **5365**

XCB SERIES

## SPAULDING ANTENNA TOWERS

### CYLINDER-BASE TOWERS—14-FT. to 55-FT. HIGH

Need No Concrete Foundation—Set into Cylinder Base

SERIES XCB. High-strength, self-supporting towers. Assemble on ground or vertically. Special "culvert base" for quick, one-man installation. All-riveted 100% galvanized steel. Top holds any rotor. With base, adjustable hinge feet, 8-ft. mast and factory-assembled 3-ft. tower sections.

Stock No.	Type	Ant. Ht.	Sections	Lbs.	EACH
11 A 2294 ZF	X28CB	23'	2	104	53.65
11 A 2295 ZF	X36CB	31'	3	131	66.45
11 A 2058 ZF	X44CB	39'	4	170	84.80
11 A 2059 ZF	X52CB	47'	5	217	107.00
11 A 1832 ZF	X60CB	55'	6	271	132.45

Low as **3370**

### SERIES EP "ECONOMY-PACK" STRATO-TOWERS

Easy to Install on Ground or Roof-Top

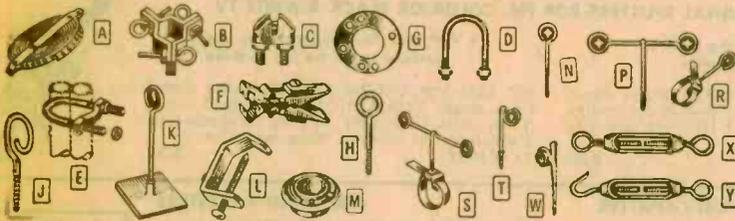
Include listed quantity of 8-ft. zinc-plated steel tower sections, ground plate with stakes, 3-ft. mast kit. Mount with house bracket or roof mount (not supplied), below. Require guying it room-mounted or over 16 ft. above house bracket. Includes EP-H1 house bracket below.

Stock No.	Type	Ant. Ht.	Sections	Lbs.	EACH
11 A 2541 ZF	EP-2	22'	2	62	33.70
11 A 2540 ZF	EP-3	30'	3	80	44.45
11 A 2535 ZF	EP-4	38'	4	99	53.65
11 A 2534 ZF	EP-5	46'	5	118	62.85
11 A 2543 F	EP-R1			2	4.70
11 A 2544 F	EP-H1		House Base House Bracket	5	4.70



**NOTE**

Spaulding towers are shipped truck F.O.B. Frankfort, Indiana. No C.O.D. orders. Specify full shipping address—no Post Office box numbers. See Ordering Information pages for complete instructions.



- A** HANGER STRAP. Mounts masts to odd-shaped objects. 3/4" perforated galvanized steel strapping. 12' coil. 1 lb. 11 A 1107 ..... Each 69¢
- B** RING CLAMP. Supports guy ring on mast. Corrosion-resistant steel. Provides slip-proof grip. Fits mast up to 2 1/2" diameter. Pkg., 1 lb. 11 A 1369 ..... 49¢
- C** CABLE CLAMP. Provides non-slip grip on guy wire ends. Fits cables to 3/8" dia. 7/8 x 3/16". Pkg., 4 oz. 2 per pkg. 11 A 1404 ..... Per Pkg. 43¢
- D** U-BOLT. Galvanized steel. With nuts and washers. Fits masts to 1 1/2" O.D. Pkg. wt., 4 oz. 2 per pkg. 11 A 1122 ..... Per Pkg. 25¢
- E** MAST CLAMP. Tight-grip yoke. For 2 masts, max. O.D. 1 3/8" each. Galvanized steel. Pkg., 4 oz. 2 per pkg. 11 A 1123 ..... Per Pkg. 59¢
- F** ANTENNA CLIP. Clips lead-in to antenna terminals. Pkg., 10 oz. 4 per pkg. 11 A 1405 ..... Per Pkg. 55¢
- G** GUY RING. Rests on ring clamp. For 1 1/4 O.D. masts. Pkg., 10 oz. 5 per pkg. 11 A 1124 ..... Per Pkg. 75¢
- H** CLOSED HOOK EYE. Anchors guys. 5" long. Pkg., 10 oz. 5 per pkg. 11 A 1126 ..... Per Pkg. 39¢
- I** OPEN HOOK EYE. Anchors guy wires securely to roof. Screws into wood. Galvanized steel resists rust, corrosion. Pkg. 10 oz. 5 per pkg. 11 A 1125 ..... Per Pkg. 33¢

- K** "STICK-ON" STAND-OFF SUPPORT KIT. Heavy-duty supports have pressure-sensitive backing that sticks to brick, masonry, wood or aluminum siding, glass. Standoff screws into plastic shaft. Supports with stand-offs. Shpg. wt., 10 oz. Pkg. of 3. 11 A 1143 ..... Per Pkg. 99¢
- L** GROUND CLAMP. For secure connection to water pipes up to 1 1/2" dia. Screw terminal for ground wire. Shpg. wt. per pkg., 4 oz. 2 per pkg. 11 A 1433 ..... Per Pkg. 39¢
- M** ALUMINUM FLOATING GUY RING. Fastens easily and quickly with set screw. Permits guyed mast to be rotated. Takes 3 or 4 guys on any mast to 1 1/8" outside diameter. Shpg. wt. 8 oz. 11 A 1296 ..... Each 1.59  
11 A 1311. As above, takes 3 or 4 guys on any mast to 1 3/4" O.D. Shpg. wt., 9 oz. Each ..... 1.69
- N** UNIVERSAL STAND-OFFS. For any TV antenna lead-in. Polyethylene insulation. Screw-in type. Shpg. wt. per pkg., 10 oz. 5 per pkg. 11 A 1127. 3 1/2" Long ..... Per Pkg. 20¢  
11 A 1128. 5 1/2" Long ..... Per Pkg. 33¢  
11 A 1129. 7 1/2" Long ..... Per Pkg. 39¢
- P** DOUBLE STAND-OFFS. Wood-screw type hold two leads. For any TV lead-in. Pkg., 10 oz. 5 per pkg. 11 A 1132. 3 1/2" Long ..... Per Pkg. 74¢  
11 A 1133. 5 1/2" Long ..... Per Pkg. 82¢  
11 A 1134. 7 1/2" Long ..... Per Pkg. 85¢

- R** STRAP-TYPE SINGLE STAND-OFFS. Mount on mast. For any lead-in. Fit up to 3" masts. Pkg. wt., 6 oz. 3 per pkg. 11 A 1137. 3 1/2" Long ..... Per Pkg. 35¢  
11 A 1138. 5 1/2" Long ..... Per Pkg. 41¢  
11 A 1139. 7 1/2" Long ..... Per Pkg. 44¢

- S** STRAP-TYPE DOUBLE STAND-OFFS. As above, but hold two lead-ins. Clamp up to 3" mast. Pkg., 8 oz. 3 per pkg. 11 A 1135. 3 1/2" Long ..... Per Pkg. 73¢  
11 A 1136. 7 1/2" Long ..... Per Pkg. 75¢

- T** DRIVE-IN STAND-OFFS. For all types lead-in. 3 1/2" long. Pkg., 5 oz. 5 per pkg. 11 A 1130 ..... Per Pkg. 37¢

- W** UNIVERSAL HOT NAIL STAND-OFFS. For any lead-in. Hold in wood or mortar. No starting hole is needed. 3 1/2" long. Pkg., 4 oz. 5 per pkg. 11 A 1131 ..... Per Pkg. 61¢

CAST ALUMINUM TURNBUCKLES. Provide easy adjustment of guy-wire tension. Shpg. wt. per pkg. 8 oz. 4 per pkg.

Stock No.	Fig.	Closed	Open	PER PKG.
11 A 1407	Y	5 1/2"	7 1/2"	.69
11 A 1409	Y	7 1/2"	10 1/2"	1.59
11 A 1410	X	5 1/2"	7 1/2"	.69
11 A 1412	X	7 1/2"	10 1/2"	1.59

## COPPERWELD ANTENNA AND GUY WIRE

Finest grade high-tensile copper weld wire. For use with antennas or guying antenna towers and masts. Copper outer conductor bonded to a steel core for exceptional strength and durability. 12 to 18 gauge. In 100 ft., 250 ft. and 500 ft. rolls.

Stock No.	Ga.	Ft.	Lbs.	PER ROLL
11 A 1357	12	100	2	3.16
11 A 1358	12	250	5	7.49
11 A 1359	14	100	1 1/2	2.74
11 A 1360	14	250	3	5.87
11 A 1361	18	250	2	2.50
11 A 1362	18	500	3	3.75

# Antenna Installation Mounts and Masting

## CHIMNEY MOUNTS

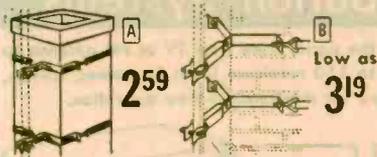


### RATCHET CHIMNEY MOUNT

- Low as 419**
- For Masts to 1 1/2" Dia.
  - Withstands High Winds
  - Stainless Steel Strapping

Extra-rugged chimney mount designed to withstand high winds, adverse weather. Fastens to chimney with wrench. With 12-ft. stainless steel strapping, 2 brackets.

11 A 1322. Wt., 3 1/2 lbs. . . . . 4.19  
11 A 1328. Above, but 18' strap. 4 lb. 4.95



**A** CHIMNEY MOUNT. Sturdy low-cost mount for TV or FM antennas. Has stainless steel strappings. Brackets are heavy-gauge steel, zinc-plated and dichromate-dipped for long life. Easily adjusted for snug, firm grip. For masts to 1 1/4" dia. With two 10-ft. straps, hardware. Wt., 4 lbs.

11 A 1113 . . . . . 2.59

**B** SNAP-IN CHIMNEY MOUNT. Fit masts to 1 3/4" O.D. 4" chimney clearance. Steel brackets zinc-plated, dichromate-dipped to protect against corrosion. Simply "snap" mast in place, tighten bolts. With two 12-ft. stainless steel straps. Wt., 4 lbs.

11 A 1242. . . . . 3.19  
11 A 1142. As above, but with two 3/4" x 18-ft. stainless steel straps. 4 lbs. . . . . 3.95

11 A 1144. Snap-in mount with gold finish; two 3/4" x 12-ft. straps. 4 lbs. . . . . 4.05  
11 A 1146. Snap-in mount with gold finish; two 3/4" x 18-ft. straps. 4 lbs. . . . . 5.04

## TRIPODS AND ROOF MOUNTS



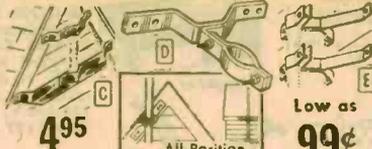
**F** ANTENNA BASE. Accepts masts of 10 ft. or more and up to 1 1/2" O.D. Eliminates guy wires in most installations. Set-screws anchor mast and permit orientation. Electro-galvanized and dichromated. 2 ft. high. Shpg. wt., 7 lbs.

11 A 2040 XW . . . . . 4.39  
11 A 2043 XW. As above, but 3 ft. high. Shpg. wt., 6 1/2 lbs. . . . . 4.95  
11 A 2044 XW. As above, but 5 ft. high. Shpg. wt., 15 lbs. . . . . 8.29

**G** VENT PIPE MOUNT. For clamping to any pipe or vent from 4" to 6" in diameter. Perfect for antenna installations where chimney is inaccessible. Heavy-gauge steel. For all masts up to 1 3/4" diameter. Zinc-plated, dichromate-dipped for long life. 2 per pkg. Shpg. wt., 3 lbs.

11 A 1351 . . . . . Per Pkg. 1.98  
11 A 1363. For 2" to 4" vents. Shpg. wt., 3 1/2 lbs. . . . . Per Pkg. 1.98

## WALL AND EAVE MOUNTS



**C** EAVE MOUNT. For mounting antenna mast on building eaves, 48" lower bracket straddles building. Top bracket mounts on peak. Zinc-plated and dichromate-dipped. For masts to 1 3/4" O.D. 5 1/2 lbs.

11 A 2504 XW . . . . . 4.95

**D** ALL-POSITION MAST BRACKET. Heavy-duty steel; holder swivels 360° for mounting in any position. For telescoping masts to 3" O.D. Ideal for ground-up masts. 2 1/2 lbs.

11 A 1011 W . . . . . 2.18

HEAVY-DUTY WALL MOUNTS (Not illus.) Bracket legs 16" apart to match studs of homes. Heavy-gauge steel.

11 A 2130 XW. 24" from Wall. 10 lbs. 4.95  
11 A 2129 XW. 18" from Wall. 5 lbs. 3.69  
11 A 1256. 12" from Wall. 5 lbs. 2.49

**E** CLOSE-WALL MOUNTS. For areas where large clearance is not needed. For masts to 1 1/4" O.D. Heavy-gauge steel.

11 A 1173. 2 1/4" from Wall. 1 lb. . . . . 99¢  
11 A 1215. 4" from Wall. 2 lbs. . . . . 1.29

## ANTENNA MAST SECTION



Strong, seamless hot-dipped galvanized steel masts with swaged ends and locking joint. 1 1/4" outside diameter.

Stock No.	Ft.	Gauge	Wt.	EACH
11 A 2119 XW	5	18	2 1/4 lbs.	1.19
11 A 2121 XW	5	16	2 3/4 lbs.	1.39
11 A 2135 ZW	10	18	5 lbs.	2.14
11 A 2122 ZW	10	16	7 lbs.	2.55

### NEW GOLD ENAMEL FINISH MASTS

11 A 2107 XW	5	18	2 1/2 lbs.	1.39
11 A 2106 XW	5	16	3 lbs.	1.59
11 A 2105 XW	10	18	5 lbs.	2.19
11 A 2104 ZW	10	16	7 lbs.	2.64

## TELESCOPING TV ANTENNA MASTS

20-Ft. **675**      50-Ft. **1895**

- Made of High-Carbon Steel Tubing
- Hot-Dipped Galvanized
- Floating Guy Ring Permits Rotation

50-Ft. MAST. Heavy-duty for TV (or FM) antenna array. Bolts lock each section in place. Hot-dipped 18-gauge high-carbon steel tubing. Consists of 5 mast sections—O.D.: #1, 1 1/4"; #2, 1 1/2"; #3, 1 3/4"; #4, 2"; #5, 2 1/4". Hardware. 42 lbs.

11 A 2103 ZW . . . . . 18.95

40-Ft. MAST. 4 rugged sections (see sizes listed above); Nos. 1, 2, 3, and 4. Maximum height 40 feet. Shpg. wt., 32 lbs.

11 A 2102 ZW . . . . . 14.50

30-Ft. MAST. Consists of 3 rugged sections: Nos. 1, 2, and 3 described above. Maximum height 30 feet. Shpg. wt., 22 lbs.

11 A 2101 ZW . . . . . 10.15

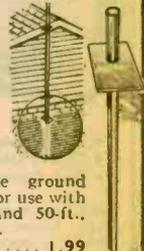
20-Ft. MAST. 2 sections. Consists of mast sections 1 and 2 above. Maximum height, 20 feet. Shpg. wt., 13 lbs.

11 A 2100 ZW . . . . . 6.75



## DRIVE-IN GROUND STAKE FOR TELESCOPING ANTENNA MASTS

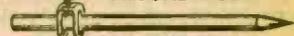
**199** Easy to Install



Sturdy, drive-in type ground mount base. Suitable for use with 20-ft., 30-ft., 40-ft., and 50-ft. masts. Shpg. wt., 5 lbs.

11 A 1013 XW . . . . . 1.99

## GROUND RODS



Selection of low-cost ground rods. Constructed of moisture-resistant copper-plated steel to assure a long-lasting, low resistance contact with earth. Complete with clamp. Each size includes bolt.

Stock No.	Size	Shpg. Wt.	EACH
11 A 2537 XW	4"x3/8"	1 1/2 lbs.	.75
11 A 2538 ZW	6"x3/8"	2 1/4 lbs.	.98
11 A 2539 ZW	8"x1/2"	4 1/4 lbs.	1.98

## GROUND AND GUY WIRE

ALUMINUM GROUND WIRE. No. 8 solid wire. For all grounding applications.

Stock No.	Coil Feet	Wt., Lbs.	EACH
11 A 1557	50	1 1/2	.79
11 A 1558	100	2 1/4	1.59
11 A 1559 XW	1000	26	14.95

NO. 20 GALVANIZED GUY WIRE. 6-strand wire in 100-ft. or 1000-ft. rolls.

11 A 1560. 100-Ft. Roll. 2 lbs. . . . . 69¢  
11 A 1561 XW. 1000-Ft. Roll. 20 lbs. . . . 6.50

NO. 18 GALVANIZED GUY WIRE. For heavy-duty use. 100-ft. or 1000-ft. rolls.

11 A 1562. 100-Ft. Roll. 2 1/2 lbs. . . . . 1.09  
11 A 1563 XW. 1000-Ft. Roll. 25 lbs. . . . 10.95

"PLASTIGARD" PLASTIC-COVERED GALVANIZED GUY WIRE. High tensile strength wire with green transparent jacket. Resists sunlight, corrosion, wind, snow and temperature changes. Heavy-gauge plastic extruded over stranded galvanized steel wire.

11 A 1181 XW. 100-Ft. Roll. 2 1/2 lbs. . . . 2.10  
11 A 1183 XW. 1000-Ft. Roll. 25 lbs. . . . 19.95

## SHIPPING NOTE:

Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages

# JFD Home TV Distribution Systems

**MEDIUM-FRINGE AREA SYSTEM**

4382 \$5 monthly\*

**DEEP-FRINGE AREA SYSTEM**

5612 \$5 monthly\*



## MEDIUM-FRINGE AREA SYSTEM

HS-41-300. Quality 4-set distribution system for medium-fringe areas. Covers VHF-UHF TV, plus FM. Includes: PC-4382 Solid-State Indoor Amplifier/Splitter; Four SS21 UHF/VHF Signal Splitters; Four TT3030 Wall-Plates. Gain: VHF, 16 dB; UHF, 6.5 dB; FM, 6 dB. 300-ohms. 3-transistor amplifier circuit. Amplifier size, 6½x3½x2". 110-130 V, 60 Hz AC. Shpg. wt., 3 lbs.  
**11 A 1177..... 43.82**

## DEEP-FRINGE AREA SYSTEM

HS-42-300. Deep-fringe 4-set system distribution offers improved VHF-UHF and FM reception in all areas. Includes: SP-2382 Solid-State Antenna Splitter/Power-Supply; SC72 300-Ohm 4-Way Splitter; Four SS21 UHF/VHF Signal Splitters; Four TT3030 Wall Plates. Gain: VHF, 12 dB; UHF, 12 dB; FM, 14 dB. Amp. 6½x2½x2½" mounts on crossarm or mast; power supply, 3x4½x1½", mounts indoors. 300 ohms. 115 VAC. Shpg. wt., 3 lbs.  
**11 A 1178..... 56.12**

# Blonder-Tongue TV-FM Distribution Systems

These top-quality distribution systems amplify the signal from your TV or FM antenna to permit delivering a strong, clear signal to up to 150 receivers. Ideal for homes, schools, motels, or any large building. All are designed for maintenance-free operation.



**HIGH-GAIN VHF TV/FM AMPLIFIER**  
**4675**  
 \$5 monthly\*

- 25 dB Minimum Gain VHF and FM
- 75/300 Ohm Input and Output
- Gain Controls for Adjustable Output

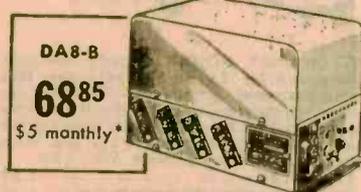
1202. Low-noise broadband amplifier for large home systems, motels, small MATV systems, etc. Drives up to 50 sets. Has 75 and 300 ohm inputs and outputs; low-noise figure (Ch. 2-6, 4 dB; 7-13, 6 dB; FM, 4 dB). Gain control range of 15 dB on all channels. 6½x4¼x5¾". 105-129 VAC. Wt., 4½ lbs.  
**11 A 1163..... 46.75**



**MLAC**  
**11400**  
 \$6 monthly\*

## LARGE SYSTEM VHF TV AMPLIFIER

MLAC VHF TV amplifier provides a gain of 40 dB on channels 2-13. Supplies adequate power to operate up to 150 sets with proper antenna distribution system. Two or more units may be used in series for additional gain when extremely long lines are used. Offers maximum signal fidelity for both color and black-and-white TV. Separate controls make it possible to adjust either high (channels 7-13) or low (channels 2-6) band to compensate for differing input signal strengths. 75-ohm coaxial input and output connectors. Seven tubes. In rugged, well-ventilated metal cabinet, 9x6x5". For 110-120 volts, 60 Hz AC. Shpg. wt., 9 lbs.  
**11 A 1365..... 114.00**



**DA8-B**  
**6885**  
 \$5 monthly\*

## 8-SET VHF AMPLIFIER

DA8-B. Combination signal booster and isolation-distribution system for use in small apartment buildings, homes, motels. Has outputs for up to 8 TV sets, with 22 dB minimum isolation between outputs to prevent interference between sets. 10 dB gain on all VHF channels for bright, clear pictures. Gain control range of 10 to 1 protects system from overload. Low-noise all-triode circuit. Has inputs and outputs for 75 or 300-ohm lines. One output may be used to feed another DA8-B for additional hookups. Includes power supply, terminating resistors, grounding clamp, screw terminals. 5x9x5½". 110-120 V, 60 Hz AC. Wt., 6 lbs.  
**11 A 1248..... 68.85**



## CVB-30P BROADBAND VHF/FM AMPLIFIER

- Silicon Transistor Circuit
- Input for Powering Preamps
- High and Low Gain Controls

CVB-30P. Broadband VHF/FM amplifier for homes, showrooms, small MATV systems, etc. Handles up to 50 sets. Has two 75-ohm inputs; one for direct connection to antenna; the other has duplexed low-voltage AC for powering a mast-mounted preamp. Gain: 30 dB on all VHF channels. Output impedance, 75 ohms. Two controls, for high channels 7-13 and low channels 2-6-FM, balance gain. F connectors; 3-wire power cord. 8½x2x3½x2¾". 105-129 VAC.  
**11 A 1725. Shpg. wt., 4 lbs..... 58.45**

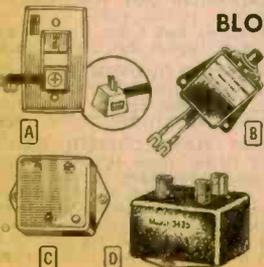


## CVB-29P HIGH-GAIN UHF AMPLIFIER

- Silicon Transistor Circuit
- Eliminates Need for Converter
- Provides Sharp, Clear Pictures

CVB-29P. Excellent high-gain, high-output broadband UHF amplifier gives up to 30 dB gain for use in medium and small MATV systems. Eliminates need for UHF to VHF converter. Built-in UHF/VHF multiplexers permit use with companion VHF amplifiers (CVB-30P at left), for all-channel reception. High and low-gain controls, input for powering preamps. 75-ohm input and output impedances. Size, 8¾x5½x3¾". 3-wire power cord. 110-120 VAC.  
**11 A 1726. Shpg. wt., 3¼ lbs..... 100.00**

## BLONDER-TONGUE DISTRIBUTION SYSTEM ACCESSORIES



- A** COLORTAP 3650. Two UHF/VHF/FM outlet plugs. 300 ohms. With two plugs.  
**11 A 1485. Shpg. wt., 6 oz..... 1.82**  
**11 A 1486. Rotortap-2. 4560. 4 or 5-wire rotor socket, plug, two 300-ohm outlets..... 3.57**
- B** 4564 VHF/UHF. Adapts 75-ohm coax to 300 ohms. 3x2x1".  
**11 A 1274. Shpg. wt., 4 oz..... 1.93**
- C** 4515. VHF/FM splitter. Indoor 2-way hybrid. Separates one 75-ohm coax input into two 75-ohm outputs. Blonder-Tongue OD connectors accept type 59 cable. 2x2x2½". Wt., 8 oz.  
**11 A 1277..... 4.00**

- C** 4537. VHF/FM splitter. Indoor 4-way hybrid. Separates one 75-ohm coax input into four 75-ohm coax outputs. Blonder Tongue OD connectors accept type 59 cable. 2x2x1½".  
**11 A 1276. Shpg. wt., 8 oz..... 5.30**
- D** 3435. VHF/UHF/FM splitter. Indoor 2-way hybrid. Separates one all-channel 75-ohm input into two 75-ohm outputs. Three type F connectors; plugs for type 59 cable. 2x2x1½".  
**11 A 1278. Shpg. wt., 8 oz..... 7.80**
- D** 4535. VHF/FM splitter. Indoor 4-way hybrid. 5 type F connectors, plugs. 75 ohms.  
**11 A 1279. Wt., 8 oz..... 8.45**

# Radio-TV Accessories and Servicing A

## VHF/UHF TV CLARIFIER

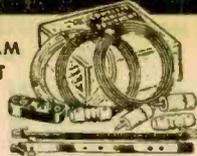
**595** Installs in 60 Seconds



Handy device improves reception by amplifying the pickup power of your antenna. Helps filter out ghosts and interference; clears up snowy pictures. 12-position switch for selecting clearest picture. With 5' twin-line. U.L. Listed. 110-120 AC or DC. 11 A 1209. Shpg. wt. 2 1/4 lbs. . . . . 5.95

## SHORTWAVE/AM ANTENNA KIT

**239**



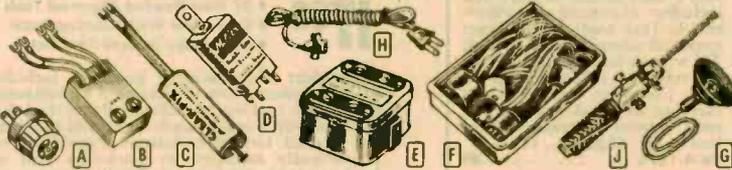
"Pulls in" difficult-to-receive stations on shortwave and AM broadcast bands. Includes: 100' 7x26 bare copper wire; 40' lead-in; 25' heavy-gauge ground wire; 2 insulators; window lead-in; lightning arrester; 2 nail knobs; ground clamp; instructions. 11 A 1239. Shpg. wt., 2 1/2 lbs. . . . . 2.39

## COLOR TV DEGAUSSING COIL



A "must" for color-TV owners just once and it pays for itself netizing picture tube to remove patches of green on screen. 7' coil. Push-button on-off switch complete instructions. For 11 60 Hz AC. Wt., 10 oz. 11 A 1048 . . . . . 11 A 1613. Professional Degaussing 13" dia., 9' cord. Wt., 2 lbs. . . . .

## ACCESSORIES FOR SERVICING, BETTER RECEPTION



**A** TV NOISE KILLER AND STATIC FILTER. Eliminates noise from electrical appliances, power tools. Simply Plug TV into noise killer, noise killer into AC outlet. Sharply reduces electrical interference. Shpg. wt., 4 oz. 11 A 1758. . . . . 69

**B** TV ANTENNA INTERFERENCE FILTER. Stops interference due to planes, neon lights, outdoor transformers. Installs between antenna lead-in wires and set terminals. Improves color or black-and-white viewing. Shpg. wt., 3 oz. 11 A 1759. . . . . 98

**C** SUPEREX "CLEAR-PIX" INTERFERENCE FILTERS. Choice of units to overcome TV interference from various sources. For TV sets using 300-ohm twin lead. 5 oz.

Stock No.	Type	Attenuates	EACH
11 A 1066	CPH	21 MHz Amateur	1.17
11 A 1068	CPF	Strong FM station	1.17
11 A 1067	CPI	Ignition or similar	1.17
11 A 1065	CPL	Citizens Band	1.17

**D** MILLER ANTENNA TRANSFORMERS. Permits use of low-loss 52 or 72 ohm coaxial cable on 300 ohm receiver inputs. Two required: one at antenna, one at receiver. For indoor or outdoor. 3/4x3/4x1 1/4". 3 oz. 11 A 1306. Type 6161. 52 ohms. Each 2.25 11 A 1309. Type 6162. 72 ohms. Each 2.25

**E** R. L. DRAKE TV-300-HP HIGH-PASS FILTER. Eliminates or reduces interference caused by police, Amateur (including 6-meter), Citizens Band, diathermy. 40 dB attenuation. 0 to 52 MHz. Attaches to 300-ohm antenna terminal. Size, 2 1/2x2 1/2x1 1/4". Shpg. wt., 8 oz. 11 A 1160. . . . . 3.97

**F** EBY K-302 CRT EXTENSION HARNESS KIT. Expedites testing of any black-and-white picture tube. Consists of 3-ft. anode extension harness; 4-ft. CRT socket harness designed for use with both electrostatic and magnetic tubes; 3-ft. octal yoke harness. Shpg. wt., 10 oz. 11 A 1035. . . . . 4.80

**E**BY K-320 CRT COLOR EXTENSION HARNESS KIT. Similar to K-302 extension harness kit listed above, but designed for color TV. Shpg. wt., 15 lbs. 11 A 1610. . . . . 10.50

**G** EBY AC-1 CRT HI-VOLTAGE CONNECTOR. Important replacement part for television servicing and repair work. Second anode connector. Silver-plated plug contacts for low-loss. 1 1/2" diameter rubber cap. 18" heavily insulated wire lead. 4 oz. 11 A 1034. . . . . 69

**H** TV POWER CORD AND CONNECTOR. Identical to original equipment on most sets. 9 ft. long. U.L. Listed. 8 oz. 11 A 1049. . . . . 36 11 A 1032. 6-Ft. Cord, Conn. 6 oz. . . . . 46

**J** TRANSISTOR VARI-LOOPSTICK. Impedance tap, micrometer adjustment; snap-in mounting. Use 365 or 410 pF tuning capacitor. 7/8x2". 11 A 1286. Shpg. wt., 4 oz. . . . . 73

## VOKAR VIBRATORS

Auto radio vibrators for general replacement use. 1 1/2x2 1/4". 8 oz. 11 A 1280. NP-42V. 6 V, 4 pins 1.79 11 A 1281. NP-7V. 12 V, 3 pins 1.79 11 A 1282. NP-42V. 12 V, 4 pins 1.79

## PERMA-POWER PICTURE TUBE "BRITENERS" FOR LIKE-NEW TV

Low as **220** Handy Plug-In Design, No Rewiring Necessary

### FOR BLACK-AND-WHITE TUBES

**C-202** AUTOFORMER TYPE. Duodecal Base. Adds life to aging picture tubes when dimness is due to low cathode emission—returns brightness and contrast to picture. For parallel or series sets with black-and-white picture tubes, 8" or larger. Boosts filament power 50% to increase cathode emission. Does not relieve cathode-filament shorts. Shpg. wt., 8 oz. 11 A 1204. . . . . 2.20  
**C-212** 110° AUTOFORMER TYPE. Button Base. As above, for use with 110° button base tubes. Shpg. wt., 8 oz. 11 A 1205. . . . . 2.20

**C-301** ISOLATION TYPE. Duodecal Base. Brightens and isolates parallel or series types. Select 6.3 V to relieve cathode-filament shorts; 7.8 V to increase emission. 11 A 1092. Shpg. wt., 10 oz. . . . . 2.62  
**C-311** ISOLATION TYPE. Button Base. Same as C-301, but for 110° button base tubes. 11 A 1093. . . . . 2.92

### FOR COLOR TUBES

**C-501** "COLOR BRITE". Brightens and restores color contrast and quality to aging color TV picture tubes. Increases filament voltage to boost cathode emission for sharper, clearer pictures. Use with 70° round 21" color CRT's. Shpg. wt., 1 lb. 11 A 1227. . . . . 5.73  
**C-502**. Similar to above, but only isolates parallel or series type television sets. For 70° round 21" color picture tubes. 11 A 1232. Shpg. wt., 1 lb. . . . . 7.25

## G-C ELECTRON TUBE SAVER

**397**



25-900. Quality electron tube saver especially designed to protect the critical electron tubes in color TV receivers. Rate 250-400 watts. Handles damaging voltage surges to protect tubes in all sorts of electronic devices—radios, TV's, hi-fi systems, etc. Easy to use—can be set up in just a few minutes. Simply plug device to be protected into tube saver; then plug tube saver into outlet. Size, 2 1/4x2 1/2x1 1/4". For 110-120 V, AC or DC. Shpg. wt., 7 oz. 11 A 1211. . . . . 3.97

## PERMA-POWER VOLTAGE REGULATORS

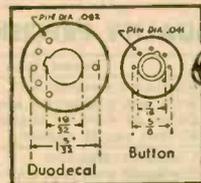
Low as **825**



**D200**. Automatic voltage regulator maintains normal operating voltage for TV sets, hi-fi systems, similar equipment. Especially useful where line voltage is consistently low. Improves TV reception by eliminating picture shrinkage, flutter and loss of brightness due to low voltage. Automatically boosts voltage 10 volts when AC line voltage goes below 110. 300-watt capacity. Turns on and off with appliance. 4 1/4x4 1/4x2 1/4". 11 A 1224. Shpg. wt., 2 1/2 lbs. . . . . 8.25

## COLOR TV VOLTAGE REGULATOR

**D210**. Same as D200 above, but handles up to 400 watts. Especially recommended for use with color TV. Shpg. wt., 2 1/2 lbs. 11 A 1303. . . . . 14.25



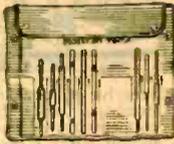
**C-511**. Extends tube life, brightens pictures. Boosts cathode emission by increasing filament voltage. For series or parallel wired sets using 23" or 25" rectangular color CRT's. Shpg. wt., 1 lb. 11 A 1663. . . . . 5.73  
**C-512**. Similar to C-511 above, but only isolates circuit. Shpg. wt., 1 lb. 11 A 1259. . . . . 7.25

# City Radio-TV Alignment Tools and Kits

GC  
GC



**MODEL 9210 DELUXE 10-PC. CB ALIGNMENT TOOL KIT**



**489**

Ten of the most useful tools for alignment and adjustment of Citizens Band transceivers, according to a trade publication's nationwide survey. Kit includes: alignment screwdrivers; K-Tran tool; core aligner; universal aligner; tuning wand; TV wrench and aligner; double end core tool; IF core alignment tool. Comes in flexible plastic carrying kit that rolls up for easy, compact storage in your tool caddy. Shpg. wt., 1 lb.

26 A 1676 ..... 4.89



**MODEL 9200 27-PC. RADIO-TV ALIGNMENT TOOL PANEL KIT**

**1752**

- 27 Most Needed Alignment Tools
- Convenient Wall-Mounting Panel
- Individually Marked Tool Slots

Convenient wall-mounting panel kit includes 27 of the most often used radio-TV alignment tools. Each tool has an individually marked slot in the sturdy, 3-color panel. Helps you to locate the desired tool immediately. Panel can be conveniently mounted on workshop wall or back of workbench for easy visibility and access. Tools are precision-made of finest materials including low-loss plastics and extra-hard bone fiber; tips are hardened spring steel. Kit includes: alignment screwdrivers of various lengths; special short tools; alignment wrenches; channel tuners; core aligners; oscillator adjustment tools; trimmer and IF aligners; solder probe; nylon replacement tip for long reach aligner; hex tools; and many other useful alignment tools. Size of convenient wall-mounting steel panel for holding tools is 9 3/4" high and 18 3/4" wide. Shpg. wt., 3 lbs.

26 A 1831 X ..... 17.52

**ALIGNMENT KIT**

Handy Roll-Up Case  
Among Tools Included  
V, Communications

ment tool assortment. Contains alignment tools for practically the market. Also communication. In addition to long tools are furnished: K-Tran and screwdrivers of various lengths; channel tuner; core aligners; dual oscillator aligner; alignment FM tuners; Zenith-Admiral tuning wand; and many alignment and adjustment

**TV-FM ALIGNMENT TOOL KIT**

Here in one package are the necessary tools to align any TV or FM set. Kit contains one each of the following: 1/4" neutralizing wrench, wire dressing and alignment tool, K-Tran alignment tool, slotted stud driver, stubby stud driver, standard alignment tool, duplex alignment screwdriver, turret tuner tool, slotted screwdriver, double ender tool, IF alignment tool, and a slug saver tuner tool. With handy leatherette case. Shpg. wt., 1 lb.

26 A 1726 ..... 7.20

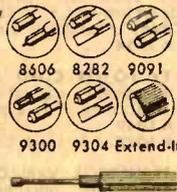
**MODEL 5050 48-PC. ALIGNMENT TOOL KIT**



Complete alignment tool kit featuring every tool needed by the professional serviceman or technician for precision alignment of radios, TV's, hi-fi units, all types of electronic equipment. Includes assortment of special alignment tools designed for Zenith and RCA TV sets; "twin end" TV aligners; alignment screwdrivers; channel tuning tool; capacitor and tuner adjusting tool; contact finishing tool; service inspection mirror, much more. 45-pieces in all. Tools are in handy three-section pouch with fold over flap and snaps to prevent tools from falling out in transit. Each tool is fully visible in its own slot—easy to remove, easy to replace. All are top-quality G-C tools featuring the finest in functional design and precision construction. Pouch size (folded), 12 3/4"x12 1/4". Shpg. wt., 4 lbs.

26 A 1143 X ..... 34.95

**MODEL 8454 COLOR TV ALIGNMENT TOOL KIT**



Extends Reach of Alignment Tools

Handy 7-piece kit features five most-needed alignment tools for color TV, plus "extend-it," a special attachment that makes long-reach aligners out of standard size tools. Includes one each: 8606, 8282, 9091, 9300, 9304 alignment tools; plus "extend-it" and pocket saver pouch. Tools are precision-made, designed for long dependable use. Shpg. wt., 4 oz.

26 A 1144 ..... 2.49

**MODEL 5040 ALL-PURPOSE ALIGNMENT TOOL KIT**



Convenient general-purpose alignment tool kit offers 12 most-popular tools for alignment of both color and black-and-white TV's. Tools are housed in durable plastic case with transparent front for fast, easy identification. Case rolls up for easy storage in service kit. Tools in kit include: 8729 long reach; 8289 "shorty"; 9050-L

Zenith-RCA; 9089 Westinghouse alignment tools; 8276 duplex aligner; 8271 core aligner; 9091 iron-core aligner; 8606 Zenith-Admiral hex wrench; 5097 K-tran tool; 9088 heavy-duty soldering tool; 8607 Delrin long reach aligner; 8988 "X57" plastic long slim alignment tool. Tools are all precision designed for top performance. Each tool fits neatly into its own slot in pouch for efficient handling. Shpg. wt., 8 lbs.

26 A 1145 X ..... 8.79

**TOP-QUALITY PRECISION ALIGNMENT TOOLS FOR EVERY SERVICING NEED**

Stock No.	Type	Description	Oz.	E.A.	Stock No.	Type	Description	Oz.	E.A.
26 A 1021	5000	Alignment screwdriver	3	.46	26 A 3655	8867	#4 and #6 I.F. stud aligner	6	1.05
26 A 3122	5003	RCA coil, pushbutton screwdriver	3	.58	26 A 3656	8868	Dual blade alignment screwdriver	6	1.05
26 A 3123	5004	Delrin all-wave set aligner	3	.48	26 A 3657	8869	Double ended hex aligner	6	1.05
26 A 1015	5097	K-Tran and IF aligner	3	.76	26 A 3126	8987	12" blade plastic screwdriver	3	.67
26 A 1020	8195	Channel tuning tool	3	.78	26 A 2499	8988	12" plastic screwdriver	3	.97
26 A 2496	8271	Stackpole stud-type core aligner	3	.66	26 A 2492	8989	16" blade plastic screwdriver	3	1.20
26 A 1014	8275	Zenith universal aligner	3	.57	26 A 1012	9091	.125" hex nylon wrench	3	.48
26 A 1011	8276	Short Duplex aligner	3	.57	26 A 1217	9293	12" fiberglass alignment stick	12	.47
26 A 2497	8277	2 5/8" duplex aligner	3	.57	26 A 3658	9294	16" fiberglass alignment stick	12	.73
26 A 1013	8282	Zenith 100 hex wrench and aligner	3	.37	26 A 3128	9295	11" long Delrin 100 hex	3	.67
26 A 3124	8605	Capacitor/tuner hex and screwdriver	3	.63	26 A 1008	9296	11" long nylon .075 hex	4	.66
26 A 1010	8606	Zenith-Admiral Delrin hex wrench	3	.48	26 A 3129	9300	.075 hex coil slug and alignment	3	.48
26 A 3125	8721	9" standard/thin stud aligner	3	.78	26 A 1164	9302	5 3/8" Magnavox hex core aligner	4	.48
26 A 1019	8722	7" duplex #4 and #6 stud aligner	3	.65	26 A 3130	9380	Hex driver for CTS type controls	3	.75
26 A 1017	8728	12" fiberglass screwdriver	3	.54	26 A 3659	9440	Transistor IF core aligner	12	.63
26 A 1016	8728A	7" Delrin plastic screwdriver	3	.42					

# Chemicals and Servicing Tools



Complete Kit for Quick and Easy Plating

## RAPID ELECTROPLATING KITS

For easy electroplating of small metal objects. Each kit includes: 1-oz. metal cleaner; 1-oz. metal polish plating compound; 3/4" brush; wires and clips; polishing stick. Order batteries, below—uses two No. 6 1 1/2-volt. Shpg. wt., 1 lb.

Stock No.	Type	Compound	EACH
26 A 1076	200	Nickel	2.49
26 A 1077	202	Cadmium	2.49
26 A 1079	204	Copper	2.49
26 A 1080	205	Brass	2.49
26 A 1088	206	Silver	3.19
26 A 1089	207	24K Gold	5.29

18 A 5641. Batteries. Wt., 2 lbs.. Each .99¢

**A** G-C 8890 COLOR CLEAR COLOR TV TUBE CLEANER. Stops dirt and dust buildup—keeps picture tubes sparkling clear. Acts as anti-static agent—prevents electrostatic dust accumulation. 8-oz. spray can. Shpg. wt., 10 oz. 26 A 1120.....99¢



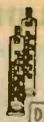
**B** CHEMTRONICS "TUN-O-LUBE" TUNER CLEANER. An activated TV tuner cleaner used by servicemen to clean and lubricate all types of tuners. Helps quiet noise caused by dirty contacts. 8-oz. spray can. Shpg. wt., 1 lb. 26 A 2270.....1.69



**C** G-C 8888 "SPRA-LUBE" COLOR-TV TUNER CLEANER. Cleans oxidation and dust, leaving a light coating for lubrication. With pinpoint extension spray. 8-oz. spray can. Helps quiet noise. Shpg. wt., 12 oz. 26 A 3135.....1.95



**D** G-C "SUPER GRIP" EPOXY GLUE. Used by NASA. Won't shrink or expand. Resists acids, alkali, grease, gas, water, etc. High electrical resistance. Hardens in 2-4 hours at room temp. Kit of 2-tubes (approx. 4 oz.). Shpg. wt., 6 oz. 26 A 3650.....2.50



**E** "NO NOISE" CONTACT RESTORER. Cleans, lubricates and restores volume controls, band switches, relays. Won't harm precious metals. Does not change capacities. 6-oz. spray can. Shpg. wt., 8 oz. 26 A 3651.....2.25



**F** CHEMTRONICS COLOR LUBE. Color TV tuner cleaner. Perfectly safe for any color TV. Will not detune tuners. Cleans, lubricates in one operation. Safe for plastics. Non-flammable. 8-oz. spray can. Wt., 10 oz. 26 A 3652.....2.39



**G** "NO NOISE" TUNER CLEANER. Cleans and lubricates TV tuner controls, contacts and switches. Eliminates noise caused by dirty components. Spray can contains 6 fluid oz. Shpg. wt., 14 oz. 26 A 2397.....2.20



**H** GC 8682 "RELAY KLEEN" CONTACT CLEANER. For cleaning relays and contacts. Also a good solvent for all electrical and mechanical equipment. Non-flammable, no residue. With pinpoint spray extension for hard-to-reach places. 6-oz. spray can. Shpg. wt., 14 oz. 26 A 3131.....1.89



## JET-PAK SPRAY OUTFIT

198



Sprays up to 32 oz. of any liquid. Uses gas power-cartridge. Includes head assembly, 4-oz. glass jar, 15-oz. power unit. Shpg. wt., 1 1/2 lbs.  
26 A 1638.....1.98  
26 A 1640, 15-oz. Power Unit, 1 lb., 1.20  
26 A 1642, Extra Jar, 5 oz.....13¢

**J** QUIETROLE CLEANER. Cleans controls, switches, relays and other devices. Eliminates noise. With dropper applicator. 2-oz. bottle. Shpg. wt., 4 oz. 26 A 1090.....1.69



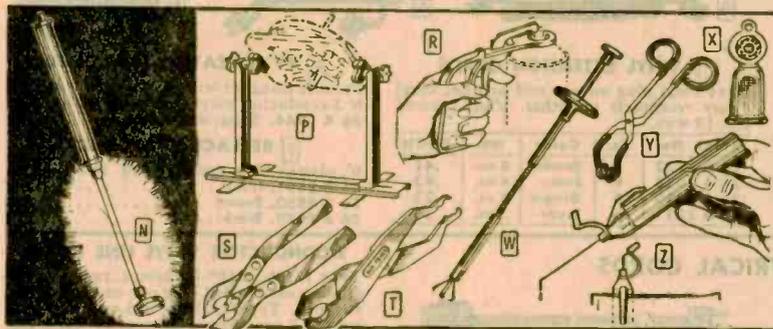
**K** G-C 8676 "JIF" CONTACT AND CONTACT CLEANER. Cleans and lubricates contacts, controls, switches. Eliminates noise caused by dust. Contains silicone for effectiveness. Non-flammable. 6-oz. spray can. Shpg. wt., 10 oz. 26 A 3133.....1.79



**L** G-C 8668 "FREEZE MIST" CIRCUIT COOLER. Cools components so you can spot bad capacitors and transistors, oxidized joints. With pinpoint spray extension for hard-to-reach places. 6-oz. spray can. Shpg. wt., 10 oz. 26 A 3134.....1.26



**M** G-C "SPRA-KLEEN" CONTACT CLEANER. Lubricates contacts, controls, relays, switches. Stops volume control noise. No harsh solvents, won't harm plastic. 6-oz. spray can. Shpg. wt., 10 oz. 26 A 1075.....97¢



**N** G-C 8725 ILLUMINATED INSPECTION MIRROR. Anod. alum.; 6" lucite rod, 1" hinged mirror. Less penlight cells. 12 1/4", 6 oz. 26 A 1007.....1.97  
19 A 5870, Burgess "Z" Cell. 1 1/2-volt cell for above. Uses two. 3 oz.... Pkg. of 2 for 20¢

**P** G-C 5212 CHASSIS CRADLE. Rotates 360° to lock radio or TV chassis at best working angle. Makes any part of chassis easily accessible. 14" high, adjustable to 24" wide, 12 1/2" deep. Shpg. wt., 7 lbs. 26 A 3710 X.....7.95

**R** G-C 5900 SPRAY CAN HANDLE. Converts any spray can to spray gun. Keeps hands clean; eliminates hand fatigue. 2 oz. 26 A 1178.....48¢

**S** G-C 8872 C-RING TOOL. Removes, inserts "C" washers, retainers. 2 oz. 26 A 1253.....1.84

**T** G-C 9356 FUSE PULLERS. Nylon tongs at each end for miniature and industrial fuses, from 3/16" to 1" dia. Also fits domestic screw-in type. Shpg. wt., 1 oz. 26 A 1177.....87¢

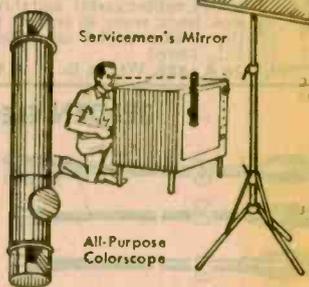
**W** G-C 5089 PICKUP TOOL. Push button to open claws—release to close. Flexible 14" shaft. Shpg. wt., 4 oz. 26 A 1741.....1.15

**X** G-C 9130 TUBE GADGET. 3 tools in one. Straightens 7 or 9-pin miniature tube pins; also can be used for pulling tubes. Shpg. wt., 3 oz. 26 A 1003.....1.65

**Y** G-C HOT TUBE PULLERS. Puts an end to burned fingers and dropped tubes. Special plastic coating insulates handles and tips—assures firm, cool grip. Straight model for open work. Right angle model for tight or enclosed areas. 26 A 3653, Straight Model. 6 oz.....1.73  
26 A 3654, Right Angle Model. 6 oz....1.88

**Z** WALSCO REACH-ALL PEN OILER. Pocket size precision instrument oiler. Has .035" stainless steel tube that extends up to 9 1/2"; lubricates hard-to-reach spots without disassembly. Dispenses drop or fraction of drop of fine oil. Transparent, refillable container comes filled. 5" long. Pocket clip, tube guard. Shpg. wt., 3 oz. 26 A 1165.....89¢

## G-C SERVICE AIDS FOR FASTER TV REPAIRS



**G-C 8381 SERVICEMEN'S MIRROR** Super deluxe mirror is a must for TV servicemen. Made of unbreakable plexiglass with special swivel mount. Can be adjusted to old set height and to low boy height. Complete with stand. Size, 10x12". Wt., 3 lbs. 26 A 1061.....11.45

**G-C 9454 COLORSCOPE** Attaches easily to picture tube safety glass or tube face. Takes only minutes to static converge any color TV easily and accurately. Power optic magnifier enables brilliant viewing of the Red, Blue and Green Tricolor dot pattern. Makes precise adjustments a convenient and fast operation. Wt., 2 lbs. 26 A 1725.....7.95

# Electrical Accessories for Home and Shop



Replaces Standard  
2-Way Light Switch

**598** Saves  
Bulbs

Lets you adjust intensity of light to fit every requirement. Adjust for reading, TV watching, to provide a party atmosphere, etc. Simply turn the knob for desired light level. Push the knob to turn lights on or off; does not disturb intensity setting. Easy to install; replaces any standard 2-way light switch. Controls up to 600 watts of incandescent lighting. Must be used with a minimum of 40 watts. Solid-state design assures long life and top performance. Silicon transistors withstand high current and inverse voltage surges. Shpg. wt., 1/2 lb.

- 26 A 1510..... 5.98
- 3-WAY ELECTRONIC DIMMER CONTROL. Same features as above, but replaces 3-way switch. Wt., 1/2 lb.
- 26 A 3013..... 11.95

## LUTRON SOLID-STATE LIGHT DIMMERS



FLUORESCENT DIMMERS

Dimmer Ballast

**MODEL T-14 DIMMER.** Easy-to-install fluorescent dimming system; only 2 connections to dimmer. Gives you a 500:1 dimming ratio. Controls 4 to 14 40-watt rapid-start fluorescent lamps. Lets you adjust intensity of light to fit every requirement. Simply turn knob for desired light level. Built-in minimum illumination control, adjusts simply and quickly. Has rotary positive on-off switch. Dimmer installs in any single-gang wall box. Use for new installations or to convert existing installations. Order ballast below.

- 26 A 1902. Shpg. wt., 1 lb..... 17.98
- MODEL T-8 DIMMER.** Above, for 1-8 lamps.
- 26 A 3289. Shpg. wt., 8 oz..... 12.95
- MODEL BT-1 BALLAST.** 1 per 40-watt lamp.
- 26 A 3298. Shpg. wt., 2 lbs..... 6.95



Dims One  
or More  
Lamps,  
Up to  
600 W



## FINGERTIP REMOTE CONTROL

Flatter your rooms with the soft glow of muted light. Decorator-styled Lutron Dim-liter lets you decorate with light. You can brighten a corner, dramatize a furniture grouping, or highlight a painting by dimming or raising the light-level at will. For use in living room, dining room, den, bedroom, nursery, dinette, office, anywhere! Gives you continuous control of one or more lamps, up to 600 watts, incandescent. Saves electricity, too. A concealed glow-light helps you find switch in dark. Cork bottom protects furniture finish. 6' cord with plug. Use multiple-plug to control more than one lamp. 117 VAC. Wt., 1 1/2 lbs.

- 26 A 3752..... 9.95

## EAGLE "LIGHT-A-MATIC" LIGHT CONTROLS



**INDOOR UNIT.** Turns on lights at dusk and shuts them off at dawn. Place control facing outdoor natural light, plug it into outlet, and plug lamps into unit. Sealed case, 2 1/2 x 1 1/4 x 1 1/8". 8-ft. cord, plug. 875 W incandescent or 500 W fluorescent. 110-

- 125 V, 50-60 Hz AC. Shpg. wt., 1 lb.
- 26 A 1839..... 5.95

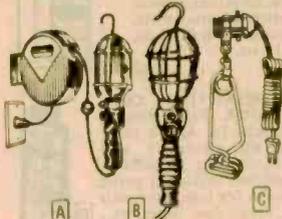
## "LIGHT-A-MATIC" OUTDOOR UNIT



Handles 125-volt AC incandescent loads up to 1000 watts or fluorescent to 500 watts. Fits Gem Box, "T" box, and FS box. 2 1/2 x 1 1/4 x 1 1/8" deep. With stainless steel plate, mounting screws, rubber gasket, and three 8-in. leads, ready to connect to the source to be controlled. U.L. Listed.

- 26 A 1438. Wt., 3/4 lb..... 8.95

## TROUBLE LAMPS AND CLAMP-ON LIGHT



**A CORDOMATIC 500.** Light and reel with 20-ft. heavy-duty cord. Pulls out easily. Locks, retracts automatically. Reel wall-mounts for 180° swivel, ceiling-mounts for 360°. Handle outlet. With mtg. hardware. 117 VAC.

**B TROUBLE LAMP.** Rated to 600 watts, including bulb. 2 outlets in handle. 50' cord. Less bulb. 117 VAC.

**C CLAMP-ON LIGHT.** Clamps on chair, bed, post. Vinyl-covered clamp won't mar finish. Swivels to any angle. Less bulb.



## D VINYL EXTENSION CORDS

Have vinyl plug on one end and flat vinyl 3-way receptacle on other. Vinyl-covered No. 18 wire.

Stock No.	Ft.	Color	Wt.	EACH
26 A 2232	9	Brown	4 oz.	.41
26 A 2233	9	Ivory	4 oz.	.43
26 A 2230	6	Brown	3 oz.	.33
26 A 2231	6	Ivory	3 oz.	.36

## E TV "CHEATER" LINE CORD

Permits using set with back cover removed. 6' 2-conductor, vinyl-covered. Plastic plug.

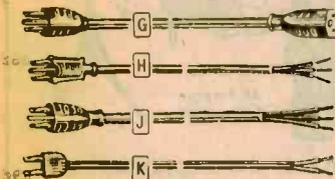
- 26 A 1944. Shpg. wt., 1 lb..... 37¢

## F REPLACEMENT CORDS

6', plastic, vinyl, end-stripped. 10 oz.

- 26 A 2551. Ivory..... 21¢
- 26 A 2550. Brown..... 21¢
- 26 A 2020. Black..... 21¢

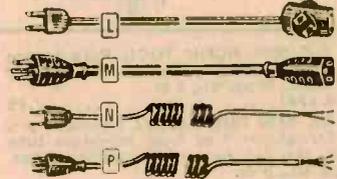
## BELDEN ELECTRICAL CORDS



## G QUALITY HEAVY-DUTY EXTENSION CORDS

Have molded 3-prong plug at one end and molded 3-prong receptacle at other end. 3-conductors. Yellow vinyl cover. U.L. Listed. \*In table indicates gauge.

Stock No.	Mfr's Type	Ft.	Ø	Lbs.	EACH	
					1-9	10-UP
26 A 2181	17491	25	18	2 1/2	2.32	2.07
26 A 2182 X	17492	50	18	3 1/2	4.26	3.80
26 A 2183 X	17493	100	18	9	7.76	6.94
26 A 2184	17494	25	16	2	2.72	2.43
26 A 2185 X	17495	50	16	4 1/2	5.36	4.79
26 A 2186 X	17497	100	16	7	9.60	8.58
26 A 2187	17694	25	14	5 1/2	5.70	5.09
26 A 2188 X	17695	50	14	10	10.02	8.95
26 A 2189 X	17697	100	14	19 1/2	18.32	16.37



## 3-CONDUCTOR CORDS

Types 17236, 17238 and 17237 are for small tools, business machines, instruments. Others for sanders, grinders, saws, polishers requiring grounding. \*Gauge. Black except. †gray. Letters in Type No. indicate cordage. U.L. Listed. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Fig.	FL	Ø	EACH	
					1-9	10-UP
26 A 2872	17236-SV	H	6	18	.76	.69
26 A 2873	17238-SV	H	8	18	.88	.79
26 A 2874	17237-SVT	H	6	18	.69	.61
26 A 1930	17408-SJ	J	8	18	.94	.84
26 A 2875	17407-SJT	J	8	18	.86	.77
26 A 2876	17409-SJO	J	8	18	.86	.77
26 A 2877	17419-SJ	J	9	16	1.25	1.12

## 2-CONDUCTOR VINYL LINE CORDS

Type 17106, 17109 for lamps, radios, small appliances. Molded plug one end; other end stripped. Type 17156 is a 3-way cube tap cord. All are brown. Letters in Type No. indicate cordage. \*Gauge. U.L. Listed. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	FL	Ø	EACH	
					1-9	10-UP
26 A 2854	17106-SPT	K	6	18	.35	.31
26 A 2855	17109-SPT	K	9	18	.45	.40
26 A 2856	17156-SPT	L	6	18	.46	.41

## 3-CONDUCTOR POWER CORDS

For electrical equipment having a built-in receptacle with blades and grounding pin. Can also be used as extension cord with devices requiring ground. Black rubber with vinyl connectors. U.L. Listed. Wt., 1 lb.

Stock No.	Mfr's Type	Fig.	FL	Ø	EACH	
					1-9	10-UP
26 A 2895	17460	M	10	18	1.30	1.16
26 A 2896	17461	M	10	16	1.49	1.33

## RETRACTABLE POWER CABLES

Stay neat... allow free movement of appliance or tool. 6-ft. length retracts to 12", 12-ft. to 24". Black. U.L. Listed. Letters in Type No. indicate cordage. Av. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	FL	Ø	EACH	
					1-9	10-UP
26 A 2878	17249-SVO	N	6	18	1.23	1.10
26 A 2879	17447-SJO	P	6	18	1.62	1.44
26 A 2880	17449-SJO	P	12	16	2.61	2.33

# Electrical Accessories for Home and Shop



## A C DUTCH PLASTIC ELECTRICAL TAPE

Strong black vinyl. A-7. .007"; 130. .010"; 167. .0085", usable—10° F to +176° F. 6 oz.

- 26 A 3614. Type A-7. 3/4"x44"..... Per Roll 86¢
- 26 A 3623. Type 130. 1/2"x108"..... Per Roll 1.56
- 26 A 3671. Type 167. 3/4"x60"..... Per Roll 1.33

## DUTCH FRICTION ELECTRICAL TAPE

Tough fabric base. Sticks tight, protects against wear or weather. Resists 1800 V. 7 oz.

- 26 A 2486. No. 4. 3/4"x30"..... Per Roll 29¢
- 26 A 3612. No. 8. 3/4"x60"..... Per Roll 58¢
- 26 A 3620. D48200. 3/4"x60"..... Per Roll 27¢

## B SCOTCH PLASTIC ELECTRICAL TAPE

Black pressure-sensitive vinyl plastic. No. 33. .007"; No. 88. .0085", all-weather tape. 6 oz.

- 26 A 3699. No. 33. 3/4"x44"..... Per Roll 94¢
- 26 A 2512. No. 88. 3/4"x66"..... Per Roll 1.39
- 26 A 3700. No. 88. 3/4"x66"..... Per Roll 1.69

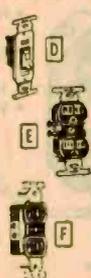
## EAGLE SWITCHES AND RECEPTACLES

**Q** QUIET SWITCH. 15 A. 120 VAC. U.L. Listed. C.S.A. Approved. Shpg. wt. 4 oz.

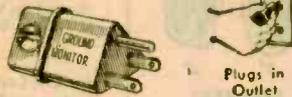
- 26 A 2528. Brown—Single Pole 39¢
- 26 A 2529. Ivory—Single Pole. 43¢
- 26 A 3000. Brown—3-Way. 65¢
- 26 A 3001. Ivory—3-Way. 69¢

**E** 3-WIRE DUPLEX RECEPTACLE. 15 A. 125 V. U.L. Listed. Screw press terminals. Shpg. wt. 4 oz.

- 26 A 3006. Brown. 34¢
- 26 A 3007. Ivory. 38¢
- F** DUPLEX FLUSH WALL RECEPTACLE. 15 A. 125 V. U.L. Listed. 4 oz.
- 26 A 3008. Brown. 23¢
- 26 A 3009. Ivory. 27¢



## DEARBORN 3-WIRE GROUND AND POLARITY TESTER



Plugs in Outlet

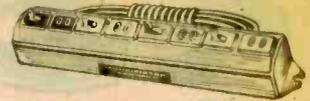


595

- Quick, Easy Test
- Assures Your Safety

"CIRCUIT GUARD." Tests for proper ground and polarity at 115-V 3-wire power outlets. Lights indicate Circuit OK, Improper Ground, Improper Neutral, Reversed Polarity, Reversed Ground and Power, No Power. Checks frame ground of travel trailers. Wt., 8 oz.  
26 A 3670..... 5.95

## CBC HEAVY-DUTY COMPACT AC OUTLET BOXES



Very useful quality-constructed heavy duty AC outlet boxes. Being short, they fit easily into small areas. Rated 15 amps at 115 volts. Size. 1 1/2x2 1/4x1 1/2", except MO-3, 5x2x1 1/4". On-off switch. MO types have pilot lights. Fused or circuit breaker. Brown hammertone finish. \*Four individually switched outlets. #3-wire.

### CIRCUIT-BREAKER OUTLET BOXES

Stock No.	Mfr's Type	Out-lets	Wt. Lbs.	EACH
26 A 2197	FMO-GD-CB	6	2 1/4	10.29
26 A 2198	MO-CB	6	2 1/4	8.57
26 A 2199	*SS-CB	4	2 1/4	8.57

### FUSED OUTLET BOXES

Stock No.	Mfr's Type	Out-lets	Wt. Lbs.	EACH
26 A 1948	FMO-GD	6	2 1/4	7.95
26 A 1949	MO	6	2 1/4	6.25
26 A 1950	*SS	4	2 1/4	6.25
26 A 1951	MO-3	3	1 1/2	3.75

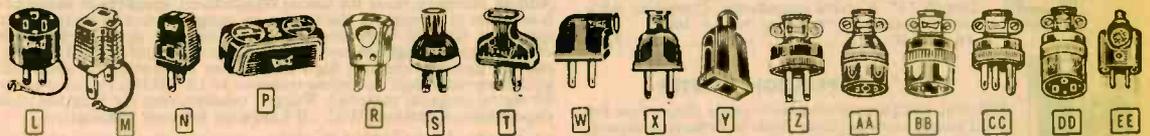
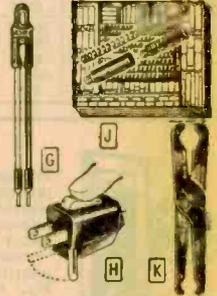
## ELECTRICAL ACCESSORIES

**G** EAGLE "DETECTO-LITE" TESTER. Tests power lines from 90-600 volts. Detects live or ground wire Safety pocket-clip.  
26 A 3688. Wt., 3 oz. 44¢

**H** DEFLEX GROUNDING FLUG. Lets you operate 3-wire appliances from 2 or 3-hole outlets without adapter. Button on plug defects grounding blade for 2-hole outlets. Tension spring holds blade against metal faceplate.  
26 A 3066. Wt., 3 oz. 79¢

**J** EAGLE 526 CARBON MOTOR-BRUSH KIT. Assortment of 104 brushes. 15 copper springs. Exact replacement in a wide variety of vacuum cleaners, appliances, other fractional horsepower motors.  
26 A 3674. Wt., 1 lb. 4.99

**K** EAGLE 642 POCKET-TYPE FUSE PULLER. Rated 200A at 250V, 100 A at 600V. Blade clamp for adjusting clips that have spread. Size, 1 1/2x7 1/2".  
26 A 3673. Wt., 3 oz. 79¢



## VALUES IN SELECTED ELECTRICAL WIRING ACCESSORIES FOR THE HOME

**L** EAGLE BAKELITE GROUND ADAPTER. Heavy duty double wipe contacts. For connecting 2-wire system to 3-wire parallel blade and U-ground. 3/4" grounding lead. U.L. Listed. 15 amp @ 125 V. Wt., 2 oz.  
26 A 3669..... 28¢

**M** EAGLE PARALLEL GROUND ADAPTER. Gray vinyl; will not crack. Double wipe contacts. Connects 2-wire system to 3-wire parallel U-ground. Duplex receptacle accepts two. Grounding lead has "C" lug. U.L. Listed. 15 amp @ 125 V. Wt., 2 oz.  
26 A 3729..... 23¢

**N** EAGLE VINYL CUBE TAP. 3 easy-to-get-at outlets. Brass spring prongs. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 2 oz.  
26 A 3724..... 22¢

**P** EAGLE BAKELITE TRI TAP. 3 taps. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 2 oz.  
26 A 2545..... 23¢

**R** EAGLE JIFFY PUSH-PULL PLUG. With brass spring prongs. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 2 oz.  
26 A 2542..... 9¢

**S** EAGLE FLEXIBLE SPRING PRONG RUBBER HANDLE CAP. 15 amp @ 125 V. U.L. Listed. With fibre washers. 2 per pkg. Shpg. wt., 2 oz.  
26 A 3721..... Pkg. of 2 for 29¢

**T** EAGLE FLAT BAKELITE HANDLE CAP. Brass spring prongs. U.L. Listed. 15 amp @ 125 V. Pkg. of 2. Shpg. wt., 4 oz.  
26 A 3723..... Pkg. of 2 for 23¢

**W** EAGLE FIAT RUBBER CAP. WITH SIDE OUTLET. With brass prongs. Wiring completely enclosed. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 4 oz.  
26 A 3722..... Pkg. of 2 for 33¢

**X** EAGLE FLAT RUBBER CAP. Binding screws won't touch even when stepped on. Brass prongs. 15 amp @ 125 V. Use with Fig. V. U.L. Listed. Wt., 4 oz.  
26 A 3725..... Pkg. of 2 for 29¢

**Y** EAGLE FLAT RUBBER CORD CONNECTOR. Female contacts. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 2 oz.  
26 A 3727..... 38¢

**FF** INSULATED COPPER STAPLES. For holding wiring in place. Off-white insulation. Boxes of 50. 7 oz.  
26 A 1914. 1/16x1/2". Box of 50 for 22¢  
26 A 1915. 1/16x3/4". Box of 50 for 22¢

Stock No.	Type	Fit	PKG.
26 A 2215	H502F	1/8" to 3/16"	.39
26 A 2216	H503F	3/16" to 1/4"	.39
26 A 2217	27243†	1/4" to 3/16"	.39
26 A 2218	H506F†	3/16" to 1/2"	.39

**Z** EAGLE LARGE RUBBER HANDLE CAP. 15 A @ 125 V. U.L. Listed. Wt., 2 oz.  
26 A 3728..... 23¢

**AA** EAGLE RUBBER CORD CONNECTOR. 15 A @ 125 V. U.L. Listed. Wt., 2 oz.  
26 A 3603..... 35¢

**BB** EAGLE RUBBER CONNECTOR. 15 A @ 125 V. U.L. Listed. Shpg. wt., 2 oz.  
26 A 3726..... 38¢

**CC** EAGLE PARALLEL GROUND RUBBER HANDLE CAP 15 A @ 125 V. Wt., 2 oz.  
26 A 3717. U.L. Listed..... 45¢

**DD** EAGLE PARALLEL GROUND RUBBER CONNECTOR. 15 A @ 125 V. Wt., 2 oz.  
26 A 3718. U.L. Listed..... 79¢

**EE** FUSED PLUG. Takes 2-3AG fuses (not supplied.) U.L. Listed. Wt., 3 oz.  
26 A 3648..... 37¢

**HH** PHENOLIC-TYPE SOLDERLESS WIRE CONNECTORS. Extremely handy; requires no tools; all you have to do is strip two ends, push them into connector, and screw cap down. Wire cannot be pulled out after being inserted into connector. U.L. Listed. Av. shpg. wt., pkg. of 2. 4 oz.

Wire Size	Stock No.	PKG. OF 12
16-18	26 A 3701	1.59
14-18	26 A 3702	1.99
12-18	26 A 3703	.28

# Allied® Extra-Value Replacement Speakers



## GENERAL-PURPOSE REPLACEMENT SPEAKERS

- For Universal Replacement Use
- Ruggedly Constructed
- Built to EIA Standard Dimensions
- Precision-Centered Elements
- Rigid Frame Assures Alignment
- Dust-proofed Coils

Top-quality permanent magnet speakers at very low prices. Designed for replacement use in all types of music systems, or with new equipment. Ruggedly constructed throughout—to exacting EIA standards. Rigid frame assures permanent alignment of parts, assures longer service, better reproduction. Magnet and voice coil are precision centered for efficient, distortion-free sound. Dustproofed coils for longer life and reliability. Impedance, 3.2 ohms, except †, which indicates 8 ohms impedance. \*Indicates extended-range speaker. PC indicates pincushion shaped basket.

Stock No.	Size	Shape	Mag. Oz.	Max. Watts	Wt., Lbs.	EACH
16 A 3476	4"	Square	.68	3.0	1/2	1.59
16 A 3477	5"	PC	.68	3.5	3/4	1.89
16 A 3472	5x7"	Oval	1.0	5.0	1	2.39
16 A 3471	6x9"	Oval	1.47	8.0	1 1/4	2.69
16 A 3493	*6x9"	Oval	1.47	8.0	1 1/4	2.89
16 A 3416	†6x9"	Oval	1.47	8.0	1 1/4	2.79
16 A 3470	8"	PC	2.15	9.0	1 1/2	2.79
16 A 3542	†8"	PC	2.15	9.0	1 1/2	2.79
16 A 3529 X	12"	Round	3.16	10.0	3 3/4	4.99

## 4x10" MIDRANGE HORN

Die-cast midrange horn for replacement use or modernization of existing equipment. Adds startling realism to most speaker systems. Reinforces middle-range frequencies for fuller, richer sound. High sensitivity for increased "presence," wide dispersion angle for uniform distribution. Frequency response: 600-12,000 Hz. Handles 30-watt program peaks with proper crossover. Mounting flange, 10 1/2 x 3 1/2". Depth 11". 8 ohms impedance. Complete with capacitor crossover. Shpg. wt., 3 lbs.

16 A 3540.....7.95

## 2x6" COMPRESSION TWEETER

Efficient design provides wide-angle dispersion for good sound reproduction. Built-in crossover capacitor simplifies installation. Response: 2000-18,000 Hz. Employs 1.4-oz. magnet, with 3/4" voice coil. Power capacity, 30 watts. Impedance, 8 ohms. Shpg. wt., 1 1/4 lbs.

16 A 3539.....6.95

## BIG-VALUE HEAVY-DUTY REPLACEMENT SPEAKERS

- Constructed with Heavy Ceramic Magnet Assemblies
- Moisture-Resistant Cone
- Rigid, Extra-Strong Frame
- Rugged, Baked Enamel Finish
- Epoxy Bonds Between Cones and Voice Coils

Allied's own brand of high-quality permanent-magnet replacement speakers are priced at exceptionally low cost. All have large precision centered magnets and voice coils for better tonal quality with plenty of power handling capacity. Mount easily in hard-to-get-at locations such as wall, ceiling, narrow speaker baffles, etc. Moisture-resistant treated cone. Rigid frame assures permanent alignment of voice coil and other moving elements. 8-ohm impedance. Baked-on enamel finish. PC, pincushion shape.

Stock No.	Type	Size	Shape	Magnet Oz.	Shpg. Wt.	EACH
16 A 3404	4BC	4"	Square	1.0	3/4 lb.	4.75
16 A 3408	5BC	5"	PC	1.0	3/4 lb.	4.95
16 A 3409	6EC	6"	PC	3.0	1 lb.	5.50
16 A 3410	8FC	8"	PC	5.5	1 1/4 lbs.	5.95
16 A 3411 X	12JC	12"	Round	10.0	3 1/2 lbs.	9.95
16 A 3412	57EC	5x7"	Oval	3.0	1 1/4 lbs.	5.50
16 A 3413	69JC	6x9"	Oval	10.0	2 1/2 lbs.	6.95

## LOW-COST EXTENDED-RANGE COAXIAL SPEAKERS

These Two-Way Speakers Offer Top-Dollar Value

For Low-Cost Music Systems or Extension Speakers



Ideal for use in low-cost music systems or as extension speakers. Provide clear highs and smooth, undistorted lows. Feature heavy-duty 1" voice coils, except 6x9" size, 3/4". Impedance, 8 ohms.

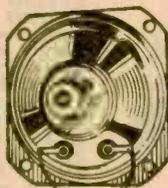
16 A 3551 X, 12" Coaxial Speaker. Woofer has 6-oz. magnet; 4" tweeter has .68-oz. magnet. 40-15,000 Hz response, crossover at 2500 Hz. Power capacity, 15 watts. Shpg. wt., 5 lbs.....8.95

16 A 3552, 8" Coaxial Speaker. Woofer has 3-oz. magnet, tweeter has .68-oz. magnet. 50-13,000 Hz response, crossover at 3000 Hz. Power capacity, 9 watts. Shpg. wt., 6 lbs.....6.95

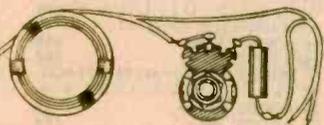
16 A 3554, 6x9" Coaxial Speaker. Oval speaker with 3-oz. magnet, 3" tweeter has .68-oz. magnet. 50-15,000 response, crossover at 3000 Hz. Power capacity, 8 watts. Shpg. wt., 1 1/2 lbs.....6.95

## ADD-ON TWEETER AND CROSSOVER EXTENDS RESPONSE OF YOUR PRESENT 8-OHM SPEAKER

- For Replacement Speaker Use in a Wide Range of Hi-Fi Consoles and Systems
- Extends Upper Frequency Limit When Added to Many Systems
- Handles Up to 10 Watts Program Material
- With All Hardware for Easy Hook-Up



Available with or without Brilliance Control



Add-on tweeters, ideal for use as replacement speakers in many hi-fi consoles or to expand the frequency range of your present 8-ohm speakers. Greatly improves the sound of your system, provides crisp, sparkling high frequencies. Each unit is equipped with crossover to properly channel high frequencies to tweeter for excellent sound reproduction. Increases response to 13,500 Hz. Handles up to 10 watts program material. Rugged construction for long life and dependable operation. With all hardware for easy installation.

16 A 3475, Model TSP35A-X, 3 1/2" tweeter has crossover to separate high frequencies for excellent sound response. Mounts easily in any installation. Shpg. wt., 2 lbs.....3.95

16 A 3479, Model TSP35A-XC, 3 1/2" tweeter and crossover as above, but also includes brilliance control for precise adjustment of higher frequencies. Shpg. wt., 3 lbs.....4.95

## LOW-COST EXTENDED-RANGE DUAL-CONE SPEAKERS



6x9" Speaker



8" Speaker

12" Speaker



- Heavy-Duty Voice Coil for Reliability
- Separate VHF Cones Extend Highs
- Rigid Frame Assures Alignment

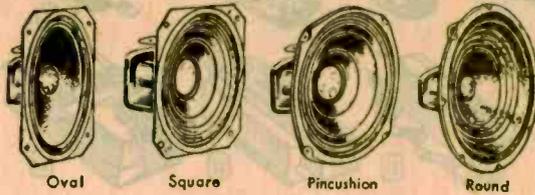
Perfect for extension speakers or for low-cost music systems for family or play room. Offers extended response with clear highs and smooth low frequencies. Whizzer cone acts to reinforce higher frequencies. Rigid frame assures alignment of voice coil and other moving elements. Internal dust cap protects heavy-duty voice coil—extends life of speaker. Husky ceramic magnet drives dual-cone. Impedance, 8 ohms.

Stock No.	Type LC	Size	Shape	Mag. Oz.	Wt., lbs.	EACH
16 A 3419	57EC-W	5x7"	Oval	3.0	1 1/4	3.95
16 A 3423	69JC-W	6x9"	Oval	10.0	2 1/2	5.49
16 A 3428	8JC-W	8"	Round	10.0	2 1/4	5.49
16 A 3431 X	12JC-W	12"	Round	10.0	4	7.45

# Speakers by Quam, ERA, Utah and Misco

BUY TWO AND SAVE 10%

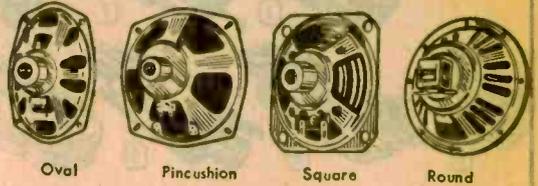
## QUAM GENERAL-PURPOSE REPLACEMENT SPEAKERS



Have Alnico V magnets, baked-enamel finish. \*Very shallow frame. Impedance: 3.2 ohms, except †8 ohms; †8-10 ohms; †12 ohms; †100 ohms. "PC", pincushion design. \*\*High energy Q/8 magnet.

Stock No.	Mfr's Type	Shape	Size	Cap. W	Magn. Oz.	Wt. Lbs.	EA.	TWO for
16 A 3424†	22A0678	Round	2 1/4"	.25	.45	1/4	3.00	5.40
16 A 3425†	22A067100	Round	2 1/4"	.25	.45	1/4	3.30	5.94
16 A 3422	25A07	Square	2 1/4"	1.5	.65	1/4	2.28	4.10
16 A 3426†	27A06212	Round	2 3/4"	.25	.55	1/4	2.97	5.35
16 A 3485	30A05	Square	3"	2.0	.55	1/4	1.58	3.56
16 A 3453	3A07	Square*	3 1/2"	2.5	.65	1/2	2.43	4.37
16 A 3417	4A05	Square*	4"	2.5	.55	1/4	1.74	3.13
16 A 3561	26A07	Oval*	2x6"	2.0	.65	1/2	2.40	4.86
16 A 3421	35A05	Oval*	3x5"	2.0	.55	1/2	2.40	4.82
16 A 3435	4A1**	Square*	4"	3.0	1.0	3/4	2.67	4.31
16 A 3436	4A15	Square	4"	3.0	1.47	3/4	2.97	5.35
16 A 3433	46A1**	Oval*	4x6"	3.5	.65	3/4	3.12	5.62
16 A 3438†	4A178**	Square*	4"	3.0	1.0	3/4	3.06	5.51
16 A 3461	46A15	Oval	4x6"	3.5	1.47	1	3.45	6.21
16 A 3427	48A2**	Oval*	4x8"	4.5	1.2	1	4.50	8.10
16 A 3484	410A2**	Oval*	4x10"	6.0	1.2	1 1/4	5.16	9.29
16 A 3441	5A1**	PC	5"	3.5	1.0	1	2.88	5.18
16 A 3439	5A15	PC	5"	3.5	1.47	1	3.18	5.72
16 A 3442†	5A1Z8**	PC*	5"	3.5	1.0	1 1/2	3.18	5.72
16 A 3405	52C10	PC	5 1/4"	10.0	10.0	2 1/8	6.15	11.07
16 A 3446	57A15	Oval	5x7"	5.0	1.47	1	2.84	5.11
16 A 3447	57A21	Oval	5x7"	5.0	2.15	1 1/4	4.26	7.67
16 A 3445	6A31	PC	6 1/2"	6.0	3.16	1 1/2	4.77	8.59
16 A 3451†	69A2Z10**	Oval	6x9"	8	1.4	1 1/4	5.01	9.02
16 A 3463	69A3	Oval	6x9"	10.0	3.2	1 1/2	5.58	10.04
16 A 3449	7A21	PC	7"	6.0	1.4	1	4.59	8.26
16 A 3443	8A21	PC	8"	7.0	2.15	1 1/2	4.65	8.37
16 A 3444	8A31	PC	8"	9.0	3.16	2 1/4	5.49	9.88
16 A 3452	10C5	Round	10"	9	4.8	2 1/4	7.47	13.45
16 A 3533X	12A6	Round	12"	14.0	6.8	4 1/2	9.96	17.93

## UTAH SHALLOW-PROFILE HIGH-EFFICIENCY SPEAKERS



Slim-profile speakers for general replacement use. Alnico V magnets provide gap flux density equaling or exceeding EIA standards. Give better response, fuller tone. Uses wafer-thin magnet and one-piece pot. All have 3-4 ohms impedance, except Types SP4Y18, SP69D8, SP8J8 and SP12J8, 8 ohms. Type SP25A is for use in transistorized circuits. PC in table indicates pincushion. \*Indicates speaker has transformer mounting facilities. †Watts.

Stock No.	Mfr's Type	Shape	Size	W†	Depth	Magn. Oz.	Lb.	EA.	TWO for
16 A 3500	SP25A	Square	2 1/2"	2	1 3/8"	.68	1/4	2.37	4.27
16 A 3501	SP3A	Square	3"	3	1 3/8"	.68	1/4	2.28	4.11
16 A 3456	SP35A	Square	3 1/2"	3	1 3/8"	.68	1/2	2.31	4.16
16 A 3457	SP4Y	Square	4"	4	1 1/2"	.55	1/2	1.74	3.13
16 A 3489	SP4Y8	Square	4"	4	1 1/2"	.55	1/2	1.86	3.35
16 A 3502	*SP4B	Square	4"	4.5	1 1/8"	1.00	3/4	2.58	4.65
16 A 3490	*SP4D	Square	4"	5	1 23/32"	1.2	3/4	2.70	4.86
16 A 3492	*SP5D	PC	5"	5.5	1 29/32"	1.2	3/4	2.91	5.24
16 A 3503	*SP5B	PC	5"	5	1 1/8"	1.00	3/4	2.61	4.70
16 A 3458	SP6A	PC	6"	6	2 1/8"	.68	3/4	2.97	5.35
16 A 3505	*SP6D	PC	6"	6.5	2 3/32"	1.47	3/4	3.24	5.84
16 A 3507	*SP6FL	PC	6"	8	3"	3.16	1 1/2	4.35	7.84
16 A 3459	SP8D	PC	8"	8	2 3/8"	1.47	1 1/2	3.48	6.26
16 A 3508	*SP8G	Round	8"	10	3 1/8"	3.16	2	5.40	9.72
16 A 3509	*SP8J8	Round	8"	12	4 1/8"	6.8	3 1/4	6.66	11.96
16 A 3510X	*SP12J8	Round	12"	14	5 1/8"	6.8	4 3/4	7.95	14.78
16 A 3511	SP46A	Oval	4x6"	4	1 23/32"	.68	1/2	2.70	4.68
16 A 3466	SP53Y	Oval	5x3"	4	1 19/32"	.55	1/2	2.34	4.22
16 A 3406	SP57A	Oval	5x7"	4.5	2 1/2"	.68	3/4	2.91	5.24
16 A 3512	SP57D	Oval	5x7"	6.5	2 3/32"	1.47	1	3.33	6.00
16 A 3467	SP69B	Oval	6x9"	7.0	2 27/32"	1.00	1	3.81	6.86
16 A 3513	SP69D	Oval	6x9"	7.5	2 7/8"	1.47	1 1/4	3.90	7.03
16 A 3496	SP69D8	Oval	6x9"	8	2 7/8"	1.47	1 1/4	4.02	7.24
16 A 3514	SP69G	Oval	6x9"	10	3 3/32"	3.16	1 3/4	5.10	9.15

## 45-OHM INTERCOM SPEAKERS

Top-quality PM speakers for replacement use in 45-ohm intercoms. \*Very shallow frame. \*\*High energy Q/8 magnet.

Stock No.	Mfr's Type	Size	Shape	Magn.	Wt. Lb.	EA.	TWO for
16 A 3481	3A07Z45	3 1/2"	Square*	.65 oz.	1/2	2.70	4.86
16 A 3482	4A1Z45**	4"	Square	.65 oz.	3/4	3.06	5.51
16 A 3483	5A1Z45**	5"	Pincush.	.65 oz.	1	3.2	5.78

## PERSONAL REMOTE SPEAKER

This speaker lets you enjoy good-quality personalized listening to your TV, radio or phonograph. Excellent as an extension speaker, too. Two controls, one for the speaker, the other for the radio, TV, etc. Easy to install, simply connect cable from your remote to speaker leads in your radio, TV, or phonograph. Has attractive, high impact plastic case, 4x4x2". With 20-ft. cable. From Japan. Wt., 1 lb.

16 A 3515..... Each 3.95 Two for 7.11

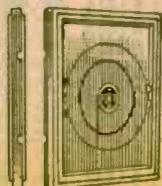


## ERA POLY-PLANAR WAFER-TYPE SPEAKERS

Model G51. Wide-range electro-dynamic speaker employs lightweight expanded polystyrene panel supported by a shallow plastic frame. Reproduces frequencies from 60 Hz to 20,000 Hz. Large radiating area results in minimum piston motion for low distortion and high electromagnetic efficiency. Provides sound not available from cone-type speakers. 1" voice coil. 8 ohms. 5 watts peak. 4 1/2 x 8 1/2". Max. depth, 3/4", 19 oz.

16 A 3400, Each..... 7.95 Two for... 14.50

16 A 3488, Model G201. As above, 40-20,000 Hz. 20 watts peak. 1 1/4 x 4 1/8". Max. depth, 1 1/8". 19 oz..... Each 14.95 Two for... 26.90

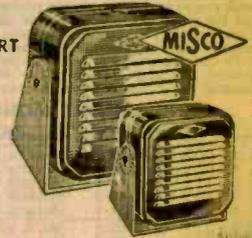


## ALL-WEATHER SPEAKERS FIGHT MOISTURE AND DIRT

- Rugged Outdoor Speakers
- Perform Under All Conditions
- Cones Treated for Long Life
- Acoustically Designed Louvers

Each speaker is housed in a rugged, 20-gauge steel enclosure that is weatherproof and dustproof. Withstands the destructive effects of humidity, temperature, shock and corrosive climates. Perfect for patios, outdoor theaters, factories etc. Has acoustically designed louvers, and perforated plate backing. Treated speaker cones. Impedance, 8 ohms. Type MS-3BB, 3 1/2" "Mini-Speaker" has 1-oz. magnet; is 4x4x2 1/4". 3-watt capacity.

16 A 3414. MS-3BB. 1 1/2 lbs. ... Each 7.29 Two for 13.12  
Type MMS-8-F. 8" "Music-Mini" has 3.16-oz. magnet; is 9x9x4 1/4". 70-13,000 Hz response. Capacity, 8 watts.  
16 A 3550. MMS-8-F. 5 lbs. ... Each 14.29 Two for 25.72



## UTAH WEATHERPROOF OUTDOOR SPEAKERS

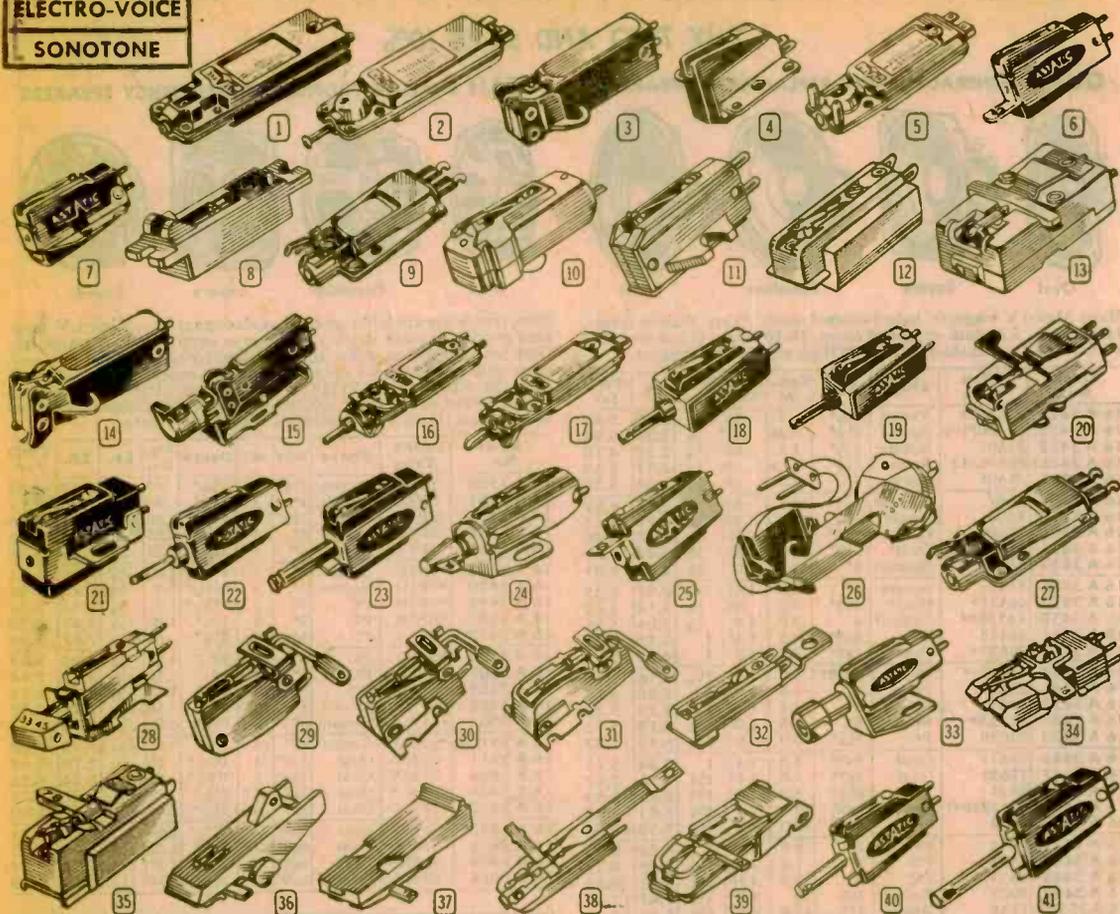
For drive-ins, theatres, golf courses, etc. Specially treated cone, dust cap, ring. 3-4 ohms. \*Square; †pincushion. ‡ Watts.

Stock No.	Type SP	Size	Mag. Oz.	Lb.	EA.	TWO for
16 A 3460*	35A-WP	3 1/2"	3	.68	1/2	2.98 5.36
16 A 3464*	4Y-WP	4"	4	.55	1/2	2.69 4.84
16 A 3465†	5Y-WP	5"	4	.55	1/2	2.69 4.84
16 A 3469†	8D-WP	8"	8	1.47	1 1/4	3.98 7.16



**ASTATIC**  
**ELECTRO-VOICE**  
**SONOTONE**

# Exact-Replacement Phono Cartridges



These stereo and monophonic phono cartridges replace the originals used by most manufacturers of phonographs. In "Needle" column of tables below, 1S and 1D indicate .001" synthetic-sapphire or natural-diamond tip for long-playing records; 3S, .003" synthetic-sapphire tip for 78-rpm records; 2S, .002" all-purpose synthetic-sapphire for all mono records; 7S and 7D indicate .0007" synthetic-sapphire or natural-diamond for stereo records. Av. shgp. wt., 3 oz.

## DOUBLE-NEEDLE MONOPHONIC CARTRIDGES (Cont'd)

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1152	Ast. 420	BSR TC8H, Ronette TO284	33	1S/3S	3.27
16 A 1153	Ast. 422	BSR TC8M, Ron. DC284	33	1S	3.57
16 A 1032	Ast. 470	Vaco TO-45X	41	1S/3S	3.57
16 A 1220	Ast. 611	Astatic 611 Mastercraft	35	1S/3S	3.57
16 A 1027	E-V 80	Ronette TO-284	28	1S/3S	3.27
16 A 1026	E-V 87	Ronette TO-222	28	1S/3S	3.87
16 A 1139	E-V 88	Ronette DC 500/1	46	1S/3S	3.87
16 A 1019	E-V 119	BSR-TC8M	24	1S/3S	2.88
16 A 1018	E-V 120	BSR-TC8H	24	1S/3S	2.88
16 A 1022	E-V 190D	Magnavox	26	1D/3S	12.00
16 A 1221	E-V 5369	BSR X1H	59	1S/3S	2.76
16 A 1227	E-V 5201	Vaco TO-45M, 45X, 55X, 45XM	42	1S/3S	3.30
16 A 1228	E-V 5206	Vaco TO-55, 4.45M, H45X, TO-H46X	43	1S/3S	3.00
16 A 1146	So. 2TA-S	Sonotone 2T-S	30	1S/3S	4.35
16 A 1147	So. 2T-LB-S	Sonotone 2T-LB-S	29	1S/3S	4.55
16 A 1148	So. 3T-S	Sonotone 3T-S	31	1S/3S	5.72
16 A 1149	So. 3T-SD	Sonotone 3T-SD	31	1D/3S	7.76

## SINGLE-NEEDLE MONOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1002	Ast. 12	Astatic 12	2	2S	2.67
16 A 1005	Ast. 24	Astatic 24	1	3S	2.97
16 A 1116	Ast. 40-1	Astatic 40-1	3	1S	3.90
16 A 1243	Ast. 40-2	Astatic 40-2	3	2S	3.90
16 A 1238	Ast. 51-1	Astatic 51-1	4	1S	4.44
16 A 1217	Ast. 62-1	RCA 103238, 103238A	9	1S	2.97
16 A 1224	Ast. 66-2	Astatic 66-2	5	2S	2.97
16 A 1216	Ast. 146-7	RCA 123489	13	7S	3.57
16 A 1205	Ast. 310-2	Astatic 310-2	6	2S	2.97
16 A 1118	Ast. 346	RCA 115058	8	7S	4.17
16 A 1244	Ast. 408	RCA 75575	9	1S	2.67
16 A 1206	Ast. 414-1	Astatic 414-1	7	1S	2.67
16 A 1307	Ast. 414-2	Astatic 414-2	7	2S	2.67
16 A 1006	Ast. 416-2	Astatic 416-2	7	2S	3.27
16 A 1210	Ast. 434	GE Show-Tell, Piezo	25	3S	2.67
16 A 1137	Ast. 601	Singer H2200 Portable	32	1S	2.97
16 A 1218	Ast. 609	Magnavox 560313, 3, 5	12	1S	2.97
16 A 1225	Ast. 350	GE Show-Tell, Varco	10	1S	2.67
16 A 1226	E-V 5200	Vaco SN-45	11	2S	2.55

## DOUBLE-NEEDLE STEREOGRAPHIC CARTRIDGES

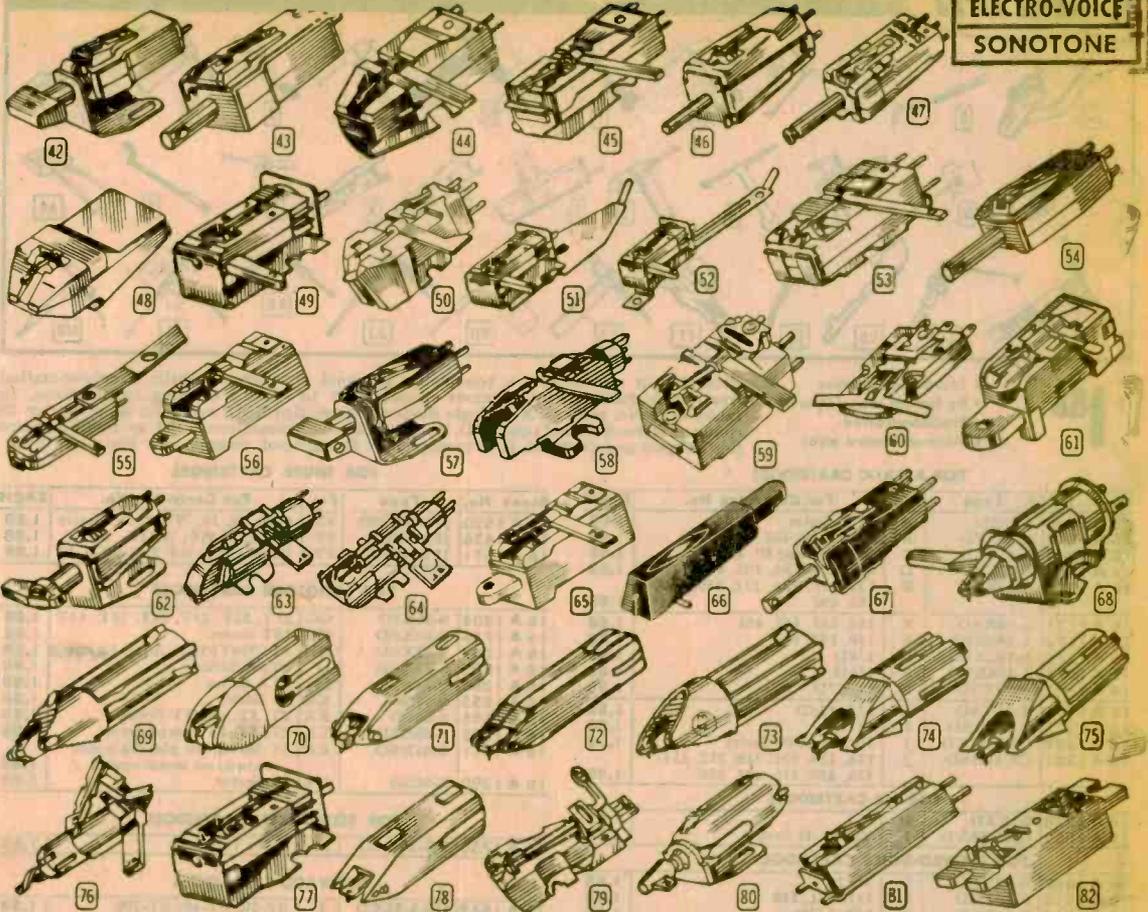
Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1219	Ast. 40T	Astatic 40T	14	1S/3S	4.17
16 A 1241	Ast. 40TB	Astatic 40TB	15	1S/3S	5.07
16 A 1211	Ast. 60TS	VM	40	1S/3S	4.17
16 A 1223	Ast. 66TS	Astatic 66TS	16	1S/3S	4.35
16 A 1253	Ast. 66TY	Astatic 66TY	17	1S/3S	3.90
16 A 1013	Ast. 118	Astatic 118-TS	18	1S/3S	3.87
16 A 1014	Ast. 120	Astatic 120	18	1S/3S	3.87
16 A 1015	Ast. 124	Astatic 124TS	19	1S/3S	3.87
16 A 1120	Ast. 146	Ast. 146, BSR X1H(E)	20	1S/3S	3.87
16 A 1245	Ast. 192	Sears 57-8883-S	20	1S/3S	3.87
16 A 1200	Ast. 310T	Astatic 310T	21	1S/3S	3.27
16 A 1016	Ast. 310TS	Astatic 310TS	22	1S/3S	3.27
16 A 1301	Ast. 314TS	Astatic 314TS	23	1S/3S	3.27
16 A 1141	Ast. 414S	RCA 77779	27	1S/3S	3.90

## DOUBLE-NEEDLE STEREOGRAPHIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1355	Ast. 17	Astatic 17	20	7D/3S	7.05
16 A 1356	Ast. 17D	Astatic 17D	20	7D/3S	9.45
16 A 1315	Ast. 70TS	Astatic 70TS	47	7S/3S	4.35
16 A 1314	Ast. 74TS	Astatic 74TS	47	7S/3S	4.35
16 A 1313	Ast. 76TSB	Ronette 208/A1, 208-2	62	7S/3S	4.77
16 A 1214	Ast. 80TS	Astatic 80TS	47	7S/3S	4.50
16 A 1140	Ast. 86TSB	Ronette 105	62	7S/3S	5.10
16 A 1077	Ast. 133	Motorola 59C61496A01	50	7S/3S	5.85
16 A 1115	Ast. 133D	Motorola 59C61496A02	50	7S/3S	8.25
16 A 1123	Ast. 140	G.E. EA1003	20	7S/3S	4.50
16 A 1124	Ast. 142R	G.E. EA1006, 15358-2	20	7S/3S	5.55
16 A 1125	Ast. 142RD	G.E. 1009, 15358-1	20	7D/3S	7.35
16 A 1126	Ast. 142	G.E. RS6518	20	7S/3S	4.35
16 A 1121	Ast. 153D	Adm. 409C62, -1-2-3-4	50	7D/3S	7.50
16 A 1159	Ast. 157D	Philco 35-2865-1	50	7D/3S	9.26
16 A 1162	Ast. 167D	Sears 33-413-0, 414-0	38	7D/3S	7.50
16 A 1291	Ast. 275D	Sears 33-456-0	66	7D/3S	8.70
16 A 1157	Ast. 349D	G.E. C-500	36	7D/3S	10.44
16 A 1158	Ast. 351D	G.E. C-650	37	7D/3S	10.44
16 A 1161	Ast. 353D	RCA 115276, 115276	39	7D/3S	8.97
16 A 1215	Ast. 355D	RCA 115302, 115303	39	7D/3S	9.98

# by Astatic, Electro-Voice, and Sonotone

**ASTATIC**  
**ELECTRO-VOICE**  
**SONOTONE**



## DOUBLE-NEEDLE STEREOPHONIC CARTRIDGES (Cont'd)

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1133	Ast. 472	Vaco ST-2X, ST-20X	67	.7S/3S	4.50
16 A 1134	Ast. 474	Vaco ST-4X, ST-40X	67	.7S/3S	4.35
16 A 1068	S Ast. 475SD	RCA106960A; 110023A	60	.7D/3S	11.40
16 A 1069	Ast. 475	RCA108213.A; 110023.A	60	.7S/3S	6.00
16 A 1067	Ast. 477	RCA 106771, A, B	60	.7S/3S	6.00
16 A 1066	S Ast. 477D	RCA 106771, A, B	60	.7D/3S	11.40
16 A 1071	S Ast. 487D	RCA111348	61	.7D/3S	11.61
16 A 1246	Ast. 710	Euphonic E-1, U-1	34	.7S/3S	5.97
16 A 1244	Ast. 718	Euphonic U10	34	.7S/3S	6.57
16 A 1222	Ast. 718D	Euphonic U11	34	.7D/3S	9.57
16 A 170	Ast. T1023	Telefunken T20, D, T22/D	61	.7S/3S	7.50
16 A 1229	Ast. 195D	Magnavox 560345-1	55	.7D/3S	7.50
16 A 1150	E-V 26	E-V 26	49	.7S/3S	6.90
16 A 1151	E-V 26D	E-V 26D	49	.7D/3S	9.90
16 A 163	E-V 95	Ronette 105	62	.7S/3S	5.10
16 A 1164	E-V 96	Ronette 106	62	.7S/3S	4.77
16 A 1131	E-V 97	Ronette 105/1 OV-1, T1	46	.7S/3S	4.50
16 A 1132	E-V 98	Ronette 106-1, P 208-1	46	.7S/3S	4.39
16 A 1040	E-V 121	BSR TC-8, S-3, SH, SM	60	.7S/3S	4.68
16 A 1048	E-V 126	Magnavox 560296-2	52	.7S/3S	6.90
16 A 1047	E-V 126D	Magnavox 560296-1	52	.7D/3S	9.90
16 A 1046	E-V 127	Magnavox 560281-4	51	.7S/3S	6.90
16 A 1045	E-V 127D	Magnavox 560281-3	51	.7D/3S	9.90
16 A 1052	E-V 131	Motorola 59C61640A01 59P6024-24	53	.7S/3S	5.37
16 A 1053	E-V 131D	Motorola 59C61640A02	53	.7D/3S	7.77
16 A 1043	E-V 137	Elac KST-102	48	.7S/3S	4.50
16 A 1395	E-V 141	Telefunken T20/2, T200/2	65	.7S/3S	7.77
16 A 1397	S E-V 141D	Telefunken T20/D, T200/D	65	.7D/3S	11.37
16 A 1398	E-V 143D	Jensen 143-D, SSD5B	45	.7D/3S	7.35
16 A 1089	E-V 148	V-M 29286-C	53	.7S/3S	5.37
16 A 1089	E-V 148D	V-M 29286-C	53	.7D/3S	7.77
16 A 1036	E-V 149	Admiral 409C51-1	44	.7S/3S	5.40
16 A 1037	E-V 149D	Admiral 409C59-3	44	.7D/3S	7.20
16 A 1072	E-V 150	Allied 466, BSRC-1	44	.7S/3S	4.80
16 A 1051	E-V 150D	Magnavox 860315-1	44	.7D/3S	6.60
16 A 1144	E-V 158	Jensen 158, R2C49B	44	.7S/3S	5.40
16 A 1050	E-V 158D	Magnavox 560310-1	44	.7D/3S	7.50
16 A 202	E-V 271	BSR SX1M	59	.7S/3S	3.60
16 A 203	E-V 272	BSR SX1H	59	.7S/3S	3.60
16 A 1230	E-V5212	Vaco ST-2	54	.7S/3S	3.45
16 A 1231	E-V5216	Vaco ST-4	54	.7S/3S	3.45
16 A 1232	E-V141	Telefunken T20/2, T200/2	56	.7S/3S	7.77

## DOUBLE-NEEDLE STEREOPHONIC CARTRIDGES (Cont'd)

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1233	E-V 5219	Vaco ST-4X	37	.7S/3S	3.60
16 A 1234	E-V 5026D	Garrard Model 30	38	.7D/3S	6.90
16 A 1165	So. 8TA4-S	Sonotone 8TA4-S	79	.7S/3S	6.47
16 A 1166	So. 8TA4-SD	Sonotone 8TA4-SD	79	.7D/3S	8.51
16 A 1167	So. 9TAF-S	Sonotone 9TAF-S	63	.7S/3S	6.54
16 A 1189	So. 9TAF-SD	Sonotone 9TAF-SD	63	.7D/3S	8.57
16 A 1191	So. 16TAF-SD	Sonotone 16T, 19T, 916T	64	.7D/3S	6.84
16 A 1292	.....	Allied 480, Telrad I-G2S-B	.....	.7S/3S	3.46

## PLUG-IN MONOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1192	Ast. 81T	Astatic 81T	78	1S/3S	2.37
16 A 1193	Ast. 81TX	Astatic 81 TX	78	1D/3S	4.17
16 A 1194	Ast. 81TBX	Astatic 81TBX	68	1D/3S	4.77
16 A 1096	Ast. 89T	Astatic 89T	78	1S/3S	2.97
16 A 1097	Ast. 89TX	Astatic 89TX	78	1D/3S	4.77
16 A 1195	Ast. 89-1	Ast. 89-1, RCA 108555	78	1S	2.55
16 A 1204	Ast. 98	Zenith 142-87	73	1S/3S	2.37
16 A 1207	Ast. 101	Zenith 142-76, -77	73	1S/3S	4.50
16 A 1235	Ast. 83-1	Astatic 83-1, Jensen 42	71	1S	2.10
16 A 1099	E-V 56	E-V 56, Mot. 59B634530	69	1S/3S	2.37
16 A 1101	E-V 56D	E-V, 56D, 56DS	69	1D/3S	4.17
16 A 1104	E-V 76	Webcor A1919	70	1S/3S	2.37
16 A 1105	E-V 76D	Webcor A1920	70	1D/3S	4.17

## PLUG-IN STEREOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1259	Ast. 13TX	Astatic 13TX	72	.7D/3S	5.37
16 A 1258	Ast. 13TBX	Astatic 13TBX	68	.7D/3S	5.97
16 A 1257	Ast. 13T	Astatic 13T	72	.7S/3S	3.57
16 A 1256	Ast. 13TB	Astatic 13TB	68	.7S/3S	4.17
16 A 1459	E-V 66D	E-V 66D, 66DS	74	.7D/3S	5.97
16 A 1462	E-V 106	E-V 106	74	.7S/3S	4.17
16 A 1463	E-V 106D	E-V 106, 106DS	74	.7D/3S	5.97
16 A 1466	E-V 108	E-V 108	75	.7S/3S	4.17
16 A 1467	E-V 108D	E-V 108D, 108DS	75	.7D/3S	5.97
16 A 1197	So. 10T2-S	Sonotone N10T2-S	76	.7S/3S	5.14
16 A 1198	So. 10T2-SD	Sonotone N10T2-SD	76	.7D/3S	7.17

## SINGLE-NEEDLE STEREOPHONIC CARTRIDGES

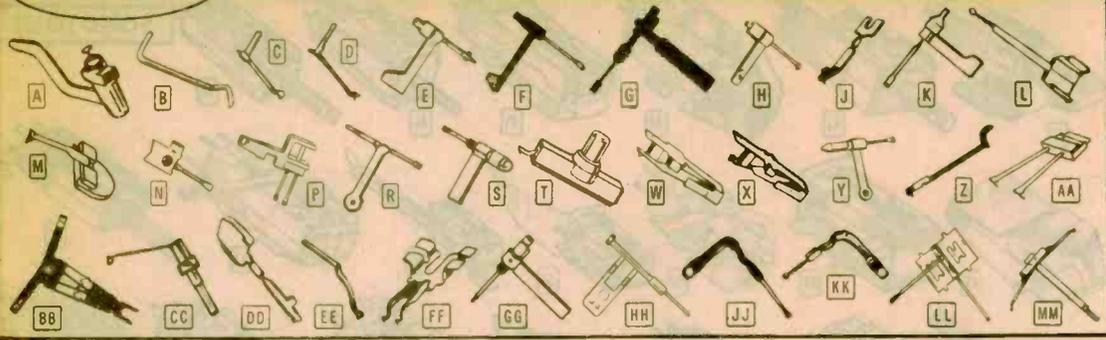
Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1403	E-V 21	E-V 21	77	.7S	6.36
16 A 1413	E-V 21D	E-V 21D	77	.7S	9.08
16 A 1209	E-V 5178	E-V 191	81	.7S	3.58
16 A 1236	E-V 264	RCA 115059	82	.7S	4.89
16 A 1247	Ast. 348	RCA 11059	.....	.7S	4.77



**DIAMOND**



**PHONOGRAPH NEEDLES**



**188**

- Top-quality needles
- By famous manufacturers
- Precision-crafted
- Minimum record wear

Protect your records with a top-quality diamond replacement needle. Precision-crafted from whole diamonds by a famous manufacturer to Allied's exacting specifications. In table, Type No. suffixes: XD, single diamond stereo tip; XSD, synthetic sapphire (for 78 rpm) and stereo diamond tips; LPD, long-play diamond, monophonic; SD, synthetic sapphire (for 78 rpm) and diamond, both monophonic; D, diamond, monophonic. Slipp. wt., 2 oz.

**FOR ASTATIC CARTRIDGES**

Stock No.	Type	Fig.	For Cartridge No.	EACH
16 A 1644	A-685D	A	57-T Series	1.88
16 A 1658	A-74LPD	B	51, 53, 59, 402	1.88
16 A 1645	A-75LPD	C	ACD Series; 40, 41	1.88
16 A 1657	A-67LPD	D	64, 66, 68, 94, 405, 406	1.88
16 A 1282	A-94XSD	E	133, 137, 233, 237, 455, 483, 485, 497	1.88
16 A 1171	A-98XSD	E	153, 157, 461, 481	1.88
16 A 1172	A-100XSD	E	140, 142, 146	1.88
16 A 1275	A-102XSD	E	138D	1.88
16 A 1276	A-104XSD	E	148D	1.88
16 A 1742	A-90XSD	F	17, 17D	1.88
16 A 1501	A-94XSD	H	133; 133D	1.88
16 A 1277	A-106XSD	H	181D	1.88
16 A 1669	CRA-55XD	J	70 Series; 80 Series	1.88
16 A 1281	CRA-55SD	J	118, 120, 124, 310, 312, 414, 416, 420, 422, 424, 426	1.88

**FOR BSR CARTRIDGES**

16 A 1278	B1XSD	H	C-1	1.88
16 A 1669	CRA-55XD	J	TC-8S, H Series	1.88

**FOR ELECTRO-VOICE CARTRIDGES**

16 A 1667	E-98XD	L	21, 26	1.88
16 A 1510	E-10XSD	L	117, 131, 148	1.88
16 A 1514	E-15XSD	L	132; 132D	1.88
16 A 1518	E-16XSD	L	149; 149D	1.88
16 A 1279	E-19XSD	L	169D; 186D	1.88
16 A 1284	E-21XSD	II	198, 199; 282	1.88
16 A 1500	E29X50	G	5026D	1.88

**FOR EUPHONIC CARTRIDGES**

16 A 1614	J-47XD	M	E Series	1.88
16 A 1752	J-57XD	N	U-1 Series; U-2 Series	1.88
16 A 1039	EU-3XSD	P	U-12, U-13 (R)	1.88
16 A 1173	EU-2XSD	P	U-10, U-11, R	1.88

**FOR G.E. CARTRIDGES**

16 A 1642	G-19XD	T	VR-227	1.88
16 A 1643	G-20XD	T	VR-225	1.88
16 A 1523	G-1D	W	RFX Series	1.88
16 A 1054	G-1XD	W	RFX Series (for playing stereo records on mono equip.)	1.88
16 A 1060	G-4XD	X	4G Series VRII (for playing stereo records on mono equip.)	1.88
16 A 1601	G-4D	X	4G Series; VR II	1.88
16 A 1502	G-21XSD	Y	C-100, C-200, C-400, RS3824, ER97X, 250	1.88
16 A 1503	G-10LPD	R	Early RFX Series	1.88
16 A 1504	G-23XD	S	VR 1000-7	1.69
16 A 1283	2739DS	Y	C-100A, C-200, C-400	1.88
16 A 1286	G-24XSD	V	C-50, C-500, C-600, C-650	1.88

**FOR RCA CARTRIDGES**

16 A 1622	M-77XSD	AA	106770A, 106771A	1.88
16 A 1653	M-74LPD	CC	75475, 77779, 75575	1.88
16 A 1753	M-80XSD	BB	110020, 110021	1.88
16 A 1505	M-82XD	Z	RPM-203 (115059)	1.88
16 A 1287	M-84XSD	H	115276-115303; 115303	1.88

**FOR RONETTE CARTRIDGES**

16 A 1649	CRA-55LPD	J	All Ronette Monophonic; Astatic; BSR	1.88
16 A 1288	CRA-57LPD	DD	Mono PC-422, SCW-395, DC-500 Series	1.88
16 A 1665	CRA-57XD	DD	P-105, 106; BF-40, Ronette Stereo; Admiral Ensign	1.88
16 A 1437	CRA-572D	DD	SCW-395-2	1.88

**FOR SHURE CARTRIDGES**

Stock No.	Type	Fig.	For Cartridge No.	EACH
16 A 1650	JPS-30LPD	EE	P-30, 72, 76, 77, 79; PC Series	1.88
16 A 1436	JPS-35SD	FF	P-7, 8, 9; W9; WC10	1.88
16 A 1651	JPS-36SD	FF	PC-2, 3, 4, 5; P-7, 8, 9; Wt-9, 10	1.88

**FOR SONOTONE CARTRIDGES**

16 A 1506	S-86X5D	GG	21T, 22T, 23T, 24T, 35T, 43T	1.88
16 A 1746	S-80XSD	HH	18T Series	1.88
16 A 1747	S-82XSD	HH	9T; 916T; 16T; Adm. Ensign	1.88
16 A 1620	S-71XSD	JJ	8T; A Series	1.88
16 A 1289	S-72XSD	JJ	8TA Series	1.88
16 A 1655	S-61SD	KK	3T Series	1.88
16 A 1656	S-66SD	KK	2T, 5T, and 7T Series	1.88
16 A 1078	S-66XSD	KK	2T, 5T, 7T Stereo Series	1.88
16 A 1111	S-61XSD	KK	3T Series (for playing stereo records on mono equip.)	1.88
16 A 1290	S-68SD	KK	2T Series	1.88

**FOR TELEFUNKEN CARTRIDGES**

16 A 1750	TE-19XSD	LL	T-20; T-20DS	1.88
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**FOR VACO CARTRIDGES**

16 A 1669	CRA-55XD	J	ST-20; ST-40; ST-200	1.88
16 A 1508	VA304SD	K	CN62; CN68; CN75	1.88

**FOR ZENITH CARTRIDGES**

16 A 1174	Z1XSD	MM	142-126, 7, 8; 142-136, 7, 142-140, 41	1.88
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**NEEDLE-CARTRIDGE COMBINATIONS**



**ZENITH "COBRA ARM" PLUG-IN NEEDLE-CARTRIDGES**

Stock No.	Type No.	Zen. Type	Fig.	Stylus	EACH
16 A 1631	S-15780	Z-62	NN	Syn. Sapphire	1.88
16 A 1635	142-76, 142-77	Z-59	PP	Syn. Sapphire	4.29
16 A 1697	142-76, 142-77	Z-59SD	PP	Diamond	8.95

**DIAMOND PLUG-IN NEEDLE-CARTRIDGES**

Stock No.	Type No.	Fig.	For Cartridge	EACH
16 A 1606	A-41SD	SS	Astatic 81TX	4.49
16 A 1610	A-43SD	SS	Astatic 89TX	4.49
16 A 1689	A-44XSD	SS	Astatic 13TX Stereo	4.95
16 A 1625	E-36SD	TT	E.V. 56DS	4.49
16 A 1627	E-37SD	RR	E.V. 76DS	4.49
16 A 1690	E-46XSD	TT	E.V. 66DS Stereo	4.95

**SYNTHETIC-SAPPHIRE PLUG-IN NEEDLE-CARTRIDGES**

Stock No.	Type No.	Fig.	For Cartridge	EACH
16 A 1623	A-41	SS	Astatic 81T	1.88
16 A 1609	A-43	SS	Astatic 89T	1.88
16 A 1615	A-44X	SS	Astatic 13T Stereo	3.49
16 A 1624	E-36	TT	E.V. 56	1.88

# Selected Hi-Fi and Phono Accessories

## AUTOMATIC HI-FI SHUTOFF



Plug "Off-A-Matic" into outlet—amplifier and record changer into "Off-A-Matic."

- 495**
- Shuts Off After Last Record
  - Manual or Automatic Operation
  - For Most Record Changers

Compact "Off-A-Matic" unit shuts off entire hi-fi system automatically at end of last record. Simply plug "Off-A-Matic" into wall outlet and amplifier (or receiver) and record changer into "Off-A-Matic." Works with all record changers having automatic shut-off. Switch permits manual operation if the automatic-shutoff feature is not desired. Steel case,  $2\frac{1}{2} \times 4\frac{1}{4} \times 1\frac{1}{8}$ ". 6' AC cord. Shpg. wt., 2 lbs.

24 A 9234.....4.95

## RECORD-MATIC RECORD RACK

Find the Record Album You Want Instantly!



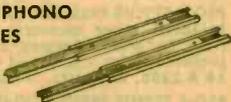
Adds Life to Your Valuable Records

Are you tired of hunting for the record album you want? Record-Matic record rack does the browsing for you—it starts and stops with the touch of a finger, runs fast or slow for your convenience. Each album is exposed to view and is easy to find—takes all the work out of album storage. You stop operation manually for instant record selection. Protects your valuable record collection and record jackets, too. It's automatic, yet has no springs, magnets or motor.  $12\frac{1}{2} \times 12\frac{1}{2} \times 12\frac{1}{2}$ ". 4 lbs.

16 A 2019 X.....7.95

## "EASY-PULL" PHONO DRAWER SLIDES

Low **198** as



Heavy steel ball-bearing slides for custom-mounting record changer in high-fidelity cabinet. Accommodates any record changer base. Offers quiet, effortless rolling action. 15" long, 11-inch travel. Shpg. wt., 3 lbs. 16 A 2046.....1.98

16 A 2047, 13-inches long, 9-inch travel. Shpg. wt., 3 lbs.....1.98

16 A 2044, Heavy-Duty 18-inch Full Extension Slides. Have extra-long 18-inch travel. Shpg. wt., 4 lbs.....3.50

## RECORD CARE BOOKLETS

PROFESSIONAL METHODS FOR RECORD CARE AND USE. Booklet by Cecil E. Watts, authority on record care, supplies combined experience of professionals on methods for cleaning records, proper care of stylus, etc. 23 A 7417, Wt.,  $1\frac{1}{2}$  oz.....50c

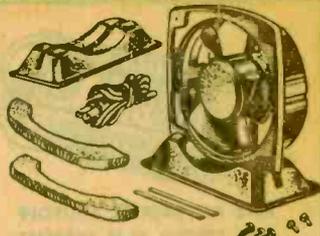


HOW TO CLEAN, MAINTAIN AND PROTECT RECORDS. Cecil E. Watts. Explains dust static, theory of static behavior, how to handle, rejuvenate records. 23 A 7422, Wt.,  $1\frac{1}{2}$  oz.....25c



## DELWYN "WHISPER FAN" by ROTRON PROTECTS EQUIPMENT FROM HEAT

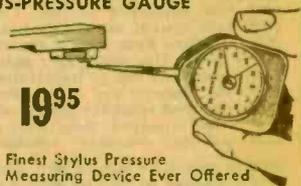
Prevent operating failure in expensive high-fidelity components, television sets, tape recorders and other electronic equipment. Extremely quiet Whisper Fan delivers 60 cfm of cooling air with no audible noise level. Protects your equipment against deterioration by heat—makes it last longer and perform better. Its compact design allows installation almost anywhere. Only  $4\frac{1}{16}$ " square by  $1\frac{1}{2}$ " deep. Can be mounted in round or square opening. Airflow is reversible. Consumes only 7 watts of power. With cord, plug. For 110-120 V, 60 Hz AC. 16 A 2031. Shpg. wt.,  $1\frac{1}{2}$  lbs.....15.95



- 15.95**
- Super Quiet Whisper Fan
  - Delivers 60 cfm of Air

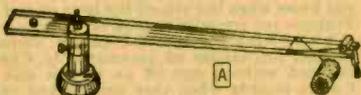
## SHERR-TUMICO PRECISION STYLUS-PRESSURE GAUGE

Precision dynamometer gauge measures stylus pressure of pickup arm. Assures maximum protection of phono cartridge and records. Easy-to-read meter calibrated in 0-.6 grams.  $1\frac{3}{4}$ " actuating arm has  $15^\circ$  movement either up or down. Two needles operate simultaneously. When pressure is released one needle returns to zero, other remains at max. reading. After reading, manual reset knob returns needle to zero.  $1\frac{1}{16} \times 1\frac{1}{16} \times 3\frac{3}{8}$ " including arm. 16 A 2040. Shpg. wt., 12 oz.....19.95



**19.95**  
Finest Stylus Pressure Measuring Device Ever Offered

## RECORD CLEANING EQUIPMENT AND CUING DEVICE



**A** AUTOMATIC "DUST BUG." For manual turntables. Keeps records free from dust. Plastic arm with nylon brush, dust-collector pad mounts on end of pickup arm. With pad, cleaning fluid (extra fluid below). 16 A 2022. Shpg. wt., 8 oz.....6.50  
16 A 2018, ANTISTATIC FLUID, 2 oz.....2.00

**B** MANUAL PARASTAT. Removes dust, grit and residue deep inside record grooves. Elliptical nylon bristles encased in wood. 16 A 2021. Shpg. wt., 8 oz.....15.00



**C** RECORD WASH BRUSH. Restores brilliant "highs" rejuvenates old records, removes background noise by deep cleaning. Each bristle micro-ground to elliptical shape. With instructions. 16 A 2020. Shpg. wt., 2 oz.....3.50

**D** "PARASTATIC PREENER" DUST REMOVER. Get your records really clean. Rub wetted center wick of brush over rotating record. Chemical process cleans them like new. Safe to use, leaves no damaging film. Extends record life. Size,  $5\frac{1}{2} \times 6\frac{1}{4}$ ". 16 A 2261. Shpg. wt., 6 oz.....4.00

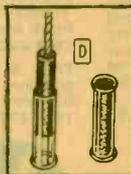


## HI-FI PARASTAT KIT

- 15.00**
- Cleans Records Thoroughly
  - Relaxes Any Static Charge

Meets stringent demands imposed by low-pressure elliptical styli. For new records only or those in new condition. Cleans completely sharp corners and minute high-frequency configurations in record grooves. Establishes correct degree of humidity at working surface of record to relax static charge. Includes case with humidifier, anti-static fluid and dispenser, distilled water and dispenser, stylus cleaner.

16 A 2015. Shpg. wt., 8 oz.....15.00



**E** ORTOFON "HI-JACK" CUING DEVICE. Precision instrument specially designed for manual turntables. Permits you to raise and lower turntable pickup arm without touching it "floats" the arm to the record at precisely the right spot.

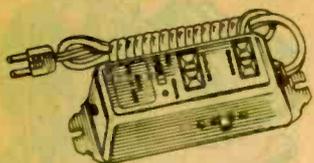
Accurate safety device prevents damaging needles or scratching records through human misap. It's a "must" for those who want maximum protection for high-quality diamond needles and valuable, irreplaceable records. Installs in seconds. 16 A 2246. Shpg. wt., 12 oz.....10.00

## ACOUSTIC INSULATION FOR SPEAKER ENCLOSURES

Prevents reverberation and distortion caused by standing waves created inside speaker enclosure. Improves performance of virtually any enclosure. Numerous other uses—insulating automobile from engine and road noises, etc. Cuts into any shape, presses into place with glue. Fireproof.  $\frac{1}{2} \times 12 \times 72$ ". 16 A 2042 X, Foam Rubber. Shpg. wt.,  $1\frac{1}{2}$  lbs.....1.98  
16 A 2042 X, Fiberglass. Shpg. wt.,  $1\frac{1}{2}$  lbs.....1.32



# ROBINS Record and Phono Care Accessories



## PS-3 AUTOMATIC SHUTOFF FOR STEREO HI-FI SYSTEMS

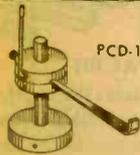
**699**

- Turns Off Hi-Fi System
- May Be Operated Manually
- All Solid-State Circuit

Safeguard your stereo hi-fi system with this automatic shutoff. Turns your hi-fi system off automatically. Not a luxury item, but a practical safety device that will insure against costly accidents due to forgetfulness. Prevents "burning up" of equipment by shutting off complete system after last record is played. Solid-state design assures complete reliability.

Handy switch on side of unit allows you to change to manual shutoff operation. Has two separate outlets for amplifier and phono. Suitable for all models of domestic and foreign equipment. Rated at 3 amps, 350 watts. Attractive, durable metal housing protects unit for years of dependable service. Size, 6 1/2 x 2 1/4 x 1 1/4". With 6-ft. AC line cord that plugs into 110-120 volts, 60 Hz AC.

16 A 2224. Shpg. wt., 2 lbs. .... 6.99



PCD-1



PNT-1

## PCD-1 RECORD CUING CONTROL

For manual turntables. Raise, lower arm without touching it. Floats to desired track with scratchless pin-point accuracy.

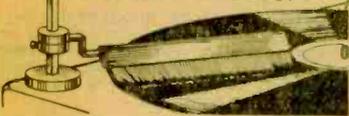
16 A 2284. Shpg. wt., 12 oz. .... 6.98

## PNT-1 PHONO STYLUS TIMER

Gauge calibrated to 400 hours indicates stylus wear to prevent needless record damage. Sapphire stylus should be replaced after 250 hours use. Diamond stylus, after 400 hours use. Timer also indicates time for cleaning and general maintenance of equipment and records. Self-stick base for mounting to phono deck. Imported.

16 A 2287. Shpg. wt., 6 oz. .... 4.98

## PB-88 "CLEAN-SWEEP" CAMEL'S HAIR BRUSH

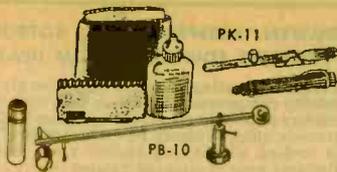


Gently cleans entire surface of records up to 12" with each revolution. Connects easily, mounts to phono with adhesive base pad, needs no screws that will harm phono base. For manual record changers only.

16 A 2285. Shpg. wt., 3 oz. .... 4.29

**PRA-50 RECORD SPIDERS.** (Not illustrated). Fifty high-impact plastic, reusable 45 rpm record adapters. Easily inserted in 45-rpm records to permit playing on conventional spindle.

16 A 2289. Shpg. wt., 6 oz. .... 79¢



PK-11

## PK-11 RECORD CARE KIT

Contains professional record sweep, anti-static cleaner and lubricant. Cleans records automatically as they play. Mounts to phono by suction cup. Stylus microscope, pressure gauge, record cleaning kit.

16 A 2203. Shpg. wt., 1 1/4 lbs. .... 7.15

## PB-10 RECORD SWEEP

Sweeps dust and other particles from sound grooves. With anti-static cleaner, lubricants. Improves sound fidelity.

16 A 2204. Shpg. wt., 3 oz. .... 2.98



## PC-6 END RECORD

Protects records from dust and dirt, lets you know when last record has been played. Features pre-recorded sign-off on one side—tells you when last record is played; turns changer mechanism off automatically. Can be used without sign-off on reverse side. Covers records when they are stacked on changer. Automatically drops after last record has been played.

16 A 2206. Shpg. wt., 9 oz. .... 1.98

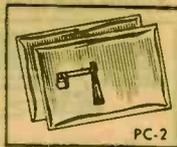


PK-6

## PK-6 "ROB-O-STAT" KIT

Super-soft foam applicator mitt; 1 1/2-oz. anti-static cleaner and lubricant, poly-foam pad. With stylus brush.

16 A 2210. Shpg. wt., 8 oz. .... 1.49



PC-2

## PC-2 CLEANING CLOTHS, BRUSH

Anti-static treated cloths. Brush clips to tone arm to remove dust from records while they play. Shpg. wt., 4 oz.

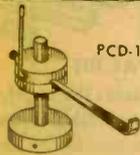
16 A 2213. .... 79¢



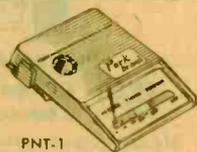
## PK-3A RECORD CARE KIT

Deluxe record care kit helps you get top fidelity from your records, and increases record life. Contains: PSG-3 stylus pressure gauge; adjustable stylus brush; record brush to clip on tone arm; turntable level; anti-static record cleaning cloth; 18 protective round-bottom record covers. Pressure gauge and balance weight track low as 1/2 gram for improved sound. Long life.

16 A 2205. Shpg. wt., 1 lb. .... 4.49



PCD-1



PNT-1

## PCD-1 RECORD CUING CONTROL

For manual turntables. Raise, lower arm without touching it. Floats to desired track with scratchless pin-point accuracy.

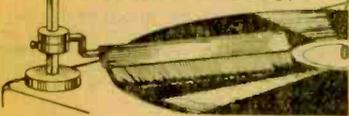
16 A 2284. Shpg. wt., 12 oz. .... 6.98

## PNT-1 PHONO STYLUS TIMER

Gauge calibrated to 400 hours indicates stylus wear to prevent needless record damage. Sapphire stylus should be replaced after 250 hours use. Diamond stylus, after 400 hours use. Timer also indicates time for cleaning and general maintenance of equipment and records. Self-stick base for mounting to phono deck. Imported.

16 A 2287. Shpg. wt., 6 oz. .... 4.98

## PB-88 "CLEAN-SWEEP" CAMEL'S HAIR BRUSH

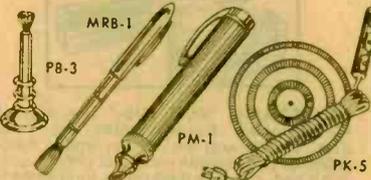


Gently cleans entire surface of records up to 12" with each revolution. Connects easily, mounts to phono with adhesive base pad, needs no screws that will harm phono base. For manual record changers only.

16 A 2285. Shpg. wt., 3 oz. .... 4.29

**PRA-50 RECORD SPIDERS.** (Not illustrated). Fifty high-impact plastic, reusable 45 rpm record adapters. Easily inserted in 45-rpm records to permit playing on conventional spindle.

16 A 2289. Shpg. wt., 6 oz. .... 79¢



MRB-1

PB-3

PM-1

PK-5

**PB-3 ADJUSTABLE STYLUS BRUSH.** For use with all phonos. Spring secured, adjusts from 1/4" to 2 1/4" height. Removes dust from stylus during cycling. Self-stick base.

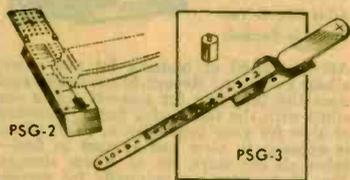
16 A 2002. Shpg. wt., 3 oz. .... 85¢

**MRB-1 ALL-PURPOSE BRUSH.** Removes dust and dirt from equipment, stylus and records. Telescoping soft, camel's hair brush in gold finish case. Pocket clip.

16 A 2222. Shpg. wt., 3 oz. .... 99¢

**PM-1 STYLUS MICROSCOPE.** Pocket size, precision lenses. Knurled focusing adj., slot for needle inspection. 3/4 x 1/2" dia.

16 A 2286. Shpg. wt., 4 oz. .... 1.89



PSG-2

PSG-3

**PK-5 STROBE AND LIGHT KIT.** Checks phono for speed accuracy at 33 1/3, 45 and 78 rpm. Includes neon lamp and strobe disc. Instructions. For 110 V, 60 Hz AC.

16 A 2014. Shpg. wt., 6 oz. .... 1.59

**PSG-2 STYLUS PRESSURE GAUGE.** Calibrated balanced gauge measures stylus pressure from 1/2 gram. Assures proper tracking; prevents stylus and record wear.

16 A 2258. Shpg. wt., 4 oz. .... 89¢

**PSG-3 STYLUS PRESSURE GAUGE.** Calibrated and balanced. Measures pressure to 1/2 gram. Includes counterweight.

16 A 2223. Shpg. wt., 3 oz. .... 99¢



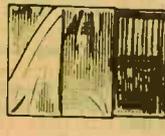
PB-9



PC-12, PC-10

PX-8

PL-2



PJ-25



PJ-18

**PB-9 DISK-WHISK RECORD CLEANER.** Cleans, lubricates both sides of record in one operation. For 45 rpm and LP records. Anti-static silicone coating. With handling disc.

16 A 2207. Shpg. wt., 5 oz. .... 1.19

**PX-8 ANTI-STATIC RECORD CLEAN SPRAY.** Silicone lubricant and cleaner prevents dust accumulation. Silicone coating.

16 A 2208. Shpg. wt., 11 oz. .... 1.19

**PC-12 FOAM PHONO CUSHION.** Cushions record drop and reduces slippage. Includes strobe disk. 1 1/8" diameter.

16 A 2220. Shpg. wt., 3 oz. .... 75¢

16 A 2221. PC-10. Above, 9/8" dia. .... 69¢

**PL-2 ROUND TURNTABLE LEVEL.** For accurate leveling of phono turntables. Self-stick. Mounts to phono deck.

16 A 2255. Shpg. wt., 3 oz. .... 1.59

**PJ-25 ALBUM COVERS:** 12 heavy-weight plastic window-clear 12" album covers. Special thumb notch permits easy insertion and removal of records. Shpg. wt., 6 oz.

16 A 2225. .... Pkg. of 12 for 99¢

**PJ-18 RECORD COVERS.** Round bottom, polyethylene plastic protective covers for up to 12" records. Prevents scratching, seals out dust and moisture. Shpg. wt., 6 oz.

16 A 2226. .... Pkg. of 18 for 75¢

# Hi-Fi Grille Cloth, Switches, Controls, Cables

## POPULAR ACOUSTONE SPEAKER GRILLE CLOTH

- Laboratory tested and approved
- Patterns to match any decor
- Special open-weave design
- Will not sag, shrink or fade
- Keeps dust out of speakers
- Patterns are color-fast

Wide selection of beautifully woven speaker grille cloth designed to keep dust and other foreign matter out of speakers and allow acoustically transparent passage of sound waves. Laboratory tested and approved. Won't sag, shrink or fade. Highly attractive, color fast patterns. You'll find a decorative pattern to match virtually any decor. Made of extremely durable material with a special open-weave design that allows completely unrestricted passage of all audio frequencies. Special construction and weaving techniques prevent sagging and shrinking. Available in pieces, 36x36", or in lengths over 36". Specify choice when ordering. Shpg. wt. per yard, 15 oz.

### BUDGET-PRICED

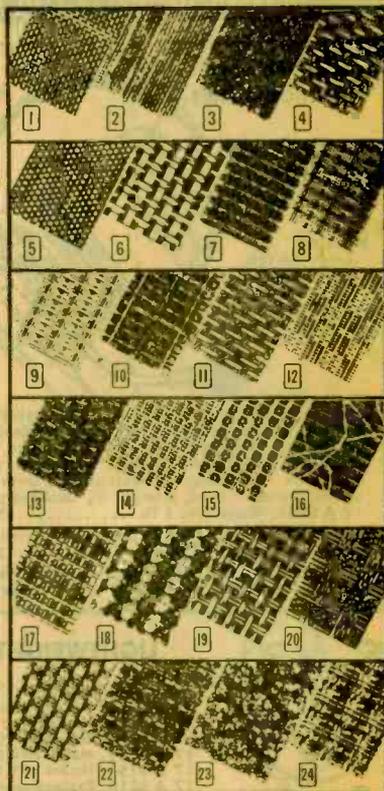
Description	Pattern No.	Fig.	Stock No.		PER YARD
			In Lengths Over 1 Yd.	36x36"	
Gold and Beige Random Metal	A-27	1	16 A 2113 X	16 A 2114 X	2.69
Natural Irish Effect	A-Pls. Lin	2	16 A 2117 X	16 A 2118 X	2.69
Brown with Beige Nubs	A-Drk. Lin	3	16 A 2119 X	16 A 2120 X	2.69
Walnut Cane w/Bronze Threads	A-2412	4	16 A 2236 X	16 A 2237 X	2.69
Nat. Color Straw Imported Look	A-Pand.	5	16 A 2121 X	16 A 2122 X	2.69
Silver Random Metal	A80	6	16 A 2124 X	16 A 2134 X	2.69

### MODERATELY PRICED

Description	Pattern No.	Fig.	Stock No.		PER YARD
			In Lengths Over 1 Yd.	36x36"	
Mahogany with Ivory Threads	B-211	7	16 A 2103 X	16 A 2104 X	3.49
Walnut with Bronze Threads	B-811	8	16 A 2115 X	16 A 2116 X	3.49
Blend White/Black Honeycomb Weave	B-625	9	16 A 2125 X	16 A 2126 X	3.49
Light Walnut with Gold Metal Box	B-711	10	16 A 2325 X	16 A 2326 X	3.49
Nat. & Walnut Cane w/Gold Metal	B2422	11	16 A 2313 X	16 A 2314 X	3.49
Beige and Walnut with Gold Metal	B3705A	12	16 A 2238 X	16 A 2239 X	3.49
Solid Black Ribbon Honeycomb	B4542	13	16 A 2240 X	16 A 2241 X	3.49
Light Gray w/Random Silver Metal	B5081	14	16 A 2127 X	16 A 2128 X	3.49

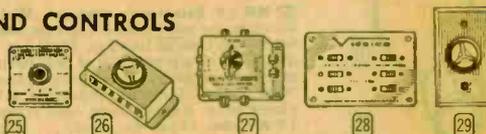
### DELUXE DECORATOR STYLES

Description	Pattern No.	Fig.	Stock No.		PER YARD
			In Lengths Over 1 Yd.	36x36"	
White w/Random Gold Thread	C6423	15	16 A 2321 X	16 A 2322 X	4.29
Black with Gold Cobweb	C-453	16	16 A 2148 X	16 A 2149 X	4.29
Beige, White & Tan w/Gold Metal	C7104	17	16 A 2154 X	16 A 2155 X	4.29
Black w/Raised Walnut Cane	C2600	18	16 A 2136 X	16 A 2137 X	4.29
Blended Walnut Cane	CWal.	19	16 A 2138 X	16 A 2139 X	4.29
Walnut Interwoven Wood Effect	DWW-1	20	16 A 2244 X	16 A 2245 X	4.29
Tan-Beige Interwoven w/Gold Metal	D2425	21	16 A 2129 X	16 A 2130 X	4.29
Brown and Olive Interwoven Grille	D2621	22	16 A 2140 X	16 A 2141 X	4.29
Brown w/Raised Walnut Fleur Dirlis	D3012	23	16 A 2142 X	16 A 2143 X	4.29
Wicker Walnut/Rust on Black Base	D6000	24	16 A 2133 X	16 A 2135 X	4.29



## SELECTED AUDIO SWITCHES AND CONTROLS

Stock No.	Fig.	Mtg.	Description	EACH
16 A 2158	25	W	Mono 8-Ω L-pad spkr. control*	3.27
16 A 2160	25	W	Stereo 8-Ω L-pad spkr. control*	5.61
16 A 2161	25	W	Stereo 16-Ω L-pad spkr. control*	5.61
16 A 2169	25	W	Stereo 3-speaker selector switch*	3.27
16 A 2170	26	SM	Mono 3-speaker selector switch*	3.63
16 A 2186	26	SM	Stereo 2-speaker selector switch*	4.17
16 A 2194	27	SM	1 of 3 stereo sources to 1 input†	4.17
16 A 2197	28	PM	Stereo selects any of 6 spkr. sets	2.64
16 A 2202	29	PM	Distributes volume between two speakers	1.15



Famous name audio switches and controls. Quality-built to exacting standards for consistently fine performance and long life. All have solder terminals except \*screw terminals. †Phono jacks. In mtg. column of table left. W indicates wall plate mounting; SM surface mounting; PM panel mounting. Fig. 25 is rated 10 watts; Fig. 29, 5 watts. Av. shpg. wt., 10 oz.

## ALLIED MOLDED HIGH-FIDELITY AUDIO CABLES

### TWO-CONDUCTOR STRAIGHT PHONE PLUG TO VARIOUS CONNECTORS

Stock No.	Mfr's Type	Conn't's		L.	EA.
		Fig.	Fig.		
16 A 2059	4C-3076	B	A	6'	1.19
16 A 2063	4C-3064	B	A	10'	1.59
16 A 2060	4C-3075	B	B	6'	1.69
16 A 2061	4C-3074	B	B	10'	1.99
16 A 2050	4C-3062	B	F	6'	1.69
16 A 2072	4C-3061	B	F	10'	1.99
16 A 2055	4C-3063	B	G	6'	.99
16 A 2051	4C-3060	B	H	6'	1.19

### STRAIGHT TINI-PLUG TO VARIOUS CONNECTORS

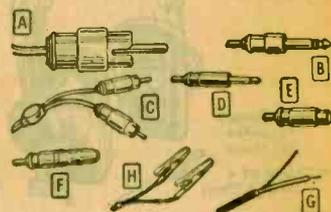
Stock No.	Mfr's Type	Conn't's	L.	EA.
16 A 2065	4C-3066	D A	6'	1.44
16 A 2053	4C-3058	D B	6'	1.59
16 A 2054	4C-3057	D G	6'	1.19

### STRAIGHT PHONO PLUG TO VARIOUS CONNECTORS

Stock No.	Mfr's Type	Conn't's		L.	EA.
		Fig.	Fig.		
16 A 2058	4C-3056	A	A	18"	.59
16 A 2057	4C-3054	A	A	36"	.69
16 A 2056	4C-3055	A	A	6'	.89
16 A 2062	4C-3073	A	A	10'	1.19
16 A 2070	4C-3071	A	E	36"	.89
16 A 2068	4C-3069	A	E	6'	.99
16 A 2064	4C-3065	A	E	10'	1.19
16 A 2067	4C-3068	A	G	36"	.59
16 A 2086	4C-3067	A	G	6'	.69
16 A 2052	4C-3059	A	H	6'	.99

### SPECIAL STEREO CABLES

Two shielded cables inside a common jacket. Phono plugs color coded. 5 oz.  
 16 A 2069 4C-3070 C C 36" 1.79  
 16 A 2071 4C-3072 C C 6' 1.99



Quality molded hi-fi cable assemblies. Built-in cable clamps eliminate strain on cable. Functionally designed handles provide easy grip. Cables are chrome-grey with matching plastic handles. A—phono plug; B—phone plug; C—phono plugs; D—tini-plug; E—phono jack; F—phone jack; G—stripped and tinned; H—alligator clips. Av. wt., 5 oz.

# Language Lab and General-Purpose Headsets

## TELEX HEADSETS FOR EVERY APPLICATION

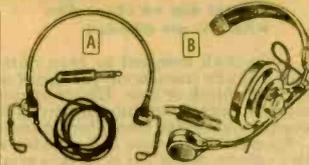
### DELUXE HEADSET WITH BOOM MIKE



Mike rotates 360°, is detachable

Meets all language lab requirements

2400-42. Dual headset with field-detachable 360° rotating mike. Response: dynamic headset, 20-20,000 Hz; dynamic noise-canceling mike, 100-8000 Hz. Impedance: headset, 600 ohms; mike, 300 ohms. Soft, removable earcushions form snug acoustic seal. 5' cord, straight 1/4" molded plugs. 17 A 6287. Shpg. wt., 1 lb.....33.95  
17 A 6288. Model 2400-19. Same as above, but right-angle plugs. Shpg. wt., 1 lb.....33.95  
17 A 6289. Model ACV-4 Extra Foam Earcushions. Brown, washable. Shpg. wt., 2 oz.....Pair 1.50



A "TWINSET"

HTW-2. Lightweight and comfortable headphones for pilots, Hams, etc. Sound is fed direct to ears thru adjustable arms. Background sounds remain intelligible. Magnetic elements rest at temples. 500 ohms. Weighs 1.6 oz. 5' cord, 1/4" phone plug. 17 A 6262. Wt., 10 oz....14.50

### B SINGLE PHONE, MIKE

MRB-75 "Magna-Twin Mark III. Versatile headphone/mike for professional use. Magnetic headset element has response of 50-10,000 Hz; carbon boom mike, 50-6000 Hz. Imp.; headset, 500-600 ohms; mike, 20 ohms. Mike boom cannot accidentally rotate mike out of position. 5' cord, 1/4" phone plugs. Gray. 17 A 6390. Wt., 1 lb.....24.95

## SUPEREX HEADPHONES



### AVIATION/MARINE HEADSET

- High Intelligibility in Noisy Areas
- Lightweight and Comfortable
- 10' Retractable Cord with Plug

AV-NS-7. "Noise Shield" phones provide maximum intelligibility in high noise areas. Outside noise is attenuated up to 50 dB. Lightweight and comfortable, even when wearing glasses. Contoured foam ear cushions, spring steel headband. Response, 40-15,000 Hz. 600 ohms. 10' retractable cord, phone plug. 17 A 6291. Wt., 3 lbs.....45.00  
17 A 6292. SX-NS-7. Above, 4-16 ohms; 7' straight cord.....40.00

### HEADSET FOR LANGUAGE LAB USE



AP-5. Lightweight headset for prolonged use in language labs and for communications. Vinyl-covered ear cushions. Frequency response: 80-12,000 Hz. Factory connected for hi-impedance 600-ohm output. Leads may be changed to 4-16 ohms. Supplied with 7' 4-conductor cord, 1/4" phone plug. Shpg. wt., 3 lbs. 17 A 6302.....24.95

## LIGHTWEIGHT SECRETARIAL HEADSETS

C "Tele-Fi" Headset. Under-the-chin headset delays sound to one ear for better clarity. Frequency response, 60-6000 Hz. Earloop is provided for one-ear listening. Choice of 15 ohm or 2000 ohm impedance. Supplied with 5' cord, 1/4" phone plug. 17 A 6149. Model HFR-91. 15 ohms. Shpg. wt., 1 lb.....5.95  
17 A 6154. Model HFY-91. 2000 ohms. Shpg. wt., 1 lb.....5.95  
17 A 6216. Replacement Cord. Shpg. wt., 3 oz.....2.25

D HMY-2 Secretary's Monoset. Weighs only 1.2 oz. Worn under chin for convenience; keeps headset cord from getting in the way, won't mess hairdos. Ideal for use in transcribing from office dictation equipment. Has magnetic element, metal housing, removable earplugs. Frequency response: 50-5000 Hz. Impedance: 2000 ohms. Maximum input, 25 mW. With 5' cord, standard 1/4" phone plug. Replacement cord is same as for "Tele-Fi" above. 17 A 6184. Shpg. wt., 8 oz.....7.95

## IDEAL FOR HAMS, CB, LANGUAGE LABS AND SWL'S

### FULL-FIDELITY HEADSET



- Wide-Range Response for Music
- Choice of 4 or 600 Ohms

Model 820-02. Attractive headset reproduces the entire orchestral spectrum with amazing fidelity. Ideal for music course, libraries, etc. Weighs only 10 oz., for over-head or under-chin wearing. Frequency response: 50-18,000 Hz. Impedance: 4 ohms. Hi-impact plastic with vinyl-covered spring steel headband, removable circumaural ear cushions. With 6' cord, molded plug. 17 A 6285. Shpg. wt., 1 lb.....9.95  
17 A 6286. Model 820-04. Same as above, but 600 ohms. Wt., 1 lb....13.25



### E LOW-COST DUAL HEADPHONES

Low-cost headphones provide faithful sound reproduction. Lightweight, comfortable; adjust to fit anyone. Removable ear cushions. With 5' cord, 1/4" phone plug. Wt., 1 lb. 17 A 6220. Model 610-2. 2000 Ohms....6.95  
17 A 6221. Model 610-1. 600 Ohms....6.95

### F "TELESET" HEADPHONES

HM-100. Quality dual headset is ideal for Amateurs, CB's, shortwave listeners, others. Magnetic element for speech clarity. Adjustable spring-type stainless steel headband. Response: 50-10,000 Hz. Impedance: 2000 ohms. With 5' cord, 1/4" phone plug. 17 A 6275. Shpg. wt., 8 oz.....14.50  
17 A 6276. Model HM-500. Same as above, but 500 ohm impedance. Wt., 8 oz....14.50

### "COMMUNICATOR" HEADSET



COM-5. Extremely sensitive headset for all communications use. Lightweight, fully adjustable headband; vinyl-covered foam filled ear cushions. Dynamic elements for crisp, clear reproduction. Response: 100-10,000 Hz. Impedance: 4-16 ohms. Supplied with 7' two-conductor cable with 1/4" phone plug. Shpg. wt., 1 lb. 17 A 6309.....13.95

# Lincoln Headphones.. Quality at Low Prices



## A DELUXE DUAL HEADPHONES

Excellent quality for Amateurs, CB'ers. Lightweight, with vinyl-covered double headband. Adjustable earpieces have removable ear-encompassing cushions that block out distracting noise from surrounding area. Heavy-duty 5' cord with standard 1/4" phone plug. Gray. Shpg. wt., 1 lb. 17 A 6227. 2000 Ohms..... 5.95  
17 A 6226. 8 Ohms..... 5.95

## B DELUXE SINGLE HEADPHONE

Deluxe headphone for receiver monitoring and other uses. Perfect for mobile CB, since some States permit only a single phone for mobile operations. Vinyl-covered headband. Comfortable earcushion is removable. Impedance, 1000 ohms. 5' cord with standard 1/4" phone plug. 17 A 6228. Shpg. wt., 1 lb. .... 5.95



## C LOW-COST DUAL HEADPHONES

General-purpose headphones for Amateurs and shortwave listening. Vinyl-covered double headband with easily adjustable yokes. Hyflux Alnico magnets, 1 1/4" diaphragm. 4 1/2-foot cord with phone tips. Terminals are inside earpiece. Wt., 1 lb. 17 A 6083. 2000 Ohms..... 2.95  
17 A 6215. 11 Ohms. Same as above, but with standard 1/4" phone plug..... 3.50

## D LOW-COST SINGLE HEADPHONE

Dependable headphone, suitable for hard-of-hearing installations, receiver and crystal set monitoring, other applications. 1 1/4" diaphragm. 4 1/2-foot high-quality cord with phone tips. Spring-metal headband, permanently attached. 1000 ohms impedance. Shpg. wt., 8 oz. 17 A 6085..... 1.50

## HEADSET WITH BOOM MIKE



- Earcushions Block Outside Sounds
- Lightweight, Can Be Worn for Hours
- Sensitive Ceramic Boom Mike

Lightweight dual headset with boom mike for Hams, CB'ers, language labs, many other uses. Earpieces have extra-heavy-duty magnets for clear voice reproduction. Vinyl-covered headband, adjustable earpieces. Removable, washable ear-cushions. Cord has phone plugs for hi-Z mike and 2000 ohm headset. Gray. 1 1/2 lbs. 17 A 6230..... 17.95

## LOW-COST HEADPHONE ACCESSORIES



Vinyl Ear Cushions. Ear-encompassing—reduce external noises to a minimum. Fit standard earpieces. Provide maximum comfort for long hours of use. Washable vinyl covering. Shpg. wt., 2 oz. 17 A 6203..... Per Pair 70¢



Rubber Earphone Cushions. Provide comfortable listening over long periods and reduce external noise. Washable. Fit standard earpieces. Wt., 3 oz. 17 A 6103. 1-9 Pairs..... Per Pair 65¢  
10 or More Pairs..... Per Pair 60¢

## PRIVATE LISTENING DEVICES FOR TV, HI-FI AND INSTITUTIONAL USE



## E CANNON HEADPHONE SET

Allows you to listen privately. Also can be operated with speaker. Aids hard-of-hearing. Control box has volume control and speaker/phones switch. Includes dual headset, control box, 15' cord. 17 A 6135. Shpg. wt., 2 lbs..... 7.95



## H TELEX PRIVATE LISTENERS

LCP-93. For private TV, radio, monophonic hi-fi listening. For hard-of-hearing, too. Volume control. Jacks for 2 earpieces—one is for standard 1/4" phone plug. 15-foot cord with miniature plug. Includes one earpiece. Wt., 1 lb. 17 A 6231..... 9.50

LCP-90. Similar to above, but has jack for miniature plug. Includes on-off speaker switch. 15-foot cord with spring clips. Includes one earpiece. Wt., 1 lb. 17 A 6234..... 9.95  
17 A 6281. Extra Earpiece. 1/4 lb..... 2.95

F THORO TEST PILLOW SPEAKER  
PS-8. Audible only to the user. Allows private listening anywhere. May be used with transistor radios or across voice coil leads with other speakers. Impedance, 8 ohms. With 6 foot cord and miniature phone plug. Size, 3/8x2 1/4". 17 A 6092. Shpg. wt., 6 oz..... 3.95

G TELEX PILLOW SPEAKER  
SDN-2A. Provides outstanding sound fidelity for private listening through a pillow or held close to the ear. VA hospital approved. Stainless steel, easily sterilized. Dynamic speaker has handy hanger ring. 3.2 ohms impedance. Insulated. 1 1/2x3 3/4". 5' cord, std. 1/4" phone plug. 17 A 6246. Shpg. wt., 12 oz..... 6.95

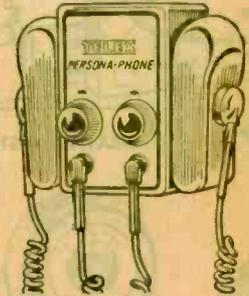


## REPLACEMENT EARPHONES

Model 21-200. Single earphone. Impedance, 10 ohms. 46" cord; rt-angle plug, 1/8" dia. with 3/8" shank. Japan. 17 A 6307. Shpg. wt., 4 oz..... 50¢

Model 21-205. Above, but 2000 ohms, with straight 1/8" dia. plug. Japan. 17 A 6308. Shpg. wt., 4 oz..... 89¢

## TELEX PERSONA-PHONE PRIVATE LISTENER FOR AUDIENCES



- Two Earsets—Separate Volume Controls
- Lets Each Listener Hear Clearly
- Connects Easily to Sound System

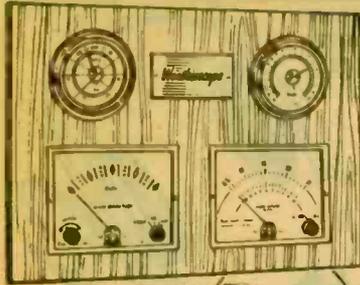
Compact dual-receiver unit provides individual listening for institutional audiences. Ideal for churches, theaters, museums, exhibits libraries—wherever listeners might have trouble hearing.

Has two earsets, each with its own volume control, so user can adjust sound to suit himself. Earshells fit all listeners, even those who wear glasses; will not disturb ladies' hairdos.

Earsets have 5-ft. coil cords, hang up on control box when not in use; weigh less than 1.5 oz. Operates from institution's 70-V, 25-V, or 8-ohm PA system. Internal matching transformer and terminal strip. Gold color. 4 1/4x3 7/8x2 7/16". 17 A 6290. Shpg. wt., 5 lbs..... 34.00

See Pages 102-104 for Stereo Hi-Fi Headphones

# Accurate Instruments Let You Forecast Weather



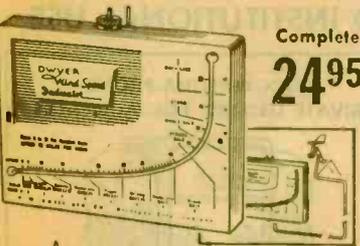
**TAYLOR  
"WEATHERSCOPE"  
WEATHER-STATION**

**19975**

- Barometer Shows Pressure and Forecast
- Outdoor Thermometer Shows High and Low
- Wind Speed and Direction Indicators

Complete home weather station gives you the information you need to let you make our own forecasts. Four instruments on handsome 17x32" walnut panel: barometer, outdoor thermometer that shows maximum and minimum temperatures, wind speed and wind direction indicators. Instruments have brass bezels.

With 60' cable for outdoor wind vane and anemometer (included), 20' capillary tubing for outdoor thermometer. Panel mounts easily on the wall. Includes battery and complete instructions for installation.  
17 A 6860 X. Shpg. wt., 17 lbs. . . . 199.75

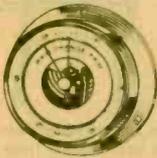


Complete  
**24.95**

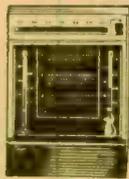
## WEATHER INSTRUMENTS FOR HOME OR OFFICE



**A**  
**24.95**



**B**  
**59.95**



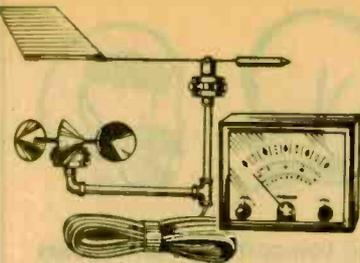
**C**  
**11.95**



**15.95**

**A** TAYLOR STATESMAN STORMSCOPE. Accurately indicates temperature, pressure and humidity. Warns of storms, helps you regulate room heat and humidity. Colonial-style mahogany pendant, 21 1/2 x 7 1/4", with brass trim—a lovely addition to your home. 17 A 6853 X. Shpg. wt., 3 lbs. . . . 24.95

**B** TAYLOR DELUXE BAROMETER. Navy-type instrument for wall mounting. Features compensated movement for extremely precise readings. Handsome, heavy spun brass case. Reads 26 to 31" pressure on 5" dial, with 6 3/4" flange diameter; indicates actual pressure between 0 and 3500 feet. 17 A 6864 X. Shpg. wt., 2 1/2 lbs. . . . 59.95



**TAYLOR WINDSCOPE WIND SPEED AND DIRECTION INDICATOR**

**89.95**

- Self-Contained
- Easy to Install
- 60-ft. Lead-in

Compact unit shows wind speed or direction selected by 2-position knob. Self-contained; no external power source needed. Outdoor parts are corrosion-resistant. Indoor indicator is 6 1/2 x 5", with attractive mahogany finish. Includes outdoor wind vane, anemometer, 60' cable, battery, instructions.

17 A 6851 X. Shpg. wt., 10 lbs. . . . 89.95

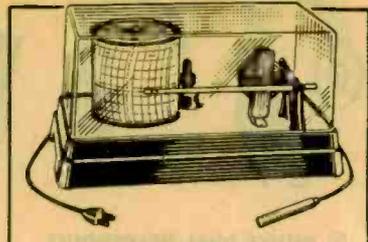
**WIND SPEED INDICATOR.** Similar to above, but shows wind speed only on double scale, 0-25 and 0-100 miles per hour. Mahogany finish case, 6 1/2 x 5", for desk or wall mounting with 60' cable, complete instructions. 17 A 8361 X. Shpg. wt., 3 1/2 lbs. . . . 69.00

**WIND DIRECTION INDICATOR.** Shows wind direction only, with major compass points on easy-to-read scale. Mahogany finished case, 6 1/2 x 5", for desk or wall. Includes 60' cable, battery, instructions. 17 A 8358 X. Shpg. wt., 4 lbs. . . . 69.00

## DWYER WIND SPEED INDICATOR

Highly accurate wind speed instrument at a low price. Made for easy installation and easy reading. Liquid-filled tube reads like a thermometer—no calculations necessary. Easily read scale is calibrated in both 0 to 80 miles per hour and Beaufort scale designations.

Outside fitting, resembling a weather vane, mounts on any elevation; attaches to meter by 50-foot vinyl tubing (supplied). Indicator size, 6x7x1". 17 A 6538. Shpg. wt., 5 lbs. . . . 24.95

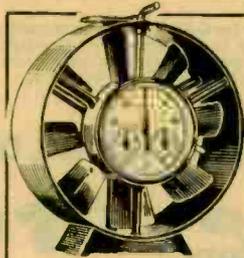


**TAYLOR 7-DAY RECORDING INSTRUMENTS**

**Barometer or Thermometer**

**BAROMETER.** Provides a record of 7-days variations in barometric pressure. Range: 29-31 inches, correctible from sea level to 10,000 feet. Sensitive UNI/MAG movement. 6 3/4 x 13 x 6 3/4". With 13 charts, ink, instructions. 115 V., 60 Hz AC. 17 A 6861 X. Wt., 5 lbs. . . . 49.95

**THERMOMETER.** Provides 7-day record of outdoor temperature, -40° to +120° F. 6 3/4 x 13 x 6 3/4". With 8' capillary tubing, 13 charts, ink, instructions. For 115 V., 60 Hz AC. 17 A 6862 X. Wt., 5 lbs. . . . 49.95



**160.00**

**TAYLOR PRECISION  
BIRAM'S ANEMOMETER**

Shows wind velocities from 200 to 3000 feet per minute. Three dials give readings to 10,000 feet. Jeweled movement, automatic zero set, disconnecter. 4" diameter. With carrying case, correction chart. 17 A 8984 X. Wt., 2 1/2 lbs. . . . 160.00



**8.95**

**3-in-1 WEATHER STATION**

Shows temperature, barometric pressure, relative humidity. Warns of approaching storms. Dials turn 90° on wood grain panel for versatile mounting. Size, 5 1/4 x 15 1/4". 17 A 6855. Wt., 1/2 lb. . . . 8.95



**TAYLOR MARINE  
COMPASS**

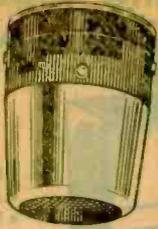
**14.95**

Features lubber line and jeweled bearing for accurate readings. Rotatable dome, 5° graduations, illuminated dial. Black plastic case, 3x4". Complete with hardware. 17 A 6870. Wt., 1 1/2 lbs. . . . 14.95

# Protect Your Property with These Alarms

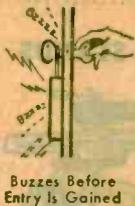
## SPECO CHEMICALLY SELF-POWERED HOME FIRE ALARM

- Compact and Powerful
- Requires No Batteries Springs or Electricity
- Constantly Vigilant
- Sounds for Two Hours
- Activates at 135° F



Install the Fire Guard about 2' from ceiling or over the door, using special mounting bracket included with the unit. Fire Guard's sensor will activate alarm at 135° F. Red chemical is released into the electronic energizing section which powers the alarm. The alarm will continue blasting for at least 2 hours. Requires no maintenance; hermetically sealed. 2 1/2 x 2" dia. 26 A 1976. Shpg. wt., 1 lb. .... 6.95

## "SECUR" SOLID-STATE DOOR INTRUDER ALARM



Buzzes Before Entry Is Gained



Provides protection in the home; great for hotels and motels when you're on vacation. Compact portable solid-state door alarm hangs on inside doorknob. Easy to install—simply plug into AC outlet and turn the alarm on. Sounds with shrill buzzing noise if anyone touches doorknob. Warns you of prowlers before entry is made. Safety clip will sound alarm even if door is forced open without touching doorknob. Has no moving or breakable parts. With illuminated on-off switch. Handsomely styled case is made of durable high-impact plastic. Size, 8x4x1 1/2" thick. U.L. Listed. For 117 VAC. 26 A 2167. Shpg. wt., 2 lbs. .... 19.95

## KIDDE HOME FIRE ALARM



Heat Detector



Alarm System

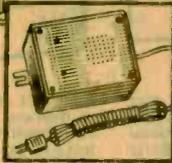
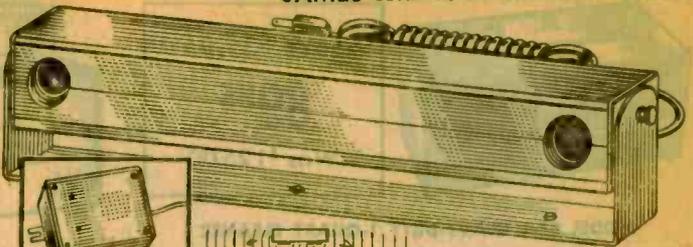
MODEL HS-12. Dependable fire-alarm panel provides adequate protection against fires, excessive heat, etc. when used with heat detector listed below. Has powerful dual-horn alarm for loud, easily identifiable tone. Solid-state circuit assures reliable operation. Self-contained.

Detector automatically rearms itself after cooling, and power is resumed. Has pilot lights which indicate location of fire at a glance. Lock-in circuit keeps alarm ringing even after it cools. Silent switch releases lock-in to restore system.

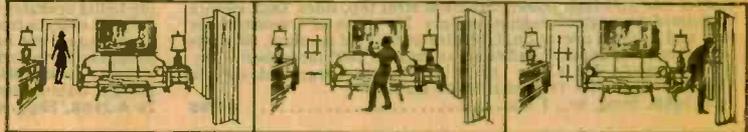
Can also operate remote bells or lights. Recommended installation is six to eight feet from floor. Handsomely styled case. Size, 6x5x3". Requires 6-volt battery. Order heat detector and cable below.

- 26 A 2102 X, Wt., 6 lbs. .... 39.95
- 26 A 2103, Heat Detector. Automatically activates alarm in presence of extreme heat. Shpg. wt., 8 oz. .... 3.95
- 55 A 7602, 100' Cable. Two-conductor. 18 gauge. Shpg. wt., 2 lbs. .... 3.45

## JAMES ULTRASONIC INTRUSION ALARM



Alarm Sends Out Invisible Ultrasonic Beam To Cover Entire 10x10-ft. Area



Turn On Alarm When You Leave—Unit Arms In Less Than A Minute

When Intruder Enters Alarm Turns On Lamps Or Floodlights

Built-in Brief Delay Permits Owner Turn-Off

MODEL C-7350. Solid-state alarm system provides effective safeguard against intruders by use of the same principle that has been successfully used in banks, detection agencies, industrial plants and other security installations. Silent, invisible ultrasonic beam provides up to 100 square feet area protection. Alarm can be connected to turn on lights, sound buzzer or bell, or send remote signals which indicate a moving object crossing the beam. Useful in protecting entranceways, stairwells and exit areas. Ideal for apartments, homes, offices or shops. Install the unit anywhere, aiming it over the area you wish to protect, while keeping the front of the unit unobstructed.

When used in a car, alarm can be set off instantly when car door is opened. On/off switch has reset with 60-second delay. Variable sensitivity control permits adjusting the ultrasonic beam further from or closer to the unit for more effective area coverage. Alarm output may be wired for 110-130 volts at 100 watts for direct connection of lamps, horns, buzzers, etc., or 1-amp switch, for connection of units with their own power supplies, 12-volt units, etc. Dependable solid-state circuit for long life and reliable operation. Size, 2x14x2". For 110-130 volts, 60 Hz AC. Order optional detector accessories, window switch and outdoor bell from listing below.

- 26 A 2281. Shpg. wt., 3 lbs. .... 99.50
- 22 A 3342. C-7363 Heat and Fire Detector. Activates alarm when temperature exceeds 134° F. 2x2x3". Shpg. wt., 1 lb. .... 2.95
- 22 A 3341. C-7364 Smoke Detector. 5x7x2". 117 VAC. Wt., 3 lbs. .... 9.95
- 22 A 3344. C-7365 Flood Detector. Needs #2U6 9-V battery. 2x2x3". Wt., 1 lb. .... 5.95
- 22 A 3340. C-7361 Window Switch. 3x2x1". Wt., 8 oz. .... 2.95
- 26 A 3117. C-7511 Outdoor 6" Bell. 117 VAC. Wt., 6 lbs. .... 21.95

## ON-GUARD SOLID-STATE BURGLAR ALARM

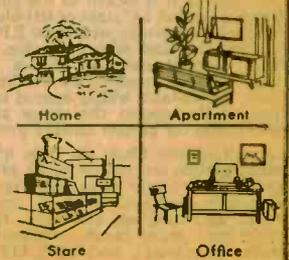
- Fits All Doors—Tamperproof from Outside
- No Wiring Needed—Runs Off Long-Life Battery
- Self-Contained Unit Mounts in Minutes
- Exit Button Lets You Open Door from Inside
- Alarm Resets Itself When Door Is Closed
- Heavy-Gauge Anodized Aluminum Case

MODEL DA-4. Night and day, at home or away, your On-Guard burglar alarm is always ready to keep intruders out. Dependable alarm requires no special wiring; solid-state circuit runs on long-life battery. Especially easy to mount on any door. Requires no lock hole in the door and is completely tamperproof. Self-contained in aluminum case which retains its good looks for years of dependable service in homes, apartments, stores and offices.

Instant or delay switch lets you program the alarm for several modes of operation. Key-type alarm switch. With switch set to "instant" and key "on" alarm will blast its shrill sound when door is opened. Exit button permits exit or entry without setting off alarm which automatically resets itself when door is closed. With switch to "delay" and key "on" alarm will sound twenty seconds after entry unless key is inserted to reset alarm within that time. With key "on" and switch in either position, alarm button may be pressed to discourage annoying salesmen or signal for aid.

Anodized aluminum case has attractive neutral sand-color finish. Size, 4 1/2 x 8 x 3". With battery, 2 keys and decals.

- 26 A 1984. Shpg. wt., 5 lbs. .... 39.95



# Electromation Ultrasonic Home Cleaners



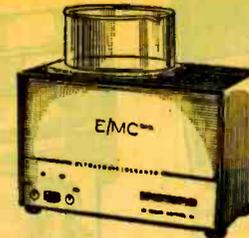
Save \$35.05

**8995**

Was \$125.00

## MODEL BP-1 HEAVY-DUTY 1-QUART CLEANER

Heavy-duty ultrasonic cleaner ideal for removing grease, tar, wax and other elements from housewares. Large 1-quart capacity. Cleans inaccessible areas. Also for continuous operation in cleaning miniature components and mechanisms, instruments, and an infinite variety of precision parts. Automatic 5-minute time switch; power dial for low and high power. Stainless steel top, sides, tank cannot be marred by normal cleaning agents. No tubes or transistors for easy and durable operation. Operates at 90 kHz nominal, 50 watts radio frequency input. Lead titanate crystal, 280° fahrenheit. Convenient console size is only 11¼x6½x5 inches. Large tank size, 8x3½x2½ inches. For 115 volts, 50-60 Hz AC. 26 A 3696. Shpg. wt., 7 lbs. .... 89.95



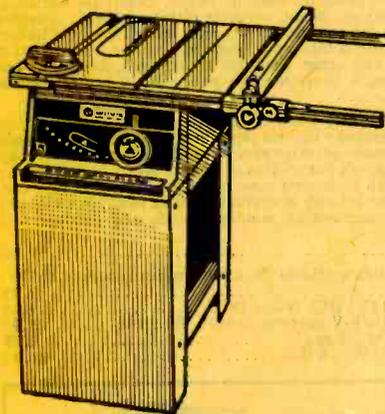
## MODEL LP-2 ECONOMY COMPACT CLEANER

**3995**

- Removable Crystal Beaker
- Automatic Overheat Shutoff
- Proven Cleaning Technique
- Cleans Inaccessible Places

Excellent value in a highly useful ultrasonic cleaner for all types of delicate and intricate housewares. Gets to inaccessible places even brushes and files miss. Has convenient crystal beaker for objects to be cleaned; stainless steel cabinet. Beaker can be easily removed, refilled and replaced without moving basic cabinet. Cleaning liquid operates at 90 kHz. Has automatic heat cutoff to protect delicate objects from damage. Beaker is a full 3" diameter by 1½" deep, can accept full set of dentures. Holds up to ½ pint cleaning fluid. Outfit includes sample bottles of jewelry cleaner; denture cleaner; silver/gold coin cleaner; copper/brass coin cleaner; plastic sponge. Cabinet size, 6x4x4". For 115 V, 60 Hz AC. 26 A 2108. Shpg. wt., 6 lbs. .... 39.95

## ROCKWELL CIRCULAR, SCROLL AND BAND POWER SAWS WITH STANDS



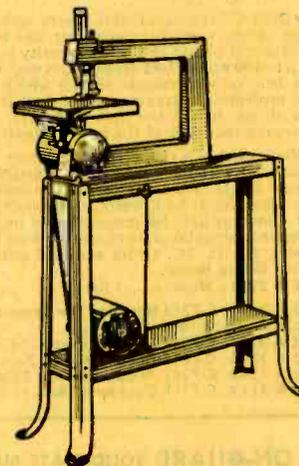
### DELTA 9" MOTORIZED CIRCULAR SAW WITH 6000-RPM 2 HP MOTOR

- On-Table Blade Adjustment
- Centralized Fingertip Control
- Extra Wide Extension Wings—22x26"

Model 34-628. Big-capacity saw for ripping, cross-cutting, mitering, beveling, and tenoning. Completely enclosed drive mechanism for added operator protection. Sealed ball bearing construction for longer maintenance free operation. Cuts stock 2¼" thick at 90° and 2½" at 45°.

Self-aligning rip fence with up-front controls automatically, aligns itself parallel to the blade as it is locked to the guide bars. Ripping is a full 24" right or left blade. Two developed hp motor with 6000 RPM speed for smoother and safer operation. Manual reset thermal overload device protects motor against excessive overloading conditions. Under-table widely spaced trunnions that solidly support the motor and drive mechanism for greater cutting accuracy.

Control adjusts blade tilt from 0° to 45°, handwheel to set desired depth of cut and level that securely locks blade in selected operating position. With 2 hp motor, switch and cord set, drive belt, rip fence, guide bars, miter gauge, combination saw blade, table insert, 30x12x34", 117 V.A.C. 26 A 1527 ZF. Shpg. wt., 90 lbs. .... 174.95



### 16" SCROLL SAW CUTS THROUGH WOOD UP TO A FULL 2" THICK

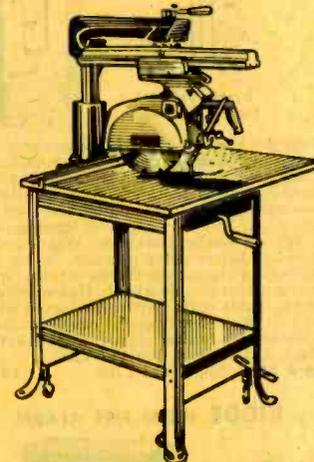
- Table Tilts 45° Right and 15° Left
- Handles Intricate Work to Heavy Stock
- Full 16" Arm to Blade Capacity

Model 40-069. Can handle anything from fine intricate work to heavy stock. Takes stock to a full 2" thick. Offers full 16" arm to blade capacity. Table tilts 45° right and 15° left for angle or bevel cutting jobs. Features Universal V-Jaw Chuck for positive grip of blades.

Spring hold-down holds work firmly against table. Can be tilted with table for angle cutting operations. Heavy ribbed, big 11x11" tilting table is supported by two trunnions centrally located under work load. Degree calibrated scale facilitates angle settings. Bronze bearing crank shaft is automatically lubricated through a unique splash system in the crank case.

V-belt is designed to make perfect contact with side of V-groove. V-belt transmit maximum power with minimum slip. Cords are saturated with pure liquid rubber, imbedded in special rubber stock which resists fatigue and carries off heat. Includes 3 saw blades, 40-100 saw, 50-717 40" stand, 20¾x12¼x26". Order motor below.

26 A 1543 ZF. Shpg. wt., 117 lbs. . . 99.50  
26 A 3788 ZF. ½-hp AC Motor, 30 lbs. 39.95



### 10" BAND SAW CUTS THROUGH WOOD UP TO A FULL 6¼" THICK

- 10x11" Table Tilts a Full 45°
- Tensioning and Tracking Controls
- Full 9¾" Frame-to-Blade Capacity

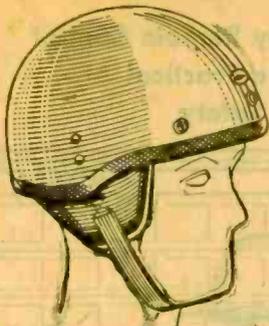
Model 28-069. For big capacity, straight line sawing and curve cutting jobs too big for other type saws to handle. Handles all jobs from resawing to fine scroll work. Cuts stock a full 6¼" thick. Offers 9¾" frame-to-blade capacity. 10x11" table tilts a full 45°. Degree scale facilitates angle setting and stop screw makes leveling easy.

Upper and lower blade guides and ball bearing blade supports are adjustable for various types and size blades, assuring longer blade life and minimizing blade breakage. Sliding blade guard covers blade completely except portion which does the cutting. Band saw wheels are also covered for maximum safety. Tensioning and tracking controls provide accurate means of correcting blade alignment and maintaining correct tension.

V-belt transmit maximum power with minimum slip. Saturated with pure rubber and imbedded on special rubber stock. With Wheel Guards, machine pulley, 28-803 ¼" blade, 50-328 42" stand, 10½x18¼x32¾". Order motor below.

26 A 2147 ZF. Shpg. wt., 111 lbs. . . 114.95  
26 A 3788 ZF. ½-hp AC Motor, 30 lbs. 39.95

# Custom Styling Automotive Accessories



**SWINGER SEMI-JET HELMET**

Swinger Crash Helmet features comfortable interior foam crown pad and size padding. Incorporates "V" hold-down harness, "D" ring for strap adjustment. Gloss white. Tough outer shell of lightweight fiberglass. Meets MS&ATA and USASI 290.1 standards. Snell Foundation approved. Specify size: 6 3/4 to 7 1/4 to 7 1/4 to 7 1/4; 7 1/4 to 7 1/2. Specify: Gloss White, Metallflake Red or Blue.  
19 A 4139 C. Wt., 3 lbs. .... 12.95

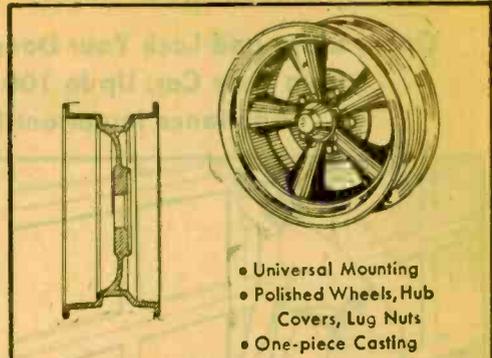


**FULL JET CRASH HELMET**

Impact Full Jet Crash Helmet features contoured padded ear cup and crown padding. "D" ring adjustable hold-down strap. Outer shell of tough fiberglass. Certified to MS&ATA and USASI 290.1 standards. Approved by AMA and Snell Foundation. Specify size: 6 3/4 to 7 1/4 to 7 1/4; 7 1/4 to 7 1/2. Specify: Gloss White, Metallflake Red or Blue.  
19 A 4140 C. Wt., 4 lbs. .... 22.95

## CUSTOM STYLE CHROME-CONE WHEEL COVERS

Give your car the sleek sporty look the easy and low cost way. Install a set of these beautiful, sparkling wheel covers. Brilliant triple chrome finish over deep drawn quality steel. Cone shaped for spectacular spinning effect. Perfect tight fit for any year and model car with 14" or 15" wheels. Easy to install, just snap on. Shpg. wt., 12 lbs.  
19 A 4141 X, 14" Wheel Covers.... (Set of 2) 5.95  
19 A 4142 X, 15" Wheel Covers.... (Set of 2) 5.95

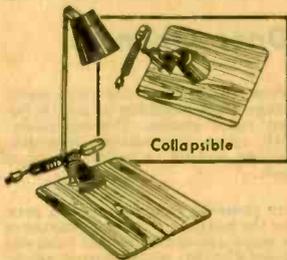


- Universal Mounting
- Polished Wheels, Hub Covers, Lug Nuts
- One-piece Casting

## HIGH-PERFORMANCE SLOT-MAG WHEELS WITH ONE-PIECE ALUMINUM ALLOY DESIGN

Transform your car into a hot-looking street machine with International's polished Slot-Mag Wheels. Recently developed production method brings you the strongest mags ever cast. Tough as iron, yet lighter than steel wheels. Overdesigned for the most rugged competition and street usage. Dial-fit universal mounting system allows Slot-Mag to be interchangeable, wheels can be transferred from one car to another with no visible adapters. With hub cover and lug nuts. Specify year, make and model of car when ordering. Shipped from California.

Stock No.	Wheel Size	Shpg. Wt.	EACH
19 A 4143 CF	14x6", 14x7" 15x6", 15x7"	20 lbs.	49.95
19 A 4158 CF	14x8", 15x8 1/2"	22 lbs.	56.95



Collapsible

## CLIP BOARD LAMP

Portable lamp includes writing pad and paper clipper. Great for family car, road rallies, business notes, etc. Lamp turns 360° right and left, 90° up and down. Wood grain finish board. 1 1/2 ft. cord, plug for 12-volt lighter outlet, 12-volt, 15 cp lamp. Shpg. wt., 2 lbs.  
19 A 4144 X..... 5.95

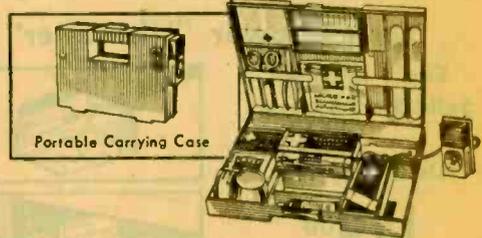
- Fits and Works in any Car
- 360° Accuracy
- In Leather-Like Case



## HULL CUSTOM LINE COMPASS

Model 700-DM. Calibrated dial. Adhesive speed mounts. Extremely accurate. Compensating system.  
19 A 4145. Wt., 1 lb. .... 4.95

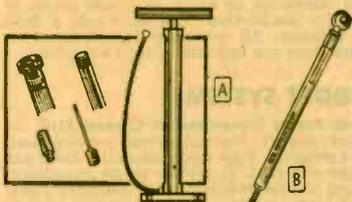
Model 810-DM. Same as above but with removable flashlight for dial illumination. With "AAA" battery.  
19 A 4146. Wt., 1 lb. .... 5.69



Portable Carrying Case

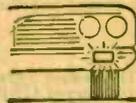
## PORTALITE FIRST AID STATION WITH LIGHT

Model MSA-120S. Compact, lightweight, portable... a "must" for the motorist, homeowner, boatsman or camper. Includes items necessary to meet most minor emergencies. Features flashing red warning light and white utility light combination, plus first aid book on minor injuries, gauze pads, cotton, surgical tape, splints, tweezers and others for a total of fifteen vital supply items. In plastic case, 10 1/2 x 7 1/4 x 2 1/4". Requires 2 "D" batteries.  
19 A 4149. Shpg. wt., 2 lbs. .... 4.98



**A** All Purpose Air Pump. Four-in-one pump can be used to inflate tires, footballs and basketballs. With four air fittings.  
19 A 4150. Shpg. wt., 5 lbs. .... 1.98

**B** Safe-Air Tire Gauge. Calibrated 10-50 lbs. Include 4 valve caps. For autos, bicycles and other uses. All metal.  
19 A 4151. Shpg. wt., 4 oz. .... .98



## DRIVATRON DRIVING LIGHTS ADAPTER

Now you can convert your car's lights to work like latest models. Parking lights work with headlights for the latest in style and safety. Solid-state electronics. Easy to install—just connect two wires. Can be connected to work with lo-beam headlights or lo and high-beam headlights.  
19 A 4154. Shpg. wt., 8 oz. .... 2.98

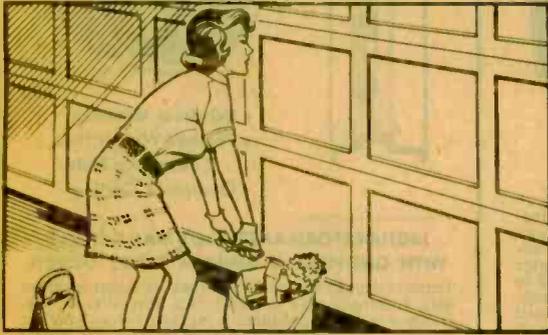


## METRO POLISER KIT WITH SANDING DISC

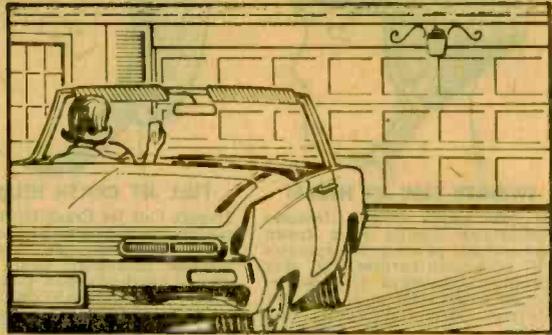
Model AP160. Auto polisher kit allows you to keep that new car look. Includes lambswool bonnets and car polish for buffing and polishing. Has scrub brush for cleaning. Has sanding disc and sandpaper. Automatic eject button. Push button operation. 20-ft. cord and plug for 12-V lighter outlet.  
19 A 4155. Shpg. wt., 5 lbs. .... 14.95

# Don't Struggle with a Big, Heavy Garage Door!

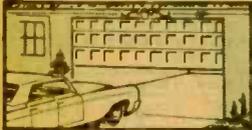
Open, Close and Lock Your Door, Turn-on Garage Lights by Remote Control from Your Car, Up to 100 Feet . . . Not a Luxury, but a Practical Appliance Important for Your Convenience and Safety



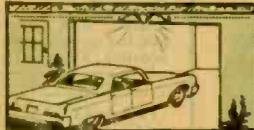
IN YOU RIDE . . .



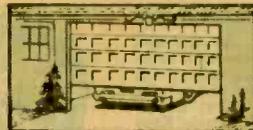
. . . YOU'RE SAFE INSIDE



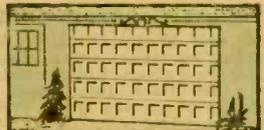
OPENS DOOR . . . Just Press Button on Transmitter



OPERATES LIGHT . . . Light Is Turned On, Off Automatically



CLOSES DOOR . . . Press Button Again . . . Door Closes



LOCKS DOOR . . . Door Locks Securely When Fully Closed

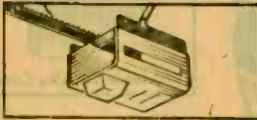
## Perma-Power "Liftmaster" Chain-Drive Garage Door Openers

Easily Installed  
Solid-State Systems

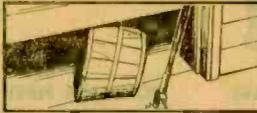
Deluxe System

**149<sup>50</sup>**

\$8 monthly  
see page 438



Power Unit with "Velvet-Glide." Powerful 1/4-hp chain-drive easily handles 20-ft. wide residential garage doors weighing up to 200 lbs. with either horizontal or curved roller tracks. "Velvet Glide" electronic clutch provides smooth, quiet, dependable operation. Accelerates from a dead stop without jerking or bouncing. Saves on your nerves as well as your back.



Instant Stop Control. Safety feature protects your family and pets. Door travel is *instantly* stopped by the button on the transmitter or by the inside door control. Door stops *automatically and instantly* if it encounters any obstacle. Model G-6101, when started again, reverses and pulls away, the ultimate safeguard against trapping any person, pet, or misplaced object.



Manual Operation of Door. No need to worry about your car being locked in or out during a chance power failure. If, for any reason, the power should fail, the motor-driven door arm can easily be detached to allow manual operation of the door until power is restored. Absolutely no tools are required for detaching. It is very simple and can be done by anyone.



Easy to Install. The Perma-Power LIFTMASTER can be installed on your *existing* garage door whether it is single or double, sectional or one-piece, metal, fiberglass, or wood. No costly extras or special skills are required for installation. You need only a drill, pliers, screwdriver, and hammer. All necessary hardware and a book of easy-to-follow directions are included with door opener.

You Open and Close Garage Door From Inside Your Car. You Don't Leave Your Children Alone in the Car; You Don't Get Wet or Cold in Nasty Weather; You're Safe From Prowlers. You Don't Risk Straining Your Back Trying to Raise a Heavy Garage Door.

### DELUXE SYSTEMS

G-6101 Deluxe Garage Door Opener. Lifts, lowers, and locks garage door; turns garage lights off and on. You get power unit, track, chain-drive, receiver, pocket transmitter, pushbutton manual control unit, antenna, and hardware. No FCC license needed. U.L. Listed. For 117 VAC.

G-6101 System with Pocket Transmitter for Channel B10P.  
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17 A 8012 ZF . . . . . 149.50

### BUDGET SYSTEMS

G-6121 Budget System with Pocket Transmitter for Channel B10P. As G-6101, except 175-lb. door capacity. Manual reverse, not electrical. If object obstructs door's progress, door stops instantly. Does not reverse and pull away when restarted. To reverse before completion of travel, electromechanical reverse switch must be manually reset. Series-wound 1/4 hp motor, not capacitor-start motor; housing less light shield.

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Alternate-Frequency System. As above, different channel.

17 A 8003 ZF. Shpg. wt., 55 lbs. Express . . . . . 119.95

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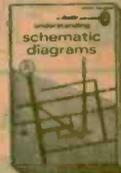
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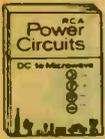
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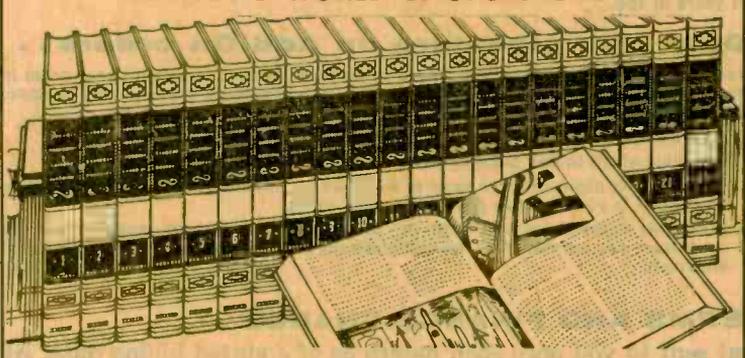
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## EXPORT ORDERS

The minimum order we can accept for delivery outside the U.S. is \$25.00 in U.S. currency. Each export order must be accompanied by cash for the full amount of the order or an irrevocable letter of credit. Prices are net, f.o.b. our plant. Include 20% over merchandise value for documentation, packing and shipping costs. On orders over \$500.00

include 10%. Any extra money that is sent will be refunded. Parcel post to APO or FPO addresses are considered domestic mailings—use Zone 5 rates for New York, Zone 8 for San Francisco. For any additional information you may require, write to our Export Department, 100 N. Western Ave., Chicago, Illinois, 60680.

# IMPORTANT ORDERING INFORMATION

## USE YOUR ZIP CODE TO FIND YOUR PARCEL POST ZONE

Use the first 3 digits of your Zip Code number to determine your parcel post zone. Example: If your Zip Code is 58374, use the first 3 numbers (583), and refer to chart below for your Zone which is 5.

Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone
006-009	8	286-289	4	400-406	3	474-478	3	560-574	4	718	5	835-839	7
010-046	5	290-292	5	407-409	4	479	2	575-579	5	719-729	4	840-849	6
047	6	293	4	410	3	480-489	3	580-581	4	730-739	5	850-854	7
048-098	5	294-295	5	411-419	4	490-491	2	582-589	5	740-744	4	855-863	6
100-129	5	296-297	4	420	3	492	3	590-591	6	745	5	864	7
130-132	4	298-299	5	421-422	4	493-495	2	592-593	5	746	4	865-880	6
133-139	5	300-303	4	423-424	3	496-499	3	594-599	6	747-748	5	881	5
140-179	4	304	5	425-426	4	500-504	3	600-605	1	749	4	882-883	6
180-199	5	305-307	4	427-428	3	505	4	606	Local	750-778	5	884-889	5
200-215	4	308-329	5	439	4	506-507	3	607-609	1	779-785	6	890-899	7
216	5	330-334	6	440-443	3	508-519	4	610-619	2	786-787	5	900-933	7
217	4	335-338	5	444-447	4	520	2	620-636	3	788	6	934	8
218-219	5	339-349	6	448-456	3	521-526	3	637-649	4	789-796	5	935-938	7
220-232	4	350-359	4	457	4	527-539	2	650-652	3	797-799	6	939-951	8
233-238	5	360-361	5	458-459	3	540	4	653-675	4	800-812	5	952-953	7
239-274	4	362	4	460-462	2	541-547	3	676-679	5	813-819	6	954-955	8
275-279	5	363-369	5	463-464	1	548	4	680-689	4	820-823	5	956-961	7
280-282	4	370-389	4	465-469	2	549	3	690-699	5	824-825	6	962-969	8
283-285	5	390-396	5	470-472	3	550-558	4	700-715	5	826-828	5	970-994	7
		397	4	473	2	559	3	716-717	4	829-834	6	995-999	8

## HOW TO ESTIMATE YOUR PARCEL POST CHARGES

Up to 16 oz., all zones allow 6¢ for first 2 oz., 2¢ for each additional oz. Find the weight of your merchandise in the extreme left-hand column of the chart at right. Pay the amount listed for Parcel Post shipment to your zone. A fraction of a pound is charged as a full lb. For example, if the weight is 4 lbs. and 1 oz. to Zone 4, postage would be for 5 lbs. (90¢). Shipments over 40 lbs. sent by Truck or Express. See following page.

### PARCEL POST RATES

WEIGHT 1 lb. & Not Exceeding	PARCEL POST RATES							
	Local	1st & 2nd Zone up to 150 mi.	3rd Zone 150 to 300 mi.	4th Zone 300 to 600 mi.	5th Zone 600 to 1000 mi.	6th Zone 1000 to 1400 mi.	7th Zone 1400 to 1800 mi.	8th Zone Over 1800 mi.
2	\$0.50	\$0.60	\$0.60	\$0.65	\$0.70	\$0.80	\$0.85	\$0.90
3	.50	.65	.70	.75	.85	.95	1.05	1.15
4	.55	.70	.75	.85	.95	1.10	1.20	1.35
5	.55	.75	.80	.90	1.05	1.25	1.40	1.60
6	.55	.80	.90	1.00	1.15	1.40	1.55	1.75
7	.60	.90	.95	1.10	1.30	1.50	1.75	1.95
8	.60	.95	1.00	1.15	1.40	1.65	1.90	2.15
9	.65	1.00	1.05	1.25	1.50	1.80	2.05	2.35
10	.65	1.05	1.15	1.35	1.65	1.90	2.25	2.55
11	.65	1.10	1.20	1.40	1.75	2.00	2.40	2.75
12	.70	1.15	1.25	1.50	1.85	2.15	2.55	2.90
13	.70	1.20	1.35	1.55	1.95	2.25	2.70	3.10
14	.75	1.25	1.40	1.65	2.05	2.40	2.85	3.25
15	.75	1.30	1.45	1.75	2.15	2.50	3.00	3.45
16	.75	1.35	1.55	1.80	2.25	2.60	3.15	3.60
17	.80	1.40	1.60	1.90	2.35	2.75	3.30	3.80
18	.80	1.45	1.65	1.95	2.45	2.85	3.45	4.00
19	.85	1.50	1.75	2.05	2.55	2.95	3.60	4.15
20	.85	1.55	1.80	2.10	2.65	3.10	3.75	4.35
21	.85	1.60	1.85	2.15	2.75	3.20	3.90	4.50
22	.90	1.65	1.90	2.25	2.80	3.30	4.05	4.70
23	.90	1.70	1.95	2.30	2.90	3.40	4.20	4.85
24	.95	1.75	2.00	2.35	3.00	3.55	4.35	5.00
25	.95	1.75	2.05	2.45	3.05	3.65	4.50	5.20
26	.95	1.80	2.05	2.50	3.15	3.75	4.65	5.35
27	1.00	1.85	2.10	2.55	3.25	3.90	4.80	5.55
28	1.00	1.90	2.15	2.60	3.35	4.00	4.90	5.70
29	1.05	1.90	2.20	2.70	3.40	4.10	5.05	5.90
30	1.05	1.95	2.25	2.75	3.50	4.20	5.20	6.05
31	1.05	2.00	2.30	2.80	3.60	4.35	5.35	6.25
32	1.10	2.05	2.35	2.90	3.65	4.45	5.50	6.40
33	1.10	2.10	2.40	2.95	3.75	4.55	5.65	6.55
34	1.15	2.10	2.45	3.00	3.85	4.65	5.75	6.75
35	1.15	2.15	2.50	3.05	3.95	4.80	5.90	6.90
36	1.15	2.20	2.55	3.15	4.00	4.90	6.05	7.15
37	1.20	2.25	2.60	3.20	4.10	5.00	6.20	7.25
38	1.20	2.25	2.65	3.25	4.20	5.10	6.35	7.40
39	1.25	2.30	2.70	3.35	4.25	5.25	6.45	7.60
40	1.25	2.35	2.75	3.40	4.35	5.35	6.60	7.75

### INSURANCE FEES

We insure all Parcel Post shipments with a private insurance company. In case of loss or damage, adjustment is made easily and quickly. See fees below.

\$2.00 to \$15.00.....	20¢
\$15.01 to \$50.00.....	30¢
\$50.01 to \$100.00.....	40¢
\$100.01 to \$150.00.....	50¢
\$150.01 to \$200.00.....	60¢
Over \$200.00.....	add 40¢ per \$100.00

### AIR PARCEL POST

We will ship your order Air Parcel Post upon request. Weight and size limitations, 70 lbs. and 100 inches (length plus girth). Rates in table below.

#### 10¢ per ounce, up to 3 ounces

Wt., Lbs.	Zones							
	1, 2, 3	4	5	6	7	8		
1	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	\$0.90		
1-1/2	.98	1.02	1.07	1.14	1.18	1.24		
1 1/2-2	1.16	1.23	1.34	1.47	1.55	1.64		
2-2 1/2	1.40	1.48	1.62	1.79	1.91	2.08		
2 1/2-3	1.64	1.73	1.90	2.11	2.27	2.48		
3-3 1/2	1.88	1.98	2.18	2.43	2.63	2.88		
3 1/2-4	2.12	2.23	2.46	2.75	2.99	3.28		
4-4 1/2	2.36	2.48	2.74	3.07	3.35	3.68		
4 1/2-5	2.60	2.73	3.02	3.39	3.71	4.08		
Add per lb.	48¢	50¢	56¢	64¢	72¢	80¢		

### C.O.D. ORDERS

To save you money, we strongly recommend that you send a remittance with your order. The Post Office charges both a C.O.D. fee,

plus a money order fee. Minimum C.O.D. order is \$10.00, with a deposit of a least 20%. Estimate charges from both tables below.

#### PARCEL POST C.O.D. FEES:

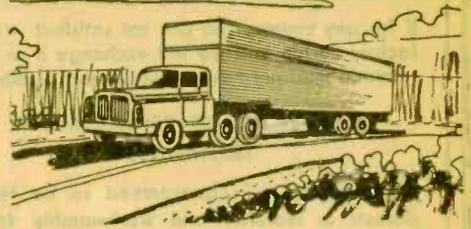
\$0.01 to \$10.00.....	60¢	\$50.01 to \$100.00.....	90¢
\$10.01 to \$25.00.....	70¢	\$100.01 to \$200.00.....	\$1.00
\$25.01 to \$50.00.....	80¢		

#### MONEY ORDER FEES:

From \$0.01 to \$10.00.....	25¢
From 10.01 to 50.00.....	35¢
From 50.01 to 100.00.....	40¢

# IMPORTANT ORDERING INFORMATION

**NOTE:** On Cash Orders, Be Sure to Include All Transportation Charges. A Handling Charge of 50¢ Will Be Applied on Cash Orders Under \$10.00. (Use Tables on These Two Pages to Calculate Charges.) On Credit Fund Orders, Allied Will Ship All Merchandise Prepaid and Transportation Charges Will Be Added To Your Credit Fund Account.



## SHIPMENT OF NON-PARCEL POST ITEMS (Items with suffix U, W or Z in Allied's Stock No.)

Allied will always ship your order the best and lowest-cost way possible. Items weighing up to 40 lbs. and otherwise mailable will usually be sent Parcel Post (see page 440). Items which are not mailable either because of size or weight restrictions or because of their fragile nature are generally shipped as follows: Items with suffix letter "U" in Stock No. are either oversize for mail handling or particularly fragile and are usually shipped Express.

Items with suffix letter "W" or "Z" in Stock No. are heavier items and are usually shipped by truck. Calculate shipping charges from appropriate truck and express tables below. Express charges ordinarily include home delivery to urban areas and in some cases to rural areas. Further information on this is available at your local R.E.A. office. Please see paragraph below concerning home delivery charges on truck shipments.

### REA EXPRESS SHIPMENTS

Shpg. Wt., in Lbs.	Chicago	ZONES 1 & 2		ZONE 3	ZONE 4	ZONE 5	ZONE 6	ZONE 7	ZONE 8
		Local to 150 mi.	151 to 300 mi.	301 to 600 mi.	601 to 1000 mi.	1001 to 1400 mi.	1401 to 1800 mi.	Over 1800 mi.	
1-25	6.00	6.85	7.30	8.30	9.75	10.90	12.00	13.10	13.10
26-50	6.25	7.75	8.45	9.90	12.10	13.85	15.45	17.15	17.15
51-75	6.70	8.60	9.65	11.50	14.40	16.70	18.90	21.25	21.25
76-100	7.10	9.45	10.75	13.10	16.65	19.50	22.30	25.10	25.10
Over 100 lbs., Add per lb.	7¢	10¢	11¢	13¢	17¢	20¢	22¢	25¢	25¢ W

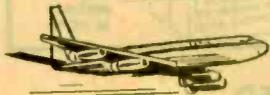
### TRUCK SHIPMENTS

Shpg. Wt. in Lbs.	Local to 150 mi.	151 to 300 mi.	301 to 600 mi.	601 to 1000 mi.	1001 to 1400 mi.	1401 to 1800 mi.	Over 1800 mi.
	Under 100 lbs.	6.07	6.51	7.34	8.14	8.96	9.33	11.18
Over 100 lbs. Add per lb.	3¢	4¢	5¢	6¢	6¢	9¢	11¢

### HOME DELIVERY CHARGES ON TRUCK SHIPMENTS

In most areas of the country, a residential delivery charge is added to the normal truck rates when delivery is to be made directly to a residence. This charge is usually between \$5.00 and \$5.50.

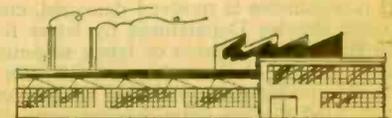
### AIR FREIGHT AND AIR PARCEL POST SHIPMENTS



"Rush" orders will be shipped via air freight, Air Express, or Air Parcel Post upon your request. Contact your local express or postal agent for information concerning shipping costs. Air Freight and Air Parcel Post charges should be included with remittance on cash orders.

### SHIPMENTS DIRECT FROM FACTORY

The letter "F" at the end of our Stock Nos. indicates merchandise that is shipped directly from the factory collect by Express or truck only. Freight and Express charges are based upon the distance from factory to point of destination.



# ALLIED GUARANTEES YOUR SATISFACTION OR YOUR MONEY BACK

If for any reason, you are not satisfied with your purchase, return it to us within 30 days in the original factory carton and we will exchange it or return your money (less transportation charges). Merchandise returned must not have been abused or altered. This policy does not apply to kits. Kit guarantees below.

## SERVICE AND REPLACEMENT GUARANTEE:

All merchandise is guaranteed to be free of defects in material and workmanship for the period of time specified in the listing of the product. Where no time is specified, the guarantee is for 90 days.

Wherever so indicated in our listing of the product we will replace it. Wherever our listing does not specify, we will either replace it or repair it at our option. Item must be returned prepaid for our inspection.

**KNIGHT-KIT GUARANTEE:** All parts in kits are guaranteed to be free from defects in material or workmanship for 90 days. During this period we will replace any defective part returned to us. Within the 90 day period, your completely wired kit may be returned to us prepaid for repair and adjustment at the service and handling charge published in the warranty and service section of your kit manual.

**OTHER KITS:** Kits of manufacturer's other than Allied carry the same guarantee as above, except that Allied does not repair or rewire them. They must be returned to the manufacturer, who will determine the charges where applicable.

## IF IT IS NECESSARY TO WRITE TO US

We return your order papers with an invoice that summarizes prices and transportation charges. If you write to us about your order, please include all order papers and any correspondence that we have returned to you. If you don't have the order papers, provide us with the Stock Numbers, and description of the merchandise, the name and address that appeared on the original order, and the date of the order.

## LOCAL SERVICE FACILITIES

In many instances, our suppliers maintain service facilities around the country. Be sure to read your instruction manual. If it is necessary to return merchandise for service, write in advance—we will be able to advise you if service is available in your locality. This especially applies to High-Fidelity Components, Tape Recorders, Radios, Record Turntables and Television Sets.

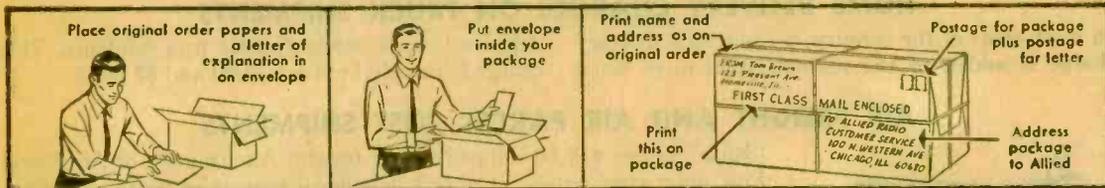
## IF YOU FIND IT NECESSARY TO RETURN MERCHANDISE

Returned merchandise should be shipped to Allied prepaid in its original factory carton, with all papers, correspondence, instructions, etc. included. Also return all accessories that came with the merchandise (Test Equipment Probes, Cases, Books, Instruction Manuals). This will assure fastest adjustments with no delays in handling.

**Parcel Post.** Place instructions, all papers and correspondence in an envelope inside package. Mark "First Class Mail Enclosed" and add extra postage for letter. Be sure to insure the package for full value.

**Express and Truck.** Place all papers in a stamped, sealed envelope inside the package. Date envelope and draw lines across the stamp with ink. Your name and address should be on envelope and package. Insure for full value.

**SHIP PREPAID TO: Allied Radio Corporation, Customer Service Dept.,  
100 N. Western Ave., Chicago, Illinois 60680**



## IF YOUR ORDER IS RECEIVED DAMAGED

If merchandise is received damaged, contact our Customer Service Department by letter for instructions. In the case of express or truck shipments, if there is apparent or obvious damage, be sure this is noted on the receipt when you sign for delivery. If you find concealed damage upon opening your shipment, retain

all packing materials (both internal and external) and contact carrier to obtain an inspection. Send all order papers, delivery receipt and inspection reports to us and wait for our instructions on how to return goods. All damaged goods must be returned via the carrier which made the delivery.

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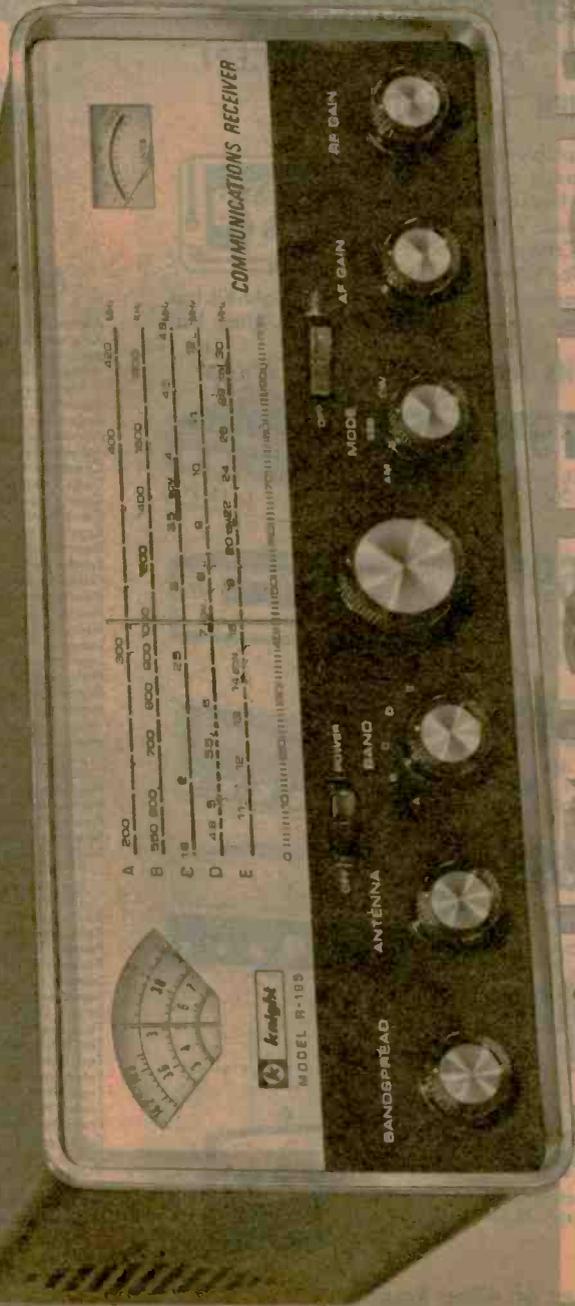


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- Longwave . . . . . 200 to 400 kHz
- AM Broadcast . . . . . 550 to 1800 kHz
- 1st Shortwave . . . . . 1.8 to 4.8 MHz
- 2nd Shortwave . . . . . 4.8 to 12 MHz
- 3rd Shortwave . . . . . 12 to 30 MHz



Switchable ANL for reduction of man-made noise



Illuminated "S" meter for measuring signal strength and for more accurate tuning



Switchable AVC to prevent fading or blasting

Treat yourself to fascinating listening from the capitals of the world! Tune-in the famous cities of Europe, Asia, Africa, North and South America. Hear ship-to-shore signals. Set your watch or clock to the exact time given by U.S. Government station WWV in Colorado. Get aviation weather reports or tune-in on Coast Guard Loran signals. Listen to Hams, Citizens Banders, Radio Telephoners—all this *plus* your favorite AM radio programs.

Offers wide coverage of these exciting bands: 200 to 400 kHz longwave; 550 to 1800 kHz AM band; 1.8 to 4.8 MHz, 4.8 to 12 MHz, and 12 to 30 MHz short-wave bands. Features: 5 band-switched ranges; electronic bandspread control to separate crowded bands for best station reception; illuminated signal-strength meter to show strongest signal for correct tuning. IF sensitivity control to help pick up distant stations and develop beat note for code reception and practice. Automatic Volume Control (AVC) assures even volume when receiving signals of widely different strengths. Automatic Noise Limiter (ANL) cuts static for clear, crisp reception. Antenna trimmer peaks incoming signals. Built-in 4" speaker provides fine sound—front-panel headphone jack allows you to listen with dual headset (below). Illuminated 7 1/2" slide-rule dial. Code key jack for code practice.

The Star Roamer also boasts Knight-Kit's famous ease of assembly—it's an ideal choice for novice kit-builders. Includes all parts, with precut, stripped and tinned wire; nontechnical instructions with step-by-step assembly procedures and easy-to-follow oversize wiring diagrams. Built-in AM antenna. Handsome charcoal-gray cabinet with neatly designed aluminum front panel looks smart anywhere. Size, 5 1/2" x 12 1/2" x 8". Optional accessories are listed below. For 110-180 Volts, 60 Hz AC; From Japan.

22 A 3102 X. Shpg. wt., 12 lbs. . . . . \$39.95

### STAR ROAMER ACCESSORIES

- 22 A 3099 X. Antenna Kit for Outdoors or Attic. Shpg. wt., 7 lb. . . . . 1.39
- 22 A 3257 X. Dual Headset with Cord and Plug. Shpg. wt., 7 lb. . . . . 2.50
- 17 A 6656. Code Practice Key. Shpg. wt., 1 lb. . . . . 2.50

## Lowest-cost Star Roamer Kit Outfit for world-wide radio listening

**41<sup>95</sup>**

\$5 monthly  
see page 438

## Star Roamer Kit Outfit with 84-page "How to Listen to the World" book

**42<sup>95</sup>**

\$5 monthly  
see page 438



Ever-popular shortwave receiver kit outfit features easy assembly . . . offers complete coverage and wide-range radio reception



Star Roamer Kit Outfit features Long-Range Antenna Kit, Dual Headset for private listening, 84-page Guide to World Listening

If you would like the wonderful experience of assembling a Knight-Kit and getting a good receiver too, you'll want this outfit. After a few enjoyable hours of assembly you'll have a complete, sensitive receiving station for international and domestic listening. It's the perfect outfit for getting started in long-distance radio listening. Discover the thrill of armchair traveling with the feature-packed Star Roamer. Valuable accessories assure outstanding LW-SW reception plus regular AM stations. Outfit includes: Star Roamer 5-Band Shortwave Receiver Kit; Antenna Kit for outdoor and attic mounting, with 50 ft. of wire, 25-ft. lead-in, standoff, clamp, insulators; Dual Headset with cord, plug. Metal cabinet, wire, solder, detailed instructions. 5 1/2 x 12 1/4 x 3". 110-130 V, 60 Hz AC. Receiver from Japan.

22 A 0011 L3X. Shpg. wt., 14 lbs. . . . . 41.95

Quality 4-piece outfit offers everything needed for exciting shortwave listening. Big 84-page guidebook provides frequency listings of shortwave broadcast stations all over the world, including type of broadcast (music, news, commentary, etc.), time schedules, plus useful and interesting information about the "hows and whys" of shortwave broadcast stations. Antenna kit includes everything necessary for outstanding reception of all available stations. Outfit includes: Star Roamer Receiver Kit; Antenna Kit with 50-ft. wire, 25-ft. lead-in, standoff, clamp, insulators; Dual Headset with cord and phone plug; 84-page Book, "How to Listen to the World." Dual headset allows private listening—have all the volume you want without disturbing others. With all parts and easy-to-follow instructions. 110-130 VAC. Receiver from Japan.

22 A 0268 L4X. Shpg. wt., 15 lbs. . . . . 42.95

## Start learning Amateur Radio with this Star Roamer Kit Outfit

Fascinating introduction to Ham Radio . . . Star Roamer Outfit with Code Key, ARRL Book Set

**43<sup>95</sup>**

\$5 monthly  
see page 438

You learn by listening to the Hams themselves. Star Roamer covers 160 through 10-meter Ham bands. Learn Morse Code by listening "on the air"—then practice it, using the code key plugged into the rear-panel jack on the receiver. Outfit includes: Star Roamer Receiver Kit; Antenna Kit; Dual Headset; Code Practice Key; 4-Book ARRL Set, "Gateway to Amateur Radio," including How to Become a Radio Amateur, Learning the Radio-Telegraph Code, Operating an Amateur Radio Station, Radio Amateur's License Manual. Books are written in non-technical language. Star Roamer kit includes all parts, detailed easy-to-follow instructions. For 110-130 VAC. Receiver from Japan.

22 A 0269 L5X. Shpg. wt., 16 lbs. . . . . 43.95



*Knight-Kits are a product of Allied Radio*

**ALLIED 451**

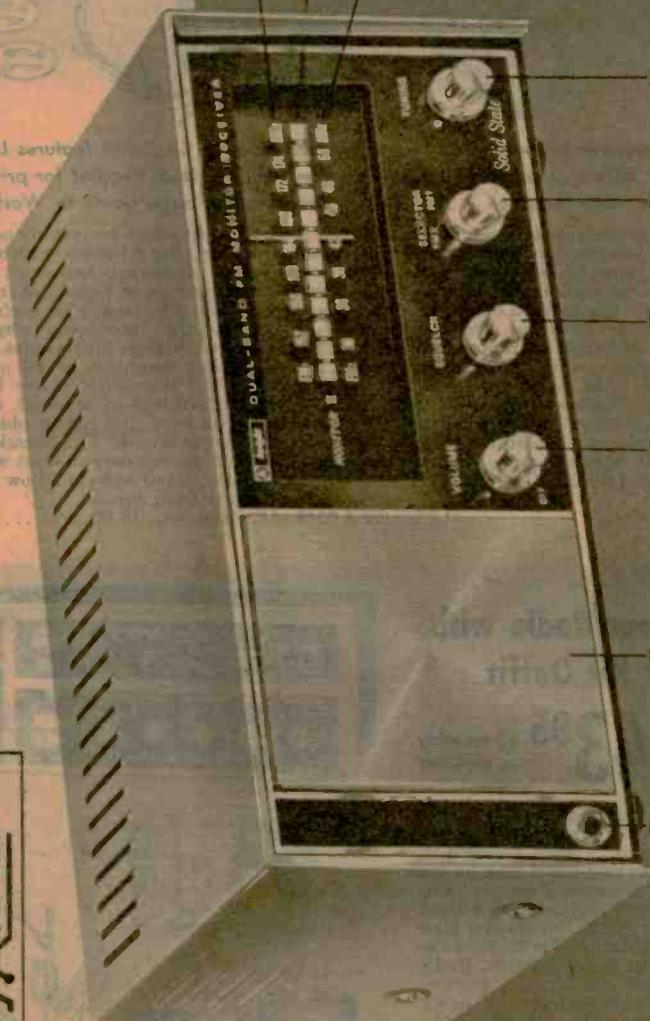


# Dual band VHF FM Monitor Receiver Kit featuring \*Modular Concept assembled printed circuit boards

452 ALLIED

\$5 monthly  
see page 438

## 5995



### \*MODULAR CONCEPT



Knight-Kit's new concept makes kit assembly faster, easier, and more enjoyable. Most parts are mounted and soldered on PC boards. All you do is solder interconnections. Critical circuits are aligned at the factory.

- 1 **AUDIO JACK:** Takes headphones for private monitoring or external speaker.
- 2 **MONITOR SPEAKER:** Built-in 4" speaker fed by powerful push-pull audio output.
- 3 **ON/OFF VOLUME:** Varies loudness of signal being received. Turns AC power on and off.
- 4 **SQUELCH:** Cuts off speaker during no-signal periods, restores it when signal is present.
- 5 **BAND SELECTOR:** Instantly selects lower VHF or upper VHF band.
- 6 **MAIN TUNING:** Tunes the receiver to the desired frequency as indicated on the dial.
- 7 **BAND 2:** Receives signals in the range of 30 MHz to 50 MHz.
- 8 **LOGGING SCALE:** Numbered 0-100, aids in retuning stations of unknown frequencies.
- 9 **BAND 1:** Receives signals in the range of 152 MHz to 174 MHz.

# Knight-Kit's solid-state circuit has tuned RF stage plus four IF stages to pull in all police/emergency calls on 30-50 MHz and 152-174 MHz

Knight-Kit Monitor III. Tune in on the "action" with this receiver kit that lets you monitor land transportation radio services in your area. Hear police calls, fire alarms, civil defense, Weather Bureau, taxis, mobile radio-telephones, public safety and domestic public services. Covers both the 30-50 MHz and 152-174 MHz bands. Solid-state design for dependable, instant operation. Sensitive FM circuit gives you static-free reception. Powerful push-pull audio-output. 4 preassembled, aligned IF's, tuned RF and mixer for greater sensitivity and selectivity. Automatic Volume Control (AVC) prevents overload by strong signals and boosts weak signals for best possible reception. Regulated power supply. Adjustable squelch keeps receiver silent unless a signal is being received. Eliminates static between messages. Adjustable to varying signal strengths.

## SPECIFICATIONS

**Tuning Range:** 30-50 MHz and 152-174 MHz. **Sensitivity:** Better than 4  $\mu$ V for 20 dB S/N. **IF:** 10.7 MHz. **Power Supply:** Full wave, transformer operated; zener diode regulation. **Active Circuit Elements:** 20 transistors, plus 10 diodes.

Any headphones with 8-ohm impedance may be used by simply plugging into the jack marked "Phones". An external 8-ohm speaker using a standard 1/4" phone plug may also be connected to this jack. Insertion of a phone plug into jack automatically silences built-in 4" speaker. Easy-to-read illuminated dial is equipped with a logging scale numbered from 0 to 100, a valuable aid when you want to return to a specific point on the dial after tuning through the band. Antenna terminals for connecting your antenna for best possible long-range reception. Gray metal case. 5 1/16 x 1 1/2 x 7 3/8". With solder, pre-cut wire, illustrated instruction manual. For 117 VAC. From Japan.

22 A 3412 X. Shpg. wt., 11 lbs. . . . . 59.95  
17 A 6226. 8-ohm Dual Headset. With plug and cord. Shpg. wt., 1 lb. . . . . 5.95

## Get increased range with this complete Monitor Receiver Outfit

Separately, \$75.40. Outfit includes: Knight-Kit Monitor III Dual-Band VHF-FM Monitor Receiver, Allied 1/4-Wave Ground Plane Antenna, and 50' Coil RG-58/U Foam Coax Cable. Pick up more signals on your receiver with this low-cost outfit. Antenna has mounting clamp for up to 1 1/2" dia. masts. Cable with PL-259 connectors. 22 A 0133 13X. Wt., 16 lbs. . . . . 69.50  
17 A 6714 X. Allied Antenna Alone. Shpg. wt., 3 lbs. . . . . 9.95  
17 A 6883. 50' Coil RG-58/U Cable Alone. Shpg. wt., 2 lbs. . . . . 5.50

Save \$5.90  
69.50



Save \$10.90  
74.50

## Deluxe Monitor Receiver Outfit boosts performance

Separately, \$85.40. Includes: Monitor III Receiver, Antenna Specialists MON-8 Antenna, 50' Coil RG-58/U Foam Coax Cable. Get top performance at a low system price. Double-loading-coil ground plane antenna has omnidirectional pattern. For masts up to 1 1/2" dia. SO-239 connection for PL-259 connector. Cable with PL-259 connectors. 22 A 0134 13X. Wt., 19 lbs. . . . . 74.50  
17 A 6716 X. MON-8 Antenna Alone. Shpg. wt., 6 lbs. . . . . 19.95  
17 A 6883. 50' Coil RG-58/U Cable Alone. Shpg. wt., 2 lbs. . . . . 5.50



### 30-50 MHz FM BAND

Police, fire, civil defense, other emergency services, utilities, radio-telephone service, radio dispatched repair vehicles, paging service.

### 152-174 MHz FM BAND

Police, fire, civil defense, other emergency services, U.S. Weather Bureau forecasts, railroads, taxicabs, forestry and conservation, private mobile telephone.

**NOTE:** Frequencies used differ in various parts of the country. Ask local authorities for the specific frequencies used by the various services in your own region.



# knight-kit AUTOMOTIVE

"... The finished analyzer is as accurate as any ready-made unit ... top-quality components."

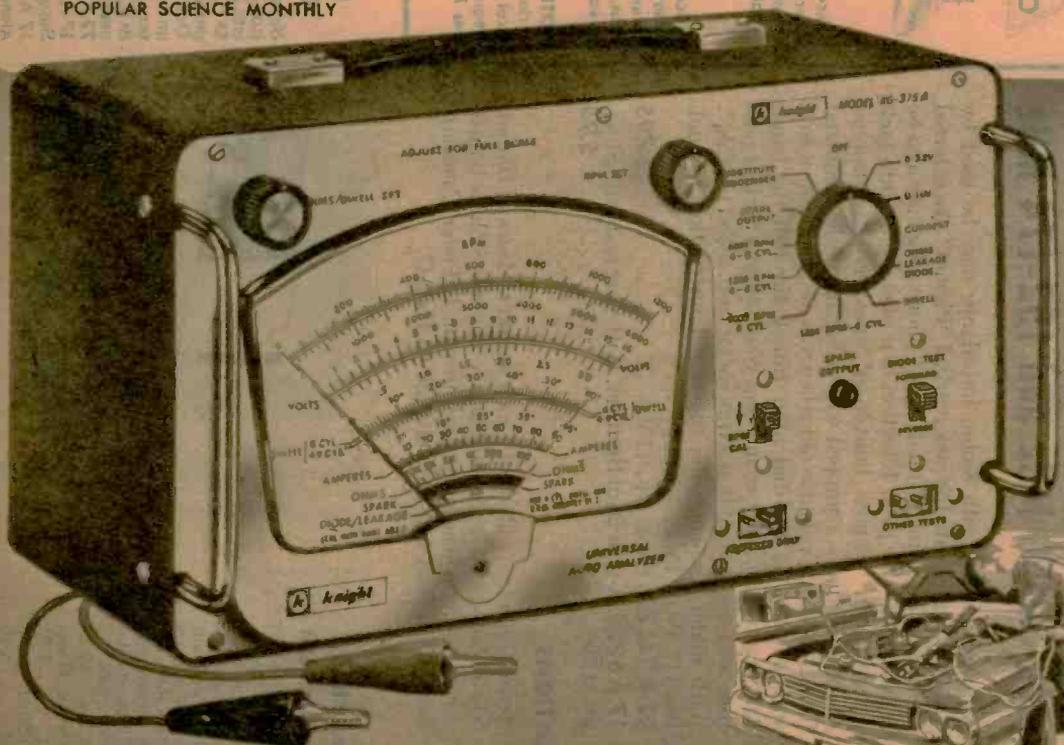
POPULAR SCIENCE MONTHLY

## Portable Auto Analyzer Kit . . Saves on car tuneups and troubleshooting

"Enables anyone to make his own tuneups . . . do his own troubleshooting with . . . ease . . ."

SCIENCE AND MECHANICS

# 49<sup>95</sup>



- ✓ Battery-powered for in-car road tests
- ✓ Silicon solid-state tachometer circuit
- ✓ Printed circuit board for easy assembly
- ✓ Front-Panel Roll Bars
- ✓ Detailed tuneup and troubleshooting chart
- ✓ Single function switch
- ✓ Easy-to-read D'Arsonval 7-inch meter reads engine rpm, voltage amperes, resistance dwell angle, spark output and leakage

Knight-Kit KG-375A. Solid-state auto analyzer kit can save you hundreds of dollars during the life of your car, and help you boost its performance too. Gives you many deluxe extras—outperforms many factory assembled analyzers costing more. Helps you do your own tuneups and many repairs and adjustments. Lets you test significant factors of your car's electrical and ignition systems prior to determining what repair work needs to be done.

Accurately checks voltage and current regulators, generators, alternator diodes. Checks distributor wear, condition of point surfaces, variation of dwell angle. Determines coil resistance, locates poor or open electrical ground circuits, much more. Self-contained and portable for actual road performance tests. Single function switch for operating ease. Big 7" meter has sensitive D'Arsonval movement; scales for 0-1200-6000 engine rpm; 0-3.2-16 volts; 0-90 amps; 0-20,000 ohms; 0-45° -90° dwell angle; spark output and leakage. Case, 6½x12x5½", with roll bars, carrying handle, soft rubber feet.

With comprehensive tuneup, troubleshooting manual; 4 "C" batteries; 90-amp shunt; solder; assembly instructions. For 6 or 12-volt systems, 4, 6 or 8-cylinder engines, positive or negative ground. From Japan. 22 A 3323 X. Shpg. wt., 11 lbs. . . . . 49.95



### Chilton's 1969 Auto Repair Manual

Complete, authoritative, highly understandable manual covers all U.S. cars, 1961 to 1969. Detailed step-by-step instructions for every repair and adjustment. Troubleshooting section. Illustrated. Over 1400 pages. 8½x11¼". Hard cover. 23 A 7121 E. Shpg. wt., 7 lbs. . . . . 9.95

# Capacitive-discharge Ignition System Kit boosts engine power

## 28<sup>95</sup>



Helps give faster starts  
even in subzero weather



3 to 10 times longer  
plug and point life

Increases mileage  
up to 20% . . . save  
up to 4 gallons each  
time you fill up



Conservatively rated  
components designed  
for quick assembly

**Knight-Kit KG-372.** Solid-state capacitive-discharge ignition system kit offers dramatic performance improvement for your car, or boat, at an exciting low price. Also cuts operating costs. Provides many times the energy of ordinary ignition systems to give you more complete combustion, increased acceleration, and improved engine performance, plus 10% to 20% increase in gas mileage. Drive many thousands more miles between tuneups.

Increased spark magnitude—from 3 to 4 times normal—assures improved ignition. Fast spark rise-time helps prevent fouling and electrode erosion, resulting in 3 to 10 times longer spark-plug life. Complete combustion reduces formation of residuals and other contaminants which shorten engine life. After easy assembly, installs in less than 10 minutes into standard ignition system with no rewiring, removal, or addition of parts. Leaves original coil intact—disconnects in one minute for performance comparisons.

Input current: 1-5 amps, depending on rpm; 400-volt discharge pulse Triggered by ignition points or any suitable source. Unaffected by temperature extremes or operating conditions. 3x5 1/2 x 3 3/8". With all parts, solder, instructions. For 12-volt systems only, positive or negative ground. . . . 28.95

**Input Source:** 12-volt positive or negative ground battery, generator or alternator. **Input Current:** 1-5 amps, depending on rpm. **Output:** 400-volt discharge pulse. **Triggering:** Points or other source. **Maximum Point Series**

### SPECIFICATIONS

**Resistance:** About 25 ohms. **Minimum Point Shunt Resistance:** About 200 ohms. **Open Circuit Secondary Voltage:** Cranking 8-volt input, 35 kV; 500-rpm 12-volt input, 50 kV; 7500-rpm 14-volt input, 40 kV.

- ✓ Installs in cars or boats
- ✓ Connects to your engine in just 10 minutes
- ✓ Increased spark assures fast, positive ignition
- ✓ Gives you fast, sure starts in any kind of weather
- ✓ Provides more complete combustion and better gas mileage for improved performance and economy
- ✓ For positive or negative 12-volt ignition systems
- ✓ Uses silicon-controlled-rectifier switching
- ✓ Reduces spark-plug fouling



**knight-kit**  
AUTOMOTIVE

## High-intensity Timing Light Kit for focused super-bright flashes

**19.95**  
\$5  
monthly\*

Powered by built-in DC supply, not by ignition coil, for flashes that make timing marks visible even in daylight



### COMPARES WITH LIGHTS COSTING MUCH MORE

- ✓ Helps you get maximum mileage
- ✓ Helps you set ignition timing
- ✓ Checks double breaker-arms
- ✓ Checks automatic spark-advance
- ✓ Checks distributor-cam wear
- ✓ Reliable solid-state circuit
- ✓ Pistol-grip trigger switch
- ✓ Rugged high-impact housing
- ✓ Up to 1250 flashes-per-minute (2500 rpm with 4-cycle engine)

**Knight-Kit KG-371.** Outstanding timing-light kit offers design features stressing fine performance, ease of handling, and durability. It's everything you would want in a timing light... easy to build, equals factory-assembled lights, and outperforms many costing much more. Lets you tune-up auto engines and repair them with efficiency and accuracy. High-intensity flash "stops" timing marks on engine fly-wheel or crankshaft vibration dampener. You accurately check timing by lining-up marks with pointer. Helps you get maximum fuel-economy and power by making sure plugs are firing at proper intervals in compression cycle. Checks ignition timing, synchronization of double breaker-arms, automatic spark-advance, and distributor-cam wear. Built-in solid-state DC power supply and high-intensity 600-volt flashtube generate super-bright flashes, sharply

focused by a special light-concentrating lens. Gives much brighter flash than that obtained from timing lights operating off ignition coil. Flashes can be clearly seen even in brightly-lighted work areas. Delivers up to 1250 flashes-per-minute (2500 rpm with 4-cycle engine). High-impact housing with comfortable form-fitted trigger switch. Insulated adapter-clip attaches high-voltage cable between spark-plug and its wire. DC cables attach directly to car battery. Cables are 5 1/2-feet long for easy under-hood testing. 6 7/8 x 8 3/4 x 2". With insulated copper hippo-clips, all cables, spark-plug adapter. Easy-to-follow instructions, comprehensive, simplified operating procedures. For 6 or 12-volt systems; positive or negative ground. From Japan. Shpg. wt., 2 lbs.

22 A 3312 X..... 19.95



**Save \$5.00**

A low-cost basic Automotive Kit Outfit

**34.90**

\$5 monthly\*

### Save on Timing Light and Analyzer Kit Outfit for auto tune-up and repair

Separately, \$39.90. Basic automotive kit outfit helps you get your car in top shape and keep it that way. And you save on our special low package price, too. Consists of Knight-Kit KG-371 solid-state high-intensity Timing Light kit and Knight-Kit KG-303 solid-state Junior Auto Analyzer kit. Both of these fine instruments are vital to proper engine tune-up, troubleshooting, and repair. Auto analyzer has scales for engine rpm, dwell angle, and voltage. Has easy-to-read 2 1/2" meter with D'Arsonval movement. Both kits are complete with all parts, solder, instructions. From Japan.

22 A 0304 L2X. Shpg. wt., 6 lbs..... 34.90

# All-in-one battery-powered Junior Auto Analyzer Kit with simplified controls for easy and fast tests

**1995** \$5 monthly\*  
see page 438

- For easier tune-ups and servicing
- Handles 4, 6 and 8-cylinder engines
- Simplified control-panel for fast tests
- Trouble-free all solid-state circuit

**Knight-Kit KG-303.** Portable solid-state auto analyzer kit designed for fast, easy tune-ups and simplified troubleshooting. Gives you performance never expected at this low price. Full-size 2½" meter has four rpm ranges from 0-6000 rpm; two dwell angle ranges from 0-60°; plus 0-16 volt voltmeter range. Convenient compact size and self-contained battery power let you take it with you anywhere for road testing.

May be used on 4, 6, and 8-cylinder engines with either 6 or 12-volt, positive or negative ground ignition. Tachometer scales read engine rpm—help you set idling speed and automatic transmission shift points. Dwell meter tests points, distributor, and spark-advance. Voltmeter measures battery and voltage to any electrical component in your car; also tests fuses.

Analyzer can also be used as a continuity tester; to check whether or not a complete circuit exists. Size, 6½x3½x2½". With all parts, detailed instructions. For 6 or 12 volts, positive or negative ground. Japan. 22 A 3327 X, Shpg. wt., 3 lbs. \$19.95

## SPECIFICATIONS

**Voltmeter Range:** 0-16 volts. **Accuracy:** ±6% of full scale. **Tachometer Ranges:** 0-1200, 1600, 4500, 6000 rpm; **Accuracy:** ±6% of full scale. **Dwell Meter Ranges:** 0-45°, 0-60°; **Accuracy:** ±6% of full scale. **Controls:** Function Switch; Tachometer HI-LO Switches; RPM Set Control; Dwell Set Control; Meter Adjustment Control. **Power Source:** self-contained 9-volt battery.



## Illuminated auto-marine Tachometer Kit mounts in any position . . . all-electronic operation

Stable electronic circuit  
compensates for normal voltage  
and temperature changes

**1795**

**Knight-Kit KG-340.** Deluxe high-sensitivity engine speed indicator works with any 4, 6 or 8-cylinder, 12-volt system, positive or negative ground. You save money by assembling it yourself—outperforms many tachometers costing much more. Packed with extras not expected at this low price. Range, 0-8000 rpm. Accuracy, ±2%. Deflection Angle, 240°. Shock and vibration-resistant. Two leads connect to engine key or light switch for dial illumination. Big 3½" dial with rotatable bezel is adjustable for best visibility. Black with chrome bezel. Supplied with all cables and full instructions. 22 A 3330 X, Shpg. wt., 2 lbs. \$17.95





**knight-kit**  
AUTOMOTIVE

Keep your  
car in top  
tune all  
year 'round

## Get better performance and better mileage with a Tuneup and Repair Outfit

### A Basic Tuneup and Repair Kit Outfit

Separately \$57.67. Big savings on combination outfit. Great for part-time mechanics and hobbyists. Consists of: Knight-Kit KG-303 Junior Auto Analyzer Kit; Knight-Kit KG-371 Timing Light Kit; Chilton's 1969 Auto Repair Manual; Assembled Compression Tester, Vacuum and Fuel Pump Tester, Remote Starter. Portable solid-state auto analyzer kit designed for fast, easy tuneups and simplified trouble-shooting. Chilton's 1969 Auto Repair Manual covers all U.S. cars, 1961-1969. Has detailed step-by-step instructions for every repair and adjustment. Vacuum and fuel pump tester checks for proper idle adjustment, leaky valves. Reads up to 30" vacuum, 7 lbs. pressure. Remote starter permits easy one-man testing.  
22 A 0081 L3X. Shpg. wt., 14 lbs. . . . . 49.50

### B Repair Outfit with Ignition System Kit

Separately \$87.17. This outfit includes everything needed for fast, easy, repairs and tuneups, plus ignition system kit for dramatically improved engine performance. Consists of: Knight-Kit KG-303 Junior Auto Analyzer Kit; Knight-Kit KG-371 Timing Light Kit; Knight-Kit KG-372 Capacitive-Discharge Ignition System Kit; Chilton's 1969 Auto Repair Manual; Assembled Compression Tester, Vacuum and Fuel Pump Tester, Remote Starter. Auto analyzer and timing light kits permit complete check of electrical system. Testers check gas lines, valves, pistons/cylinder head gasket. Capacitive-discharge ignition system offers up to 20% increased gas mileage, 3 to 10 times longer spark plug life.  
22 A 0080 L4X. Shpg. wt., 16½ lbs. . . . . 75.50

### C Outfit for extensive tests and repairs

Separately \$87.67. Excellent outfit for serious hobbyists, technicians. Offers more sophisticated trouble-shooting, extensive tests and analyses. Includes: Knight-Kit KG-375A Deluxe Auto Analyzer Kit; Knight-Kit KG-371 Timing Light Kit; Chilton's 1969 Auto Repair Manual; Assembled Compression Tester, Vacuum and Fuel Pump Tester, Remote Starter. Compression tester locates trouble in valves, piston rings, cylinder head gasket. Vacuum and fuel pump tester checks for proper idle adjustment, leaky valves, gas line leakage. Reads up to 30" vacuum, 7 lbs. pressure. Remote starter permits under-the-hood starting for easy one-man testing. Knight-Kits complete with all parts, solder, easy-to-follow instructions; other units assembled.  
22 A 0659 L6X. Shpg. wt., 22 lbs. . . . . 75.50

### D Our finest! 7-piece kit outfit

Separately \$117.17. Our finest automotive kit outfit—tuneup and repair instruments plus capacitive-discharge ignition system kit for top operating performance. Includes: Knight-Kit KG-375A Auto Analyzer Kit; Knight-Kit KG-371 Auto Timing Light Kit; Knight-Kit KG-372 Capacitive-Discharge Ignition System Kit; Chilton's 1969 Auto Repair Manual; Assembled Compression Tester, Vacuum and Fuel Pump Tester, Remote Starter. Auto analyzer and timing light kits permit complete electrical checks and adjustments. Testers check gas lines, valves, pistons, cylinder head gasket. Capacitive-discharge ignition system offers up to 20% increased gas mileage, 3 to 10 times longer spark plug life, reduced engine maintenance.  
22 A 0491 L7X. Shpg. wt., 26 lbs. . . . . 99.95

Save  
\$8.17

49<sup>50</sup>

\$5 monthly\*



Save  
\$11.67

75<sup>50</sup>

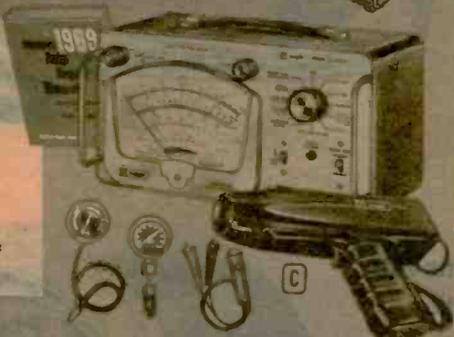
\$5 monthly\*



Save  
\$12.17

75<sup>50</sup>

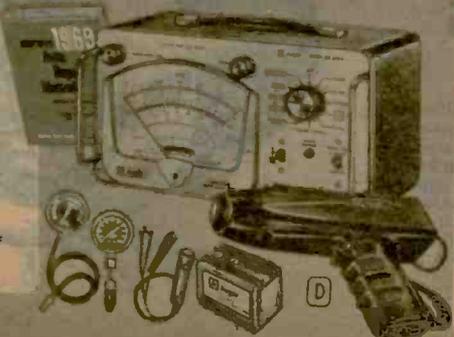
\$5 monthly\*



Save  
\$17.22

99<sup>95</sup>

\$5 monthly\*

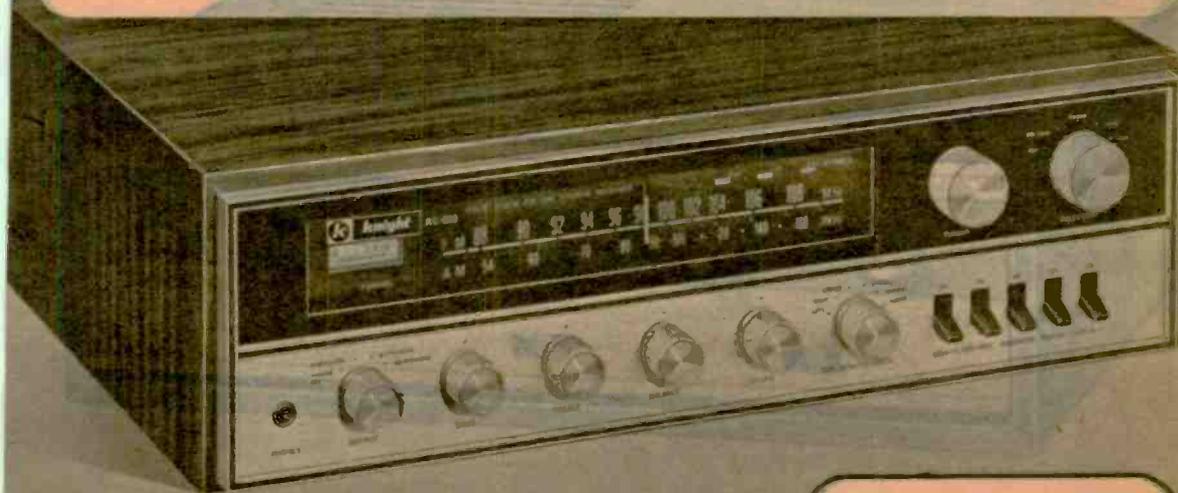


# Knight-Kit® 100-watt Stereo FM-AM Receiver features silicon-transistor circuit for finest hi-fi and new Modular Concept\* design for easier kit assembly

Field-effect-transistor in front-end for excellent sensitivity and image rejection . . . integrated circuits and complementary symmetry circuit for amazingly realistic sound . . . power enough to drive two pairs of stereo speakers

# 179<sup>95</sup>

With Wood Case



Model KG-988. Latest in the Knight-Kit line of fine stereo components. Features handsome styling, ultra-reliable silicon solid-state circuit, and a host of other deluxe features that assure magnificent stereo. Field-effect-transistor front-end for high sensitivity and image rejection. Integrated circuit in the preamplifier for minimum distortion. Complementary symmetry circuit (no audio transformers) for full power and response over the entire audio range. Stereo amplifier delivers powerful 100-watt output.

Between-station muting switch lets you tune a desired station from a background of silence rather than noise. Wide illuminated dial, flywheel tuning and signal-strength meter for effortless station selection. FM stereo, FM mono, and AM indicator lights. AFC switch locks in FM signals to prevent drift. Loudness switch for full response even at low power levels. Separate bass and treble, balance, volume controls. Scratch and rumble filters. Tape monitor switch for use with three-head tape equipment. Front-panel stereo headphone jack.

Outputs for two pairs of speakers—you can connect remote speaker systems in another room. Switch selects one or both sets of speakers. Built-in AM antenna permits pickup of strong local signals; has terminals for external antenna. Inputs for magnetic or ceramic phono, tape monitor, auxiliary. Walnut veneer wood case. 5 $\frac{3}{4}$  x 17 $\frac{3}{4}$  x 14". For 110-120 volts, 50-60 Hz AC. With solder, wire, step-by-step instructions. From Japan. 179.95

## SPECIFICATIONS

**AMPLIFIER.** Output at 4 Ohms: 100 watts  $\pm$  1 dB; 80 watts THP; 50 watts rms. Response:  $\pm$  1 dB, 20-30,000 Hz. Harmonic Distortion: 1%. Hum and Noise: Magnetic Phono, -56 dB; Auxiliary, -70 dB. Inputs: Magnetic phono, ceramic phono, tape monitor, auxiliary. Channel Separation: Magnetic Phono, 45 dB; Auxiliary, 50 dB. Output: 4 and 8 ohms, headphones, speakers (two pairs), recorder. **TUNER CIRCUIT, FM Section.** Sensitivity: 2  $\mu$ V. Separation: over 30 dB. Signal-to-Noise Ratio: 45 dB. Image Rejection: 90 dB. Antenna: Includes FM dipole, 300 ohms, balanced. **AM Section.** Image Rejection: 70 dB. Antenna: Built-in ferrite rod; terminals for external antenna. **GENERAL Controls:** Volume, Power On/Off, Bass, Treble, Balance, Selector (AM, FM Auto, Phono, Tape, Aux.), Speaker Selection (Main, Remote, Main and Remote, Off), Channel Selector/Tape Monitor, Loudness, Muting, AFC, High and Low Filters.

**\*MODULAR CONCEPT**  
Critical Circuits are assembled and tested **READY-TO-USE**



Knight-Kit's new concept gives you **FOUR ADVANTAGES:**

**Simplified Assembly.** Most parts are mounted, and soldered, on PC boards. Boards mount quickly and easily on chassis. All you do is solder interconnections.

**Better Performance and Dependability.** Critical PC board circuits are wired and aligned at the factory.

**Faster Assembly.** Pre-mounting of most parts eliminates tedious mechanical work. Greatly reduces assembly time.

**Satisfaction and Enjoyment.** You have the satisfaction of assembling the kit yourself, plus the dependability of a factory-assembled model.



**knight-kit**  
STEREO HI-FI

# Stereo Amplifier Kit with 60 watts power and all silicon transistors at a remarkable low price

Even at this low price you get flat response from 18-30,000 Hz for full enjoyment of your records you save by building it yourself . . . makes a fine beginning for a low-cost stereo hi-fi system

**69<sup>95</sup>**

\$5 monthly

see page 438

less case



- ✓ No audio transformers, you get full response and power bandwidth
- ✓ Uses silicon transistors exclusively for cleanest possible hi-fi sound
- ✓ Two printed circuit boards for easier and quicker assembly
- ✓ Handy front-panel stereo headphone jack, plus speaker muting switch
- ✓ Separate on-off switch, volume control setting need not be disturbed
- ✓ Two AC convenience outlets on back for plugging in tuner or record changer

**Knight-Kit KG-865.** Enjoy excellent hi-fi at low cost with this popular stereo amplifier kit. Powerful 60-watt output drives any speaker systems for impressive hi-fi sound! All silicon transistor circuit, usually found only in higher-priced amplifiers, assures super stability, high reliability, and smooth sound. Handsome design with wood-accented front panel. A perfect beginning for an amplifier-turntable system. Add the KG-796 FM tuner kit (facing page) to enjoy stereo FM, and AM, too.

Special Complementary Symmetry Circuit eliminates all driver and output transformers, providing exceptionally wide frequency response and power bandwidth. Delivers full rated power from 20-20,000 Hz. Frequency response is within 1 dB from 18-30,000 Hz for startlingly realistic sound from deep bass to crystal-clear highs. Boasts premium semiconductors, including special preamplifier transistors that slash internal noise.

An array of controls puts you in command of both stereo and monophonic functions. Even has a separate on-off switch so that volume control settings never need be disturbed. Ganged volume, bass and treble controls. Front-panel stereo headphone jack and speaker muting switch. Convenient selector switch for phono, tuner and auxiliary allows instant control of a variety of sound sources.

Pilot light indicates when the amplifier is on. Printed circuit boards for easier assembly. Attractive heavy-gauge extruded aluminum front panel with walnut-finish inserts. Inputs for magnetic cartridge, tuner and auxiliary. Two AC outlets on rear of chassis. Size, 3 1/2 x 13 x 10". With solder, step-by-step instructions. Takes optional case below.

- 22 A 3700 X. Shpg. wt., 10 lbs. . . . . 69.95
- 22 A 3713 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 12.95

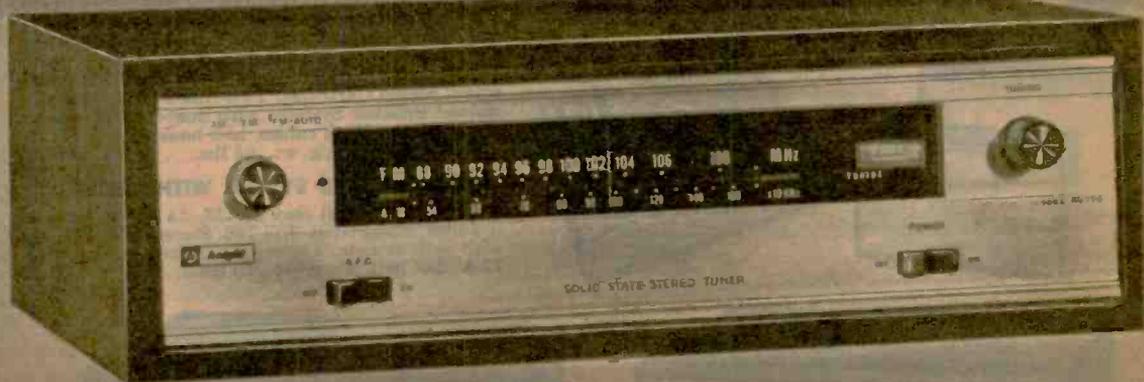
**SPECIFICATIONS**

Output at 4 Ohms: 60 watts ±1 dB, 30 watts per channel; 50 watts IHF, 34 watts sine wave. Response: ±1 dB, 18-30,000 Hz. Power Bandwidth: 20-20,000 Hz at 1% harmonic distortion. Hum and Noise: Tuner, Aux. inputs, -65 dB; Mag. Phono, -60 dB. Channel Separation: over 50 dB. Impedances: 4-16 ohms; plus stereo headphones. Damping Factor: 50. IM Distortion: under 1% at 60 Hz and 7000 Hz mixed 4:1 at rated power. Input Sensitivity: Mag. Phono, 5 mV; Tuner and Aux, 400 mV. Power Requirement: 110-130 volts, 60 Hz AC.

# Knight-Kit's Stereo FM-AM Tuner features silicon-transistor circuit for fine performance, plus new Modular Concept\* design for easier kit assembly

Sensitive FM circuit with TWO tuned RF stages for excellent hi-fi stereo pulling power even from weak or distant stations  
AM circuit has wide bandwidth for maximum fidelity . . . FM frequency response equals the finest stereo records or tapes

**69<sup>95</sup>** \$5 monthly  
see page 438



Knight-Kit KG-796. Even in Knight-Kit's budget priced stereo FM-AM tuner kit you get all silicon transistors, sensitive stereo FM reception that you would expect only from higher-priced tuners, plus quality AM. Pulls in excellent hi-fi FM stereo even from weak or distant stations. Silicon transistors assure super-stability and freedom from distortion. Assembly is simplified by the Modular Concept\* featuring wired printed circuits and aligned RF and IF stages.

FM circuit has two tuned RF stages to cut interference and assure high sensitivity. Wideband IF circuits and wideband detector permit a smooth frequency response from 30-15,000 Hz for FM stereo realism that equals or surpasses the finest stereo records or tapes. Even the AM circuit has a full 10-kHz IF bandwidth for maximum fidelity; special filter circuit screens out whistles on weak or distant stations. Signal-strength tuning meter and edge-lit tuning dial make station-finding easy. FM stereo indicator lights up and circuit automatically switches to stereo when a stereo program is tuned in.

Beautifully styled heavy-duty aluminum front panel, with walnut-finished inserts, for the appearance of an expensive factory-assembled tuner, and perfect matching with the KG-865 Stereo Amplifier kit. Effortless flywheel tuning. Size, 3 $\frac{3}{4}$ "x13x10". With indoor dipole FM antenna, solder, step-by-step instructions. Takes optional case below. For operation from 110-120 volts, 60 Hz AC.

22 A 3918 X. Shpg. wt., 7 lbs. . . . . \$69.95  
22 A 3713 X. Oiled Walnut Wood Case. Wt. 6 lbs. . . . . \$12.95

## SPECIFICATIONS

**FM CIRCUIT.** Usable IHF Sensitivity: 3 microvolts, Response:  $\pm$  1 dB, 30-15,000 Hz. Harmonic Distortion: less than 1.0%. Hum and Noise:  $\pm$  50 dB. Tuning Range: 88-108 MHz. Capture Ratio: 3 dB. IF Rejection: more than 80 dB. Image Rejection: greater than 50 dB. Output Voltage: 0.8 volt with 1000  $\mu$ V input signal, 100% modulated at 400 Hz. Channel Separation: 35 dB or more at 1 kHz. SCA Rejection: 35 dB or more. Antenna: 300-ohm input. **AM CIRCUIT.** Sensitivity: 50  $\mu$ V for 20 dB signal-to-noise ratio at 600 kHz. Bandwidth: 10 kHz at 25-dB-down points. Hum and Noise: 38 dB. Rejection; IF: nominal 35 dB at 1000 kHz; Image: 35 dB.

**\*MODULAR CONCEPT**  
Critical Circuits are  
assembled and tested  
**READY-TO-USE**



Knight-Kit's new concept gives you these **FOUR SPECIAL ADVANTAGES:**

**Simplified Assembly.** Most parts are mounted, and soldered, on PC boards. Boards mount quickly and easily on chassis. All you do is solder interconnections.

**Better Performance and Dependability.** Critical PC board circuits are wired and aligned at the factory.

**Faster Assembly Time.** Most small parts are already mounted and soldered in boards, reducing assembly time.

**Satisfaction and Enjoyment.** You have the satisfaction of assembling the kit yourself plus the dependability of a factory-assembled model.

# knight-kit

STEREO HI-FI

## Save up to \$77.15 . . Stereo Systems with Knight-Kit 60-watt amplifier kit

Budget System with Garrard 40B and Allied 8" speaker systems

Save \$43.25 **169<sup>50</sup>**

Separately, \$212.75. Allied's Knight-Kit KG-865 silicon solid-state 60-watt Stereo Amplifier Kit  $\pm 1$  dB, 18-30,000 Hz response for real-as-life stereo. Controls and inputs for nearly all sources. With walnut Case. Garrard 40B 4-speed Automatic Turntable has counter-balanced arm with stylus pressure adjustment. With Base. Empire 808E elliptical-stylus Stereo Cartridge. Two Allied 3007 three-way walnut Speaker Systems with dual-cone 8" woofer,  $3\frac{1}{2}$ " tweeter. With cables, hi-fi booklet. 22 A 0346 D7U. Shpg. wt., 65 lbs. . . . . 169.50

### ALTERNATE SYSTEM WITH TUNER

Separately, \$295.65. Save \$49.15. As above, but also includes Knight-Kit KG-796 Stereo FM-AM Kit with walnut case. Perfectly matched components. 22 A 0347 D9U. Shpg. wt., 75 lbs. . . . . 246.50

Big-value System with Garrard SL72B and Allied 12" speaker system kits

Save \$69.25 **259<sup>50</sup>**  
with case

Separately, \$328.75. Knight-Kit KG-865 60-watt Stereo Amplifier Kit has silicon transistors for superior stereo. With walnut Case. Garrard SL-72B Automatic Turntable has Synchro-Lab motor for perfect pitch at all 4 speeds. Has cuing, anti-skating, damped pickup arm. With Base. Pickering V15/ACE-3 Stereo Cartridge has elliptical stylus and "Dustomatic" brush. Two Allied 2330AK 3-way 12" walnut Speaker System Kits, 12" woofer, 8" midrange,  $3\frac{1}{2}$ " tweeter. Cables, booklet. 22 A 0344 D7Z. Shpg. wt., 101 lbs. . . . . 259.50

### ALTERNATE SYSTEM WITH TUNER

Separately, \$411.65. Save \$77.15. Above, but also with Knight-Kit KG-796 Stereo FM-AM Tuner Kit and Case. Pulls in stereocasts; two tuned RF stages on FM. 22 A 0345 D9U. Shpg. wt., 117 lbs. . . . . 334.50

Custom System with Garrard SL75B and two Allied 3-way 12" speakers

Save \$61.30 **249<sup>50</sup>**  
less case

Separately, \$310.80. Knight-Kit KG-865 60-watt Stereo Amplifier Kit has silicon transistor circuit. Takes optional case below. Garrard SL-75B 4-speed Automatic Turntable has cuing and pause controls. With Base. Pickering V15/AME-3 Stereo Cartridge has elliptical needle, brush. Two Allied 888HCA 3-way 12" speakers with 12" woofer cone, midrange cone, tweeter. With cables, hi-fi booklet. 22 A 0348 D6U. Shpg. wt., 52 lbs. . . . . 249.50  
22 A 3713 X. Case for KG-865, KG-796. 6 lbs. Ea. 12.95

### ALTERNATE SYSTEM WITH TUNER

Separately, \$380.75. Save \$66.25. Above system, plus silicon-transistor Knight-Kit KG-796 Stereo FM-AM Tuner Kit. Optional amplifier and tuner cases above. 22 A 0349 D7U. Shpg. wt., 62 lbs. . . . . 314.50

# Save up to \$91.70 on Stereo Systems with Knight-Kit KG-865 solid-state 60-watt stereo amplifier kit

Custom System with Garrard 40B  
and Allied 3-way 12" Speakers

Save \$30.30 + **169<sup>50</sup>**  
less case



Separately, \$199.80. A fine selection of carefully matched components for good stereo at a low price. Knight-Kit 60-watt Stereo Amplifier Kit has premium semiconductors including special preamp transistors that cut distortion to the vanishing point. Optional case below. Garrard 40B 4-speed Automatic Turntable includes Base. Empire 808E Stereo Cartridge. Two Allied 830BHC 12" Speakers have full-range sound. With cables, hi-fi booklet.  
22 A 0350 D6U. Shpg. wt., 47 lbs. . . . . 169.50  
22 A 3713 X. Walnut Wood Case. Wt., 6 lbs. . . . 12.95

### ALTERNATE SYSTEM WITH TUNER

Separately, \$269.75. Save \$40.35. Above, plus Knight-Kit KG-796 Stereo FM-AM Tuner Kit for everything in stereo hi-fi. Optional case above.  
22 A 0351 D7U. Shpg. wt., 57 lbs. . . . . 229.50

### Knight-Kit Stereo FM-AM Tuner Kit and Stereo Amplifier Kit Package



Save \$16.00 **149<sup>80</sup>**  
with cases

KG-865 Amplifier plus KG-796 Tuner  
. . . perfectly matched pair at one low price!



Prestige System with Garrard SL75B  
and Allied 3-way 12" speaker systems

Save \$78.80 **279<sup>50</sup>**  
with case

Separately, \$358.30. Prestige components at a moderate price. Knight-Kit KG-865 60-watt silicon-transistor Stereo Amplifier Kit includes walnut Case. Garrard SL-75B Automatic Turntable has Synchro-Lab motor for perfect 3-speed accuracy. With Base. Shure M32E elliptical-stylus Stereo Cartridge. Two Allied 3030B 3-way 12" walnut Speaker Systems have full 12" woofer, 6" midrange and 3 1/2" tweeter. With cables and hi-fi booklet.  
22 A 0352 D7Z. Shpg. wt., 90 lbs. . . . . 279.50

### ALTERNATE SYSTEM WITH TUNER

Separately, \$441.20. Save \$91.70. Above, but you also get Knight-Kit's KG-796 Stereo FM-AM Tuner Kit and walnut Case for a complete FM-phono system.  
22 A 0353 D9Z. Shpg. wt., 106 lbs. . . . . 349.50

Separately, \$165.80. Special combination offer of two kits that are perfectly matched for great performance and smart appearance. Knight-Kit KG-865 60-watt Stereo Amplifier has all silicon transistors, delivers full rated power from 18-30,000 Hz. Frequency response is flat from 10-15,000 Hz. Knight-Kit KG-796 Stereo FM-AM Tuner also has all silicon transistors for circuit stability, plus highest quality FM and AM reception. Tuner kit has "Modular Concept" design for easier kit assembly and performance comparable to factory assembled tuners costing much more. With all necessary cables, hi-fi booklet, and oiled walnut wood cases.  
22 A 0354 L4X. Shpg. wt., 32 lbs. . . . . 149.80

## knight-kit

STEREO  
HI-FI

## Knight-Kit/Koss deluxe Stereo Headphone Kit with separate volume control for each ear

# 14<sup>95</sup>

Knight-Kit KG-802. These easy-to-assemble headphones actually outperform many factory-assembled models that cost much more. They are made to our specifications by Koss, one of the leaders in stereo headphones. You'll be amazed by the wide-response hi-fi sound. These headphones bring you "closer" to the music than speakers, and give you total channel separation. Best of all, you can enjoy everything from Brubeck to Bach, at full volume, even at midnight—without bothering anyone.

Excellent for use when monitoring tapes or recording sessions. Or listen in during your jam sessions to hear the big sound as the audience hears it. Comfortable foam-cushioned earcups help seal out room resonance, false echo, and distracting noises so you can hear stereo music at its best. Durable lightweight plastic headband is fully adjustable to provide hours of relaxed listening pleasure with no feeling of fatigue.

Large 3½" dynamic elements deliver smooth frequency response from 20-16,000 Hz. Separate volume controls in each earpiece (for right and left channels) assure perfect balance. And you don't have to get out of your chair to change volume. Impedance of 4-16 ohms matches any stereo amplifier. With 8-ft. cord with standard ¼" phone plug. With solder and detailed step-by-step instructions.

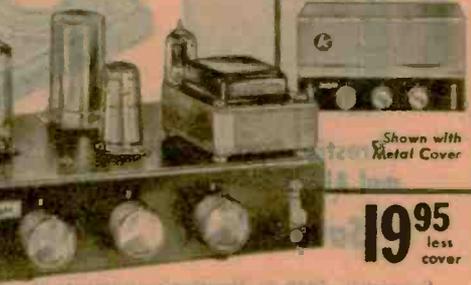
22 A 3380 X. Shpg. wt., 2½ lbs. . . . . 14.95

# 5<sup>95</sup>

### Low-cost Stereo Headphone Kit

Knight-Kit KG-801. Amazing low price for stereo headphones of this quality. This headphone kit reproduces stereo with good realism and response. Large earcushions seal out room noises, a real aid when listening to soft musical passages. Provides fully private listening; lets you have all the volume you want without disturbing others. Adjustable headband and padded earcushions for maximum comfort. So light in weight, you hardly know you're wearing them. Frequency response, 20-15,000 Hz. With 6-foot cord and standard ¼" phone plug that fits most stereo amplifiers and receivers. With all parts and step-by-step assembly instructions. From Japan.

22 A 3359 X. Shpg. wt., 1 lb. . . . . 5.95



Shown with  
Metal Cover

# 19<sup>95</sup>

less  
cover

### Monophonic hi-fi Amplifier Kit

Knight-Kit KM-15. A big value in a 14-watt utility amplifier kit that's ideal as the "heart" of an inexpensive music system, or as an "add on" second channel to convert your monophonic system to stereo. Push-pull output for smooth, clean response from 30-15,000 Hz. Built-in equalized pre-amp for magnetic phono cartridge. High-level input for tuner or ceramic phono cartridge. Controls: Volume, Bass, Treble. Switches: Phono-Tuner, On-Off. Output: 14 watts IHF music power. Output impedances: 4, 8, and 16 ohms. Jet black chassis. With instructions. Optional cover below. For 110-130 VAC. Japan.

22 A 3784 X. Shpg. wt., 8 lbs. . . . . 19.95  
22 A 3783 X. Metal Cover. Gray, chromed trim. 2 lbs. 4.50

# Guitar Amplifier Kit with assembled Speaker System

Professional-quality 90-watt  
solid-state Amplifier Kit plus  
two 12" Jensen Speakers

**149<sup>95</sup>** \$8 monthly  
see page 108

**Knight-Kit KG-387.** This professional outfit makes even the best groups sound bigger and better. Has 90-watt peak power amplifier with a full array of controls, plus factory assembled speaker system featuring two Jensen heavy-duty 12" speakers. Amplifier rides "piggyback" atop speaker enclosure and is connected with a convenient plug-in cord.

Dual channels have two inputs per channel. Normal channel is designed for lead rhythm or bass guitar, voice, sitar, etc. Second channel features special tonal effects—tremolo with separate intensity and rate controls, and reverb using the popular Hammond reverb unit. Foot switch jack on control panel for remote switching of tremolo and reverb.

Separate bass and treble controls boost or cut either channel independently. FET's in preamps for distortion-free music. All knobs, switches, inputs and outputs placed for fingertip control. Speaker, amplifier enclosures covered with gray tangle-tweed Tolex. Speaker, 26 1/2 x 22 1/2 x 10"; amplifier, 5 1/4 x 19 3/4 x 8 3/4". With pre-cut wire, solder, instructions. 115 VAC. 22 A 3328 Z. Shpg. wt., 60 lbs. . . . . 149.95

## SPECIFICATIONS

**Power Output:** 90 watts peak; 30 watts rms. **Bass Boost:** 9 dB min. at 80 Hz. **Treble Variation:** 20 dB at 10,000 Hz. **Reverb Depth:** Variable, 0-50%. **Tremolo Depth:** Variable, 0-75%. **Tremolo Speed:** Variable, 2-10 Hz. **Controls:** Normal channel—Volume, Treble, Bass; Second Channel—Volume, Treble, Bass, Tremolo Intensity, Tremolo Rate, Reverb Depth. **Signal/Noise:** 60 dB below 90 watts. **Input Sensitivity:** 40 mV for 90 watts. **Input Impedance:** 500,000 ohms. **Input Capacity:** 10 pF, max. **Semiconductors:** 10 transistors, 6 diodes (including 4 rectifiers).

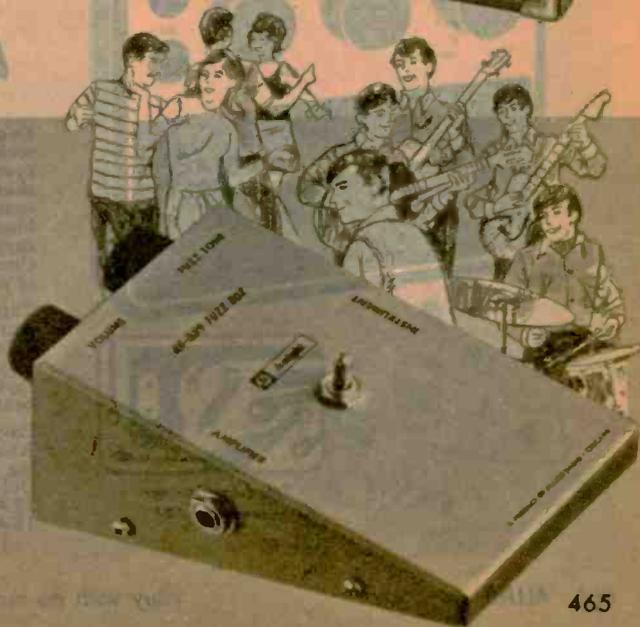


## Solid-state electronic Fuzz Box Kit for any electric guitar

It's the greatest . . .  
tunes your group on  
to today's young sound

**12<sup>95</sup>**

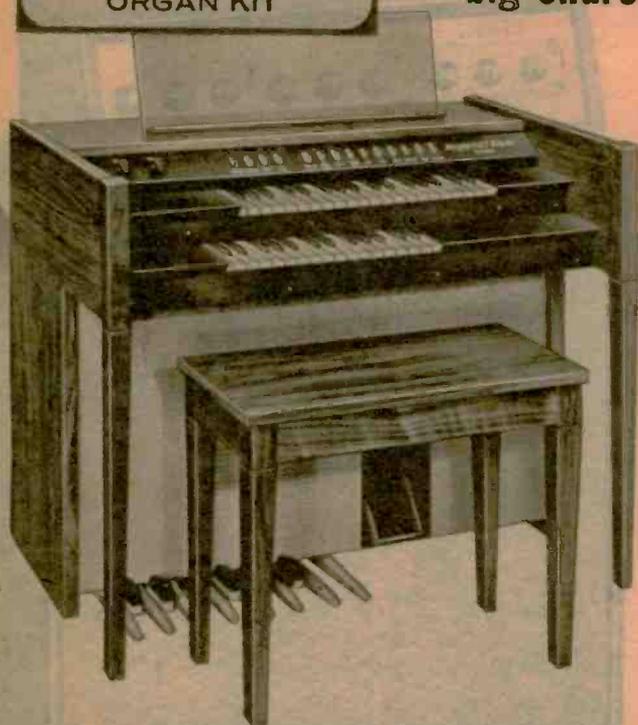
**Knight-Kit KG-389.** Turn on this electronic fuzz box, and your audiences too, for the wildest sound they ever heard. You can have a ball and save money doing it with this fuzz box kit. Metal construction to take the brutal beating of a typical jam session. Attack control varies sound effect. Volume control and foot switch. Uses one 9-V battery (order below). Standard 1/4" plug-in jacks for instrument and amplifier. With pre-cut wire, solder, instructions. 2 3/4 x 6 x 3 1/2". 22 A 3336 X. Shpg. wt., 4 lbs. . . . . 12.95  
18 A 5980. 9-V Battery, 6 oz. . . . . 2/59¢



# SCHOBER

## ELECTRONIC ORGAN KIT

# Electronic Spinet Organ Kit . . big-church sound at a low price



WITH **499<sup>50</sup>** \$21  
BENCH monthly†

Authentic pipe sound for wide tonal range . . 14 distinct voice selections

Electronic organ is small enough to fit any room, yet has a sound to rival many church organs. Assembly is surprisingly simple . . 98% of the wiring is on 14 printed circuit boards.

Keyboards: upper manual has 36 notes. Lower manual has 29 notes. Manuals overlap to produce total of 41 notes. Pedal clavier has 13 notes. Plays 14 distinct voices singly or in combination. Upper manual voices include: diapason, vox humana, string, french horn, oboe, tibia, cello, saxophone, tuba, trumpet. Lower manual: dulciana, diapason, flute, horn.

Solid-state amplifier rated 25 watts rms. Full-size 12" bass speaker, plus 6x9" treble speaker. Sanded, walnut-veneer console and bench ready to assemble (order oil finishing kit below). Solder is included (order soldering iron on facing page —no other is satisfactory). Size, 34x38x22 1/2". For 117 VAC. Truck or express from New York. Shpg. wt., 140 lbs.

22 A 3329 ZF. Complete Organ Kit. . . . . 499.50  
22 A 9588. Oil Finishing Kit. Wt., 2 lbs. . . . . 4.95  
22 A 9589. Demonstration Record. Wt., 8 oz. . . . . 50¢



# "Combo Sideman" electronic rhythm section by Knight-Kit®

**49<sup>95</sup>** \$5  
monthly†

- Electronic sound sensation
- Excellent accompaniment for solo guitarists, combos

Knight-Kit KG-392. Whatever you dig—hard rock or folk rock, you'll have the rhythm to back it. Combo Sideman provides 3 basic rhythm instrument sounds—bass drum, snare drum and cymbals, with amazing realism. These sounds are generated and can be mixed in various combinations to produce six precise, perfectly timed rhythms for practice or performance. Just plug the Combo Sideman into your amplifier to put the power of percussion behind you.

Tap the start/stop button and a continuous rhythm starts. The same button stops it. Select any one of 6 different rhythms, or change from one to another while playing. Tempo control knob speeds or slows the rhythm. Solo button provides single, repetitive drum beats. Exciting addition to rock combos.

Easy to build . . . assembly is greatly simplified by Knight-Kit's "Modular Concept" (see page 447) featuring pre-wired printed circuits. With 9-volt battery. Only 7 1/2 x 7 1/2 x 2". From Japan.  
22 A 3916 X. Shpg. wt., 3 lbs. . . . . 49.95  
18 A 5980. Extra battery. Wt., 6 oz. . . . . Pkg. of 2 for 59¢



\*Modular Concept  
.. see page 447

# Portable Dynabeat Kit gives you the sounds of live rhythm instruments

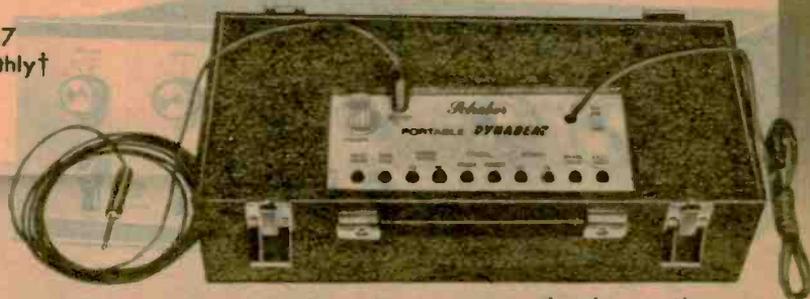
## SCHOBÉR

### MUSICAL KITS

aldmore  
zepsi

**139<sup>50</sup>** \$7  
monthly†

Complete rhythm section  
great for modern combos



- Big-beat sound of bass drum, snare drum, cymbal, others
- Single or combination sounds

Portable Dynabeat produces all the musical rhythm percussive sounds as realistically as a professional drummer behind a full array of rhythm instruments. With the Dynabeat you are the drummer! Fingertip-operated pushbuttons let you produce the sounds of 10 different rhythm instruments so authentically that listeners can't tell the difference. A booming bass drum; a tom-tom; two wood blocks (high pitched and low pitched); two cymbals (one stroked by brushes, the other a dramatic crash); two bongos (high and low pitched); the snare drum with beats or roll; castanets, with short burst or long roll. Play them singly or in

combinations of two or more, or all at the same time . . . any way you like and in any rhythm. Sensational for modern rock combos. Plugs into any amplifier. Has volume control, illuminated on-off switch. With instructions, amplifier connecting cable. (Order solder and soldering iron below, left—no other soldering equipment is satisfactory.) Size, 6 $\frac{3}{8}$ "x15 $\frac{1}{4}$ "x6 $\frac{3}{4}$ ". For 110-120 V, 50-60 Hz AC.

- 22 A 9571 X. Shpg. wt., 6 lbs. . . . . 139.50
- 22 A 9572 X. Assembled Dynabeat. Wt., 6 lbs. . . . . 169.50
- 22 A 3243. Demonstration Record. Wt., 8 oz. . . . . 50¢

# Portable Tunessmith Kit plays infinite variety of vibrato effects

**149<sup>50</sup>** \$8  
monthly†



The portable Tunessmith plays single-note melodies with vibrato effects approximating violin, cello, oboe, trumpet, organ, flute, saxophone. Play the keyboard with the right hand and operate the control board with the left. Turn on any one of the different voices, then turn the control knobs for the desired vibrato depth, volume and speed. Changes from one voice to another without breaking rhythm. An ideal combo instrument. The 32-pitch keyboard ranges from F below middle C to two octaves above middle C. Vibrato control is continuously variable from no vibrato (clear, unwavering tone) to the smoothest full vibrato

(real vibrato—a true variation in pitch, not simply a volume change). Tuning knob raises or lowers range of entire instrument about  $\frac{1}{2}$  tone. Vibrato speed; voice selection; volume control; vibrato control. Plugs into any guitar, public address or hi-fi amplifier. Includes 12-ft. connector cable and plug. Easy to assemble. (Order solder and iron below—no other is satisfactory.) 4 $\frac{3}{4}$ "x27 $\frac{1}{2}$ "x8 $\frac{3}{4}$ ". 117 VAC.

- 22 A 9569 X. Shpg. wt., 14 lbs. . . . . 149.50
- 22 A 9570 X. Assembled Tunessmith. Wt., 14 lbs. . . . . 189.50
- 22 A 3242. Demonstration Record. Wt., 8 oz. . . . . 50¢

## Ungar Soldering Iron

(Not illustrated.) Use this iron for assembling all kits on these two pages. Excellent for other printed circuit work, too. Ungar soldering iron includes #776 soldering handle with cord, 37 $\frac{1}{2}$ -watt #1235 thread-in element, 1" long #PL333 copper tiplet. For 110-120 volts, 60 Hz AC. 22 A 3166. Wt., 1 lb. . . . . 3.50

## Ersin Multiscore Solder

(Not illustrated.) Non-corrosive flux. 60% tin, 40% lead. 16 gauge wire. 1-lb. spool. 26 A 1730. Wt., 1 $\frac{3}{4}$  lbs. . . . . 3.34

# Easy-to-use electric organ Autotuner Kit

- Tunes electric organs quickly and accurately
  - No special skill required
- 48<sup>50</sup>** \$5  
monthly†

The Autotuner is a stroboscopic device that makes you an organ tuner—instantly! Natural "ear" or talent not required. For Baldwin, Thomas, Lowrey, Wurlitzer, Conn, most combo organs, others. Not necessary for KG-388 on facing page (tuning method is included). Assemble with solder and iron at left—no other is satisfactory. For 117 VAC.

- 22 A 9573 X. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 48.50
- 22 A 9574 X. Assembled. 4 $\frac{1}{2}$  lbs. . . . . 68.50



# DYNACO

## STEREO HI-FI KITS

# Perfectionists' dream! Silicon solid-state Stereo Preamp Kit

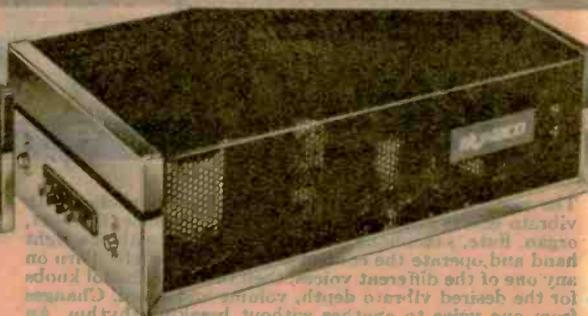


Kit form **89<sup>95</sup>** Assembled **129<sup>95</sup>**  
 \$5 monthly\* \$7 monthly\*

Model PAT-4, Dynaco's finest stereo preamplifier kit. It's the ideal mate for the "Stereo 120," "Stereo 80," or any other quality basic power amplifier. Superb solid-state design features premium silicon transistors for superior stability and low noise. Positive-action rocker switches control volume, tape monitor, power, rumble filter and dual modes. Four-position high filter. Has six-position program selector switch, balance control, and dual-concentric bass and treble tone controls. Inputs for high and low level phono cartridges, tape head, tuner, tape recorder and auxiliary. Front-panel input for guitar, microphone or recorder; front-panel output for recorder. Frequency Response:  $\pm 0.5$  dB, 10-100,000 Hz. Harmonic Distortion: 0.05% at 2 volts output. IM Distortion: 0.05% at 2 volts output. Mag. Phono Input Hum and Noise: 70 dB below 10  $\mu$ V input. Metal case with satin gold aluminum front panel. Size,  $4\frac{1}{2} \times 13\frac{1}{2} \times 8$ ". For 120/240 volts, 50-60 Hz AC. Wt., 11 lbs.

13 A 2235 X. Kit Form..... 89.95  
 13 A 2241 X. Factory-Assembled..... 129.95

- One of the best preamps ever made—a proven performer
- Silicon transistor circuit has 10-100,000Hz response
- Controls and inputs for all sources, including guitar
- Virtually unmeasurable distortion levels
- Includes smart metal case with gold color panel



### "Stereo 120" 120-watt Basic Amplifier

Kit form **159<sup>95</sup>** Factory assembled **199<sup>95</sup>**

Dynaco's best! Solid-state stereo amplifier has silicon transistors for thermal stability. Oversize power transformer and regulated power supply provide full output power over the entire audio frequency spectrum. Self-regulated bias and over load circuit protect audio transistors. Power: 60 watts rms per channel at 8 ohms. Transformerless audio circuit assures the widest possible response:  $\pm 0.5$  dB, 5-100,000 Hz. Harmonic Distortion: 0.5%. IM Distortion: less than 0.5%. Power Bandwidth: 5-50,000 Hz. Hum and Noise: 95 dB below rated output. Output Impedance: 4-16 ohms; Input: 1.5 volts into 100,000 ohms for rated output. Use with PAT-4, PAS-3X or any other good stereo preamplifier. Plated chassis with metal cover. Size,  $4 \times 13 \times 10\frac{1}{2}$ ". Instructions: 120/240 V, 50-60 Hz AC. Shpg. wt., 20 lbs.

13 A 2233 X. Kit Form..... 159.95  
 13 A 2234 U. Factory Assembled..... 199.95

### "Stereo 80" 80-watt Basic Amplifier

Kit form **119<sup>95</sup>** Factory assembled **159<sup>95</sup>**

Professional-quality solid-state stereo power amplifier with silicon transistors for high reliability and finest sound. Transformerless output stage assures ultra-wide response and clean, undistorted sound over the entire audio frequency spectrum. Factory wired etched circuits assure easier assembly. Output stage is fully protected against short-circuits or overloads. Power: 40 watts per channel rms at 8 ohms; Response:  $\pm 0.5$  dB, 15-15,000 Hz. Harmonic Distortion: 0.5%. IM Distortion: less than 0.1%. Power Bandwidth: 6-50,000 Hz IHF. Hum and Noise: 95 dB below rated output. Outputs: 4-16 ohms. Input: 1.3 volts into 100,000 ohms for rated output. Use with PAT-4, PAS-3X or any other quality stereo preamplifier. With metal cover. Size,  $4\frac{1}{2} \times 13\frac{1}{2} \times 9$ ". Instructions: 120/240 V, 50-60 Hz AC. Shpg. wt., 20 lbs.

13 A 2137 U. Kit Form..... 119.95  
 13 A 2091 U. Factory Assembled..... 159.95

# Silicon solid-state stereo Amplifier Kit with powerful 80-watt rms output

**DYNACO**  
STEREO HI-FI KITS

Kit form  
**169<sup>95</sup>**

\$9 monthly\*

Assembled  
**249<sup>95</sup>**

\$13 monthly\*



- Connoisseur-quality stereo at a moderate price
- Tape monitor facilities for 3-head tape decks
- Silicon transistors for finest hi-fi sound

Model SCA-80. Premium-quality solid-state stereo control amplifier kit delivers 80 watts of rms power, enough to drive two sets of low-efficiency speaker systems to concert hall volume. Silicon transistor circuit. Ganged bass, treble, balance and volume controls. Rocker switches control AC power, loudness compensation, tape monitor, noise filter, mono/stereo/blend mode and speaker system selector. Also has stereo headphone jack. Power: 40 watts rms per channel at 8 ohms. Response:  $\pm 0.5$  dB, 15-50,000 Hz. Power Bandwidth: 6-50,000 Hz. IM Distortion less than 0.1%. Hum and Noise: Phono -60 dB; Aux., -80 dB. Input Sensitivity: Phono, 3 mV; Aux., .13 V. With satin gold front panel and metal case  $4\frac{1}{4} \times 13\frac{1}{2} \times 10\frac{1}{2}$ . 120/240 V, 50-60 Hz AC. Wt., 16 lbs.

13 A 2136 U. Kit Form.....	169.95
13 A 2090 U. Factory Assembled.....	249.95

## Buy these Dynaco Units and get the quality of Separates at low cost



### Virtually distortionless Stereo Amplifier Kit is perfect for compact systems

Kit form  
**99<sup>95</sup>**

Features extremely wide power bandwidth and low distortion for great hi-fi

Model SCA-35. Powerful, moderately priced integrated amplifier features full inputs, outputs and controls for all music sources. Has selector switch for tape head, radio, phono, tape and spare. Also has ganged bass and treble controls, balance control, mono/stereo mode switch, loudness compensation, scratch filter and AC power switch. Provision for connecting monophonic center-channel speaker. Has hum, balance controls and 2 AC outlets at rear of chassis. Power Output, 17.5 watts rms per channel. Response:  $\pm 0.25$  dB, 20-20,000 Hz. IM and Harmonic Distortion: less than 1% at rated output. Hum and Noise: 80 dB down. Outputs: tape, 8-16 ohms.  $4\frac{1}{4} \times 13\frac{1}{2} \times 10\frac{1}{2}$ . With metal case. 120 V, 60 Hz AC. Wt., 21 lbs.

13 A 2590 U. Kit Form.....	99.95
13 A 2595 U. Factory Assembled.....	139.95

### Sensitive Stereo FM Tuner famous for easy assembly and clean sound

Kit form  
**99<sup>95</sup>**

Sophisticated design and non-critical alignment assure superb performance

Model FM-3. Broadcast quality at a budget price! Superb stereo FM tuner kit features cathode-coupled RF stage and slug-tuned coils for laboratory-accurate alignment without the use of special tools or equipment. Also has wideband discriminator and four progressive-limiting IF stages for virtually noise-free and distortion-free FM reception. Smooth planetary drive, "bar" type "Magic Eye" and stereo indicator light permit easy pinpoint tuning accuracy. Tune-switching multiplex provides 30 dB stereo FM separation. FM Sensitivity: 4  $\mu$ V IHF. Signal-to-Noise Ratio: 70 dB. IM Distortion: 0.5%. Response:  $\pm 5$  dB, 10-15,000 Hz. Output: 2 volts. With metal case. Size,  $4\frac{1}{4} \times 13 \times 8\frac{1}{2}$ . 120 V, 60 Hz AC. Shpg. wt., 13 lbs.

13 A 2588 X. Kit Form.....	99.95
13 A 2589 X. Factory Assembled.....	154.95

\*See page 438 for full Credit details

# DYNACO

STEREO HI-FI KITS

## Superb tube-type stereo and mono hi-fi components . . . easy to build

### 70-watt basic Stereo Amplifier Kit .. a favorite with perfectionists

Kit form **99<sup>95</sup>** Wide power bandwidth, low distortion and powerful output make this one of the finest basics available  
\$5 monthly\*

Dynaco's "Stereo 70" basic amplifier kit has ultra-wide response and plenty of power. Prewired etched circuits, detailed instructions and large pictorials make this an amazingly simple kit to build. Absolute stability and professional performance is assured by the use of conservatively operated, premium components. Power: 70 watts rms. IM Distortion: less than 1%. Response:  $\pm 0.5$  dB, 10-40,000 Hz. Hum and Noise:  $-90$  dB. Sensitivity: 1.3 V for rated output. Four EL34 output tubes. With cage. Perfect companion for PAS-3X preamp.  $6\frac{1}{2} \times 9\frac{1}{2} \times 13$ ". 120 VAC. Shpg. wt., 31 lbs.  
13 A 2237 U. Kit Form..... 99.95  
13 A 2238 U. Factory Assembled..... 129.95

### 35-watt Basic Amplifier Kit

"Stereo 35," similar to above. 35 watts rms. Response:  $\pm 1$  dB, 10-40,000 Hz. Harmonic Distortion: less than 1% at rated output. 8, 16 ohms. With cover. Perfect companion for PAS-3X preamp. Size,  $4 \times 5\frac{1}{2} \times 13$ ". 110-120 V 50-60 Hz. AC. Shpg. wt., 16 lbs.  
13 A 2593 X. Kit Form..... 59.95  
13 A 2594 X. Factory Assembled..... 79.95

### Full-feature Stereo Preamplifier Kit

Model PAS-3X. Most advanced preamp in the PAS Series features prewired etched critical circuits for easier kit assembly. DC on tube filaments prevents hum. Slide switches control AC power, tape monitor, scratch filter and loudness compensation. Rotary switches control mode and program selector for phono, tape head, tuner and tape recorder. Separate bass and treble tone controls for each channel. 5-tube circuit has wide response:  $\pm 0.5$  dB, 10-40,000 Hz. IM Distortion: less than .05% at 2 volts output. Virtually unmeasurable harmonic distortion. Satin gold front panel. With metal case.  $4 \times 13 \times 8$ ". For 120 VAC. Shpg. wt., 11 lbs.  
13 A 2242 X. Kit Form..... 69.95  
13 A 2236 X. Factory Assembled..... 109.95



Kit form **59<sup>95</sup>** \$5 monthly\*



Kit form **69<sup>95</sup>** \$5 monthly\*

Buy one amplifier for powerful mono hi-fi, buy a pair for super-stereo! Power ratings are both rms!

Kit form **59<sup>95</sup>**

### 40-watt basic Amplifier Kit

Model Mark IV. Deluxe monophonic amplifier has prewired etched circuits for easy assembly. Dyna Biaset maintains output tube bias regardless of tube aging. Response:  $\pm 0.5$  dB, 10-40,000 Hz. IM Distortion: below 1%. Hum and Noise:  $-90$  dB. Outputs: 4-16 ohms.  $7 \times 14 \times 5$ ". With cover. 120 VAC. Shpg. wt., 20 lbs.  
13 A 2265 U. Kit Form..... 59.95  
13 A 2266 U. Assembled..... 79.95



**79<sup>95</sup>**  
KH

### 60-watt basic Amplifier Kit

Model Mark III. Dynaco's most powerful mono amplifier has prewired etched circuits for easy assembly. Biaset output tube bias regulation maintains peak performance. Response:  $\pm 0.5$  dB, 10-60,000 Hz. Distortion: under 1%. Hum and Noise:  $-90$  dB. Outputs: 4-16 ohms.  $6\frac{3}{4} \times 9 \times 9$ ". With cover. 120 VAC. Shpg. wt., 28 lbs.  
13 A 2267 U. Kit Form..... 79.95  
13 A 2268 U. Assembled..... 99.95

**34<sup>95</sup>**  
KH

### Monophonic Preamplifier Kit

Model PAM-1. Premium-quality kit has 1% precision resistors and other professional components for flawless performance. Has facilities for all music sources including tape monitor. Response:  $\pm 0.5$  dB, 10-40,000 Hz. Distortion: .05%. With cover.  $2\frac{3}{4} \times 12 \times 6$ ". No power supply; takes power from Mark III or IV. Wt., 7 lbs.  
13 A 2246 X. Kit Form..... 34.95  
13 A 2247 X. Assembled..... 59.95

# Easy-to-assemble silicon-transistor Stereo Component Kits from Scott

boldmeasA

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## SCOTT KITS

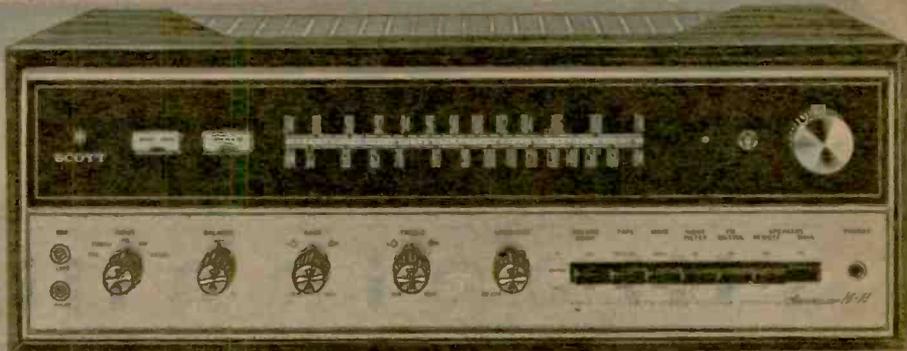
STEREO HI-FI

Widely acclaimed Scott stereo component kits feature ease of assembly, attractive styling and the latest solid-state devices including field-effect-transistors, integrated circuits and silicon transistors for magnificent stereo hi-fi

**135-watt  
Stereo FM-AM  
Receiver Kit  
with FETs, ICs**

**299<sup>95</sup>**  
less case

\$15 monthly\*



- Silver-plated field-effect-transistor front-end for amazing sensitivity
- Integrated circuits in IF strip for maximum FM stability
- Automatic stereo/mono FM switching
- Automatic Variable Bandwidth for the finest AM reception
- Silicon transistors for finest stereo sound and greater reliability
- Complete tape monitoring facilities
- Front-panel mike and headphone jacks
- Main/remote speaker selector switches

Model 1288. Superb kit receiver has silicon transistors for finest sound and greater reliability. Silver-plated field-effect-transistor front-end and integrated circuits in the IF strip assure sensitive, noise-free FM reception and outstanding stereo FM separation. Offers excellent AM too. Flywheel tuning, center channel and signal-strength tuning meters; and stereo indicator light simplify tuning. Has between-station quieting on FM and automatic stereo/mono FM switching.

Has pushbutton switches for loudness contour, tape monitor, scratch and rumble filters, and main and remote speakers. Front-panel jacks for mikes and stereo headphones. Power output at 4 ohms: 135 watts  $\pm 1$  dB; 100 watts IHF. 32 watts rms per channel at 8 ohms. Frequency response:  $\pm 1$  dB, 15-30,000 Hz. Sensitivity: 1.9  $\mu$ V. Harmonic Distortion: 0.8%. FM Separation: 40 dB. Size, 5 $\frac{1}{2}$ "x17 $\frac{1}{2}$ "x14 $\frac{1}{8}$ ". Takes optional case below. For 117 VAC.

13 A 2011 U. Shpg. wt., 26 lbs. . . . . 299.95  
13 A 2733 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. . . . . 26.95



**160-watt Stereo Amplifier Kit  
drives any speaker systems**

**149<sup>95</sup>**  
less case

Model LK-60B. Powerful high-performance stereo amplifier kit gives you fingertip command of 160 watts. Silicon-transistor transformerless output stage assures wide response and power bandwidth. Features tape monitor, loudness contour, scratch and rumble filters, main/remote speakers switch and stereo headphone jack. Power output at 4 ohms: 160 watts  $\pm 1$  dB; 120 watts IHF. 40 watts rms per channel at 8 ohms. Response:  $\pm 1$  dB, 15-30,000 Hz. Harmonic Distortion: 0.8%. Inputs: tape, magnetic phono; auxiliary and tape monitor. Outputs: 4-16 ohms, tape, stereo headphones. Black vinyl-finish chassis enclosure. 5 $\frac{1}{4}$ "x15 $\frac{1}{2}$ "x13 $\frac{1}{4}$ ". Optional case at right. 117 VAC. 13 A 2738 U. Shpg. wt., 21 lbs. . . . . 149.95



**Sensitive Stereo FM Tuner Kit  
has field-effect-transistors**

**149<sup>95</sup>**  
less case

Model LT-112B-1. Super-sensitive tuner kit features three-function meter to show signal strength and "O center," plus multipath signals (ghosts) to permit perfect antenna orientation for finest reception. Silver-plated front end, silicon-transistor IF strip and time-switching multiplex circuit are all factory-assembled. Stereo indicator light. Front-panel tape output. Sensitivity: 1.8  $\mu$ V. Harmonic Distortion: 0.8% at 100% modulation. Response: 50-15,000-Hz. 5 $\frac{1}{4}$ "x15 $\frac{1}{2}$ "x13 $\frac{1}{4}$ ". Takes optional case below. For operation from 110-120 volts, 60 Hz AC.

13 A 2035 U. Shpg. wt., 13 lbs. . . . . 149.95  
13 A 2040 X. Oiled Walnut Wood Case. For Models LK-60B and LT-112B-1. Shpg. wt., 6 lbs. . . . . 20.82

\*See page 438 for full Credit details

# EICO

## STEREO HI-FI KITS

# All-silicon solid-state 80-watt Stereo FM-AM Receiver Kit

Kit form

Assembled

Eico's best receiver! Features, and performance usually reserved for highest priced receiver kits . . . and it's easy to assemble!

# 189<sup>95</sup>

\$10 monthly\*

# 279<sup>95</sup>

\$14 monthly\*



- All silicon transistor circuit provides superb performance
- Four double-tuned IF stages for excellent FM selectivity
- Factory assembled front end, IF strip, multiplex circuit

**Model 3770.** Eico's finest solid-state stereo receiver gives you many fine features usually not found in receiver kits in its price class. All silicon-transistor circuit develops 80 watts of power to drive just about any speaker systems made. Advanced design FM circuit with time-switching multiplex on FM, five tuned circuits in the front end and four double-tuned IF stages delivers magnificent stereo FM reception. Also offers excellent AM. Pre-assembled front end, factory-aligned IF strip and factory-assembled multiplex circuit simplify kit assembly and assure top performance without using special alignment tools and equipment. Also has precision tuning meter, switchable AFC on FM and stereo indicator light for extra tuning convenience and accuracy.

**Power Output at 4 Ohms:** 80 watts  $\pm 1$  dB, 70 watts IHF, 20 watts rms per channel. Deluxe full-feature preamp has controls and facilities for every music source. Features tape monitor, loudness contour, mono/stereo mode switch, rumble and scratch filters, speaker selector switch and stereo headphone jack. Response:  $\pm 1.5$  dB, 8-60,000 Hz. FM Sensitivity: 2.4  $\mu$ V IHF. Harmonic Distortion: less than 0.75%. Hum and Noise: -70 dB. FM Separation: 40 dB. Inputs: magnetic phono, tape and auxiliary. Outputs: 4-16 ohms, tape and stereo headphones. With walnut-finish vinyl-clad metal case. Size, 4 $\frac{1}{2}$ x16x9". For 115 VAC.

13 A 2334 U. Kit Form. Shpg. wt., 15 lbs. . . . . 189.95  
13 A 2335 U. Factory Assembled. . . . . 279.95

- High and low frequency filters
- Time-switching FM multiplex circuit
- Five tuned circuits in FM front end
- Switchable AFC control on FM
- Speaker selector for use in multi-speaker systems



## Deluxe 80-watt Stereo FM Receiver Kit

**Model 3570.** Popular silicon-transistor receiver kit features factory assembled front end, multiplex circuit, and aligned IF strip for easy assembly and top performance without using special tools or equipment. Five tuned circuits in the RF section, time-switching multiplex and four double-tuned IFs assure outstanding stereo FM reception. Also has stereo indicator light and tuning meter. Preamp has tape monitor, loudness contour, mode switch, rumble and scratch filters, speaker selector, and stereo headphone jack. Response:  $\pm 0.5$  dB, 8-60,000 Hz. FM sensitivity: 2.4  $\mu$ V IHF. With walnut-finish vinyl-clad metal case. Size, 4 $\frac{1}{2}$ x16x9". For 115 VAC.

13 A 2352 U. Kit Form. Shpg. wt., 14 lbs. . . . . 169.95  
13 A 2343 U. Factory Assembled. . . . . 259.95

Kit form

Assembled

# 169<sup>95</sup>

\$9 monthly\*

# 259<sup>95</sup>

\$13 monthly\*

# Eico "Cortina" silicon solid-state 80-watt Stereo Amplifier Kit



Kit form      Assembled

**99<sup>95</sup>**

\$5 monthly\*

**139<sup>95</sup>**

\$7 monthly\*



- Silicon-transistor circuit for outstanding stereo hi-fi
- Preamp has high overload level for full dynamic range
- Transformerless output for response of 5-100,000 Hz

Model 3070. Eico's most popular solid-state stereo amplifier kit offers powerful performance and advanced circuit design at a budget-value price. Premium silicon-transistor transformerless output circuit develops a husky 80 watts of music power to drive two sets of speakers. Preamp has wide dynamic range to prevent clipping distortion due to overloads. Also has scratch and rumble filters, mode switch, loudness contour and speaker selector. Power Output at 4 Ohms: 80 watts ±1 dB, 70 watts IHF, 20 watts rms per channel. Response: ±1½ dB, 5-100,000 Hz. Harmonic Distortion: less than 0.8%. Hum and Noise: -72 dB. Inputs: magnetic phone, tuner, auxiliary. Outputs: 4-16 ohms, extension speakers, headphones, tape monitor. Walnut-finish vinyl-clad metal case. 3¼x12x8". 115 VAC.

13 A 2338 X. Kit Form. Shpg. wt., 8 lbs. . . . . 99.95  
13 A 2339 X. Factory Assembled. . . . . 139.95

## Eico's best silicon solid-state Stereo Amplifier Kit..190 watts

Kit form      Assembled

**149<sup>95</sup>**

\$9 monthly\*

**225<sup>00</sup>**

\$12 monthly\*



- Silicon transistors for pure sound and stable operation
- Preamp has array of controls for all music sources
- Tremendous 190-watt output magnificent stereo sound

Model 3150. Eico's finest solid-state stereo amplifier kit has all the features power and quality you'd ever want—and look at the remarkably low price! Boasts silicon transistors in a Complementary Symmetry circuit (no driver or output transformers) which develops a mighty 190 watts of music power. Transformerless output assures wide response, ±1.5 dB, 10-30,000 Hz. Full-feature preamp features tape monitor, scratch and rumble filters, mode switch, speaker selector switch, loudness contour and stereo headphone jack. Power Output at 4 Ohms: 190 watts ±1 dB, 150 watts IHF, 50 watts rms per channel. Harmonic Distortion: 0.1%. Hum and Noise: -75 dB. Two AC convenience outlets, one switched. With walnut-finish vinyl-clad metal case, 3½x15x7½". For 115 VAC.

13 A 2254 U. Kit Form. Shpg. wt., 17 lbs. . . . . 149.95  
13 A 2253 U. Factory Assembled. . . . . 225.00

## Compact solid-state Stereo FM Tuner Kit

Model 3200. One of Eico's most popular kits because it has many features and performance of more expensive tuner kits. Has solid-state circuit with silicon transistors. Easy to assemble; preassembled front end, multiplex circuit and IF strip assure optimum performance without the expense and trouble of alignment tools and other electronic gear. Features automatic stereo/mono FM switching, tuning meter, stereo indicator light and SCA filter. Has two RF stages with five tuned circuits and four double-tuned IFs. Sensitivity: 2.4 µV IHF. Perfect mate for either amplifier above. With walnut-finish vinyl-clad metal case. Size, 3¼x12x8" deep. For 115 VAC.

13 A 2340 X. Kit Form. Shpg. wt., 7 lbs. . . . . 99.95  
13 A 2341 X. Factory Assembled. . . . . 139.95



Kit form

**99<sup>95</sup>**

\$5 monthly\*

Assembled

**139<sup>95</sup>**

\$7 monthly\*

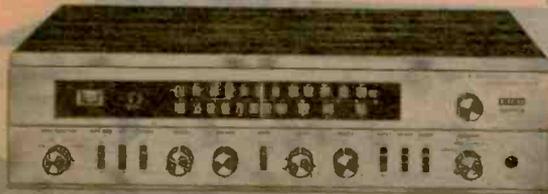
# Selected Kits

STEREO SYSTEMS

## Latest in easy-to-build Eico and Scott Kit stereo systems at big savings

Eico 80-watt stereo FM-AM-Phono System with deluxe three-way speaker systems

Save \$104.85 **349<sup>95</sup>**



*Separately, \$454.80.* Superb kit system for the critical hi-fi listener. Eico 3770 80-Watt Stereo FM-AM Receiver Kit with metal case. All silicon transistors, five tuned circuits, four double-tuned IF stages. Garrard SL65B 4-Speed Automatic Turntable with Base, Synchro-lab motor, damped cuing and anti-skating. Pickering XV-15/AME Stereo Cartridge with elliptical diamond stylus. Two Allied 3030B assembled 3-way Speaker Systems, 12" woofer, 6" midrange, 3 1/2" tweeter. Precision-tuned ducted port. 3/4" wood cabinet in walnut finish. Complete with instructions, hi-fi booklet, and connecting cables.  
13 A 0970 D5U. Shpg. wt., 82 lbs. . . . . 349.95

### ALTERNATE FM-PHONO SYSTEM

*Separately, \$404.80.* As above, but with Eico 3570 FM-only Receiver Kit; 2 Allied 3017 3-way 10" Speaker Systems. 13 A 0969 D5U. Shpg. wt., 73 lbs. . . . . 299.95



Eico 190-watt Stereo Phono System

Save \$85.30 **319<sup>50</sup>**

Scott 160-watt Stereo Phono System

Save \$86.80 **359<sup>00</sup>**

*Separately, \$404.80.* First-rate performance at a low price. Eico 3150 190-watt Stereo Amplifier Kit with metal Case. Boasts silicon transistors in a Complementary Symmetry circuit. Garrard SL65B 4-speed Automatic Turntable with Base, Synchro-lab motor, stylus pressure gauge and adjustable counterweight. Empire 888E Stereo Magnetic Cartridge with elliptical diamond stylus. Two Allied 3030B assembled 3-way Speaker Systems, with 12" woofer, 6" midrange, 3 1/2" tweeter. Cabinet has cane grille cloth, walnut finish. With instructions, cables, hi-fi booklet.  
13 A 0971 D5U. Shpg. wt., 91 lbs. . . . . 319.50

*Separately, \$445.80.* Exceptional power and performance are yours to command with this fine system. Scott LK-00B 160-watt Stereo Amplifier Kit. Takes optional case below. Silicon transistor transformerless output stage. Garrard SL72B Automatic Turntable with Base. Synchro-Lab motor, low-mass tubular aluminum pickup arm. Shure M93E Stereo Cartridge with elliptical diamond stylus. Two Allied 2330B assembled 3-way Speaker Systems. 12" woofer, 8" midrange, 3 1/2" tweeter. With instructions, cables, hi-fi booklet.  
13 A 0973 D5U. Shpg. wt., 106 lbs. . . . . 359.00  
13 A 2040 X. Wood Amplifier Case. Wt., 6 lbs. . . . . 20.82

### ALTERNATE 80-WATT SYSTEM

*Separately, \$324.80.* Above, with Eico 3070 80-watt Amplifier Kit; 2 Allied 3017 3-way 10" Speaker Systems. 13 A 0972 D5U. Shpg. wt., 67 lbs. . . . . 249.95

### ALTERNATE SCOTT KIT SYSTEM

*Separately, \$385.80.* Same stereo system as above, but with two Allied 3017 3-way 10" Speaker Systems. 13 A 0974 D5U. Shpg. wt., 81 lbs. . . . . 319.00

See your favorite music  
displayed in thrilling color!

**EICO KITS**  
COLOR ORGANS



Kit form  
**49<sup>95</sup>**

**3-channel Color Organ**

Model 3440. Watch reds, blues and greens dance to your favorite beat. Color and intensity change with frequency and volume of music. Connects in seconds to speaker leads of any hi-fi or guitar amplifier. Volume control assures full performance with any power input level. Has no effect on sound quality. Solid-state circuit—not mechanical. Shatterproof 9x14" screen. Walnut grain wood case. 10x15x6". For 115 V, 60 Hz AC. Wt., 12 lbs.  
13 A 2255 U. Kit..... 49.95  
13 A 2256 U. Assembled... 79.95



Kit form  
**64<sup>95</sup>**

**4-channel Color Organ**

Model 3445. Add true synchronization of color and sound, plus 4-channel operating capability to your hi-fi or guitar amp for spectacular color effects. Solid-state color organ responds to amp output to change light color and brightness as the frequency and volume of the music varies. Built-in volume control lets you adjust for varying input power levels. Uses low-voltage high-intensity lamps. 24x12" screen. Walnut case. 24x12x10". Wt., 18 lbs.  
13 A 2248 U. Kit..... 64.95  
13 A 2249 U. Assembled... 99.95

Four-color operation for spectacular light display

Giant 30x15" shatterproof screen

Kit form  
**79<sup>95</sup>**



**Giant 4-channel Color Organ**

Model 3450. For the armchair audiophile or professional musician. See every tone, every note, every combination of instrument create its own vivid pattern. All-electronic 4-channel operation and giant 30x15" shatterproof plastic screen. Unit can be connected directly to hi-fi, tape recorder, or guitar amp without loss in sound quality or volume. Connects in seconds. Solid-state circuitry throughout. Walnut case, 30x.5x11". Shpg. wt., 22 lbs.  
13 A 2262 U. Kit..... 79.95  
13 A 2263 U. Assembled... 109.95



**39<sup>95</sup>**  
Kb

**Strobe with automatic control**

Model 3475. Newest sensation in audio lighting effects. Strobe flashes in rhythm to music; adjusts rate automatically. Sensitivity control permits use with low volume level. Connects to any audio line. Teaz vinyl clad metal case. 6 1/2 x 9 3/4 x 5 5/8". With spun aluminum reflector, plug-in xenon bulb. Wt., 3 lbs.  
13 A 2271. Kit..... 39.95  
13 A 2300. Wired..... 59.95  
13 A 2272. Model 3470. Similar to above, but manual flash rate adjustment. Wt., 3 lbs. Kit..... 24.95  
13 A 2301. Wired..... 39.95



**49<sup>95</sup>**  
Kb

**Sound/Color Translator**

Model 3465. Solid-state three-channel sound/color translator converts your music system into three primary frequencies. Hook up any arrangement of colored lights up to 1200 watts (400 watts per channel). Handsome teak vinyl-clad metal cabinet, 6 1/2 x 9 3/4 x 5 5/8". Shpg. wt., 7 lbs.  
13 A 2295. Kit..... 49.95  
13 A 2302. Wired..... 69.95  
13 A 2295. Model 3460. Similar to above, but single channel, lights up to 500 watts. Wt., 3 lbs..... 24.95  
13 A 2303. Wired..... 39.95

**Display/Receiver**

**29<sup>95</sup>**  
Kb

Keeps rhythm with music or lights randomly



Light display/receiver can be used with Model 3460 translator at left to flash in rhythm to music, or used by itself for random display of flashing lights. Just lower the house lights and turn it on to produce an interesting and unusual lighting effect in any room in your house. Walnut cabinet, 24x12x10". 115 VAC. Shpg. wt., 3 lbs.  
13 A 2297 X. Kit..... 29.95

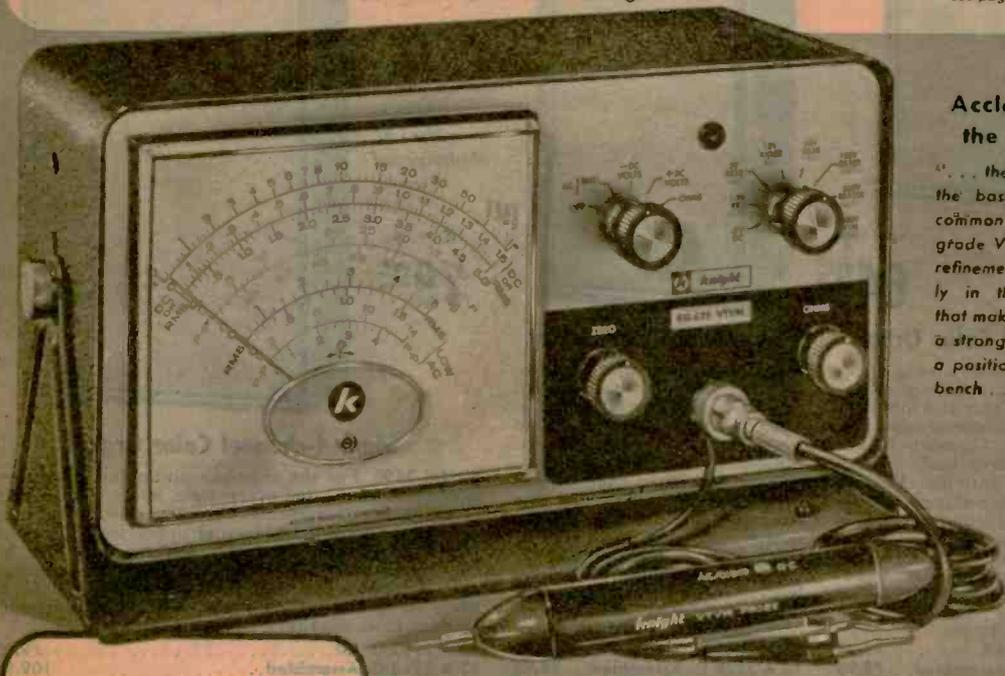
Save money and have fun building your own color organ

**knight-kit**  
TEST  
EQUIPMENT

**Knight-Kit's finest VTVM Kit**  
... 6" scale plus 1/2-volt DC range  
for accurate transistor servicing

Single, switchable AC-ohms/DC probe permits quick, easy multiple measurements... precision 1% resistors are used as multipliers for outstanding accuracy... big 6" meter has 10 color-correlated scales and fluorescent knife-edge pointer for effortless readings

**39<sup>95</sup>** \$5 monthly  
see page 438



**Acclaimed by  
the experts!**

"... the extras. While the basic circuits are common to all service grade VTVM's, it's the refinements, particularly in the DC circuit that makes the KG-625 a strong contender for a position on your test bench..."

RADIO  
ELECTRONICS

- ✓ AC frequency response is useable to 5 MHz
- ✓ Pre-aged bridge tube with matched triode sections
- ✓ Provides direct readings of AC volts (both p-p and rms)
- ✓ Zero-center scale for discriminator alignment
- ✓ Separately calibrated scales for 1.5 and 5 V AC rms
- ✓ Separately calibrated scales for 4.2 and 14 V AC p-p
- ✓ 11-megohm DC input resistance for minimum circuit loading
- ✓ Gimbal-type mounting bracket for test bench versatility

**Knight-Kit KG-625.** Deluxe VTVM kit with all the convenience and features necessary for proper servicing of electronic equipment. Features 1/2-volt full scale DC range for accurate transistor work; single, switchable AC-ohms/DC test probe for quick, easy multiple measurements; well-designed layout with inverted chassis for simplified assembly.

Has push-pull balanced bridge circuit for maximum accuracy and meter protection. Premium, pre-aged bridge tube with matched triode section assures stable calibration adjustments, 6" meter with sensitive 200- $\mu$ A movement. Fluorescent knife-edge pointer eliminates parallax. 10 color-correlated scales. Also has: DC polarity reversing switch; zero-center scale for discriminator alignment; pilot light; low-leakage switches; special power transformer for line isolation. 11-megohm DC input resistance.

Calibration controls at back of panel. 7 $\frac{3}{4}$ " x 12 $\frac{5}{16}$ " x 5 $\frac{1}{4}$ ". With gimbal mounting bracket. AC-ohms/DC probe; battery; 115 VAC. Optional probes below.  
22 A 3975 X. Japan; Shpg. wt., 9 lbs. ... 39.95  
22 A 3130 X. Assembled High-Voltage Probe. To 25,000 V. Wt., 1 lb. ... 6.95  
22 A 3131 X. Assembled High-Frequency Probe. To 250 MHz. Wt., 1 lb. ... 6.95

**SPECIFICATIONS**

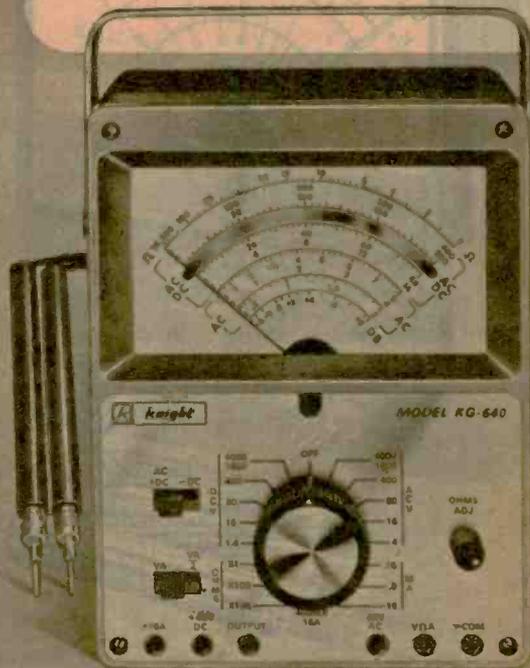
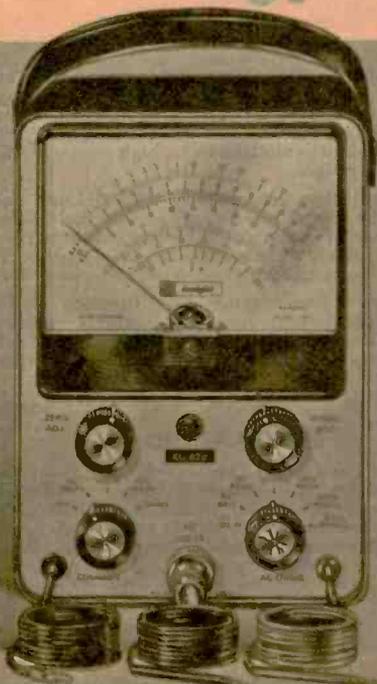
DC Section, Range: 0-0.5-1.5-5-15-50-150-500-1500 volts, full scale. With optional HV probe (to 25,000 V. Accuracy:  $\pm 3\%$  of full scale. Input Resistance: 11 meg (1 meg in probe) to 1500 V, AC Section, Ranges (rms): 0-1.5-5-15-50-150-500-1500 volts full scale. (p-p): 0-4.2-14-42-140-420-1400-4200 volts full scale. Accuracy:  $\pm 5\%$  of full scale. Response:  $\pm 1$  dB, 30 Hz to 3 MHz,  $\pm 3$  dB, 30 Hz to 5 MHz. With optional RF probe to 250 MHz. Ohmmeter, Ranges: 0-1000-10K-100K ohms, 0-1-10-100-1000 megs. Battery, 1 1/2-volt size "C." Tube Complement, Meter Bridge: 12AU7A, Full-Wave Rectifier: 6AL5. Power Supply: transformer, silicon diode rectifier.

Low-cost 4½" VTVM Kit  
 .. there's no better value  
 in a general-purpose tester

**29<sup>95</sup>**  
 \$5 monthly  
 see page 438

Our finest VOM Kit has 57  
 total ranges plus  
 taut-band meter movement

**39<sup>95</sup>**  
 \$5 monthly  
 see page 438



**4 pocket-sized VOM kit**

**Knight-Kit KG-620.** Outstanding value for any service shop, lab bench or hobby corner. Provides entirely electronic, direct-reading measurements of AC volts (both p-p and rms), DC volts, resistance and decibels on a highly legible, two-color 4½" meter scale.

Has push-pull balanced bridge circuit; DC polarity reversing switch; 11-megohm DC input resistance. Uses precision 1% resistors for high accuracy. 200-µA meter movement; direct-reading decibel scale; 1.5-volt full scale DC range. Single zero-adjust control for all ranges and functions. Zero-center scale for discriminator alignment. Special power transformer for line isolation.

Steel case, 7½x5½x4¼". With three test leads, battery, instructions. Optional probes below, 115 VAC. Japan.

- 22 A 3911 X. Shpg. wt., 7 lbs. .... 29.95
- 22 A 3130 X. Assembled HV Probe. To 25,000 V. 1 lb. .... 6.95
- 22 A 3131 X. Assembled RF Probe. To 250 MHz. 1 lb. .... 6.95

**SPECIFICATIONS**

**Ranges:** DC Volts: 0-1.5-5-15-50-150-500-1500 (with optional HV probe to 25,000 V). Accuracy: ±3%. AC Volts (rms): 0-1.5-5-15-50-150-500-1500. (p-p): 0-4.2-14-42-140-420-1400-4200. Accuracy: ±5%. Resistance: 0-1000-10K-100K ohms, 0-1-10-100-1000 megs. Center Scales: 10, 100, 1000, 10K, 100K ohms, 1 and 10 megs. Decibels: -10 to +65 in 7 ranges. AC Response: ±1 dB, 30 Hz to 3 MHz; ±3 dB, 30 Hz to 5 MHz (to 250 MHz with optional RF probe). Tube Complement: Bridge, 12AU7A; Rectifier, 6AL5

**Knight-Kit KG-640.** This 20,000 ohms/volt VOM kit offers exacting performance and dependability required by technicians, servicemen and serious experimenters. Accurately measures AC, DC and output volts, current, ohms and dB. 0.8 VDC range for precise transistor work.

Sensitive, diode-protected 50-µA taut-band meter movement assures repeatability of readings; 57 total ranges covered by a single range/function switch and range doubler. Easy-to-read 4½" meter with mirrored scale; AC response extends to beyond 200 kHz for precise AC measurements. Has DC polarity reversing switch, ohms adjust. Uses 1% precision carbon film resistors as multipliers.

DC sensitivity: 20,000 ohms/volt or 10,000 ohms/volt (function of scale multiplier switch); Metal case, 6¾x5½x3¾". With one "C" battery, 4 penlight batteries, test leads, step-by-step instructions. From Japan.

- 22 A 3954 X. Shpg. wt., 5 lbs. .... 39.95

**SPECIFICATIONS**

**Ranges:** AC Volts: 0-2-4-8-16-40-80-200-400-800-1600-2000-4000. DC Volts: 0-8-1.6-8-16-40-80-200-400-800-1600-2000-4000. Output Volts: 0-2-4-8-16-40-80-200-400. Resistance: 0-1000-10K ohms, 0-10 megs. DC Current: 0-80-160-400-800 µA., 8-16-200-400 mA, 8-16 Amps. Decibels: -12 to +74 on 12 ranges. Accuracy: DC, ±3% of full scale reading; AC, ±5% of full scale reading (to 1600 V). AC Frequency Response: 200 Hz to beyond 200 kHz. Test Leads: 48" long, one red, one black.

# knight-kit

TEST EQUIPMENT



Low-cost full-size VOM Kit  
with easy-reading 4½" scale  
.. fine value for the hobbyist

16<sup>95</sup>

**Knight-Kit KG-645A.** This 5000-ohms/volt VOM kit is priced right, sized right for the hobbyists' and experimenters' workbench. Boasts full meter movement protection on all voltage, current and decibel ranges. Precision 1% resistors are used as multipliers for high accuracy. Has 38 total measuring ranges.

Provides accurate measurements of AC, DC and output volts, AC and DC current, resistance and decibels. Easy-to-read 4½" two-color meter has 8 clearly calibrated scales. Helps you to quickly evaluate condition of radios, TV's, appliances, audio equipment and other electronic devices.

Has ohms/zero adjust; range and function switches. Specially designed for easy, simplified assembly—takes only a few hours. Rugged case, 6½"x5½"x2¾". With battery, test leads, carrying strap, instruction manual with informative "How to Use" section. From Japan.  
22 A 3914 X. Shpg. wt., 3-lbs. . . . . 16.95

### SPECIFICATIONS

**Ranges, AC, DC and Output Volts (7 Ranges Each):** 0-1-5-10-50-100-500-5000. **Resistance (3 Ranges):** 0-5000-50K-500K ohms. **Center Scales:** 50, 500 and 5000 ohms. **AC, DC Current (4 Ranges Each):** 0-1-10-100 mA, 0-1 A. **Decibels:** -20 to +76 in 6 ranges. **AC and DC Sensitivity:** 5000 ohms/volt. **Accuracy:** AC, 4% of value; DC, 3% of value; ohms 3% full scale. **Meter Movement Sensitivity:** 80 µA for full scale deflection. **Battery:** 1½-V size "C". **Test Leads Supplied:** 48" long, one red, one black.

20,000 ohms-per-volt DC sensitivity

Protected 40-µA meter movement

Recessed range/function switch

22.95

11<sup>95</sup>



Pocket-sized VOM Kit  
.. full 20,000 ohms/volt

**Knight-Kit KG-646.** Here's a pocket VOM kit with many full-size VOM features. Ideal for signal tracing, alignment, voltage, current and resistance measurements in all types of electronic devices. Easy-to-read two color scale with red knife-edge pointer. Sensitive 40-µA meter movement with diode and ceramic capacitor protection. Recessed range/function switch for convenient operation. Reads AC, DC volts; DC current; resistance; decibels; L (Self-Inductance); and C (Static Capacitance). Precision circuit design for excellent operating stability. Top-quality shunts and multipliers provide ±2% full scale accuracy. 5x3½"x1¾". With 1.5-volt penlight battery, test leads, detailed step-by-step instructions for easy assembly. From Japan.  
22 A 3907 X. Shpg. wt., 1 lb. . . . . 11.95

### SPECIFICATIONS

**Ranges, DC Volts:** 0-2.5-10-50-250-1000. **AC Volts:** 0-10-50-250-500-1000. **DC mA:** 0-.05-25-250. **Resistance:** 0-10K-100K ohms, 0-1 meg. **Decibels (2 Scales):** -20 to +20; +20 to +36. **L (Self-Inductance):** 0-5 kH. **C (Static Capacitance):** 0.02 µF to 250 pF. **DC Sensitivity:** 20,000 ohms/volt. **AC Sensitivity:** 10,000 ohms/volt. **Accuracy:** AC, DC, ±2% full scale. **Meter Sensitivity:** 40 µA for full scale deflection. **Internal Resistance:** 2200 ohms (±5%). **Mez Protection Circuit:** diode, capacitor.

# Portable Tube Tester Kit . . updated to check over 2500 tube types

**44<sup>95</sup>**  
\$5 monthly  
see page 438



Lightweight and  
portable . . great  
for use in home  
or service shop . .  
newest features  
at lowest cost



**Knight-Kit KG-600C.** Improved version of our popular KG-600B emission-type tube tester kit updated to meet today's complex radio and TV servicing needs. Accurately checks over 2500 tube types, plus many CRT's (with optional harness below), and pilot lights to 117 V. Features illuminated roll-chart for fast, easy setup; easy-action universal-type selector switches; easy-to-read 3-color 4 1/2" meter; sixteen different switch-selected filament voltages from 0.63 to 117 volts.

Thoroughly checks 2, 4, 5, 6 and 7-pin tube types; octals; loctals; 7, 9, and 10-pin miniatures; 9-pin magnovals; 9-pin novars; 10-pin decals; 12-pin compactrons; pilot lamps. Has GOOD-REPLACE emission scale; GOOD-BAD gas test scale; 0-100 numerical scale. Neon indicator shows filament continuity and leakage or shorts between tube elements. Special power rheostat compensates for variations in line or load voltages.

Illuminated roll chart has smooth thumbwheel drive for fast location of proper tube data. Gray fabrikoid-covered portable case, 6 1/2 x 14 1/2 x 10 1/2", latching cover. CRT harness, adapters below. 115 VAC. Japan.  
 22 A 3212 X. Shpg. wt., 13 lbs. . . . . 44.95  
 22 A 3141 X. TV Picture Tube Harness. Black-and-white 90° tubes, 8 oz. . . . 4.50  
 22 A 3271 X. 110° Adapters. With harness above, for 110° tubes. 3 oz. . . . 4.50

### SPECIFICATIONS

**Type of Tester:** cathode conductance (emission). **Tube Condition Indicator:** 3-color 4 1/2" meter with GOOD-REPLACE emission scale; GOOD-BAD gas test scale; 0-100 numerical scale. **Individual Element Tests:** shorts, opens and continuity indicated by neon lamp. **Filament Voltages Available:** 0.63, 1.4, 2.0, 2.5, 3.0, 4.2, 5.0, 6.3, 7.5, 12.6, 19.6, 25, 32, 50, 70, and 117 volts. **Line and Load Voltage Adjustments:** power rheostat located in primary of power transformer compensates for voltage variations. **Individual Tube Settings:** read from illuminated, gear-driven roll chart with thumbwheel drive. **Power Required:** 110-130 V, 50-60 Hz AC.

- ✓ Improved version tests the latest types of tubes
- ✓ Checks emission, continuity, shorts, open elements
- ✓ Positive-action selector switches for easy setups
- ✓ 16 switch-selected filament voltages from 0.63-117 V
- ✓ Illuminated roll-chart with thumbwheel drive finds tube-types fast
- ✓ Full-view 4 1/2" meter has GOOD-REPLACE, GOOD-BAD, 0-100 scales
- ✓ Tests most TV picture tubes with optional adapter

### Replacement Tube Data Roll Charts

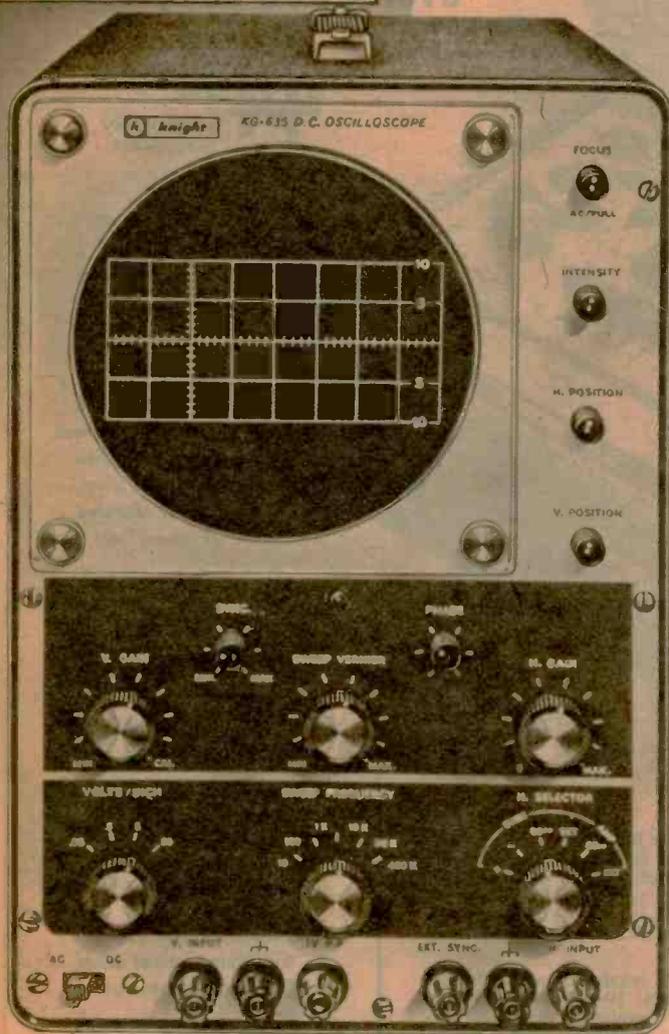
Updated replacement roll charts for all 600 series tube checkers purchased prior to Aug. 1, 1969 are available singly or on subscription basis with a chart plus two supplements per year. Prices: \$3.50 per chart; \$5.00 for chart plus supplements. Write to: COELECTRONICS Tube Data Service, 1744 Rockaway Ave., Hewlett L. I., New York 11557.



# 5" Oscilloscope Kit with DC to 5.2 MHz response for color TV work

**119<sup>95</sup>** \$6 monthly  
see page 438

Get five linear Time Base Ranges even at this low price, not the usual three or four



Knight-Kit KG-635, Wideband DC coupled scope for nearly every service requirement... easily meets the critical demands of color TV servicing. Excellent linearity and lock-in characteristics assure stable waveform presentations even at upper frequency limits. Dynamic sync limiter for trace stability; auto astigmatism correction for uniform focus; 1650-volt accelerating potential for really bright traces.

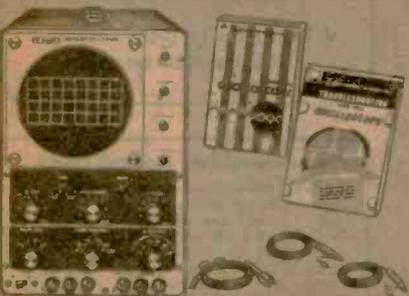
Five linear time base ranges from 10 Hz to 400 kHz. Series/shunt peaking and DC coupling for optimum wideband response and low phase shift. High vertical sensitivity permits accurate resistor work. Vertical attenuator is marked directly in volts/inch. Graticule scale has X and Y linear grids for easy voltage measurements. Regulated power supply; tapped primary transformer; front panel voltage calibrator output; easily accessible calibration controls.

Retrace blanking; push-pull on-off focus control. 5-way binding posts, 3/4" spacing. Metal case, 11 1/8 x 7 1/2 x 15 1/8". Probes below. For 110-130 V, 50-60 Hz AC, Japan.  
 22 A 3979 Z. Shpg. wt., 29 lbs. .... 119.95  
 22 A 3152 X. Direct Test Leads. 1 lb. .... 1.95  
 22 A 3150 X. 12-pF Low-Capacity Probe. 8 oz. 6.95  
 22 A 3151 X. 250-MHz Demod. Probe. 8 oz. .... 6.95

## SPECIFICATIONS

Vertical. Sensitivity: 17 mV rms/inch (7 mV rms/cm). Response:  $\pm 1.5$  dB, DC to 5.2 MHz. Color Bandpass:  $\pm 0.5$  dB. Overshoot: less than 6%. Rise Time: 70 nsec. Impedance: 3 meg shunted by 35 pF. Horizontal. Sensitivity: 0.6 V rms/inch. Response:  $\pm 1.5$  dB, 1 Hz to 400 kHz. Inputs: internal time base, 60 Hz phase controlled, external. Time Base Ranges: 10-100 Hz; 100-1000 Hz, 1-10 kHz, 10-90 kHz, 90-400 kHz. Impedance: 7 meg shunted by 25 pF. Sync: internal + and -, 60 Hz, ext. Z-Axis Input: 10 V neg. for beam cutoff. Impedance: 1 meg. Calibrator: 100 mV p-p,  $\pm 5\%$  60 Hz Sine. Tubes: 9, 5" flat-face CRT, 2 rectifiers.

## Oscilloscope Kit plus most-wanted Accessories



Save  
**\$12.30**

**129<sup>95</sup>**

\$7 monthly

see page 438

Separately, \$142.25. Full scope outfit for speedy, profitable servicing. Consists of Knight-Kit KG-635 Oscilloscope Kit; Direct Test Leads with Clip, Insulator and Double Plug; 12-pF Low-Capacity Probe; 250-MHz Demodulator Probe; Two Howard W. Sams Books: "Know Your Oscilloscope" and "Troubleshooting with The Oscilloscope." Leads and probes are fully assembled. Books are clearly written in non-technical language—provide you with helpful instructions on servicing, adjustments, troubleshooting and calibration, plus explanations of theory and operation of oscilloscopes. Scope kit includes step-by-step assembly instructions.  
 22 A 0079 L2Z. Shpg. wt., 30 lbs. .... 129.95

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

# Color Bar/Pattern Generator Kit with silicon transistors

## ... Tops for in-home or in-shop color TV servicing

Three super-stable crystal-controlled oscillators give you seven rock-steady patterns . . . Permit precision convergence, tracking and purity adjustments for movie-clear color TV . . . You also get fast, simplified setup with no need for any synchronization with TV set under test

**79<sup>95</sup>** \$5 monthly  
see page 438

Was \$89.95 in Cat. 280



With all leads and cables

### SPECIFICATIONS

**RF Output:** 10,000  $\mu$ V minimum, tunable to channels 3, 4, and 5. **Composite Video Output:**  $\pm 2$  volts peak-to-peak. **Composite Sync Output:** -2 volts (for Zenith color sets). **Crystal-Controlled Oscillators:** Master, 179 kHz; Color, 3.56 MHz; Sound Subcarrier, 3.56 MHz. **Front Panel Controls and Jacks:** Display Selector; Sound Carrier On-Off; Gun-Interruption On-Off; Power On-Off; Service Light On-Off; Color Level Control; Video Level/Polarity; 6 Pin Jacks (3 signal output, 3 CRT grids). **Rear Panel Controls:** Channel Tuning; Vertical Intensity; Timing; 6-circuit Test Jack. **Cables:** RF Output; Gun Interrupter; Service Light; Composite Video and Sync. **Fuse:** Internal,  $\frac{1}{4}$ -A quick blow.

**Knight-Kit KG-685.** Portable, self-contained color bar/pattern generator kit provides all patterns needed for fast, accurate convergence and color adjustments . . . it's the ideal choice for on-the-bench and in-the-home color TV servicing. Advanced solid-state circuit uses 22 transistors (19 silicon types including Unijunction counters) plus 8 diodes for long-term dependability and operating efficiency.

Generates stable, crystal-controlled displays: 10 color bar signals; purity, tracking and crosshatch patterns; dots; vertical and horizontal lines. Brightness keyed color bars. Tracking pattern with 6-position gray scale. Horizontal display elements one raster line thick. Crystal-control eliminates need for synchronization with test set.

Insulation-piercing clips on gun interrupters for safe, positive connections. Shaded hi-intensity light source with clip mount. Highly polished service mirror stores under case. Roomy storage compartment for all cables. Special power transformer eliminates magnetic effects on color CRT.  $4\frac{1}{2} \times 9\frac{1}{2} \times 12$ ". With all cables, instructions, 115 VAC. 22 A 3989 X. Shpg. wt., 14 lbs. . . . . 79.95

### Color Bar/Pattern Generator Kit with valuable Accessories

**Separately, \$110.73.** Complete outfit for fast, accurate color TV servicing. Consists of Knight-Kit KG-685 Solid-State Color Bar/Pattern Generator Kit; B&K Model HV-30 High Voltage CRT Probe; Color TV Degaussing Coil. High-voltage probe has built-in meter, reads 0-30,000 VDC. Permits direct HV readings of color TV CRT's. Has triple-insulated probe, 50- $\mu$ A meter, soft-lined carrying case. Needs no batteries, or other power. Accuracy,  $\pm 2\%$  at 25,000 volts;  $\pm 3\%$  of full scale.  $14\frac{1}{4}$ " long; Degaussing coil removes unwanted green patches on screen, clears up picture. 7" diameter. Pushbutton on-off switch. Instructions. For 115 VAC. 22 A 0069 L3X. Shpg. wt., 18 lbs. . . . . 105.00

Save  
**\$5.73**  
**105<sup>00</sup>**

\$6 monthly  
see page 438



**Knight-Kits are a product of Allied Radio**

**ALLIED 481**



# knight-kit

TEST EQUIPMENT

"An honest-to-goodness calibrated-output RF signal generator for under \$300! Yep, less than \$100. It's Allied Radio's KG-686."

ELECTRONICS ILLUSTRATED

# Solid-state lab RF Signal Generator Kit with precision calibrated output

# 79<sup>95</sup>

100 kHz to 54 MHz in five fundamental bands . . . includes all TV IF frequencies . . . frequency accuracy is usable to  $\pm 0.1\%$  with built-in Crystal Calibrator

\$5 monthly  
see page 438



Easy-to-read metal Dial with 6:1 vernier drive and anti-backlash for easy frequency selection

Built-In 100 kHz/1 MHz Crystal-Calibrator for frequency accuracy usable to  $\pm 0.1\%$

Switchable 200- $\mu$ A D'Arsonval Meter shows accurate RF carrier or modulation level

Knight-Kit KG-686. Offers the precision control needed for exact design work and critical troubleshooting. All-silicon transistor circuit for outstanding stability . . . built-in 100 kHz/1 MHz crystal calibrator for frequency accuracy comparable to units costing much more. Covers 100 kHz to 54 MHz in five fundamental bands (includes all television IF frequencies). Frequency accuracy is  $\pm 1.5\%$  on any band, usable to  $\pm 0.1\%$  with calibrator.

Has floating-type oscillator for complete isolation from chassis; tunable L and C on every band; bridged "T" low-distortion two-stage modulation oscillator. Six individually shielded step attenuator switches offer 21 discrete levels for precise attenuation to -96 dB. Fine attenuator control covers -10 to +2 dB. Detector-amplifier-speaker system provides audible "zero" beats from crystal calibrator. Clearly calibrated, two-color 4" metal dial with 6:1 vernier drive and antibacklash for effortless and precise frequency selection and resettability.

Well-designed chassis and generous copper shielding assure minimum radiated leakage. Fully regulated power supply for excellent output stability. Output is 120,000  $\mu$ V max., calibrated into 50-ohm load. Point-to-point wiring. Detachable 2-wire line cord. Steel case, 10 1/4 x 14 1/4 x 7 3/4". BNC output jack, mated terminal cable. For 110-130 V, 60 Hz AC. Japan.  
22 A 3393 X. Shpg. wt., 15 lbs. . . . . 79.95  
22 A 3369 X. Optional 3-Wire Cord. Shpg. wt., 1 lb. . . . . 1.98

### SPECIFICATIONS

**Frequency Coverage (5 Fundamental Bands):** A, 100-370 kHz; B, 370-1400 kHz; C, 1.4-5.1 MHz; D, 5.1-16 MHz; E, 16-54 MHz. **Frequency Accuracy:**  $\pm 1.5\%$ , usable to  $\pm 0.1\%$  with calibrator. **Calibrator:** 100 kHz (derived)/1 MHz. Accuracy,  $\pm 0.05\%$ . **Detector-amplifier-speaker system** for audible "zero" beats. **Calibrated Output:** 50-ohm load, 120,000  $\mu$ V max. **Open Circuit Uncalibrated Output (min. rms per Band):** A, 3 V; B, 2 V; C, 0.6 V; D, E, 0.3 V. **Attenuation:** six-step attenuators; 21 levels to -96 dB. **Fine control:** -10 to +2 dB. **Outputs** to +106 dB (0.5  $\mu$ V) may be obtained. **Internal Modulation:** 400 Hz at  $\pm 20\%$ . **Metered depth** to 50 ( $\pm 5\%$ ) to 30 MHz. **External Sensitivity:** approximately 1 Vrms for 50% modulation at 400 Hz.

# Professional solid-state Sweep/Marker Generator Kit with fixed and variable post-injection markers

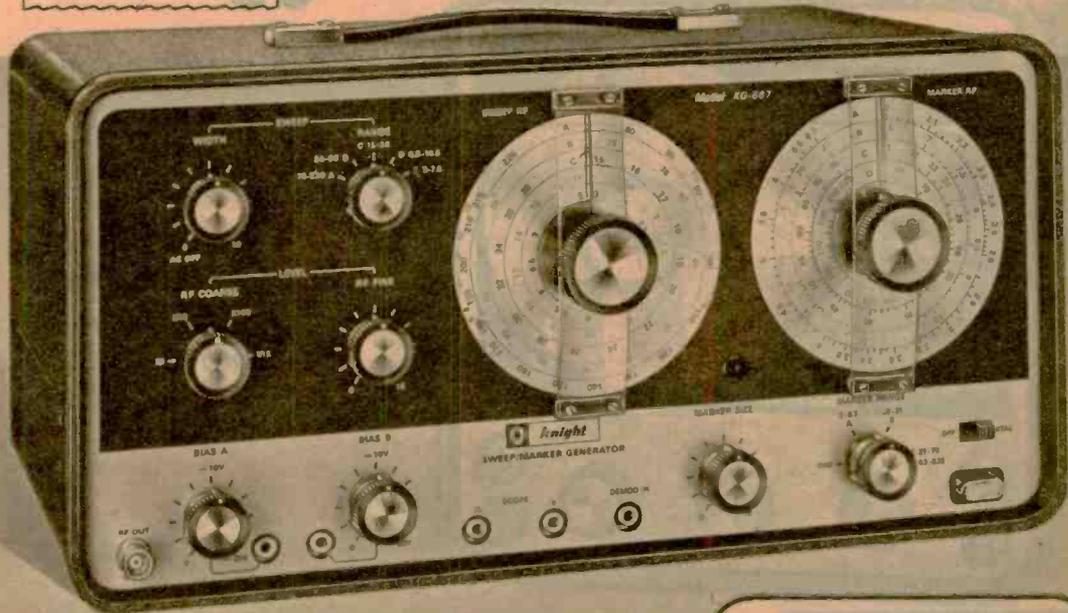
"...distinctively styled.  
Construction of the  
kit is simple and straight-  
forward."

ELECTRONICS WORLD

Sweep oscillator, 3-220 MHz . . . Marker  
oscillator, 2-225 MHz . . . covers all TV  
and FM, IF and TV VHF frequencies . . .  
crystal-controlled and post-injected Markers

# 99<sup>95</sup>

\$5 monthly  
see page 438



**Knight-Kit KG-687.** For color, black-and-white TV, FM and stereo FM servicing. Has all-electronic sweep from 1 Hz to as high as 18 MHz at highest center frequency. Sweep oscillator, 3-220 MHz on five fundamental bands; marker, 2-225 MHz on four bands (three fundamental, one harmonic). Silicon transistor circuit. Regulated power supply; dual feedback; 5-band adjustable reactor; 4-step decade attenuator with level control. RF retrace blanking; horizontal phase adjustment for scopes (front panel outputs). 4.5 MHz crystal (included) may be mixed with variable marker. On-off switch or crystal function. Steel case, 10<sup>1</sup>/<sub>2</sub> x 14<sup>3</sup>/<sub>4</sub> x 7<sup>3</sup>/<sub>8</sub>". Detachable 2-wire line cord. With 4.5 MHz crystal in HC-6/U holder. 110-130 V, 50-60 Hz AC. Japan. 12 A 3994 X. Shpg. wt., 13 lbs. . . . . 99.95  
12 A 3356 X. 5-MHz Crystal. Fits HC-6/U holder. Wt., 3 oz. . . . . 4.95  
12 A 3357 X. 10.7-MHz Crystal. Fits HC-6/U holder. Wt., 3 oz. . . . . 4.95  
12 A 3369 X. Optional 3-Wire Line Cord. Shpg. wt., 1 lb. . . . . 1.98

## SPECIFICATIONS

**Sweep Oscillator Output Levels (rms min.):** 3-50 MHz, 0.3 V; 50-120 MHz, 0.1 V; 120-220 MHz, 0.05 V. **Amplitude Regulation:** (for sweep widths not to exceed 20%) 3-50 MHz,  $\pm 5$  dB; 50-220 MHz,  $\pm 1$  dB. **Impedance:** 75 ohms. **Sweep Frequency:** 60 Hz. **Marker Oscillator Variable Frequencies:** (4 Bands): A, 2-6.7 MHz; B, 6.6-21 MHz; C, 21-75 MHz; D (harmonic), 65-225 MHz. **Crystal Frequencies:** 4.5 MHz; 500-kHz to 20-MHz may be used.



4" Metal Dials  
with 6:1 vernier  
drive and anti-  
backlash for  
precise frequency  
selection

Marker systems  
may be mixed in-  
ternally . . . on-off  
switch for Crystal

Fully regulated  
0 to -20 volt  
AGC bias supplies  
for sets under test

## Complete Test Generator Kit Outfit

Separately, \$179.90. Professionalize your test bench with these lab-quality signal generators. Includes: Knight-Kit KG-686 RF Signal Generator Kit; Knight-Kit KG-687 Sweep/Marker Generator Kit.  
22 A 0131 12U. Shpg. wt., 28 lbs. . . . . 169.90

Save  
\$10.00  
**169<sup>90</sup>**





**knight-kit**

TEST  
EQUIPMENT

# Sine/square wave Generator Kit with silicon solid-state FET oscillator for laboratory accuracy

**59<sup>95</sup>**

\$5 monthly  
see page 438



**SINE WAVE**  
20 Hz to 2 MHz in 5 Ranges  
**SQUARE WAVE**  
20 Hz to 200 kHz in 4 Ranges

## CHECK THESE DELUXE FEATURES

- ✓ Precise Sulzer Oscillator
- ✓ All silicon transistors  
for super-stability
- ✓ Clearly calibrated heavy-  
gauge aluminum dial
- ✓ 6:1 planetary-ball, anti-  
backlash, vernier drive
- ✓ Molded hairline cursor  
for exact selection
- ✓ Sine wave frequency range  
covers entire AM band
- ✓ Square wave rise time less  
than 0.1  $\mu$ sec at 20 kHz
- ✓ Square wave output adjustable  
from 0 to 10 volts p-p

Knight-Kit KG-688. Ideal signal source for everything from audio amplifiers to video amplifiers. Sine wave frequency range covers 20 Hz to 2 MHz (includes entire AM band). Square wave frequency range covers 20 Hz to 200 kHz. All-silicon transistors for stability and reliability. Precision Sulzer oscillator circuit has Field Effect Transistor for outstanding accuracy. Complementary-symmetry output for low impedance and distortion.

Multiple feedback circuit employs barreter element for constant amplitude output. Sine wave output voltage is adjustable from 0-7.5 V rms into loads of 10K ohms or higher. Square wave output voltage is adjustable from 0-10 volts p-p into high-impedance loads. Constant-impedance, calibrated step attenuators provide up to 41 dB attenuation in discrete 1 dB steps. Easy-to-read 4" dial; 6:1 vernier drive.

Ground post at rear of chassis. Positive-lock, 5-way binding posts accept standard GR plugs. Metal case, 7 $\frac{3}{4}$ "x7 $\frac{3}{4}$ "x10 $\frac{1}{4}$ ". Two-wire line cord is detachable for easy storage and service. With solder, detailed step-by-step assembly instructions. For 110-130 V, 50-60 Hz. AC, Japan.

22 A 3995 X. Shpg. wt., 10 lbs. . . . . 59.95  
22 A 3369 X. Optional 3-Wire Line Cord. Shpg. wt., 1 lb. . . . . 1.98

## SPECIFICATIONS

**SINE WAVE.** Frequency Coverage: 20 Hz to 2.0 MHz in 5 ranges. X10, 20 Hz to 200 Hz; X100, 200 Hz to 2 kHz; X1K, 2 kHz to 20 kHz; X10K, 20 kHz to 200 kHz; X100K, 200 kHz to 2 MHz. Output Voltage: adjustable 0-7.5 V rms into 10K ohms or higher, 0-6.5 V rms into 600 ohms. Source Impedance: 600 ohms nominal using attenuators. Distortion: less than 0.25% across entire audio range. Frequency Accuracy:  $\pm$ 3% over entire range except  $\pm$ 5% below 100 kHz and above 1 MHz.

**SQUARE WAVE.** Frequency Coverage: 20 Hz to 200 kHz in 4 ranges. X10, 20 Hz to 200 Hz; X100, 200 Hz to 2 kHz; X1K, 2 kHz to 20 kHz; X10K, 20 kHz to 200 kHz. Output Voltages adjustable 0-10 volts p-p into high-impedance loads. Source Impedance: 200 ohms nominal. Rise Time: less than 0.1  $\mu$ sec at 20 kHz.

# General-use RF Signal Generator Kit . . . even at this low price you get modulated and unmodulated RF plus 400-Hz for aligning AM-FM radios and TV sets

# 29<sup>95</sup>

\$5 monthly  
see page 438

Fundamental output covers 160 kHz to 112 MHz . . . calibrated second harmonics usable to 224 MHz . . . no alignment needed thanks to factory-calibrated precision-wound coils

**Knight-Kit KG-650.** This thrift-priced signal generator kit has a fundamental output range from 160 kHz to 112 MHz divided into five separate bands. Calibrated second harmonics are usable to 224 MHz. Large, clearly calibrated dial and vernier drive for tuning accuracy. Step and continuous-type attenuators for exact adjustment of output voltage.

Output is available modulated, unmodulated or as 400 Hz sine wave adjustable to more than 10 volts. Provision for external modulation. Colpitts oscillator circuit and cathode-follower outputs provide maximum stability. Isolated power supply. Metal case, 7 $\frac{1}{4}$  x 10 $\frac{1}{2}$  x 5 $\frac{1}{4}$ ". Detailed assembly and operating instructions. With test leads. For 115 VAC. 22 A 3953 X. Shpg. wt., 8 $\frac{1}{2}$  lbs. . . . . 29.95

### SPECIFICATIONS

**Frequency Ranges—Calibrated Fundamentals:** Band A, 160-550 kHz; Band B, 550-1850 kHz; Band C, 1850 kHz to 27 MHz; and Band E, 27-112 MHz. **Calibrated Second Harmonics:** usable to 224 MHz. **RF Output:** in excess of 400,000 microvolts. **Modulation Frequency:** 400 Hz. **Audio Output:** adjustable to more than 10 volts at 400 Hz. **Attenuator:** 3-position switched, plus continuously variable attenuator control. **Tube Complement:** 6C4, 12AT7; plus selenium rectifier.



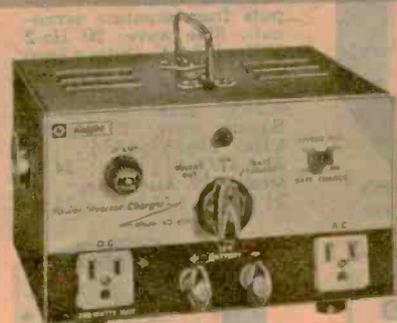
# 3<sup>95</sup>

## Handy battery-powered solid-state Signal Injector Kit

Completely portable and self-contained . . . easy one-hand operation . . . only 1 $\frac{1}{2}$ " diameter

**Knight-Kit KG-644.** One of the handiest troubleshooters you can use. This pocket-size servicing aid is a must for anyone who works on radios, audio amplifiers, TV and other electronic devices. Generates a signal rich in harmonics for tracing audio, RF and IF circuits when troubleshooting. Pushbutton operation, insulated test probe. Battery condition light. Comfortable-to-hold cylinder-type handle houses entire circuit to permit long use without tiring. 9 $\frac{1}{2}$  x 1 $\frac{1}{2}$ " dia. With 4 penlight batteries, complete, easy-to-follow assembly instructions. From Japan. 22 A 3915 X. Shpg. wt., 8 ozs. . . . . 3.95

Traces RF, IF, audio circuits



# 39<sup>95</sup>

\$5 monthly  
see page 438

## Solid-state Power Inverter/Charger Kit converts 12-volt DC from your car to house current . . . also charges batteries

**Knight-Kit KG-666.** Operate radios, TV sets, tape recorders, other AC appliances in your car, boat, trailer or camper. Converts 12 VDC to 110-130 volts, AC. Also has DC output for universal motor loads. Delivers self-regulating Hi-Lo 6-amp tapering charge to 12-volt batteries. Silicon diode starting network; capacitive and diode despiking network; 2-position output load optimizing switch; pilot light; fuse. Square wave output, 55-65 Hz. Rated 200 watts continuous. Four germanium power transistors. Aluminum case, 4 $\frac{3}{4}$  x 8 x 8 $\frac{1}{4}$ ". Full instructions. 22 A 3906 X. Shpg. wt., 9 lbs. . . . . 39.95

# EICO KITS

TEST EQUIPMENT



**DC to 4.5 MHz 5" wideband Scope**

Model 460-K. Flat response of DC to 4.5 MHz, usable to 10 MHz. Easily reproduces 3.58 MHz color TV sync burst. Vertical sensitivity, 5 mV rms/cm. Input impedance, 3 megs shunted by 35 pF. 4-position attenuator. Full-screen vertical positioning, 2X horizontal positioning. Sweep: 10 Hz to 100 kHz plus low-frequency range. Automatic sync. Edge-lit scale. Metal case, 13x8 1/2 x 16". For 105-125 V, 50-60 Hz AC.  
 21 A 4158 U. Shpg. wt., 25 lbs. .... 99.95  
 21 A 4157 U. Model 460. Assembled. .... 149.95

**99.95**  
Kit  
\$5 monthly  
see pg. 438



**3" wideband portable Scope**

Model 435-K. Direct coupled. Push-pull amplifier. DC or p-p AC, 50 mV to 500 V. Response, DC to 4.5 MHz; usable to 10 MHz. Vertical sensitivity, 18 mV rms/cm. Sweep: 10 Hz to 100 kHz; 30 Hz vertical, 7875 Hz horizontal positions. 8 1/2 x 5 1/4 x 12 5/8". 105-125 VAC.  
 21 A 4282 U. 18 lbs. .... 119.95  
 21 A 4335 U. 435 Assembled. 169.95

**119.95**  
Kit  
\$6 monthly  
see pg. 438



**Professional 5" wideband Scope**

Model 465-K. Sensitivity 12 mV rms/cm. Zener diode calibration; 5" CRT; push-pull AC-DC coupled amplifiers. Response, DC to 8 MHz; usable to 10 MHz. Sweep: 10 Hz to 100 kHz, 30 Hz vertical, 7875 Hz horizontal positions. 12 1/2 x 8 1/2 x 17 1/2". 117 VAC.  
 21 A 4535 U. 27 lbs. .... 179.95  
 21 A 4536 U. 465. Assembled. 249.95

**179.95**  
Kit  
\$9 monthly  
see pg. 438

### Shielded Probes for oscilloscopes

For use with 460-K, 435-K and 465-K. Av. shpg. wt., 5 oz.

Description	Kit Form			Factory Assembled		
	Stock No.	Type	EACH	Stock No.	Type	EACH
Demodulator Probe	21 A 4151	PSD-K	4.50	21 A 4152	PSD	6.95
Direct Probe	21 A 4153	PD-K	3.50	21 A 4154	PD	4.95
Low-Capacity Probe	21 A 4155	PLC-K	4.50	21 A 4156	PLC	6.95



**Audio Generator**

Model 379-K. Simultaneous sine and square wave outputs from separate terminals. Sine wave: 20 Hz-2 MHz; 0-7.5 V. Output level varies ±1 dB on 4 lowest bands, ±2 dB on high band. 0.25% max. distortion. Square wave: 20 Hz-200 kHz. 7 1/2 x 8 1/2 x 8 1/2". 117 V.  
 21 A 4177. 8 1/2 lbs. .... 54.95  
 Model 379. Assembled.  
 21 A 4244. 8 1/2 lbs. .... 74.95

**54.95**  
\$5 monthly  
see pg. 438

**Color Pattern Generator**

Model 385-K. Solid-state. 5 well-defined, crystal-controlled patterns: dots, cross-hatch, horizontal and vertical lines, 10 color bars. Feeds directly to antenna terminals. Gun killers can eliminate one or more colors. Portable; requires 6 "C" cells. 2 1/2 x 8 1/2 x 8 3/8".  
 21 A 4537. 7 lbs. .... 79.95  
 Model 385. Assembled.  
 21 A 4538 U. 7 lbs. .... 109.95



**79.95**  
Kit  
\$5 monthly  
see pg. 438



**RF Signal Generator**

Model 324-K. 158 kHz to 145 MHz fundamental output (to 435 MHz on harmonics) in 6 bands. Etched dial, ±1.5% accuracy. Internal 400-Hz modulation variable 0-30%; also external sources. Coarse/fine RF attenuators. 8x10x4 3/4".  
 21 A 4141. 10 lbs. .... 32.95  
 Model 324. Assembled.  
 21 A 4140. 10 lbs. .... 44.95



**Sine/square Generator**

Model 377-K. Pure, stable sine wave; 4 bands, 20 Hz to 200 kHz. Wien Bridge oscillator, 1% resistors. Square wave in 4 bands, 60 Hz to 50 kHz. Output, 10 V, 1000 ohms. Hum, under 0.4%. Accuracy, ±3% or 1 Hz. 7 1/8 x 11 1/8 x 7 5/8".  
 21 A 4135 X. 14 lbs. .... 39.95  
 Model 377. Assembled.  
 21 A 4134 X. 14 lbs. .... 54.95



**Sweep Marker Generator**

Model 369-K. For TV, FM. Features marker adder. 5 sweep ranges, 3 to 220 MHz. 3 marker ranges, 2 to 75 MHz on fundamentals; 60-225 MHz on harmonics. 4.5 MHz crystal. Blanking. 3-stage AGC. Output, 50 ohms. 8 1/2 x 12 1/2 x 7".  
 21 A 4307 U. 18 lbs. .... 99.95  
 Model 369. Assembled.  
 21 A 4308 U. 18 lbs. .... 149.95



**Deluxe Audio Generator**

Model 378-K. Low-distortion sine wave, 1 Hz to 110 kHz. Detent switches select 1 Hz, 10 Hz, 100 Hz, 1 kHz, and 10 kHz steps. 8-step attenuator. Adjustable 0-10 V rms output. 4 1/2" meter. Accuracy ±5%. Size, 8 1/2 x 12 1/2 x 9". For 117 VAC.  
 21 A 4336 X. 16 lbs. .... 59.95  
 Model 378. Assembled.  
 21 A 4337 X. 16 lbs. .... 79.95

# Tube and Component Tester Kits

... easy to build ... priced low

## EICO KITS

### TEST EQUIPMENT



**44<sup>95</sup>**  
Kit  
\$5 monthly\*



**29<sup>95</sup>**  
Kit  
\$5 monthly\*



### Dynamic Tube and Transistor Tester

**89<sup>95</sup>**  
Kit  
\$5 monthly\* Tests latest tube types

### Deluxe portable Tube Tester

Model 635-K. Versatile tester checks all standard tubes for dynamic cathode emission, shorts, grid leakage, and gas. Tests Novars, nuvistors, compactrons, 10-pin types, battery types, auto radio hybrids, foreign and industrial tubes. Even handles new decals, magnovals, 7-pin nuvistors and picture tubes. Burnout-protected 3 1/2" D'Arsonval meter; phosphor bronze sockets, pin straighteners. Scuff-proof luggage type case, 4x12 1/2 x 9". Tube chart. For 110-130V, 50-60 Hz AC.  
21 A 4541. Wt., 5 lbs. .... 44.95  
21 A 4542. 635-W. Assembled. .... 69.95

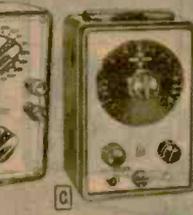
### Tube and Battery Tester

Model 636-K. Tests over 800 radio and TV tubes for cathode emission, shorts, opens, intermittents. Has Go/No-Go continuity test. Sockets for octals, loctals, 7- and 9-pin miniatures, novars, nuvistors, compactrons. Tests, under load, commonly used batteries from 1.5 to 90 volts (11 ranges). 3-color meter; neon lamp short indicator. Transformer isolation power supply. Bakelite case, 8 1/2 x 7 1/2 x 3 1/2", with metal handle. With complete tube data manual. For 117 V, 60 Hz AC.  
21 A 4544. Wt., 4 lbs. .... 29.95  
21 A 4238. 636. Assembled. .... 44.95

Model 667-K. Joins mutual conductance (Gm) and plate conductance (Gp) tests into a single dynamic test, plus peak emission test to give a single reading of tube quality. Spots bad transistors by gain and leakage tests.

Checks nuvistors, novars, compactrons, miniatures, subminiatures, octals, loctals, special purpose tubes, VR a, cold cathode regulators. Multi-section transfer switches, 12 six-position-element lever switches. 4 1/2" D'Arsonval meter. Roll chart. Separate plate, screen and grid voltages. 4 1/2 x 15 x 12", latching cover. 115 VAC.  
21 A 4143 X. Shpg. wt., 23 lbs. .... 89.95  
21 A 4142 U. 667. Assembled. .... 139.95  
21 A 4144. CFU CRT Adapter. 1 lb. .... 9.95

### Transistor and Component Testing Kits



**A** 680-K Transistor/Circuit Checker Kit. Measures I<sub>ceo</sub>, I<sub>cso</sub>, DC Beta, simulated AC Beta. 0-5-50 VDC; 0-2000-200K ohms, 0-20 megs; 0-50-500  $\mu$ A; 0-5-50-500 mA DC. 3x5 3/4 x 6 3/4". Leads, batteries.  
21 A 4149. Wt., 3 lbs. .... 34.95  
21 A 4148. 680-W. Assembled. 49.95

**B** 1140-K R-C Box Kit. 1350 in-circuit substitutions. Res., 15 ohms to 10 meg. Cap., 0.0001 to 0.2  $\mu$ F.  $\pm$ 10%. 5 1/2 x 6 1/8 x 2 3/8".  
21 A 4111. Wt., 3 lbs. .... 15.95  
21 A 4110. 1140-W. Assembled 24.95

**C** 955-K Capacitor Tester Kit. Wien bridge permits in-circuit test (0.1-50  $\mu$ F) with shunt as low as 35 ohms.  $\pm$ 10%. Short test, to 2000  $\mu$ F; open test down to 15 pF. 8 1/2 x 5 3/4 x 6". With leads. 117 VAC.  
21 A 4103. Wt., 6 lbs. .... 24.95  
21 A 4102. 955-W. Assem. .... 39.95

**D** 1180-K Capacitor Decade Box Kit. 100 pF to .111  $\mu$ F; 100, 1000, 10,000 pF steps. 350 V.  $\pm$ 1% mica capacitors. 9x3 1/2 x 3 1/2". Less leads.  
21 A 4105. Wt., 3 lbs. .... 19.95  
21 A 4104. 1180-W. Assembled 29.95

### CRT Tester/Rejuvenator

**69<sup>95</sup>**  
Kit  
\$5 monthly\*



Model 633-K. Tests and rejuvenates most picture tubes, including latest color TV types. High DC voltage for rejuvenate-welding and short-clearing procedures. 0-150 volt negative DC output for variable G<sub>1</sub> grid cutoff; variable filament over 12 ranges from 1-12 volts. Tests for shorts, open elements, beam current, leakage, tube life. Pushbutton operation; 4 1/2" meter. Transformer power supply. 12 1/2 x 9 x 5". 117 VAC.  
21 A 4539 U. Shpg. wt., 9 lbs. .... 69.95  
21 A 4540 U. 633. Assembled. .... 99.95

### R-C Bridge/R-C-L Comparator

Model 950-K. Reads 0.5 ohm to 500 megohms and 10 pF to 5000  $\mu$ F (4 ranges). Has .05-20 comparator range. Variable 0-500 volt DC source tests capacitors for shorts, leakage. Measures power factor of electrolytics. Less leads. 8x10x4 3/4". For 105-125 V, 60 Hz AC.  
21 A 4101. Shpg. wt., 8 lbs. .... 29.95  
21 A 4100. Model 950-W. Assembled. .... 39.95



\*See page 438 for full Credit details

# EICO KITS

## TEST EQUIPMENT

Values in quality Test Equipment for TV-radio service technicians



**49<sup>95</sup> Battery/AC FET VOM... 4 1/2" meter**  
 Model 240-K. Solid-state. Ideal for testing semiconductor circuits. 4 1/2" meter, 200  $\mu$ A movement. P-P ACV ranges: 0-2.8, 8.5, 28, 85, 280, 850, 2800 volts; AC and DCV; 0-1, 3, 10, 30, 100, 300, 1000 volts. Input impedance: 11 meg DC, 1 meg AC. Resp: 25 Hz to 2 MHz. Ohmmeter: 0.2-1000 meg. With Uni-probe. 8 1/2 x 5 1/2 x 5". 117 VAC, or "D" cell and three 9-V batts. Shpg. wt., 5 1/2 lbs.  
 21 A 4304. Kit. \$49.95  
 21 A 4305. Assembled. \$69.95

**59<sup>95</sup> Battery/AC FET VOM... 6 1/2" meter**  
 Model 242-K. Versatile VOM for vacuum tube and semiconductor circuits. Big 6 1/2" meter with 200  $\mu$ A movement. P-P ACV ranges: 0-2.8, 8.5, 28, 85, 280, 850, 2800 volts; AC DCV: 0-1, 3, 10, 30, 100, 300, 1000 volts. Input impedance: 11 meg DC, 1 meg AC. Resp: 25 Hz to 2 MHz. Ohmmeter: 0.2-1000 meg. With Uni-probe. 7 1/2 x 8 1/2 x 5". 117 VAC, or "D" cell and three 9-V batts. 6 lbs.  
 21 A 4306. Kit. \$59.95  
 21 A 4316. Assembled. \$79.95

**25<sup>95</sup> 31-range VOM .. 20K ohms/V**  
 Model 565-K. 20,000 ohms/volt DC sensitivity; 4 1/2" meter with 50  $\mu$ A movement. Ranges: AC-DC, output V, 0-2.5-10-50-250-1000-5000 (AC at 1000 ohms/V); DC, 0-100  $\mu$ A, 0-10-100-500 mA, 0-10 amps; 0-2000-200,000 ohms, 0-20 megs; -12 to +55 dB. With batteries. Less leads. 6 3/4 x 5 1/2 x 3". Shpg. wt., 4 lbs.  
 21 A 4268. 565-K Kit. \$25.95  
 21 A 4269. Assembled. \$34.95  
 21 A 4270. 555-K Kit. Above kit but 1% resistors. \$29.95  
 21 A 4271. Assembled. \$39.95

**19<sup>95</sup> 38-range VOM .. 1000 ohms/V**  
 Model 566-K. Full 4 1/2" meter. Rectifier in deluxe dual half-wave circuit. Divider resistors. AC/DC ranges: 0-1-5-10-50-100-500-5000 V at 1000 ohms/volt; 0-1-10 mA, 0-0.1 ampere; 0-5000-100,000 ohms, 0-1 megohm; decibels, -20 to +69 dB. With battery. Less leads. Overall size, 6 3/4 x 5 1/2 x 3". Shpg. wt., 3 lbs.  
 21 A 4260. 566-K Kit. \$19.95  
 21 A 4261. Assembled. \$25.95  
 21 A 4262. 556-K Kit. Above kit but 1% resistors. \$21.95  
 21 A 4263. Assembled. \$29.95



**A Model 232-K P-P VTVM.** Has 4 1/2" meter. Balanced bridge; 1% multipliers. P-P volts, 0-4-14-42-140-420-1400-4200; DC/AC volts, 0-1.5-5-15-50-150-500-1500; resistance, 0.2 ohm to 1000 megs in 7 ranges. 30 Hz to 3 MHz. Uni-probe. 8 1/2 x 5 x 5". 117 VAC.  
 21 A 4235. Kit. 5 lbs. \$34.95  
 21 A 4236. Assembled. \$49.95

**B Model 249-K P-P VTVM.** Huge 7 1/2" meter. Balanced bridge; 1% multipliers. P-P volts, 0-4-14-42-140-420-1400-4200; DC/AC volts, 0-1.5-5-15-50-150-500-1500; resistance, 0.2 ohm to 1000 megs in 7 ranges. 30 Hz to 3 MHz. Uni-probe. 8 1/2 x 13 x 5". 117 VAC.  
 21 A 4233. Kit. 9 lbs. \$39.95  
 21 A 4234. Assembled. \$59.95

**C Model 235-K Professional VTVM.** Two-color 6" meter; 200  $\mu$ A. Balanced-bridge; 1% multipliers. Ranges: P-P volts, 0-4-14-42-140-1400-4200; DC/AC volts, 0-1.5-5-15-50-150-500-1500, (plus 0.5 volt DC range). Resistance, 0.2 ohm to 1000 megs in 7 ranges. 30 Hz to 3 MHz. Uni-probe. 8 1/2 x 7 1/2 x 5". 117 VAC.  
 21 A 4338. Kit. Shpg. wt., 9 lbs. \$49.95  
 21 A 4356. Factory Assembled. \$69.95



**Signal Tracer 49<sup>95</sup>**  
 Model 150-K. Solid-state. For AM, FM, TV, audio. Independent RF/ audio inputs. RF demod. probe, direct audio probe. Output transformer. Speaker. Calibrated meter output indicators. Output: 400 mW. 200  $\mu$ A meter movement. For 117 VAC. 7 1/2 x 8 1/2 x 5".  
 21 A 4345. Kit. 6 lbs. \$49.95



**8-range Grid-Dip Meter for Hams, servicing 34<sup>95</sup>**  
 Model 710-K. Operates as oscillating detector or wavemeter. 400 kHz to 250 MHz. Sensitivity control; 500  $\mu$ A meter; 1:7 drive ratio; phone jack; plug-in coils. 2 1/4 x 2 1/2 x 6 7/8". 117 VAC.  
 21 A 4223. Kit. Shpg. wt., 3 lbs. \$34.95  
 21 A 4224. Factory Assembled. \$59.95

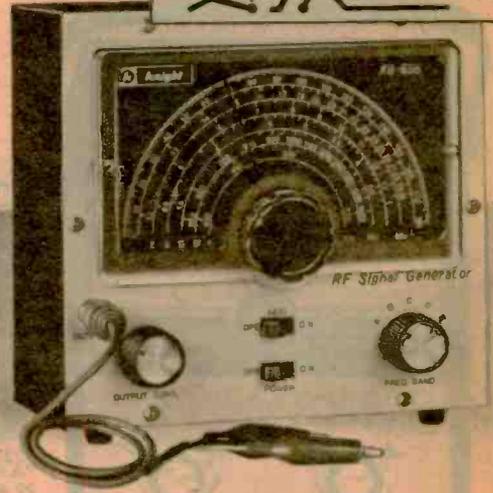
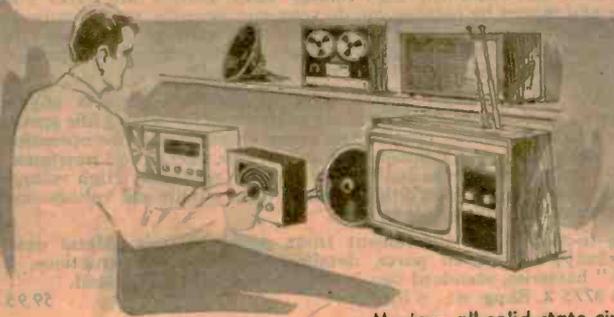
**Accessory Probes**  
 PSI-K Signal Injector Probe Kit. Cordless probe generates, injects signals covering audio, IF, RF.  
 21 A 4549. Wt., 6 oz. \$5.95  
 21 A 4545. Assembled. 6 oz. \$9.95  
 Uniprobe Kit. Select DC, AC ohms.  
 21 A 4242. Wt., 1/2 lb. \$5.95  
 21 A 4243. Assembled. 1/2 lb. \$7.95  
 PTP-11-K. Peak-to-Peak Kit. For 11-meg VTVMs.  
 21 A 4245. Wt., 1 lb. \$5.50  
 PRF-11-K. RF Kit. Measures to 250 MHz. For 11-meg VTVMs.  
 21 A 4251. Wt., 1 lb. \$4.50  
 21 A 4250. Assembled. 1 lb. \$5.95

# Battery-powered RF Generator Kit

## 400 kHz to 30 MHz in five bands

**19<sup>95</sup>** \$5 monthly  
see page 436

Test and troubleshoot FM-AM radios and even TV sets



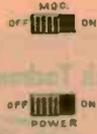
- Modern all-solid-state circuit
- Precision-wound adjustable coils
- Lightweight, compact, portable
- Printed circuit for fast assembly

Band selector permits instant selection of any of the generator's five bands



Clearly calibrated vernier tuning dial for precise frequency selection

Mode switch permits switching between unmodulated and unmodulated RF output



Flick-on power switch to activate circuit instantly—no warm-up required

**Knight-Kit KG-696.** Fully portable generator kit, ideal for servicing AM, FM radios and audio equipment as well as TV receivers. Checks RF, IF and oscillator alignment; also can be used with sweep generator for TV receiver alignment. Wide frequency coverage, from 400 kHz to 30 MHz in five bands. Clearly calibrated vernier dial and five-position band selector switch make precise frequency selection a snap. Solid-state circuit assures stability and reliable performance. Battery powered, lightweight; great for

house calls, in-the-field service—frees you from your workbench. Select either modulated or unmodulated output. Internal 1000 Hz modulation oscillator; transformerless RF oscillator; continuous-type voltage attenuator. Low impedance output; coaxial output connector and leads. On-off switch; adjustable coils. Black metal case, 5 1/2 x 5 1/2 x 3 1/2". Uses one 9-volt battery (included). With all parts, PC board, solder, detailed assembly instructions. From Japan.

22 A 3952 X. Shpg. wt., 2 lbs. .... 19.95

### SPECIFICATIONS

**Frequency Coverage:** 400 kHz to 30 MHz in five fundamental bands. Band A, 400 to 500 kHz; Band B, 550-1600 kHz; Band C, 1.6-4.5 MHz; Band D, 4.5-13

MHz; Band E, 12-30 MHz. **RF Output:** over 100,000  $\mu$ V. **Modulation:** 1000 Hz. **Audio** 1 kHz, adjustable intensity. **Battery:** Eveready No. 216 or equiv.

## Money-saving Test Equipment Outfits for beginners and "pros"



### Beginner Electronic Servicing Package

Save \$9.35 **54<sup>50</sup>** \$5 monthly  
see page 433

Separately, \$63.85. For the electronic servicing novice. Includes KG-696 RF Signal Generator Kit (see above); KG-640 VOM Kit; Howard W. Sams Book, "Electronic Servicing for the Beginner." VOM features 20,000 ohms/volt sensitivity, 57 ranges, diode-protected taut-band meter movement. Book is clearly written in non-technical language, covers basic troubleshooting. Kits include parts, solder, detailed instructions. Japan. 22 A 0334 13X. Shpg. wt., 8 lbs. .... 54.50



### Technician Electronic Servicing Package

Save \$12.35 **69<sup>50</sup>** \$5 monthly  
see page 438

Separately, \$81.85. For the experienced technician. Includes KG-696 RF Signal Generator Kit (see above); KG-645A 5000 Ohms/Volt VOM Kit; KG-600C Tube Tester Kit. VOM has 38 ranges, 1% multiplier resistors, eight-scale 4 1/2" color coded meter. Tube tester checks over 2300 tube types and is lightweight, portable and very accurate. All parts, wire, solder, detailed instructions and operator's manual. From Japan. 22 A 0335 13X. Shpg. wt., 18 lbs. .... 69.50

# DELTA

## ELECTRONIC KITS

# High-voltage Auto Analyst for engine diagnosis and tuneup

### 59<sup>95</sup>

\$5 monthly

see page 438

Five instruments in one give you versatile repair capability . . . Tach, Dwell Meter, Ohmmeter, DC Voltmeter, plus High-voltage Tester

Portable, self-contained high-voltage auto analyst kit saves you time and money by helping you do your own tuneups, make many repairs and adjustments. Provides all the readings necessary for tuneup and accurate analysis of the modern internal combustion engine. Dependable solid-state circuit for long-life.

Actually combines five instruments in one for complete engine analysis. Tachometer scales indicate engine rpm for setting idle speed, adjusting shift points. Dwell-angle scales check distributor operation and spark advance. Ohmmeter traces circuits, checks coil resistance. 0-15 V voltmeter checks battery and voltage regulator! High voltage tester checks spark plug firing voltage, open circuit coil voltage and distributor. Has many other uses.

Easy-to-read scale. Convenient front panel controls. Metal case, 6 1/2 x 8 x 3 1/2". With all parts, detailed step-by-step instructions, 8 "AA" batteries, standard test leads, probe, high-tension lead. 22 A 3775 X. Shpg. wt., 8 lbs. . . . 59.95

### SPECIFICATIONS

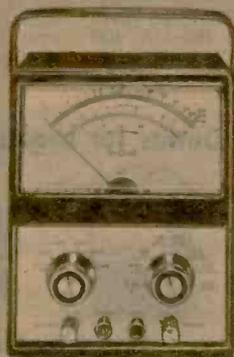
- TACHOMETER: Two ranges, 0-1500 and 0-6000 rpm. Accuracy,  $\pm 2\%$  of full scale reading.
- DWELL METER: Two ranges, 0-45° and 0-60°. Accuracy,  $\pm 1^\circ$ .
- OHMMETER: 1K ohms to 100K ohms. (10K center scale.) Accuracy,  $\pm 5\%$
- DC VOLTMETER: 0-15 volts DC. Accuracy,  $\pm 2\%$  of full scale reading.
- HIGH-VOLTAGE TESTER: Two ranges, 0-15 and 0-45 kV peak. Accuracy,  $\pm 5\%$  of full scale reading.

## High-accuracy field-effect-transistor VOM Kit

### 59<sup>95</sup>

\$5 monthly  
see page 438

10-megohm input impedance for low circuit loading . . . 0.3 V and 0.03  $\mu$ A ranges for precise transistor work



Model 3000. Battery-operated VOM kit provides all the accuracy and precision of a VTVM. Field-Effect-Transistor input permits full 10-megohm input impedance for negligible circuit loading. Advanced design with special integrated circuit amplifier for excellent operating stability. Voltage and current regulation assure precise readings. Has 0.3 V and 0.03  $\mu$ A full scale ranges for accurate transistor servicing. Reads 0-1000 AC, DC volts (8 ranges); 0-300 mA AC and DC current (8 ranges); 10 ohms to 10 megohms center scale (8 ranges). 6 1/2 x 8 x 3 1/2". With all parts, test leads, battery, instructions. 22 A 3750 X. Shpg. wt., 8 lbs. . . . 59.95

## Computach Tachometer Kit

### 28<sup>95</sup>

\$5 monthly  
see page 438



For precise readings of engine rpm. Deluxe engine speed indicator works with any 12-volt ignition system. Has solid-state computer for 1% full scale accuracy from 0 to 8000 rpm. Easy-to-read illuminated meter. Extensive filtering circuit, voltage and temperature stabilization throughout assure top performance under all operating conditions. Chrome-plated die-cast housing, 3 1/2" long by 3 1/8" diameter. Red set-pointer, wide-angle sweep, zero parallax. Computer unit is 1 1/4 x 2 3/4 x 3 5/8" deep. All-angle ball and socket mounting for easy installation. With all leads, cables, easy-to-follow assembly instructions. 22 A 9558. Shpg. wt., 3 lbs. . . . 28.95

# Psychedelic Color Organ Kit . . . "see" your way to music enjoyment

All music sounds better when you "see" it in dazzling color . . . spectacular light display follows beat and frequency

**34<sup>95</sup>**

\$5 monthly  
see page 438



**Knight-Kit KG-338.** Join the fun with this new device that's sweeping the nation! Easy-to-build color organ kit adds an entire new dimension to your present stereo system. Not only will you hear your music as well as before, but now you can "see" it as the color organ flashes vividly in synchronization with the beat and frequency. Prismatic glass lens gives a brightly colored "three-dimensional" psychedelic effect. Sound-sensitive color controller responds to amplitude and frequency . . . follows any music you play with color and intensity changes.

Max. sensitivity of 0.15 VAC and high input impedance permit intense color displays even at normal listening levels. Three channel, fully electronic system has inputs to separate frequencies and match them to different colors. Frequencies from 40 to 200 Hz activate red; 200 to 1000 Hz activate green; 1000 to 20,000 Hz activate blue. Has ganged On-Off/Master control for overall intensity; separate color controls for red and green. Advanced solid-state circuit uses Silicon-Controlled-Rectifiers for fast response and positive switching.

Color display does not affect sound quality in any way. Handsome vinyl-clad wood case, 8 1/4 x 14 1/4 x 5 1/4, simulated walnut veneer. Uses standard G.E. bulbs (No. D33), available for easy replacement anywhere. With all parts, 9 bulbs, instructions. 115 VAC. 22 A 3379 X. Shpg. wt., 10 lbs. . . . . 34.95

Add a new and exciting dimension to your home stereo system . . . "brighten" your combo with sparkling color . . . sound-sensitive Color Organ Kit hooks up easily to any audio amplifier . . . absolutely no effect on sound quality

# Versatile Treasure/Metal Locator Kit makes every stroll an adventure

Pays for itself many times over in excitement and practicality! Search for buried coins, antiques, gold and silver, anything metallic. . . Take it along on camping and outdoor trips for fascinating explorations

**29<sup>95</sup>**

\$5 monthly  
see page 438

**Knight-Kit KG-366.** Make every stroll an adventure with exciting Treasure/Metal locator kit. Locates both ferrous metals (tin, iron, steel) and non-ferrous metals (gold, silver, copper) quickly and easily. Super-sensitive . . . detects an object as small as a half-dollar up to 6 inches beneath the ground. Opens up a whole new world of fascinating exploration as you detect buried metal objects. Practical too, use in the home to find plumbing inside walls, in yard or garden to locate pipes before digging; it's also ideal for Gas and Telephone Company servicemen.

Hermetically sealed circular coil is enclosed in shock and heat-resistant industrial resin potting compound. Specially designed Faraday shield increases sensitivity, prevents false indications. Built-in 2 3/4" speaker faces the operator for extra-clear audible indication when metal object is approached. Pitch increases when locator draws nearer the object . . . gives positive audible signal with no meters to read or dials to check.

Lightweight, easy-to-use. Solid-state circuit with IC (RCA 5-transistor) array for excellent stability and reliability. 36" handle is collapsible for easy storage. 6 1/2" diameter coil. Uses single 9-volt battery, order below. With all parts, instructions.

22 A 3382 X. Shpg. wt., 3 lbs. . . . . 29.95  
18 A 5980. 9-Volt Battery. Shpg. wt., 6 oz. . . . . 2 for 59¢



**Knight-Kits are a product of Allied Radio**



**knight-kit**

AMATEUR  
GEAR

## Six-meter Amateur Transceiver Kit

... use it in your Ham shack or car

**89<sup>95</sup>**

\$5 monthly  
See page 438

RF and mixer stages are factory-assembled and aligned for peak performance... solid-state 110-VAC/12-VDC supply for versatility



**Knight-Kit TR-106.** Perfect choice for the Technician Ham and the Oldtimer who wants the best buy in a 6-meter transceiver that operates either fixed-station or mobile. Operation is easy and satisfying—provides effective, dependable communications. Simplified assembly, too. Incorporates the best features of transceiver design. Has precision factory-assembled and aligned RF and crystal-controlled mixer stages for ease of assembly and best performance.

Features dual-conversion receiver with 0.5- $\mu$ V sensitivity, AVC for constant signal level, ANL to cut ignition and pulse-type interference. 15-watt-input transmitter with plate and screen modulation for low distortion and excellent linearity. Separate AF and RF gain controls; frequency spot switch; automatically switched, illuminated S/R/F meter; vernier-drive tuning; illuminated dial; transmit indicator light. Front-panel jack for low-impedance headphones or external speaker. Front-mounted built-in speaker. Three front-panel crystal jacks. Rear-panel VFO input, VFO power output. Pi-network matching 30-90 ohm antennas. Built-in solid-state power supply for 110-130 V, 60 Hz AC and 12 VDC, negative ground.

With noise-canceling push-to-talk mike, metal case, full instructions. 5 $\frac{1}{2}$ x13 $\frac{1}{2}$ x11". Optional crystals and other accessories below. 22 A 3460 X. Shpg. wt., 22 lbs. 89.95

"... the signal sounded fine, was over S9, and had no drift... a few nights to build."

73 MAGAZINE

"... puts out an excellent signal... verified by your reviewer... reports have been flattering."

POPULAR ELECTRONICS

### SPECIFICATIONS

**Receiver.** Coverage: 6 meters, 50-52 MHz. **Input Impedance:** 50 ohms. **Sensitivity:** 0.5  $\mu$ V. **Selectivity:** 8-kHz bandwidth at 6 dB down. **Audio Output:** More than 5 watts at 10% distortion. **Transmitter, Stages:** doubler, tripler, straight-through final. **DC Power Input:** 15 watts nominal. **Modulation:** AM (high-level plate and screen). **Frequency Control:** Fundamental (8 MHz) crystals or VFO.

### USEFUL TRANSCIVER ACCESSORIES

- 22 A 3140 X. Base for Desk-Top Use. Holds transceiver at the best angle. Shpg. wt., 5 lbs. 2.95
- 22 A 3129 X. Mobile Mounting Bracket. For ease in installing transceiver in car or boat. Shpg. wt., 2 $\frac{1}{2}$  lbs. 1.95
- 17 A 9404 CS. 6-Meter Crystal. Specify 8340-8450 kHz ( $\pm$ 6 kHz). Shpg. wt., 3 oz. Each 2.95

### 6 and 2-meter VFO Kit with temperature-controlled Clapp oscillator

**Knight-Kit V-107.** Easy-to-assemble VFO with Clapp oscillator for stable variable frequency control of the TR-106 six-meter transceiver or previous 2-meter Model TR-108. Simplicity of operation as well as fine performance and durability. Oscillator has voltage-regulator-stabilized DC supply. Power is drawn from transceiver through connectors on transceiver and VFO. Backlighted dial is calibrated for 6 and 2 meters. Smooth vernier-tuning. B+ switch and indicator light for standby operation. 5 $\frac{1}{2}$ x4 $\frac{1}{4}$ x6 $\frac{1}{4}$ ". With all parts, wire, solder, detailed easy-to-follow instructions. 22 A 3461 X. Shpg. wt., 5 lbs. 24.95

**24<sup>95</sup>**

\$5 monthly  
See page 438



# Power-boosting Linear Amplifier Kit for 6 or 10-meter SSB-AM-CW transmitters

**99<sup>95</sup>**

\$5 monthly  
See page 438



**Knight-Kit T-175.** Six and 10/11-meter\* linear amplifier builds up input power to 330W PEP SSB, 150W CW, 120W AM. Makes a real difference in range and readability. Requires drive of only 1-15W PEP SSB, 1-7W CW, 1-4W AM.

Features two illuminated meters for plate-current and grid-current/relative-power. Internal automatic antenna changeover circuit for SSB, AM, and low-speed CW—with no internal connection to transceiver required. Rugged fan for forced air cooling during transmit. Thermal radiators on plate caps reduce tube temperatures. Standard SO-239 coaxial connectors.

Input Impedance, 50 ohms nominal; Output Impedance, 50-70 ohm pi-network.  $5\frac{1}{2} \times 13\frac{1}{2} \times 11"$ . Coils supplied for \*26,960-29,700 MHz and 50-54 MHz. With all parts, wire, solder, detailed instructions. For 110-130 V, 60 Hz AC. \*Illegal for Class D CB Operation in U.S.A.

22 A 3463 X. Shpg. wt., 22 lbs. . . . . \$99.95

## SPECIFICATIONS

**Frequency Coverage:** \*26,960-29,700 MHz and 50-54 MHz. **Power Input (DC):** AM, 120W max; CW, 150W max; SSB, 300W PEP max. **Drive Requirements:** AM, 1-4W; CW, 1-7W; SSB, 1-15W PEP max. **Input Impedance:** 50 ohms nominal. **Output Impedance:** pi-network, 50-70 ohm loads with a VSWR of 3:1 or less. **Tubes:** 6JE6A output amplifiers; 12AT7 relay amplifier. **Primary Input:** 110-130 V, 60 Hz AC.

"... economical way to really work out... you'll have the best signal on the block... it's a darn good investment."  
73 MAGAZINE

"... a nice addition to Allied Radio's popular kit line... tested primarily on 6 meters... performs equally well on 10..."  
POPULAR ELECTRONICS

## Two-unit SWR/Power Meter Kit

**16<sup>95</sup>**



**Knight-Kit P-2.** Measures SWR from 1:1 to 20:1, relative power from 0-10. Covers 1.8-432 MHz; handles up to 1 kW. Flexible two-unit construction—consists of coupler and indicator connected by a 4-ft. shielded cable. May be left in transmission line. No AC power or batteries. Accuracy is better than 10%. Sensitivity adjustment. Gray satin finish. Coupler,  $2\frac{1}{2} \times 6\frac{1}{4} \times 3"$ . Indicator,  $2\frac{1}{2} \times 6\frac{1}{4} \times 3"$ . SO-239 connectors. All parts, wire, solder, detailed instructions.  
22 A 3627 X. Shpg. wt., 3 lbs. . . . . 16.95

## Grid-Dip Meter Kit covers 1.5 to 300 MHz

**23<sup>95</sup>**

\$5 monthly  
See page 438



**Knight-Kit G-30.** Covers from 1.5 to 300 MHz in 6 ranges. Dial scales are color-coded to match coils. Sensitivity control for optimum grid current adjustment. Movable hairline cursor for fast, accurate readings. Becomes a crystal oscillator with a standard-spaced plug-in crystal. Phone jack permits use as modulation monitor or regenerative detector.  $6\frac{3}{8} \times 3\frac{1}{4} \times 1\frac{1}{8}"$ . With 6 coils in plastic case, instructions. For 110-130 V, 50-60 Hz AC.  
22 A 3721 X. Shpg. wt., 2 lbs. . . . . 23.95

# HOBBY

## RADIO CONTROL

# Ready-to-use four-channel R/C System with digital proportional control

Model DV-4

**329<sup>95</sup>**

27.145 MHz

\$16 monthly\*

Model DV-4 assembled Radio Control System. Four independent, simultaneous channels. Transmitter has built-in Battery Charger and nickel-cadmium Battery Pack. Receiver has integrated circuits in decoder for exact control

**A** Citizenship DV-4. Ready-to-use four-channel digital proportional system ideal for Aero Commander and Kwik Fli on next page. DPR-4 Transmitter has built-in battery charger for nickel-cadmium battery pack. DPR-4 Receiver has harness with 5 plugs. DMS servo (4 included) has IC reference generator, 3 outputs, 5-pole motor. For 27.145 MHz only. Transmitter,  $7\frac{1}{2} \times 6\frac{3}{8} \times 1\frac{3}{4}$ ". Receiver,  $1\frac{3}{16} \times 2\frac{3}{16} \times \frac{61}{64}$ ". R/C license Required.  
 22 A 3763 S. Shpg. wt., 7 lbs. . . . . 329.95  
 22 A 3764 F. Above, but for 26.995, 27.045, 27.095, 27.195 or 27.255 MHz—specify. Allow 3-4 weeks delivery from Indiana. . . . . 329.95  
 22 A 3768 F. Above, but for 72.080, 72.240, 72.400 or 75.640 MHz—specify. Allow 3-4 weeks delivery from Indiana. . . . . 349.95

Three Independent, Simultaneous Channels on 27.145 MHz

**274<sup>95</sup>**

\$14 monthly\*

Single-Channel Digital System on 27.145 MHz

**84<sup>95</sup>**

\$5 monthly\*

**34<sup>95</sup>**

\$5 monthly\*

Single-Channel . . . 27.145 MHz

### Three-channel R/C System

Citizenship DP-3. Digital-proportional radio control system with 3 channels. Same features as DV-4 above. Battery charger and nickel-cadmium battery pack; 3 DMS servos. Transmitter,  $6\frac{1}{8} \times 5\frac{5}{8} \times 2\frac{3}{4}$ ". Receiver,  $2\frac{1}{2} \times 1\frac{1}{4} \times 1\frac{1}{4}$ ". Fully assembled. Order 1 battery below. R/C license required.

- 22 A 3772 S. Wt., 6 lbs. . . . . 274.95
- 18 A 5652. Burgess D6 Batt. 1 lb. . . . . 1.36
- 22 A 3773 F. Above, but for 26.995, 27.045, 27.095, 27.195 or 27.225 MHz—specify. Allow 3-4 weeks delivery from Indiana. 6 lbs. . . . . 274.95
- 22 A 3774 F. Above, but for 72.080, 72.240, 72.400 or 72.640 MHz—specify. Allow 3-4 weeks for delivery from Indiana. 6 lbs. . . . . 299.95

### One-channel R/C System

Citizenship DP-1. Fully assembled Digital proportional Radio Control system for single-channel uses. Transmitter ( $6\frac{1}{8} \times 3\frac{3}{8} \times 2\frac{3}{8}$ ") has vertical control stick. Receiver ( $2\frac{1}{4} \times 1\frac{1}{4} \times \frac{7}{16}$ ") has superhet circuit. Switch and servo are board-mounted with all connections for receiver and batteries. For 27.145 MHz. R/C license required. Order batteries below.

- 22 A 3761 S. Wt., 3 lbs. . . . . 84.95
- 22 A 3762 F. Above, but for 26.995, 27.045, 27.095, 27.195 or 27.225 MHz—specify. Allow 3-4 weeks for delivery from factory in Indiana. Shpg. wt., 3 lbs. . . . . 84.95
- 18 A 5083. Battery. (Use 4). 4 oz. . 2/27¢
- 18A5652. Battery. (Use 1). 1 lb. Ea. 1.57

### Medium-range R/C System

MRC-Futaba F-66. Ready-to-operate single-channel Radio Control system ideal for use with small model planes, boats and cars. Solid-state circuit for dependable operation on 27.145 MHz. Strong, super-regenerative relayless receiver has tuning lamp for peak operating efficiency. Transmitter has retractable antenna, operates on standard pencil batteries (order below).

Full installation diagram and operating instructions are included. Compound escapement operates from receiver batteries. Transmitter,  $4\frac{1}{2} \times 2\frac{3}{8} \times 1\frac{1}{4}$ ". Receiver,  $1\frac{1}{2} \times 1\frac{1}{2} \times \frac{11}{16}$ ". From Japan. Shpg. wt., 1 lb. . . . . 34.95  
 22 A 3770 S. . . . . 34.95  
 18 A 5083. Batt. (Use 10). 4 oz. . 2/27¢

**22<sup>95</sup>**



### .19 R/C Engine

Veco. Radio Control engine, ideal for small model planes. Features Mechanite piston design for long life, reduced break-in period. Includes coupled exhaust/intake throttle control for added reliability. Fully assembled and ready to mount. Shpg. wt., 1 lb.

22 A 3753 S. . . . . 22.95

### .61 R/C Engine

Veco. Higher power engine for larger models. Features linear control carburetion from idle to maximum rpm. One-piece die-cast aluminum alloy case; hard chrome-plate cylinder sleeve. No tension, single ring, low expansion piston. Fully assembled, ready to mount.

22 A 3754 S. Wt.,  $1\frac{1}{2}$  lbs. . . . . 44.95

**44<sup>95</sup>**



# Ready-to-operate Radio/Control Plane Outfit with rudder and motor control

**HOBBY**  
RADIO CONTROL

Fully assembled and painted foam plastic Plane . . . Motor, Transmitter and Receiver plus all Accessories . . . Rudder and Motor Control System for realistic operation

**124<sup>95</sup>**  
\$7 monthly\*



MRC-Futaba. Exciting model of the Mooney MU-2 300-mph prop jet. Has 37" wingspan and 27" fuselage, landing gear and wheels, adjustable push rods, fuel tank and line, metal motor mounts. MRC-Inya .09111 TV engine and propeller. Single-Channel MRC-69 transmitter with electronic keying for stick control of rudder and positive motor control. Pre-wired, mounted actuators, connectors, harness, switch and battery holders. Extra paint, cement. Batteries below.

- 22 A 3771 X. Japan. Shpg. wt., 10 lbs. . . . . 124.95
- 8 A 5083. Batteries. Use 11. Wt., 10 oz. . . . . Pkg. 2/27¢
- 8 A 5980. 9-Volt Battery. Use 1. Wt., 10 oz. . . . . 2/59¢

**24<sup>95</sup>**

Fully assembled and ready-to-operate

\$5 monthly\*



## R/C Car Outfit with Sequential Control

Has single channel forward/reverse, left/right, stop/start sequential control. Handsomely designed 14" long sedan. Crystal-controlled transmitter with extended range circuitry; transmit button. Solid-state receiver with relay for precise control. Order batteries below. Japan.

- 22 A 3757 X. Shpg. wt., 5 lbs. . . . . 24.95
- 18 A 5079. "D" Batteries. Use 2. Wt., 8 oz. . . . . Pkg. 4/65¢
- 18 A 5980. 9-Volt Battery. Use 1. Wt., 10 oz. . . . . 2/59¢

**59<sup>95</sup>**

Fully assembled and ready-to-operate

\$5 monthly\*



## R/C Car Outfit with Proportional Control

Red, hard-top sedan is 10½" long, has chrome trim, grill, bumpers and hub caps. Proportional power steering and reverse permit any degree turn. High-low speed switch; positive steering wheel control. With 12 flagged obstacles for exciting "Skill Driving." Batteries below. Japan.

- 22 A 3758 X. Shpg. wt., 6 lbs. . . . . 59.95
- 18 A 5078. "C" Batteries. Use 4. Wt., 4 oz. . . . . Pkg. 2/33¢
- 18 A 5980. 9-Volt Battery. Use 1. Wt., 10 oz. . . . . 2/59¢

**34<sup>95</sup>** \$5 monthly\*



**8<sup>95</sup>**

## Cessna 150 Plane Kit

Midwest. Semi-scale model of the world's most popular plane. Use with single-channel DP-1 or F-66 Radio Control systems (opposite page). 44" wing span, 264 sq. in. area. Molded foam wing and stab, shock absorbing nose gear. Takes .049 engine. Easy to assemble. Wheel, hub kit below.

- 22 A 9511 X. Wt., 2½ lbs. . . . . 8.95
- 22 A 9507. Wheel, Hub Kit. 5 oz. . . . . 2.95

## Kwik-Fli III Plane Kit

Top-Flite. Contest aerobatic model plane for use with multi-channel DV-4 Radio Control system and Veco .61 engine (opposite page). 60" wing span, 53" long. Shaped longerons and spar tapers for easy assembly. Control surfaces hinged with Super-Monokote adhesive. Instructions. Less wheels, Radio Control equipment, engine.

- 22 A 3751 X. Wt., 7½ lbs. . . . . 34.95

**29<sup>95</sup>** \$5 monthly\*

## Aero Commander 100 Plane Kit

Du-Bro. Easy-to-assemble model of a respected 4-place private plane. Use with DP-3 Radio Control system and Veco .19 engine (opposite page). Foam-core wing/stabilizers, servo rails, fuel tank in reinforced fuselage. 49" wing span, 36" long. Near scale appearance. Pre-formed die-cut parts. Less wheels, Radio Control equipment, engine.

- 22 A 3769 X. Wt., 6 lbs. . . . . 29.95

\*No money down, low monthly payments . . . see page 438



**knight-kit**

HOBBY

**Shortwave Receiver Kit puts the world at your fingertips . . . 4-band listening at a low price**

**29<sup>95</sup>** \$5 monthly  
See page 438



Hear English and foreign language broadcasts from the capitals of the world

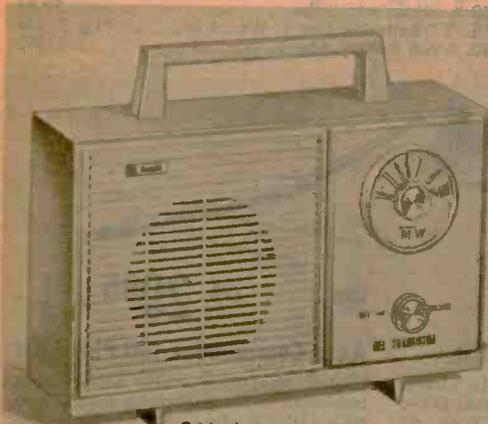
**Knight-Kit Spanmaster® II.** An ideal first receiver for aspiring SWL's and Hams. Offers full communications coverage on 4 bands: 550-1600 kHz AM; 1.5-4.5 MHz, 4-12 MHz, and 11.5-30 MHz Shortwave. Lets you listen to many English and foreign language broadcasts from other continents . . . tunes in Hams, CB'ers, U. S. government stations and much more, plus your local AM broadcast stations.

It's easy and fun-to-build too, with full step-by-step assembly instructions, oversize illustrations and easy-to-follow wiring diagrams. You'll find shortwave listening even more exciting knowing you built the kit yourself. Has calibrated vernier tuning dial for precise station selection; sensitive superhet receiver circuit. Delivers 1-watt-audio

output for full volume from built-in 3" speaker. Even has beat-frequency oscillator to vary the pitch of CW signals for clear reception of Morse Code broadcasts. Has on-off pilot light; front panel headphone jack for private listening; isolated power transformer for safe operation. Efficient circuit uses four tubes, plus rectifier. Fuse protection prevents damage to components.

Gray crackle finish steel cabinet, 5 $\frac{1}{8}$ x9 $\frac{5}{8}$ x6". Step-by-step assembly instructions are easy enough for a youngster to follow. 110-130 V, 60 Hz AC. From Japan.

- 22 A 3170 X. Shpg. wt., 8 lbs. . . . . 29.95
- 22 A 3099 X. Optional Antenna Kit. Wt., 1 lb. . . . . 1.39
- 22 A 3257 X. Dual Headset with Cord and Plug. 1 lb. . . . . 2.50



**Portable AM Radio Kit features "Modular" Concept prewired PC board**

**12<sup>95</sup>** Handsomely styled solid-state portable great for beach and picnics . . . or just around the house

Critical circuits assembled and **READY-TO-USE** . . . All you do is solder interconnections. PC board circuit is factory-tested. See pg. 447.

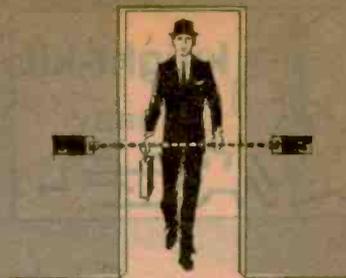
**Knight-Kit Ranger IV.** Top-value portable AM radio is ideal as a starter kit for beginning hobbyists. All critical circuits are prewired and aligned at the factory for simple, foolproof assembly. Has dependable solid-state circuit . . . pulls in plenty of stations, yet keeps battery drain to a minimum. Built-in 4" speaker for clear sound indoors or out. Attractively styled unit enhances any room in the house; is lightweight and compact enough for easy carrying at beach or picnic. Has built-in ferrite antenna for increased sensitivity. Tunes 540-1600 kHz AM band. High-impact case, 8x10 $\frac{1}{2}$ x3 $\frac{1}{2}$ ", carrying handle. With 4 "D" batteries, step-by-step assembly instructions. From Japan.

- 22 A 3908 X. Shpg. wt., 4 lbs. . . . . 12.95
- 18 A 5079. Extra "D" Batteries. (Use 4.) 10 oz. . . . . Pkg. of 4 for 65¢

# Photoelectric Relay Kit with light source . . . effective switching distance of up to 50 feet

Offers low-cost, effective protection—  
when used as alarm, plus accurate  
signals for counting and switching

**19.95** \$5  
monthly  
See page 438



**Knight-Kit KG-833.** Sensitive photoelectric relay unit has hundreds of uses around the house, at office or shop, in factories, warehouses, garages. Functions as an effective alarm against intruders; provides accurate counting for merchandise, people entering and leaving a given area, production line units, much more. Consists of exciter lamp with built-in light source, plus photoelectric relay receiver. Operates from 110-130 V, 60 Hz AC line.

Provides continuous beam between light source and relay unit. When beam is broken, unit sounds alarm, bell or buzzer, or provides signal to electronic counter. Installation is fast and easy. Simply connect lamp and receiver unit so that light beam is aimed directly into "eye" of receiver. Variable sensitivity control provides exact beam power for desired distance. Units can be placed up to 50-ft. apart in darkened areas; up to 15-ft. apart for operation in daylight or brightly lit areas.

Reaction time: 50' m/m per second (at a distance of 10-ft. between units). Working temperature range: -4° to +104° F. Power consumption: Exciter lamp, 15 V/amp; receiver, 0.5 V/amp. Units encased in rugged metal housings. Each unit, 3x6x5". With easy-to-follow step-by-step assembly instructions, mounting hardware. From Japan.  
22 A 3381 X. Shpg. wt., 8 lbs. . . . . 19.95



For convenient  
"hands-free" use

**6.95**

(A)



## (A) Telephone Amplifier Kit

**Knight-Kit KG-205.** Solid-state telephone amplifier kit permits "hands free" conversation. Lets the whole family listen to calls from friends and relatives. Excellent aid for the hard-of-hearing, too. Amplifies the sound from your telephone to room level without any electrical connection to phone. Has suction cup mount for instant connection to any telephone. Volume control, on-off switch. Attractively styled unit, 4x3x1 1/4". With 9-volt battery, all parts, step-by-step assembly instructions. From Japan.

22 A 3333 X. Shpg. wt., 1 lb. . . . . 6.95

## (B) Remote Control Center Kit

**Knight-Kit KG-229.** For radio, TV and phono. Lets you operate volume and on-off functions from your easy chair. Has built-in speaker, 60-minute timer, main-remote switch and volume control. Turns sets off after pre-set delay of up to 60 minutes; controls volume of set's speaker or its own built-in speaker. Earphone jack for private listening without disturbing others. Compact case, only 5x 3 3/4 x 1 5/8". With 15' remote cable, all parts, detailed step-by-step assembly instructions. For 115 VAC. Japan.

22 A 3331 X. Shpg. wt., 1 lb. . . . . 7.95

Remote control of  
TV, radios, phonos

**7.95**

(B)



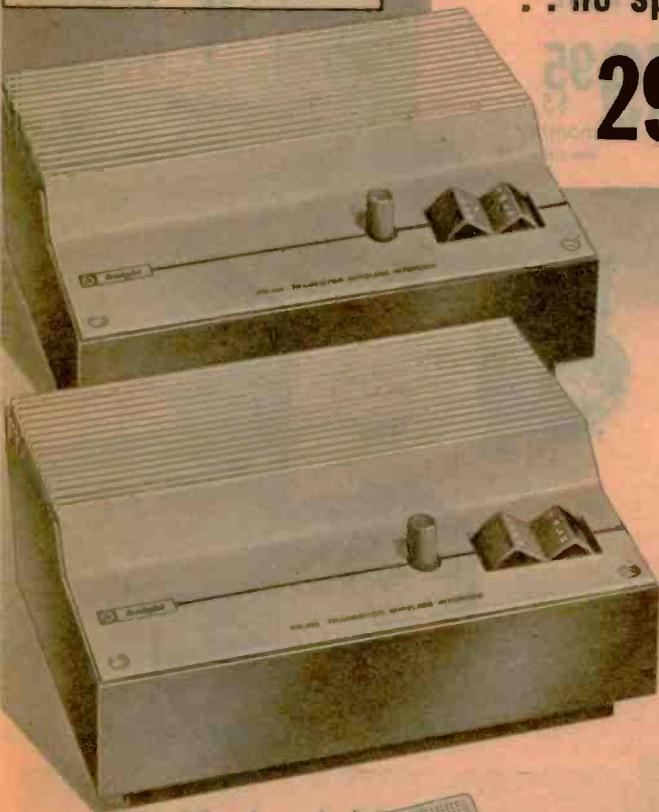
**knight-kit**

HOBBY

## Deluxe solid-state wireless 2-channel Intercom System Kit .. no special wiring to install

**29<sup>95</sup>**

Both stations are Masters  
so you can originate calls  
from either station



- Even talk between adjacent buildings
- Add more stations as they are needed
- Two channels for two conversations at once

**Knight-Kit KG-225.** Enjoy the convenience of being able to move your intercom stations from place to place, without special wiring between stations. Just plug each station into any AC outlet. Great for home, office or shop. You can talk between house and garage or between adjacent homes and buildings, as long as they are on the same electric-line transformer.

In addition, the KG-225 offers dual frequency (136 and 215 kHz) switch to let you operate 2 separate, independent systems (4 or more units) simultaneously. Solid-state circuits permit clear sound without noise. Compact, streamlined styling. Special volume control won't let volume drop below an audible level—prevents missed calls.

Press-to-talk switch with locking position for continuous transmissions. Solid-state circuit draws hardly more current than an electric clock. Easy and fun to assemble. Sea foam green and cream cases, 3 $\frac{1}{4}$ x8 $\frac{1}{4}$ x5 $\frac{3}{4}$ ". With all parts, solder, and full assembly instructions. For 110-130 V, 60 Hz AC. From Japan.

22 A 0015 L2X. Shpg. wt., 8 lbs. . . . . 29.95  
22 A 3309 X. Extra Station, 4 lbs. . . . . Each 19.95

**Three-Station Intercom System Kit.** Master stations—all 3 can originate calls.  
22 A 0016 L3X. Shpg. wt., 12 lbs. . . . . 44.95



**7<sup>95</sup>**

## Low-cost battery powered two-station Intercom Kit

- Battery-powered for use anywhere
- Sensitive—can pick up soft sounds
- Solid-state circuits for clear sound

**Knight-Kit KG-234.** An all-transistor 2-station intercom kit with features found in assembled models costing over twice as much. Ideal for baby-minding—sensitive enough to pick up baby sounds in bedroom. Battery-powered—talk between any two rooms.

Easy to operate—just press button to talk, release to listen. Volume control is on Master-station. Circuit permits signal to be sent even if switch is in "off" position on Remote-station.

High-impact plastic cases, gold-color grilles. Can be hung on wall. Compact, only 3x1 $\frac{1}{4}$ x4". With 9-V battery, 66-ft. interconnecting wire, plugs, solder, instructions. Japan.  
22 A 3334 X. Shpg. wt., 2 $\frac{1}{2}$  lbs. . . . . 7.95

# Learn Morse Code with Code Practice Oscillator kit

## 795



- Battery-powered for use anywhere
- Learn with light, speaker or phones
- Begin to earn an Amateur Radio license

**Knight-Kit LC-1.** Take the first step toward earning your Amateur Radio license with this portable code practice kit. Makes learning Morse Code as easy as possible. It's the ideal kit for aspiring Amateurs, Scouts, students, hobbyists. Adjustable hand key gives you the "feel" of on-the-air operation at the very beginning. You learn fast as you listen to the clear tone from the built-in speaker, or watch the built-in flasher. For private operation, just plug headset (below) into the front panel jack.

Assembly is fun, thanks to Knight-Kit's well-illustrated, step-by-step instructions. Two-transistor circuit uses 1 1/2-volt "C" flashlight battery for power. Handsomely designed black bakelite case, aluminum panel, gray trim. 2x6 1/4 x 3 3/4". With all parts, solder, key and battery. Japan.

22 A 3432 X. Shpg. wt., 2 lbs. . . . . 7.95  
22 A 3257 X. Headset. Shpg. wt., 1 lb. . . . . 2.50



### A LC-1 and Code Course Record

Get off on the right foot with the help of Allied's package offer for the beginner in Amateur radio. This outfit includes the Knight-Kit LC-1 Code Practice Oscillator kit, Battery and Key plus Allied's Beginning 10-Lesson Code Course, complete on one easy to understand 12" 33 1/3-rpm record. Makes code easy to learn — starts slow, goes to 15 words per minute. With 20-page manual.

22 A 0326 L2X. Wt., 3 lbs. . . . . /10.95

### B LC-1, Code Course, 4 Books

All you need to prepare for the Amateur Exam. Code practice package includes: LC-1 Oscillator Kit, Battery, Key, 10-lesson Course on 12" Record with 20-page instruction manual, plus four A.R.R.L. Books that give a full introduction to Ham radio: *How to Become a Radio Amateur*; *Learning the Radio-telegraph Code*; *Radio Amateur License Manual*; *Operating an Amateur Station*.

22 A 0327 L3X. Wt., 4 lbs. . . . . 12.95



# Solid-state Motor/Speed Light Control kit

- Controls speeds of power tools
- Varies brightness of lamps
- Regulates heating elements

## 995

**Knight-Kit KG-201.** Gives you the right power tool speed for the job. Ideal for sewing machines, blenders, lathes; great for portable drills, saws, sanders, other tools with universal AC-DC motors. Controls brightness of incandescent lamps and photographic floodlights, too. Also for heating pads, coffee makers, toasters, and other appliances with heating elements. Calibrated control adjusts output.

Solid-state circuit uses silicon-controlled rectifier and two diodes. For any universal-wound AC-DC motor driven device with nameplate rating of 7.5 amps or less. For resistive loads to 900 watts, incandescent lamps to 500 watts. Handles 10-amp surges. (Not for AC-only motors, but works with most DC-only motors.) Fully protected by thermal circuit breaker. Compact case, only 2 7/8 x 4 x 1 1/2". With all parts, solder, easy-to-follow instructions. For 110-130 V, 50-60 Hz AC.

22 A 3335 X. Shpg. wt., 2 lbs. . . . . 9.95



*Knight-Kits are a product of Allied Radio*

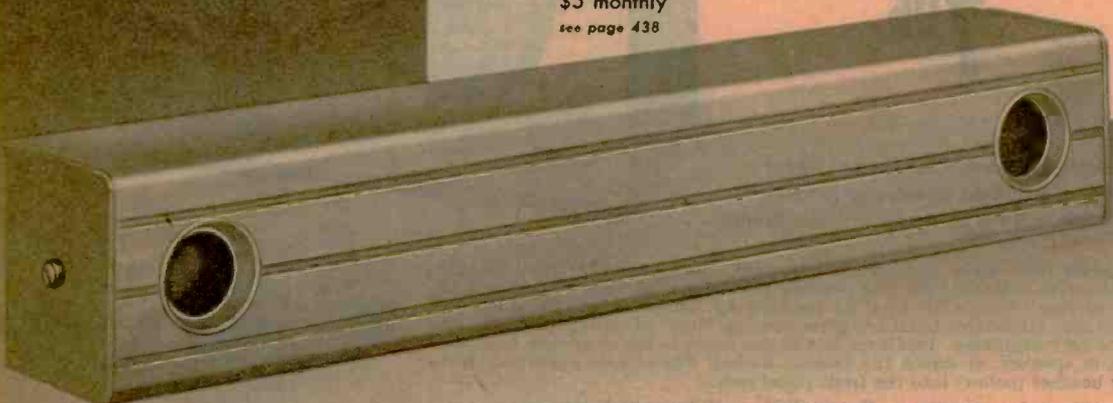
knight-kit

# Ultrasonic Intrusion Alarm Kit for protection from burglars or prowlers

## 69<sup>95</sup>

\$5 monthly  
see page 438

Protects up to 100 sq. ft. area . . . great for entranceways, stairwells and exit areas



This alarm system uses a time-tested ultrasonic principle . . . impossible to detect or avoid . . . triggers sound-alarms . . . turns on lights or provides remote indication of any moving object that enters the protected area . . . easy-to-assemble and install

**Knight/James KG-642 Sonic Alarm.** Ultrasonic alarm system kit provides effective safeguard against intruders at a surprisingly low price. Uses the same principle that has been successful for years in banks, detection agencies, industrial plants and other security installations. Provides up to 100 sq. ft. area protection with the use of a silent and invisible ultrasonic beam. When the beam is broken by an intruder, alarm can be connected to turn on lights, sound buzzer or bell, or send remote signals indicating a moving object crossing the beam. Dependable solid-state circuit for long life and reliable operation, even under constant use.

Ideal for use in homes, apartments, offices or shops. Offers complete installation flexibility—can be set up to protect stairways, entrance foyers, hallways, storage rooms, other critical areas. Simply install the unit anywhere, "aiming" it over the area you wish to protect, and keeping the front of the unit unobstructed. Great for cars or boats, too. When used in car, unit can be connected to sound alarm instantly when car door is opened. Has on-off/reset switch (reset has 60-second delay). Variable sensitivity control permits adjusting the beam further from or closer to the unit for more effective area coverage.

Output may be wired for 110-130 V at 500 watts (for direct connection of lamps, horns, buzzers, etc.); or 5-amp control switch (for connection of units with their own power supplies, 12-volt units, etc.). Simplified assembly with entire circuit mounted on a single PC board. With all parts, detailed, non-technical assembly instructions. Size, 2x12x2". For 110-130 V, 60 Hz AC. Optional gimbal bracket, alarm bell below.  
22 A 3722 X. Shpg. wt., 3 lbs. . . . . 69.95

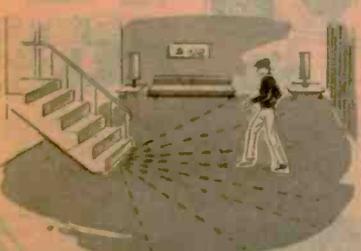
### SPECIFICATIONS

Ultrasonic Frequency: 40 kHz.  
Area Coverage: 10 ft. x 10 ft. (100 sq. ft. total).  
Controls: On-Off/Reset switch (Reset with 60-second delay).  
Variable sensitivity control.  
Outputs: 110-130 V at 500 watts or 5 amp switch contacts.  
Power Requirements: 110-130 V, 60 Hz AC.

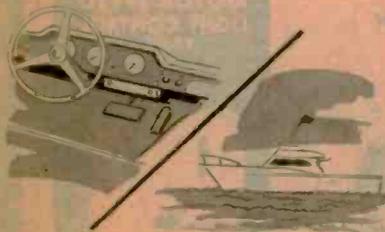
### ACCESSORIES

- Gimbal-type Mounting Bracket. For KG-642 installation.  
22 A 3008 X. Shpg. wt., 2 lbs. . . . . 3.00
- 3 1/2" Bell. For use with KG-642. Shpg. wt., 2 lbs.  
26 A 2161 . . . . . 5.95
- 6" Bell. For use with KG-642. Shpg. wt., 4 lbs.  
26 A 2162 . . . . . 24.95

Alarm sends out invisible ultrasonic beam to cover entire 10x10-ft. area



Impossible to detect or avoid . . . covers entrances, stairways, halls, foyers



Ideally suited for cars and boats . . . provides effective area protection

# Science Lab Kit lets you explore the "secrets" of electronics with over 100 fascinating experiments

**24<sup>95</sup>** \$5 monthly  
see page 438



**Knight-Kit 100-in-1 Lab Kit.** Fun-filled way to discover the exciting world of electronics. Create up-to-the-minute projects that are both informative and entertaining. Build a crystal-set radio, code buzzer, transistor radio, audio amplifier, more . . . over 100 projects in all. It's the perfect instructor for students, hobbyists and aspiring technicians.

No soldering is required. All you need for easy assembly is a screwdriver. After the main parts are mounted on the Master Control panel, all you do to change circuits is rearrange a few wires and parts. Strong, spring-type connectors hold all wires and components firmly in place. Kit includes solar-type photocell, meter, tube and transistors, power transformer, dual headset, speaker and antenna—all parts for each project.

Informative 156-page instruction manual has detailed step-by-step instructions plus full illustrations for each project; sections on basic electronics principles and how to read schematic diagrams. Lab kit, 8x14½x8". For 110-130 V, 50-60 Hz AC. From Japan.  
22 A 3997 X. Shpg. wt., 8 lbs. . . . . 24.95

## Tools for easy and accurate kit assembly



**A** Ungar Soldering Iron, 27 watts. "Taper tip" design for easy PC work, 7½" long. U. L. Listed. 110-120 V, AC-DC.  
22 A 3068 X. Wt., 5 oz. . . . . 2.56  
22 A 3067 X. Extra Tip. Wt., 2 oz. . . . . 1.24

**B** Knight-Kit Tool Outfit, 5 pieces. Ungar soldering iron (above); 5" wire cutters, 6½" long-nose pliers; 2 screwdrivers, 3½x ½ and 4x ¼".  
22 A 3070 X. Wt., 1½ lbs. . . . . 5.95



**395**

## Philmore Crystal Radio Kit

Model VC-1000. Same general design as traditional crystal radios, but features convenient variable-capacity tuning and high "Q" coil. Coil is tapped to permanently fixed germanium crystal, for best values of volume and selectivity. Receives standard AM stations without batteries or AC power. Fun to assemble. Offers unlimited hours of listening pleasure. With full instructions, earphone, plastic ear holder. Shpg. wt., 3½ lbs.  
22 A 3205 . . . . . 3.95

## Selected Kits

ELECTRONIC LABS

# Learn electronics the fun way with these deluxe Norelco Kits

Model  
EE20

**19<sup>95</sup>**

\$5  
monthly\*

Explore the basic principles  
of electronics with 23  
different, interesting projects!  
No soldering or tools needed



**13<sup>95</sup>**

### Norelco solid-state Master Electronics Kit

Model EE20. A world of information and many enjoyable hours are at your fingertips with this fascinating all-transistor kit. Makes 23 different projects—all showing clearly many basic principles of electronics. An individual template for each project makes assembly virtually foolproof. Safe, easy-to-assemble pegboard parts mount with no soldering or tools needed. Make transistor radios, amplifiers, intercom, burglar alarm, electronic organ, code traifier, time switch, rain indicator, much more. Detailed 76-page instruction manual explains every assembly step in easy-to-understand non-technical language, and shows how each circuit operates. Projects are easy to take apart for new projects. Order 9-volt battery, below.

22 A 9593 X. Shpg. wt., 4 lbs. . . . . 19.95  
18 A 5102. 9-volt Battery. (Use 1.) Shpg. wt., 7 oz. . . . . 1.36

### Norelco "Starter" Electronics Kit

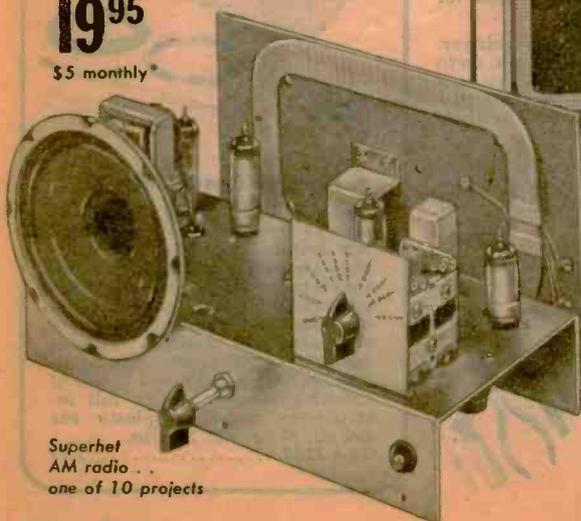
Model EE1050. Wonderful way to begin learning electronics. Exciting basic educational electronics kit builds 12 interesting projects, using newest silicon planar transistors. You can build up to 24 projects with optional add-on kits listed below. Individual templates are included for each project, along with a simplified instruction manual, to make assembly easy and fun. You build an amplifier, a burglar alarm, nightlight, traffic beacon, plus 8 more. Order 6 batteries below.

22 A 9595 X. Shpg. wt., 2½ lbs. . . . . 13.95  
22 A 9596 X. EE1051 Kit for 6 More Projects. 2 lbs. 7.95  
22 A 9597 X. EE1052 Kit for 6 More Projects. 2 lbs. 7.95  
18 A 5083. Penlight Batteries. Wt., 2 oz. . . . . Pkg. 2/27¢

### Conar "Adventures in Electronics" 10-project lab Kit Outfit

**19<sup>95</sup>**

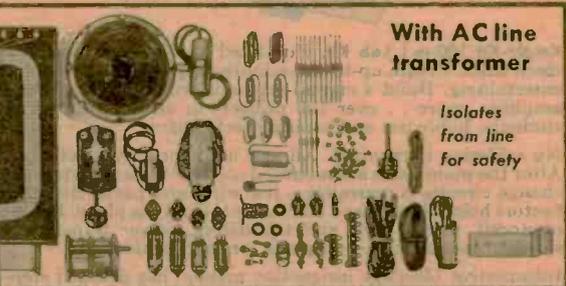
\$5 monthly\*



Superhet  
AM radio . . .  
one of 10 projects

With AC line  
transformer

Isolates  
from line  
for safety



### Exciting 10-project Kit Outfit

Perform ten interesting and rewarding projects while you study the basic applications of important electronic principles. Detailed study book takes you through projects increasing in interest until you reach the final project—an AM broadcast band superhet receiver. Manual also contains a glossary of electronic terms for easy reference. Projects include signal tracer, radio broadcast station, secret listener, audio oscillator, audio amplifier, metronome, code practice oscillator, theramin, photoelectric controls, and radio. Easy step-by-step instructions for assembling each project. With AC line isolation transformer. Size, 5½x10½x14". For 110-130 volts, 60 Hz AC.

22 A 9500 X. Shpg. wt., 6 lbs. . . . . 19.95

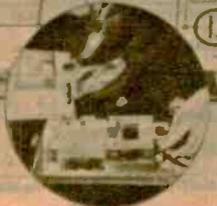
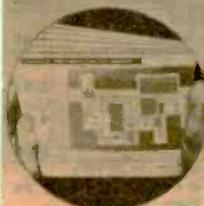
# Start learning electronics with one of these easy Raytheon Kits

## Selected Kits ELECTRONIC LABS

See-through solid-state building blocks connect magnetically... no wiring, soldering, or tools needed

Low as

**995**



Easy-to-follow instructions

Cubes connect magnetically... No tools needed

Match block symbols with circuit diagrams

Plastic see-thru building blocks

Many functional, working projects

The latest way to learn the principles of electronics. No previous knowledge or training needed. Build a solid-state radio in 2 minutes—take it apart and assemble many more projects. Plastic "see-thru" cubes each contain an electronic component with its schematic symbol etched on the top. Simply place the cubes together on the ground-plate, matching the symbols with the diagrams in the easy-to-follow instruction book.

Cubes connect magnetically—no wiring, soldering, or tools needed. Instruction book give you full explanation of circuits and components. Leads you along gradually and logically until you find yourself absorbing electronic principles naturally and easily, and having fun too. Projects build quickly and take apart easily.

**Series 1 Raytheon Lectron Cube Kit.** Twenty exciting projects. Assemble metronome, morse-code transmitter, code-practice oscillator, grounded transmitter circuit; convert AC to DC; much more. With 8x11" metal ground-plate, 12 blocks, 100-page manual. 22 A 9590 X. Shpg. wt., 2 lbs. (Order battery below.)..... 9.95

**Series 3 Raytheon Lectron Cube Kit.** Fifty-six fascinating projects. Assemble transistor radio with speaker, electronic organ, phono and public-address amplifier, burglar alarm, automatic night light, more. 8x11" metal ground-plate, 21 blocks, 100-page manual. 22 A 9592 X. Shpg. wt., 4 lbs. (Order battery below.)..... 24.95

**Series 3A Raytheon Lectron Cube Kit.** Sixty-four projects. Assemble 3-stage AM BC-band receiver, electronic alarm clock, more. 13x19" ground-plate, 31 blocks, 100-page manual. Order battery below. 22 A 3296 X. Shpg. wt., 5 lbs. .... 39.95  
18 A 5980. 9-volt Battery. Shpg. wt., 6 oz. .... Pkg. of 2 for 59¢

### Superex Lab 35 deluxe electronics Lab Kit

Thirty-five projects. Begins with a simple-circuit diode radio, climaxes with an audio-modulated test generator. Build 3-transistor radio, radio broadcast transmitter, solar-powered radio, electronic fire and burglar alarm, driver sleep alarm, test equipment, audio amplifier, much more. Exclusive Superex full-size pictorial diagrams and easy-to-follow step-by-step assembly instructions make each project easy and fun. With batteries.

22 A 9541 X. Shpg. wt., 5 lbs. .... 21.88  
22 A 9542 X. Superex Lab 18 Electronics Lab Kit. 3 lbs. .... 11.88

35 Advanced Projects

**21<sup>88</sup>**

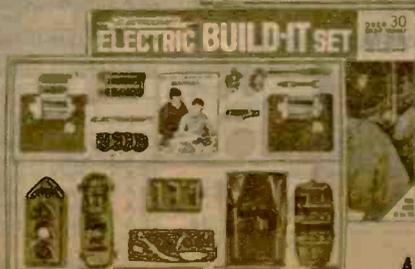
\$5 monthly\*



### Electrocraft master electric Build-It Kit

Model 810. Over 30 fascinating projects. You build two electric motors, complete working panels, buzzer unit (code-key included), electromagnet, telegraph, traffic signals, motor-driven boat, dune buggy, electric crane, and many more. Simplified, illustrated instruction manual makes assembly easy and interesting. Order "D" cells and penlight batteries below. 21 1/2 x 13 1/2 x 2 1/4".

22 A 3660 X. Shpg. wt., 3 lbs. .... 8.95  
18 A 5870. Penlight Batteries. (Use 2.) Wt., 2 oz. Pkg. 2/20¢  
18 A 5079. "D" Batteries. (Use 2.) Wt., 10 oz. .... Pkg. 4/65¢



Over 30 Projects

**8<sup>95</sup>**

\*See page 438 for full Credit details

ALLIED 503

# Motorola HEP Semiconductor Devices



HEP-408



HEP-400



HEP-407

Top-quality low-cost line of solid-state devices offering a broad variety of circuit designs for hobbyists, experimenters and technicians. When used in conjunction with design books (below)—they provide a wide range of informative, practical circuit designs.

- 22 A 3797 E. HEP-408. Field Effect Transistor Projects. 96 pages. 5 1/2 x 8 1/2". Shpg. wt., 5 oz. .... 1.00
- 22 A 3798 E. HEP-400. Solid-State Projects from Motorola. 68 pages. 5 1/2 x 8 1/2". Shpg. wt., 4 oz. .... 50¢
- 22 A 3799 E. HEP-407. Integrated Circuits Projects from Motorola. 96 pages. 5 1/2 x 8 1/2". Shpg. wt., 5 oz. .... 1.00

## COMPLETE DEVICE LINE FOR HOBBYISTS AND EXPERIMENTERS

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Stock No.	Type No.	Description	EACH
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22 A 3811	HEP-2	PNP RF Type, 1000MHz, 300mW	1.25
22 A 3812	HEP-3	PNP RF Type, 250MHz, 100mW	1.25
22 A 3813	HEP-200	PNP Power Type, TO-3, 3 Amps, 90 Watts	.82
22 A 3814	HEP-231	PNP Power Type, TO-3, 5 Amps, 90 Watts	.89
22 A 3815	HEP-231	PNP Power Type, TO-36, 15 Amps, 150 Watts	1.69
22 A 3817	HEP-232	PNP Power Type, TO-3, 7 Amps, 90 Watts	2.34
22 A 3818	HEP-233	PNP Power Type, TO-36, 15 Amps, 170 Watts	4.20
22 A 3819	HEP-234	PNP High-Voltage Power Type, Vertical Deflection Amp, 200 V, 5 A, 56 W.	3.25
22 A 3820	HEP-235	PNP High-Voltage Power Type, Horizontal Deflection Amp, 320 V, 10 A, 56 W.	4.50
22 A 3821	HEP-250	PNP General-Purpose Type, Medium gain, 200 mW	.79
22 A 3824	HEP-251	PNP General-Purpose Type, High gain, 200 mW	.89
22 A 3828	HEP-252	PNP General-Purpose Type, Low leakage, 200 mW	.89
22 A 3829	HEP-253	PNP General-Purpose Type, Medium gain, 225 mW	.95
22 A 3830	HEP-254	PNP General-Purpose Type, Medium gain, 225 mW	.89

### SCR'S—TRIGGERS—TRIACS

22 A 3831	HEP-300	Thyristor (SCR) 50 V, 5 A	2.29
22 A 3832	HEP-302	Thyristor (SCR) 200 V, 5 A	2.69
22 A 3833	HEP-304	Thyristor (SCR) 50 V, 15 A	4.35
22 A 3834	HEP-305	Thyristor (SCR) Reverse Polarity, 50 V, 15 A	4.60
22 A 3844	HEP-306	Thyristor (SCR) 200 V, 15 A	5.90
22 A 3845	HEP-307	Thyristor (SCR) Reverse Polarity, 200 V, 15 A	6.20
22 A 3796	HEP-310	Silicon Unijunction, 30 mW	1.10
22 A 3846	HEP-311	Silicon NPN Bifunctional Trigger, 35 V, 2 A	.99
22 A 3847	HEP-320	Thyristor (SCR) 50 V, 8 A	.99
22 A 3848	HEP-340	Triac 200 V, 8 A	4.49

### ZENER DIODES

22 A 3849	HEP-101	10 V, 400 mW	.95
22 A 3850	HEP-102	3.6 V, 1 W	1.20
22 A 3851	HEP-103	6.2 V, 1 W	1.20
22 A 3852	HEP-104	9.1 V, 1 W	1.20
22 A 3853	HEP-105	12 V, 1 W	1.20

### RECTIFIERS AND DIODES

22 A 3854	HEP-134	Germanium diode—substitute for Type 1N34A	.26
22 A 3855	HEP-135	Germanium diode—substitute for Type 1N60	.26
22 A 3856	HEP-151	Silicon Power Rectifier—stud-type, 50 PIV, 15 A	.79
22 A 3857	HEP-153	Silicon Power Rectifier—stud-type, 200 PIV, 15 A	1.24
22 A 3858	HEP-154	Silicon Rectifier—Axial leads, 50 PIV, 1 A	.36

### RECTIFIERS AND DIODES (Cont'd)

Stock No.	Type No.	Description	EACH
22 A 3859	HEP-156	Silicon Rectifier—Axial leads, 200 PIV, 1 A	.49
22 A 3860	HEP-157	Silicon Rectifier—Axial leads, 400 PIV, 1 A	.56
22 A 3861	HEP-158	Silicon Rectifier—Axial leads, 600 PIV, 1 A	.66
22 A 3862	HEP-159	Silicon Rectifier—Axial leads, 800 PIV, 1 A	.92
22 A 3863	HEP-160	Silicon Rectifier—Axial leads, 1000 PIV, 1 A	1.45
22 A 3864	HEP-161	Silicon "Top Hat" Rectifier—50 PIV, 3 A	1.09
22 A 3865	HEP-162	Silicon "Top Hat" Rectifier—200 PIV, 3 A	1.25
22 A 3935	HEP-170	Silicon Rectifier—Axial leads, 1000 PIV, 25 A	.82

### MOUNTING KITS, ACCESSORIES

22 A 3841	HEP-450	Mounting Kit for Devices In TO-3 Case	.30
22 A 3839	HEP-500	Heat Sink for Devices in TO-3 Case	2.35
22 A 3826	HEP-501	Heat Sink for Devices in TO-36 Case	2.35
22 A 3800	HEP-452	Mounting Kit for Devices in TO-66 Case	.32
22 A 3803	HEP-451	10-Pin Integrated Circuit Socket, Pkg. of 2	1.49
22 A 3925	HEP-453	14-Pin Dual In-Line Integrated Circuit Socket	.99
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22 A 3927	HEP-455	Mounting Kit for Devices in TO-36 Case	.32
22 A 3928	HEP-456	Mounting Kit for Devices with 10-32 Threads	.30
22 A 3929	HEP-457	Mounting Kit for Devices with 1/4-28 Threads	.32

### FIELD EFFECT TRANSISTORS

22 A 3795	HEP-801	N-Channel Audio FET	1.59
22 A 3866	HEP-802	N-Channel RF FET	1.59
22 A 3930	HEP-803	P-Channel Audio FET	3.39

### DUAL DIODES, RECTIFIER BRIDGES

22 A 3867	HEP-165	Silicon Dual Diode with common cathode	.62
22 A 3868	HEP-166	Silicon Dual Diode with common anode	.60
22 A 3869	HEP-175	Full-Wave Bridge Rectifier—50 PIV, 1 A	1.49
22 A 3870	HEP-176	Full-Wave Bridge Rectifier—200 PIV, 1 A	2.05
22 A 3871	HEP-177	Full-Wave Bridge Rectifier—400 PIV, 1 A	2.25
22 A 3872	HEP-178	Full-Wave Bridge Rectifier—600 PIV, 1 A	3.05

### SILICON TRANSISTORS

22 A 3875	HEP-50	NPN RF—100 MHz, 300 mW	.79
22 A 3876	HEP-51	PNP RF—50 MHz, 600 mW	1.29
22 A 3877	HEP-52	PNP RF—100 MHz, 300 mW	.95
22 A 3878	HEP-53	NPN RF—50 MHz, 600 mW	1.15
22 A 3879	HEP-54	NPN RF—30 MHz, 310 mW	1.08
22 A 3880	HEP-55	NPN RF—210 MHz, 310 mW	1.20

### SILICON TRANSISTORS (Cont'd)

Stock No.	Type No.	Description	EACH
22 A 3881	HEP-56	NPN (UHF Oscillator)—750 MHz, 310 mW	1.44
22 A 3882	HEP-57	PNP RF—200 MHz, 310 mW	1.20
22 A 3931	HEP-75	NPN Power—TO-5, VHF/UHF, 5 Watts	2.95
22 A 3932	HEP-76	PNP RF Power—TO-5, VHF/UHF, 5 Watts	4.95
22 A 3883	HEP-240	NPN Power—TO-66, 300 V, 500 mA, 10 W	2.05
22 A 3884	HEP-241	NPN Power—TO-66, 120 V, 5 A, 40 W	1.79
22 A 3885	HEP-242	PNP Power—TO-5, 40 V, 3 A, 5 W. Comp. to HEP-243	2.40
22 A 3886	HEP-243	NPN Power—TO-5, 40 V, 3 A, 6 W. Comp. to HEP-242	1.79
22 A 3887	HEP-244	NPN Power—Case 77 "Thermopad," 300 V, 50 mA, 25 W	2.15
22 A 3888	HEP-245	NPN Power—Case 77 "Thermopad," 40 V, 3 A, 30 W, Comp. to HEP-246	1.99
22 A 3889	HEP-246	PNP Power—Case 77 "Thermopad," 40 V, 3 A, 30 W, Comp. to HEP-245	2.29
22 A 3890	HEP-247	NPN Power—TO-3, 40 V, 10 A, 150 W. Comp. to HEP-248	2.80
22 A 3891	HEP-248	PNP Power—TO-3, 40 V, 3 A, 150 W. Comp. to HEP-247	6.49

### DIGITAL INTEGRATED CIRCUITS

Stock No.	Type No.	Description	EACH
22 A 3791	HEP-553	MECL Half-Adder	1.89
22 A 3792	HEP-554	MECL Bias Driver	1.49
22 A 3793	HEP-556	MECL 3-Input Gate	1.79
22 A 3794	HEP-558	MECL J-K Flip-Flop	2.39
22 A 3892	HEP-570	RTL Quad Gate	2.10
22 A 3893	HEP-571	RTL Dual Buffer	2.10
22 A 3894	HEP-572	RTL Dual J-K Flip-Flop	3.90
22 A 3895	HEP-580	RTL Dual 2-Input Gate	.95
22 A 3896	HEP-581	RTL 4-Input Gate	.95
22 A 3897	HEP-582	RTL Dual Buffer	.99
22 A 3898	HEP-583	RTL J-K Flip-Flop	1.49
22 A 3899	HEP-584	RTL Dual 2-Input Gate	1.89

### LINEAR INTEGRATED CIRCUITS

22 A 3873	HEP-590	High-Frequency Amplifier	3.99
22 A 3874	HEP-591	Audio IF Amplifier	3.60
22 A 3837	HEP-592	Dual (Stereo) Preamp	3.25
22 A 3838	HEP-593	1-Watt Power Amplifier	7.95

### PHOTO TRANSISTOR

22 A 3933	HEP-312	Silicon, sensitive to near ultra-violet	2.49
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See next page for Motorola Experimenter Kits, informative manuals and handbooks on Semiconductors, and helpful HEP Semiconductor Cross Reference Guide.

## Semiconductor and IC Manuals, Handbooks, Experimenter Kits



**Motorola**

IC or FET Kit

**395**  
Each

### IC EXPERIMENTERS KIT

HEK-1. IC experimenters kit— invaluable aid for hobbyists, technicians, designers. Includes 5 Motorola RTL Integrated circuits—4-Input Gate, Dual Buffer, J-K Flip-Flop, two Dual 2-Input Gates. With tips on using IC's, IC cross-reference guide, and several practical circuits using the devices included. 8x3½x1½".

22 A 3801. Wt., 2 oz. . . . . 3.95

### FET EXPERIMENTER KIT

HEK-2. Helpful, educational FET experimenters kit. Includes: 1-N-channel audio FET; 1 N-channel RF FET; 1 NPN silicon transistor; 1 PNP silicon transistor. Has full instructions on making 9 practical circuits, plus tips on using FET's in designing and developing new circuits, and informative FET cross-reference guide.

22 A 3934. Wt., 2 oz. . . . . 3.95

### INFORMATIVE REFERENCE MANUALS

HEP-404. Switching Transistor Handbook. Instructive book covers principles of switching transistors. Detailed theory and explanations. 8x5½". 346 pages. Shpg. wt., 15 oz.

22 A 3805 E. . . . . 2.50

HEP-410. Silicon Rectifier Handbook. Covers theory and application of silicon rectifiers. Explains parameters, details operations. 8x5½". 194 pages. Shpg. wt., 9 oz.

22 A 3806 E. . . . . 1.50

HEP-411. Semiconductor Data Manual. Informative reference source. Explains parameters, covers general theory. 10x7¾". 1880 pages. Shpg. wt., 4½ lbs.

22 A 3807 E. . . . . 4.95

### HEP CROSS REFERENCE GUIDE

HMA-07. Lists approximately 12,000 semiconductor types replaced by the Motorola HEP- semiconductor devices. Indexed by JEDEC and Manufacturer's Type Nos. for easy use. 55 pages. Shpg. wt., 2 oz.

22 A 3808 E. . . . . 25¢

## Linear IC Variety Pack Kit has 5 integrated circuits for unlimited applications

- Two KD2114 transistor arrays
- One KD2115 audio amplifier
- Two KD2116 transistor arrays

**440**

RCA KD2117. This IC variety pack enables an engineer or experienced hobbyist to extend his knowledge of IC's. Has 12 starter circuits. Pack contains 5 integrated circuits: two KD2114 transistor arrays, one KD2115 audio amplifier, two KD2116 transistor arrays. Includes folder giving 12 useful circuits, their schematic diagrams, parts lists, and features.

22 A 3780. Shpg. wt., 8 oz. . . . . 4.40



## SCR Experimenter's Kit builds 10 useful electronic control circuits

- Has one silicon controlled-rectifier assembly
- 2 transistors, 5 rectifiers

**995**

RCA KD2105 Kit. Basic kit has all the active components (additional passive components are required) for building the 10 practical control circuits described in the RCA SCR Experimenter's Manual KM-71 (below, right). Shpg. wt., 8 oz.

22 A 3781. . . . . 9.95

22 A 3782. RCA KD2106 Light Sensor Kit. Has 1 photocell. For KD2105, above. 10 oz. . . . . 2.75

22 A 3789. RCA KD2110. Heat Sensor Kit. Has 3 thermistors. For KD2105, above. 10 oz. . . . . 2.45



### RCA Hobby Circuit Manual 175



RCA HM-90 Manual. Construction information on 35 semiconductor circuits. Photos, schematics, parts lists 5½x8¾". 224 pages. 10½ oz.

23 A 7316 E. . . . . 1.75

### Experimenter's Manual 95¢

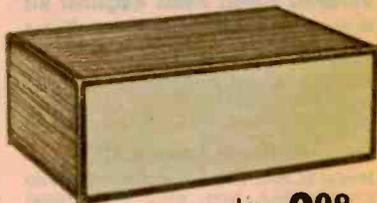
RCA KM-71 Manual. Explains SCR theory and circuitry. Projects are easy to build without special tools. 136 pp. 5½x8½". 7 oz.

23 A 7116. . . . . 95¢



## Flexi-Cab® vinyl-clad custom steel Cabinet Kits

Ideal for hobbyists test equipment, controls, prototypes. Fast, easy, push-together, stay-together assembly using flat panels joined by "links" of mar-resistant plastic with precut mitered corners. Instructions, 40 self-stick labels.



Low  
as **298**

Stock No.	Description	Size	Lbs.	EACH
22 A 3715	Walnut with brass front panel	3x4x4"	1	2.98
22 A 3717	Black leather, chrome front panel	3x4x4"	1	2.98
22 A 3718	Walnut with brass front panel	3x4x6"	1½	3.79
22 A 3719	Black leather, chrome front panel	3x4x6"	1½	3.79
22 A 3723	Walnut with brass front panel	3x6x9"	2	4.49
22 A 3724	Black leather, chrome front panel	3x6x9"	2	4.49

# EICOCRAFT

## HOBBY KITS

# Discover the world of

- Comprehensive and complete step-by-step instructions included in each kit
- Top quality solid-state circuits for complete reliability
- Offers an exciting new hobby that the whole family can enjoy
- Demonstrates important electronic principles—fun to use

Here's an exciting selection of easy-to-assemble electronic kits at really low prices. These kits are perfect as an introduction to the fascinating field of electronics, for hobbyists or for learning kit building. Each kit has a useful application, and all are supplied with professional parts.

### "Treasure Finder" Kit

Model EC1900. Have fun building this metal locator kit. Beat-frequency battery-operated kit can be used to locate both ferrous and non-ferrous metals (iron, steel, etc.) and non-ferrous metals (gold, silver, copper, etc.). Consists of two RF oscillators and a search loop.

Distinctive audio signal goes up when it locates buried ferrous metals, and the frequency goes down when it locates non-ferrous metals. Use G124 SPST switch, and 9-volt battery listed on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ". Less stick. With instructions. 22 A 9581. Shpg. wt., 8 oz. . . . . 9.95

### Electronic Aircraft Converter

Model EC-2900. Enjoy the excitement of monitoring local aircraft communications with this VHF converter; plus the fun of building the converter yourself. Adapts to any standard AM radio for VHF monitoring. The EC2900 is an all-transistor converter operating from the 108-136 MHz band.

Can be operated in your car or in your home for easy portability. No interwiring is necessary. Operates simply by placing the converter next to your AM radio. Completely battery operated. Takes nine-volt battery on opposite page. Instructions. 22 A 3047. Shpg. wt., 8 oz. . . . . 7.95

### Low-Band Police Converter

Model EC-2700. Add a VHF converter to your AM radio and monitor exciting broadcasts from local police, fire, Civil Defense, emergency services, mobile telephones and many others. For home, car, or as a portable unit.

Operates in the 30-50 MHz band. Modern all-transistor design, operates simply by placing converter next to any AM radio. No interwiring necessary. Battery operated. Takes nine-volt battery on opposite page. 22 A 3048. Wt., 8 oz. . . . . 7.95  
Model EC-2800. Same as above, but operates in the 152-175 MHz band. 22 A 3049. Wt., 8 oz. . . . . 7.95

### Electronic Siren Kit

Model EC100. Emits penetrating, attention getting wail—ideal for use as a burglar alarm. Also can create sound effects for model railroads, etc. Use with A, B, and D listings on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9577. Shpg. wt., 8 oz. . . . . 4.95

### Versatile 2-watt Audio Amplifier Kit

Model EC300. Has 2-watt output. Takes microphone, radio, other high-level inputs. Use 2 for stereo. Ideal for small P.A. Use A and B shown on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9579. Shpg. wt., 8 oz. . . . . 5.95

### Electronic Tremolo Kit

Model EC500. Three-transistor tremolo gives guitar, bass, etc., professional sound. Sets to desired speed and intensity. Phone jacks. Use E and C on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9580. Shpg. wt., 8 oz. . . . . 9.95

### "Do Nothing" Mystifier Kit

Model EC700. Fascinating oscillator circuit of 6 blinking lights. You control the geometric sequences of never-ending entertainment. Takes F on opposite page.

22 A 3054. Shpg. wt., 8 oz. . . . . 4.95

### AC Power Supply Kit

Model EC900. Transformer-operated 6 VDC power supply can convert all Eicocraft kits using 6-volt battery to AC. Full-wave bridge rectifier, high-capacity filter. Takes D, opposite page. 110-125 VAC.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9582. Shpg. wt., 1 lb. . . . . 8.95

### Ham/CB VOX Kit

Model EC1700. May be used with CB or Ham transmitter. Actuates the transmitter when speaking into the microphone and return to receive. Takes A on opposite page.

22 A 3055. Shpg. wt., 8 oz. . . . . 8.95

### Voice-operated Switch Kit

Model EC1300. Permits audio control of remotely operated devices, such as radio, TV. Can be activated by whistles, musical instruments. Takes A on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9584. Shpg. wt., 8 oz. . . . . 8.95

### FM Radio Kit

Model EC1400. Covers 88-108 MHz FM broadcast band. Can be used with earphone (supplied), or as FM tuner with amplifier. (EC-300). Use E on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9585. Shpg. wt., 8 oz. . . . . 9.95

### AM Radio Kit

Model EC1500. Tunes favorite programs on the AM broadcast band (550-1600 kHz). Use as personal radio (with earphone), or as an AM tuner with EC-300 amplifier. Use E on opposite page.  $5\frac{1}{2} \times 8\frac{1}{2} \times 1\frac{1}{2}$ ".

22 A 9586. Shpg. wt., 8 oz. . . . . 8.95

### Electronic TOX

Model EC1800. Touch-operated switch with relay amplifier. Provides a signal that can respond to an intruder's touch and sound an alarm bell. Takes E on opposite page.

22 A 3056. Shpg. wt., 8 oz. . . . . 8.95

### Electronic Eye

Model EC2200. Sensitive resistor detects light and amplifier boosts this signal. Relay which latches on or off can control bell, appliance, etc. Use E on opposite page.

22 A 3058. Shpg. wt., 8 oz. . . . . 9.95

### Magic Switch

Model EC2100. When touch plate connected to amplifier is touched, a relay opens or closes providing a signal which turns any appliance off or on. Use E on opposite page.

22 A 3060. Shpg. wt., 8 oz. . . . . 9.95

# Eicocraft solid-state Kits

## EICOCRAFT

### HOBBY KITS

- No technical knowledge or experience needed to build these exciting kits
- Predrilled, copper plated and etched printed circuit boards
- Ideal for students involved in school science fair projects
- Each kit is educational as well as instructive, with useful applications



All kits have predrilled, printed circuit boards. Comprehensive, easy to follow step-by-step instructions are included. Offers fun for the whole family. Students and hobbyists will find them educational, instructive, as well as fun to build. No technical knowledge or experience is necessary.

### Electronic Organ Kit

Model 2000. Solid-state one-octave electronic organ produces eight organ tones by means of a twin-T oscillator and selected potentiometers. Supplied with a built-in preamplifier. Use with Eicocraft EC300 audio amplifier or any other for deep, full clear tones.

Two or more of these organs can be played in harmony to produce the graceful chord structures. Ideal multi-tone generator for general purpose audio generator, or general purpose testing. Takes 9-volt battery and type G124 switch listed below. Size, 5 1/2 x 8 1/2 x 1 1/2".  
22 A 9583. Shpg. wt., 8 oz. . . . . 9.95

### Electronic Bongos Kit

Model EC-1600. For rock groups or for your own enjoyment. Powerful 3-transistor, battery-operated bongos circuit kit electronically produces the exciting sounds of high-pitched and low-pitched bongos, tom-toms, bass drum, marimba, and claves, when used with an amplifier or speaker.

Ideal for use with electric guitars or other musical instruments. The sounds are created by 2 electronic "ringing" oscillators and a preamplifier; each oscillator emits a sound when its touch plate is touched by the player. Takes E and D below.  
22 A 9587. Shpg. wt., 8 oz. . . . . 7.95

### Electronic Bullhorn Kit

Model EC-2400. Use this fascinating "Bullhorn" to hail boats on the lake, or as a portable Public Address System in a variety of ways. The EC2400 is a new dimension in sound projection kits, as well as an interesting and useful project the whole family will enjoy building and using.

Portability and versatility of application plus up to 3.5 watts of penetrating power are yours in this basic two-transistor power amplifier. Includes a sensitive carbon-type microphone and speakers. Takes A listed below. Complete with instructions.  
22 A 3061. Shpg. wt., 1 lb. . . . . 8.95

### Audio Preamplifier

Model EC2300. For audio, hi-fi and public address. Inputs for AM or FM tuner, magnetic cartridge, tape head and high-impedance microphone. 3-transistor circuit comprises 2 high-gain amplifier stages for low distortion. Uses E and D below.  
22 A 3063. Shpg. wt., 8 oz. . . . . 8.95

### Eicocraft Kit Accessories

- A** Type 5105 6-Volt Lantern Battery. Has binding posts. Shpg. wt., 1 1/2 lbs. . . . . 99¢  
18 A 5085. . . . .
- B** 3.2-Ohm Speaker. Quality 4" speaker for fine sound. Shpg. wt., 8 oz. . . . . 1.59  
16 A 3476. . . . .
- C** Type G361 3PDT Switch. 3-pole double throw switch. Shpg. wt., 2 oz. . . . . 1.00  
56 A 5918. . . . .
- D** Type G124 SPST Switch. For on-off control, other uses. Shpg. wt., 2 oz. . . . . 50¢  
56 A 5034. . . . .
- E** Allied 9-Volt Battery. Top-quality, American made. Shpg. wt., 6 oz. . . . .  
18 A 5980. . . . . Pkg. of 2 for 59¢
- F** Type P60 90-volt battery. American made. 18 A 5651. Shpg. wt., 1 lb. . . . . 2.97

### Solid-state Wireless FM Microphone Kit

Works with standard FM radio or tuner **995**

Model EC1100. Wireless FM microphone kit is a delight to build and use. No larger than a pack of cigarettes. Broadcast voice or music through any FM standard broadcast radio (or FM tuner, or car FM radio).

Broadcasts up to 50 feet, while walking about freely unencumbered by any interconnecting wires. Transistorized circuit comprises both audio modulator and RF oscillator within the FM broadcast band (90 to 100 MHz).

Includes wire, solder, step-by-step instructions and wiring diagram with illustrations. Use 9-volt battery at left. 3 1/2 x 2 1/2 x 1". Shpg. wt., 1 lb.  
22 A 3064. . . . . 9.95



No larger than a pack of cigarettes

# BOWMAN

## HOBBY KITS

### Color Organ Kit and Psychedelic Control Center for "lighter" music



Color Organ

Control Center

39<sup>95</sup>

\$5 monthly\*

12<sup>95</sup>



#### "Display" music with this three-channel Color Organ Kit

Model CVA-3. Brighten your music with a three-dimensional colored diamond light show. This three-channel color organ will let you "see" music in three colors. Connects to any PA, phono or radio speaker in seconds. Just plug it in and turn yourself on. Three individual sensitivity controls allow you to vary each channel separately according to your own personal audio and visual requirements. Includes frequency crossover network at 2000, 5000, and 10,000 Hz so that each channel responds to different frequencies and sound levels for the input signal applied. Gives spectacular light display across the entire audio range. Has separate on/off switch. Solid-state circuit assures dependability. Special G.E. high-intensity red, blue, and green colored lights. Prismatic glass front. With oiled walnut wood cabinet. Size, 12x18x9". For 110-130 volts, 60 Hz AC.

22 A 3282 X. Shpg. wt., 13 lbs. . . . . 39.95

#### 1000-watt Control Center Kit

Model PCC-10. Arrange your own spectacular light display to accompany the hard rock sounds of your favorite music. This psychedelic control center handles up to 1000 watts of any plugged in lights. Feed in sound from any speaker and see music come to life. Has separate on/off switch. Sensitivity control lets you adjust the color intensity as you wish. Reliable solid-state dual silicon controlled rectifier circuit. Size, 3x4x1½". For 110-130 V, 60 Hz AC.

22 A 3283 X. Shpg. wt., 1 lb. . . . . 12.95

### Craftint complete Art Supply Sets for budding artists



**A** Acrylic Set. Wooden box 13½x10" with handle contains ten 1x4" tubes of acrylic polymer colors, three 1 oz. jars of gloss, matte and gel mediums, one 1 oz. jar of acrylic remover, one 1½x6" tube of titanium white, four brushes, palette knife, palette, two 9x12" canvas panels. Plus three 12x16" canvas panels, book, and folding 18" aluminum table easel.

22 A 3277 X. Shpg. wt., 13 lbs. . . . . 24.95

**B** Oil Color Set. Wooden box 9x12" contains seven 1x4" tubes of oil colors, large tube of titanium white, bottle linseed oil, bottle turpentine, 9x12" canvas panel, palette with cup and knife, 3 assorted brushes. Plus three 12x16" canvas panels, book, and folding aluminum table easel.

22 A 3278 X. Shpg. wt., 12 lbs. . . . . 24.95

**C** Water Color Set. Contains 12-color pen set; 12 tubes (½x3¼") water colors, white enameled mixing pan, 2 brushes in cardboard box; water color pad 12x18", 3 extra brushes, book, folding table easel.

22 A 3279 X. Shpg. wt., 6 lbs. . . . . 15.95

**D** Drawing Set. Contains 4-piece charcoal pencil assortment, 6-piece drawing pencil assortment, 24-color set of oil pastels, 6 oz. spray art fixture, kneaded eraser, charcoal pad 12x18", sketch pad 12x18", two books, and folding table easel.

22 A 3280 X. Shpg. wt., 7 lbs. . . . . 11.95



24<sup>95</sup> \$5 monthly\*

24<sup>95</sup> \$5 monthly\*

15<sup>95</sup>

11<sup>95</sup>

# Solid-state "Mod-U-Kits" . . . ideal for students and hobbyists

## BOWMAN

### HOBBY KITS



#### Light Sentry Kit

Model ALS-8. Turns your lights on at dusk and also serves as a light beam alarm to protect home from prowlers. Photo-cell turns lights on automatically. As Light Sentry, anyone breaking light-path from photocell sets off alarm signal heard through any AC-powered AM radio—just tune radio to extreme high-frequency end of dial. 4x3x1 1/8". 115 VAC. Shpg. wt., 1 lb.  
22 A 9544. . . . . 9.95



#### Electronic Organ Kit

Model EOA-3. Live up parties or entertain family and friends at home with this low-cost electronic organ. As much fun to assemble as it is to play. Has treble/bass control, audio pitch control. Includes speaker. Sturdy polyethylene plastic case. Order 9-volt battery below. 2x5x4 1/2". Shpg. wt., 10 oz.  
22 A 3288. . . . . 6.95  
18 A 5980. 9-volt Battery. Wt., 6 oz. . . . . Pkg. 2/59¢



#### Mobile Amplifier Kit

Model MPA-5. Three-transistor power amplifier produces up to 5 watts power when used with a microphone. Driver section of the amplifier is placed on a special predrilled printed circuit board. Powered by 12 VDC auto battery, PS-12F (below), or any other 12-VDC source. Has separate volume and tone controls. Power cord fits auto cigarette lighter. 4x3x1 1/8".  
22 A 9539. Wt., 1 lb. . . . . 8.95



#### Multiband Receiver Kit

Model MBR-4. Includes super amplifier kit, citizen's band tuning head kit, FM tuning head, and AM tuning head. Tuning heads are specially designed to be used with the amplifier. All you do is plug them into the amplifier input jack. Order 9-volt battery below. Compact size, each unit, 3x2x1 1/4". Shpg. wt., 10 oz.  
22 A 3289. . . . . 14.95  
18 A 5980. 9-volt Battery. Wt., 6 oz. . . . . Pkg. 2/59¢

#### Aircraft Receiver Kit

Model AIR-3. Covers 100-200 MHz for local VHF aviation messages. 3-stage super-high-gain amplifier; ferrite RF transformer; telescoping antenna. 3x2x1 1/4". With earphone. Order 9-volt battery below.  
22 A 9537. Shpg. wt., 14 oz. . . . . 5.95  
18 A 5980. 9-V Battery. 6 oz. . . . . Pkg. 2/59¢



#### AM Wireless Mike Kit

Model AMW-103. Broadcast your own radio programs with this basic transistor AM transmitter. Has range up to 50 ft. With mike, telescoping antenna. Order 9-V battery below. 3x2x1 1/4".  
22 A 3290. Shpg. wt., 5 oz. . . . . 7.95  
18 A 5980. Battery. 6 oz. . . . . Pkg. 2/59¢



#### Fire Alarm Kit

Model FA-2. Two-transistor oscillator with special charging circuit for siren effect. Thermostat makes contact when temperature reaches 130° F. Test button. Uses any speaker. 6-V batt. below. 2 3/4 x 2 x 3/4".  
22 A 9538. Shpg. wt., 14 oz. . . . . 4.95  
18 A 5085. Battery. Use 1. 1 1/2 lbs. Each 99¢



#### 5-watt monophonic Amplifier Kit

Model UA-5. General-purpose 3-transistor amplifier gives 5 watts music power. Accepts practically any pickup device. Imp., 3-16 ohms. Volume control. Order one 6-volt battery below. 3x2x1 1/8".  
22 A 9531. Wt., 5 oz. . . . . 5.95  
18 A 5085. 6-V Battery. 1 1/2 lbs. . . . . Each 99¢



#### Proximity Switch Kit

Model PRS-100. Capacity switch. Use as alarm, night-light, etc. Also controls universal motor devices drawing current up to 5 amps. Capacity bridge network, SCR, transistor. For 110-130 V, 60 Hz AC. 4x3x1 1/8". Shpg. wt., 8 oz.  
22 A 9532. . . . . 6.95



#### Super Sleuth Kit

Model SS-100. 3-transistor direct-coupled amplifier. Use as hearing aid or private listening device. With crystal input mike, output earpiece. 3x2x1 1/4". Order 1.5-volt (AAA) penlight battery below.  
22 A 9530. Shpg. wt., 5 oz. . . . . 5.95  
18 A 5080. Battery. Wt., 2 oz. . . . . Pkg. 2/26¢



### Ready-to-use 12-VDC Power Supply delivers 3 amps

Model PS-12FH. Fully assembled heavy-duty power supply can power almost any tape player. Also can be used to power amplifiers and CB units requiring high current with low-ripple DC. Suitable for Mod-U-Kit Mobile Amplifier. Supplies up to 3 amps of switching current. Features special dual high-capacity filtering. Has safety fuse, on/off neon indicator. Rubber bumper feet will not mar or scratch. With two-piece aluminum case. 2 1/2 x 5 x 4". For 115 VAC.  
22 A 3281 X. Shpg. wt., 4 lbs. . . . . 24.95



### Ready-to-use Universal 6-10 VDC Power Supply

Model PS-6F. Assembled power supply module. Supplies 6-10 VDC depending on current drawn. For tape recorders, amplifiers, radios, or any other type of high gain device that requires pure DC. Suitable for all Mod-U-Kits except Mobile Amplifier. Delivers up to 0.5 amps. Color-coded leads. 4 1/2 x 2 1/2 x 1 1/2". For 115 VAC.  
22 A 3688. Shpg. wt., 2 lbs. . . . . 7.95

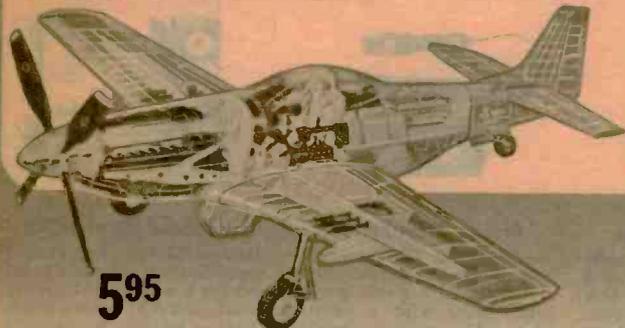


# HOBBY KITS

## SCIENCE

### These Kits make learning fun

Many hours of fascinating and lasting excitement with these great kits

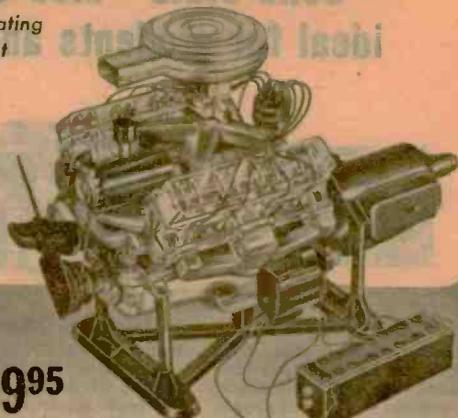


595

#### Monogram Transparent Phantom Mustang Kit

Authentically detailed 1/32 scale model of this famous WWII fighter plane. Has see-through fuselage and wings to show internal details. Two electric motors provide power for realistic working features—propeller spins, landing gear drops and retracts, bombs drop from wing mounts. Controlled by pushbuttons in mounting base. 144 plastic parts. 19 1/4 x 13 1/4 x 2 3/4". Order batteries below.

22 A 3656 X. Shpg. wt., 2 lbs. . . . . 5.95  
18 A 5079. "D" Batteries. Uses 2. Wt., 5 oz. Pkg. of 4 for 65¢



995

#### Renwall Visible V-8 Engine Kit

Gives a good working knowledge of the V-8 engine. Precision molded parts are in four basic colors, including "clear," so that actually functioning parts—pistons, connector rods, rocker arms, properly timed spark plugs—can be seen. Includes miniature electric motor, all necessary parts, plus informative instruction manual. Operates on two "C" batteries, order below. 14 1/2 x 10 1/2 x 7 1/4".

22 A 9554 X. Shpg. wt., 5 lbs. . . . . 9.95  
18 A 5078. Batteries. Wt., 6 oz. . . . . Pkg. of 2 for 33¢



#### 1488 Nova Planetary brings outer space to you

Shows more than 60 constellations as they are seen in the Northern Hemisphere, plus all major southern constellations. Has lighted pointer. Adjusts for any latitude north of the equator, any month of the year, any hour of the night. Built-in horizon maintains proper perspective regardless of latitude setting. Brightness control, star charts, instructions. 15x10x10". For 117 VAC.

22 A 3696 X. Shpg. wt., 4 lbs. . . . 14.88

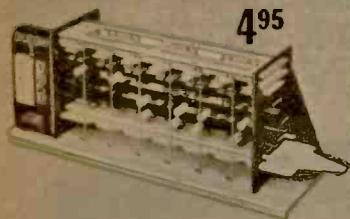


Blasts off to 1000 feet

#### 1388 Valkyrie Rocket Kit with liquid propellant

Blast off to 1000 feet with this exciting scale-model rocket kit with fully realistic lift-off. Safe liquid propellant is flame and heat-free, non-toxic. Takes off at about 4 g's, accelerates to 10 g's at burnout. Polished aluminum engine and parts, with working valves, separator, parachute.

22 A 3755. Wt., 2 1/2 lbs. . . . . 13.88  
22 A 3756. Extra Fuel. Shpg. wt., 8 oz. . . . . Per Can 1.50



495

#### Digi-Comp 1 digital binary Computer

Look into the interesting world of the computer programmer and operator with this operating desk-top computer kit. Programming this binary machine makes it easy to see the basic operating principles of larger computers. Performs all basic arithmetical operations, solves problems, processes data, does missile countdown and checkout, and more. With detailed, easy-to-follow instructions. 12" long, 5" high. Shpg. wt., 2 lbs.

22 A 3699 X. . . . . 4.95



Both Kits

5.95

#### Pumping and Beating Heart Kits

The aspiring doctor, nurse, medical technician or the high-school student will find these great kits fascinating as well as educational. Medically accurate, they show in great detail the beating and pumping actions of the heart. All parts are precision molded plastic with accurate anatomical shape and coloring. Visible pumping heart kit has red dye solution to show blood circulation. Complete with easy-to-follow instructions. Wt., 2 1/2 lbs.

22 A 9598 X. . . . . Both Kits for 5.95



995

B

#### 488 Renwall Visible Man, Visible Head

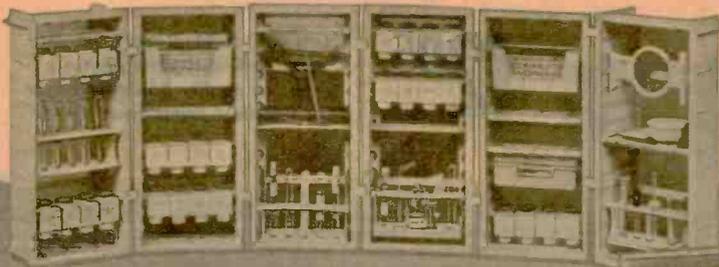
**A** Visible Man. Male anatomy in minute detail. Transparent skin and musculature, natural color internal organs, separate 206-bone skeleton, base, anatomy book. 16" high. 22 A 3698 X. Shpg. wt., 2 1/2 lbs. . . . 4.88

**B** Visible Head. Displays the anatomy of the human head with laboratory clarity. Inner ear, eye, brain, spinal cord, vertebrae, mouth, throat, muscular structure. 22 A 3697 X. Shpg. wt., 5 lbs. . . . 9.95

# Fascinating Educational Kits for budding mechanics and scientists

## HOBBY KITS

### SCIENCE



**A**

File cards program over 700 experiments with this kit

**14.95** Complete chemistry laboratory kit

**B 9.95**

### **A** Gilbert deluxe graduate Chemistry Modulab Kit

Conduct experiments in chemical gardening; analytical testing; thermal chemistry; advanced chemical "magic"; chromatography; more—over 700 experiments in all. Includes six modular lab storage racks; chemicals and supplies; precise lab scale; mortar and pestle; hydroponic tray; alcohol lamp; test tubes; file cards for experiments. With detailed instructions.

22 A 3670 X. Shpg. wt., 15 lbs. . . . . 14.95

### **B** Porter deluxe mineralogy-senior Laboratory Kit

Includes full complement of scientific instruments for determining mineral types; geologist's hammer for unearthing specimens; magnifier for examining crystalline structure and particles of various minerals. With 24 mineral specimens; alcohol lamp with blow-torch attachment; test papers and chemicals; test-tube rack; streak plate. Descriptive instruction manual and wall-size identification chart. Three-panel metal case.

22 A 3669 X. Shpg. wt., 5½ lbs. . . . . 9.95



### **C** Gilbert senior engineer Erector Set

This is "heaven" for the engineering-oriented youngster. Complete assortment of steel girders, plates, curved sections for hundreds of projects. Plans for helicopter, oil rig, lift bridge, shipbuilding crane, more. Power-Matic motor with three takeoffs; Power-Matic hoist for powering two different operations, with shift control; battery case for start, stop; forward and reverse remote-control. Order batteries below.

22 A 3663 X. Shpg. wt., 8 lbs. . . . . 15.95

18 A 5079. "D" Batteries. Use 2. Wt., 5 oz. . . . . Pkg. of 4 for 65¢



**15.95 C**

### Norelco deluxe Mechanical Kit with 40 projects

**27.95**

\$5 monthly\*

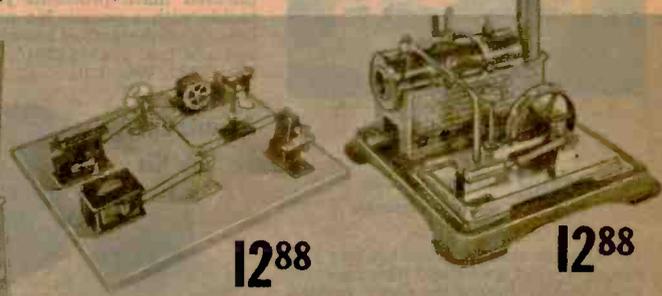
Contains over 600 parts for a wide range of experiments



Model ME-1200. Over 40 operating projects plus many more special experiments. Lets children see in action the various power sources we use every day. Over 600 parts for experiments with electricity, air and water pressure, gears and gravity. Unbreakable plastic parts are easy to identify and assemble. 136-page manual with easy-to-follow diagrams for simplified assembly. Order one battery below.

22 A 3661 X. Shpg. wt., 6½ lbs. . . . . 27.95

18 A 5102. Battery. Shpg. wt., 8 oz. . . . . 1.36



**12.88**

**12.88**

### Miniature Machine Shop

Perfect little machine shop can be operated with steam engine at right. Consists of shaper, saw, forging hammer, drill press, and milling machine connected by belts to a line shaft. Machines move like those in large machine shop. Red enamel with gold trim. 11½"x14" wood base. 5" high.

22 A 3437. Wt., 6 lbs. . . . . 12.88

### Dry-fuel fired Steam Engine

Nickel-plated brass boiler with double-action slide-valve type cylinder, safety valve, whistle, gauge glass, 3" flywheel, power take-off pulley, throttle valve, rotating governor. Reversible. Four fuel tablets. Size, 8½"x8¾"x9¼". Shpg. wt., 4 lbs.

22 A 3438. . . . . 12.88

22 A 3439. Extra Fuel Tablets.

Wt., 6 oz. . . . . Pkg. of 20 for 49¢

\*See page 438 for full Credit details . . . including no money down

**AMERICAN BASIC SCIENCE**

SCIENCE KITS

**Develop and enlarge your own photos with this complete Darkroom Kit**

**12<sup>95</sup>**

Lets you develop and print your own black-and-white photos . . . even has quality 35mm enlarger for excellent prints up to 8x10"



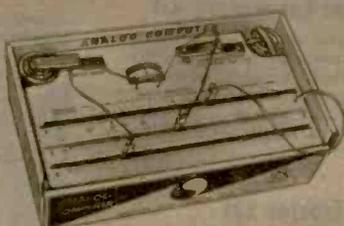
Great value for shutterbugs, hobbyists, beginners, candid-cameramen. Money-saving Photography Lab Kit contains everything you need to develop and print your own black-and-white photos with excellent quality. Makes it easy and fun to set up your own darkroom. Includes a versatile 35-mm Horizontal-Type Enlarger with twin condensing lenses and 3" focal length projection lens. Produces quality enlargements up to 8x10". Contact Print Frame takes negatives up to 3 1/2 x 4 1/4", turns out bright and clear standard size prints. Also contains Three Plastic Developing Trays, Tray Thermometer, Developing Chemicals, Film Clips, Neon Safelight, Printing and Enlarging Paper, Darkroom Handbook with full instructions for each processing step. 22 A 9522 X. Shpg. wt., 4 lbs. . . . . 12.95



**Weather Station Kit**

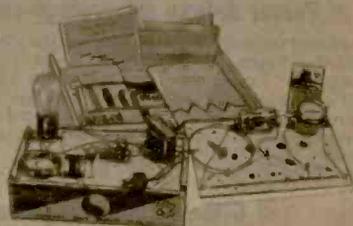
**8<sup>88</sup>** Make your own weather forecasts

Exciting weather station kit lets you measure wind speed and direction; record relative humidity; check rainfall to 1/100th of an inch. You build 4 professional-type instruments: Remote-reading Anemometer and Wind Vane; Air-Tank Barometer with 4-ft. indicator column; Sling Psychrometer; Rain Gauge with calibrated scale tube. Flashing indicator lights show wind speed and direction on indoor board. Safety power cord limits current—all electrical connections are safe to touch. With all parts, 150-ft. lead-in wire; weather map, cloud chart, full instructions. 115 VAC. 22 A 9514. Wt., 2 lbs. . . . . 8.88



**Exciting Analog Computer Kit 6<sup>95</sup>**

Fascinating analog computer kit, great for students, hobbyists and mathematicians. Fast and accurate, it helps you perform lengthy and complicated math problems you'd never tackle with a pencil. No need for extensive mathematical knowledge. Fun-to-build too. 10x5 3/4 x 2 3/4". 22 A 3291. Wt., 1 lb. . . . . 6.95



**Fun-filled Electronics Laboratory Kit 9<sup>95</sup>**

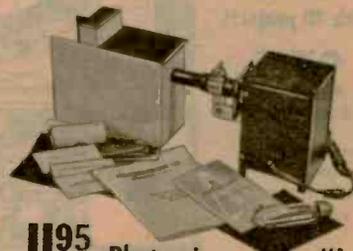
Educational and informative, this deluxe electronics lab kit lets you perform exciting experiments. Experiment with AC and DC current, static electricity, inductance and reactance, much more. Includes all parts, plus accessories for fun-filled experiments. Full instructions. For 115 VAC. 22 A 3292. Wt., 3 lbs. . . . . 9.95

**Atomic Energy Lab Kit**



**7<sup>95</sup>**

Modern, space-age kit lets you study nuclear physics with completely safe radioactive materials. You get: Atomic Cloud Chamber; Spinharscope; and Electroscop. Track particles, measure changes in nuclear structure; test radiation of samples, much more. With detailed instructions for all experiments. Wt., 3 lbs. 22 A 9523. . . . . 7.95



**11<sup>95</sup> Photomicrography Kit**

Includes micro-camera, projector and microscope for making photographs of slide specimens. Provides a magnified image of the microscopic subject up to 99X, which can be then developed and printed. Can be used with both black-and-white or color film. With full instructions, details for exciting projects. For 115 VAC. 22 A 3293. Wt., 4 lbs. . . . . 11.95

# Explore backwoods trails with this go-anywhere Trail Bike Kit

## MANCO

### TRAIL BIKE KIT



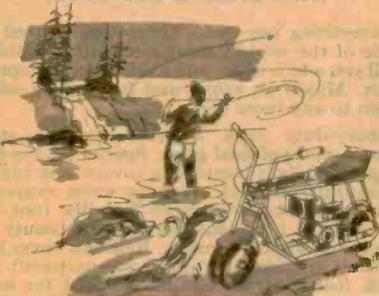
**149<sup>50</sup>** Compare! There's no better value in a 3 1/2-hp bike

**A** Built to go *anywhere*. Explore backwoods trails, deserted dunes or beaches, gravel roads, or anyplace off the beaten path. Lauson 3 1/2-hp engine zips you along at up to 30 mph. Four-cycle engine requires no mixing of gas and oil. Pneumatic (air filled) 4.10/3.50x6 knobby tires give you good traction over almost any terrain. Heavy-duty double-loop tubular frame shrugs off brutal punishment. Comfortable foam saddle with vinyl cover. Ball-bearing steering. Adjustable hand brake with handlebar control. Automatic centrifugal clutch, chain drive with safety cover. Convenient recoil starter. 5:1 gearing. Finished in high-gloss enamel, with chrome-plated fenders. 34x21 1/2x51" long. Ground clearance, 4 1/2". Curb weight, 78 lbs. Shpg. wt., 85 lbs. See Note below.

22 A 3647 ZF. . . . . 149.50  
22 A 3648 ZF. Factory Assembled. Shpg. wt., 85 lbs. . . . . 169.50

**B** Deluxe 5-hp Model. Has same fine features as above, but extra-powerful 5-hp engine, *plus* front and rear shock absorbers, internal expanding rear wheel brake. Special "Swing Arm" spring suspension rear wheel. Chrome plated handlebars. 37" wheel base. Overall, 37 1/2x28x49".  
22 A 3644 ZF. Factory Assembled. Shpg. wt., 112 lbs. . . . . 199.50

Sidecar optional



## Deluxe 5-hp Bike



**199<sup>50</sup>** Factory Assembled

## Custom Trail Bike Accessories for added versatility



**12<sup>95</sup>**

### Sealed beam Headlight Kit

Powerful headlight shows the way at night. Assembles easily, mounts in hole in front of bike. With battery box for 6-volt lantern battery. Order battery below. Shpg. wt., 2 lbs.  
22 A 3649 F. . . . . 12.95  
18 A 5085. 6-volt Lantern Battery. Wt., 1 1/2 lbs. . . . . 99¢



**7<sup>95</sup>**

### Custom Windshield

Custom-designed trail bike windshield is made of strong, clear acrylic plastic. Protects you from bugs, dust, etc. Attaches firmly to handle bars. May be installed or removed easily. Size, 12x17 1/2" high. With hardware. Shpg. wt., 2 lbs.  
22 A 3645 F. . . . . 7.95



**49<sup>95</sup>**

### Two-speed Drive Kit doubles torque

Shiftable hi/lo speed drive provides a 2:1 gear reduction for easier going on extra rough terrain. Shift control mounts on handle bar . . . lets you instantly change from standard 5:1 gear ratio to 10:1 ratio. Installs easily. 8 lbs.  
22 A 3739 F. . . . . 49.95



**48<sup>95</sup>**

### Sidecar Kit adds utility

Add extra versatility to your trail bike with this bolt-on sidecar. Plenty of carrying space. Tubular frame with heavy-gauge steel sides. Single wheel. Easily attached or removed from trail bike. 10x13x28" long. Shpg. wt., 40 lbs.  
22 A 3740 UF. . . . . 48.95

**NOTE:** Use of trail bikes on streets, or public highways is prohibited by law. All items this page shipped from Fort Wayne, Ind. Allow 2-3 weeks for delivery. Trail Bikes, Side Car sent frt. or exp.

# HOBBY

## AQUARIUM OUTFITS

Complete Aquarium Outfits get you started in a fascinating new hobby

**29<sup>95</sup>**

\$5 monthly\*

### Deluxe 10-gallon Outfit with Stow-a-lite cover

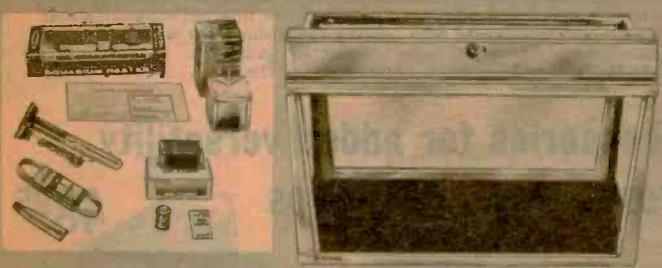
Everything you need for getting started in one of the world's most interesting hobbies. All you add is water and a selection of tropical fish. Makes an exotic and fascinating addition to any room decor.

Heavy-duty tank features stainless steel frame and polished glass. Special stow-a-lite aquarium light completely covers tank top to keep dirt out and minimize water evaporation. Sockets for two 25-W bulbs (not included) to bring out the colorful beauty of fish and aid plant growth. Reflector cover has convenient hidden storage compartment for fish food, net, accessories. Hinged for easy access. Dynaflo motor filter with silent magic-magnet drive aerates water as it filters, keeps fish healthy and lively.

Outfit includes: 50-W heater with automatic thermostat, thermometer, charcoal and glass wool for filter, anti-chlorine crystals, fish food, aquarium manual. Tank, 12x20x10". Light, filter and heater for 117 VAC. Shpg. wt., 25 lbs.  
 22 A 3620 U. .... 29.95  
 22 A 3641 U. 20-Gal. Outfit. 55 lbs. .... 44.95



Dynaflo motor filter, heater with thermostat, thermometer, charcoal and glass wool, anti-chlorine crystals, fish food and handy aquarium manual



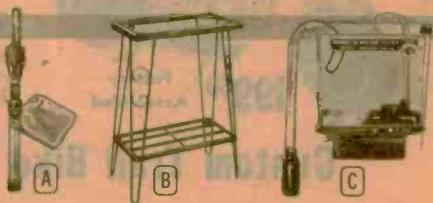
### Budget-priced 10-gallon Aquarium Outfit

**19<sup>95</sup>**

\$5 monthly\*

- Stainless-steel tank has polished glass sides
- Powerful air pump for corner filter/aerator
- Stainless-steel reflector for aquarium lights

Complete 10-gallon aquarium outfit is a great value for everyone! Provides countless interest-filled hours. Features a built-to-last stainless steel tank with polished, distortion-free glass sides. Rugged vibrator-type air pump powers the filter/aerator. Keeps water clean and fresh. Stainless-steel reflector has sockets for two bulbs (not included). Outfit includes: 50-watt heater with automatic thermostat, thermometer, airline tubing, charcoal and glass wool for filter, chlorine neutralizer, fish food, aquarium handbook. Tank, 12x20x10". Light, air pump and heater for 110-120 volt, 60 Hz AC.  
 22 A 3642 U. Shpg. wt., 23 lbs. .... 19.95

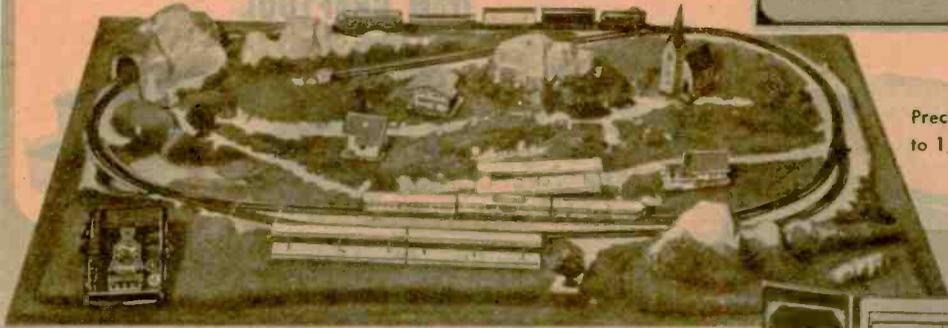


### AQUARIUM ACCESSORIES

- A** Aqua-Vac Aquarium Cleaner. Cleaner picks up dirt your filter misses. Cleans gravel surface and imbedded dirt. With extension tube for deep tanks, disposable bag, instructions. Order 2 batteries sold below.  
 22 A 3622 X. Shpg. wt., 1 lb. .... 4.95  
 18 A 5078. "C" Batteries. 4 oz. .... 2 for 33¢
- B** Wrought Iron Aquarium Stand. For 10-gallon tanks. Black finish. 30" high.  
 22 A 3621 X. Shpg. wt., 21 lbs. .... 8.95  
 22 A 3643 X. 20-Gal. 30" high. 23 lbs. .... 9.95
- C** Dynaflo Heavy-Duty Filter. Silent "magic-magnet" motor circulates 1000 gallons of water daily. Filtration and aeration to keep water clear, fish healthy. 117 VAC.  
 22 A 3623 X. Shpg. wt., 3½ lbs. .... 10.95

# N-Gauge Bookshelf Railroads . . world's smallest train outfits!

**HOBBY**  
MODEL RAILROADS



Precision engineered  
to 1/160 scale

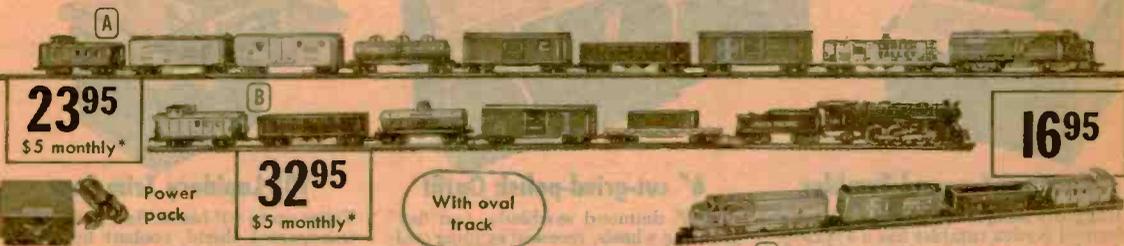
## Deluxe Railroad Outfit with 45"x27" layout

The real thing in miniature . . master-crafted, fully detailed. Combination freight and passenger railroad set you'll be proud to own and display. Powerful Alco diesel locomotive pulls 4 freight cars, 3 streamline passenger cars over big, panoramic layout. Cars feature automatic coupling. Full 45"x27" layout board is realistically painted and flocked; track and switches mounted. U.L. listed power pack with accessory outlets, car railer. Building kit and trees included. For 117 VAC.

22 A 3433 U. Shpg. wt., 17 lbs. . . . . 49.95

**49<sup>95</sup>**

\$5 monthly\*



**23<sup>95</sup>**

\$5 monthly\*

**32<sup>95</sup>**

\$5 monthly\*

**16<sup>95</sup>**

Power pack

With oval track

### A Diesel with Freight Cars

Precision-made set to please the rail buff. Alco diesel pulls 8 deluxe freight cars including Santa Fe, Republic, Lehigh Valley. Features automatic coupling over 17"x24" track layout. Realistic outfit. U.L. listed power pack with accessory outlets. Car railer to put cars on track. 117 VAC.

22 A 3434 X. Wt., 3½ lbs. . . . . 23.95

### B Steam Locomotive Outfit

Big Pacific 4-6-2 steam locomotive has headlight and tender. With 5 colorful freight cars: stock car, flat car with load, tank car, hopper car, caboose. Puffs around 17"x24" layout. U.L. listed power pack. Nickel plated oval track. Car railer to put cars on track. 117 VAC.

22 A 3435 X. Wt., 3½ lbs. . . . . 32.95

### C Low-priced Diesel Outfit

Life-like Alco diesel freight outfit featuring powerful gear drive locomotive and 3 authentically detailed freight cars; automatic coupling. Speeds around big 16"x24" oval track. U.L. listed power pack has accessory outlets. Includes car railer to put car on track anywhere. For 117 VAC.

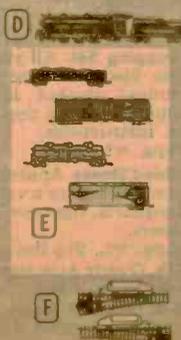
22 A 3436 X. Wt., 3½ lbs. . . . . 16.95

## Quality Cars, Engines, Switches

**D** Pacific steam Locomotive and Tender. Modeled from USAFA 4-6-2 prototype. Precisely detailed with spoked drivers, operating valve gear, headlight. Painted and lettered after the original engine. Wt., ½ lb.  
22 A 3425 . . . . . 21.95

**E** Set of 4 Freight Cars. Exact replicas of American prototype freight cars. Each has fully automatic coupling. Authentically painted and lettered. Make a handsome addition to your collection. Wt., ½ lb.  
22 A 3426 . . . . . Set of 4 for 4.95

**F** Pair of Electric Switches. One left-hand and one right-hand. Use for adding freight yard, additional spurs, etc. to layout.  
22 A 3427. Shpg. wt., ½ lb. . . . . Pair 7.95



Giant 52-pc.  
Track and  
Trestle  
Extender Pack

**995**



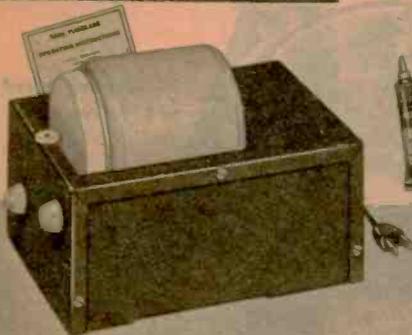
Create your own miniature railroad empire with this giant 52-piece track and trestle extender pack. Assembles to a full 48"x60½". Includes 8 sections of curved track and 18 sections of straight track, plus ½ section straight track and 2 pier sets (24 pieces). Shpg. wt., 2 lbs.  
22 A 3428 . . . . . 9.95

\*See page 438 for full Credit details

## SELECTED KITS

### LAPIDARY

# Lapidary Outfits and Supplies for hobby fun or part-time profit from CRAFTOOL



All you need to transform rough stones into beautiful pieces of gem stone jewelry

**23<sup>95</sup>**

Enjoy the fascination of transforming a rough stone into a beautifully polished gem stone for mounting in earrings, cuff links or other pieces of jewelry to wear yourself or as really special gifts. Complete tumbling and jewelry making kit provides a marvelous introduction to the lapidary's craft of gem polishing. Includes: mini-tumbler with drum and liner, powerful self-contained motor, assortment of rough cut gem stones, assorted jewelry mountings, 3 grades of abrasive grits, polishing medium, jewelry glue, instruction booklet. 117 VAC.  
22 A 3735 X. Shpg. wt., 12 lbs. . . . . 23.95

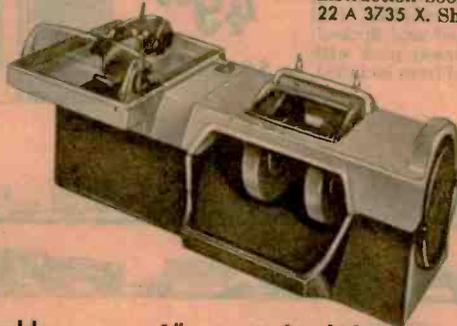


## Gem Stone/Tumbling and Jewelry Making Kit



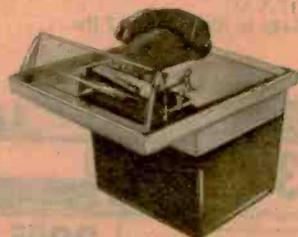
### Compact 6-pound Tumbler

Ruggedly designed cast aluminum and formed Kydex tumbler has a 4 1/2 x 9 1/2" dia. hexagonal drum. Up to 6-lb. capacity. Lined with strong, noise-deadening neoprene gasket. Quiet, extra-long nylon bearings. Fan-cooled motor. 11 3/4 x 11 x 9". 117 VAC.  
22 A 3776 XF. \*Shpg. wt., 19 lbs. 34.95



### 6" cut-grind-polish outfit

Has 6" diamond sawblade, two 6x1" grinding wheels, recessed sanding/polishing disc. Lexan shields. Coolant flow adjustment, well drains. With set of sanding discs, cement, instructions. Uses motor at right; extra 6" saw blades below. 9x10x26".  
22 A 3777 UF. \*Shpg. wt., 53 lbs. 129.50



### 10" Lapidary Trim Saw

Takes up to 10" blade. Saw guard with transparent shield, coolant hose connection, 13x18" table, adjustable rock vise. Less motor (below), and saw blade (Fig. A, below). 12x13x18".  
22 A 3778 UF. \*Wt., 43 lbs. . . . . 69.95  
22 A 3779 XF. AC Motor. For above and 6" outfit. \*Wt., 13 lbs. . . . . 28.50



**A** 10" Diamond Saw Blade. Specially designed for rock cutting. Can be operated in either direction to equalize rim wear and get maximum use from every blade. Hand tensioned to remove wobble and flutter for true running at rated speed. 10x.040".  
22 A 3741. Shpg. wt., 2 lbs. . . . . 22.45



**B** 22 A 3742. 6" Blade. Same as above, but 6x.025". Wt., 1 lb. . . . . 13.50

**C** Tumbling Abrasives. Four packages of silicon carbide tumbling abrasive, from coarse to polish; coarse, medium, fine, polish.  
22 A 3743. Shpg. wt., 3 lbs. . . . . 3.50



**D** 19-Piece Dopping Set. All you need to facilitate final polishing of gem stones. Includes: alcohol lamp, 4 pieces of dopping wax, 12 dop sticks, 2 metal dops, instructions.  
22 A 3744. Shpg. wt., 2 lbs. . . . . 4.95



**E** Rough Tumbled Stones. Approximately 200 pieces, including a variety of agate and rose quartz, tiger eye, jasper, and many others.  
22 A 3745. Shpg. wt., 2 1/2 lbs. . . . . 5.50  
22 A 3746. 3-lb. Quartz Assortment. Colored and clear pieces. 4 lbs. . . . . 5.50  
22 A 3747. 3-lb. Banded Agate Assortment. Light and dark banded. 4 lbs. 5.50



**F** Jewelry, Gem Cutting and Metalcraft. William T. Baxter. Detailed instructions covering all phases of jewelry making, metalcraft. 334 pps.  
22 A 3785 E. Shpg. wt., 1 lb. . . . . 7.50



**G** Hand-Made Jewelry Booklet. A. R. Emerson. Introduction to producing simple hand-made jewelry. 83 pps.  
22 A 3786 E. Shpg. wt., 8 oz. . . . . 1.95

**H** Findings Kit. Mounts for polished stones. Includes: 2 sets of earring mounts, cuff links, tie bar, key ring, finger ring, chain pendant, wrist bracelet, jewelry cement.  
22 A 3787. Shpg. wt., 1 lb. . . . . 2.95

# You'll enjoy savings, satisfaction and fun when assembling a Hobby Kit

**SELECTED KITS**

**HOBBY**

## Easy-to-assemble full-feature AM Table Radio with superhet circuit

**995**

*It's more fun to hear your favorite AM programs  
loud and clear on a radio you've built yourself*

Here's an AM table radio kit that's just right for beginning hobbyists and experimenters. Low-priced, educational and instructive, it lets you experience the thrill of hearing all your favorite AM radio programs loud and clear on a radio you've built yourself. Covers standard 540-1600 kHz AM radio broadcast band. Sensitive superheterodyne receiver circuit picks up plenty of stations. Special Automatic Volume Control (AVC) circuit provides steady sound, even when receiving stations of widely varying signal strength. Ferrite-core antenna provides increased sensitivity. Circuit has four tubes, plus rectifier. Handsome ivory plastic case blends well with any decor. Overall size,  $5\frac{1}{4} \times 7\frac{3}{4} \times 4"$ . Detailed assembly manual has easy-to-follow step-by-step instructions and illustrations with oversize diagrams. Complete, with all parts, tubes and rectifier, solder, pre-cut wire. For 110-130 volts, AC or DC. From Japan. Shpg. wt., 3 lbs.

22 A 9524.....9.95



**488**

*Bright light  
for studying,  
reading, hobby-  
kit building*

### Universal high-intensity Lamp Kit

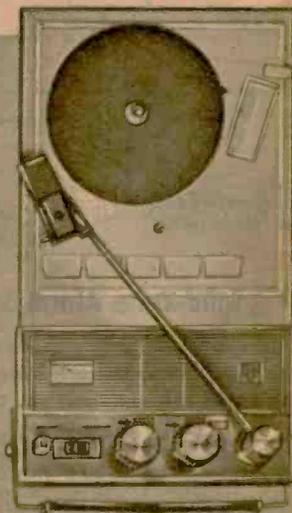
Provides bright, clear light when and where you need it. Non-glaring light is equivalent to 150-watt incandescent bulb. Folding arm for compact storage. Hi/Low/Off switch lets you select just the light you need. Handsome mar-proof wood-grain finish; double shade; deluxe rosewood inlay base for a real decorator's touch. Beige color. With easy-to-follow instructions for fast, fun assembly. With one #93 bulb; order extra bulbs below. For 115 VAC.

22 A 9501. Shpg. wt., 2 lbs. ....4.88  
26 A 3147. Extra #93 Bulbs. 2 oz. . . . Pkg. of 2 for 49¢

*Great outdoor  
entertainment  
at the beach  
or on picnics*

**1995**

*Portable plays  
 $33\frac{1}{3}$  and 45-  
rpm records*



### Battery-powered Phonograph Kit

Manually-operated portable phonograph is great at the beach, picnics or any type of party. Plays up to 12" records at  $33\frac{1}{3}$  or 45-rpm. Has built-in speaker, volume control, lightweight tone arm with crystal cartridge. Push-pull output circuit. Housed in sturdy plastic case, with removable cover. Compact,  $2\frac{1}{2} \times 5\frac{1}{2} \times 9\frac{3}{4}"$ . Operates on 4 "C" batteries. With all parts, solder, batteries, strobe disc and 45-rpm adapter. Extra batteries below.

22 A 9520 X. Shpg. wt., 3 lbs. ....19.95  
18 A 5865. Extra "C" Batteries. Use 4 with above. Shpg. wt., 4 oz. .... Package of 2 for 33¢

**knight-kit**

**ALARM SYSTEMS**

# Home Protection System Kit and Remote Sensors



Master Unit

Remote Sensors

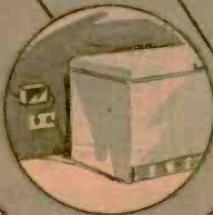
**14<sup>95</sup>**  
Kit

Low  
as

**2<sup>95</sup>**  
Each



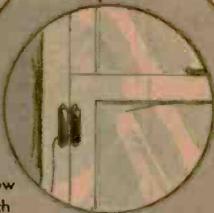
Flooding alarm



Power-failure alarm



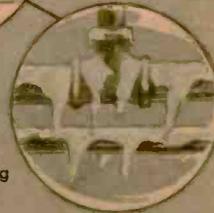
Smoke alarm



Door/window alarm switch



Heat/fire alarm



Freezing alarm

## Solid-state Alarm System protects your home, family and possessions

- Loud alarm horn can be heard up to 100 ft.
- "Fail-safe"—any break in system starts alarm
- Key switch control . . . only you can activate system

- Master unit accepts up to three remote sensors
- Assembles quickly with screwdriver and pliers
- Battery-operated for use anywhere

Now you can give your home, family and possessions complete protection from fire, theft, flooding, smoke, power failures, and freezing with this solid-state alarm system. Actuation of any remote sensor produces a loud audible warning that can be heard up to 100 feet. Gives you an instant warning so quick corrective action may be taken. Battery operation makes system ideal for boats, cars or airplanes.

Battery-operated master accepts up to three sensors (order at right), operates up to one year on two "D" batteries. Door-window magnetic switches signal opening of door or window. Smoke alarm signals presence of smoke in air duct. Heat/fire alarm gives immediate signal of fire. Freezing alarm signals when temperature falls below 32°F, while flood alarm signals water in basement or boat. Power failure alarm warns you immediately of power loss in any desired part of your home. Automobile alarm protects against theft or vandalism, with a loud horn warning.

Built-in "failsafe" sounds alarm automatically for break anywhere in the system to assure you of constant protection once system is activated. Tumbler type key switch control prevents anyone but you from turning system on or off. 5 1/4 x 7 x 2 1/2". Master unit kit includes keylock switch, siren, control components, case, instructions. Each independent sensor is assembled, with 6-ft. cord and pin plug. To run longer cord to Master Unit, order audio cable with pin plug on one end, pin jack on other (p. 354), or splice in lamp cord.

- 22 A 3339 X. Master Unit Kit. Wt., 3 lbs. . . . . 14.95
- 22 A 3299 X. Master Unit Wired. Wt., 3 lbs. . . . . 19.95
- 22 A 3340. Door/Window Magnetic Switch. 8 oz. . . . . 2.95
- 22 A 3341. Smoke Sensor. 117 VAC. Wt., 3 lbs. . . . . 9.95
- 22 A 3342. Heat/Fire Sensor. Wt., 1 lb. . . . . 2.95
- 22 A 3343. Freezing Sensor. Wt., 1 lb. . . . . 3.95
- 22 A 3344. Flood Sensor. Wt., 1 lb. . . . . 5.95
- 22 A 3345. Power Failure Sensor. Wt., 1 lb. . . . . 2.95
- 22 A 3346. Automobile Alarm Kit. 3 lbs. . . . . 8.95
- 18 A 5079. "D" Battery. Master uses 2. Wt., 8 oz. . . . 4.65¢



Usable with  
"Pro-Type"

Usable with  
"Pro-Type"

39<sup>95</sup>

A

89<sup>95</sup>

B

49<sup>95</sup>

C

## Values in Business Machines

### A Deluxe Electric Typewriter

Brother 1220. Has correction key to adjust spacing errors, and for perfect right-hand margins. Tab set, clear; instant-set margins. 6-position spacing, half-spacing. 88-character keyboard. Adjustable touch control; copy control regulates typing speed, number of copies. Card holder. Steel. Pica type. With case. 6x14x15 $\frac{1}{2}$ ". 117 VAC. Japan.  
10 A 5109 U. Wt., 40 lbs. . . . . 139.95

### B Heavy-duty Portable

Features segment shift, comfort-sloped 88-character keyboard, clear-view paper meter, scale. Pushbutton key-set tab, ribbon key. Jam-release key, variable line spacer, rapid paper advance, line finder. Molded case. Steel. 7 $\frac{3}{4}$ x18x16 $\frac{3}{4}$ ". From Japan. Shpg. wt., 23 lbs.  
10 A 4308 X. Elite Type. . . . . 89.95  
10 A 4309 X. Pica Type. . . . . 89.95  
10 A 4310 X. Script Type. . . . . 89.95



69<sup>95</sup>

D

### "Pro-Type" customizes typewriters (A), (B) above to your profession

For (A), (B) only. "Pro-Type" cylinder slips-on special typewriter key. Typist selects any of 12 symbols to be used. Japan. 6 oz. (Not shown.)  
10 A 5111 S. International Language. £ ¢ ¤ ¨ ~, etc. . . . . 9.95

10 A 5112 S. Medical/Pharmacy. P I M Ph R H S, etc. . . . . 9.95  
10 A 5113 S. Engineering. a Ω [ ] φ °, etc. . . . . 9.95  
10 A 5110 S. Mathematics. + = Σ ∞ π √, etc. . . . . 9.95

### C Student budget special

Full 88-character keyboard. Has 2-line spacing; half-space ratchet for formula typing. Eraser table, card holder, paper scale, hand-set margins. Two-color adjustment, stencil position. Jam release, touch adjustment. Pica type. With case. Steel. 6 $\frac{3}{4}$ x11 $\frac{1}{2}$ x15". Japan.  
10 A 4306 X. Wt., 15 lbs. . . . . 49.95  
10 A 4982 X. As above, but 84-characters, clamp-on lid. 12 lbs. . . . . 44.95

### D Full-feature economy model

Includes features of costlier portables. Has automatic key-set tab. Comfort-sloped 88-character keyboard with clear-view paper meter and scale. Touch selector, jam-release key. 1, 1 $\frac{1}{2}$  and 2-line spacing plus half-spacer for formulas. Two-color ribbon, stencil selector. All steel. Pica type. Carry case. 8x18x16". From Japan.  
10 A 4311 X. Wt., 19 lbs. . . . . 69.95



79<sup>95</sup>

E

### E Portable Electric Adder

Compact adder for home or small office. Adds, subtracts, multiplies, gives total and sub-total. Lists to 7 columns, totals to 8 columns (999,999.99). Repeat key, correction lever, column indicator. All metal, die-cast. Retractable handle. 4 $\frac{1}{2}$ x8 $\frac{3}{4}$ x12 $\frac{1}{2}$ ". Triple-purpose carry case, dust cover. 117 VAC. U.L. Listed. Takes standard tape. 16 lbs. Japan.  
10 A 5044 X. . . . . 79.95

### F SCM deluxe Electric Adder

Adds, subtracts, multiplies 8 columns (999,999.99), totals 9 columns (9,999,999.99). Fast response; correction key; simplified tape-feed. Repeat, sub-total keys. Steel case. 5 $\frac{1}{2}$ x8x12". 117 VAC. U.L. Listed.  
10 A 4787 X. Wt., 14 $\frac{1}{2}$  lbs. . . . . 109.95  
10 A 4305 X. SCM Home Adder (not shown). Adds 7 columns, totals 8. Lightweight. Snap-on cover. 7x9x13". 117 VAC. 10 $\frac{1}{2}$  lbs. . . . . 69.95



Vinyl-Clad Steel Case

109<sup>95</sup>

F

### G Home/office Electric Stapler

Ultimate in automatic stapling. Easy to load, takes standard staples. Quietly, uniformly staples different thicknesses of paper. Gauge to set staple where you want it. Features automatic shut-off for safety. Modern styling in molded high-impact plastic. 3-bottom suction cups. Size, 4 $\frac{1}{2}$ x3 $\frac{1}{4}$ x6 $\frac{1}{2}$ ". 117 VAC. From Japan. Shpg. wt., 3 lbs.  
10 A 5114 S. . . . . 29.95

### H Electric Pencil Sharpener

Great convenience for home or office. Safe enough for a child to use. Simply insert any standard pencil. Stops automatically when pencil is sharp. Heavy-duty motor, precision-ground cutter and die-cast metal construction. Transparent shaving receptacle slides out easily for quick, neat cleaning. 8x4x8". 117 VAC. U.L. Listed. Japan.  
10 A 4353 S. Wt., 3 $\frac{3}{4}$  lbs. . . . . 13.95



29<sup>95</sup>

G



13<sup>95</sup>

H

# Telescopes, Outfits and high-power Binoculars



**19995**  
\$10  
monthly\*



**9995**  
\$5  
monthly\*

## Our best Telescope Outfit—600 power

Our most powerful astronomical and terrestrial refracting telescope. Lets you see stellar objects as faint as 11.2 magnitude. Boasts giant 76mm (3") achromatic Fraunhofer type objective lens and five separate eyepieces for magnifications of 54.5x, 96x, 133.3x, 200x, and 300x. 2x Barlow lens, also included, doubles each power for magnifications up to 600x. Outfit also includes erecting prism for terrestrial viewing and diagonal prism for right angle viewing. Projection screen and filter for safe viewing of solar flares, sun spots. Moon filter and 6x30 finder scope. Rack and pinion focus. Counterbalanced equatorial mount has slow motion controls, holds illuminated parts tray. With carrying case, instruction book. From Japan.

10 A 5128 U. Shpg. wt., 50 lbs. .... 199.95

## 450-power astronomical Telescope Outfit

Track man-made satellites, see Saturn's rings on a clear night. Achromatic, coated 60mm objective lens with three separate eyepieces—46x, 152x, and 227x, plus Barlow 2x lens to double each power. Diagonal prism for right angle viewing. Erecting prism for terrestrial viewing. Projecting screen and filter for observing sun. Moon filter and 6x30 finder scope with cross hairs. Counter balanced 3-axis (polar, horizontal and declination) equatorial/altazimuth mount. Slow motion cable controls. Rack and pinion focus. 900mm focal length. Illuminated metal parts tray. Five-foot wood extension tripod. Scope has gray metal body, chromed attachments. Length: open, 38½"; closed, 32½". Hardwood case, instructions. Japan.

10 A 4383 U. Shpg. wt., 31 lbs. .... 99.95

## 40-540x zoom astronomical refracting Telescope



Complete with equatorial mount

**11995**  
\$6  
monthly\*

This astronomical and terrestrial refractor boasts Fraunhofer-type objective lens with 60mm diameter, 900 mm focal length. 7.5mm-22.5mm zoom eyepiece and 5mm auxiliary eyepiece give 40-540 power. 6x30 right angle finder scope plus 3x Barlow lens, image erector, moon filter and diagonal prism. Equatorial mount has slow motion controls for horizontal, polar and declination axis. Azimuth, hour, declination circles. Group viewing screen. 5' adjustable tripod with illuminated parts tray. 30" long. Japan. 10 A 5129 U. Wt., 34 lbs. .... 119.95

**5995**  
\$5  
monthly\*



## 350-power Telescope Outfit

Bring the stars and planets 350 times closer with this powerful 60mm astronomical refractor. Features three eyepieces and 2x Barlow lens for 35x, 70x, 117x, 175x, 234x, and 350x magnifications. Also has sun filter, moon filter, projection screen, 5x24 finder scope, star diagonal, erecting prism. 700mm focal length. 5-foot tripod; altazimuth mount. Illuminated parts tray. Instructions. Japan.

10 A 4196 U. Wt., 25 lbs. .... 59.95

**2995**  
\$5  
monthly\*

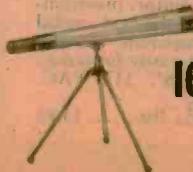


## 90-power Terrestrial Telescope

15x low power permits close examination of a wide field while 90x gives you a closer look at far away objects—plus three other magnifications for astronomical or terrestrial use. Hard-coated 60mm objective lens, single eyepiece with 15x, 30x, 45x, 50x, and 90x settings. 550mm focal length. Precision crosshair finder. 5-foot adjustable tripod with altazimuth mount. 27" barrel. From Japan.

10 A 4214 X. Wt., 12 lbs. .... 29.95

**1695**



## 15x-45x zoom terrestrial Telescope

Compact and lightweight—ideal for target spotting. Terrestrial viewing scope has 40mm objective lens, fingertip focusing control. Achromatic optics. 16" long. With 9" table tripod. Japan. Wt., 4 lbs. 10 A 4250 S. .... 16.95

# ...top values in our largest selection ever



**6<sup>95</sup>**

With case  
**69<sup>95</sup>**  
\$5 monthly\*



All models  
have roll-down  
rubber eyecups

**44<sup>95</sup>**  
\$5 monthly\*



With case  
**54<sup>95</sup>**  
\$5 monthly\*

### Super-power 25x70 Binoculars

Our most powerful binoculars offer full 25 power and 70mm objective lenses that pull in distant objects; ideal for star gazing or satellite watching. Hard coated achromatic objectives, full 131-foot field at 1000 yards, 10' high. For best viewing of distant objects order tripod (listed below) for steady support. Binoculars with case. Japan. Shpg. wt., 7 lbs.

10 A 5130 S. .... 69.95

10 A 5062 S. Telescoping Tripod. Recommended for viewing distant objects with 20x50, 20x60, and 25x70 high power binoculars. With carrying case. Japan. Shpg. wt., 3 lbs. .... 6.95

### 20x50 wide-angle Binoculars

High power puts you 20 times closer to the action while affording a 50% wider field of view. An excellent choice for long-range viewing. Ideal for astronomical use, satellite tracking. Hard coated achromatic objective lenses. Center focus with right eye adjustment. With roll down rubber eyecups to protect glasses. 205' field at 1000 yards. 7 1/4" high. With carrying case. From Japan. Shpg. wt., 5 lbs.

10 A 5131 S. .... 44.95

10 A 4190 S. Long Range 20x50. Similar to above with 157' field at 1000 yds. With carrying case. From Japan. Shpg. wt., 6 lbs. .... 29.95

### High-power 20x60 Binoculars

High power and giant 60mm objective lenses combine to give you the large, bright images necessary for spectacular long-distance views. Achromatic lenses have amber coating to cut glare. Center focus with right eye adjustment. 210' field at 1000 yards. For best viewing of distant objects use tripod listed at left. Equipped with roll down rubber eyecups to protect eyeglasses and sunglasses from scratches. Complete with carrying case. From Japan. Shpg. wt., 4 lbs.

10 A 5061 S. .... 54.95

10 A 5060 S. 20x50. As above, but 173' field. Japan. Wt., 3 lbs. .... 39.95



Converts  
binocular  
to spotting  
scope

**14<sup>95</sup>**



**24<sup>95</sup>**  
\$5 monthly\*



**36<sup>95</sup>**  
\$5 monthly\*

Wide-angle view      regular

### 2.5x Magni-Booster

Converts your regular binoculars to a high-power spotting scope. Increases power 2 1/2 times. Adapter (order below) locks to objective of most binoculars (not 20x50, 20x60, or 25x70). With case. From Japan.

10 A 5068 S. Wt., 1 lb. .... 14.95

### Bright image 7x50 Binoculars

Our most versatile binocular. Best for general purpose viewing, ideal for night or marine use. Also great for astronomy, bird watching, hunting. Feature large 50mm objective lenses for extra-bright images, even in poor light conditions. Also have roll-down rubber eyecups to protect glasses. 373' field at 1000 yards. 6 1/2" high. With case. Japan.

10 A 4189 S. Wt., 6 lbs. .... 24.95

10 A 4248 S 7x35. As above, but 35mm objective lenses and 368' field. Japan. Shpg. wt., 6 lbs. .... 19.95

### 8x40 wide-angle Binoculars

Wide field of vision makes these binoculars ideal for sports events and general use. Feature a full 8 power and large 40mm objective lenses for extra light gathering, brighter images. Compact and lightweight—weigh only 27 ounces. Ultra-violet coated lenses. 472' field at 1000 yards. Center focus. Folding rubber eyecups, tripod socket. 4 1/2" high. Japan.

10 A 4216 S. Shpg. wt., 6 lbs. .... 36.95

10 A 4198 S. As above, but 7x35. 551' field at 1000 yards. Weigh 25 ounces. Japan. Shpg. wt., 6 lbs. .... 29.95

#### LOCKING ADAPTERS

Shpg. Wt., 4 oz.

Stock No.	Mfr's Type	For Front Lens Size	EACH
10 A 5069 S	2590	35mm	2.49
10 A 5070 S	259L	40mm	2.49
10 A 5071 S	2592	50mm	2.49

\*Buy with no money down, see page 438 for full Credit details



**8995 Professional-quality Zoom Microscope Outfit**

Deluxe model meets many of the demands of the professional microscope user. Zoom power from 50-1200X. Four objective turret with 5X, 10X, 40X, and 60X achromatic objectives. Zoom ocular 10X through 20X. Plano concave mirror, 1 1/2" dia. Geared ratchet coarse focusing, single knob fine-focusing. Automatic power computer.

Optical condenser built into mechanical stage. Adjustable down stop to protect slides and lenses. With 2 prepared slides, 4 blank slides, instructions, mechanical stage, heavy-gauge vinyl dust cover and book. Mahogany finished wood carrying case, Japan. 10 A 5127 X. Wt., 10 lbs. . . . . 89.95

**3995 Wide-angle/viewer Two-Microscope Outfit**

Top-value outfit includes 40-1200X wide-angle microscope, plus 50X and 100X reflecting microscope viewer. Ideal combination for the serious student of microbiology. Precision wide-angle microscope has rotating turret with 5X, 12X, 40X, and 60X objectives; 10X and 20X eyepieces.

Plano-concave mirror has light that operates from two "C" batteries (not included) or AC transformer. 3 1/2" x 3" stage. Rack and pinion mechanism. Reflecting microscope projects image on screen for close study. With electric illuminator, instruments, specimens. Gift box. Japan. . . . . 39.95

**2995 Complete 77-piece Microscope Outfit**

Includes everything required by the inquiring young student. Technician-type microscope boasts zoom power from 50-1200X. Has 10X through 20X zoom ocular; 8X, 20X, 40X, and 60X achromatic objectives on rotating turret. Efficient light power supply for a bright, clear image is produced by a plano-concave mirror with AC transformer.

Micro-fine adjust obtains the sharpest possible image. Safety stop eliminates chance of damaging slides and lenses. 77-piece outfit includes slides, specimens, and instruments. Gift box. From Japan. 10 A 4319 X. Wt., 12 lbs. . . . . 29.95



**1995 50-900X Zoom Microscope Outfit**

Four-objective enclosed turret: 5X, 10X, 40X, and 60X. Automatic power computer calculates magnification for all lenses and zoom powers. Zoom ocular 10X through 15X. Vinyl dust cover; AC adapter jack in base. With slides, specimen, book, case. Japan. 10 A 4256 X. Wt., 8 lbs. . . . . 19.95  
10 A 5021 S. 117 VAC Adapter. Shpg. wt., 1 lb. . . . . 3.95



**995**

**30-power Telescope**

Lightweight portable telescope features adjustable power to 15X, 20X, 25X, 30X. Black barrel with chrome draw tubes. Coated lens. Opens to 16", closes to 7". 30mm lens. 210mm focal length. 52-102' field at 1000 yds. With case. Japan. 10 A 4191 S. Wt., 3 lbs. . . . . 9.95

**1295**

**Varipower terrestrial Telescope**

25X low power permits close view of a wide field. 50X high power gives you a closer look at far-away objects. Prefocusing gauge prevents focus fumble. Coated 40mm objective lens. 10" tripod, altazimuth mount, carrying box. Japan. 10 A 5073 X. 4 lbs. . . . . 12.95



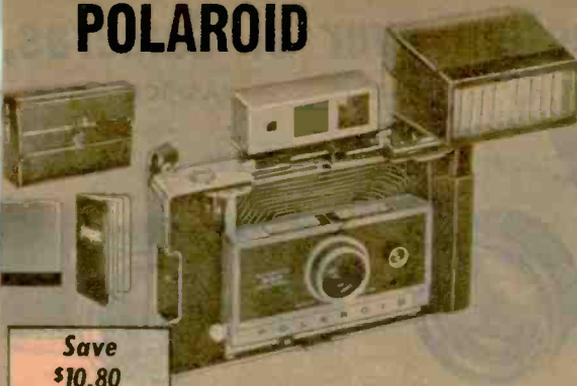
**795**

**Wear these like eyeglasses . . . weigh less than 3 ounces**

Sports spectacles for indoor or outdoor sporting events—leaves hands free! Puts you 2.8 times closer to the action. Coated optics focus to match each eye individually. Light and comfortable, can be worn for hours without fatigue. With soft rubber light shields, carrying case. Japan. 10 A 4264 S. Shpg. wt., 10 oz. . . . . 7.95

# POLAROID

# Color Pack Outfits



Save  
\$10.80  
**189<sup>95</sup>**

**Color Pack 360 outfit features rechargeable electronic flash**

Save  
\$15.34  
**159<sup>95</sup>**

**Built-in electronic timer buzzes when picture is ready**

*Separately, \$200.75. Outfit: Model 360\* Camera, Case, Photo Album, Color Pack film. Camera features rechargeable electronic flash, charger, built-in electronic development timer. Triplet lens, electronic shutter with two exposure ranges for color, two for B&W. Zeiss Ikon range/viewfinder automatically corrects for parallax and field size. Close-up, Portrait kits at right.*  
 10 A 0136 L4S. Shpg. wt., 7 lbs. .... \$189.95  
 10 A 5087 S. Model 360 Alone. Shpg. wt., 3 lbs. .... \$179.95

*Separately, \$175.29. Includes: Model 350\* Camera, Self-Timer, Carrying Case, Flashgun, 12 Bulbs, Color Pack film. Camera boasts triplet lens, electronic shutter with four exposure ranges. Zeiss Ikon range/viewfinder, plus built-in development timer. Metal housing.*  
 10 A 0146 L4S. Shpg. wt., 6 lbs. .... \$159.95  
 10 A 5089 S. Model 350 Alone. Shpg. wt., 3 lbs. .... \$144.95  
 10 A 4859 S. Close-Up Kit for 360, 350. 1 lb. .... \$10.95  
 10 A 4704 S. Portrait Kit for 360, 350. 1 lb. .... \$10.95



**89<sup>95</sup>**



**Included in 330 and 320 Outfits**

Camera carrying case,  
Color Pack film,  
flashgun and 12 bulbs



**74<sup>95</sup>**

## 330 Outfit . . camera has triplet lens

Model 330\* Color Pack camera with accessories above. Features electric eye and electronic shutter for correct exposure automatically. Built-in mechanical timer. Automatic time exposures up to 10 seconds. Double-window coupled type range/viewfinder. Plastic housing.  
 10 A 0133 L4S. Shpg. wt., 6 1/2 lbs. .... 89.95  
 10 A 5091 S. Model 330 Alone. Shpg. wt., 3 lbs. .... 74.95

## Value-priced Camera does all the work for you

Model 320\* camera with accessories above. Lowest-priced folding Color Pack camera features electric eye operation that sets correct exposure automatically—even for flash. Just load, aim, shoot—the camera does the rest. Range/viewfinder. Plastic housing.  
 10 A 0132 L4S. Shpg. wt., 6 lbs. .... 74.95  
 10 A 5092 S. Model 320 Alone. Shpg. wt., 3 lbs. .... 59.95

## Film, Camera Accessories for Polaroid

- 10 A 4928 S. Print Copier. Make color or B&W prints with your Polaroid camera. Not for Colorpack II. 1 lb. .... 7.95
- 10 A 5088 S. Carryall Case. Shpg. wt., 1 1/2 lbs. .... 10.95
- 10 A 4883 S. Development Timer. Wt., 4 oz. .... 6.95
- 10 A 4884 S. Self-Timer. Delays shutter. Wt., 4 oz. .... 4.95
- 10 A 4909 S. Flash Attachment. For 200- and 300-series (except 360) cameras. Uses M-3 flashbulbs. 1 1/2 lbs. .... 7.95
- 10 A 4903 S. M-3 Flashbulbs. Wt., 6 oz. .... Pkg. 12/1.59
- 10 A 4885 S. Cloud Filter. Not for Models 320, 210, 220 or Swingers. Shpg. wt., 7 oz. .... 4.95
- 10 A 4886 S. Cable Release. Shpg. wt., 4 oz. .... 1.95
- 10 A 4879 S. Type 107 B&W Film. 8 exposures. 6 oz. .... 2.50
- 10 A 4880 S. Type 108 Color Film. 8 expos. 6 oz. .... 4.90
- 10 A 4784 S. Album. Holds 90 3 1/4 x 4 1/4" photos. 1 lb. .... 4.95

**ACCESSORY LENSES.** For Color Pack 360, 350, 340, 250, 240, 230. With viewfinder, leather case. Japan. 1 lb.  
 10 A 4708 S. Telephoto Lens. 2X magnification. .... 19.95  
 10 A 4709 S. Wide-Angle Lens. 75% more coverage. .... 19.95  
 10 A 4854 S. Wide-Angle/Telephoto Lens Outfit. *Separately, \$39.90.* Both with dual viewfinder, case. 2 lbs. .... 34.95



Includes case,  
Color Pack film,  
3 flashcubes  
**39<sup>50</sup>**

## Colorpack II\* has electric eye operation

Features fast loading, electric eye, electronic shutter, viewfinder, rangefinder, triplet lens, built-in flash.  
 10 A 0131 L4S. Shpg. wt., 3 3/4 lbs. .... 39.50  
 10 A 5093 S. Colorpack II Alone. Wt., 2 1/2 lbs. .... 29.95  
 10 A 5094 S. Carryall Case Alone. Wt., 1 1/2 lbs. .... 3.95  
 10 A 4865 S. Flashcubes. 4 shots each. 6 oz. .... Pkg. 3/1.59  
 10 A 5126 S. Print Copier. Wt., 1 lb. .... 7.95

\*Color in 60 seconds, black-and-white in 15 seconds . . prints are 3 1/4 x 4 1/4"

# Our largest selection ever of Cameras,

MIRANDA



Our finest Single Lens Reflex

**25750** Super-fast f/1.4 lens for indoor shots

Sensorex. Thru-lens CdS exposure meter reads "modified spot" indicated in viewfinder—you just match needles for precise exposure setting. Fast 50mm f/1.4 lens focuses close as 17". Bayonet mount for automatic lenses; inside screw mount for preset types; interchangeable viewfinder. Micro-prism focusing grid. Depth of field preview. ASA 25-1600. Focal plane shutter, 1-1/1000 sec., B. Self timer. FP/X sync. From Japan.

10 A 5157S. Wt., 5 lbs. . . . . 257.50  
Miranda Sensorex f/1.8. As above, but with 50mm f/1.8 lens. Japan.  
10 A 4806 S. Wt., 5 lbs. . . . . 214.95

MINOLTA



Light-averaging 35mm SLR

**21950** Automatically indicates exposure setting needed

Model SR-T 101. Was \$239.50 in Catalog 280. Focusing, composing, shutter speed, and exposure data all visible in control-integrated viewfinder. CLS (Contrast Light Compensator) light averaging system. Thru-lens reading at maximum aperture. 55mm f/1.7 lens in bayonet mount. ASA 6-6400. Quick return mirror with lockup. 1-1/1000 sec. plus B. Depth of field preview. Self timer. FP/X flash sync. 10 A 4775 S. Japan. Wt., 5 lbs. 219.50  
10 A 5165 S. 135mm f/2.8 Auto. Telephoto Lens for above. Japan. 1 lb. 69.95  
10 A 5158 S. 35mm f/2.8 Auto. Wide-Angle Lens for above. Japan. 1 lb. 69.50

YASHICA



Thru-lens metering SLR

**19995** Perfect reading with IC exposure readout system

Model TL Electro-X. Thru-lens integrated circuit exposure readout system gives you accurate exposure setting even under subdued light. Red over/under indicator lamps in viewfinder signal correct exposure. 50mm f/1.7 lens in screw mount. Electric focal plane shutter has speeds from 2-1/1000 sec. with infinite range between settings. ASA 25-800. Depth of field preview. Self timer. FP/X flash sync. From Japan.  
10 A 5155 S. Wt., 5 lbs. . . . . 199.95  
Yashica TL Electro-X f/1.4. Same as above but with faster f/1.4 lens.  
10 A 5156 S. Wt., 5 lbs. . . . . 229.95

YASHICA



SLR with dual CdS sensors

**18495** Easy-to-use match-needle exposure control

Model TL-Super. Was \$189.95 in Catalog 280. Single lens reflex camera features CdS light sensors that read the exposure through stopped down lens. Has 50mm f/1.7 lens in universal thread mount. ASA range from 25-800. Micro-screen focusing to 1 3/4 ft. Instant return mirror with lockup for extra-wide-angle lenses. Quiet focal plane shutter has speeds from 1-1/1000 sec. plus B. Self-timer. FP/X flash sync. "Hot" accessory shoe. 10 A 4430 S. Japan. Wt., 5 lbs. 184.95

Yashica TL f/2. Same exposure control system as above. 50mm f/2 lens. Speeds, 1/2-1/500 sec. plus B. FP/X flash sync. From Japan.  
10 A 4782 S. Wt., 5 lbs. . . . . 157.95

PETRI



Behind-lens metering SLR

**14495** CdS cross-coupled exposure meter system

Model FT. Budget-priced 35mm SLR features cross-coupled CdS behind-the-lens metering system. Has 55mm f/1.8 lens. Boasts pentaprism viewfinder with micromatic lens focusing. Bayonet type interchangeable lens mount. Instant return mirror. Focal plane shutter speeds from 1-1/1000 sec. plus B. Self timer. Full flash synchronization for M-FP/X. Single stroke rapid film advance and self-cocking shutter. With 52mm screw-in filters. From Japan.

10 A 5152 S. Wt., 5 lbs. . . . . 144.95  
10 A 5153 S. 135mm f/2.8 Auto. Telephoto Lens for above. 1 lb. 62.95  
10 A 5154 S. 35mm f/2.8 Auto. Wide-Angle Lens for above. 1 lb. Japan. 59.95

MAMIYA/SEKOR



Versatile 35mm SLR

**20950** Has spot and averaging light metering systems

Model 1000 DTL. Feature-packed single lens reflex camera boasts both spot and averaging thru-lens metering. Switch selects system, pointer in viewfinder indicates one in use. Pressing film advance lever to camera body activates system, stops down lens for exposure reading. Area measured by each system outlined in viewfinder. ASA 25-3200. 55mm f/1.8 lens in universal thread mount. Speeds, 1-1/1000 sec. plus B. Self timer. FP/X flash synchronization. From Japan.  
10 A 4464 S. Wt., 5 lbs. . . . . 209.50

Mamiya/Sekor 500 DTL. Same dual metering system as above. 50mm f/2 lens. 1-1/500 sec., B. FP/X. Japan.  
10 A 4472 S. Wt., 5 lbs. . . . . 169.50

# Slide Projectors and Projector Accessories

## Our lowest priced 35mm

Yashica 5000E. Rangefinder camera has IC exposure control. Over/under indicator lights in viewfinder signal correct exposure. 45mm f/1.8 lens. ASA 10-800. 1-1/1000 sec., B. Self-timer. M/X sync. Japan. 10 A 4460 S. Wt., 5 lbs. . . 79.95



79<sup>95</sup>

## CdS electronic shutter 35mm

Yashica Electro 35. You set aperture, "computer" sets electronic shutter. Shoot indoors, even in candle light. Range/viewfinder. 45mm f/1.7 lens. ASA 10-400. Speeds from 30-1/500 sec. plus B. Self-timer. X sync. Japan. 10 A 5160 S. Wt., 5 lbs. . . 99.95



99<sup>95</sup>

## Yashica "Atonor" ultraminiature Camera

You won't miss that "once-in-a-lifetime" shot with this ultraminiature camera. Smaller than a pack of cigarettes. Take it anywhere. Just align dial with meter needle and shoot. Camera selects lens opening (f/2.8-f/16) and speed (1/45-1/250 sec.). Has built-in Y2, UV filters. 4x3/4x1 1/4". Weighs only 4 oz. With 80 B and 4x filters, flash, case. Japan.

10 A 4998 S. Wt., 3 lbs. . . 84.95

Film. 20 exp./cartridge. 3 oz.

10 A 4999 S. Kodachrome II Color Film. . . . . 2-Roll Pkg./2.60

10 A 4802 S. XT Pan Black-and-White Film. . . . . 2-Roll Pkg./2.20



Fits in shirt pocket



With case, filters, flash

84<sup>95</sup>

## Airequipt and Sawyer's 35mm Slide Projectors



AIREQUIPT

Panel focusing semi-automatic

49<sup>95</sup>

Model 125. Thrifty-priced slide projector lets you relive your favorite moments. Gives sharp, clear projection of all your 2x2" slides. Quality 4" three-element lens. Has easy-to-use panel controls for focusing and elevation. Three-way on/off switch. Bright 500-watt lamp. Efficient cooling system lets you enjoy your slides for hours with no worry of over-heating the projector. With 100-slide magazine. Takes Airequipt metal or plastic trays, plus stacker. For 115 VAC.

10 A 4750 X. Wt., 10 lbs. . . . . 49.95



AIREQUIPT

Remote control automatic Projector

59<sup>95</sup>

Model 135. Our best-selling slide projector. Designed to give you "most-wanted" features at lowest possible price. Boasts remote controls for forward, reverse, and focusing. Lets you show your slides from the comfort of your favorite chair. 4" three-element lens. Panel controls for elevation and focus. 500-watt lamp. Efficient cooling system. Jam-proof changer handles 2x2" slides. With 100-slide magazine. Uses Airequipt metal or plastic trays, plus stacker. For 115 VAC.

10 A 4811 X. Wt., 11 lbs. . . . . 59.95



AIREQUIPT

Automatic electronic focusing

99<sup>95</sup>

Model 350/EF. Our finest slide projector. Does all the work for you. Just focus the first slide by remote control—all others focus automatically in just 1/40th second. Remote controlled forward and reverse. Has bright, long-lasting 500-watt quartz lamp. Thumb control for elevation and leveling leg. Panel focusing control. Has 4" f/3.5 lens. Exhaust system for cool operation. Uses Airequipt metal or plastic trays, or stacker. Usable with "Sound sync" below. For 115 VAC.

10 A 4751 U. Wt., 14 lbs. . . . . 99.95

### Airequipt slide projector Accessories

A 10 A 4434 S. 4-6" f/3.5 Zoom Lens. Wt., 6 oz. . . . . 34.95

B 110 A 4435 S. Sound Synchronizer. For 350/EF only. Add words and music to your slide shows. Slides change to sound track of stereo tape recorder. With cable and adapter. 6 oz. . . . . 24.95

10 A 4827 S. 36-Slide Metal Magazine. 1/2 lb. . . . . 1.69

10 A 4828 S. 36-Slide Plastic Magazine. 1/2 lb. . . . . 1.39

10 A 4812 S. 40-Slide Metal Stacker Tray. 1/2 lb. 8.95

10 A 4912 S. 100-Slide Round Magazine. 1 lb. . . . . 2.69



24.95

### Sawyer's Projector/Viewer

Bright 3 1/2 x 3 1/2" viewing area allows slides to be shown even in a lighted room. Converts to conventional slide projector with flip of a switch. Holds up to 40 2x2" slides. Convection (no fan) cooled 100-watt lamp. Weighs only 5 lbs. 8x10x10". For 115 VAC. Shpg. wt., 6 lbs.

10 A 5159 S. . . . . 29.95



29<sup>95</sup>

# Bargain prices on complete zoom



**ARGUS**



## Deluxe Super 8 Camera/Dual 8 Projector Outfit

Separately, \$274.80. 815 Super 8 Camera has automatic thru-lens CdS eye, f/1.8 3:1 zoom lens, folding handle. 881 Dual 8 Projector has reel-to-reel threading, forward/still/reverse, film trimmer, 400' takeup reel. Accessory Kit: camera case, movie light, Kodachrome II film, movie-making guide. Plus 30x40" tripod screen.

- 10 A 0152 L2U. Japan. Shpg. wt., 33 lbs. .... 229.80
- 10 A 4788 S. Camera Alone. Includes film, four "AA" batteries. Shpg. wt., 5 1/4 lbs. .... 119.95
- 10 A 5185 U. Projector Alone. Shpg. wt., 13 lbs. .... 114.95
- 10 A 5186 U. Accessory Kit Alone. Wt., 8 lbs. .... 29.95
- 10 A 4436 U. Screen Alone. Shpg. wt., 7 lbs. .... 9.95

Save

\$45.00

**229<sup>80</sup>**

\$12 monthly  
see page 438



**ANSCO**



## Zoom Super 8 Camera/Dual 8 Projector Outfit

Separately, \$194.85. ST/97 Super 8 Camera has automatic warning signal, f/1.7 3 1/2:1 zoom lens, film pulse indicator. 388Z Dual 8 projector has automatic threading, adjustable takeup control, rapid rewind, f/1.5 zoom lens, 400' takeup reel. Accessory Package: case, 3 extra reels and cans, light, 4 "AA" batteries, 30x40" tripod screen, film, guide.

- 10 A 0154 L2U. Japan. Shpg. wt., 28 lbs. .... 174.85
- 10 A 5188 S. Camera Alone. Shpg. wt., 3 lbs. .... 89.95
- 10 A 5189 U. Projector Alone. Shpg. wt., 13 lbs. .... 74.95
- 10 A 0153 L2X. Accessory Package Alone. 12 lbs. .... 29.95

Save

\$20.00

**174<sup>85</sup>**

\$9 monthly  
see page 438

### SUPER 8 COLOR FILM

Kodachrome II color film in instant-loading Super 8 cartridge. 50 feet. For all movie cameras listed on this and facing page.

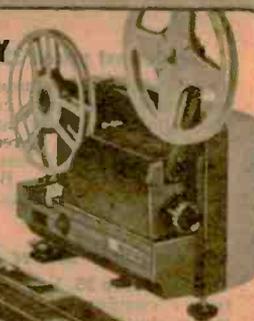
- 10 A 4932 S. Shpg. wt., 6 oz. .... 2.69

### "AA" ALKALINE BATTERIES

Alkaline batteries for long life and dependable performance. Specially suited for photographic applications. Cameras listed use four.

- 18 A 5131. Wt., 3 oz. .... Pkg. 2/79¢

**VICEROY**



Save \$25.00

**194<sup>80</sup>**

\$10 monthly  
see page 438

## Big-value Super 8 Outfit includes Dual 8 Projector

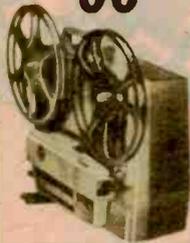
Separately, \$219.80. Model 250 Camera has f/1.8 5:1 power zoom lens, thru-lens CdS eye, remote control, film footage indicator, 18, 32 fps. Model 804 Dual 8 Projector has zoom lens, automatic threading, forward/reverse/still, 400' takeup reel. Accessory Package: camera case, sealed beam movie light, splicer, four "AA" batteries, one Super 8 film cartridge, 3 extra reels and storage cans, cartoon. 30x40" tripod screen. Japan.

- 10 A 0151 L2U. Wt., 30 lbs. .... 194.80
- 10 A 5036 S. Camera Alone. Shpg. wt., 4 lbs. .... 99.95
- 10 A 5042 U. Projector Alone. Shpg. wt., 12 lbs. .... 89.95
- 10 A 5183 U. Accessory Package Alone. Shpg. wt., 8 lbs. .... 19.95
- 10 A 4436 U. Screen Alone. Shpg. wt., 7 lbs. .... 9.95

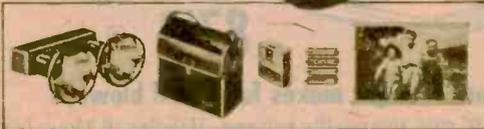
# Movie Outfits and Super 8 zoom Cameras

Save \$15.00

99<sup>85</sup>



VICEROY



## Low-priced Super 8 2:1 zoom Movie Outfit

Separately, \$114.85. Model 200 Super 8 Camera has f/1.8 manual 2:1 zoom lens, CdS electric eye meter system. Model 801 Super 8 Projector has automatic film threading; rapid rewind; fast f/1.4 lens; framing, focus, and elevation controls; 400' takeup reel; film trimmer. Accessory Package: camera case, 30x40" tabletop screen, double light bar with bulbs, four "AA" batteries, and 50' film cartridge.

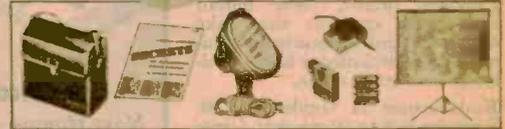
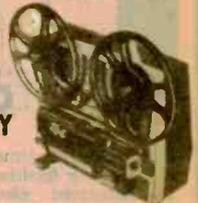
- 10 A 5199 U. Japan. Shpg. wt., 21 lbs. .... 99.85
- 10 A 5084 U. Camera Alone. Wt., 13 1/4 lbs. .... 44.95
- 10 A 5082 U. Projector Alone. Wt., 13 lbs. .... 54.95
- 10 A 5086 U. Accessory Pkg. Alone. 8 lbs. .... 14.95

Save \$15.00

149<sup>80</sup>



VICEROY



## Full-feature Super 8 3:1 zoom Outfit

Separately, \$164.80. 207 Super 8 Camera has f/1.8 manual 3:1 zoom lens, CdS metering, 802 Super 8 Projector has automatic threading; reverse/still/forward/fast forward; rapid rewind; f/1.4 lens; framing, focus, elevation controls; 400' takeup reel; trimmer. Accessory Pkg.: case, light, film, batteries, splicer, book. Plus 30x40" tripod screen.

- 10 A 0155 L2U. Japan. Shpg. wt., 28 lbs. .... 149.80
- 10 A 5196 S. Camera Alone. Wt., 34 lbs. .... 64.95
- 10 A 5197 U. Projector Alone. Wt., 12 lbs. .... 69.95
- 10 A 5198 U. Accessory Pkg. Alone. 7 lbs. .... 19.95
- 10 A 4436 U. Screen Alone. Wt., 7 lbs. .... 9.95



194<sup>50</sup>

\$10 monthly\*

B & H power zoom with provision for sound



169<sup>95</sup>

\$8 monthly

Yashica 6:1 power zoom professional quality



Save \$20.00 219<sup>90</sup>

B & H sound Camera Outfit

Accura 70-230 f/4.8 Zoom Lens, 3.3 to 1 zoom ratio. Focuses from 8 feet to infinity. Stops down to f/22. Tripod socket. Shpg. wt., 2 1/2 lbs. 119.95  
 10 A 4490 S. Shpg. wt., 3 lbs. 149.95

### SHIPPING NOTE:

Accura 70-230mm f/4.8 Zoom Lens, 3 to 1 zoom ratio. Focuses from 8 feet to infinity. Stops down to f/22. Tripod socket. Shpg. wt., 2 1/2 lbs. 119.95  
 10 A 4487 S. Shpg. wt., 2 1/2 lbs. 119.95

3 Niconic recharge. bats. Japan. 44.95  
 18 A 5629. AA 1.5 Niconic battery. Shpg. wt., 3 oz. Each 1.93

# Accessories for bigger and better pictures



**Kako compact  
Electronic  
Flash**

**24<sup>95</sup>**



Eliminate the time and trouble of handling flashbulbs with this transistorized electronic flash. Provides bright, clear indoor shots with cameras that take electronic flash. Mounts on camera either vertically or horizontally. 55° coverage angle.

Kodachrome II Guide No. 40. Recycles in 8 to 10 seconds. Gives 60 flashes per charge. Flash duration is 1/3000 sec. Operates from two built-in NiCad batteries or 110-120 VAC. With batteries. From Japan.

10 A 4756 S. Wt., 1 1/4 lbs. . . 24.95

## Viceroy Electronic Flash

Low-cost electronic flash (not illustrated) operates on two batteries or 117 VAC. Flash duration is 1/2000 sec. Color temperature, 5700° K. Guide No. 28 (ASA 25) With 12-ft. AC cord. Order batteries below. Japan.

10 A 5077 S. Wt., 2 lbs. . . . 14.95

18 A 5083. "AA" Batteries. 2/27¢

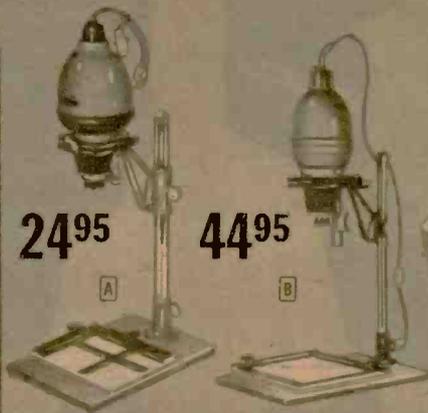
18 A 5426. Alkaline Batts. 4/1.31



**44<sup>95</sup>**

**Kako Super Elite  
Electronic Flash**

Features automatic voltage control circuit, recharge-indicator lamp, multiple flash socket. Kodachrome II Guide No. 64. Recycles in 5-8 seconds. 50 flashes/charge. Flash duration, 1/1500 sec. Color temp., 6000° K. Operates on batteries or 110-120/220-240 VAC. Univ. mount, PC cord.



**24<sup>95</sup>**

**44<sup>95</sup>**

## A Accura 35mm Enlarger makes full-detail blowups

Make blowups up to 8x10" with this quality enlarger. Handles all 35mm black-and-white film. Includes double condenser and 50mm f/3.5 lens. Size, 15 1/4 x 13 1/2 x 8". Requires #211 enlarger bulb (order below). For 110-120 volts, AC or DC. From Japan.

10 A 4892 X. Shpg. wt., 11 lbs. . . . . 24.95

## B Accura Color Enlarger for all 2 1/4 x 2 1/4" negatives

Enlarges 2 1/4 x 2 1/4" negatives, both color and black-and-white, up to 15x15". Includes filter drawer, double condenser and 75mm f/3.5 lens. Size, 21x16 1/2 x 9 1/2". Requires #211 enlarger bulb (order below). For 110-120 volts, AC or DC. From Japan.

10 A 4893 X. Shpg. wt., 21 lbs. . . . . 44.95

## C Complete 14-piece 35mm Enlarging Outfit

Contains all you need to make professional-quality prints up to 8x10". Complete outfit includes condenser enlarger, 35mm negative carrier, lens, safelight, three 8x10" trays, two print tongs, roll film tank, thermometer, two film clips, four-way easel and instructions. Requires #211 enlarger bulb (order below). From Japan.

10 A 4757 U. Shpg. wt., 26 lbs. . . . . 87.50

10 A 4622 S. #211 Enlarger Bulb. Shpg. wt., 3 oz. . . . . 80¢



**87<sup>50</sup>**

## Vivitar and Accura Lenses for 35mm SLR cameras



**Preset  
Lenses**

Fit Yashica, Pentax, Mamiya/Sekor type lens mounts only. Not for Nikon, Canon or Minolta. Adapter and lens dust cap included with all models. From Japan.

Accura 35mm f/2.8 Wide-Angle Lens. Has extra-wide 63° coverage angle. Focuses from 3 feet to infinity. Stops down to f/16.

10 A 4994 S. Shpg. wt., 9 oz. . . . . 36.95

Vivitar 135mm f/2.8 Telephoto Lens. 18° coverage angle. Focuses 6 feet to infinity. Stops down to f/22.

10 A 4760 S. Shpg. wt., 11 oz. . . . . 34.95

Accura 300mm f/5.5 Telephoto Lens. Provides 6x magnification. Has 8° coverage angle. Focuses from 25 feet to infinity. Tripod socket.

10 A 4431 S. Shpg. wt., 2 1/2 lbs. . . 44.95



**Automatic  
Lenses**

Stop down automatically with Yashica, Pentax, Mamiya/Sekor type lens mounts. Not for Nikon, Canon or Minolta. Lens dust cap included. From Japan.

Vivitar 35mm f/2.8 Wide-Angle Lens. Features extra-wide 62° coverage angle. Focuses from 3 feet to infinity. Stops down to f/16.

10 A 4763. Shpg. wt., 1 lb. . . . . 59.95

Vivitar 135mm f/2.8 Telephoto Lens. Has 18° coverage angle. Focuses from 4 1/2 feet to infinity. Stops down to f/32. Built-on sun shade.

10 A 5173 S. Shpg. wt., 2 lbs. . . . 69.95

Accura 300mm f/5.5 Telephoto Lens. Has 8° coverage angle. Stops to f/22. Tripod socket in rotating collar.

10 A 4488 S. Shpg. wt., 2 1/2 lbs. 79.95

# 8mm Movie Projectors and Film Editor

**BELL & HOWELL**

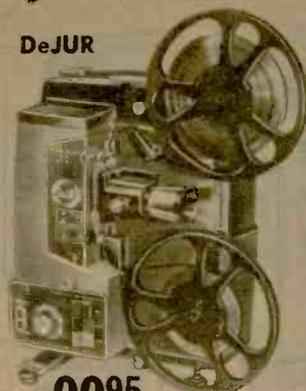


**169<sup>95</sup>** Provision for adding sound

## Deluxe dual 8 zoom sound Projector

Model 458Z. Has every quality feature of a truly fine projector. Synchronized-sound-adapted for Bell & Howell 450 cassette recorder (P. 527). Forward/reverse/still/rapid rewind. Variable speed control. 15-25mm f/1.6 zoom lens. Automatic reel-to-reel threading. Dial focusing; framing dial. With trimmer, 400' takeup reel, reel adapters. 117 VAC. 10 A 5174 U. Shpg. wt., 19 lbs. . . . . 169.95  
 10 A 4834 U. Model 456Z. Above, but no sound provision or variable speed control. f/1.6 zoom lens. Shpg. wt., 17 lbs. . . . . 144.95  
 10 A 5176 U. Model 357Z. Above, but Super 8 only. No sound provision or variable speed control. f/1.6 zoom lens. 16 lbs. . . . . 99.95  
 10 A 4840 S. Model DJL Projection Lamp. For all models above. Shpg. wt., 6 oz. . . . . 5.50

**DeJUR**



**99<sup>95</sup>**

## Dual 8 zoom Projector

Model DP-787Z. Dual 8 projector shows all your Super 8 or Standard 8mm films at the flip of a switch. Quality features include automatic threading, multiple speed control, forward/reverse/still projection. f/1.5 zoom lens. Has automatic room lamp receptacle that turns light off when projector is turned on. Full 400' reel capacity. Complete with film trimmer. For 117 VAC. 10 A 4735 U. Wt., 18 lbs. . . . . 99.95  
 10 A 4734 U. Model DP-787. As above, but with standard f/1.5 lens. Shpg. wt., 16 lbs. . . . . 89.95  
 10 A 4749 S. Dejur Projection Lamp. Shpg. wt., 8 oz. . . . . 6.25

**DeJUR**



**139<sup>95</sup>**

## Dual 8 zoom has fully illuminated still projection

Model 86. Full-feature Dual 8 projector has completely illuminated still projection. Lets you stop action. Has forward/reverse control. Variable speed control lets you speed up or slow down projection as desired.

Slow motion control gives clear slow motion projection. Features sharp f/1.5 zoom lens. Has automatic reel-to-reel threading, fast rewind. Room light receptacle. Full 400-ft. reel capacity. With long-lasting 500 watt brilliance quartz lamp. For 117 VAC. 10 A 5177 U. Wt., 20 lbs. . . . . 139.95

Model 84Z Dual 8 Zoom Projector. Low-priced projector features totally illuminated still projection. Has f/1.6 zoom projection lens. Has fast rewind, automatic reel-to-reel threading. Full 400-ft. reel capacity. With 500 watt lamp and carrying case. For 117 VAC.

10 A 5178 U. Wt., 19 lbs. . . . . 89.95  
 10 A 5179 U. Model 84. As Model 84Z above, but with standard f/1.6 lens. Shpg. wt., 18 lbs. . . . . 79.95

**ARGUS**



**129<sup>95</sup>**

## Dual 8 zoom Projector with variable speed control

Model 882B. Features sharp f/1.5 zoom lens. Has single lever control for forward, reverse or still projection. Variable film speed control knob lets you speed up or slow down projection for special effects or close scrutiny. Jamproof automatic reel-to-reel threading. Brilliant 500-watt lamp with turbo-blower cooling. Intermission light outlet. 400-ft. reel capacity. Built-in film trimmer. With 400-ft. takeup reel. 117 VAC. 10-A 5181 U. Wt., 15 lbs. . . . . 129.95



**109<sup>95</sup>**

## Dual 8 zoom Projector with slow motion control

Model 788. Just set the conversion lever for Super 8 or Standard 8mm and you are ready to show your favorite films. Projector has forward, reverse, still and fast forward operation. Has separate slow motion control. Automatic sprocketless film threading with takeup control. Sharp f/1.5 zoom lens. Bright quartz halogen lamp. Retractable power cord for easy, compact storage. Automatic room light outlet. 117 VAC. 10 A 5180 U. Wt., 12 lbs. . . . . 109.95



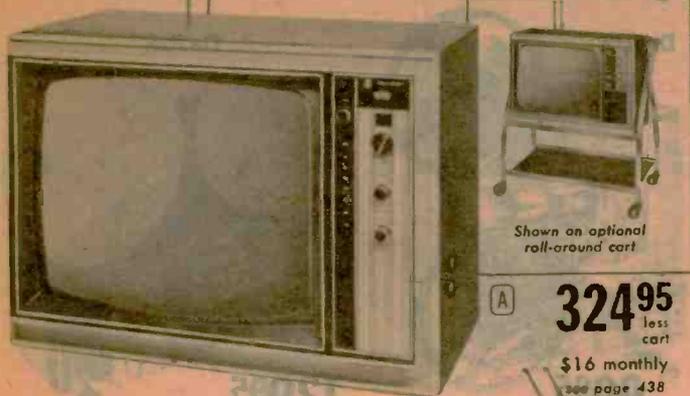
**32<sup>95</sup>**

## Baia Instaview dual 8 Editor

Model 120. Has variable forward and reverse electric drive speeds. Big 12 sq. in. viewing screen. Focusing, framing, frame marker and lamp switch controls. Fast slip-in loading. Full 400' capacity. Complete with dual reel holders, splicer and tape. For 117 VAC.

10 A 4294 X. Shpg. wt., 10 lbs. . . . . 32.95  
 10 A 4296 X. Dual 8 Edviewer. As above, but crank operation. Wt., 9 lbs. . . . . 22.95

# Latest color and black-and-white Portables



Shown on optional roll-around cart

## A Luxurious 18" Portable Color TV

18" picture measured diagonally

Sharp. Enjoy true-to-life color on a big 180 sq. in. viewing area. Special circuits for instant picture, instant sound. Preset tuning, 3 IF stages, automatic degaussing and 21,500-volt picture power assure excellent viewing. UHF-VHF antennas. Walnut-grain metal cabinet.  $17\frac{1}{2} \times 24\frac{3}{4} \times 19\frac{1}{2}$ ". U.L. Listed. 117 VAC. Japan.

10 A 4075 Z. Shpg. wt., 85 lbs. . . . . 324.95  
10 A 0104 LZ. Above, With Cart. 95 lbs. 339.95

**324.95**  
less cart

\$16 monthly  
see page 438

## B Compact 15" Color Portable

15" picture measured diagonally

Midland. Get the performance you would expect from a console in this compact portable. 20,000 volts for brilliant pictures on a 125 sq. in. viewing area. Automatic degaussing, 3 IF stages and keyed AGC assure top performance, picture stability. Dual antennas. Walnut-grain metal.  $20\frac{1}{2} \times 16\frac{1}{4} \times 17\frac{1}{2}$ ". U.L. Listed. 117 VAC. Japan.

10 A 4355 Z. Shpg. wt., 68 lbs. . . . . 269.95

## C Deluxe 12" Portable Color TV

12" picture measured diagonally

Sharp. Lightweight portable with preset fine tuning . . . set once for each VHF station, no need to reset when you change channels. Keyed AGC, 3 IF stages and 15,000-volt picture power assure bright, stable color on 75 sq. in. viewing area. Automatic color purifier keeps colors true. Earphone. Walnut-grain finish cabinet.  $13\frac{1}{4} \times 19 \times 15$ ". U.L. Listed. 117 VAC. Japan.

10 A 5018 Z. Shpg. wt., 42 lbs. . . . . 239.95



**269.95**

\$14 monthly  
see page 438



**239.95**

\$12 monthly  
see page 438



## Big-screen 19" Portable TV

19" picture measured diagonally

**109.95**

\$6 monthly  
see page 438

Family-size portable provides excellent black-and-white pictures on a big 184 sq. in. viewing area. Convenient front-mounted controls, including VHF tuner and 2-speed silicon-transistor UHF tuner. 3 frame-grid IF tubes help pull in strong signals; bonded picture tube cuts reflections. 19,000-volt picture power.  $6 \times 2\frac{3}{4}$ " speaker. Earphone jack. VHF-UHF antennas. Plastic cabinet.  $17 \times 21\frac{1}{8} \times 13$ ". With earphone. U.L. Listed. 117 VAC. From Japan. 10 A4067 U. Wt., 42 lbs. . . . . 109.95  
10 A 4073 U. Above, walnut vinyl, slide-rule UHF tuning. 42 lbs. . 119.95



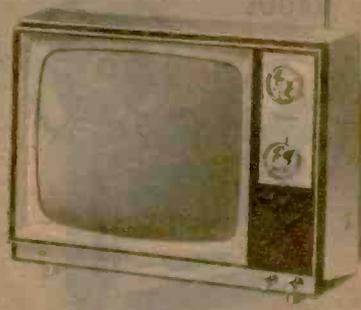
## "Insta-Vu" 16" Portable TV

16" picture measured diagonally

**94.95**

\$5 monthly  
see page 438

Get crisp, clear black-and-white pictures and static-free sound the instant you turn set on. 141 sq. in. viewing area; 17,000 volt picture power. High-gain IF amplifier and gated AGC assure top performance. Stable pictures. Tunes all VHF-UHF stations. 3" speaker. Hi-impact ivory cabinet.  $17\frac{1}{16} \times 16\frac{5}{8} \times 12\frac{1}{16}$ ". U.L. Listed. 117 VAC. From Japan. 10 A 4357 U. Wt., 27 $\frac{1}{2}$  lbs. . . . . 94.95  
10 A 4060 U. 16" Portable. (Not illus.) 15,000 V.  $4 \times 3$ " speaker. Slimline.  $14\frac{1}{2} \times 19\frac{3}{4} \times 12\frac{3}{8}$ ". Earphone. U.L. List. 117 VAC. Japan. 30 lbs. . . . . 99.95



## Lightweight 12" Portable

12" picture measured diagonally

**79.95**

\$5 monthly  
see page 438

Handsome, modern slimline-styled portable provides clear b & w pictures on 75 sq. in. viewing area. Special circuit design for instant pictures and sound —no wait for warmup. 13,000 volts picture power. AGC and AFC circuits maintain, picture stability. Convenient front-mounted controls; large  $3\frac{1}{8}$ " speaker to deliver clear sound. All-channel VHF and deluxe vernier UHF tuning. Telescoping VHF, loop UHF antennas. With earphone.  $11\frac{3}{16} \times 15\frac{3}{4} \times 10\frac{3}{4}$ ". U.L. Listed. For 117 VAC. From Japan. 10 A 4083 U. Wt., 21 lbs. . . . . 79.95

# 200 Personal and compact Portables



**"Minni" 3" battery AC TV**

3" picture measured diagonally

**109<sup>95</sup>**

\$6  
monthly\*



**4" TV with FM-AM Radio**

4" picture measured diagonally

**139<sup>95</sup>**

\$7  
monthly\*



**Panasonic 5" Battery/AC TV**

5" picture measured diagonally

**129<sup>95</sup>**

\$7  
monthly\*

Solid-state TV pulls in sharp pictures on 4.7 sq. in. viewing area. Operates on 117 VAC, 12 VDC with optional cord that plugs into car cigarette lighter, or on 9 "C" batteries. Order rechargeable batteries below. With AC adapter/battery charger, earphone. 6 $\frac{1}{2}$ x3 $\frac{1}{2}$ x6". Japan.

- 10 A 4054 S. Wt., 6 $\frac{1}{2}$  lbs. .... 109.95
- 10 A 4047 S. Rechargeable "C" Batteries. Wt., 2 lbs. .... Pkg. of 9 for 14.95
- 10 A 4043 S. 12 VDC Cord with Cigarette Lighter Plug. Wt., 12 oz. .... 5.95
- 10 A 4324 S. Leatherette Carry Case with Sun Visor. Wt., 1 lb. .... 9.95

Versatile portable brings you excellent UHF-VHF TV on a 9 sq. in. viewing area, plus FM-AM radio reception. Solid-state. With AC adapter/charger, earphone. Battery pack or batteries, below. 3 $\frac{3}{4}$ x9 $\frac{3}{4}$ x8 $\frac{1}{4}$ ". Japan.

- 10 A 4321 S. Wt., 11 lbs. .... 139.95
- 18 A 5079. "D" Batteries. Uses 9 Shpg. wt., 4 oz. .... Pkg. of 4 for 65¢
- 10 A 4322 S. Rechargeable Battery Pack. Shpg. wt., 2 lbs. .... 24.95
- 10 A 4055 S. 12 VDC Car Cord. Neg. or pos. gnd. Shpg. wt., 1 lb. .... 5.95
- 10 A 4102 X. Car Antenna and Stand. Shpg. wt., 3 lbs. .... 24.95

Compact solid-state battery/AC portable TV comes equipped with a built-in set of rechargeable batteries, plus 117 VAC supply/battery recharger. Pulls in movie-clear pictures on 16 sq. in. viewing area. Tinted screen cuts glare. Slide-rule UHF tuning.

AGC circuit keeps picture steady; noise canceller eliminates interference. Compactly-styled to fit anywhere and light enough, only 12 lbs., to get there easily. 9 $\frac{1}{2}$ x6 $\frac{3}{8}$ x8 $\frac{1}{4}$ ". VHF-UHF antennas. Power indicator. Earphone. From Japan.

- 10 A 4266 S. Wt., 17 lbs. .... 129.95



**99<sup>95</sup>**

\$5  
monthly\*

**Battery/AC 9" TV with clip-on sun screen**

9" measured diagonally

Solid-state black-and-white portable TV plays on 117 VAC, 12-V car battery or rechargeable battery pack, below. Provides brilliant pictures on 38 sq. in. viewing area. Clip-on sun screen cuts glare for outdoor viewing. Walnut finish. 8 $\frac{1}{2}$ x13 $\frac{3}{8}$ x10 $\frac{1}{4}$ ". With earphone. U.L. Listed. Japan.

- 10 A 5166 X. 17 lbs. .... 99.95
- 10 A 4337 X. Battery Pack. Battery, Case. 6 lbs. .... 15.95
- 18 A 5858. Extra Rechargeable Battery. 6 lbs. .... 10.62
- 10 A 4330 S. 12-VDC Car Cord. Wt., 1 lb. .... 5.95



**109<sup>95</sup>**

\$6  
monthly\*

**Battery/AC 12" TV with sun screen**

12" measured diagonally

The perfect portable for people on the go. Uses 117 VAC, 12-VDC car or boat battery or rechargeable battery-pack (below). Solid-state, comes on instantly with sharp clear pictures on big 75 sq. in. viewing area. VHF-UHF antennas. Clip-on sun screen, earphone. Walnut-grain finish 12 $\frac{1}{2}$ x14 $\frac{1}{2}$ x12 $\frac{1}{8}$ ". U.L. Listed. From Japan.

- 10 A 4088 U, 21 lbs. .... 109.95
- 10 A 4337 X. Battery Pack. Battery, Case. 6 lbs. .... 15.95
- 10 A 4330 S. 12-VDC Car Cord. Wt., 1 lb. .... 5.95



**69<sup>95</sup>**

\$5  
monthly\*

**Latest 9" black-and-white Portables**

9" pictures measured diagonally

**A** Low-Priced 9" Portable. Easy-to-carry portable gives you a bright, clear picture on 45 sq. in. viewing area. Fine VHF-UHF reception; solid-state UHF tuner. 13,000 volt picture power. Only 13 lbs. 10 $\frac{1}{2}$ x14 $\frac{1}{4}$ x10". Earphone. U. L. Listed. 117 VAC. 10 A 4358 U. Japan. Shpg. wt., 14 $\frac{3}{4}$  lbs. .... 69.95

Compact 9" Portable with "Instant On". (Not illus.) Handsome slimline-styled TV comes on instantly. 11,000-volt picture power. 44 sq. in. viewing area. VHF-UHF antennas. 9 $\frac{1}{4}$ x13 $\frac{3}{8}$ x9 $\frac{3}{4}$ ". Earphone. U.L. Listed. 117 VAC. 10 A 4089 U. Japan. Shpg. wt., 18 lbs. .... 74.95

**B** 9" Portable with Built-In Digital Clock. Perfect bedroom TV. Accurate digital clock includes timer to shut TV off automatically after up to 3 hours. 38 sq. in. viewing area. 12,000-volt picture power. 9 $\frac{1}{2}$ x15 $\frac{1}{8}$ x10 $\frac{1}{8}$ ". 117 VAC. 10 A 4210 X. Japan. Shpg. wt., 15 lbs. .... 99.95



**99<sup>95</sup>**

**B**

\*See page 438 for full Credit details

# Telex-Phonola Stereos

Your Choice **239<sup>95</sup>**

**Solid-state Stereo Credenzas with record storage space**



Traditional style 42" wide



Spanish style 42" wide



Large storage space for records

Impressive credenza with authentic styling and choice woods delivers great stereo from radio or records. Stereo FM-AM radio has lighted slide-rule dial, stereo FM indicator light, built-in antennas. Full-feature Garrard changer plays at all 4 speeds. Has 11" turntable, cueing lever, adjustable pickup arm, cartridge with diamond stylus, 45-rpm spindle. Master control panel has separate bass and treble controls, loudness control, mode selector. Amplifier delivers 50-watt peak music power, has bass-boost circuit. Two 8" woofers, plus two 4" tweeters with cross-over network. Jacks are included for tape recording or adding extension speakers. Center lift-lid provides easy access to controls, front door opens for record storage. 28x42x17 $\frac{1}{2}$ ". For 117 VAC. Shpg. wt., 85 lbs.

10 A 4536 ZF. Traditional (Pecan) . . . 239.95  
10 A 4534 ZF. Spanish (Oak) . . . . . 239.95

## Solid-state Stereo FM-AM-Phono Consoles



**199<sup>95</sup>** 44" wide

**Mediterranean style**



**189<sup>95</sup>** 44" wide

**Scandinavian style**



**189<sup>95</sup>** 44" wide

**Early American style**

Luxurious sculptured pecan finish. Silicon-transistor radio has AFC, mode indicator lights. 4-speed Garrard changer has diamond stylus, 11" turntable, 45-rpm spindle. Bass, treble, balance controls. 25 watts peak. Jacks for tape recording, extension speakers. Two 8" woofers, two 4" tweeters. 27x44x17". 117 VAC.

10 A 4532 ZF. Wt., 70 lbs. . . . . 199.95

Elegantly finished in oiled walnut. Record storage space. Silicon-transistor radio has stereo FM-AM indicator lights, AFC. Bass, treble, balance controls. 4-speed Garrard changer has shutoff, 45-rpm spindle. 25 watts peak. Recording, extension speaker jacks. Two 6" dual-cone speakers. 24 $\frac{1}{4}$ x44x16 $\frac{1}{2}$ ". 117 VAC.

10 A 4537 ZF. Wt., 70 lbs. . . . . 189.95

Authentically styled, with maple finish. Stereo FM-AM radio has silicon transistors, AFC, mode indicator lights. Garrard stereo changer has 11" turntable, diamond needle. 45-rpm spindle. Bass, treble, balance controls. 25 watts peak. Jacks for recording, ext. speakers. Two 8" woofers, two 4" tweeters. 27x44x17". 117 VAC.

10 A 4535 ZF. Wt., 70 lbs. . . . . 189.95



**A 99<sup>95</sup>**

36" wide

**B 149<sup>95</sup>**

36" wide

### **A Compact solid-state Stereo Phono Console**

This 20-watt peak music power phono offers good stereo at a reasonable price. 4-speed automatic stereo record changer has low-mass pickup arm, ceramic cartridge with diamond needle 45-rpm adapter. Two 8" speakers offer rich bass, clear highs. Controls: left and right channel volume, tone, channel separation. Record storage space. Walnut finish. 117 VAC. 26 $\frac{3}{4}$ x36x16 $\frac{1}{4}$ ".

10 A 4556 ZF. Shpg. wt., 50 lbs. . . . . 99.95

### **B Solid-state Stereo FM-AM-Phono Console**

Handsome console for full stereo entertainment at a bargain price. Solid-state stereo FM-AM radio has dual volume, tone, balance, channel separation controls. 4-speed automatic changer has ceramic cartridge with diamond needle, 45-rpm spindle. Two 8" speakers. 20 watts peak music power. Record storage space. Built-in FM-AM antennas. Walnut finish. For 117 VAC. 26 $\frac{3}{4}$ x36x16 $\frac{1}{4}$ ".

10 A 4572 ZF. Shpg. wt., 65 lbs. . . . . 149.95

# Solid-state Stereo Consoles

## Delmonico Consolette with stereo FM-AM-Phono-8 track cartridge player

Complete solid-state stereo entertainment center in a compact oiled walnut cabinet. Stereo FM-AM radio has AFC, slide-rule dial, stereo FM light, built-in antennas. Bass, treble and balance controls. 4-speed automatic record changer has dual synthetic-sapphire needles, automatic shut-off. Built-in 8-track easy-loading cartridge player has channel indicator lights, automatic and manual channel-changing. Ten-watt peak music power stereo amplifier. Two 6" woofers, two 2 1/2" tweeters. 26 1/2 x 27 1/4 x 14 1/4". 117 VAC. Express from New York City. Shpg. wt., 58 lbs.  
10 A 4592 ZF. No C.O.D. Orders. . . . . 189.95

Stereo from every source for only

**189<sup>95</sup>**

\$10 monthly\*



27 1/4" Wide

## Deluxe Telex-Phonola Stereo FM-AM-Phono with 8-track Cartridge Player

Our finest! Stereo FM, AM, 4-speed stereo changer, plus 8-track stereo tape cartridge player. Radio has slide-rule dial, AFC, stereo FM light. Automatic Garrard changer has full-size 11-inch turntable, diamond stylus, 45-rpm spindle. Built-in 8-track easy-loading cartridge player has automatic program selector. Solid-state 24-watt peak music power amplifier. Balance, bass, treble and loudness controls. Two 8" woofers, two 4" tweeters, crossover network. Jacks for extension speakers. Walnut finish. 27 x 44 x 17". See Shpg. Note on page 532. Wt., 70 lbs.  
10 A 4528 ZF. No C.O.D. Orders. . . . . 269.95



Our best console . . . everything in stereo

**269<sup>95</sup>**

\$14 monthly\*



44" Wide

## Stereo entertainment in unique, versatile cabinetry

### Telex-Phonola Stereo FM-AM-Phono in choice of cabinets

**169<sup>95</sup>**

Can be wall-mounted

Versatile hutch-type cabinet can be hung on a wall, or placed on shelf or table top. Silicon-transistor stereo FM-AM radio has slide-rule dial, bass, treble and balance controls, AFC switch for drift-free FM. Automatic record changer with full 11" turntable, diamond stylus, 45-rpm spindle, tubular arm. Two 6" high-compliance speakers. 25 watts peak music power. With wall-mounting brackets. 16 1/4 x 37 x 9". For 117 VAC. Shpg. note on page 532.  
10 A 4529 ZF. Mediterranean (Oak). Wt., 50 lbs. . . . . 169.95  
10 A 4530 ZF. Early American (Maple). Wt., 50 lbs. . . . . 169.95



Early American



Open view

Mediterranean



## Compact 3-pc. Stereo FM-AM-Phono

Component-type stereo compact at a budget price. 16-watt-peak amplifier and separating 6" speaker systems give you a "wall" of stereo sound. Stereo FM-AM radio has bass, treble, balance controls; AFC switch, stereo FM indicator light, head phone jack. Lighted slide-rule dial with "black-out" feature. Four-speed BSR Mini-Changer mixes 10", 12" records. Inputs for external antenna and tape. With dust cover. Radio/changer, 17 1/4 x 10 1/2 x 9 1/4". Walnut-finish wood cabinetry 5 1/2 x 9 1/2 x 7 1/4". 117 VAC. Imported.  
10 A 4350 U. Shpg. wt., 17 lbs. . . . . 129.95

**129<sup>95</sup>** \$7 monthly\*



\*See page 438 for full Credit details

56<sup>95</sup>

\$5 monthly\*



### G.E. "Mustang II" Portable Phono

Easy-to-carry solid-state phono has drop-down 4-speed automatic changer. Stereo ceramic cartridge with dual synthetic-sapphire styli. Features two 4" Dynaco speakers that separate to 12-ft. Attractive simulated walnut grain grille exteriors. Top-mounted volume, balance and tone controls. Automatic shutoff. With 45-rpm spindle. Hi-impact green polystyrene case. 14 $\frac{1}{2}$ x19x7". U.L. Listed. For 117 VAC.

10 A 4032 U. Shpg. wt., 23 lbs. . . . . 56.95



59<sup>95</sup>

\$5 monthly\*

### Portable Stereo Phono in wood cabinet

Handsomely-styled portable phono boasts walnut-vinyl covered wood cabinets. Speaker enclosures separate to 24-ft. Drop-down 4-speed changer features automatic record-size intermix, automatic shutoff. Stereo cartridge with dual synthetic-sapphire styli. Left and right channel volume controls, tone control. Solid-state stereo amplifier. With 45-rpm adapter. 12 $\frac{1}{4}$ x23 $\frac{1}{2}$ x5 $\frac{1}{4}$ ". U.L. Listed. 117 VAC.

10 A 4125 U. Shpg. wt., 25 lbs. . . . . 59.95

46<sup>95</sup>

\$5 monthly\*



### Popular G.E. "Wildcat" Stereo Phono

Compact solid-state portable has trimline styling with drop-down 4-speed changer. Plays up to 6 records. Automatic shutoff. Ceramic cartridge; dual synthetic-sapphire styli. Two built-in 6" oval speakers. Volume, balance, tone controls. Beige polystyrene case. 14x22x7 $\frac{1}{4}$ ". With 45 rpm spindle. U.L. Listed. 117 VAC.

10 A 4507 U. Shpg. wt., 18 lbs. . . . . 46.95

# Solid-state Stereo Phonos

## A Portable Stereo Phono with Stereo FM-AM

Complete, compact portable music system for exciting stereo listening anywhere. Attractive pecan-vinyl covered wood cabinet. Two detachable high-compliance air-suspension speaker systems for full, natural sound. Drop-down stereo changer has low-mass tubular pickup arm for sensitive tracking. Plays all 4 speeds. Automatic intermix and automatic shutoff. Stereo cartridge has diamond stylus. Solid-state stereo FM-AM radio boasts silicon transistors for greater sensitivity. Slide-rule dial, mode beacon lights. Volume, balance, tone controls. With 45-rpm spindle. 14 $\frac{1}{2}$ x30 $\frac{1}{2}$ x7". U.L. Listed. 117 VAC.

10 A 4135 U. Shpg. wt., 35 lbs. . . . . 139.95

## B Component-type Stereo FM-AM-Phono Compact

Dramatically-styled in select oiled walnut solids and veneers, with translucent smoked side panels and dust cover. Up-to-date appearance looks smart in any surrounding. Matching air-suspension speaker systems provide rich, full-fidelity sound. Custom 4-speed stereo changer features cueing lever and pickup arm weight adjustment for superb tracking. Stereo cartridge with diamond stylus. Includes 45-rpm spindle adapter. Stereo FM-AM radio provides excellent reception of your favorite programs. Brings you thrilling stereo and crisp, clear mono. Silicon solid-state circuit. Jacks for tape and extension speakers. Slide-rule tuning, volume, balance, tone controls. 10 $\frac{1}{2}$ x22x15 $\frac{1}{2}$ ". Speakers, 9 $\frac{1}{2}$ x7 $\frac{1}{2}$ x6 $\frac{1}{2}$ ". U.L. Listed. 117 VAC.

10 A 4152 U. Shpg. wt., 50 lbs. . . . . 179.95

## C Deluxe solid-state portable Stereo Phono

Top-quality drop-down 4-speed stereo changer in a striking vinyl-covered wood cabinet offers exceptional features and performance. Big 11" turntable, platter, adjustable pickup-arm weight. Stereo cartridge has diamond stylus. 45-rpm spindle adapter. Solid-state stereo amplifier with bass boost for full sound. Two matching wide-range air-suspension speaker systems separate for full stereo effect. Left and right volume, bass/treble controls. 15 $\frac{1}{2}$ x19 $\frac{1}{2}$ x8 $\frac{1}{2}$ ". Speakers, 14 $\frac{1}{2}$ x9 $\frac{3}{4}$ x4 $\frac{1}{2}$ ". U.L. Listed. For 117 VAC.

10 A 4095 U. Shpg. wt., 40 lbs. . . . . 99.95

## D Custom-styled compact 4-speed Stereo Phono

Magnificent solid-state stereo phono features unique "swing-out" styling; changer swings down for use, up and out-of-the way for carrying or when not in use. Amplifier delivers a powerful 40-watt peak power output to two detachable speaker systems, each with an 8" woofer and 4" tweeter. Speakers separate to 24-ft. for finest stereo effect. Precision 4-speed changer boasts cueing lever, low-mass arm with weight adjustment, automatic intermix, 11" platter, automatic shutoff. Stereo cartridge with diamond stylus. 45-rpm spindle adapter. Separate bass, treble controls; dual loudness, balance. Walnut-vinyl covered wood cabinetry, 14x22x7 $\frac{1}{4}$ ". Speakers, each 14x11x4 $\frac{1}{2}$ ". U.L. Listed. For 117 VAC.

10 A 4096 U. Shpg. wt., 48 lbs. . . . . 129.95

## E Compact solid-state portable Stereo Phono

A real party-maker anywhere you go. Slimline styling with split-lid design; matched high-compliance 4" speakers in lid separate to 24-ft. for best stereo. 4-speed stereo changer has automatic intermix, automatic shutoff. Stereo cartridge with dual synthetic sapphire styli. Right and left channel volume; dual tone controls. Wood cabinet with walnut-vinyl and egg-white accent. 9 $\frac{1}{2}$ x18 $\frac{1}{4}$ x13". U.L. Listed. For 117 VAC.

10 A 4116 U. Shpg. wt., 20 lbs. . . . . 69.95

## F Solid-state 4-speed Stereo Phono

A winning combination of style and sound. Drop-down 4-speed stereo changer features low-mass tubular arm for lighter tracking, reduced record wear; automatic intermix and shutoff; 45-rpm spindle. Detachable 6" wide-range speakers separate to 24-ft. Has left and right channel volume and bass/treble controls. Sturdy wood cabinet covered with charcoal gray vinyl, walnut accents. 18x16x11". U.L. Listed. 117 VAC.

10 A 4087 U. Shpg. wt., 28 lbs. . . . . 79.95

# Latest from Telex-Phonola

Full-feature  
Stereo FM-AM-  
Phono Portable

**139<sup>95</sup>**  
\$7 monthly\*

(A)



Component-styled Stereo  
FM-AM-Phono

**179<sup>95</sup>**  
\$9 monthly\*

(B)



Deluxe 4-speed,  
drop-down-changer  
Stereo Portable

**99<sup>95</sup>**  
\$5 monthly\*

(C)



Modern Stereo  
Phono features  
unique styling.

**129<sup>95</sup>**  
\$7 monthly\*

(D)



Compact Stereo with  
split-size speakers

**69<sup>95</sup>**  
\$5 monthly\*

(E)



Smartly-styled  
Stereo Phono with  
drop-down-changer

**79<sup>95</sup>**  
\$5 monthly\*

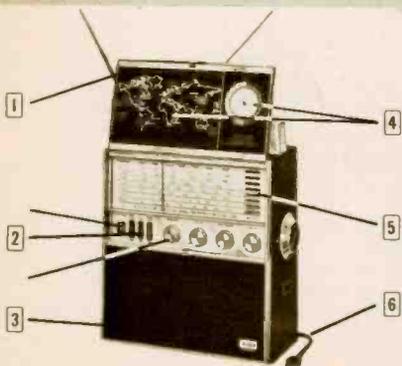
(F)



\*See page 438 for full Credit details

# Allied® police/public service Radios . . no others tune in so much excitement at prices this low

## Our finest Allied FM-AM-SW-VHF Portable Radio



- 1 Telescoping FM-VHF antennas
- 2 S/battery meter, rocker switches
- 3 Full-tone 6x4" speaker
- 4 World time map in folding lid
- 5 Indicator lights show band in use
- 6 Built in AC cord and plug

### TUNES 8 BANDS

540-1600 kHz standard AM broadcast band	88-108 MHz FM broadcast for static-free music
1.7-5 MHz medium wave for Marine calls	30-50 MHz VHF police/public service band
5-12 MHz shortwave foreign stations, Hams	107-136 MHz VHF aviation band for aircraft
12-24 MHz shortwave foreign stations, Hams	147-176 MHz VHF police/public service band

Model 2682. This solid-state 8-band portable is loaded with exciting extras. *S9 Magazine* says: "If you like the idea of having a unique portable radio that can cover just about everything you'll find your dreams answered in the 2682." And it plays anywhere on 4 "D" batteries or 117 VAC. Fine-tuning separates stations on crowded SW bands. Squelch control silences radio between calls on VHF. Slide-rule dial with momentary light, band indicator lights.

Automatic Noise Limiter, AFC, tone switches. Tuning/battery condition meter. Local/distance switch. Dual 27" VHF-SW-FM antennas, built-in AM-marine antenna. Motorola-type jack for external SW antenna. 19 transistors, 7 diodes. Leatherette-covered case, 12½x9½x4½". With batteries, earphone, SW station list. Japan.

10 A 4230 U. Shpg. wt., 15 lbs. . . . . 89.50  
 18 A 5079. Extra "D" Batteries. Shpg. wt., 10 oz. . . . . Pkg. of 4 for 65¢  
 Takes Accessories Listed Below

## Our best selling Allied FM-AM-SW-VHF Portable



- 1 Dial light on-off Switch
- 2 Variable Tone Control
- 3 AFC Switch for drift-free FM
- 4 Fine-tuning control for SW
- 5 Motorola-type SW antenna jack
- 6 Self-storing AC cord and plug

### TUNES 5 BANDS

540-1600 kHz standard AM broadcast band	108-135 MHz VHF aviation band for aircraft and local airports
5-12 MHz shortwave foreign broadcasts, Hams	147-175 MHz VHF police/public service band
88-108 MHz standard FM	

Model 2671. Full-feature portable plays anywhere on 4 "C" batteries or 117 VAC. Includes: fine-tuning control, AFC, 3x6" speaker, slide-rule dial with momentary pushbutton light. Telescoping FM-VHF antenna, built-in AM-SW antennas; Motorola-type jack for SW antenna. 15 transistors. Leatherette case. 7½x10½x3". Japan.

10 A 4362 X. Shpg. wt., 9 lbs. . . . . 49.95  
 18 A 5078. Extra "C" Batteries. Shpg. wt., 10 oz. . . . . Pkg. of 2 for 33¢  
 11 A 1749. Deluxe SW Antenna. With Motorola-type plug. 4 lbs. . . . 7.95  
 11 A 1239. Economy SW Antenna Kit. 100' wire, accessories. 2½ lbs. 2.39  
 10 A 4051 S. Motorola-type Antenna Adapter Plug. Wt., 1 oz. . . . . 11¢  
 23 A 7538. "ABC's of Shortwave Listening." by Len Buckwalter (Sams). 96 pages of valuable shortwave listening information. 12 oz. . . . 2.50

### YOU CAN HEAR ALL THIS ON THE VHF BANDS

30-50 MHz and 147-175 MHz Police/Public Service Bands: Police, fire, emergency services; industrial and business radio; continuous weather on 162.55 MHz in many larger U.S. cities. 108-135 MHz Aviation Band: planes, local airports, navigation stations. Frequencies may vary in different

parts of the country, so check locally for exact frequencies in your area. The closer you are to a major highway, airport, harbor or other source of VHF, the more you will hear. Calls are of short duration with random elapsed time between them. TV audio may be heard in many parts of the nation.

## 8-band Portable tunes both police/ public service bands

"Portability, frequency coverage with some unique features, and price make this portable radio a good buy."

59 MAGAZINE

# 89<sup>50</sup>



Shown closed



## 5-band Portable tunes police/public service bands

"... wide-range coverage, there isn't anything going on that you don't intercept... performed perfectly in tests... one of the best buys around."

POPULAR ELECTRONICS

Was \$59.50 in Cat. 280.

# 49<sup>95</sup>



# Enjoy these Car-Portables anywhere

Our best Car-Portable . . has 15 bands, battery/AC

Cut \$30.00

**159<sup>95</sup>** \$8 monthly\*

Was \$189.95 in Cat. 285



**15 BANDS**

FM, AM, longwave, marine, plus eleven shortwave bands

Deluxe portable radio covers all these frequencies: standard AM broadcast band, 550-1650 kHz; FM band, 88-108 MHz; longwave band, 145-420 kHz; marine band, 1.5-3.65 MHz; plus eleven major international broadcast shortwave bands from 3.61-22.10 MHz. Full dial bandwidth on all dials. Includes 80, 40, 20 and 15-meter Amateur bands.

Nordmende Globetraveler III. Covers FM, AM, longwave, marine and eleven SW bands (right). Full drum dial bandspread for all 11 SW bands; IF bandwidth switch; 4 IF stages on FM, 3 on SW; battery/tuning meter; separate bass, treble controls; lighted dials. AFC, built-in AC, 5x7" speaker; 2 1/2" tweeter. Plays on 5 "D" batteries (below); 117 VAC; 6 or 12-V pos. or neg. gnd. car battery. Dual telescoping antenna. SW antenna. Phono jacks; amp, recorder outputs. Vinyl-covered wood cabinet, 8 1/2 x 12 1/8 x 4". Bracket below.

10 A 5066 X. Imported. Shpg. wt., 11 lbs. . . . . 159.95  
10 A 4344 X. Lockable Car Bracket. Shpg. wt., 5 1/4 lbs. . . . . 19.95  
18 A 5079. "D" Batteries. Uses 5. Shpg. wt., 12 oz. . . . . Pkg. 4/65¢



**99<sup>95</sup>**

\$5 monthly\*

## These solid-state Portables can be played in cars, boats or at home

### Panasonic FM-AM Radio/Cassette Recorder

Great for car, boat or home use, or carry it with you anywhere. Plays on 5 "D" batteries, or on 6 or 12 VDC pos. or neg. gnd. car battery and antenna with optional mounting bracket (below). You can order 117 VAC adapter for home use, too (below). Records and plays up to two hours on standard cassettes. Record directly from radio or "live" with mike. Features record level meter, accurate vernier tuning, AFC on FM, tone control, big 6x4" speaker. Power output, up to 2 watts. Has ferrite AM and telescoping FM antennas. Size, 3 1/2 x 11 x 11". With batteries, mike and earphone. Order extra batteries above, left. From Japan.

10 A 4002 S. Shpg. wt., 11 lbs. . . . . 99.95  
10 A 4006 S. Mounting Bracket, lock, Key, 4 lbs. . . . . 19.95  
10 A 4280 S. AC Adapter. For 117 VAC. Wt., 1 lb. . . . . 9.95



**54<sup>95</sup>**

\$5 monthly\*

### 3-band FM-AM-VHF car/portable/home Radio

Compact three-band radio pulls in standard FM and AM broadcasts. Also tunes VHF 148-174 MHz Police/Public Service band for police, fire, emergency services, utilities taxis, trains, etc. Tunes 162.5 MHz Weather Information service heard in many urban areas. Plays on three "C" batteries, 6 or 12 VDC pos. or neg. gnd., or 117 VAC. Connects to car antenna. Dial lights up when used in car. Pushbutton AFC. Vernier slide-rule tuning. Peak power output when used in car, 2 watts. Speaker, 4 3/8 x 2 3/4". Overall size, 7 1/2 x 5 1/8 x 2". With mounting bracket for car, lock and key. AC cord, batteries and earphone. U.L. Listed. Order extra batteries below. From Japan.

10 A 4594 S. Shpg. wt., 5 lbs. . . . . 54.95  
18 A 5078. Extra "C" Batteries. Wt., 10 oz. . . . . Pkg. 2/33¢



**44<sup>95</sup>**

\$5 monthly\*

### Versatile FM-AM car/portable/home Radio

Versatile FM-AM radio locks into bracket under dash, operates on 6 or 12 VDC pos. or neg. gnd. car battery. Out of car it's a portable, indoors it's a plug-in! Operates on 3 "C" batteries or 115 VAC. Features AFC on FM, pushbutton tone control, big 4" speaker. Has AFC and RF circuit. Ferrite AM and telescoping FM antennas plus pushbutton for car/antenna jack. Pilot light turns on when used with car battery. 7 5/8 x 5 1/2 x 2". With mounting bracket for car, lock, key, batteries, AC cord and earphone. U.L. Listed. Extra batteries above. Japan.

10 A 4154 S. Shpg. wt., 5 lbs. . . . . 44.95

# Exciting Radios feature latest modern designs

## 3-piece Stereo FM-AM with digital clock

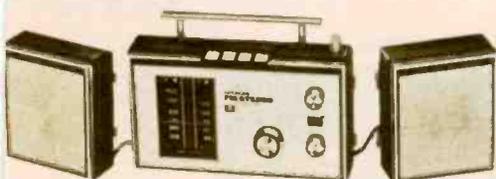
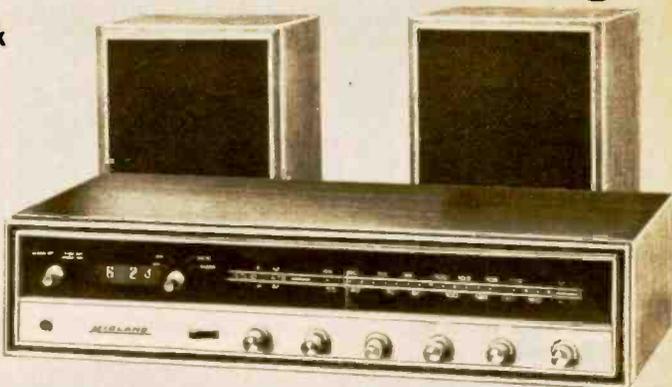
Unique digital clock/stereo radio in all-wood cabinetry

**99<sup>95</sup>**

\$5 monthly\*

Imagine! Unique digital clock wakes you to stereo FM, AM radio, or alarm. Has lighted dial, stereo indicator light. Controls for balance, bass, treble, function, tuning, AFC. 16 watts peak music power. Inputs for phono, external speaker, antenna. Two 5" speaker systems separate up to 12 feet for full stereo realism. Barrel-type dials for alarm time, hour, minutes, seconds. Handsome walnut finish wood cabinets with brushed aluminum trim. Radio, 3 $\frac{1}{2}$ x16 $\frac{1}{2}$ x9 $\frac{1}{4}$ "; matching speakers, 9 $\frac{1}{2}$ x7 $\frac{1}{4}$ x5 $\frac{3}{8}$ ". With FM antenna. For 115 VAC. Japan.

10 A 4000 U. Shpg. wt., 13 lbs. .... 99.95



**69<sup>95</sup>**

\$5 monthly\*

### Battery/AC Stereo FM-AM

Hitachi. Two 4" speakers detach for full stereo effect, fold behind cabinet for carrying. Entire unit less than 5 lbs. 800-mW peak music power. Stereo indicator light, built-in AFC, tone control. AM, telescoping FM antennas. Leatherette-covered. 5 $\frac{1}{2}$ x9 $\frac{3}{8}$ x3 $\frac{3}{8}$ " (closed). With 117 VAC adapter, 4 "C" batts., 2 earphones (jacks). 10 A 4118 S. Japan. 6 lbs. .... 69.95  
10 A 4671 S. As above, but speakers not detachable. Less 117 VAC adapter, earphones (below). 5 lbs. .... 49.95  
10 A 4364 S. AC Adapter. 6 oz. .... 4.95  
10 A 4759 S. Earphone for above. (Use 2 for stereo.) Wt., 6 oz. .... Each 1.95

**49<sup>95</sup>**

\$5 monthly\*

### FM-AM Clock-Radio/Lamp

Smartly styled clock-radio/lamp combination ideal for bedside or desk. Full-feature Telechron clock keeps precise time—wakes you to music or alarm, lulls you to sleep at night. Solid-state FM-AM radio has AFC to eliminate annoying FM drift. 3 $\frac{1}{2}$ " speaker delivers excellent sound. Slide-rule dial for easy tuning. High-intensity lamp adjusts to three intensities. Telescoping-swivel arm lets you pin-point light beam to exact position desired. Ivory base with attractive rosewood trim. Size, 10x6 $\frac{3}{4}$ ". For 117 VAC. Japan. 10 A 4373 S. Shpg. wt., 6 lbs. .... 49.95



**89<sup>95</sup>**

\$5 monthly\*

With FREE headphones for private listening

### Five-band table Radio

Deluxe solid-state table radio offers coverage of 540-1600 kHz AM; 88-108 MHz FM; 23-channel Citizens Band; 108-135 MHz Aircraft Band and 149-173 MHz Police/Public Service Band. Features big 5" speaker for good sound. Tuning meter, squelch control, switchable AFC, illuminated slide-rule dial, precise logging scale, and smooth flywheel tuning. Has separate power switch—no need to interfere with volume control setting. Stylish walnut-finished wood cabinet. Size, 8 $\frac{3}{4}$ x14 $\frac{1}{2}$ x6 $\frac{1}{2}$ ". For 117 VAC. With headphones. Japan. 10 A 5045 U. Shpg. wt., 17 lbs. .... 89.95



**24<sup>95</sup>**

\$5 monthly\*

### Two-speaker wood cabinet FM-AM Radio

Monophonic table radio features two speakers, 3" and 2 $\frac{3}{4}$ " oval dynamic, for good sound reproduction. Switchable AFC locks-in FM stations, prevents drift. FM circuit has four IF transformers; AM circuit has three. Tone control. Illuminated slide-rule dial. Handsome walnut-finished wood cabinet, chrome trim. 5x11 $\frac{1}{2}$ x4 $\frac{1}{4}$ ". 117 VAC. Imported. 10 A 4209 S. Shpg. wt., 4 $\frac{1}{2}$  lbs. .... 24.95



**75<sup>00</sup>**

### Stereo FM Headset-Radio

Panasonic. Super-portable FM radio built into a stereo headset for greatest possible stereo channel separation. Stereo/mono pushbutton; 3-pos. vol. switch; 2 $\frac{1}{2}$ " speakers. Telescoping antennas. Outputs for use as tuner. Adjustable headband, vinyl/foam earcushions. With 3 "AA" batteries. Japan. 10 A 5105 S. Shpg. wt., 1 $\frac{1}{4}$  lbs. .... 75.00  
18 A 5083. Extra "AA" Batteries. Wt., 6 oz. .... 2/27¢



### Battery/AC 6-band Radio

FM, AM, marine,  
shortwave plus  
VHF police and  
aircraft bands†

# 89<sup>95</sup>

\$5 monthly\*

(A)



### Battery/AC 5-band Radio

Tunes FM, AM,  
marine band,  
shortwave, VHF  
police band†

# 59<sup>95</sup>

\$5 monthly\*

(B)



### Battery/AC 5-band Radio

Hear FM, AM,  
SW, both VHF  
police/public  
service bands†

# 54<sup>95</sup>

\$5 monthly\*

(C)



### Battery/AC 3-band Radio

Unique model  
receives FM, AM  
and 162.55 MHz  
weather data

# 44<sup>95</sup>

\$5 monthly\*

(D)



### Battery/AC 4-band Radio

Listen to your  
favorite FM-AM  
stations plus  
SW and marine

# 49<sup>95</sup>

\$5 monthly\*

(E)



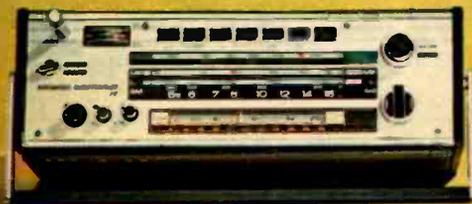
### Battery/AC 3-band Radio

Pulls in FM, AM  
and local VHF  
police/public  
service band†

# 39<sup>95</sup>

\$5 monthly\*

(F)



### Battery/AC 16-band Radio

Our best portable  
radio offers wide  
coverage and  
many extra-  
deluxe features

# 189<sup>95</sup>

\$10 monthly\*

(G)



### Battery/AC 3-band Radio

Good reception  
on FM, AM  
and VHF  
police band

# 32<sup>95</sup>

\$5 monthly\*

(H)

Coverage Includes: FM, AM, longwave,  
marine, VHF police/public service† plus  
international shortwave on eleven bands

# Multiband solid-state Portables

**A** 6-Band FM-AM-MB-SW-Air-Police. Enjoy hours of entertaining listening with this fine portable. Covers FM, AM, 2.5-6.5 MHz marine, 9-18 MHz SW, 148-174 MHz VHF police/PSB† and 107-136 MHz aircraft bands. Plays on 6 "C" batteries or 117 VAC. Slide-rule dial, fine-tuning, AFC switch, squelch control, 4x6" speaker, dual telescoping antennas and antenna wire for shortwave. World map and time chart in lid. Jacks for external SW antenna (included), earphone and earphone. Plastic case with leatherette padded diast sides. With batteries, earphone. 8 $\frac{7}{8}$ x11 $\frac{3}{4}$ x4 $\frac{1}{2}$ ". Japan.  
0 A 4315 X. Shpg. wt., 10 lbs. . . . . 89.95

**B** 5-Band FM-AM-SW-Police. Standard FM-AM, 1.8-4.5 MHz marine band, 4.5-12 MHz SW and 148-174 MHz VHF police/public service band†. Slide-rule tuning dial, fine-tuning control on SW. Big 4" speaker. AFC switch locks in FM stations; squelch control eliminates background noise when monitoring police band. Tone control. Ferrite and telescoping antennas; jacks for external antenna (included) and earphone. Versatile portable plays anywhere on 6 "C" batteries or 117 VAC with self-storing cord. With batteries, earphone. 10x11 $\frac{3}{4}$ x4". Japan.  
10 A 4317 S. Shpg. wt., 8 lbs. . . . . 59.95

**C** 5-Band Tuner FM-AM-SW Two VHF Police/Public Service Bands. Exciting listening on 30-50 MHz and 146-175 MHz VHF police/public service bands†, plus international shortwave on 6-18 MHz and standard FM-AM. Plays anywhere on 4 "C" batteries or self-storing 117 VAC cord. Slide-rule dial with pushbutton band indicator lights. 3 $\frac{1}{2}$ " speaker. Built-in ferrite and telescoping 37 $\frac{1}{2}$ " antennas. Compact vertical styling. Die-cast front, leatherette case, leather handle. 6 $\frac{1}{2}$ x10x3 $\frac{3}{4}$ ". With batteries, earphone. From Japan.  
10 A 4409 S. Shpg. wt., 8 lbs. . . . . 54.95

**D** FM-AM/Weather Station Portable. The perfect portable for boaters, campers, or anyone. Just press a button for the latest, up-to-the-minute weather reports from the 162.55 MHz U.S. government weather station (heard in many metropolitan areas). Also enjoy FM or AM. Plays on 4 "C" batteries or 117 VAC. 800 mW output through 3 $\frac{1}{2}$ " speaker. Rugged construction, folding metal handle. Pushbuttons for band selection and AFC. Slide-rule dial, tone switch, ferrite and swivel telescoping antennas. With batteries. 6 $\frac{1}{4}$ x9 $\frac{1}{2}$ x2 $\frac{5}{8}$ ". From Japan.  
10 A 4670 S. Shpg. wt., 4 lbs. . . . . 44.95

**E** 4-Band FM-AM-MB-SW. Hear your favorite FM and AM stations, ship-to-shore radio and maritime calls on 2.5-6.5 MHz marine band, and international shortwave on 9-18 MHz. Plays on batteries or 117 VAC with self-storing cord. Slide-rule dial, fine-tuning control, tone control. AFC switch, 4" speaker. Built-in ferrite and telescoping antennas, jack for external antenna (included). Case has walnut grain panels. 9 $\frac{1}{4}$ x11 $\frac{1}{4}$ x4". Batteries, earphone. Japan.  
10 A 4318 S. Shpg. wt., 7 $\frac{1}{2}$  lbs. . . . . 49.95

**F** FM-AM-VHF Police Band Portable. Three-band radio brings you dramatic coverage of the 147-174 MHz VHF police/public service band†, plus FM and AM. Plays on 4 "C" batteries or 117 VAC. Vertical slide-rule dial with smooth vernier tuning, momentary dial light button. Tone switch and 4" speaker for good sound. Squelch control eliminates background noise on VHF. Ferrite and telescoping antennas. Plastic case, folding metal handle. 6 $\frac{3}{4}$ x9 $\frac{5}{8}$ x2 $\frac{5}{8}$ ". Batteries, earphone. Japan.  
10 A 4279 S. Shpg. wt., 4 $\frac{1}{2}$  lbs. . . . . 39.95

**G** Our Finest! 16 Bands Including Police/Public Service. Globetrotter IV portable tunes FM, AM, 1.5-3.7 MHz marine, 145-420 kHz LW and 147-174 MHz VHF police/public service band† on large slide-rule dial. Separate rotating drum dial for shortwave from 3.61 to 22.10 MHz in eleven spread bands. Separate dial light switches. Provides superb performance anywhere on 5 "D" batteries or 117 VAC. Has IF bandwidth switch, AFC, 4-watt audio power, tuning meter, battery tester. Separate bass and treble controls, 5x7" woofer and 2 $\frac{1}{4}$ " tweeter for fine sound. Ferrite and dual telescoping antennas; jacks for external antenna and ground. Earphone and headphone jacks. Extension speaker, phono, tape, amplifier jacks. Attractive vinyl-covered wood cabinet. 8 $\frac{1}{4}$ x13 $\frac{1}{4}$ x4 $\frac{1}{8}$ ". Batteries below. Imported.  
10 A 4354 X. Shpg. wt., 12 lbs. . . . . 189.95  
18 A 5079. "D" Batteries. Shpg. wt., 12 oz. . . . . Pkg. of 4 for 65¢

**H** FM-AM-Police Portable. Compact radio tunes FM, AM and 144-174 MHz VHF for police/public service band and 2-meter Amateur band. Uses 4 "AA" batteries or 117 VAC with self-storing cord. Large slide-rule dial, thumbwheel volume and tuning controls. AFC prevents FM drift; AVC for constant volume level. Built-in ferrite AM, telescoping FM-VHF antennas. Brown vinyl case with chrome trim. 10x6 $\frac{1}{2}$ x4 $\frac{1}{2}$ ". With batteries, earphone. Japan.  
10 A 4347 S. Shpg. wt., 3 $\frac{1}{2}$  lbs. . . . . 32.95

† VHF Public service bands cover police, fire, emergency services, utilities, etc. The closer you are to a city, highway or airport, the more VHF you will hear. Calls are short and intermittent. 162.5-MHz weather station is heard in many urban areas.

8 Bands  
**9995**  
\$5 monthly  
see page 438



## Battery/AC Portable Radio

Pushbutton band selection for FM, AM, 150-350 kHz LW, 1.6-3.6 MHz marine, 3.7-9 and 9-22 MHz SW, plus 108-136 MHz VHF aircraft and 148-175 MHz VHF police/PSB†. Slide-rule dial, fine tuning control, dial light, tone control, AFC switch. Die-cast front panel, black leatherette case. 4 "D" batts., earphone. 10x14 $\frac{1}{4}$ x5". Japan.  
10 A 4186 X. Shpg. wt., 12 lbs. . . . . 99.95

6 Bands  
**8495**  
\$5 monthly  
see page 438



## Battery/AC FM-AM-LW-SW Radio

Covers FM, AM, 145-380 kHz LW, shortwave on 3 bands: 1.6-4.3, 3.9-12, 12-26.5 MHz. Has BFO for code reception, slide-rule dial, fine-tuning, dial light, AFC, tuning/battery meter, world time map in lid. Telescoping antenna; ext. ant. jack. Rugged die-cast case. 8 "D" batteries, earphone, AC cord. 8 $\frac{1}{4}$ x12x4 $\frac{3}{4}$ ". Japan.  
10 A 4282 U. Shpg. wt., 15 lbs. . . . . 84.95

3 Bands  
**3995**  
\$5 monthly  
see page 438



## Radio with AM and two VHF bands†

Listen in on both 30-50 and 147-174 MHz VHF police/public service bands, plus AM. Plays anywhere on 6 "C" batteries or 117 VAC. Squelch control eliminates noise when monitoring VHF. Slide-rule dial, 3 $\frac{1}{2}$ " speaker. Ferrite AM, telescoping VHF antennas; external antenna jack. 6 $\frac{3}{4}$ x9 $\frac{1}{4}$ x3 $\frac{1}{2}$ ". With batteries, earphone. From Japan.  
10 A 4044 S. Shpg. wt., 4 $\frac{1}{4}$  lbs. . . . . 39.95



## QUALITY FEATURES



Balance control lets you adjust for best stereo



Stereo Headphone jack for private listening



Easy tuning with illuminated slide-rule dial



Smartly styled oiled walnut wood cabinet



Stereo crystal phono input for playing records

## Allied® one-piece Stereo FM-AM Radio with headphone jack and wood cabinet

**59<sup>95</sup>**  
\$5  
monthly\*

Solid-state stereo at a low price . . . 6-watt peak power, plus two 4" speakers in a compact all-wood cabinet with oiled walnut finish . . . includes a balance control for greatest stereo realism

Model 2691. Never before have we offered an Allied stereo FM-AM radio at a price this low. But we haven't skimped on quality or features, because this radio gives you important extras you wouldn't expect in a table model. Even the cabinet is outstanding. It's all-wood and acts as a "sounding board" to improve the tone of the twin 4" speakers, and has a smart oiled walnut finish. Compact size too, for use on bookshelf or table-top.

Solid-state circuit delivers 6 watts of peak power (1½ watts per channel, rms) for plenty of volume without distortion. Pulls in static-free stereo FM, with good channel separation, plus fine-sounding AM. Tone control lets you emphasize bass or treble response. Balance control permits easy adjustment for equal volume from each speaker, important for maximum stereo effect. A front panel jack lets you plug in stereo headphones for listening to stereo, at full volume, even at midnight, without disturbing anyone. A stereo FM indicator light flashes on to show when you're tuned to a stereocast. AFC locks in FM stations to prevent drift, may be switched off to aid in tuning weak stations. Illuminated slide-rule dial makes tuning all stations easier. Band indicator lights show at a glance whether you're tuned to FM or AM.

You can even play your stereo records through this radio—there are rear-panel jacks for plugging in any record changer equipped with a crystal cartridge. Front-panel switch selects FM, stereo FM, AM and phono. Line-cord FM antenna, built-in AM antenna, terminals for external FM antenna. 17 transistors, 17 diodes, 4 thermistors. Cabinet has matching grille cloth covering speakers. 8½x19¼x5½". For 105-125 volts, 60 Hz AC. From Japan. 10 A 5055 X. Shpg. wt., 14 lbs. . . . . 59.95



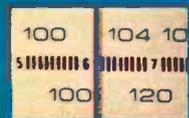
### DELUXE DETAILS



Jacks for phono, aux., stereo headphone, tape



Clearly marked five-position selector switch



Easy-to-read illuminated slide-rule dial



Good-looking, solid die-cast front panel



6 1/2" woofer and 2" tweeter in each speaker system

## Our finest and most powerful Allied Stereo FM-AM Radio . . . four speakers

**99<sup>50</sup>**  
\$5  
monthly\*

25-watt peak music power solid-state circuit  
 . . . Component-type speaker systems, each with 6" woofer and 2" tweeter, separate up to 14-ft. for real-as-life stereo . . . Oiled walnut cabinets

Model 2690. This 3-piece ensemble offers everything you could want in a fine stereo FM-AM radio. Fully enclosed speaker systems spread up to 14 ft. apart for a "wall" of sound that can give you more stereo realism than consoles costing several times more. Solid-state circuit, with 20 transistors, 18 diodes and 4 thermistors, pours out 25 watts of peak music power. Radio pulls in static-free FM, stereo or monophonic, plus good-quality AM. Has illuminated slide-rule dial; stereo FM indicator light; pushbuttons for AFC and AC on-off; balance control; plus *separate* bass and treble controls. There are jacks for stereo headphones and a stereo record changer with crystal or ceramic cartridge. Outputs for tape recording. Built-in FM-AM antennas, terminals for external FM antenna. Switch selects AM, FM, stereo FM, phono or aux. Adhesive pads, included, permit speakers to be used vertically or horizontally. Radio has a solid die-cast panel with the look and feel of finest quality. Radio, 4 3/8 x 16 3/8 x 9 7/8". Speaker enclosures, 13 x 8 1/4 x 7 1/2". For 117 VAC. Japan. 10 A 4268 U. Shpg. wt., 34 lbs. . . . . 99.50

### BSR 4-speed Mini-Changer

**39<sup>95</sup>**

Mini-changer for above. With base, dust cover. Low-mass tubular arm, ceramic stereo cartridge, synthetic sapphire styli. Detachable spindle. Also includes 45-rpm spindle. 12 x 8 1/2". England. 117 VAC. 9 lbs. 10 A 4713 X. . . . . 39.95



\*No money down, low monthly payments . . . see page 438

# FM-AM Clock-Radios

Models on these two pages have 60-minute Sleep Switches and wake you to music or buzzer. All have solid-state circuits, full-view dials, precision clocks. For 117 VAC.



54<sup>95</sup> **A**



**B** 46<sup>95</sup>



**C** 59<sup>95</sup>

Swivels 30° on base for extra convenience



**E** 34<sup>95</sup>

**D** 44<sup>95</sup>



**G** 29<sup>95</sup>

**F** 39<sup>95</sup>



**J** 24<sup>95</sup>



**I** 19<sup>95</sup>



**H** 34<sup>95</sup>



**K** 27<sup>95</sup>

**A Latest styling plus digital-readout clock**

Styling as modern as tomorrow. Walnut-grain cabinet, smoked glass dial, chrome trim. Precision digital-readout clock dial is softly illuminated. AFC plus AGC for drift-free, stable FM. Good AM reception, too. 3 1/2" speaker, plus earphone for private listening. Lighted slide-rule tuning dial. FM-AM band indicator. Built-in antennas. U. L. Listed. 3 3/4 x 11 1/4 x 5". Japan.  
10 A 4001 X. Shpg. wt., 3 3/4 lbs. .... 54.95

**B Sleek styling with digital clock system**

Exciting "new look" styling. FM circuit has RF stage for maximum station-pulling power. Has lighted slide-rule dial, automatic volume control, tone control. AFC locks in FM stations. 3" speaker. Easy-to-read odometer-type digital clock shows hours, minutes, seconds. Walnut wood-grain plastic cabinet, leather-grain trim. FM-AM antennas. 4 1/4 x 11 1/2 x 5 1/2". Japan.  
10 A 4015 X. Shpg. wt., 5 1/2 lbs. .... 46.95

**C Our finest FM-AM Clock-Radio**

Panasonic. Full-size, wood FM-AM clock radio has 3/4-watt output, big 4" speaker for excellent tone quality. Lighted vertical slide-rule dial has individual band lights, push-bar band selector. AFC provides drift-free FM. Lighted clock face. Matching push-bar for doze alarm. On 30° swivel base. Deluxe walnut-finish wood cabinet. 6 x 13 3/4 x 7 1/8". Japan.  
10 A 4139 X. Shpg. wt., 9 lbs. .... 59.95

**D Dual-speaker model with walnut finish**

Two-speaker FM-AM clock-radio in elegantly-styled walnut-finish wood cabinet. Features two speakers, 4" and 2". RF stage on FM for maximum station-pulling power. AFC switch locks in FM stations. Slide-rule log scale dial offers accurate tuning. Separate volume and tone controls. Telechron clock-system has sweep-second hand. "Snooze" touch-bar for an extra 10-minute nap. 7 3/4 x 13 3/4 x 5 1/8". Japan.  
10 A 4016 X. Shpg. wt., 8 lbs. .... 44.95

**E FM-AM Radio. Above, less clock. Shpg. wt., 7 1/2 lbs.**  
10 A 4017 X. .... 34.95

**F FM-AM Clock-Radio in wood cabinet**

Smart FM-AM clock-radio in luxurious walnut-veneer wood cabinet. Features large 4" dynamic speaker for rich, full-tone sound. Vertical slide-rule dial for precise tuning. AFC switch on FM. Telechron clock-system has "snooze" button, lighted dial, sweep-second hand. 7 x 14 1/4 x 5 1/8". Japan.  
10 A 4061 X. Shpg. wt., 5 1/4 lbs. .... 39.95

**G FM-AM Radio. Above, less clock.**  
10 A 4062 X. Shpg. wt., 4 lbs. .... 29.95

**H Low-profile model with two speakers**

Compact low-profile FM-AM clock-radio has two-speaker system with 3" and 2 1/2" speakers for wider tonal range. Convenient slide-rule dial offers precision tuning. AFC provides drift-free FM. Separate tone control. Full-feature clock-system has "snooze" button, luminous dial, sweep-second hand. Handsome wood-grain plastic cabinet. 4 1/2 x 11 x 7 3/4". Japan.  
10 A 4185 X. Shpg. wt., 5 lbs. .... 34.95

**J AM Clock-Radio. Above, but no FM or tone control.**  
10 A 4188 X. Shpg. wt., 4 lbs. .... 24.95

**K Budget-priced low-profile model**

Styled extra-low and compact for bedside table, bookshelf or desk. Features large 3 1/2" dynamic speaker for rich, mellow tone. Lighted easy-to-read slide-rule dial. Drift-free FM. Telechron clock has "snooze" bar, luminous hands and dial. Walnut-grained plastic cabinet. Earphone. 3 1/2 x 9 1/2 x 5 1/8". Japan.  
10 A 4195 S. Shpg. wt., 4 lbs. .... 27.95

**L FM-AM Radio. As above, less clock.**  
10 A 4197 S. Shpg. wt., 3 1/2 lbs. .... 19.95

**29<sup>95</sup>** **N**  
\$5 monthly\*

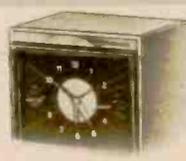


**M** **39<sup>95</sup>**  
\$5 monthly\*

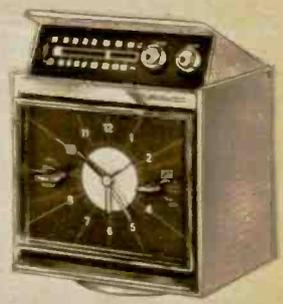
**M Large twin speakers for extra tonal range**

Outstanding FM-AM clock-radio provides that desired extra tonal range with two 3 1/2" wide-range speakers. Convenient slide-rule log scale tuning dial. Switchable AFC for drift-free FM. Tone control. Precision Telechron clock has ten-minute "snooze" bar. Handsome walnut-grain finish plastic cabinet. 6 3/4 x 11 1/4 x 3 3/4". Japan.  
10 A 4078 X. Shpg. wt., 4 1/2 lbs. .... 39.95

**N** 10 A 4079 X. FM-AM Radio. Less clock. 3 3/4 lbs. .... 29.95



Radio drops out of sight under control-panel lid



**29<sup>95</sup>** \$5 monthly\*

**Unique "Hideaway" model on swivel base**

Clever design permits radio controls to slant upward toward eye level or disappear completely under specially designed lid. Clock appears to stand alone in modern, polystyrene cabinet. FM-AM radio plays in open or closed position. Has slide-rule dial, volume control. AFC provides drift-free FM. Has 2 1/2" side-mounted speaker. Large-dial, precision clock-system with luminous hands and "snooze" bar. Mounted on 360° swivel base. Size, 6 1/2 x 6 1/4 x 5". Japan.  
10 A 4065 S. Shpg. wt., 3 1/2 lbs. .... 29.95

**Styled to save space on night table or shelf**

Cube-shaped clock-radio offers ultramodern styling and good FM-AM reception. Deluxe features include large, modern clock face and vertical slide-rule tuning dial.

Built-in AFC for drift-free FM. Has 2 3/8" dynamic speaker. Earphone for private listening. Precision Telechron clock-system has "snooze" button, luminous clock hands, sweep-second hand. High-impact polystyrene cabinet. Size, 7 x 4 3/8 x 3 3/4". From Japan. Shpg. wt., 4 lbs.  
10 A 4192 S. .... 26.95



**26<sup>95</sup>** \$5 monthly\*



## Allied® Stereo FM-AM Radio..our lowest price for any 3-piece model with wood cabinets and component-type features

# 74<sup>95</sup>

Never before so many extras at this bargain price . . . 8-watt solid-state radio, two 5" speaker systems, stereo headphone and phono jacks, plus oiled walnut wood cabinets

Model 2600. First time we've ever offered a 3-piece stereo FM-AM radio with so many component-type controls and features at such a low price. Compact oiled walnut-finish wood cabinets fit almost anywhere, look smart in any room. Ideal for bookshelf or mantle. Solid-state radio pulls in static-free stereo FM, plus AM, and delivers 8 solid watts of peak music power. Matching 5" speaker systems separate up to 14 feet for stereo channel separation at its best. Controls include separate bass and treble, plus a balance control and function selector for AM, FM, FM-AFC, Stereo FM and Phono. Has jacks for plugging in any stereo record changer with ceramic cartridge, and stereo headphones. Stereo FM indicator light. Illuminated slide-rule dial. AFC locks in FM stations. Built-in FM-AM antennas, terminals for external FM antenna. AC convenience outlet. Metal-look panel with chrome trim. 19 transistors, 17 diodes, 4 thermistors. Radio, 3 $\frac{3}{4}$ x14 $\frac{3}{4}$ x10 $\frac{3}{8}$ ". Speaker enclosures, 10x7x7 $\frac{1}{8}$ ". For 117 VAC. Japan. 10 A 5057 U. Shpg. wt., 23 lbs. . . . . 74.95

**BASS**      **TREBLE**

Separate bass and treble controls

Built-in stereo headphone jack

Oiled walnut finish all-wood cabinets

## 39<sup>95</sup> Garrard Demi-Changer

Four-speed. Diamond needle, ceramic stereo cartridge, 2 spindles for automatic or manual operation. Base, dust cover. 12x8 $\frac{1}{2}$ ". 117 VAC. England. 13 A 3109 X. 10 lbs. . . . 39.95



## BSR 4-Speed Changer 39<sup>95</sup>

Synthetic-sapphire needle, ceramic stereo cartridge. Automatic shutoff. Base, cover, 45-rpm automatic spindle. 12x8 $\frac{1}{2}$ ". 117 VAC. U.L. Listed. England. 10 A 4713 X. 9 lbs. . . . . 39.95



## TUNES 6 BANDS

88-108 MHz FM Broadcast

540-1600 kHz AM Broadcast

30-50 MHz Police/Public Service

5-12 MHz Shortwave

147-176 MHz Police/Public Service

12-24 MHz Shortwave



## Allied® 6-band battery/AC Portable Radio

Our latest solid-state portable gives you wide coverage of international shortwave, police, fire, emergency and business VHF, plus FM and AM. . . Plays anywhere on batteries or AC

Model 2660. Allied's own 6-band solid-state radio offers exceptional versatility at an unbeatable price. Now you can listen to six of the most popular radio bands everywhere you go—rugged portable operates on batteries or 117 VAC with self-storing cord. For everyday listening, tune in your favorite FM and AM stations. Also get news and entertainment and listen in on Hams from all over the world on two shortwave bands. Or keep posted on what's happening locally on two VHF police/public service bands.

Big slide-rule dial makes tuning easy; has momentary-action dial light switch. Fine-tuning control helps separate stations on shortwave. Squelch control silences speaker between calls when monitoring VHF. Switchable AFC prevents FM drift. Local/Distance switch. Tone control. 3x6" speaker.

Built-in ferrite AM, dual telescoping 27" FM-SW-VHF antennas; plus jack for external SW antenna. (See page 536 for antenna accessories.) Handsomely-styled leatherette-covered case with chrome trim. 12x16x6". 15 transistors, 8 diodes, 2 rectifiers. With 4 "D" batteries and earphone. From Japan.

10 A 5056 X. Shpg. wt., 12 lbs. . . . . 69.95

**VHF** Police/Public Service Bands cover police, fire, emergency services, etc. The closer you are to a city, highway or airport, the more calls you will hear. Calls are brief and intermittent. Continuous weathercasts heard on 162.5 MHz in many urban areas.

Features two  
VHF police/public  
service bands

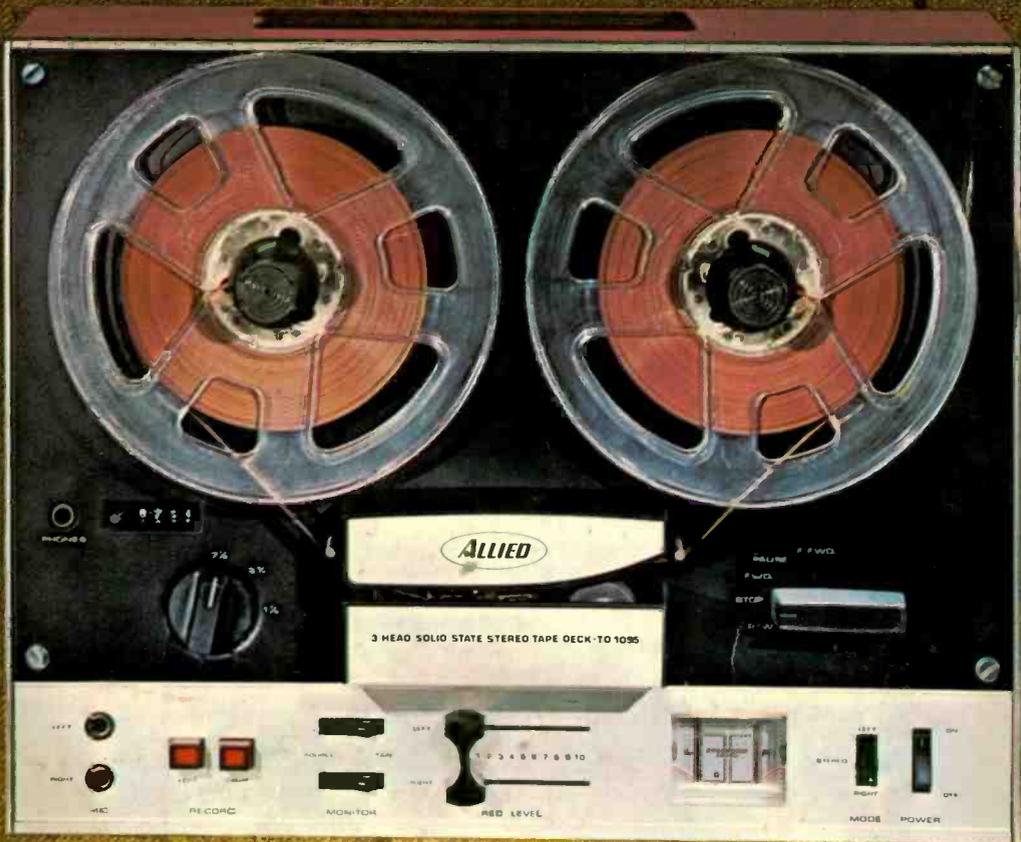
**69.95**

NO MONEY  
DOWN  
See page 438

With batteries and earphone



ALLIED 551



## 179<sup>95</sup> Allied Stereo Tape Deck features 3 heads plus all silicon transistors

\$9 monthly  
see page 438

Model TD-1095. Allied's latest stereo tape deck offers features to please the most critical recording enthusiast at a moderate price. Records 4-track stereo or mono; plays through your stereo music system or console. Boasts 3 heads for tape monitoring, sound-on-sound, sound-with-sound, other special effects. Automatic tape lifter protects heads. Flutter-free motor for accurate 7½, 3¾, 1½ ips speeds. Automatic shutoff. Single-knob function control with instant pause. Push-to-reset 4-digit counter. Slide-type recording level controls; illuminated level meters. Inputs: 2 mike, 2 aux. Outputs: line, stereo headphone. Response: ±3 dB, 30-22,000 Hz. Flutter/Wow: below 0.1%. 12¼ x 16x6½", 117 VAC. Japan. Full specs on page 120. 15 A 7574 U. Shpg. wt., 25 lbs. . . . . 179.95

Stereo Tape Deck with Mike Bonus. TD-1095 tape deck with Allied 3311P mike outfit for only \$5 more. Pair of dynamic mikes, desk stands in custom-fitted case. 13½x11¾x2½". Japan. 15 A 0182 L2U. Shpg. wt., 31 lbs. . . . . 184.95



Sliding record level controls for easier operation



Four-digit counter for editing and locating selections easily



Convenient positive-acting single-knob function control

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