



# 1970

FULL LINE ANNUAL

# RADIO-TV ELECTRONICS CATALOG

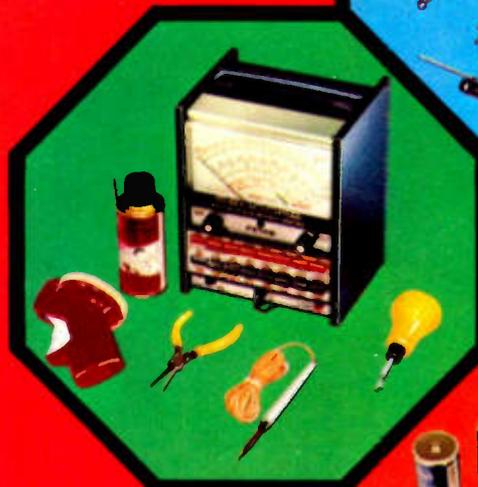
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FOR INDEX

CATALOG  
NO.  
701

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NEW

# Garrard "MODULE SERIES" AUTOMATIC TURNTABLES

EACH MODULE UNIT COMES COMPLETE, PREWIRED READY TO PLUG IN, WITH APPROPRIATE CARTRIDGE INSTALLED AND PRE-SET TO CORRECT TRACKING FORCE... EACH MOUNTED ON A GARRARD BASE WITH 3-WAY DUST COVER (EXCEPT X-11 WHICH IS SUPPLIED WITH SPECIALLY MATCHED "DEMI" BASE AND DUST COVER).

## Garrard ALL-NEW SLX-3 AUTOMATIC TURNTABLE

The SLX-3 is based on the features and mechanism of Garrard's finest quality automatic turntable the SL95B. It comes complete with a world-famous magnetic cartridge, capable of tracking under 1 1/2 grams, with elliptical stylus pre-mounted in its counter-balanced, low-mass arm. The entire assembly is pre-mounted on Garrard's beautiful molded base with built-in spindle storage compartments, and includes a matching three-way dust cover. Special features include broad surface record support platform for sure steady control of the records. Three simple separate "up-front" controls for automatic play, manual motor control, viscous damped cueing for raising and lowering arm in both manual and automatic mode. Damped set-down for the first time the tone arm is lowered by viscous damping during change cycle. New stylus force adjustment screw at rear of the arm. Pressure is readily read through window. Adjustable anti-skating control uses no springs. Large turntable is lightweight but magnificently balanced and precision matched to the kinetic energy of the synchronous motor for constant speed. Size: 16 3/4" W. x 15 1/4" D. x 8 1/4" H. Shpg. Wt. 22 lbs.

No. 33A647. Net Each **\$99.50**



SEE PAGE 4 FOR  
FULL LINE OF  
GARRARD ACCESSORIES



## Garrard

### NEW MODEL SLX-2 FAMOUS SYNCHRO-LAB TURNTABLE

Garrard 3-speed synchronous automatic turntable complete with fine quality high compliance magnetic cartridge pre-mounted on coordinated base, ready to plug into components and play. Tracking force has been pre-set (a stylus pressure gauge is built into tonearm). Has cueing and pause control. Interchangeable spindles: convenient short spindle for playing single records manually; long center drop spindle for automatic play. Adaptor supplied for single play of 45 RPM records. Spindle removes for safety and convenience when taking records off turntable. Combined speed and size selector for 33, 45 and 78 RPM, 12", 10" and 7" records. Size: left to right 15"; front to rear 13 1/4"; 7 3/4" high. SLX-2 Changer complete with Cartridge. Mounted on Base, with Dust Cover.

No. 33A585. Wt. 14 lbs. Net Each **\$69.50**

## Garrard

### X-10 3-SPEED AUTOMATIC TURNTABLE MODULE

The ideal turntable module that fits the system for the young at heart. Features diamond ceramic cartridge with flipover cartridge installed; with base and matching dust cover. The entire record-playing source pre-assembled, wired, ready-to-plug into table radios, FM stereo radios, budget component systems, TV sets, tape recorders, and cassette machines, and as a replacement in brand name consoles. Has low-mass, pencil thin tubular aluminum tone arm of advanced design. A convenient single lever cueing and pause control for both manual and automatic play. Two interchangeable spindles: long (for automatic play) short (for manual play). Size: 15" W. x 13 1/4" D. x 7 3/4" H. Shpg. wt. 17 lbs.

No. 33A648. Net Each **\$52.50**

## Garrard

### X-11 MODULE "DEMI-CHANGER" 4-SPEED AUTOMATIC TURNTABLE

It's a light and lively miniature that's perfect for the small system. A complete package ready to plug in and play through table radios, FM stereo radios, compact stereo systems, tape recorders and cassette machines. Ebony turntable on a green unit plate, set off by an ebony pinseal base with sparkling silver trim and tinted styrene dust cover. The "Bantam" entry is only 13 1/2" W. x 10" D. x 6 1/2" H. Small enough to fit on a bedside table. Advanced design, low-mass tubular tonearm has been precisely balanced. Ceramic cartridge with flip-over diamond stylus assembly.

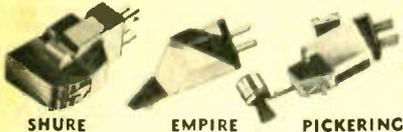
Exclusive feature for a changer of this size... plays single records automatically or manually with short manual spindle supplied. Shpg. wt. 10 lbs. No. 33A649. Net Each **\$39.95**

# Garrard

## WORLD'S FINEST AUTOMATIC TURNTABLES

### 1<sup>st</sup> SALE EXTRA BONUS

YOUR CHOICE OF ONE  
OF THESE FAMOUS  
MAKE CARTRIDGES



JUST A PENNY MORE BUYS ONE  
OF THESE FAMOUS CARTRIDGES  
WITH PURCHASE OF TURNTABLE

### GARRARD SYNCHRO- LAB MOTOR



Personifies a new high in engineering achievement. Rotor is in two sections; an induction rotor provides high starting torque and instantly accelerates the motor to the correct speed, and a permanent magnet rotor which provides continuous motive force at synchronous speed... motor runs at perfect constant speed regardless of variations in voltage, circuit load, temperature, stylus pressure, level of record modulation of turntable load.



### MODEL SL95B 3-SPEED AUTOMATIC TRANSCRIPTION TURNTABLE

The New Standard of the industry with all new features: Synchro-Lab motor, 12" aluminum turntable. Advanced ultra-low mass tone arm of aluminum with A. mroseia wood inserts for low resonance damping. Gyroscopic gimbal pivots for minimal friction. Adjustable counterweight, isolated with rubber. Stylus force adjustment dial with detents stops at 1/4 grams; and visual markings in 1/2 gram increments, from 0 to 5 grams. Cartridge clip, interchangeable for convenient, inexpensive mounting and replacing of cartridge, eliminates need for plug-in shells. Adjustable anti-skating control. Simple patented lever type, calibrated in 1/2 grams and infinitely variable. Single play spindle, rotates with record, made of durable noiseless Delrin. Automatic spindle utilizes positive safety platform which telescopes into unit plate for single play operation. Size: left to right 15 13/16" front to rear 14 5/8"; above motor board 4 3/8", below motor board 3". Shpg. wt. 3 lbs. No. 33A539. Model SL95B Less Cartridge and Base.

**\$129.50**

No. 33A594. Model SL95B Turntable with Shure M75-6 Cartridge. Net Each	\$129.51
No. 33A562. Model SL95B Turntable with Shure Elliptical M44E Cartridge. Net Each	\$129.51
No. 33A595. Model SL95B Turntable with Shure Elliptical M93E Cartridge. Net Each	\$129.51
No. 33A564. Model SL95B Turntable with Pickering Elliptical V15ATE-3 Cartridge. Net Each	\$129.51
No. 33A596. Model SL95B Turntable with Empire Elliptical 888E Cartridge. Net Each	\$129.51
No. 33A597. Model SL95B Turntable with Shure M91E Cartridge. Net Each	\$134.50
No. 33A554. Model SL95B Turntable with Pickering XV15 AME Cartridge. Net Each	\$134.50
No. 33A598. Model SL95B Turntable with Empire Elliptical 888TE Cartridge. Net Each	\$134.50

### MODEL SL75B 3-SPEED AUTOMATIC TRANSCRIPTION TURNTABLE

Fines turntable in its price class! New 12" aluminum turntable balanced to match the Synchro-Lab motor. Low mass tone arm is made of twin-braced, extruded aluminum for extra rigidity and freedom for resonance. New adjustable anti-skating control is simple lever type, calibrated in 1/2 grams and infinitely variable. New adjustable counterweight is suspended in resonance-adsorbing plastic. New stylus pressure adjustment assembly has precision rotating "optical" knob, clearly marked 0-5 in 1/4 gram increments. Tone arm has new cartridge clip for convenient replacement of cartridge without the need of plug-in shells. Three control switches, a combined speed and record size selector switch (78, 45, 33 1/3 RPM), a combination manual switch and cueing control viscously damped, and a new automatic control lever function. New single play spindle rotates with record. New automatic spindle has positive safety platform. Size: left to right 16 1/16" front to rear 14 9/16"; above motor board 4 3/8", below motor board 3". No. 33A540. Model SL75B Less cartridge and Base.

**\$109.50**

No. 33A608. Model SL75B Turntable with Shure M75-6 Cartridge. Net Each	\$109.51
No. 33A609. Model SL75B Turntable with Shure M93E Cartridge. Net Each	\$109.51
No. 33A555. Model SL75B Turntable with Pickering Elliptical V15 ATE-3 Cartridge. Net Each	\$109.51
No. 33A610. Model SL75B Turntable with Empire 888E Cartridge. Net Each	\$114.50
No. 33A613. Model SL75B Turntable with Shure Elliptical M91E Cartridge. Net Each	\$114.50
No. 33A611. Model SL75B Turntable with Pickering XV15 AME Cartridge. Net Each	\$114.50
No. 33A612. Model SL75B Turntable with Empire 888TE Cartridge. Net Each	\$114.50

### MODEL SL72B 3-SPEED AUTOMATIC TURNTABLE

For the person who wants the finest quality at a moderate price! Its new tone-arm is low mass, hexagon shaped of sparkling aluminum that floats within a cast gimbal mounting. Uses the same slide-in cartridge clip as used on the SL95B. The counterweight is isolated from the arm and is fully adjustable by rotating it on its lead screw. The stylus pressure gauge is adjustable by a knob on the rear of the arm with the setting indicated on a scale by the side of the arm. The turntable is machined aluminum and its weight is precisely matched to its synchro-lab motor. Shpg. wt. 13 lbs. No. 33A634. Model SL72B.

**\$89.50**

Less Cartridge and Base. Each	
No. 33A639. Model SL72B with Shure M93E Elliptical Cartridge. Each	\$89.51
No. 33A640. Model SL72B with Pickering V15/ATE-3 Elliptical Cartridge. Each	\$89.51
No. 33A641. Model SL72B with Empire 888E Cartridge. Each	\$89.51
No. 33A642. Model SL72B with Shure M91E Elliptical Cartridge. Each	\$94.50

### MODEL SL65B 4-SPEED AUTOMATIC TURNTABLE

Recognized as a "best buy" among all automatic turntables, it is the famous "OMKII" improved with the Synchro-Lab motor. Features cast, balanced, oversized turntable with large trim ring. Tubular dynamically balanced, counterweight adjustable tone arm. Stylus pressure adjustment assembly with precision rotated knurled optical type knob. Cueing and pause control. Lightweight cut-away shell with cueing pointer. Automatic anti-skating assembly, supersensitive trip with DuPont Delrin, interchangeable spindles. Automatic intermix operation when desired. Size: left to right 15 3/8" front to rear 13 1/8"; above motor board, 4 3/4", below motor board 2 7/8". Shpg. wt. 13 lbs. No. 33A541. Model SL65B Less Cartridge and Base.

**\$79.50**

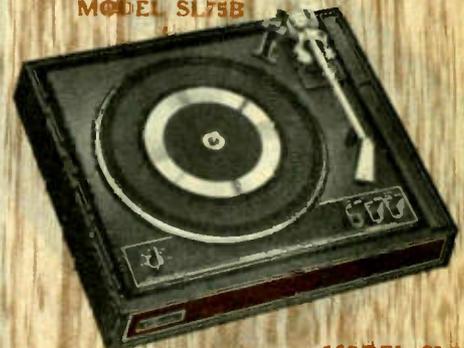
Net Each	
No. 33A635. Model SL65B Turntable with Shure M55E. Net Each	\$79.51
No. 33A558. Model SL65B Turntable with Shure M32E Cartridge. Net Each	\$79.51
No. 33A559. Model SL65B Turntable with Pickering V15/ACE-3 Elliptical Cartridge. Net Each	\$79.51
No. 33A600. Model SL65B Turntable with Shure M93E Cartridge. Net Each	\$84.50
No. 33A549. Model SL65B Turntable with Pickering V15/ATE-3 Elliptical Cartridge. Each	\$84.50
No. 33A601. Model SL65B Turntable with Empire 888E Cartridge. Net Each	\$84.50



MODEL SL95B



MODEL SL75B



MODEL SL72B



MODEL SL65B

# Garrard

## AUTOMATIC TURNTABLES AND ACCESSORIES



MODEL SL55B



MODEL 40B



MODEL 30



MODEL SP-20B



### MODEL SL55B 4-SPEED AUTOMATIC TURNTABLE

Features synchronous speed and other advanced features such as viscous damped cueing . . . priced within reach of budget conscious music lovers. Has oversize turntable with decorative turntable mat, rigid, lightweight aluminum tonearm with slide-in cartridge holder, no locking screws or chance of misalignment. New fully adjustable anti-skate control, and viscous damped cueing action lowers arm gently to prevent record and stylus damage, stylus force adjustment and scale allow more positive and accurate settings.

Supplied with 2 spindles, one for single play, the other for automatic intermix. Size: left to right 14 $\frac{7}{8}$ " , front to rear 12 $\frac{3}{4}$ " above motor board 4 $\frac{3}{4}$ " below motor board 2 $\frac{7}{8}$ ". Shpg. wt. 11 lbs.

No. 33A542. Model SL55B Less Cartridge and base.	<b>\$59.50</b>
Net Each	
No. 33A636. Model SL55B Turntable with Shure M55E Cartridge. Net Each	\$59.51
No. 33A551. Model SL55B Turntable with Shure M32E Cartridge. Net Each	\$59.51
No. 33A552. Model SL55B Turntable with Pickering V15/ACE-3 Cartridge. Net Each	\$59.51
No. 33A587. Model SL55B Turntable with Empire 808E Cartridge. Net Each	\$59.51
No. 33A588. Model SL55B Turntable with Shure M93E Cartridge. Net Each	\$64.50
No. 33A589. Model SL55B Turntable with Pickering V15/ATE-3 Cartridge. Net Each	\$64.50
No. 33A590. Model SL55B Turntable with Empire 888E Cartridge. Net Each	\$64.50

### MODEL 40B AUTOMATIC TURNTABLE

Designed for outstanding performance and versatility in systems where space must be considered. Features lightweight, tubular aluminum tonearm with isolated counterweight, and new viscous damped single-lever cueing/pause control which prevents record wear and stylus damage, adjustable pressure control with visible scale and slide-in cartridge holder. Has two spindles, short for manual, long for automatic, Automatic intermix operation.

4-pole shaded "induction surge" motor. Size: 14 $\frac{7}{8}$ " left to right, 12 $\frac{1}{2}$ " front to rear; 4 $\frac{5}{8}$ " above and 2 $\frac{7}{8}$ " below motor board. Shpg. wt. 9 lbs.

No. 33A530. Model 40B Less Cartridge and Base.	<b>\$44.50</b>
Net Each	
No. 33A637. Model 40B Turntable with Shure M44E Cartridge. Net Each	\$44.51
No. 33A603. Model 40B Turntable with Pickering V15/AC-3 Cartridge. Net Each	\$44.51
No. 33A604. Model 40B Turntable with Empire 888 Cartridge. Net Each	\$44.51
No. 33A638. Model 40B Turntable with Shure M55E Cartridge. Net Each	\$49.50
No. 33A606. Model 40B Turntable with Pickering V15/ACE-3 Cartridge. Net Each	\$49.50
No. 33A607. Model 40B Turntable with Empire 808E Cartridge. Net Each	\$49.50

### MODEL 30 4-SPEED AUTOMATIC TURNTABLE

Now, Garrard quality and features selling for the price of lower quality record changers. Features new oversized weighted turntable, one-piece case aluminum tone arm, simple, accessible stylus pressure adjustment, super sensitive trip mechanism with dupont Delrin, 4-pole shaded "induction surge" motor, intermix operation. Two spindles, short for manual; center drop for automatic play. Ultra compact size: left to right 14 $\frac{1}{2}$ " ; front to rear 12 $\frac{3}{4}$ " ; above motor board 4 $\frac{3}{4}$ " ; below motor board 2 $\frac{1}{4}$ ". Shpg. wt. 12 lbs.

No. 33A500. Less Base.	
Model 30 Complete with Ceramic Diamond Stylus Cartridge. Each	<b>\$39.50</b>

### MODEL SP-20B 4-SPEED MANUAL RECORD PLAYER

Ideal for manual playing records through high fidelity systems. Compact and efficient, recommended for quality audio-visual applications. High demand for a unit of this quality and low price has brought this unit into being. This player should not be compared with other low price, single play turntables as durability and ruggedness have been fully engineered into it, to provide years of trouble-free service. Features interchangeable plug-in head for any cartridge, magnetic or ceramic. Full size weighted turntable. Automatic return of arm to rest and shut-off after play. Arm is semi-counterbalanced with adjustable stylus pressure. Compact size only 14 $\frac{3}{8}$ " left to right, 12 $\frac{1}{2}$ " front to rear, 3 $\frac{1}{2}$ " above and 2 $\frac{1}{8}$ " below motor board. Complete with line cord, 2 audio cables, plug-in shells. Shpg. wt. 10 lbs.

No. 33A531. Model SP-20B Less Cartridge and Base.	<b>\$37.50</b>
Net Each	
No. 33A591. Model SP-20B Record Player with Shure M75-6 Cartridge. Net Each	\$37.51
No. 33A592. Model SP-20B Record Player with Pickering V15/AC-3 Cartridge. Net Each	\$37.51
No. 33A593. Model SP-20B Record Player with Empire 888 Cartridge. Net Each	\$37.51

### ACCESSORIES FOR GARRARD TURNTABLES

① **NEW COORDINATED BASES.** With new covered compartments for storage of full complement of spindles. Made of simulated ebony and walnut with silver trim. An attractive companion accessory which enhances the appearance of each Garrard model. Can be used on top of furniture or housed in cabinetry. Provisions for easy mounting of drawer slides have been built into the underside of the base. Wt. 3 lbs.

No. 33A579. Model B1. For 20, 30, 40, 50, 60 Series, SL65 and SL55 turntables. Each	\$5.50
No. 33A580. Model B2. For SL95B, SL75B, SL72B. Each	\$6.50
Model B1P and B2P are identical to bases above but automatically turns off amplifier when last record has played. Front mounted switch permits use of amplifier without changer.	
No. 33A581. Model B1P. For SL65, SL55, 40, 30, 20, 60 and 50 Series. Net Each	\$14.95
No. 33A582. Model B2P. For SL95, SL75, SL72B. Net Each	\$15.95

② **MOUNTING BOARDS.** Smooth sanded unfinished wood mounting boards. Overall size 16 x 18". For use in cabinet mounting. Can be trimmed to size.

No. 33A533. MB10. For SL65, SL55, 20, 30, 40, 50 and 60 series. Each	\$2.25
No. 33A567. MB11. For SL75, SL72B, SL95. Each	\$2.25

③ **NEW DUST COVERS.** Slides on bases even when vertical space is limited by bookshelf, etc. Can be in place while stack of records are playing. Fits only new coordinated bases listed above. Coordinated with Garrard bases above only. Wt. 2 lbs.

33A584. Model D2. For SL95, SL75, Lab 80, 70, 88 Series and Type A. Net Each	\$6.50
No. 33A583. Model D1. For SL65, SL55, 20, 30, 40, 50 and 60 Series, AT6, Autoslim, SLX. Each	\$5.50

④ <b>45 RPM AUTOMATIC SPINDLES.</b>	
No. 33A643. FLRS35. For SL65B, SL55B, 40B, 30, SLX2, X10. Each	\$1.95
No. 33A547. LRS25. For SL95B, SL75B, SL72B, SLX3, SL95, SL75. Each	\$3.80
No. 33A644. F40. For X11. Each	\$1.95

<b>EXTRA CARTRIDGE CLIPS</b>	
No. 33A543. C1. For SL75, AN75B. Each	\$1.75
No. 33A544. C2. For SL95, SL95B, SL72B, SL65B, SL55B, 40B, SP20B. Each	\$1.75

# NEW DUAL AUTOMATIC PROFESSIONAL TURNTABLES

**1¢ SALE EXTRA BONUS**



**DUAL MODEL 1219**  
LESS CARTRIDGE AND BASE **\$159.50**

The only automatic turntable with perfect 15° stylus tracking, true four-point gyroscopic gimbal, 8 3/4" tonearm and separate anti-skating control for both conical and elliptical styli. Professional synchronous/continuous pole motor drives full 12" diameter 7 lb. turntable with absolute accuracy regardless of line voltage. Other dual precision features include rotating single play spindle, pitch control for "tuning" records over a 6% range (demitone) for special purposes such as permitting synchronization with tape recorders, musical instruments, etc. Cue control system is silicone-damped for easy handling of records. Counter balance is elastically damped, has .01 gram click stops for precision balancing. Stylus overhang is fully adjustable for optimum positioning. Plays all 33 1/3, 45, and 78 RPM records manually or automatically. Multiple play spindle holds up to 6 records. Size: 10 1/2" x 12 3/4"; 6" above mounting board; 3" below mounting board. Shpg. wt. 30 lbs.

- No. 33A655. Dual 1219. Less Cartridge and Base. Each **\$159.50**
- No. 33A667. 1219 with Shure M93E Elliptical Cartridge. Each **\$159.51**
- No. 33A668. 1219 with Pickering V15/ATE3 Cartridge. Each **\$159.51**
- No. 33A669. 1219 with Empire 888E Cartridge. Each **\$159.51**
- No. 33A670. 1219 with Shure M91E Cartridge. Each **\$164.50**
- No. 33A671. 1219 with Pickering V15/AME Cartridge. Each **\$164.50**
- No. 33A672. 1219 with Empire 888TE Cartridge. Each **\$164.50**

**YOUR CHOICE OF MOST POPULAR CARTRIDGES ONLY 1¢ MORE!**



**DUAL MODEL 1209**  
LESS CARTRIDGE AND BASE **\$119.50**

All the features that have made Dual the first choice of hi-fi professionals for use in their own system. Flawless 1/2 gram tracking, low-mass torsionally rigid tubular tonearm, direct-dial tracking force, synchronous high-torque motor and pitch-controlled for "tuning" records over demitone range. Rotating single-play spindle, one-piece dynamically balanced nonferrous platter. Feather-touch cue-control for automatic and manual starts and many other features to provide you with the finest record playing equipment on the market today. Play all 3 record speeds, 33 1/3, 45 and 78 RPM manually, or up to six records automatically. Size: 10 1/2" x 12 3/4"; 6" above mounting board; 3" below mounting board. Shpg. wt. 30 lbs.

- No. 33A657. Dual 1209. Less Cartridge and Base. Each **\$119.50**
- No. 33A676. 1209 with Shure M93E Cartridge. Each **\$119.51**
- No. 33A677. 1209 with Pickering V15/AT3 Cartridge. Each **\$119.51**
- No. 33A678. 1209 with Empire 888E Cartridge. Each **\$119.51**

**EMPIRE 888E**  
REG. \$39.95

**SHURE M93E**  
REG. \$39.95

**PICKERING V15/ATE-3**  
REG. \$39.95



**DUAL MODEL 1212**  
LESS CARTRIDGE AND BASE **\$79.50**

Dual precision features and quality now available in the medium price range. The Dual 1212 shares many of the precision features of the more costly Dual Models. Features low-mass counterbalanced tonearm which tracks flawlessly as low as 1 gram. Direct-dial tracking force and synchronized anti-skating. Pitch control for all 3 speeds. Silicone-damped cue-control. Feather touch slide switch for automatic start and stop functions. Multiple play spindle holds up to six records. Handles 33 1/3, 45 and 78 RPM records manually or automatically. Hi-torque motor holds speed constant within 0.1% even when rotation varies ± 10%. Adjustable stylus overhang.

- Size: 10 1/2" x 12 3/4"; 6" above mounting board; 3" below mounting board. Wt. 30 lbs.
- No. 33A656. Dual 1212. Less Base and Cartridge. Each **\$79.50**
- No. 33A673. 1212 with Shure M93E Cartridge. Each **\$79.51**
- No. 33A674. 1212 with Pickering V15/ATE3 Cartridge. Each **\$79.51**
- No. 33A675. 1212 with Empire 888E Cartridge. Each **\$79.51**

## ACCESSORIES FOR NEW DUAL

- No. 33A658. WB12. Walnut Base for 1209 and 1212. Each **\$10.95**
- No. 33A659. WB93. Deluxe Walnut Base for 1209 and 1212. Each **\$12.95**
- No. 33A660. WB19. Walnut Base for 1219. Each **\$14.95**
- No. 33A661. DC2. Dust Cover for WB12 and WB93 Base. Each **\$10.95**
- No. 33A662. DC9. Dust Cover for WB19 Base. Each **\$12.95**

## AUTOMATIC TURNTABLES

- No. 33A663. AS12. 45 RPM. 7" Record-Automatic Spindle for 1212, 1209 and 1219 Turntables. Each **\$ 5.95**
- No. 33A664. AW3. Automatic Spindle for 12" Records. For 1212, 1209 and 1219 Turntables. Each **\$ 6.70**
- No. 33A665. MS1. Single Play Spindle for 1212. Each **70c**
- No. 33A666. RS1. Single Play Rotating Spindle for 1209 and 1219. Each **\$ 1.80**



## McDONALD MATCHED ASSEMBLY AUTOMATIC TURNTABLES

PRECISION CRAFTED IN GREAT BRITAIN . . . MORE FEATURES FOR THE MONEY THAN ANY OTHER CHANGER!  
CARTRIDGE MOUNTED, INSTALLED ON BASE, WIRED—READY TO PLUG INTO YOUR STEREO HI-FI SYSTEM



**BSR 600/XM44E SYSTEM** **\$89.50**

Deluxe automatic 4-speed turntable is loaded with important features for superb performance and operating convenience. Features precise cueing and pause control. Counterbalanced low-mass tonearm. Adjustable anti-skate compensation. Full heavy cast turntable. Plays records automatically or manually. Muting feature prevents pops and clicks during record-changing cycle. Automatic shut-off after record is played. Has dynamically balanced, resiliently mounted, hum-shielded, 4-pole induction motor. Overall dimensions: 15 1/4" W. x 13 3/8" D. x 7 1/4" H. including dust cover and base. Shpg. wt. 11 lbs. System includes Model 600 Turntable, Shure M44E Cartridge, PB-1 Power Base, DC-3 Dust Cover . . . complete, ready to plug-in. Operates on 115 V. 60 cy. AC. Shpg. wt. 11 lbs.

- No. 33A650. BSR System **\$89.50**



**BSR 500/XM44-7 SYSTEM** **\$69.50**

Excellent four speed automatic turntable offers deluxe features and performance, such as cueing, adjustable anti-skate, counterbalanced, low-mass tonearm for light-tracking. Plays all sizes and speeds of records automatically or manually. Muting feature prevents pops during change cycle. Has 4-pole induction motor which drives large turntable accurately. Jam-proof mechanism safeguards arm mechanism from damage even if tonearm is held during cycling operation. Automatically shuts off after last record. Includes 6' power cord, 4' twin-shielded audio cables. System includes BSR500A Automatic Turntable, Shure M44-7 Cartridge, PB-2 Standard Base and DC-2 Standard Dust Cover all mounted, ready to plug into your Hi-Fi Stereo System. Operates on 115 V. 60 cy. AC. Shpg. wt. 10 lbs.

- No. 33A651. BSR System **\$69.50**

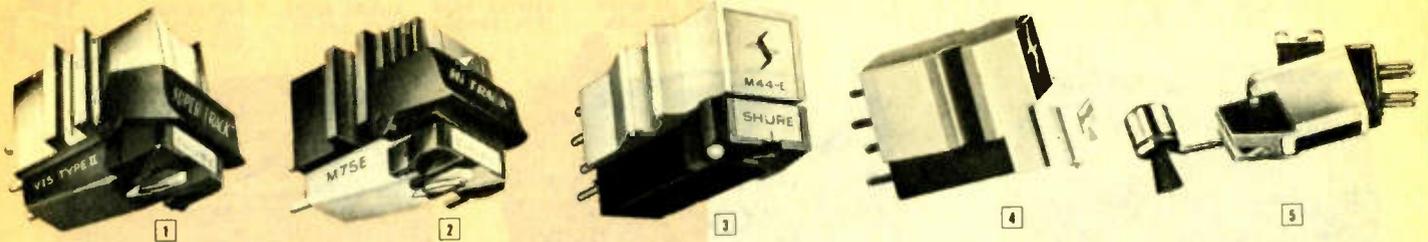


**BSR 300T/M75 SYSTEM** **\$44.50**

New low cost entry into the BSR, ready to use, automatic turntable systems. Plays automatically or manually all size and speed records. Finest features include low-mass tonearm with Shure "Hi-Track" M75 type magnetic stereo cartridge, factory set anti-skate, large turntable and 4-pole induction motor. Comes pre-mounted on attractive ebony base with walnut accent, pre-adjusted with all cables . . . ready to plug in and play. Operates on 115 V. 60 cy. AC. Overall size: 15 1/4" W. x 13 3/8" D. x 6 3/8" H. Supplied less dust cover. Shpg. wt. 11 lbs.

- No. 33A652. BSR System **\$44.50**
- No. 33A653. DC-2. Dust Cover for above. Each **\$5.00**
- No. 33A654. 45 RPM Spindle for all BSR changers with "Spindle Holder". Each **\$2.25**

# FINEST STEREO HIGH FIDELITY CARTRIDGES



## MOST POPULAR SHURE STEREO CARTRIDGES

① **SHURE V-15 TYPE II DYNETIC WITH ELLIPTICAL STYLUS**  
A vastly superior cartridge designed for the most critical audiophile. Manufactured under newly developed, unprecedented controls, inspections and techniques to provide "perfectionist" reproduction quality. Elliptical stylus tracks at 15°, retracts into cartridge when accidentally dropped or bounced. Built-in stylus guard. Response 20-25,000 Hz; output 3.5 MV; separation 25 db; diamond stylus dimensions .0007" x .0002". Tracking force 3/4 to 1 1/2 grams. **\$67.50**  
No. 33A5002. Each

② **SHURE M91E HI-TRACK ELLIPTICAL CARTRIDGE**  
Easy-mount design features only two pre-mounted screws and a slip in mounting bracket. Cartridge is Hi-Track Elliptical with optimized design parameters for trackability second only to the incomparable V-15 Type II. Bi-radial .0002" x .0007" diamond stylus. 20-20,000 Hz. Separation 25 db @ 1 KHz. Tracking force range 3/4 to 1 1/2 grams. Trackability specifications @ 1 gram: 20 cm/sec @ 400 Hz.; 28 cm/sec @ 1 KHz.; 26 cm/sec @ 5 KHz.; 18 cm/sec @ 10 KHz. Wt. 6 oz. **\$49.95**  
No. 33A5063. Each

③ **SHURE M93E EASY MOUNT ELLIPTICAL CARTRIDGE**  
Easy-mount design like M91E above. Hi-Track elliptical in the 1 1/2 to 3 gram tracking force range - an outstanding performer in automatic or manual turntables. Bi-radial .0004" x .0007" diamond stylus. 20-20,000 Hz. Separation 25 db @ 1 KHz. Tracking force range 1 1/2 to 3 grams. **\$39.95**  
No. 33A5062. Wt. 6 oz. Each

④ **SHURE M75E HI-TRACK DYNETIC WITH ELLIPTICAL STYLUS**  
Provides exceptional purity of music reproduction. Designed for use in the finest quality manual and automatic turntables. Retractable elliptical (.0007" x .0002") 15° diamond stylus for excellent tracking. Built-in stylus guard. Response 20-20,000 Hz; separation 25 db; output 6.6 MV. Tracks from 3/4 to 1 1/2 grams. **\$39.95**  
No. 33A5003. Each

⑤ **NEW SHURE M75-6 CARTRIDGE**  
Same as 75E cartridge listed above but with a .0006" conical stylus and a tracking force range of 1 1/2 to 3 grams. Wt. 6 oz. **\$24.50**  
No. 33A5061. Each

⑥ **SHURE M55E DYNETIC WITH ELLIPTICAL STYLUS**  
Developed for use in fine quality high fidelity systems with tone arms designed to track at 3/4 to 1 1/2 grams. Produces astonishing distortion free sound. Diamond elliptical stylus retracts into cartridge when excessive force is applied. Tracking angle 15°, response 20-20,000 cps; 6 MV output at 1,000 cps; separation over 25 db; stylus dimensions .0009" frontal radius, .0002" side contact radii. **\$29.95**  
No. 33A5004. Each

⑦ **SHURE M44E DYNETIC WITH ELLIPTICAL STYLUS**  
Designed for use in automatic turntables requiring a cartridge that will track in the 3/4 to 4 grams range. Diamond stylus tracks at 15°, retracts into cartridge when excessive force is supplied. Response 20-20,000 cps; separation 25 db; 9.3 MV output. Stylus dimensions .0004" x .0007". **\$24.95**  
No. 33A5005. Each

⑧ **SHURE M31E DYNETIC WITH ELLIPTICAL STYLUS**  
Newest member of Shure's family of fine cartridges. Designed for high quality tone arms to track at 1 to 2 grams. 15° diamond stylus has .0007" x .0002" dimensions. Freq. response 20 to 18,500 cps, 10 mv per channel output. 20 db channel separation. **\$27.50**  
No. 33A5006. Each

⑨ **SHURE M32E DYNETIC WITH ELLIPTICAL STYLUS**  
Same basic cartridge as M31E above, except designed for automatic turntables and record changers to track at 2 1/2 to 5 grams. 15° diamond stylus dimensions .0007" x .0004". 9 mv output per channel. Freq. response 20-17,500 cps with 20 db channel separation. **\$29.50**  
No. 33A5007. Each

⑩ **SHURE M44-7 DYNETIC**  
Finest of the new series of cartridges. Freq. resp: 20-20,000 HZ. Output voltage: 1000 Hz at 5CM/Sec. 11 millivolts per channel. Channel separation: more than 25 db at 1000 HZ. Recommended load impedance: 47,000 ohms per channel. Inductance: 720 millihenries. DC resistance: 630 ohms. Terminals: 4 (with loop pin for 3 terminal connections). Weight, 7 grams. Mounting standard 1/2". Tracking weight 1 1/2 to 3 grams. With .0007 inch radius diamond stylus. **\$19.95**  
No. 33A5000. Each

## PICKERING STEREO CARTRIDGES

Total performance from your records is now assured with the newly-designed XV-15 and V15/3 Dustomatic Series. The Dustomatic brush automatically cleans record grooves in advance of the stylus, never interfering with tracking force.

An entirely new moving system with Dynamic coupling of stylus to record, traces the cleaned grooves flawlessly, and produces the ultimate in natural sound.

⑪ **XV-15 SERIES.** "Top of the line" cartridges designed for superb performance, absolutely flat frequency response curve with extremely low tip mass. 10-25,000 cps freq. response, except XV-15/AME which is 10-30,000 cps at 4 mv., channel separation 35 db. Output 5-6 mv. "V-Guard" diamond stylus. **AME and AM** are for light tracking manual turntables, **ATE and AT** are for automatic turntables.

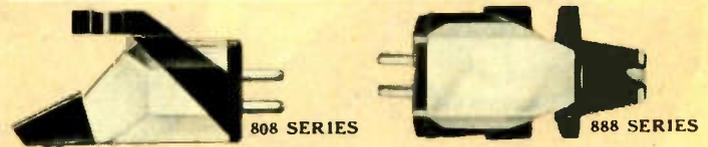
Stk. No.	Model	Tracking	Stylus	Diamond	Net Ea.
33A5008	XV-15/AME	3/4x1 1/2 Grams	Elliptical	.9x.2 Mil	\$49.95

⑫ **V-15/3 SERIES.** Micro-magnetic cartridges with V-Guard floating stylus. 20-25,000 cps freq. response. 35 db channel separation 5 to 6 mv output. **AME-3 and AM-3** are for manual turntables. **ATE-3 and AT-3** for automatic turntables, **ACE-3 and AC-3** for automatic changers.

Stk. No.	Model	Tracking	Stylus	Diamond	Net Ea.
33A5009	V15/AME-3	3/4x1 1/2 Grams	Elliptical	.9x.3 Mil	\$44.95
33A5010	V15/AM-3	1-3 Grams	Conical	.7 Mil	\$4.95
33A5011	V15/ATE-3	2-5 Grams	Elliptical	.9x.4 Mil	\$9.95
33A5012	V15/AT-3	2-5 Grams	Conical	.7 Mil	\$9.95
33A5013	V15/ACE-3	3-5 Grams	Elliptical	.9x.4 Mil	\$9.95
33A5014	V15/AC-3	3-7 Grams	Conical	.7 Mil	\$4.95

## REPLACEMENT DIAMOND NEEDLES FOR POPULAR MAGNETIC CARTRIDGES

Stk. No.	Type	Make	For Cart. No.	Tip	Net Ea.
33A5015	N3D	Shure	M7D-M3D	.7 Mil	\$7.95
33A5016	N21D	Shure	M3D	.7 Mil	11.00
33A5017	N55E	Shure	M55E	.9x.2 Ell.	17.75
33A5018	N44E	Shure	M44E	.7x.4 Ell.	12.50
33A5001	N44-7	Shure	M44-7	.7 Mil	9.75
33A5019	N75E	Shure	M75E	.7x.2 Ell.	14.95
33A5020	VN15E	Shure	V15 Type	.7x.2 Ell.	27.00
33A5021	N31E	Shure	M31E	.7x.2 Ell.	14.95
33A5022	N32E	Shure	M32E	.7x.4 Ell.	14.50
33A5065	N91E	Shure	M91E	.7x.2 Mil	24.50
33A5066	N93E	Shure	M93E	.4x.7 Mil	19.50
33A5068	N75-6	Shure	M75	.6 Mil	11.35
33A5023	S880P-6RD	Empire	880P	.6 Mil	12.95
33A5024	S880-7RD	Empire	880 & 888	.7 Mil	10.95
33A5064	S888E-ERD	Empire	888E	.4x.7 Mil	16.95
33A5025	D3807AT	Pickering	U38AT	.7 Mil	9.90
33A5026	D1507AM-3	Pickering	V15/AM-3	.7 Mil	14.95
33A5027	D1507AT-3	Pickering	V15/AT-3	.7 Mil	13.75
33A5028	D1500AME-2	Pickering	V15/AME-2	.9x.2 Ell	19.90
33A5029	D1507AT-2	Pickering	V15/AT-2	.7 Mil	10.95
33A5030	D1500ATE-2	Pickering	V15/ATE-2	.9x.4 Ell	17.95
33A5031	DR-7	G.E.	VR-1000-7	.7 Mil	6.83
33A5032	DR-5D	G.E.	VR-1000-5	.7 Mil	8.20



## EMPIRE STEREO CARTRIDGES

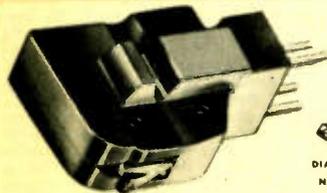
**NEW 808 CONICAL.** Has .007" conical-tip diamond stylus. Response: 10-20,000 Hz. Output Voltage: 8.0 mV per channel. Separation: 30 db. Compliance: 8 x 10<sup>-8</sup> cm/dyne. Tracks 1-5 grams Wt. 4 oz. **\$19.95**  
No. 33A5056. Each

**NEW 808E ELLIPTICAL.** An excellent choice for economy automatic turntables. Boasts 15° .0004 x .0009" elliptical diamond stylus. Frequency Response: 10 to 25,000 Hz. Output Voltage: 9.0 mV per channel. Channel separation: 30 db. Compliance 12 x 10<sup>-8</sup> cm/dynes. Tracks from 1 to 4 grams. Shpg. wt. 4 oz. **\$29.95**  
No. 33A5057. Each

**NEW 888TE ELLIPTICAL.** Superb cartridge ideal for high performance manual and automatic turntables 15° .0002 x .0007" elliptical diamond stylus. 6-32,000 Hz. Output: 8.0 mV. Channel separation: 30 db. Compliance: 25 x 10<sup>-8</sup> cm/dyne. 1/2 gram. 4 oz. Wt. 7 grams. **\$49.95**  
No. 33A5058. Each

**NEW 888 STEREO-MONO CARTRIDGE.** Has 15° .7 mil radius-conical diamond stylus. Freq. Resp. 12 to 25,000 Hz. Output Voltage 8.0 mV. Channel separation more than 30 db. Load Imp. 47,000 ohms. Wt. 7 grams. Tracking Force 3/4 to 5 grams. Wt. Compliance: 10 x 10<sup>-8</sup> cm/dyne. **\$24.95**  
No. 33A5059. Each

**NEW 888E ELLIPTICAL.** Superb cartridge. Has 15° .4 x 9 mil bi-radial elliptical diamond stylus. Freq. Resp. 10 to 30,000 Hz. Output 8 mV. Channel separation more than 30 db. Load Imp. 47,000 ohms. Tracking Force 3/4 to 4 grams. Compliance: 15 x 10<sup>-8</sup> cm/dyne. Wt. 7 grams. **\$39.95**  
No. 33A5060. Each



## PRICE SLASH! FAMOUS SHURE M3D STEREO MAGNETIC CARTRIDGE



REG. \$15.75  
SAVE \$7.80

**\$7.95**

Perfect replacement for the popular Shure M7D, Pickering U38AT, Empire 880, or any other equivalent high fidelity stereo magnetic type cartridge. There is absolutely no compromise in quality or performance at B-A's special low, low price. Frequency response 20 to 20,000 cps. 3-5 grams tracking. More than 20 db separation at 1000 cps. Output voltage 5 mv per channel at 1000 cps. Recommended load impedance: 47,000 ohms. Terminals: 4 terminals adaptable to 3 terminal arms. Uses Shure N3D or N21D standard replacement diamond needles. **\$7.95**  
No. 33A5034. Special

**ALL SOLID-STATE 70 WATT  
AM/FM/MPX  
STEREO RECEIVER**  
NOW COMPLETE WITH WALNUT ENCLOSURE

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

**FREQUENCY RESPONSE 25-20,000 HZ**

Behind the beautiful brushed aluminum finished panel is a powerful, fully transistorized stereo receiver, employing 32 transistors and 17 diodes to develop a magnificent full-throated stereo sound that will satisfy the most critical ear.

This powerful unit can handle several additional remote speakers to provide music throughout the home. Features automatic stereo indicator light, tuning meter, 5 position input selector switch. In addition to normal controls this fine unit has tape in-out, noise filtering, mono/stereo, auto, AFC. A full complement of terminal connections on rear panel makes provisions for any desired input or output connection.

Specifications: 25-20,000 Hz @ 1.5 db. Has 18 silicon transistors, 20 germanium transistors, 4 silicon diodes, 12 germanium diodes, 1 zener diode. Frequency range: FM 88-108 MC; AM 535-1605 KC. Sensitivity: FM 2.5 mv, AM 15 mv for 20 db quieting. MPX separation: better than 35 db @ 1 KC



100% modulation. FM harmonic distortion less than 1.5% @ 1 KC 100% modulation. Bandwidth input: mag. 2 mv, crystal 160 mv, aux. 160 mv for max. output. Output power 35 watts per channel IHF. Audio distortion less than 1% @ 1 KC. Tone controls: Bass 12 db —10 db @ 50 cps; Treble 12 db —10 db @ 10K Hz. Scratch filter —12 db @ 10K Hz. Loudness control 3 db @ 10K Hz, 11 db @ 50 Hz (volume —30 db). Hum and noise —60 db, aux. —75 db. Residual noise 2 mv @ min. volume control. Controls: Tuning, Balance, Bass, Treble. Switches: Power, Input Selector, AFC, Mode, Loudness On-Off, Noise Filter, Tape On-Off. Power consumption: 117 V, AC 50/60 cps, 10 watts (no input). Terminals on back: speakers, tape-in, tape-out, crystal phono, mag. phono. Fine quality import. Size 5" H. x 16 1/2" W. x 10" D.

Shpg. wt. 18 lbs. **\$159.95**  
No. 33A325. With Walnut Enclosure. Special Net Each.....

**40-WATT SOLID STATE  
FM/AM-FM  
STEREO RECEIVER**

**\$129<sup>95</sup>**  
WITH WALNUT CABINET

**FREQUENCY RESPONSE 15-20000 HZ**

Total performance incorporating every feature and refinement for perfect listening pleasure at lowest price ever.

Housed in hand-rubbed walnut enclosure. Its 20 watts per channel output power is sufficient to drive a set of powerful speakers with all the fidelity provided by its wide frequency response. Automatic switch-over from monoaural to stereo reception is controlled through the multiplex circuitry, and is signalled by the stereo indicator light. Precise tuning is accomplished with the aid of the tuning meter. Earphone jack is augmented by the speaker cut-off switch. AFC switch and 5-position input selector switch complete a front panel coverage that makes operation simplified and convenient.



Specifications: Freq. resp. 15-20,000 HZ -3 db. Solid state devices: 23 transistors, 4 silicon diodes, 16 germanium diodes. Frequency range: FM 88-108 MC; AM 535-1605 KC. Sensitivity: FM 2 mv, AM 12 mv for 10 db quieting. MPX separation, better than 42.7 db @ 1 KC. 100% modulation. FM — H.D. less than 1.5% @ 100% modulation. Bandwidth input mag. 6 mv, crystal 150 mv for max. output. Hum and noise: phono -55 db; tape aux. -70 db. Controls: Tuning, Volume, Balance, Treble, Bass. Switches: Power, Input Selector, AFC. Connection for speakers, tape-in, tape-out, magnetic phono, crystal phono. Highest quality import. Size 4 1/2" H. x 15" W. x 9" D. 117 V. 60 cy. AC.

No. 33A346. Wt. 18 lbs. **\$129.95**  
Net Each.....

**MATCHING KENWOOD AMPLIFIER AND AM/FM STEREO TUNER**



**KENWOOD**

**KT1000 FET AM-FM SOLID STATE  
STEREO TUNER \$89<sup>95</sup>**

WITH MATCHING SIMULATED WALNUT CABINET

- Large Tuning Meter, Stereo Indicator Light.
- Frequency Response: FM 20 Hz to 15,000 Hz.

Diminutive darling of the Kenwood line... size notwithstanding, KT1000 delivers excellent stereo reception and offers all the delights of separate components. Ideal for use with KA-2000 amplifier or for any existing stereo system.

Specifications: useable sensitivity 3 mv. Freq. resp. 20-15,000 Hz ± 0 — 2 db. H.D. less than .97 S/N ratio better than 60 db at 100% modulation. Image rejection better than 50 db. Stereo separation better than 30 db at 1,000 Hz. Output voltage 1 V. Output impedance 200 ohms. Features stereo noise filter, FM stereo/mono auto switching. AM section: sensitivity (IHF) 30 mv. Selectivity (IHF) better than 25 db. Output voltage .4 volt. Power consumption 110-120 V. 50/60 Hz. Dimensions: 10 1/4" W. x 4 3/8" H. x 10 7/8" D. Wt. 8 1/2 lbs.

No. 33A403. Shpg. wt. 12 lbs. **\$89.95**  
Net Each.....

**KENWOOD**

**KA-2000 40 WATT  
SOLID STATE  
STEREO AMPLIFIER \$89<sup>95</sup>**

WITH MATCHING SIMULATED WALNUT CABINET

- Frequency response: 20 to 30,000 Hz ± 2 db.
- Power (IHF) 40 watts at 40 watts at 4 ohms.
- Separate bass, treble and volume controls.

Miniature module and companion to the KT1000, this mighty mite offers an excellent low budget opportunity to enjoy the immeasurable improvement achieved with separate components. Specifications: H.D. less than .8% at rated output. IM distortion less than .8% at rated output. Inputs: Phono (2 mv), Aux. tuner (130 mv), Tape play (130 mv). Hum and Noise: phono 60 db. Separate bass and treble control. Outputs: speaker 4, 8, 16 ohms, tape rec., phono jack, AC outlet. Switch: input selector, loudness control, mode, tape monitor, power. Power consumption 110-120 V. 50/60 Hz. Size: 10 1/4" W. x 4 3/8" H. x 9 3/8" D. Wt. 10 lbs.

No. 33A402. **\$89.95**  
Net Each.....



# KENWOOD

*the sound approach to quality*



## KENWOOD

### ALL SOLID STATE 48 WATT AM-FM STEREO RECEIVER

- 2 FET's, 3-Gang Tuning Condenser, 2 IC's.
- Handsome Styling

# \$179<sup>95</sup>

MODEL  
KR-44

COMPLETE WITH  
METAL ENCLOSURE

Budget priced but not budget quality! Full 48 watts music power delivers enough power to drive two stereo speaker systems and incorporates ample tape, phono and other inputs for the most complete stereo system. IF circuits feature exceptional FM sensitivity and selectivity. Features Kenwood's exclusive power transistor protection circuit.

**SPECIAL FEATURES:** Tuning and FM stereo indicator; Rocker switches regulate loudness control, noise filter, tape monitor and stereo mono mode; Front panel dubbing/tape recording jack and stereo headphone jack; Silicon power transistor amplifier; 300 ohms and 75 ohms FM antenna inputs; Center channel output; (U.S.Pat.) Power transistor protection circuit; 2 pairs of stereo speaker output terminals for 2 sets of stereo speakers and front panel speaker selector switch (A speakers, B speakers, A-B speakers, headphones). Handsome simulated walnut finish cabinet included in price of unit.

**SPECIFICATIONS: Tuner Section:** FM: Sensitivity (IHF) 2.2 uV; HD less than .8%; SN ratio better than 60 db; Image rejection better than 70 db;

Selectivity better than 40 db; Stereo separation better than 30 db @ 1,000 Hz; AM: Sensitivity (IHF) 25 uV @ 1,000 kHz; Image rejection 40 db @ 1,000 kHz; Selectivity better than 25 db. **Amplifier Section:** Total Music power (IHF) 48 watts at 4 ohms, 40 watts at 8 ohms; Distortion—HD less than .8% at rated output, IM less than .8% at rated output; Freq. resp. 20 Hz to 50,000 Hz  $\pm$  2 db; Input sensitivity MAG 2.5 mV (Tape Play 140 mV), AUX. 140 mV; Recording output 140 mV, 35 mV, (DUBBING) 140 mV; Maximum input signal 180 mV (P.P. 1,000 Hz) at MAG input; Hum and noise: Phono (MAG) 60 db; AUX. 70 db; Speaker impedance 4, 8, 16 ohms; Bass and Treble Control; Noise filter 3,000 Hz cutoff; Loudness Control + 8 db at 100 Hz, + 3 db at 10,000 Hz. Power voltage: AC 110-120 V/220-240 V, 50/60 Hz. Power consumption: 105 watts at full power, 20 watts at no signal. Dimensions: 16 1/2" W. x 5 1/2" H. x 12 1/2" D. Wt. 20 lbs.

No. 33A404, Model KR-44 with Metal Enclosure. Net Each..... \$179.95



## KENWOOD

### 75 WATT AM/FM SOLID STATE STEREO RECEIVER

- 2 IC FM IF Stages, 2 Field Effect Transistors.
- 4 Gang Tuning Condenser Super-Sensitive Front-End.
- Keyboard style control.

# \$239<sup>95</sup>

MODEL  
KR-77

INCLUDING HANDSOME  
SIMULATED WALNUT  
FINISHED CABINET

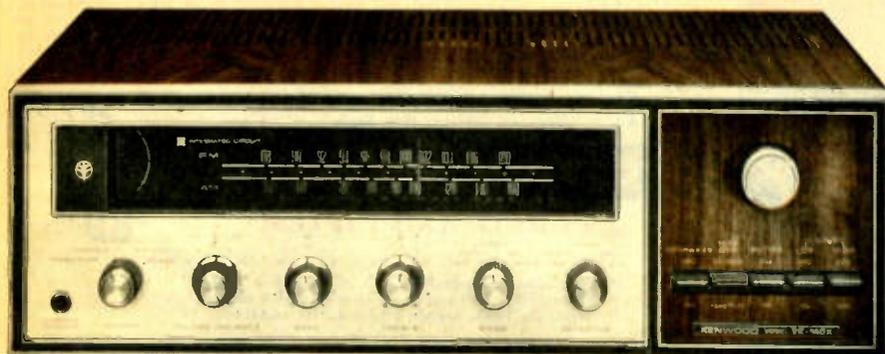
Most popular of all Kenwood receivers. Offers a multitude of professional features found only in the \$300.00 and up receivers. Two field effect transistors, 4-gang tuning condenser and two integrated circuits, FM IF stages combine to offer outstanding sensitivity and astonishing selectivity. Special features include tuning meter and FM stereo indicator. Unique keyboard controls regulate inter-station muting circuit, loudness control, low and high filter. Front panel dubbing/tape recording jack and stereo headphone jack.

**Specifications:** FM tuner: sensitivity (IHF): 1.9 mv H.D. less than .8%. S/N better than 60 db; image rejection better than 70 db; separation better than 35 db at 1,000 Hz. AM tuner: sensitivity (IHF) 15 mv at 1,000 Hz;

image rejection 90 db at 1,000K Hz. Amplifier section: music power (IHF) 75 watts at 4 ohms, 56 watts at 8 ohms; H.D. and IM distortion less than .5% at rated output. Frequency response: Main input 15 Hz to 50,000 Hz  $\pm$  1.5 db. High level input 20 Hz to 30,000 Hz  $\pm$  1.5 db. Input sensitivity: Mag. 1 and 2: 2 mv; Tape 200 mv; Tape head 2.35 mv; Auxiliary 200 mv. Recording output 200 mv and 35 mv. Speaker impedance 4, 8, 16 ohms. Separate bass and treble control high and low filter, loudness control. Power voltage 110-120/220-240 V. 50/60 Hz.

Size 16 1/2" W. x 5 1/2" H. x 12 1/2" D. Wt. 23 lbs.

No. 33A399, Model KR-77. Net Each..... \$239.95



## KENWOOD

### 200 WATT FM/AM SOLID STATE STEREO RECEIVER

- FET and 4 IC circuits.
- Freq. Resp. Amplifier Main Input: 8 Hz to 120,000 Hz  $\pm$  1.5 db.
- 200 Watts (IHF) at 4 ohms.
- 4 Gang Tuning Super-Sensitive Front-End.

# \$349<sup>95</sup>

MODEL  
TK-140X

INCLUDING HANDSOME  
SIMULATED WALNUT  
FINISHED CABINET

The ultimate in stereo receivers. Designed for those whose discriminating taste demands the finest. Delivers crisp clear tones and vibrant overtones. Heavy fly-wheel tuning. Decorator panel that switches from opaque to a blue/green, when turned on, features large tuning meter with stereo indicator, unique keyboard controls inter-station muting circuit, loudness control, tape monitor, low and high filter, smart simulated walnut cabinetry. All impart an elegance befitting such a masterpiece of craftsmanship. Extremely sensitive FM section 1.7 mv plus high image rejection (better than 100 db) combined with extra sensitive AM section 1.5 mv at 1,000 Hz give

this receiver an unsurpassable front end. The amplifier section is extremely high quality with frequency response of 8 Hz to 120,000 Hz  $\pm$  1.5 db on the main input. Provided are inputs for magnetic cartridges, tape heads. There is absolutely no input source that cannot be used or controlled from its optimum performance. Two sets of speaker outputs are provided for as well as middle channel output. Operates on 110-120 V. 50/60 Hz. Size 16 1/2" W. x 5 1/2" H. x 12 1/2" D. Wt. 28 1/2 lbs.

No. 33A401, Model TK-140X. Net Each..... \$349.95

Two Years Parts and Labor Warranty . . . Just Return to Nearest Warranty Station

# Sansui® the world's finest receivers

MODEL 2000

## AM/FM MULTIPLEX STEREO RECEIVER

# \$299<sup>95</sup>

- 100 watts ± 1 db (IHF) power.
- FET front end with 4 gang variable condenser.
- Frequency response: 15-40,000 HZ ± 1 db.

It is not often a piece of high fidelity equipment receives a glowing report from the famous Hirsch-Houck Laboratories. In the September 1968 Hi Fi Stereo Review we quote "The styling of the Sansui Model 2000 is in our opinion, exceptionally handsome and tasteful. What impressed us, however; was the effortless way in which it met or surpassed practically every specification."

The 2000 has 2 tuned R. F. stages in the FM section; one an FET. There is also a 4 stage IF amplifier. The AM tuner has a tuned R.F. stage and two I.F. stages with clean and well-balanced sound with adequate sensitivity for use even in suburban locations. All audio inputs (including tuners) pass through a 2-stage pre-amp. Magnetic phone and tape head inputs are equalized for RIAA and NAB characteristics.

Other features: Direct tape monitor, DIN connector, headphone jack, AM local-distant switch, AM ferrite bar antenna, high-and low-cut filters, mode



switch and selector switch, meter tuning, heavy fly-wheel tuning, FM 5CA filter. Walnut case optional: C-6.

Specifications: Power output—music power (IHF): 100W ± 1 db at 4 ohms, HD less than 0.8% at rated output. Input sensitivity (for rated output): phono: 2.2mv ± 3db, tape head; 2.0 mv ± 3 db, AUX: 150 mv ± 3db, tape monitor (PIN): 150 ± 3 db, tape monitor (DIN): 150 mv ± 3db. Hum and noise (IHF): phono: better than 70 db. Output impedance: from 4 to 16 ohms. Controls and switches: bass control: from +13 db to -13 db at 10,000 Hz, loudness control: +8 db at 50 Hz, +3 db at 10,000 Hz. (Volume control at -30 db), low filter: -10 db at 50 Hz, high filter: -10 db at 10,000 Hz. Mode Switch: Stereo Norm Stereo Rev, Mono L, Mono R, Selector Switch: 1, tape head 2, phono 3, AM 4, FM 5, FM auto 5, AUX, Speaker Switch: 1, A-system 2, B-system, 3, A + B system 4, off. No. 33A414.

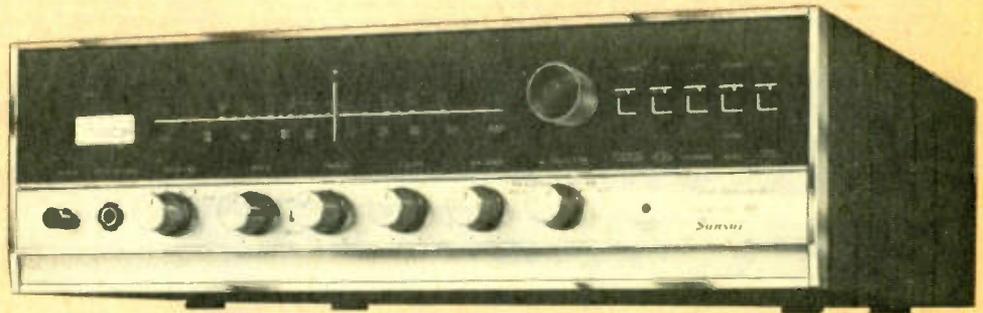
**\$299.95**

Model 2000, Net Each

# Sansui®

## 70 WATT AM/FM MULTIPLEX STEREO RECEIVER

# \$259<sup>95</sup>



This striking solid state receiver introduces a whole new performance standard in the long neglected medium-to-high power range between 40 and 100 watts. From its FET front-end for increased FM sensitivity and selectivity, to its ability to handle two speaker systems simultaneously, to its handsome black window design, the Sansui 800 offers the kind of performance and features at 70 watts that many receivers over 100 watts lack. Plus the kind of uncompromised engineering that makes a Sansui receiver a standout in any power range: a wide 20 to 35,000 Hz power bandwidth, a distortion factor that never exceeds 1%, and a channel separation figure of better than 35 db. Glance at the 800's many other features... its newly developed noise canceler, extra long tuning dials, short-proof speaker terminals, and 75 and 300 ohm antenna terminals. Other Convenient Features: High filter to eliminate scratch and surface noise. Loudness control to compensate for audible balance at low listening levels. DIN socket for convenient tape recorder hookup. Tape monitor switch to permit quality comparison between the recording and the original program while recording. Stereo headphone jack on the front panel for private listening. Noiseless push-button switches. Compare with any other receiver near the 70 watt level. Only then will you

be able to fully appreciate the Sansui 800 as one of the world's truly great receivers.

Specifications: Audio Section: Power output, Music Power (IHF): 70 W. ± 1 db at 4 ohms; HD less than 0.8% at rated output; ID less than 0.8%; Freq. Resp: Power Amplifier Section 15-50K Hz ± 1 db. Aux: 20-80K Hz ± 1 db. Hum and Noise (IHF) better than 70 db. Input Sensitivity: Phono 2.2 mV ± 3 db, Aux. 150mV ± 3 db, Tape Monitor (Pin Jack) 150 mV ± 3 db, Tape Monitor (DIN Jack) 150 mV ± 3 db. Output impedance 4-15 ohms. Equalizer: Phono RIAA, NF type. Controls and Switches: Bass, Treble, Loudness Controls; High Filter, Selector, Speaker and Mode Switches. Tuner Section: FM: Freq. Range: 88-108 MHz; Sensitivity 2uV ± 3 db (20 db quieting); HD less than 1%; Signal to noise ratio better than 50 db; Selectivity better than 45 db; Capture Ratio (IHF) 3 db. AM: Freq. Range 535-1,605 KHz; Sensitivity (IHF) 22 uV ± 3 db @ 1,000 KHz; Selectivity better than 20 db at 1,000 KHz. Semiconductors: Transistor and FET-36; Diodes - 20; Varistors - 6. Power voltage: 100, 117, 220 and 250 V. 50/60 Hz. Dimensions: 4 1/2" H. X 15 1/4" W. X 13 1/8" D. Wt. 23 lbs.

**\$259.95**

No. 33A413, Model 800, Net Each

# harman kardon

## "NOCTURNE" THREE THIRTY 90 WATT AM/FM STEREO SOLID STATE RECEIVER

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

LESS ENCLOSURE



The Nocturne Three Thirty is the first AM/FM stereo receiver which provides power sensitivity and ultra-wide band sound for less than \$250.00. The superior sound of this unit is a direct result of its wideband. Some manufacturers clip off the high and low frequencies beyond 20 and 20,000 Hz because they feel they are unimportant. Careful listening tests reveal that this clipping produces distortion in the audible frequencies which mutes the sound. The Three Thirty faithfully reproduces frequencies well beyond the usual accepted limits of human hearing to give extra realism to the sound you can hear. That's why the Nocturne Three Thirty's sound is cleaner, more transparent, more sharply defined, you can hear and feel the difference. Features include: Special electronic circuit automatically switches FM tuner to stereo the moment a stereo broadcast is received and special stereo indicator light lights up. High speaker damping controls excessive speaker excursion to avoid distortion during sharp bursts of sound. This results in clean, tight bass. Contour for low-volume listening maintains full bass response even at levels where bass normally falls off. Tuning meter shows when you have tuned to strongest and clearest signal on AM and FM. Separate Bass and Treble tone controls. Speaker switch permits operation of

one set of speakers or 2 sets at same time, for stereo in two rooms simultaneously. Headphone receptacle permits personal listening. Continuously variable balance control lets you adjust stereo balance to suit acoustic requirements of your room. Tape Monitor Switch for instant comparison of recorded material and original program. Illuminated call outs indicate function that is in operation: AM, FM, FM Stereo, Phono, Aux. Heavy, counter-weighted flywheel makes tuning smooth as silk.

Specifications: Music Power Output: 90 Watts, IHF @ 4 ohms, ± 1 db; 65 watts, IHF, @ 8 ohms, ± 1 db; Freq. Resp: ± 1 1/2 db 7-50K Hz @ 1 watt; Hum and Noise: 90 db; Intermodulation Distortion: Less than 0.8%; Usable FM Sensitivity: 2.7 Microvolts, IHF; Image rejection: better than 45 db; Spurious Response Rejection: 75 db; Multiplex Separation: 30 db; H.D.: Less than 0.8%; AM Sensitivity: 50 microvolts per meter.

Dimensions: 13" D. X 15 3/4" W. X 4 1/4" H. Shpg. wt. 20 lbs.

**\$199.95**

No. 33A398, Model 330 Less Enclosure, Each

No. 33A9503, CW30A, Walnut Cabinet for above, Each **\$24.95**

# PANASONIC SOLID STATE STEREO RECEIVERS



BEAUTIFUL  
WALNUT CABINET

Deluxe in every detail, the Panasonic SA-70 offers the highest performance and most wanted features. The FM tuner incorporates three Field Effect Transistors. A two-stage RF circuit, a four-section tuning capacitor and six tuned circuits for perfect reception of the weakest FM stations. Four Integrated Circuits in the IF stages provide extreme selectivity to eliminate annoying interference and maintain the music at the same level without fading. Unique Ceramic Filter in the AM tuner circuit locks in the station to provide drift-free reception once considered impossible. The Panasonic exclusive Ceramic Multiplex Filter prevents false triggering of the Stereo indicator lamp caused by noise or spurious signals. A Muting switch cancels between-station noise for quiet tuning throughout the FM band. The full complement of tone controls shape the sound to suit your requirement. A Low Filter and a High Filter switch allows you to remove annoying record rumble and high frequency hiss without affecting the overall natural sound of the music.

## PANASONIC

### SA70 115 WATT AM-FM MULTIPLEX STEREO RECEIVER

- Frequency Response 20-100,000 Hz - 3 db.
- 3 FET and 4 IC's front end.

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

**SPECIFICATIONS:** Amplifier Section: Music Power 115 Watts  $\pm$  1 db at 4 ohms; HD 0.8%; Intermodulation Distortion 1.0%; Power Bandwidth 15Hz to 70,000Hz, -3 db; Frequency Response Phono 30 to 20,000Hz,  $\pm$  3 db, Aux. 30 Hz to 60,000Hz,  $\pm$  3 db, Power Amplifier 20Hz to 100,000Hz, -3 db; Input Impedance 50K ohms (Phono Low) 60K ohms (Phono High). Aux. 35K ohms, Tape Monitor 35K ohms; Hum and Noise, Volume at Minimum 80 db, Phono 65 db (Phono Low), Aux. 75 db; High Filter, 12 db at 7KHz; Recorder Output Level 200mV. **Tuner Section: FM:** Usable Sensitivity (IHF) 2.0 uV; HD 0.5%; Signal to Noise Ratio 60 db; Selectivity, Alternate Channel 50 db; Image Rejection (at 100MHz) 80 db; Stereo Separation (at 1 KHz) 37 db; Capture Ratio (IHF) 20 uV. **AM:** Sensitivity (IHF) 20 uV; Image Rejection (at 1 MHz) 70 db. Dimensions: 19 $\frac{1}{2}$ " W. X 5 $\frac{1}{8}$ " H. X 14" D. Power, 117 VAC. **\$299.95**  
No. 33A366. Shpg. Wt. 35 lbs. Net Each



- 3 FET front end.
- 4 Dual tuned IF circuits.

## PANASONIC

### SA60 75 WATT AM-FM MULTIPLEX STEREO RECEIVER

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

The Panasonic SA-60 offers superb stereo FM and AM reception. The FM tuner section utilizes three Field Effect Transistors and six tuned circuits for sensitive FM reception. Four dual tuned FM IF circuits provide clear reception, free of distortion and noise. The unique AM tuner circuits incorporate Ceramic Filters to insure broad band response and drift-free operation. A separate AM RF circuit and a three-section tuning capacitor provide the highest sensitivity and selectivity for tuning in the weakest of stations. A built-in ferrite antenna employs a revolutionary coil design to deliver static-free listening. A full complement of tone controls and switches provides for complete ease of operation. The professional lever switches insure absolutely reliable electrical operation. Facilities are provided on the rear for connecting a record player, a tape recorder, including the new 8-track cartridge or a cassette player, and an auxiliary program source, such as shortwave tuner. Three AC outlets, two of which are controlled by the SA-60 pushbutton Power switch, provide the ultimate in ease of wiring. **Specifications: Amplifier Section:** Music Power 75 watts  $\pm$  1 db. at 4 ohms;

HD 0.8%; Intermodulation Distortion 1.0%; Power Bandwidth 20Hz to 50,000Hz, -3 db; Frequency Response 30Hz to 20,000 Hz, Phono  $\pm$  3 db (Phono Low), Aux. 30Hz to 60,000Hz,  $\pm$  3 db, Power Amplifier 20 Hz to 70,000Hz, -3 db; Input Impedance 50K ohms (Phono Low), 60K ohms (Phono High), Aux. 35K ohms, Tape Monitor 35K ohms; Hum and Noise, Volume at Minimum 77 db, Phono 65 db (Phono Low), Aux. 75 db; Bass and Treble Control; High Filter; Recorder Output Level 230 mV. **Tuner Section: FM:** Usable Sensitivity (IHF) 2.2 uV; HD 0.6%; Signal to Noise Ratio 60 db; Selectivity, Alternate Channel 45 db; Image Rejection (at 100 MHz) 80 db; Stereo Separation (at 1 KHz) 35 db; Capture Ratio (IHF) 2.5 db. **AM:** Sensitivity (IHF) 20 uV; Image Rejection (at 1 MHz) 70 db. Dimensions: 19 $\frac{1}{2}$ " W. X 5 $\frac{1}{8}$ " H. X 14" D. Shpg. Wt. 34 lbs. Power, 117 V AC. No. 33A406 **\$249.95**  
With Walnut Cabinet. Net Each



- Sliding audio controls.
- FET front end.
- Walnut wood cabinet.

## PANASONIC

### SA40 70 WATT AM-FM MULTIPLEX STEREO RECEIVER

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

The Panasonic SA-40 offers the features and FM/AM performance previously available only in units costing considerably more. The FM tuner features Field Effect Transistors for sensitive, drift-free reception of FM and FM stereo programs. Four sensitive FM IF stages allow you to seek out the weakest of FM stations. The AM tuner circuit provides broad band response for highest sensitivity and stability. The built-in ferrite antenna employs a revolutionary coil design to assure freedom from static—under all conditions. Exclusive Panasonic wide range Linear Sliding Controls provide for precise adjustment of the music to suit the listening environment. Positive action Loudness, High Filter Mono/Stereo and Tape Monitor rocker switches provide complete control of the musical output. The multiple-position Selector switch and Speaker switch permit a wide choice of program sources and speaker outputs. Facilities are provided on the rear panel of the SA-40 for connection of two pairs of speakers, a record player, two tape recorders, and an auxiliary program source, such as a shortwave tuner. Special Pre-amp Output and Main Amplifier input jacks allow you to add an accessory echo

reverberation or tremolo sound effect amplifier to enhance the stereo effect. **Specifications, Amplifier Section:** Music Power 70 watts  $\pm$  1 db at 4 ohms; IHF; HD 0.8%; ID 1.2%; Power Bandwidth 20 Hz to 50,000 Hz -3 db; Freq. Resp.: Phono, 30 to 20,000 Hz  $\pm$  3 db; Aux. 30 to 50,000 Hz  $\pm$  3 db. **Power Amplifier:** 20 Hz to 60,000 Hz -3 db; Input Imp.: Phono 50K ohms, and 100K ohms, 33K ohms (Ceramic); Aux. 35K ohms, Tape Monitor 35K ohms; Hum and Noise, 70 db; Phono; Aux. 70 db; Bass and Treble Control  $\pm$  10 db @ 50 Hz; High Filter 6 db per octave above 6K Hz; Recorder output level 170 mV. **Tuner Section: FM:** Usable sensitivity (IHF) 2.8 uV; HD 0.7%; Signal to Noise Ratio 60 db; Selectivity, alternate channel 40 db; Image rejection (at 100 MHz) 55 db; Stereo separation (at 1K Hz) 35 db; Capture Ratio (IHF) 3 db. **AM:** Sensitivity (IHF) 20 uV. Dimensions: 16" W. X 5" H. X 14" D. Power 120 V AC, 100 Watts.

No. 33A405. Shpg. wt. 29 lbs. **\$199.95**  
Net Each

# FAMOUS FISHER SOLID STATE RECEIVERS

## FISHER MODEL 250T 100-WATT ALL TRANSISTOR AM-FM STEREO RECEIVER

WITH  
TUNE-O-MATIC

**\$299<sup>95</sup>**  
LESS  
CABINET

- FET CIRCUITRY
- IC's IN IF AMPLIFIER

Most versatile unit made. Has all the important features of any receiver ever made plus the new Tune-O-Matic which permits presetting of any 5 FM stations you desire, then allows you to make your selection by push-button control. Flywheel tuning allows rapid manual tuning any time you prefer to manual tune other stations or selection of AM stations. The FM Tuner front end has exceptional sensitivity, selectivity, and overload rejection due to advanced FET solid-state circuitry. Integrated circuitry (IC's) in the IF amplifier stages gives the equivalent of four separate IF stages and three limiters, now making it possible to receive weak distant stations never before possible. Stereo beacon automatically indicates and switches receiver to stereo when stereo station is tuned in; d'Arsonval tuning meter permits exact center channel tuning. Dual-concentric base and treble controls permits adjustment of bass and treble of each channel independently so as to suit room acoustics or to compensate for tonal imbalance in program material. A loudness contour switch restores the natural tonal balance of the high and low ends of the audible spectrum at lowest volume settings. The complete set of controls permits you to regulate all audio signals whether from records, tape or broadcasts. Direct tape monitor permits monitoring while tape is being recorded followed by immediate playback with use of all audio controls without changing cable connections. 100 watts of music power (IHF) are enough to drive several pairs of speakers if desired.

## FISHER MODEL 175-T ALL TRANSISTOR 65-WATT AM-FM STEREO RECEIVER

PROVIDES ENORMOUS  
VERSATILITY IN  
YOUR LISTENING  
ENJOYMENT

**\$249<sup>95</sup>**  
LESS  
CABINET

Everything you need for optimum enjoyment of AM and FM-Stereo broadcasts have been combined into one beautifully integrated instrument to provide all the convenience, flexibility and ease of operation you would expect in a Fisher receiver.

The tuner section is a model of perfection, featuring the most advanced Integrated Circuits and Field-Effect transistors. Tuner sensitivity (IHF) is a remarkable 2.0 microvolts; selectivity (IHF), a high 45 db. The tuning convenience of Stereo Beacon® automatic mono stereo switching and signal-strength d'Arsonval meter are adjacent to the large, easy-to-read numbers on the AM and FM dial glass.

With 65 watts of music power (IHF), the Fisher 175-T has more than

## FISHER MODEL 160-T ALL TRANSISTOR 40-WATT FM STEREO RECEIVER

WITH  
TUNE-O-MATIC  
TOUCH TUNING

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

The world's first high-quality push-button FM Receiver unfolds a new era in stereo listening convenience. With the new 160-T at your fingertips, you can select any of five FM stations at the press of a button, with perfect center-of-channel accuracy, or tune its five vertical dials manually.

Automatic Frequency Control locks in the desired FM station, eliminating any mechanical 'off-center' displacement characteristic of pushbutton car radios. Electronic diode tuning assures this accuracy and Stereo Beacon offers added convenience.

The new Fisher 160-T has facilities for tape recorder and phonograph, plus the convenience of a 3-way speaker selector and complementary front-panel headphone jack.

## FISHER K10 DYNAMIC REVERB UNIT

**\$69<sup>95</sup>**

Add a new dimension to listening . . . reverberation. Supplies reverberation normally heard in acoustically-perfect concert hall. For use with records, radio or tape, mono or stereo. Single front-panel knob controls desired degree of reverberation. Connects simply to any amplifier or receiver. Self-powered, operates on 105-120 V. AC. Shpg. wt. 10 lbs.

No. 33A315. Net Each **\$69.95**



Its separate main and remote speaker push-buttons provide all the convenience of a four-way speaker selector but with greater ease. Turn all speakers off, if you like and enjoy music in absolute privacy through headphones plugged into front jack.

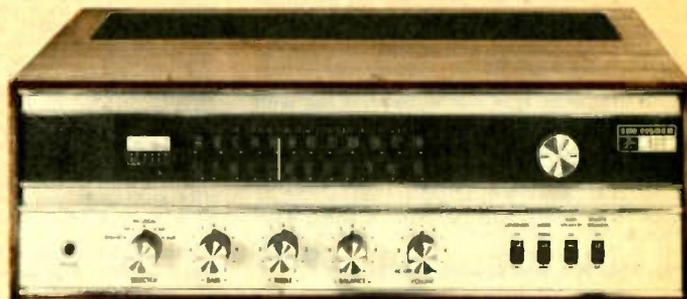
**Specifications:** Power 100 watts (IHF)  $\pm 1$  db at 8 ohms. H.D. 0.5% I.D. 1.0% at 60 watts total. Frequency Response: 20-20,000 Hz  $\pm 2$  db. Power Bandwidth: 20-25,000 Hz. Hum & Noise 90 db below rated output. Bass Controls: (total variation at 50 Hz) 24 db. Treble controls (total variation at 10 KHz) 24 db. Input Sensitivity-Phono Low: 2.5 mV. Phono High: 7.5 mV. Aux: 250 mV—AM Tuner section usable sensitivity 10  $\mu$ V/m. Selectivity: (at 1 MHz and  $\pm 10$  KHz) 50 db. Image Rejection: (at 1 MHz) 80 db. IF Frequency Rejection: (at 1 MHz) 85 db—FM Tuner section usable sensitivity (IHF Standard) 2.0  $\mu$ V. S/N ratio (100 modulation) 65 db. Selectivity: (alternate channel) 45 db spurious response rejection (at 100 MHz) 90 db. IF Rejection: (at 100 MHz) 70 db. Image Rejection: (at 100 MHz) 55 db. FM H.D. (400 Hz, 100 Mod.) 0.5%. FM stereo separation (at 1 KHz) 38 db. Capture ratio: 2.8 db. Dimensions: 15 1/2" W., 5 1/4" H., 12 3/4" D. (max. depth from knobs to rear AM antenna). Wt.: 19 lbs. Shpg. Wt.: 25 lbs.

No. 33A364.

**\$299.95**

Less Cabinet. Net Each

No. 33A365. Walnut Vinyl Closed Cabinet. Net Each **\$19.95**



enough to drive any speaker system to full room volume. Separate main and remote speaker switches and a front panel headphone jack provide enormous versatility in your listening pleasure. Whatever your choice, the 175-T delivers the musical program with the kind of super-sensitive control of sound and power that makes music a living reality.

**Specifications:** Usable Sensitivity (IHF) 2.0  $\mu$ V. Signal-to-Noise Ratio 65 db. Selectivity (alt. channel) 45 db. Stereo Separation (1 kHz) 35 db. Capture Ratio 2.8 db. Music Power (IHF) 65 watts. Harmonic Distortion at (1 kHz) 0.5%. Size: 15 1/2" wide, 5 1/4" high, 12 3/4" deep. Weight 18 pounds. Cabinet: Walnut (vinyl), 60-UW.

No. 33A363. Less cabinet. Each

**\$249.95**

No. 33A365. Walnut Cabinet. Each **\$19.95**



In appearance as well as performance, the Fisher 160-T is unequalled. It is a unique expression of Fisher engineering genius, magnificently represented in its genuine gold-plated front-panel. Sculptured walnut sides lend a distinctive touch of elegance. No need to purchase an additional cabinet.

**Specifications:** Usable Sensitivity (IHF) 2.0  $\mu$ V. Signal-to-Noise Ratio 60 db. Selectivity (alt. channel) 45 db. Stereo Separation (1 kHz) 35 db. Capture Ratio 2.8 db. Music Power (IHF) 40 watts. Harmonic Distortion (1 kHz) 0.5%. Hum & Noise 90 db below rated output. Size: 15 1/4" wide, 3 1/8" high, 11 1/4" deep. Weight 15 pounds. Genuine walnut sides contrasted with high-gloss black enameled top.

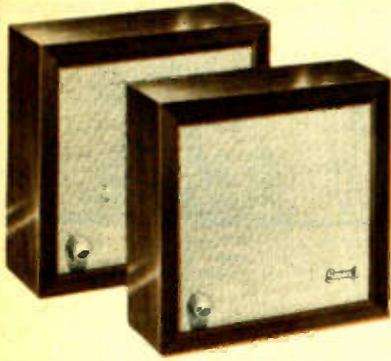
No. 33A362. Each

**\$199.95**



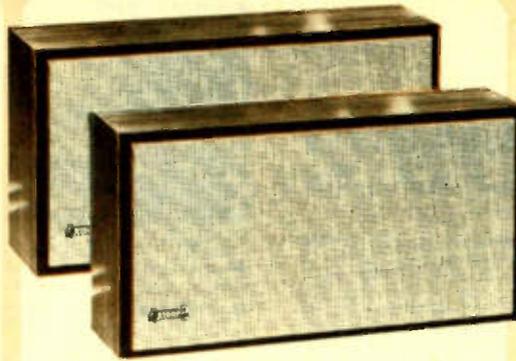
# B-A's UNBEATABLE SPEAKER SYSTEM VALUES!

ALL SYSTEMS BELOW ARE IDEAL FOR USE WITH SOLID STATE AS WELL AS TUBE AMPLIFIERS



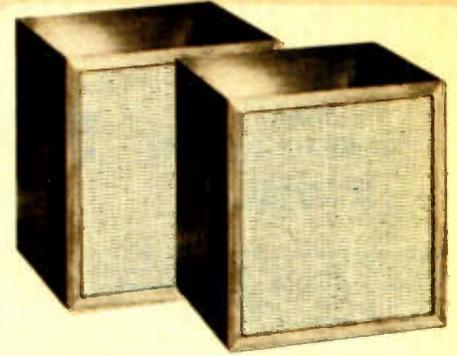
**HI-FI 6 1/2-INCH  
SPEAKER & ENCLOSURE**  
**\$9.95 EACH**

- Genuine hardwood cabinets in oiled walnut finish.
  - Fits anywhere — hangs on wall or sits on table.
  - Lightweight and portable . . . easily carried.
  - Frequency response 20-12,000 cps.
- Sounds much bigger and more expensive than it is. Slim, unobtrusive enclosure fits anywhere on floor, wall, bookshelf or table. Lightweight and portable, it is easily carried from room-to-room. B-A's audio experts were amazed by its truly high-fidelity performance — bass with impact, clear mid-range, and clean highs. High efficiency type not to be confused with similar low efficiency speakers. Includes 6 1/2" speaker with Alnico V magnet. Front mounted volume control permits stereo balance and room level adjustments. Distinctive picture frame front styling. Oiled walnut finish matches cane grille cloth. 10 watt power capacity covers even large rooms. 20-12,000 cps, 8 ohms, 4 3/8" thin x 10" x 10". Finest quality import. Shpg. wt. 6 lbs.
- No. 33A2000. B-A Special, Net Each **\$9.95**



**COMPACT 2-WAY  
SPEAKER SYSTEM**  
**\$17.95 EACH**

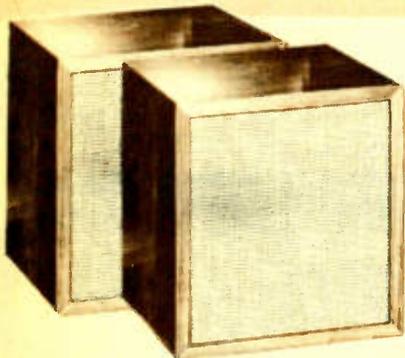
- Use horizontally or vertically on floor, bookcase or table.
  - Genuine hardwood cabinets in oiled walnut finish.
  - Frequency response 20 -20,000 cps.
- Concert hall "Big Sound" from a genuine two-way speaker system in a compact enclosure . . . all at B-A's special budget price. Selected by our own audio specialists for its smooth, pleasing 20-20,000 cps high-fidelity range. Gives realistic high-efficiency performance even with low power-sound sources.
- Use horizontally or vertically on floor, bookcase, or table. Easily carried from room to room, or outdoors. Consists of powerful 8" bass reproducer and 3 1/2" tweeter in a scientifically engineered enclosure. Decorous slim line styling. Cabinet is solidly constructed with 1/2" hardwood and glued joints. Beautiful grille cloth complements oil walnut finish. Size 17 7/8 x 10 x 5 1/2". 8 ohms.
- Highest quality import. Shpg. wt. 9 lbs. **\$17.95**  
No. 33A2001. B-A Special, Net Each



**COMPACT HIGH COMPLIANCE  
VOLUMETRIC SPEAKER SYSTEM**  
**\$29.95 EACH**

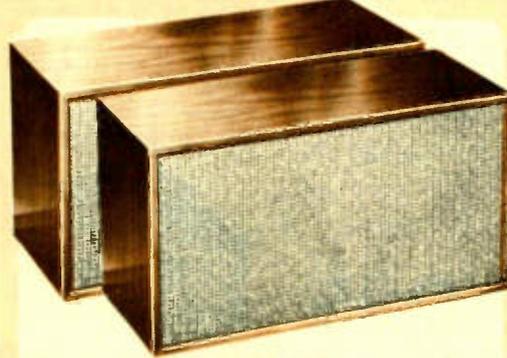
- 20-20,000 cps frequency response. Handles up to 25 watts power without break-up.
  - Handsome solid walnut enclosure, beautiful decorated grille cloth.
- Judged by B-A's audio experts as the most outstanding speaker value at this fantastic low price! True full range high fidelity quality, a complement to any stereo system. Also ideal as extension speaker to any console or component system. Heart of system is wide range 8" high compliance volumetric speaker with heavy duty ceramic magnet and long throw voice coil. Handles up to 25 watts giving true bass, exceptional mid-range and clean crisp highs. High efficiency design permits fullest response from even the lowest powered amplifier. Magnificently styled solid walnut enclosure in oiled finish. Small size, 10 1/2" H. x 10 1/2" W. x 7 1/2" D., permits use on standard bookshelf, end table or any other confined area. Output impedance 8 ohms. Easy to hook-up, has standard screw terminals, 8 ft. speaker cable.
- Shpg. wt. 11 lbs. Highest quality import.  
No. 33A2019 **\$29.95** For **\$55.00**  
Each

## NEW IMPROVED VERSIONS OF B-A's BEST SELLING SYSTEMS HEAVIER MID-RANGE AND HIGHER-RANGE TWEETERS PROVIDE SMOOTHER MID-FREQUENCIES AND CLEANER HIGH-FREQUENCIES



**B-A's 8-INCH  
3-WAY SPEAKER SYSTEM**  
**\$49.95 EACH**

- Heavy 3/4" hardwood cabinetry.
  - Engineered to B-A's exacting specifications.
  - 3 1/2" hard back tweeter and brilliance control.
  - Beautiful oiled walnut finish.
- An incomparable value! Superior in performance to speaker systems selling for much more than this low, low price! Not to be confused with low price systems selling anywhere near this price. Provides amazing highs from the 3 1/2" hard back tweeter, smooth mid-range from the whizzer and inimitable bass from the heavy duty 8-inch speaker. Enclosure of heavy 3/4" oiled walnut hardwood is tuned to provide the optimum performance over the entire frequency range.



**B-A's 12-INCH  
4-WAY SPEAKER SYSTEM**  
**\$59.95 EACH**

- Frequency response 25 cps to beyond audibility.
  - Heavy 3/4" hardwood enclosure.
  - Compact 24" W. x 17" H. x 11" D.
  - Beautiful oiled walnut finish.
  - Brilliance control.
- Heart of system is famous makers 12-inch speaker providing fine bass, whizzer supplies upper mid-range with lower end of mid-range supplied through specially designed 6 inch mid-range speaker. Super 3 1/2" tweeter provides finest high range coverage. Brilliance control permits adjustment to personal listening requirements. All of these precision components have been assembled into a specially tuned enclosure to provide the fullest response possible. Compact size with absolutely no compromise in quality was accomplished through special engineering techniques. Would be a fantastic value even at considerably more than this low, low B-A price! Beautiful oiled walnut cabinetry . . . a plus attraction to any decor, a complement to any high fidelity stereo system. For shelf or floor use, finished on all four sides.
- Specifications: frequency range 25 cps to beyond audibility. Impedance 8 ohms. Power handling capacity 35 watts music power.
- No. 33A2021 Wt. 40 lbs. Special Each **\$59.95**



**B-A's DELUXE HEAVY DUTY  
12-IN. 4-WAY SPEAKER SYSTEM**  
**\$69.95 EACH**

- Power handling capacity 50 watts music power.
  - Frequency response 20 to 30,000 cps.
  - Brilliance control for personalized listening enjoyment.
  - Beautiful oiled walnut enclosure.
- B-A's sound specialists have done it again! Our engineering associates couldn't believe it possible . . . but our own sound men came up with it . . . the most fantastic speaker system yet for only \$69.95. Our management was so impressed by this unit that they have permitted us to make the following offer: If you don't believe this is the best speaker system for anywhere near this low price after hearing it, B-A will refund your purchase price plus transportation charges both ways.
- Extra heavy duty 12-inch woofer, low mid-range heavy duty 6 inch speaker, high frequency whizzer, and super 3 1/2" ultra high frequency tweeter in a 3/4" solid wood tuned enclosure.
- Brilliance control adjusts for personalized listening. Beautiful oiled walnut finish on four sides makes this enclosure suitable for use on shelf or floor. Dimensions: 24" W. x 17" H. x 11" D.
- No. 33A2022 Wt. 50 lbs. Special Each **\$69.95**

Compact size only 16" H. x 11" D. x 11" W. Ideal for bookshelf, table top or for use anywhere fine quality sound is required in a small space.

Specifications: Frequency range 30-20,000 cps. Voice coil impedance 8 ohms. Power handling capacity 15 watts. Shpg. wt. 17 lbs.

No. 33A2020 Special Each **\$49.95**

# B-A's ALL NEW AIR SUSPENSION SPEAKERS

ULTRA COMPLIANT—DISTINCTIVE NATURAL SOUND WITH USE OF ANY AMPLIFIER WITH 5 WATTS OR MORE

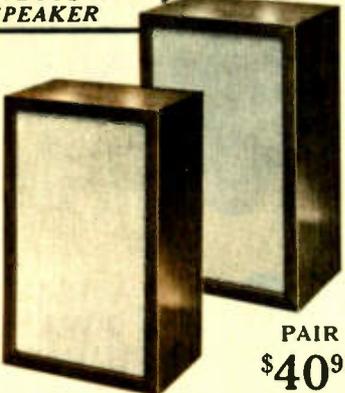
This family of speaker systems is designed to give concert-hall sound from compact, bookshelf spaces. Occupying a minimal amount of space, these speaker systems have basis performance of speakers many times their size. This rich bass is the result of a newly developed series of High Compliance Speakers used in combination with the enclosures. Astonishing purity and precision are a reality.

The enclosures are constructed of heavy 3/4" wood and the interiors are acoustically treated to damp unwanted resonance. All four sides are finished in fine oiled walnut so the systems can be used as either a bookshelf or floor standing units. The attractive grill cloth is specially selected to blend with any decorating scheme. For the discriminating music lover with a space problem, who wants no compromise in quality, these compact speaker systems are the ideal solution.

## B-A's SENSATIONAL SPECIAL OFFER!

BUY 1 SPEAKER AT REGULAR PRICE, GET 2nd SPEAKER FOR ONLY \$1.00 MORE!

**\$39.95 EA.**  
**\$1.00 BUYS 2nd SPEAKER**

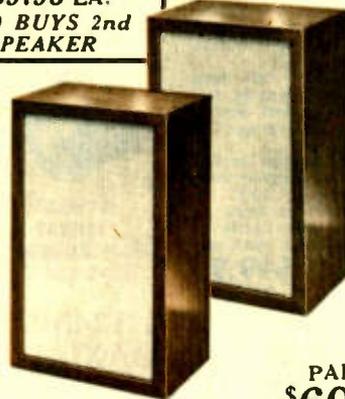


**PAIR \$40<sup>95</sup>**

**B-A A1 LONG THROW  
2-WAY 30-WATT SYSTEM  
6" AIR SUSPENSION SPEAKER**

30 watts music power. 50 Hz to beyond audibility. Big sound from a small enclosure. Features front loaded air suspension 6" two way speaker. Only 15" H. x 9 1/2" W. x 6" D. Beautiful walnut finish enclosure with contrasting white grille fabric. 8 ohms. Shpg. wt. 12 lbs.  
No. 33A2070. **\$39.95** Per **\$40.95**  
Each ..... Pair .....

**\$59.95 EA.**  
**\$1.00 BUYS 2nd SPEAKER**

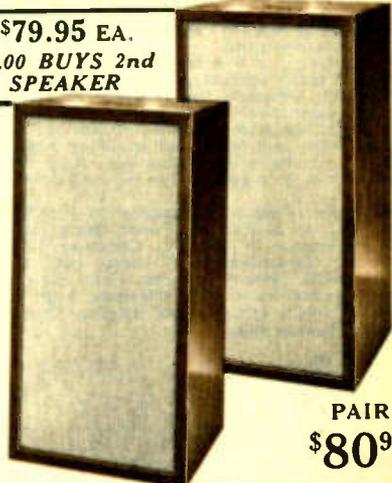


**PAIR \$60<sup>95</sup>**

**B-A A2 3-WAY 30-WATT SYSTEM  
8" HI COMPLIANCE  
WOOFER-4" TWEETER**

30 watts music power. 45 Hz to beyond audibility. Real natural sound from a true air-suspension system. Features 8" high compliance woofer/mid-range with 4" rigid diaphragm tweeter. Ideal bookshelf size, 19" H. x 10 1/2" W. x 9 7/8" D. Attractive walnut finish with eggshell grille fabric. 8 ohms. Wt. 20 lbs.  
No. 33A2071. **\$59.95** Per **\$60.95**  
Each ..... Pair .....

**\$79.95 EA.**  
**\$1.00 BUYS 2nd SPEAKER**



**PAIR \$80<sup>95</sup>**

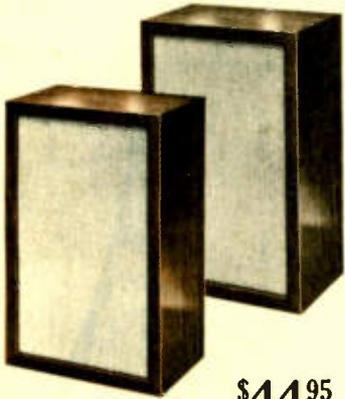
**B-A A3 3-WAY 30-WATT SYSTEM  
10" WOOFER/MID-RANGE  
4" DIRECT RADIATOR TWEETER**

30 watts music power. 35 Hz to beyond audibility. The finest reproduction from 10" ultra linear woofer/mid-range with 4" direct radiator tweeter in attractive walnut finished enclosure. 23" H. x 11 3/4" W. x 9 3/8" D. With eggshell white grille fabric. 8 ohms. Shpg. wt. 25 1/2 lbs.  
No. 33A2072. **\$79.95** Per **\$80.95**  
Each ..... Pair .....

## B-A's NEW ACOUSTIC-SUSPENSION SPEAKER SYSTEMS

Specifically designed for those who prefer the sound of the new Acoustic-Suspension systems. Special compensation has been introduced into the tweeters in order to cancel out the response peak exhibited by virtually all

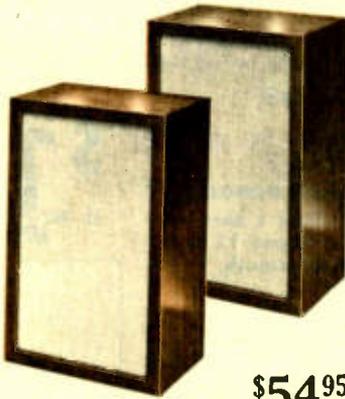
magnetic phono cartridges. The result is an almost perfectly flat overall response throughout the Audible Range.



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

**BA-1 2-WAY 30 WATT SYSTEM  
6" AIR SUSPENSION WOOFER  
3" COMPOSITION CONE TWEETER**

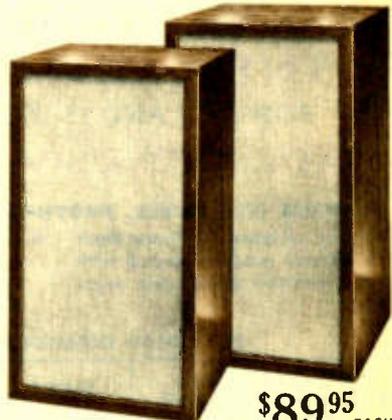
A full two-way system with a 6" acoustic suspension woofer and 3" composition cone tweeter. Carefully engineered for natural bass and smooth high frequency response. Gives true sensation of spaciousness when used in stereo systems. The handsome oiled walnut enclosures measure 15" x 8" x 7" Deep. Trimmed in brushed aluminum. The grill cloth blends well with any color scheme. Frequency Range: 40-20,000 Hz 30 Watt 1 HF handling capacity at 8 ohms. Shpg. Wt. 11 lbs.  
No. 33A2046. Net Each **\$44.95**



**\$54<sup>95</sup>**  
EACH

**BA-2 2-WAY 40 WATT SYSTEM  
8" AIR SUSPENSION WOOFER  
3" COMPOSITION TWEETER**

Similar to the BA-1 system except with 8" acoustic-suspension woofer. Has 3" composition cone tweeter with level control. Walnut enclosure measures 19" x 10" x 9" Deep. Frequency Range: 30-20,000 Hz. Power handling capacity 40 Watts 1 HF at 8 ohms. Shpg. Wt. 18 lbs.  
No. 33A2047. Net Each **\$54.95**



**\$89<sup>95</sup>**  
EACH

**BA-3 3-WAY 50 WATT SYSTEM  
10" ACOUSTIC SUSPENSION WOOFER  
5" COMPOSITION CONE MID-RANGE  
3" COMPOSITION CONE TWEETER**

A Deluxe three-way bookshelf loudspeaker system incorporating a 10" acoustic suspension woofer, 5" composition mid-range, and a 3" composition tweeter with level controls for both mid-range and high frequency. Cabinet dimensions 22 x 14 x 11" Deep. Frequency Range: 27-20,000 Hz Power handling capacity 50 Watts 1 HF at 8 ohms. Minimum recommended driving power is 10 Watts per channel. Shpg. Wt. 27 lbs.  
No. 33A2048. Net Each **\$89.95**

# B-A 12-INCH 3-WAY DIFFAXIAL SPEAKER

AMERICAN MADE  
FOR B-A BY  
UNIVERSITY  
LOUDSPEAKERS

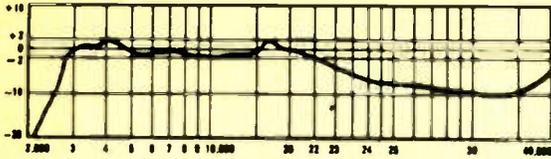
CAPABLE OF RESPONSE FROM 35-30,000 Hz

## \$49<sup>95</sup>

HANDLES 30 WATTS INTEGRATED  
PROGRAM MATERIAL

UTILIZES  
FAMOUS  
SPHERICON  
TWEETER

WORLD'S  
FINEST  
HI-FREQUENCY  
REPRODUCER



TWEETER FREQUENCY IN CYCLES PER SECOND

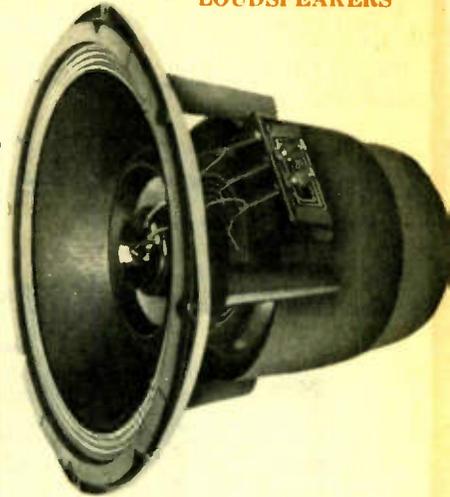
Far superior to any 12" speaker we have seen or heard at anywhere near this amazing low price.

Made expressly for B-A by University; a leader over the years in the production of audio products. This amazing speaker utilizes newest acoustical developments including the exclusive diffusicone principle and the fabulous sphericon super tweeter.

Entire audio spectrum from 35-30,000 Hz are reproduced with rich deep true bass, full mid-range and sparkling highs. High efficiency permits full "Concert" volume without distortion using amplifiers of only modest power, yet speaker is so rugged it can be used safely with high-powered amplifiers as well.

Specifications: Frequency response 35-30,000 Hz. Sphericon tweeter is flat within 2 db to 22,000 cps. Power rating: 30 watts integrated program material. Impedance 8-16 ohms. Crossover 1000 Hz (mechanical), 3000 Hz (electrical). Dimensions: 13" overall dia., 8-<sup>3</sup>/<sub>8</sub>" deep. Mounting: front or rear of baffle. Special features: rigid, die-cast frame. Rigid cup baffle to eliminate tweeter-woofer interference. High compliance suspension with exclusive University critical edge damping. Shpg. wt. 11 lbs.

No. 33A2044. Special Each **\$49.95**



**B-A 8-INCH  
2-WAY  
HIGH FIDELITY  
SPEAKER**

**\$17<sup>95</sup>**



**B-A 12-INCH  
COAXIAL  
HIGH FIDELITY  
SPEAKER**

**\$21<sup>95</sup>**



**B-A 12-INCH  
3-WAY  
HIGH FIDELITY  
SPEAKER**

**\$29<sup>95</sup>**

Fantastic 8" 2-way speaker with powerful <sup>3</sup>/<sub>4</sub> lb. ceramic magnet. Features an unusually smooth wide band response. Custom built to B-A's exacting specifications by University Loudspeakers, a foremost manufacturer of the finest high fidelity speakers.

Extremely shallow, only 2 1/2" overall depth.

Specifications: Freq. resp. 70-12,000 cps. Power handling capacity, 30 watts. Imp. 8 ohms. Nominal resonant freq. 55 cps. Crossover freq. 1500 cps. Dimensions: 8 1/4" dia., 7 1/8" baffle opening, 2 1/2" deep. Shpg. wt. 5 1/2 lbs.

No. 33A2002. B-A Special **\$17.95**

Designed to provide the finest full range reproduction at the lowest possible price. Has heavy duty die-cast frame. Low silhouette frame for easy mounting in walls or ceilings.

Specifications: Freq. resp. 35-14,000 cps. Program capacity 30 watts; 40 watts peak power. Resonance 45 cps. in free air. Sensitivity rating; 43 db EIA. Crossover: mechanical, at 1500 cps. Imp. 8 ohms. Mounting: 4 1/4" holes equally spaced on 11 1/2" circle. Fits 11 1/8" baffle spacing.

Size 12 3/8" dia. x 3 3/8" deep behind panel. Net wt. 5 1/2 lbs. Shpg. wt. 7 1/2 lbs.

No. 33A2003. B-A Special **\$21.95**

Deep rich bass and clean clear treble from two cones . . . plus smooth peak-free highs from the famous sphericon tweeter. 2" voice coil on the woofer for larger excursions of the diaphragm with low distortion . . . rugged die-cast frame to ensure perfect alignment of all moving parts.

Specifications: Freq. resp. 35-40,000 cps. Power handling capacity 30 watts IPM. Crossover frequencies: mid-range—1500 cps; tweeter—4500 cps. Imp. 8 ohms. Resonant freq. 45 cps.

Dimensions: 12 3/8" dia., 11 1/8" baffle opening, 3 7/8" deep. Shpg. wt. 9 lbs.

No. 33A2004. B-A Special **\$29.95**

## THE KARLSON ENCLOSURE KITS

FOR 8, 12 AND 15-INCH SPEAKERS

IF FACTORY ASSEMBLED  
WOULD COST \$42.60

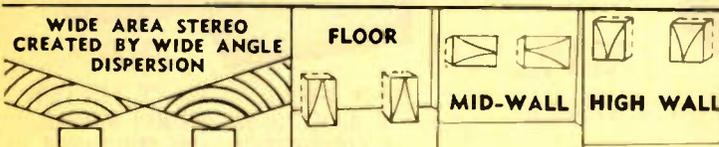
MADE EXCLUSIVELY FOR B-A

**\$19<sup>95</sup>**  
8-IN. Complete with grille fabric

REQUIRES LESS POWER, PROVIDES MORE DYNAMIC RANGE

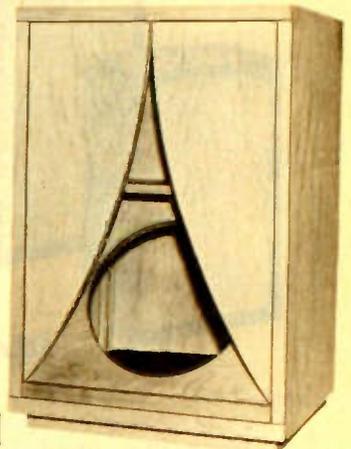
- Ordinary systems 10 times their size cannot produce sound with such enormous panoramic presence.
- Actually better than a horn enclosure 30 ft. long and 12 1/2 ft. in diameter at the mouth.

### SUGGESTED SPEAKER PLACEMENTS



SAVE  
50%  
ASSEMBLE IT  
YOURSELF

EASY-TO-BUILD



Truly the connoisseurs choice. Small enough to fit the average bookshelf yet gives a quality of reproduction and extended bass response totally beyond the normal capabilities of a one foot enclosure. With any good 8" speaker produces a bass range normally attributed to large 15" systems. Their wide-area stereo presentation and tonal definition are also typical of the Karlson transducer perfection. When placed on their backs near a wall, sound seems to come from the entire wall. Small size and big performance of these enclosures makes them adaptable to almost any use.

Uses Karlson transducer front loading combined with special back loading. Provides fundamental coupling to 1/2 speaker resonance. No tuning required. Matched loading provides very smooth rich bass and practically eliminates cone break up and rim resonances. Also minimizes cone motion giving true to pitch bass and unexcelled transient response. Amplifier loading is resistive efficiency 40% with average speaker. A dynamic range up to 100 db without distortion is normal. Fundamental loading extends down to 2/3

the speaker free field resonance. Dispersion for all speakers is uniform for all frequencies within a solid angle of 120° tilted 30° upwards. Size 17 1/4" L. x 11 3/4" W. x 10" D.—1/2" panels. Wt. approx. 14 lbs.

No. 33A3503. Deluxe Karlson Unfinished 8" Enclosure Kit. Net. **\$19.95**

FOR 12" SPEAKER. Size 24 3/4 x 16 3/4 x 13 3/4". Similar to 8" Unit above but with 3/4" panels. Dynamic range of 110 db without distortion is normal. If factory assembled would cost \$99.95. Shpg. wt. 50 lbs.

No. 33A3501. Net Each **\$51.95**

FOR 15" SPEAKER. Size 22 1/2" W. x 33" H. x 18" D. Similar to 8" Unit above but with 3/4" panels. Actually better than a horn enclosure 30' long and 12 1/2' in diameter. Dynamic range up to 120 db without distortion is normal. May be adapted for 12" or 10" speakers. If factory assembled would cost \$129.95. Shpg. wt. 60 lbs.

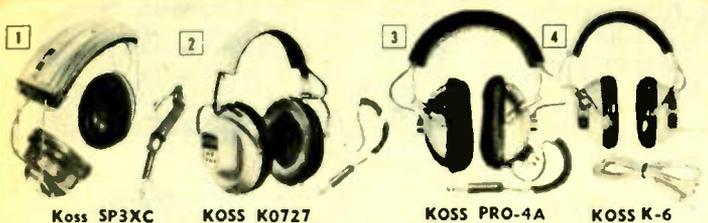
No. 33A3502. Net Each **\$74.50**

# STEREOPHONES THE ULTIMATE LISTENING PLEASURE!

**COMPLETE STEREO SEPARATION  
BRILLIANT REALISM  
PERSONALIZED PRIVATE LISTENING**

## WHY STEREO HEADPHONES?

Provides absolute stereo separation and lets you hear startling new sounds from your favorite stereo. Reproducers fit snugly to your ears shutting out 95% of all outside noise—assures you of intimate private listening without disturbing others.



**Koss SP3XC**

**KOSS K0727**

**KOSS PRO-4A**

**KOSS K-6**

① **NEW KOSS MODEL SP3XC.** Will reproduce any sound the human ear can hear. Frequency response 10-15,000 cps. Impedance 4-16 ohms. Soft sponge foam ear and head cushions are comfortable even over extended periods of listening. With 8 ft. cord and plug and jack assembly for hookup to speaker voice coil leads. Wt. 2 lbs.

No. 33A6587. Model SP3XC. Net Each **\$24.95**

② **KOSS MODEL K0727.** New design, fully adjustable. Wide range, highly sensitive reproducers feature distortion less than 1%. For 4-8-16 ohm program source up to 60 watts per channel. Foam filled ear cushions are removable. New 8 ft. coiled cord adds convenience. Wt. 2 lbs.

No. 33A6588. Model K0727. Net Each **\$34.95**

③ **KOSS MODEL PRO-4A.** New improved professional headset engineered to meet the most rigid requirements of audio engineers, laboratories and serious audiophiles. Extremely rugged construction makes it shock-proof and shatter-proof. Adjustable spring steel headband and fluid filled ear cushions are designed to fit head contour, thus forming a better seal against outside noise, can be readily removed and washed with soap and water. Unusually smooth frequency response 30-20,000 cps, 4 ohm impedance. Has 10 ft. coil cord and plug.

No. 33A6589. Shpg. wt. 2 lbs. Net Each **\$50.00**

④ **NEW KOSS MODEL K-6,** medium price wide range stereo headphones will produce your favorite music, from 10 Hz to 15,000 Hz. Impedance 4-16 ohms. Vinyl covered cushions removable for easy cleaning. Features extremely comfortable sponge foam headband for comfort during extended listening periods. Complete with 8 ft. cord with standard stereo phone plug for convenient connection to most amplifiers and receiver systems.

No. 33A6622. Model K-6. Net Each **\$26.50**



**SUPEREX STM**

**SUPEREX ST-C**

**SUPEREX ST-PRO-B**

⑤ **THE POPULAR SUPEREX MODEL STM**  
Has separate woofer and tweeter in each phone with a miniaturized crossover network, plus an individual tweeter control for each phone. Ideal for listening to your prized records at full volume without disturbing others, practicing the organ in privacy, monitoring stereo tape recorders. Styro-foam ear cushions, adjustable headband, cord and 3-conductor plug included. Response 20-20,000 cps. Impedance 6-8 ohms.

No. 33A6592. Model STM. Net Each **\$29.95**

⑥ **SUPEREX MODEL ST-C**  
The Challenger is an outstanding new headphone. Engineered to let the music enthusiast hear stereo the way it was meant to be heard. Features Suporex's exclusive double post and yoke, the "Ear-formed" vinyl covered polyurethane ear cushions assure a perfect seal so necessary for low frequency response. They can be removed for replacement or sterilization. Impedance 4-6 ohms. Frequency response: 40-15,000 cps. Power: maximum 2 watts. Element: Dynamic. With 7 ft. cord and stereo plug. Shpg. wt. 2 lbs.

No. 33A6641. Net Each **\$19.95**

⑦ **SUPEREX MODEL ST-PRO-B**  
The incomparable Suporex Professional is more than a new stereo phone. The more you listen to this phone the more impressive are its differences from other stereophones... and finally you realize that this is what professional stereo phones should be. Specifications: double headphone, dynamic woofer, ceramic tweeter; 4-16 ohm imp; freq. resp. 18-22,000 Hz, 60-18,000 Hz ± 3 db; Max power, 2 watts. Has 7 ft. cable and standard stereo plug. One pair of ear cushion covers supplied. Shpg. wt. 2 1/2 lbs.

No. 33A6642. Net Each **\$50.00**



**NEW MODEL EN-5 STEREOPHONES**

With features usually found in higher priced units. Dramatic full sound with 50-18,000 cps Frequency Response. Extra soft removable foam-filled cushions are covered with very pliable superflex 3 core vinyl. Complete with 8' Superflex cord with stereo phone plug. Brown with Avocado Green trim. Shpg. wt. 1 lb.

No. 33A6621. Each **\$9.95**



**STEREO CBO1 — PRICE IS LOW... VALUE HIGH!**

Revolutionary value leader. Features big 3 1/2" speaker with Frequency Response from 10-15,000 cps. Removable lightweight and adjustable ear cushions combine for enjoyable effortless listening. High fashion design in rich Brown. Complete with 8 ft. cord. Impedance 3-16 ohm. Shpg. wt. 1 lb.

No. 33A6620. Each **\$19.95**



**MODEL ST10 STEREO TWIN HEADPHONES**

Features Elliptical speakers which deliver flat response of 16-15,000 cps. Producing rich bass tones and faithful reproduction of highs. Soft foam rubber cushions give excellent acoustic seal. Stainless steel headband carefully tempered to maintain absolute comfort. 8 ft. cord has built-in strain relief and stereo phone plug. Shpg. wt. 1 lb. Impedance 3-16 ohms. No. 33A6619.

Net Each **\$24.95**



**MODEL ST20 QUALITY STEREO SOUND**

Channel control is built into headset eliminating inconvenience of separate control center. Maintains perfect stereo balance. Features elliptical speakers, with 10-15,000 Hz response. Soft foam rubber cushions give excellent acoustic seals, are removable for easy cleaning. Imped. 3-16 ohms. With 8 ft. cord and stereo phone plug. Brown and tan. Shpg. wt. 1 lb. No. 33A6618.

Net Each **\$34.95**

## FINE IMPORTED STEREO HEADPHONES

Private Listening at Lowest Cost!

Wide range frequency response 25-17,000 cps, big comfortable soft foam rubber cushions with "velvet" covering, leather padded adjustable headband—features generally found in more costly phones—all at tremendous comparative savings. Comes with 5 1/2 ft. cord and regular 1/4" 3-way plug. Wt. 1 lb.

No. 33A6593. Import Special Value **\$9.95**



## DELUXE STUDIO QUALITY STEREO PHONES

With Junction Box—Response 25-18,000 CPS. B-A has sold hundreds of these exceptionally nice phones. Each earpiece actually contains a high quality wide-range miniature dynamic speaker with its own miniature volume control for perfect stereo balance and beautiful tonal quality. Lightweight soft foam rubber padded, comfortable to wear and well constructed. Has 7 ft. cord, 1/4" 3-way plug and junction box for 4-8-16 ohm amplifier output. Wt. 2 lbs.

No. 33A6594. Import Special Value **\$14.95**



## KOSS JUNCTION BOX

**MODEL T-5.** For connecting one or two stereophones to existing stereo or monaural systems. Impedance 4-16 ohms. Contains two volume controls for controlling sound level in each phone. Has two output jacks for stereo or monaural use. Equipped with speaker off-on switch for personalized listening. Shpg. wt. 1 lb.

No. 33A6590. Model T-5. Net Each **\$9.95**

**25 Ft. 3-Cond. Extension Cord for Stereo headphones.** Male plug one end, female jack other end. No. 33A6591. Wt. 8 oz. Net Each **\$3.95**



## KOSS T-10 FOR CHAIRSIDE LISTENING

Handsome new connecting box for plugging in Koss Stereophones beside your favorite chair or other locations remote from equipment.

Wires directly to amplifier. Accepts two sets of stereophones. Has separate volume control for each phone plus speaker on-off control switch. In handsome walnut cabinet. Impedance 4-16 ohms. Shpg. wt. 2 lbs.

No. 33A6595. Net Each **\$19.95**



# SAVE UP TO \$79.30 ON ONE OF THESE SPECIALLY SELECTED COMPONENT SYSTEMS!

## 40-WATT STEREO SYSTEM



**SAVE \$59<sup>00</sup>**

HERE'S WHAT YOU GET...

- |   | REC. PRICE |
|---|------------|
| 1—B-A 40-Watt AM-FM-MX Stereo Receiver (No. 33A346. See page 7 for complete description)  | \$129.95   |
| 1—Garrard 40B Automatic Turntable (No. 33A530. See page 4 for complete description)       | \$ 44.50   |
| 2—B-A High Compliance Speaker Systems (No. 33A2019. See page 12 for complete description) | \$ 55.00   |
| 1—Shure M32E Magnetic Cartridge (No. 33A5007. Described page 6)                           | \$ 29.50   |
| PLUS 50 Ft. of Speaker Cable.   |            |

IF PURCHASED SEPARATELY... \$258.95  
 No. 33A416. COMPLETE SYSTEM \$199.95  
 B-A's SPECIAL LOW PRICE

## 75-WATT STEREO SYSTEM



**SAVE \$79<sup>30</sup>**

HERE'S WHAT YOU GET...

- |   | REC. PRICE |
|---|------------|
| 1—Kenwood KR44 75-Watt AM-FM Stereo Receiver (No. 33A399. See page 8 for complete description)  | \$239.95   |
| 2—B-A 3-Way High Compliance Speaker Systems (No. 33A2071. See page 13 for complete description) | \$119.90   |
| 1—Garrard SL55B Automatic Turntable (No. 33A542. Described page 4)                              | \$ 59.50   |
| 1—Garrard Base for SL55 (No. 33A579. See page 4 for description)                                | \$ 4.95    |
| 1—Shure M44E Elliptical Cartridge (No. 33A5005. Described page 6)                               | \$ 24.95   |
| PLUS 50 Ft. of Speaker Cable.   |            |

IF PURCHASED SEPARATELY... \$449.25  
 No. 33A417. COMPLETE SYSTEM \$369.95  
 B-A's SPECIAL LOW PRICE

## 90-WATT STEREO SYSTEM



**SAVE \$71<sup>25</sup>**

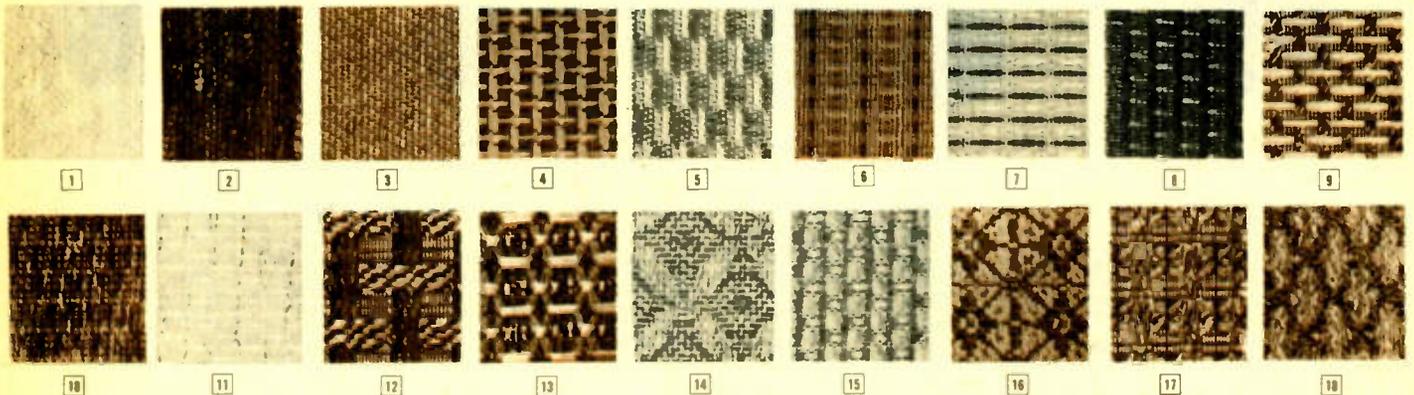
HERE'S WHAT YOU GET...

- |  | REC. PRICE |
|--|------------|
| 1—Marman-Kardon 90-Watt AM-FM Stereo Receiver (No. 33A398. Described page 9) | \$199.95   |
| 1—Walnut Cover for M-K Receiver (No. 33A9503)                                | \$ 24.95   |
| 2—B-A Deluxe 4-Way Speaker System (No. 33A2022. Described on page 12)        | \$139.90   |
| 1—Garrard SL75B Automatic Turntable (No. 33A540. Described on page 3)        | \$109.50   |
| 1—Garrard Base for SL75 (No. 33A580. Described on page 4)                    | \$ 6.50    |
| 1—Shure M75E Hi-Track Cartridge (No. 33A5003. Described on page 6)           | \$ 39.95   |
| PLUS 50 Ft. of Speaker Cable.  |            |

IF PURCHASED SEPARATELY... \$520.75  
 No. 33A418. COMPLETE SYSTEM \$449.50  
 B-A's SPECIAL LOW PRICE

## DECORATOR GRILLE FABRICS BY ACOUSTONE

PATTERNS AND COLORS TO MATCH EVERY FURNITURE STYLE AND COLOR



- ① Majorca Linen. Mixture of plastic and linen yarns. Handsome with walnut finished cabinets. Pattern A-1. No. 33A8013. 18"x24". Net Ea.....\$2.15 No. 33A8012. 36"x36". Net Ea.....\$3.95
- ② Dark Majorca. Rich dark linen effect with Antique Gold highlights. Pattern A-2. No. 33A8015. 18"x24". Net Ea.....\$2.15 No. 33A8014. 36"x36". Net Ea.....\$3.95
- ③ Random Metal. Pleasing mixture of beige and gold metal. Pattern A-27. No. 33A8017. 18"x24". Net Ea.....\$2.15 No. 33A8016. 36"x36". Net Ea.....\$3.95
- ④ Tahiti Cane. Natural cane stands out on a dark background. Pattern A-2412. No. 33A8019. 18"x24". Net Ea.....\$2.15 No. 33A8018. 36"x36". Net Ea.....\$3.95
- ⑤ Silver Checkerboard. Mixture of silver and dark grey. Pattern A-20. No. 33A8021. 18"x24". Net Ea.....\$2.15 No. 33A8020. 36"x36". Net Ea.....\$3.95
- ⑥ Waffle Weave. Beige and Bronze interwoven plastic threads—great for walnut finish. Pattern A-81. No. 33A8023. 18"x24". Net Ea.....\$2.15 No. 33A8022. 36"x36". Net Ea.....\$3.95
- ⑦ Cultar Fever. Exciting silver metal threads just out from a grey base with black lines. Pattern B-102. No. 33A8025. 18"x24". Net Ea.....\$2.60 No. 33A8024. 36"x36". Net Ea.....\$4.75
- ⑧ Black Magic. Three dimensional black plastic allover for dramatic contrast. Pattern B-4542. No. 33A8027. 18"x24". Net Ea.....\$2.60 No. 33A8026. 36"x36". Net Ea.....\$4.75
- ⑨ Tahiti Cane. Crossed with brown and gold metal stands. Pattern B-2422. No. 33A8029. 18"x24". Net Ea.....\$2.60 No. 33A8028. 36"x36". Net Ea.....\$4.75
- ⑩ Tree Bark. Chocolate strands interwoven irregularly with gold metal threads. Pattern B-5082. No. 33A8031. 18"x24". Net Ea.....\$2.60 No. 33A8030. 36"x36". Net Ea.....\$4.75
- ⑪ Eggshell Waffle. Pale Ivory and White waffle with random gold metal yarn sprinkles. Pattern C-6423. No. 33A8033. 18"x24". Net Ea.....\$2.60. No. 33A8032. 36"x36". Net Ea.....\$4.75
- ⑫ Woven Wood. Rich mixture of walnut tones on a dark background. Pattern D. No. 33A8035. 18"x24". Net Ea.....\$2.60 No. 33A8034. 36"x36". Net Ea.....\$4.75
- ⑬ 3D Modern. Walnut hexagonal with rust centers popping out from a black base. Pattern D-6000. No. 33A8037. 18"x24". Net Ea.....\$2.60 No. 33A8036. 36"x36". Net Ea.....\$4.75
- ⑭ Tapestry Weave. Beige, Brown and Gold threads woven into a modified diamond. Pattern D-3788. No. 33A8039. 18"x24". Net Ea.....\$2.60 No. 33A8038. 36"x36". Net Ea.....\$4.75
- ⑮ Danish Honeycomb. Beige and Gold luxuriously interwoven into a small brick effect. Pattern D-2425. No. 33A8041. 18"x24". Net Ea.....\$2.60 No. 33A8040. 36"x36". Net Ea.....\$4.75
- ⑯ Colonial. Soft blend of light gold and beige in circles—perfect for Early American. Pattern D-3050. No. 33A8043. 18"x24". Net Ea.....\$2.60. No. 33A8042. 36"x36". Net Ea.....\$4.75
- ⑰ Interwoven Wicker. Walnut with dark gold effects on a fine black screen. Pattern D-2701. No. 33A8045. 18"x24". Net Ea.....\$2.60. No. 33A8044. 36"x36". Net Ea.....\$4.75
- ⑱ Fleur De Lis Pattern. Walnut and Fruitwood colors—for Colonial and Italian periods. Pattern D-3060. No. 33A8047. 18"x24". Net Ea.....\$2.60. No. 33A8046. 36"x36". Net Ea.....\$4.75

All of above grille fabrics available in any length. Over 36" in 36" widths. Using the 36" price to calculate your cost for even foot length of 6' or over you may deduct 10% from the above prices.

# COLUMBIA MASTERWORK 36-WATT STEREO COMPONENT SYSTEM



WITH GARRARD AUTOMATIC  
TURNTABLE

**\$199<sup>95</sup>** MODEL  
M-4750

- Solid State Amplifier.
- 36 Watt Output.
- 4 Speaker System.
- Frequency Response 30-20,000 Hz.
- Stereo Indicator.
- Stereo Headphone Jack.
- Diamond Stylus.
- Tinted Dust Cover.

Now, enjoy a complete music center with the finest reproduction for a fraction of the cost of a typical compact system. All the desired features have been put into this system. Features solid-state dual-channel push-pull amplifier with a full 36 watt output. Inputs provided for external sound source such as tape recorder, TV, etc. Output jacks for tape recording directly from amplifier section. Six precision rotary controls: Bass, Treble, Balance, Volume, Tuning, Function: Tape, Phono, FM Stereo, FM and AM. Illuminated slide-rule dial with logging scale. Front mounted stereo headphone jack. Precision Carrard fully automatic changer with studio-type 11-inch turntable

has full range ceramic cartridge with diamond stylus. Plays manually or automatically. Deluxe oiled walnut enclosures with heavy duty 8-inch woofer and 2 1/2" tweeter in each wing are the perfect size for wall mount or bookcase. Antenna terminals provided for connection of outside FM antenna. AC convenience outlet for auxiliary power source. Size: Control center, 17" deep, 16 3/8" wide, 9" high (including dust cover); Speakers each 14" high, 9 7/8" wide, 6 7/8" deep. Shpg. wt. 35 lbs. No. 33A430. **\$199.95**  
Model M-4750. Including Dust Cover. Each.....

**harman kardon**

## A NEW APPROACH TO BOOKSHELF MUSIC SYSTEMS

Harman-Kardon has now developed a line of ultra-compact music systems that are specifically designed to fit perfectly on a bookshelf. These new high performance systems don't jut out, dangle or sit precariously on a shelf.

They fit . . . perfectly and deliver an amount and quality of sound that is unprecedented in their price category.



MODEL  
SL1112 **\$249<sup>95</sup>**

### HARMON-KARDON SLIMLINE AM/FM STEREO MUSIC SYSTEM WITH MINI RECORD CHANGER

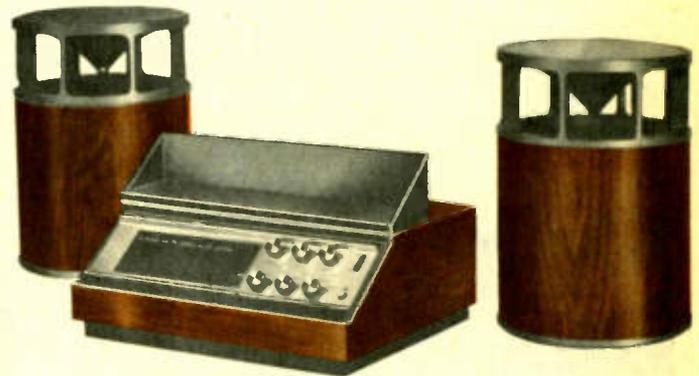
The same Receiver/Speaker combination as the SL1012 (at right) but in addition it features a highly sophisticated up-to-date mini-changer made especially for Harman-Kardon. The record changer matches the sleek, low silhouette design of the receiver. No. 33A433. Model SL1112. AM/FM Receiver with 2 H-K12 Speakers and Matched Stereo Record Changer..... **\$249.95**



MODEL  
SL1312 **\$349<sup>95</sup>**

### HARMON-KARDON SLIMLINE AM/FM STEREO MUSIC SYSTEM WITH MINI CHANGER AND TAPE CASSETTE

The same Receiver/Speaker combination as the SL1012 (at right) but includes the PC-13 combination Stereo Cassette Recorder/Player and Stereo Mini-Changer. This music system represents a significant breakthrough in styling versatility and price! No. 33A432. Model SL1312. Complete..... **\$349.95**  
Model PC13 Mini-Changer with Stereo Cassette Recorder and Dust Cover. No. 33A434. **\$149.95**  
Complete .....



### HARMAN-KARDON SLIMLINE AM/FM STEREO MUSIC SYSTEM

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

The SL1012 is a Stereo AM/FM Receiver of unique design. It's the only high performance stereo system that will fit on a 12" standard bookshelf without jutting over. In spite of its extremely compact size it offers all the important features and conveniences of separate components. It accepts any record player with ceramic phono pickup. Will accept 8 track tape system or tape cassette for record and playback.

Separate full range bass and treble controls insure complete tonal balance. Comes with 2 H-K12 omnidirectional speakers. These speakers have been designed to complement the electronics and are capable of handling the full power of the receiver without distortion. See full description of H-K12's on page 18. Receiver portion is housed in an elegantly styled walnut enclosure with see-through plastic cover over the controls. The control panel is shaped to give an additional touch of elegance and facilitate easy operation of the controls. **Specifications:** Receiver frequency response audio  $\pm 1$  db 30-15,000 Hz; Power output 30 watts (EIA) peak. Size control center: 15 1/8" W. x 5 7/8" H. x 11 3/4" deep; speaker size, 13 3/4" H. x 9 1/2" diameter. **\$199.95**  
No. 33A431. Model SL1012. Complete with H-K12 Speakers.....

# AN EXCITING NEW CONCEPT IN SPEAKER DESIGN



**harman kardon**

**OMNI-DIRECTIONAL DISPERSION**



Serious music lovers and high fidelity buffs who advocate reflected sound claim it for three main reasons:

- ① Dramatically increases stereo depth.
  - ② Spreads the stereo effect throughout the listening room.
  - ③ Improves the character of the sound itself! The bass becomes richer, the highs sweeter.
- Omni-directional sound dispersion creates greater spaciousness and depth without loss of fullness. It is unquestionably the speaker sound of today.



\$44.95



\$69.95



\$99.95

## HARMAN-KARDON MODEL H-K 12 OMNI-DIRECTIONAL SPEAKER

The specially constructed six inch twin-cone driver utilizes a heavy ceramic magnet structure which permits it to handle an inordinate amount of power for such a compact speaker system — 20 watts music power. Constructed of rigid polystyrene covered with a high grade simulated walnut laminate which is totally resistant to marring and stains. This system is uniquely compact in size and extremely good-looking. It will perform with total clarity if placed on floor, table top or open type bookshelf.

**Specifications:** Freq. Resp: 50-16,000 Hz. Medium-high efficiency, 360° dispersion, nominal impedance, handles 20 watts music power, 6 in. twin-cone long-throw extended range driver, size 13 3/4" HX, 9 1/2" Diameter.  
No. 33A2074. Model H-K 12. Each... **\$44.95**

## HARMAN-KARDON MODEL H-K 25 OMNI-DIRECTIONAL SPEAKER

The H-K 25 is the HK 12's "big brother." It is somewhat larger and employs a true two-way system with crossover network. Response is exceptionally linear and sound dispersion is 360 degrees. The HK-25 will handle 35 watts of music power with relative ease. It covers a broad frequency range through the use of a rugged long-throw six inch bass driver and 2 1/2 inch tweeter. **Specifications:** Freq. Resp: 43-20,000 Hz, medium-high efficiency, 360 degrees dispersion, nominal impedance 8 ohms, handles 35 watts music power, six inch long throw woofer and 2 1/2 inch tweeter. Size 16 1/2" HX, 12 3/4" Diameter. Constructed of rigid polystyrene with high grade laminate in walnut wood-grain finish.  
No. 33A2075. Model H-K 25. Each... **\$69.95**

## HARMAN-KARDON MODEL H-K 50 OMNI-DIRECTIONAL SPEAKER

The H-K 50 is the "top of the line" in omnidirectional speaker systems. The handsome oiled walnut enclosure houses an 8 inch air-suspension woofer (long-throw type) and a 2 1/4 inch hard surface cone tweeter.

The 2500 Hz crossover network with tweeter level control and input connections are located on the underside of the enclosure. The oiled walnut enclosure with circular slate-insert on top is finished on four sides to permit placement anywhere within the listening room.

**Specifications:** 35-18,000 Hz, handles 40 watts music power, 8 inch woofer with 2 1/4 inch tweeter, 360 degree dispersion, 8 ohm impedance. Cabinet size 18" HX, 10 3/4" Square. **\$99.95**  
No. 33A2045. Model H-K 50. Each...



WITH GARRARD RECORD CHANGER



**harman kardon**

## MODEL SC1510 PHONO COMPACT MUSIC SYSTEM

**\$199.50**  
Less Dust Cover

- Modular construction throughout to guarantee uniformity and total reliability.
- Full range balance control can compensate for program material, room acoustics and speaker unbalance.
- Modular construction throughout to guarantee uniformity and total reliability.

defeated automatically at higher volume levels. Has high level stereo inputs. Stereo tape recorder outputs.

**Specifications:** Power output: 40 watts; Freq. Resp.: 20-30,000 Hz ± 1.5 db @ 1 watt; Intermodulation Distortion: .25 @ 1 watt; H.D. less than 1%; Square Wave Rise Time: better than 5 microseconds; Speakers: 2 air loaded, high compliance systems with extended range, with dispersion driver. Dimensions: 9" W. x 14" H. x 7 1/2" D. Control Center: 15 1/4" W. x 8" H. x 17 3/4" D. (with optional dust cover in place). Shpg. Wt. 20 lbs.

No. 33A370. Model SC1510. (Less dust cover). Each **\$199.50**  
Control Center above with H-K 12 Omnidirectional Speakers. **\$219.50**  
No. 33A423. Model SC1512. Each **\$199.50**  
No. 33A371. Dust Cover for above. Each **\$19.50**

The smallest most graceful high performance compact music systems ever made. Engineered to deliver maximum amount of sound from minimum visible equipment. High power solid-state amplifier that is matched perfectly to their specially designed air suspension speakers. These speakers are created as an extension of the amplifier and are specially contoured to handle power with ease across an extremely broad musical spectrum. The heavy magnet construction used in the speaker's woofer provides excellent bass response. Special output circuit has protective relay safeguards against short circuits. Resets automatically once short is removed. Unique speaker switch permits user to connect stereo speakers in two rooms and simultaneously. A rear panel mono/stereo switch works in conjunction with speaker system #2 permitting user to connect stereo speakers to system #1 and mono speakers to system #2. Remote system can be monophonic for use in kitchen, den, patio, etc. while main system is stereo. Contour switch restores bass frequencies at low volume levels. Contour may be defeated when not required. It is

**harman****kardon**

# STEREO COMPACT SYSTEMS

## 80 WATT SOLID STATE STEREO MUSIC SYSTEM WITH FM MULTIPLEX

# \$329<sup>50</sup>

COMPLETE SYSTEM

- Solid State Design
- MOSFET Devices Used In Tuner.
- Garrard Turntable
- 80 Watts Power.

Rated a "Best Buy" by a leading consumer organization this compact system offers fine stereo performance in a small package.

The receiver portion features MOSFET (metal oxide silicon field-effect transistors) front end for spectacular reception. Automatic stereo-mono FM switching with stereo indicator. 30 watt IHF stereo system boasts a defeatable contour switch, two-room stereo speaker switches, bass and treble tone controls, full range balance control, provisions for external program sources (TV, Tape Recorder, etc.) The Garrard automatic turntable operates at 16, 33 $\frac{1}{3}$ , 45 and 78 RPM. The changer utilizes a solid state phono cartridge with diamond stylus. Features famous Harman-Kardon Nocturne styling. Rich sculptured walnut cabinetry, gleaming ebony and gold front panel. Specially designed speakers feature two air-loaded high compliance systems with heavy magnet 8" woofer network and 3" wide dispersion tweeter. 17 $\frac{1}{4}$ " H, 8 $\frac{1}{4}$ " D, 11 $\frac{1}{4}$ " W. Output: 30 watts IHF; Frequency Response: 20-30,000 Hz; Harmonic distortion less than 1%; Control Center Dimensions: 8 $\frac{1}{2}$ " H, 18 $\frac{1}{8}$ " W, 17 $\frac{3}{4}$ " D. Wt. 61 lbs. (2 cartons).

No. 33A375. Model SC2020. **\$329.50**

Net Each

No. 33A424. Model SC20 Control Center With H-K 25 Speakers. (See page 18 for details on H-K 25). Net Each **\$349.50**

Model SC20 Control Center with H-K 50 Speakers (See page 18 for details on H-K 50).

No. 33A425. Net Each **\$369.50**

No. 33A374. Model DC-44A. Shpg. wt. 4 lbs. Net Each **\$19.95**

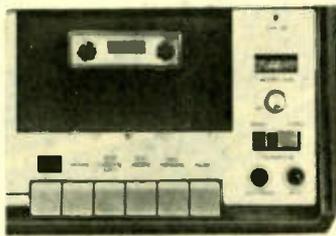
## THE MOST COMPLETE MUSIC SYSTEM EVER DESIGNED

**INCLUDING:****CASSETTE RECORD, PLAYBACK FM-FM MULTIPLEX RADIO & PHONO**

# \$449<sup>50</sup>

COMPLETE SYSTEM  
MODEL SC-2520

- All Solid State Design.
- Special Narrow Gap Recording Head for Greatest Frequency Response.
- Garrard Automatic Turntable.
- FM/FM Stereo Receiver with precision ball-bearing planetary station selector.
- MOSFET Devices used in the tuner for greater sensitivity.
- Two Walnut Wood High Compliance Speaker Systems.



BUILT-IN RECORDER SECTION OF MODEL SC-2520

The exciting SC-2520 total music system will play monaural and stereo records; monaural and stereo FM broadcasts AND it will record and playback cassette stereo tapes. Using a specially designed tape cassette system the SC-2520 will playback pre-recorded tapes, tape FM broadcasts off the air, or tape records. Even your voice. In monaural or stereo. Records up to two hours at 1 $\frac{7}{8}$  ips (both tracks). Very narrow gap recording head makes high frequency response clean and clear. Easy push-button controls for all cassette functions, play, record, rewind and pause. The recorder may be activated while listening to FM stereo or a cherished record.

The receiver portion features MOSFET (metal oxide silicon field-effect transistors) front end for spectacular reception. Automatic stereo-mono FM switching with stereo indicator. 30 watt IHF stereo system boasts a defeatable contour switch, two-room stereo speaker switches, bass and treble tone controls, full range balance control, provisions for external program sources (TV, Tape Recorder, etc.) The Garrard automatic turntable



2 WALNUT WOOD HIGH COMPLIANCE SPEAKER SYSTEMS



2 WALNUT WOOD HIGH COMPLIANCE SPEAKER SYSTEMS

operates at 16, 33 $\frac{1}{3}$ , 45 and 78 RPM. The changer utilizes a solid state phono cartridge with diamond stylus. Features famous Harman-Kardon Nocturne styling. Rich sculptured walnut cabinetry, gleaming ebony and gold front panel. Specially designed speakers feature two air-loaded high compliance systems with heavy magnet 8" woofer network and 3" wide dispersion tweeter. 17 $\frac{1}{4}$ " H, 8 $\frac{1}{4}$ " D, 11 $\frac{1}{4}$ " W. Output: 80 watts IHF; Frequency Response: 20-30,000 Hz; Tape Cassette Frequency Response: 45-12,000 Hz; Harmonic distortion less than 1%; Control Center Dimensions: 8 $\frac{1}{2}$ " H, 18 $\frac{1}{8}$ " W, 17 $\frac{3}{4}$ " D. Wt. 61 lbs. (2 cartons). **\$449.50**

No. 33A372. Model SC-2520. Net Each **\$449.50**

Handsome Dust Cover for the above models. **\$19.95**

No. 33A374. Model DC-44A. Shpg. wt. 4 lbs. Net Each **\$19.95**

No. 33A427. Model SC2525B with H-K 25 Omni-Speakers **\$469.95**

No. 33A428. Model SC2550B with H-K 50 Omni-Speakers **\$499.95**

# PANASONIC

# STEREO MUSIC CENTERS

MODEL SC-555

## PANASONIC 60 WATT STEREO MUSIC CENTER

- COMPACT DESIGN & STYLING.
- FET FM TUNER.
- WIDE BAND AM TUNER.
- AUTOMATIC TURNTABLE  
W/ CUEING LEVER.
- FULL RANGE SLIDE CONTROLS.
- DUST COVER INCLUDED.

**\$229<sup>95</sup>**

The Panasonic SC555 stereo music center is an exciting new concept in design and styling of high fidelity components for home entertainment. Beautiful walnut cabinetry enhanced by black and brushed chrome trim will complement any room decor. FM tuner features FET's for greater sensitivity and rejection of unwanted signals. 4 FM IF stages to tune in the weakest FM signals. Circuits automatically switch from mono to stereo when FM stereo station is tuned on dial. FM stereo light indicates stereo station. The exclusive Panasonic wide range linear sliding controls provide precise adjustment of sound to suit personal tastes. Separate bass and treble controls. Stereo headphone jack provided on front panel. Inputs on back panel provided for connecting tape recorder or other program source such as new 8-track cartridge or stereo cassette players. Output jacks provide for direct tape recording. Compact speaker systems incorporate acoustically matched 6½ inch woofer with 2½ inch wide-dispersion tweeter. 4 speed precision automatic turntable plays all size records. Low gram stylus



SEPARATE  
ACOUSTIC  
SUSPENSION  
LOUDSPEAKERS

pressure and built-in anti-skating compensation assure reliable operation with the exclusive Panasonic Magnistate cartridge and turnover diamond stylus.

Music power 60 watts at 8 ohms. Power bandwidth 22 Hz to 25,000 Hz —3 db. HD 1.0% at 1 KHz and rated output. FM Sensitivity 1HF 2.9 uV. S/N ratio at 60 db. FM stereo separation 35 db. Capture ratio 2-5 db. Speaker crossover frequency 8000 Hz.

Dimensions: Center Unit 17½" x 8⅞" x 15½"; Speakers 9¾" x 15⅜" x 8½"

No. 33A408. Model SC555. Each **\$229.95**

MODEL SC-666

## PANASONIC 80 WATT STEREO MUSIC CENTER

- 80 WATTS.
- FET FM TUNER.
- AM TUNER INCORPORATES RF  
STAGE.
- REMOTE SPEAKER SWITCH.
- AIR SUSPENSION SPEAKER  
SYSTEMS.
- DUST COVER INCLUDED.

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



HAS FAMOUS  
PICKERING  
V-15  
MAGNETIC  
CARTRIDGE

Now a complete stereo music center of professional standard. Latest engineering and advanced technology in solid state design enables this instrument to deliver an extraordinary amount of quality of sound.

Rich all wood walnut cabinetry enables you to place speakers on wall mounts, bookshelf or floor to complement room decor. Control center with professional-style turntable, rocker-type switches, and linear sliding controls can be placed on bookshelf, bookcase, or on endtables.

Tuner section has 4 IF stages a unique design ratio detector to provide true broad-band frequency response. Calibrated field strength meter and automatic stereo indicator lamp provide perfect center-of-channel tuning.

The wide-range sliding controls allow smooth and instant adjustment of bass and treble frequencies. Rocker-type switches control stereo-mono function, main-remote speakers, tape-monitor, and stereo headphones.

Facilities are provided on the rear panel for connection of two pairs of speakers, external program source such as tape recorder or the new 8-track cartridge or cassette players. Tape recorder output jacks are provided for direct recording. Multi-position selector switch permits wide choice of program source and computer-type indicator show program source selection.

The compact speaker systems incorporate an 8 inch woofer with inverted

half-roll surround for bass response down to 39 Hz, coupled with a 2 inch wide dispersion tweeter for smooth response out to 19,000 Hz without distortion.

The 4 speed automatic turntable features cue control, adjustable stylus pressure and anti-skate controls, and Pickering V-15 Micro-Magnetic cartridge with diamond stylus.

Music power 80 watts at 4 ohms. Power bandwidth 20 Hz to 25,000 Hz —3 db. HD 1.0% at 1 KHz and rated output. FM sensitivity 1HF 2.8 uV. S/N ratio 60 db. FM stereo separation 35 db. Capture ratio 1HF 2.5 db. Speaker crossover frequency 8000 Hz.

Dimensions: Center Unit 17½" x 8⅞" x 18⅞"; speaker system 11⅜" x 17⅜" x 8¾"

No. 33A409. SC666. Each **\$299.95**



**PRESENTING AMERICA'S  
NEWEST VALUE  
SENSATION IN  
MULTI-PURPOSE  
CABINETS!**

**40 INCH  
CABINET  
WITH 2  
SLIDING  
DOORS**

**\$19.99**

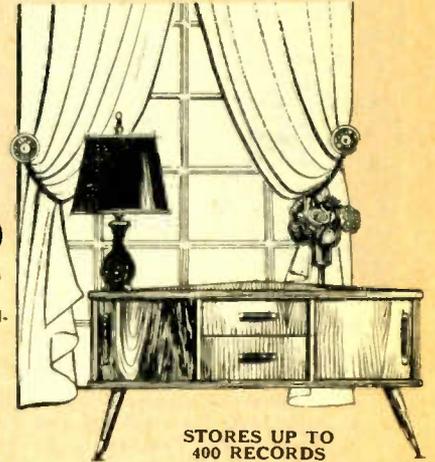
**IMAGINE SO MUCH CABINET FOR SO LITTLE!**

**VINYL-CLAD WALNUT  
CABINETS ARE STAIN,  
MAR & HEAT RESISTANT**

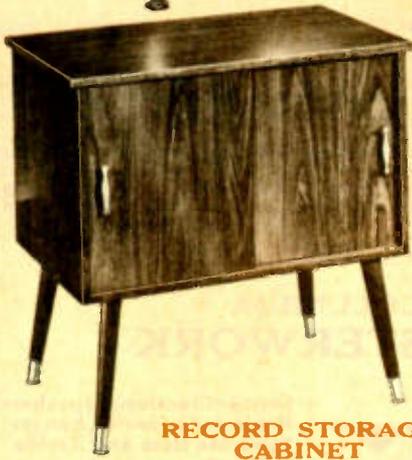
Richly finished selected hardwoods, brass-colored hardware. 40" long, 26" high, 16" deep. Easy to assemble!

- Holds many books.
- Handy as a bar.
- Decorative TV stand.
- Perfect as credenza.
- Brass finished period-matched hardware.
- Attractive room divider.
- Useful liquor cabinet.
- Ideal for picture window.
- Ideal for stereo hi-fi phono.

Units shipped K.D. Shpg. wt. 40 lbs. **\$19.99**  
No. 33A9500. Modern Walnut Finish



**STORES UP TO  
400 RECORDS**



**RECORD STORAGE  
CABINET**

Handsomely styled low boy design ideal for limited space areas. Stores up to 150 12" records. Has full view sliding doors with brass door pulls. Supplied knocked down. Easily assembled in just minutes—requires no tools, bolts or screws. Sturdy hardwood and wood construction. 26 1/4" W., 26" D., 15" H. Wt. 18 lbs. **\$11.88**  
No. 33A8501. Net Each



**CUSTOM COMPACT  
ALL-PURPOSE CABINETS**

Three decorator styles with period-matched brass finished hardware. Compact in size yet easily stores over 200 records. Size 27" W., 15" deep, 26" H. Shpg. Wt. 25 lbs. **\$16.88**  
No. 33A8502. Modern Style. Each  
No. 33A8503. Early American Style. Each \$16.88  
No. 33A8504. Mediterranean Style. Each \$16.88



**COMBINATION RECORD  
AND BOOKCASE CABINET**

Beautifully styled decorator cabinet. Has record storage compartment as well as space for radio, record player. Perfect for holding compact Hi Fi systems as listed below. Soft wood grained finish. 3 designs. Size 36" W., 15" D., 30" H. Shpg. Wt. 33 lbs. **\$24.88**  
No. 33A8505. Modern Walnut. Each  
No. 33A8506. Mediterranean Fruitwood. Each \$24.88  
No. 33A8507. Early American. Each \$24.88

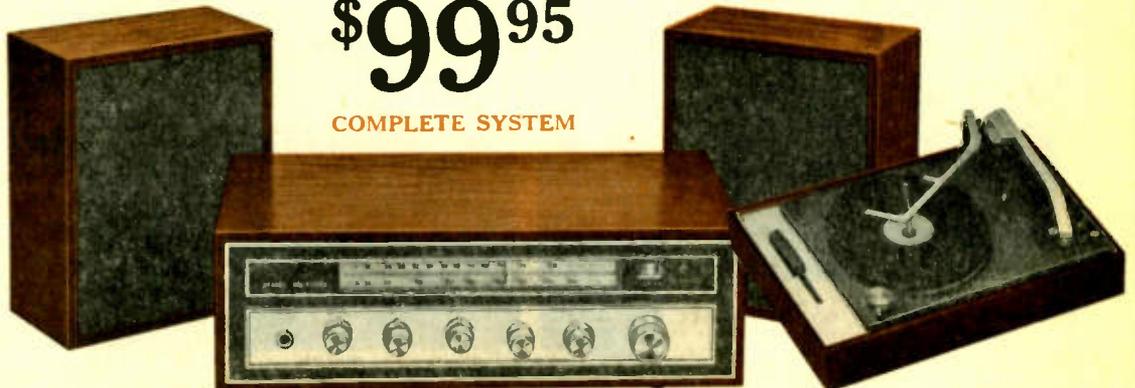
**STEREO MODULAR COMPONENT SYSTEM AT BUDGET PRICE!**

**B-A SPECIAL!  
AM-FM  
MULTIPLEX  
RADIO  
WITH  
STEREO  
PHONO**

**IN BEAUTIFUL  
WALNUT CABINETS**

**\$99.95**

**COMPLETE SYSTEM**

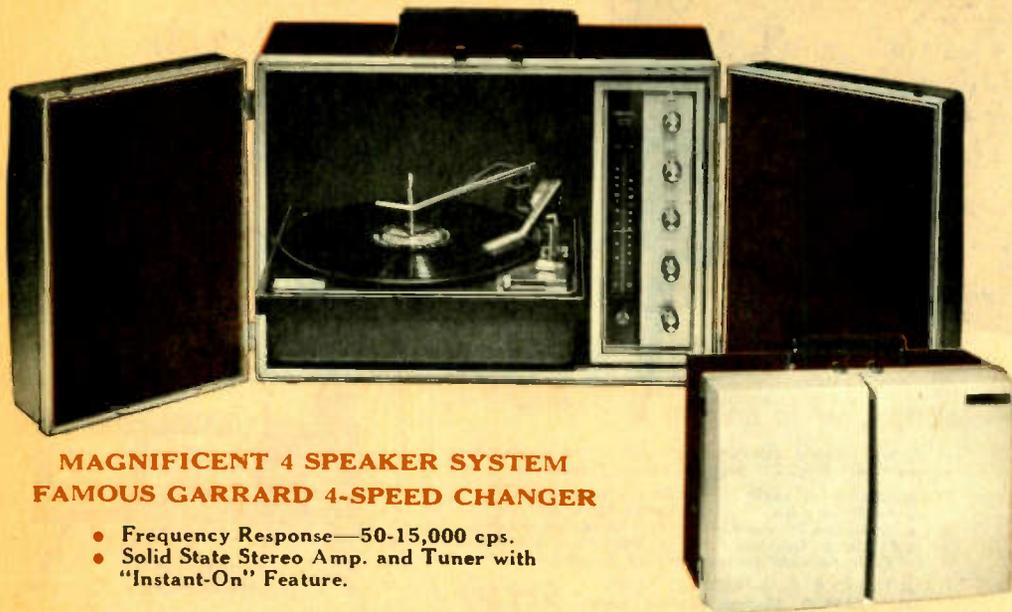


This stereo system has everything needed to provide beautiful stereo music at a price everyone can afford. Sensitive AM-FM stereo radio pulls in the most distant stations. Two 4" x 6" speakers in walnut enclosures give full range sound. Stereo phonograph plays all records stereo and mono. Stereo indicator light comes on when stereo FM is being broadcast.

Stereo headphone jack plus tape inputs and outputs permit personal listening and connections for direct tape recording. Includes external antenna connection plus 300 ohm "T" type FM antenna. Shpg. Wt. 30 lbs. **\$99.95**  
No. 33A429. Model 4356-421. Complete System. Each

# B-A SPECIAL PURCHASE SCOOP

## SAVE \$21.07 OFF 1969 CATALOG PRICE!



**B-A's FINEST!**  
**STEREO**  
**HIGH FIDELITY**  
**AUTOMATIC**  
**PORTABLE WITH**  
**STEREO FM AND**  
**FM/AM RADIO**

**REG. PRICE**  
**WAS \$149.95**

**B-A's LOW PRICE . . .**

**\$128<sup>88</sup>**

**MAGNIFICENT 4 SPEAKER SYSTEM**  
**FAMOUS GARRARD 4-SPEED CHANGER**

- Frequency Response—50-15,000 cps.
- Solid State Stereo Amp. and Tuner with "Instant-On" Feature.

Beautifully styled in Walnut and Beige makes this model most desirable, for all decors. Tops in performance . . . Has all the musical capabilities of an expensive stereo Hi-Fi console with the added convenience of smaller size and portability. Provides faithful reproduction from whatever the program source to please even the most critical listener.

**Stereo Speaker Systems.** Detachable swing-out wing enclosures, each with large 6" Woofer Speaker—3½" High Frequency Tweeter.

**Garrard 4-Speed Stereo Record Changer.** Fully automatic, stops after last record is played, intermixes 12" and 10" records of the same speed in any sequence. Dynamically balanced motor with lifetime lubricated bearing.

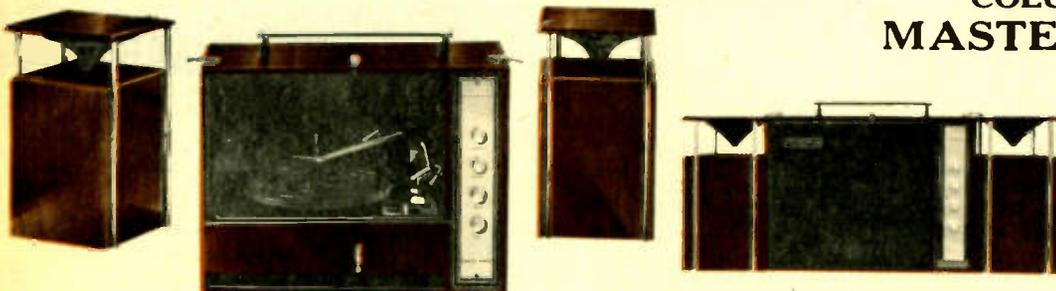
**Solid-State Amplifier.** Provides 10 watts from powerful all transistor circuit with "Instant-On" action and power transformer. Wide 70-15,000 cps Frequency Response, results in true Stereophonic, full-dimension volume.

**Stereo FM and FM/AM Radio.** Tunes in FM Radio in thrilling full-dimensional stereo volume . . . Full broadcasting reception on both AM and FM. FM Stations are securely locked in with (AFC) Automatic Frequency Control.

Cabinet is beautiful walnut and Beige with aluminum trim and knobs. Hide-a-way Changer conveniently swings down for playing. Overall Size: 21" W, 14½" H, 11½" D. 117 VAC. UL Approved.

**No. 30A407. Shpg. wt. 38 lbs. Net Each \$128.88**

**NOW! A PORTABLE PHONO WITH A NEW CONCEPT IN STEREO SOUND!**



**COLUMBIA**  
**MASTERWORK**

- Omni-directional speakers.
- Famous Garrard Changer.
- Separate Bass and Treble Controls.

**\$99<sup>95</sup>**

High quality Masterwork workmanship combined with the new omni-directional speaker systems makes this stereo phonograph an outstanding value at this low price.

**Famous Garrard 4-Speed Changer** is fully automatic with 45 RPM spindle and diamond stylus. **Solid State Dual Channel Amplifier:** 15 watts output gives superb stereo sound. Four precision controls: Volume, Balance, Bass, Treble.

**Omni-Directional Speakers:** 2 balanced 6" speakers in walnut covered cabinets with stylish aluminum trim. Center unit has drop-down changer and walnut covered cabinet.

Size: 33½" wide, 8½" deep, 13¾" high. Shpg. wt. 36 lbs.

**No. 30A420. Masterwork Model M-2314. Each \$99.95**



**EXTRA BONUS: 45 RPM**  
**SPINDLE FREE!**



**BEAUTIFUL WALNUT TRIM**

**NEW! ALL TRANSISTOR SOLID STATE**  
**STEREOPHONIC PHONOGRAPH**

- Solid State
- Garrard Record Changer
- Frequency Response—70-15,000 cps
- High styled, fold down record playing compartment

**\$79<sup>95</sup>**

Magnificently appointed case in Rich Walnut houses this component quality Stereo Phono System.

Powerful Solid-State Amplifier provides 10 watts of stereo power.

**Famous 4 Speed Garrard Changer.** Fully automatic, stops after last record is played. Dynamically balanced motor with lifetime lubricated bearing.

**Stereo Speaker Systems.** Two 5" High Efficiency PM Speakers acoustically balanced, reproduce true stereo reproduction. Each speaker is housed in its own detachable enclosure for ultimate stereo separation. Operates on 110-120 Volts 60 cycles AC. Size: 18¼" W, 13¼" H, 7½" D. UL listed. Shpg. wt. 25 lbs.

**No. 30A408. Model 4201WA. Each \$79.95**

# PORTABLE PHONOS FOR MUSICAL FUN!

## GENERAL ELECTRIC 4-SPEED SINGLE PLAY PHONOGRAPH \$16<sup>88</sup>

Any youngster will be thrilled with this full-size "grown-up" GE phono. Ruggedly built to take bumps and bruises, yet light enough for easiest carry-about. Plays all 4 speeds, all sizes—7, 10 and 12". Solid-state amplifier for instant play—no warm-up needed. Big dynamic 4" Alnico V speaker for pleasing tone and full room volume. Scuff-resistant and washable white and blue polyethylene case. Can store ten 45 RPM records in lid. 13 1/2" W., 4 1/4" H., 9" D. 110-125 V. 60 cy. AC. Shpg. wt. 6 1/2 lbs. No. 30C59. **\$16.88**  
Each



## SWINGMATE AUTOMATIC 4-SPEED SOLID STATE PORTABLE PHONOGRAPH \$29.95

Wow! What a terrific buy this is. Just think—a complete portable automatic phono at just pennies more than a record changer alone. Take the "Swingmate" where the action is—so easy to carry, weighs just 11 lbs. High impact scuff-resistant case takes abuse. Plays all monaural records with dual stylus, all speeds (33 1/3, 45, 78 and 16 RPM) all sizes (7, 10 and 12"). 45 RPM spindle included. Automatic shut-off after last record, or will repeat if desired. Fine tone quality from front mounted 2x6" Dynacoustic speaker. Solid state amplifier for instant sound, longer life and reliability. Size 14" W., 14 1/4" D., 7" H. 110-125 V. 60 cy. AC. Shpg. wt. 15 lbs. **\$29.95**  
No. 30C56. Each



## MUSTANG STEREO PHONOGRAPH FOR THE GROUP ON THE GO!

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

HANDY  
CUSTOM  
DESIGNED  
STAND



Slim, trim and youthful . . . right-up-front in performance too! An outstanding value in sound, looks, convenience and durability. General Electric 4-speed automatic changer with dual stylus plays all records—stereo and monaural, all sizes 7, 10 and 12". 45 RPM spindle included. Automatically shuts-off or will repeat last record if desired. 9" turntable rubber matted for fullest record protection. Solid state stereo amplifier requires no warm-up, plays instantly, three audio controls—separate right and left channel volume controls, and tone control—conveniently mounted on front of changer. Detachable speaker wings, each with a 5 1/4" Dynacoustic speaker, can be separated from the phonograph up to 12 ft. for true stereo sound. High-impact polystyrene cabinet folds-up for easy carrying—weight just 10 lbs. 19 1/2" W., 7 1/2" D., 12" H. 110-125 V. 60 cy. AC. Shpg. wt. 16 lbs.

No. 30A415. Each **\$59.95**  
No. 30A322. Stand. Each **\$5.77**

## AC/BATTERY PHONOS FOR MUSIC ON THE GO!

### AM RADIO-PORTABLE PHONO AT A BUDGET PRICE

- 2 Speed Phono.
- Super-Sensitive AM Radio.
- Ceramic Cartridge with Sapphire Needle.

OPERATES ON BATTERIES OR  
BUILT-IN LINE CORD

This little performer goes anywhere you go. Electronically controlled turntable governor assures constant speed. Direct drive radio tuning on sensitive AM radio makes station selection easy. Separate adaptor for 45 RPM records. Plays 45 and 33 1/3 RPM records. Powerful 8 transistor chassis. Operates on 4 "C" batteries which are included. Light weight tone arm with automatic shut-off. Size 11 1/2" x 7 1/2" x 2 1/4". No. 30A421. **\$19.95**  
Model TR6219. Each

**\$19<sup>95</sup>**



### REALTONE PORTABLE 3-SPEED SOLID STATE RADIO PHONO AC OR BATTERY OPERATION

WALNUT  
CABINET

**\$29<sup>95</sup>**



Play records, listen to favorite radio programs anywhere . . . no plug-in needed. Amazing tone quality, big sound volume. Lightweight, only 5 1/2 lbs. Slimline design in beautiful walnut wood cabinet, only 3 1/4" thick. All solid state (6 transistors, 1 diode, 1 thermistor), powered by only 4 flashlight batteries. Rubber matted turntable starts as tonearm is placed on record, stops when arm is removed. Plays 7, 10 and 12" records at 33 1/3, 45 and 78 RPM.

AM radio with vertical, easy-to-read slide rule dial. Back and front covers are high impact dark-gray styrene. Overall size 14 1/2" wide, 10" high, and only 3 1/4" thick. Shpg. wt. 7 bs. **\$29.95**  
No. 30A401. Special, Only

## PANASONIC AC/BATTERY AM-FM PORTABLE PHONOGRAPH

- Continuous Tone Control
- 4" Dynamic Speaker
- AM-FM Full-Range Radio
- 2 Speed Phono

**\$49<sup>95</sup>**



This compact-designed radio-phono combination delivers Panasonic performance from your favorite 33 1/3 and 45 RPM records. Operates on 6 "D" size batteries or regular AC current. Sensitive whip antenna for FM and ferrite antenna for AM assure quality sound from 4" dynamic speaker. Earphone jack for private listening or can be used for external speaker. 6 Panasonic Hi-Tap "D" batteries included. Size 11 5/8" x 3 1/2" x 10 7/8". **\$49.95**  
No. 30A416. Model SC-719. Each

## PANASONIC AC/BATTERY STEREO PHONO WITH AM/FM RADIO AND AUTOMATIC RECORD CHANGER

- 4 Speed Automatic Changer.
- Twin 4" Speakers.
- Dual Volume Controls.
- Continuous Tone Control.
- Sensitive FM/AM Radio.

**\$99<sup>95</sup>**



MODEL  
SC-674

Enjoy exciting stereo records as well as the ultimate in full range FM/AM reception. Operates on regular house current or six "D" batteries. Features precision Panasonic 4 speed record changer with ceramic cartridge and flip-over stylus. RPM governor motor control and automatic shut-off make for carefree phono performance. Antenna built-in for AM-FM reception. Slide-rule vernier tuning allows precise station selection. Four-inch full range dynamic speakers and continuous tone control provide highest quality sound. Attaché style case in distinctive charcoal-grey finish. Complete with 6 "D" batteries. Size 17 1/4" x 6" x 12 7/8" Wt. 15 lbs. **\$99.95**  
No. 30A417. Model SC-674. Each

# PHONO NEEDLES AND CARTRIDGES

## PRECISION DIAMOND NEEDLES

UP TO 5 TIMES LONGER WEAR COMPARED TO SAPPHIRE

Your Choice

**\$2.49** EACH

SAVE! KEEP A SPARE 2 FOR \$3.99

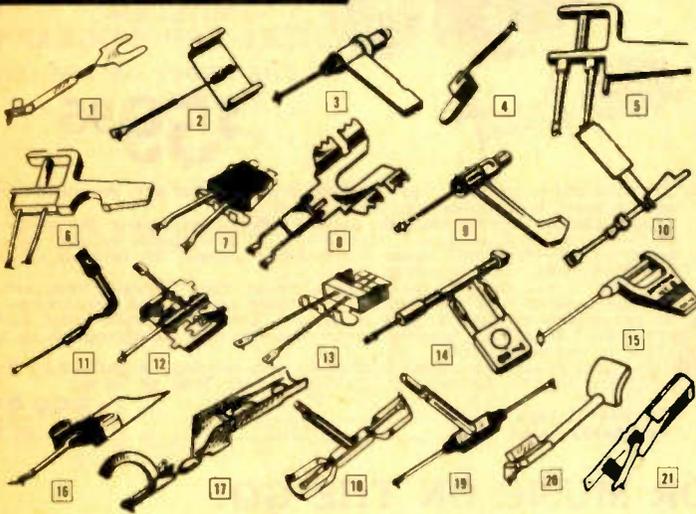
PROTECT YOUR VALUABLE STEREO AND LP RECORDS WITH A NEW HIGH QUALITY DIAMOND NEEDLE



AMERICAN MADE

DO NOT CONFUSE WITH LOWER QUALITY IMPORTS!

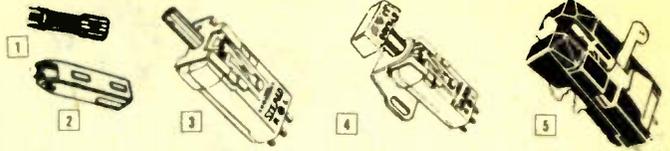
YOU WILL FIND NO BETTER QUALITY THAN THESE DIAMOND JEWEL TIPPED, HAND POLISHED NEEDLES. EXACT REPLACEMENTS FOR ALL POPULAR CARTRIDGES



All are dual needles with diamond tip compatible for both stereo and LP records, also sapphire tip for 78 RPM records, except where asterisk (\*) indicates a single diamond needle for stereo and LP only.

Fig. No.	Stock No.	Cart. Mfg.	Needle No.	Fig. No.	Stock No.	Cart. Mfg.	Needle No.
1	24A361	Astatic	* N8-3	3	24A672	Phillips	946 Series
1	24A362	Astatic	* N8-1, -2, -7	3	24A632	RCA	115328, 9
9	24A546	Astatic	N41, N42	7	24A533	RCA	108214, -215
9	24A547	Astatic	N50, 51, 60, 63	13	24B307	RCA	110020A-22
			N68, 69, 70, 72	20	24A673	RCA	* 115061
9	24A617	Astatic	N64	3	24A674	RCA	118197
3	24A665	Astatic	N74	1	24A362	Ronette	* N8-1, 2, 3, 5304
1	24A362	BSR	* TC8G, R, RS	2	24A326	Ronette	* SA-100, -200, -075
3	24A633	BSR	ST3 thru ST10	8	24A320	Shure	N4, A6, A9, A10
17	24A666	Columbia	* SC-1	3	24A595	Sonotone	N21T
2	24A322	E-V	* 2604	11	24A460	Sonotone	N3T
9	24A627	E-V	2616	11	24A385	Sonotone	N2T, 9987
9	24A574	E-V	2619	11	24A349	Sonotone	N8T, -TA, S77
3	24A587	E-V	2620, 2622	14	24B308	Sonotone	N9T, N16T
9	24A636	E-V	2626, 2613	15	24A680	Sonotone	N12THA
10	24A667	E-V	2625	14	24B309	Sonotone	N18T
4	24A541	Euphonics	* 180, 181, 182	12	24A534	Telefunken	TW560
6	24A399	Euphonics	253 thru 256	9	24A631	Tetrad	11, 31
5	24A628	Euphonics	371, 372	9	24A641	Tetrad	21, 41
16	24B306	Euphonics	* 216	3	24A676	Tetrad	13, 33
3	24A668	GE	RS4634	3	24A622	Varco	CN
3	24A611	GE	RS6528, EA80X166	1	24A362	Varco	* TO, SN
3	24A669	GE	RS4413, 4154	3	24A677	Varco	LPS
21	24A670	GE	* RPJ Series	18	24A678	Zenith	S-55804, -05, 62489
21	24A671	GE	* 4G Series				S-68566, -67
3	24A634	Mastercraft	SJN-1	19	24A679	Zenith	

## ASTATIC STEREO REPLACEMENT CARTRIDGES



Popular plug-in type cartridges used as original equipment in thousands of phonographs. Has highly sensitive ceramic element for clear wide-range response, Movement is precision engineered for high compliance, excellent transient response, and low distortion. 13T Series are stereo, 81T monaural. 13AT is same as 13T except has wider range and higher compliance. Average shpg. wt. 3 oz.

Stk. No.	Type	Fig.	Response Cps	Needle Tip	Output Volts	Stylus Pressure	Mfg. List	Net Each
24A4014	13T	(1)	20-15,000	.75-3S	5V.	5 Gr.	\$5.95	\$3.57
24A4015	13TX	(1)	20-15,000	.7D-3S	5 V.	5 Gr.	8.95	5.37
24A4016	13AT	(1)	30-20,000	.75-3S	.3 V.	6 Gr.	7.95	4.77
24A4017	13ATX	(1)	30-20,000	.7D-3S	.3 V.	6 Gr.	10.95	6.57
24A4018	81T	(2)	30-15,000	1S-3S	1.0 V.	6 Gr.	3.95	2.37
24A4019	81TX	(2)	30-15,000	1D-3S	1.0 V.	6 Gr.	6.95	4.17

Replacement for many imported cartridges such as Acos, Ronette, Telefunken, Vaco, etc. High quality crystal cartridges have wide frequency range and separation. Type 76TSB and 86TSB have mounting bracket, bushing, and knob included. Shpg. wt. 4 oz.

Stk. No.	Cart. No.	Output Volts	Response Cps	Mfg. List	Net Each
24A4020	70TS	2.0	50-10,000	\$7.25	\$4.35
24A4021	76TSB	2.0	50-10,000	7.95	4.77
24A4022	80TS	0.8	50-15,000	7.50	4.50
24A4023	86TSB	0.8	50-15,000	8.50	5.10
24A4024	142	2.0	30-10,000	7.25	4.35
24A4025	74TS	2.0	50-10,000	7.25	4.35
24A4026	17	0.8	20-20,000	11.75	7.05
24A4027	17D	0.8	20-20,000	15.75	9.45

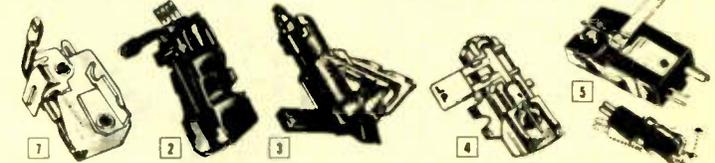
## ASTATIC MONAURAL REPLACEMENT CARTRIDGES



A wide selection of high quality cartridges designed for easy replacement of 90% of all makes. Crystal units are Rochelle-salt type especially treated to resist heat and humidity. Turnover cartridges have 1 mil and 3 mil sapphire needles included, AG and MG single needle types have 2 mil and 1 mil respectively. Average shpg. wt. 4 oz.

Stk. No.	Cart. No.	Illus. No.	Output Voltage	Response Cps	Element	Mfg. List	Net Each
24A4028	40TB	1	1.0	50-6,000	Crystal	\$8.45	\$5.07
24A4029	66TY	3	3.0	50-5,000	Crystal	6.50	3.90
24A4030	120	4	3.0	30-11,000	Crystal	6.45	3.87
24A4031	314TS	5	3.0	30-11,000	Crystal	5.45	3.27
24A4032	420	7	3.0	30-11,000	Crystal	5.45	3.27
24A4033	408	6	0.8	50-10,000	Crystal	4.45	2.67
24A4034	40-2	2	1.0	50-10,000	Crystal	6.50	3.90

## ASTATIC SONOTONE CERAMIC CARTRIDGES



High quality, not affected by temperature or humidity. Provides high output, flat response without equalization. 2TA type comes equipped with .7 mil needle for playing stereo records without damage, as well as all monaural records.

Stk. No.	Fig.	Sonotone Type	Astatic No.	Response Cps	Needle Tip	Output Volts	Mfg. List	Net Each
24A4035	(1)	2TA-S	445	20-20,000	.7S-3S	1 V.	\$ 7.40	\$4.44
24A4036	(1)	2TA-SD	445D	20-20,000	.7D-3S	1 V.	11.95	7.17
24A4037	(1)	3T-SD	455D	20-20,000	.1D-3S	.5 V.	15.00	9.00

## STEREO CARTRIDGES

Highest quality ceramic stereo cartridges give optimum trouble-free performance with smooth, wide range response. All have flip-over needle assemblies for playing all records, all speeds, stereo and monaural. Shpg. wt. 3 oz. All mountings 1/2" centers.

Stk. No.	Fig.	Sonotone Type	Astatic No.	Response Cps	Needle Tip	Output Volts	DB Separation	Mfg. List	Net Each
24A4038	(1)	8TA4-S	133	20-20,000	.7S-3S	0.3	20	\$9.75	\$5.85
24A4040	(1)	8TA4-SD	133D	20-20,000	.7D-3S	0.3	20	13.75	8.23
24A4041	(1)	10T2-SD	13TBX	20-15,000	.7D-3S	0.5	18	9.95	5.97
24A4042	(1)	16TA7-SD	497D	20-12,000	.7D-3S	0.65	25	11.75	7.05
24A4044	(1)	9TA7-SD	499D	20-17,000	.7D-3S	0.4	30	12.75	7.65
24A4045	(1)	21TR-S	153R	20-20,000	.7S-3S	0.6	21	13.50	8.10
24A4046	(1)	21TR-SD	153RD	20-20,000	.7D-3S	0.6	21	17.50	10.50
24A4048	(1)	22T-SD	153D	20-20,000	.7D-3S	0.3	24	12.50	7.50
24A4013	(1)	39T-MB-DS	139D	30-10,000	.7D-3S	0.7	21	13.75	8.25

SAVE \$\$\$ SPECIAL!



COMPARE AT \$2.49



OUR MOST POPULAR

GENUINE DIAMOND PHONO NEEDLE

EXACT REPLACEMENT FOR MANY CARTRIDGES... \$1.49 BY ASTATIC, BSR, RONETTE AND VACO

Used in all the following cartridges.  
**ASTATIC:** 64, 118, 120, 124, 310, 312, 414, 420, 422, 436, 456, 570, Stereo 70, 74, 76, 78, 80, 86, 320, 472, 474.  
**BSR:** TC8H, M, S, EV Cart #119, 120, 121.  
**RONETTE:** Collaro, Fujii, Futura, P.E. DT-60, RA-284, RA-395, DC-04, TC-200, TO-222, 284, 400.  
**VARCO:** TO-55 Series, TO-35X, 45, SN-45, SN-55, ST-45, ST-1, 2, 4, 5, 20, 40, 100, 200.  
 No. 24A681. Special Each. **\$1.49**

# ROBINS PHONO AND RECORD CARE ACCESSORIES



- ① **PHONO LEVEL KIT.** A level turntable or record changer is a must for stereo reproduction. Kit includes 4 adjustable rubber feet, circular 4-way spirit level. Wt. 5 oz.  
No. 24A6000. Type PK-4. Net Each **\$2.79**
- ② **STYLUS MICROSCOPE.** Precision ground lenses for clear magnification of stylus, slot at end of scope for holding stylus steady. Pen type pocket clin  
No. 24A6001. Wt. 3 ozs. **\$1.89**
- ③ **KLEENEEDLE BRUSH.** Mounts on side of changer under tone arm so that needle passes through brush on every change cycle. Blobs of dust are removed automatically after every record. Wt. 2 ozs.  
No. 24A6002. PK-3. Shpg. wt. 1 lb. Each **85c**

- ④ **PHONO STROBE AND LIGHT KIT.** Checks speed of changer.  
No. 24A6007. Type PK-5. Wt. 6 oz. Each **\$1.59**
- ⑤ **PACKAGE OF 50 SNAP INSERTS FOR 45 RPM RECORDS.** Snaps in large hole of record for use on standard spindles of changers or players.  
No. 24A6008. Type PRA-50. Wt. 6 oz. Package For **79c**
- ⑥ **THREE HI-FI STEREO RECORD CLOTHS.** Anti-static cleaning ingredient reduces formation of dust on records. Wt. 6 oz.  
No. 24A6009. Type PC-3. 3 For **79c**
- ⑦ **RECORD SAVERS.** Heavy, clear plastic envelopes to protect records from scratches, dust, oil and dirt. For 12" records.  
No. 24A6010. Type PJ-18. Pkg. of 18 For **75c**
- ⑧ **DELUXE RECORD CARE KIT.** Everything needed for optimum record care. Contains stylus pressure gauge, stylus microscope, turntable level, record cleaning cloth, Kleeneedle brush, record brush, tone arm lift.  
No. 24A6011. PK-9. Shpg. wt. 1 lb. Each **\$4.49**
- ⑨ **CLEAN-SWEEP RECORD BRUSH.** Large camel's hair brush sweeps entire tracking surface of record removing dust and other particles. Pressure sensitive adhesive on base for easy mounting. . . swings out of the way when not in use.  
Wt. 6 oz.  
No. 24A6012. Type PB-88 Net Each **\$4.49**
- ⑩ **TWO MIRACLE RECORD CLEANING CLOTHS AND CLIP-ON BRUSH.** Chemically treated cloths contain silicone. Cleans and lubricates records. Washable. Record brush clips on to tone arm, sweeps dust from records.  
No. 24A6013. Type PC-2. Wt. 4 oz. All For **79c**
- ⑪ **STYLUS PRESSURE GAUGE.** Accurately calibrated to measure stylus pressure from 1/2 to 8 grams. Wt. 4 oz.  
No. 24A6014. Type SG-2. Each **89c**

## POPULAR PHONO & RECORD ACCESSORIES



- ① **RECORD BRUSH AND TONE ARM LIFT**  
A unique combination of a fine record brush that sweeps records clean in front of needle, plus a tone arm lift for easy handling of tone arm. Clips on any arm. Mfg. list 98c. Wt. 1 oz.  
No. 24A299. Net Each **69c**
- ② **ELECTRO-WIPE STATIC ELIMINATOR RECORD CLOTH**  
Preserve your good records from harmful dirt and grit as well as static charge with one wipe! Eliminates record "pop and click" from vinyl attracted charges. Lubricates records for smoother needle operation, eliminates friction and static. Keeps grooves clean for true, clear fidelity, longer record life. Used by many broadcast stations and recording companies. Wt. 2 ozs  
No. 24A6003. Each **79c**

- ③ **ANTI-STATIC RECORD CLEANER**  
For vinylite and all standard records. The aerosol spray action removes dust and deposits a microscopically thin film. The film grounds static electrically and makes records permanently dust free, it will no longer cling to the surface. This reduces surface noise and increases record life.  
24A6004. 5 oz. can. Each... **79c** No. 24A6005. 8 oz. can. Each... **\$1.10**
- ④ **50-POWER NEEDLE INSPECTION MICROSCOPE**  
Precision made of finest optical parts. Wide angle lens shows a large, clear image of stylus, so that any wear or chipping can be instantly noted. The only sure way of protecting records against damage. Easily carried in shirt pocket. Only 3 3/4" long. Wt. 3 ozs  
No. 24A6006. Net Each **\$1.49**

## ASTATIC X-26 CRYSTAL CARTRIDGE

Replacement for General Industries recorder playback units. Uses regular cutting needles (not furnished). Maximum recording voltage 150 volts RMS. Frequency response to 6000 cps. Wt. 5 1/2 oz.; size 1 3/8 x 5/8 x 3 1/4". Oxidized finish.  
No. 24A4000. Shpg. wt. 10 ozs. Net Each **\$7.68**

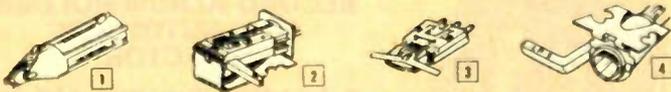
No. 24A623. Stellite Cutting Needle for above **98c**

## AUDIO POINTS RECORDING STYLI

Sapphire recording styli meet the most exacting standards of broadcast and recording studios, each styli being individually tested for thread throw and signal-to-noise ratio. Short dural shanks.

Stk. No.	Type	Description	Mfg. List	Net Ea.
24A376	14	78 RPM Sapphire Stylus	\$8.25	\$5.34
24A377	20	Microgroove Sapphire Stylus	8.25	5.34
24A378	34	Stellite Cutter Stylus	2.50	1.74

## ELECTRO VOICE CARTRIDGES



Exact replacement for the most popular type cartridges, E-V quality assures top performance and fidelity. Needles: 1S indicates sapphire tip, 1D diamond tip—both for long playing records; 3S sapphire for 78 RPM records; 7S sapphire tip for stereo records; 7D diamond tip for stereo records.

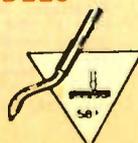
Stk. No.	Fig.	E-V	Replacement For	Needles	Mfg. List	Net Each
24A4004	1	56	Monaural Plug-In	1S/3S	\$ 3.95	\$2.37
24A4005	1	56D	Monaural Plug-In	1D/3S	6.95	4.17
24A4006	1	66	Stereo Plug-In	.7S/3S	6.95	4.17
24A4007	1	66D	Stereo Plug-In	.7D/3S	9.95	5.97
24A4008	2	26	Euphonics E-T, U-1	.7S/3S	11.50	6.90
24A4009	2	26D	Euphonics E-2, U-2	.7D/3S	16.50	9.90
24A4010	3	54	RCA 108213, A, 110021	.7S/3S	10.00	6.00
24A4011	4	PT-2	Mount for 56 Cartridge		1.00	.60
24A4012	4	PT-3	Mount for 66 Cartridge		1.00	.60

## DUOTONE SET SCREW TYPE NEEDLES ALL GROOVE

Sapphire tip needle. Truncated for both microgroove and standard records. Plays all types of records without changing needles.

No. 24A624. Each **69c**

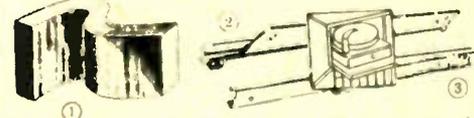
Sapphire Point. Good for 5000 plays. No finer jeweled standard needle available.  
For 78 RPM  
No. 24A625. **69c**



## LEKTROSTAT RECORD CLEANING KIT



Entirely new approach to the care and cleaning of records, both LP and stereo. Actually cleans the grooves as well as the surface. Exclusive new formula, features a non-gumming, antistatic liquid detergent in a plastic squeeze bottle, plus a special, fine-grain cloth applicator which goes down into the record grooves to clean out abrasive dust, as well as remove static. Annoying hisses and crackles disappear like magic, music sparkles with new clarity. Adds new life and brilliance to the finest records. In handy plastic pouch.  
No. 24A6015. Wt. 8 ozs. Kit. Each **\$1.96**

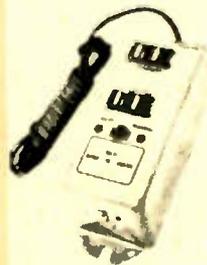


## AUDIO INSTALLATION ACCESSORIES

- ① **FIBERGLAS ACOUSTIC INSULATION.** Spun fiber glass material 1" thick eliminates standing waves and controls reverberation inside speaker baffles. Ideal for any acoustic insulation application. 24x60" size in plastic bag.  
No. 33A6509. Type 30-356. Each **\$1.49**
- ② **SLIDE DRAWER HARDWARE.** Easy mounting of radio chassis, record changers, recorders, etc. in custom cabinets, record compartments of consoles, etc. Made of 1/2" aluminum. Overall length 13". Travel lgth. 9". Load capacity 30 lbs. Silencer spring eliminates vibration. Shpg. wt. 1 lb.  
No. 33A6510. Per Poir **\$1.99**
- ③ **HEAVY-DUTY TYPE SLIDE DRAWER HARDWARE.** Made of 16 gauge steel. Load capacity 50 lbs. Otherwise as above. Shpg. wt. 2 lbs.  
No. 33A6511. Per Poir **\$2.29**

## ROBINS HIGH FIDELITY STOP-O-MATIC

**AUTOMATICALLY SHUTS-OFF ENTIRE SYSTEM AFTER LAST RECORD PLAYS!**



Now one can place a stack of records on the record changer with no worry about turning equipment off. Just plug AC cords of record changer and amplifier into "Stop-O-Matic". Special built-in device automatically shuts-off amplifier after last record has played. (Note: Changer must have automatic shut-off feature.) Wt. 1 lb.

For all European and American changers. **\$6.99**  
No. 33C31. Each



## ASTATIC PHONO PICKUPS

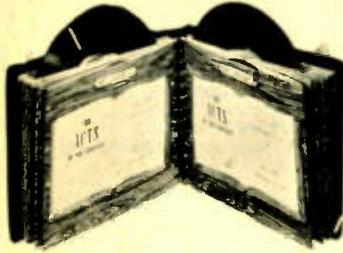
- MODEL KR-314-T.** Popular original equipment pickup with high output turnover cartridge for playing all speeds, 16, 33 1/3, 45, and 78 RPM. Ideal for replacement on portable phonographs where ruggedness at low cost is required. Base of pickup retracts into tone arm for use on phonos having low clearance in the lid. Supplied complete with mounting hardware and arm rest. Mfg. list \$6.95. Wt. 10 ozs.  
No. 24A4002. Model KR-314-T Pickup. Net Each **\$4.17**
- Same as above except equipped with Astatic 74TS high output stereo cartridge. Mfg. list \$8.25. Wt. 1 lb.  
No. 24A4003. Model KR-74-TS Pickup. Net Each **\$4.95**

# FAMOUS AUDIO BOOK LIBRARY OF TALKING BOOKS

THE BIBLE BROUGHT TO LIFE ON RECORDS

MFG. LIST  
\$34.95

**\$23.59**



Brings to life with thrilling realism the Bible . . . read aloud by one of America's finest professional readers. Every word is read correctly and reverently . . . not a word has been changed or left out. Recorded at 16 2/3 RPM on 7" unbreakable vinylite records—each record plays for nearly an hour. A special adaptor is available for playing them on any phonograph capable of operating at 33 1/3 RPM, or they can be used with any 4-speed Record Player.

Widely acclaimed by religious leaders, editors and laymen—ideal for the home, Bible classes, Sunday Schools, etc. Albums handsomely jacketed in simulated black leather with gold lettering.

- NEW TESTAMENT**—King James version. Complete and unabridged—all 27 books. 260 chapters. Mfg. List \$34.95.  
 No. 23C20. Per Album (26 Records)..... **\$23.59**  
**NEW TESTAMENT**—Challoner-Rheims (Catholic) version complete and unabridged narrated by the Rev. Robert I. Gannon, S.J. Mfg. List \$39.95.  
 No. 23C22. Per Album (30 Records)..... **\$26.97**  
**OLD TESTAMENT**—9 books: complete and unabridged. Genesis, Judges, Esther, Ruth, Psalms, Proverbs, Ecclesiastes, Solomon, and Isaiah.  
 No. 23C8. Mfg. List \$34.95. Per Album (26 Records)..... **\$23.59**  
**BOOK OF PSALMS**—Mfg. List \$8.50.  
 No. 23C19. Per Album (6 Records)..... **\$5.74**  
**PROVERBS, ECCLESIASTES, THE SONG OF SOLOMON**—Mfg. List \$5.95  
 No. 23C149. Per Album (4 Records)..... **\$4.02**  
**BOOK OF JUDGES AND RUTH**—Mfg. List \$4.95.  
 No. 23C150. Per Album (3 Records)..... **\$3.34**

**BIBLE STORIES FOR YOUNG PEOPLE**

- STORIES FROM THE OLD TESTAMENT**. 21 complete stories, including Noah and the Ark, David and Goliath, Daniel in the Lion's Den, etc. Plays 2 hours.  
 No. 23C23. Mfg. List \$3.50. Per Album (2 Records)..... **\$2.37**  
**STORIES FROM THE NEW TESTAMENT**. 26 complete stories, including The First Palm Sunday, Jesus and the Little Children, The Last Supper, Good Samaritan, etc. Plays 2 hours.  
 No. 23C24. Mfg. List \$3.50. Per Album (2 Records)..... **\$2.37**

“TALKING BOOK” STORY ALBUMS



All are recorded at 16 2/3 RPM and can be played on any record player capable of operating at 33 1/3 RPM by use of adaptor shown below or on any 4 speed player.

Title	Stk. No.	Plays	Records	Mfg. List	Price
Alice in Wonderland.....	23C14	3 Hours	3	\$4.95	\$3.95
Children's Storytime Favorites.....	23C15	2 Hours	2	3.50	2.80
Child's Garden of Verses.....	23C25	1 Hour	1	1.95	1.56
Rip Van Winkle.....	23C26	1 Hour	1	1.95	1.56
Gulliver's Travels.....	23C1	1 Hour	1	1.95	1.56
Wizard of Oz.....	23C27	5 Hours	5	6.95	5.56
Adventures of Robin Hood.....	23C6	3 Hours	3	4.95	3.95
Tales of Edgar Allen Poe.....	23C12	4 Hours	4	5.95	4.76
Famous Poems.....	23C13	4 Hours	4	5.95	4.76
Writings of Emerson.....	23C3	5 Hours	5	6.95	5.56
Trial of Socrates.....	23C28	3 Hours	3	4.95	3.95
Ben Franklin's Autobiography.....	23C4	3 Hours	3	10.95	8.76
Sonnets of Shakespeare.....	23C5	3 Hours	3	4.95	3.95
Kipling's Just So Stories.....	23C21	5 Hours	5	6.95	5.56
The Red Badge of Courage.....	23C31	6 Hours	6	8.50	6.80
Walden, Vol. 1.....	23C18	6 Hours	6	8.50	6.80
Treasure Island.....	23C17	8 Hours	8	10.95	8.76
Meditations of Marcus Aurelius.....	23C11	6 Hours	6	8.50	6.80
Dickens' A Christmas Carol.....	23C40	4 Hours	4	5.95	4.76
The Adventures of Pinocchio.....	23C41	5 Hours	5	6.95	5.56
Great Essays.....	23C30	8 Hours	8	10.95	8.76
Adventures of Tom Sawyer.....	23C147	9 Hours	9	11.95	9.56
Adventures of Sherlock Holmes.....	23C16	5 Hours	5	6.95	5.56
Writings & Speeches of Lincoln.....	23C35	8 Hours	8	10.95	8.76
Best of Mark Twain.....	23C7	4 Hours	4	5.95	4.76
The Time Machine.....	23A37	4 Hours	4	5.95	4.76
The Call of the Wild.....	23A38	4 Hours	4	5.95	4.76

**SPECIAL 16 2/3 RPM ADAPTOR**

All the Audio Book Records as shown here are recorded at 16 2/3 RPM. They can be played on any phonograph or record changer capable of operating at 33 1/3 RPM by use of this Adaptor. Simply place Adaptor on the turntable and play as any other phonograph record. Mfg. List \$3.95  
 No. 23C10. Net Each..... **\$3.07**

LEARN A FOREIGN LANGUAGE NOW THIS QUICK, EASY WAY BY LONG-PLAYING RECORDS

CHOICE OF 8 DIFFERENT LANGUAGE COURSES

**\$7.97**



EACH INCLUDES:

- 40 Lessons on 4 Long-Playing 33 1/3 RPM Records.
- Comprehensive Conversation Manual.
- Common Usage Dictionary.

Complete courses based on proven U. S. Govt. methods. Just relax and learn! Words, phrases, sentences are clearly spoken in faultless accents by expert instructors—and while one listens he sees the words he hears in the conversation Manual provided. Each course also includes a 16,000 word two-way common usage dictionary.

- No. 23A162—French
- No. 23A163—Italian
- No. 23A158—Russian
- No. 23A159—Spanish
- YOUR CHOICE EACH.....
- No. 23A160—German
- No. 23A164—Portuguese for Latin America
- No. 23A165—Portuguese for South America
- No. 23A161—Hebrew

**\$7.97**

**LIVING LANGUAGE BETTER SPEECH COURSE**

Amazing new tested method enables anyone to gain poise and self confidence in speaking . . . quickly and easily. Learn all the secrets and techniques of persuasive speakers, sparkling conversationalists. Covers pronunciation, voice training, vocabulary, proper usage, public speaking techniques, etc. Includes 40 complete lessons on 4 long playing records and two better speech manuals. Recorded under the editorial supervision of M. L. Gurren, Ph.D.  
 No. 23A157. Net Each..... **\$7.97**

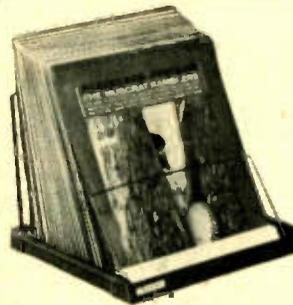


NEW BERLITZ LANGUAGE LESSONS IN COMPACT CASSETTES

Berlitz, the world-famous leader in language instruction, now presents their proven teaching methods on tape cassettes. Convenient, easy to use, will work on any cassette player, stereo or monaural. Each cassette plays for 1 hour. Lessons specifically designed for the growing number of people who travel to Europe on vacation or business. Teaches basic phrases used in everyday conversations. Available in 5 different languages—French, Spanish, German, Italian, and Russian, two volumes in each, basic and advanced.  
 No. 23A166—French Volume 1  
 No. 23A170—German Volume 1  
 No. 23A174—Russian Volume 1  
 No. 23A168—Spanish Volume 1  
 No. 23A172—Italian Volume 1  
 YOUR CHOICE OF ABOVE

**\$6.95**

NET EACH. PHRASE BOOKS for above. Specify Spanish, French, Italian or Russian.  
 No. 16A1148. Net Each..... **\$1.25**



JUST TIP AND FLIP!  
**NEW RECORD-MATIC RECORD ALBUM HOLDER AND AUTOMATIC SELECTOR**

- Self-parading albums march in full view.
- No springs, battery, magnet or motor.
- Stops automatically.

**\$5.95**

YOUR FAVORITE MUSIC AT YOUR FINGERTIPS!



Flip first album forward, then all others will follow, one after another, automatically. When record desired is removed, record-matic will stop automatically. Albums flip by slow or fast, as desired, allowing full viewing of all albums. When returning record to file, repeat the process and albums will stop at the same spot from which the record was removed. Cuts down record handling, protects valuable records. Holds 25 12-inch record albums. Base is injection molded high impact Polystyrene with white plastic record holders. Metal support arms are brass plated. Base size: 14" L. x 10 3/4" W. Shpg. wt. 3 1/2 lbs. Mfg. List \$9.95.  
 No. 33A8500. Net Each..... **\$5.95**

# 8 TRACK STEREO PLAYERS FOR EVERY USE!

## 8 TRACK PORTABLE TAPE PLAYER

Now play your 8 track cartridges anywhere, anytime. Standard 8 track cartridge starts the unit when inserted. Programs change by simply rotating the front mounted track switch. Features separate volume and tone controls. Also can be operated in automobile with "optional" 12 volt D.C. adaptor. Housed in high-impact plastic with metal trim. Complete with batteries. Size 10 1/2" x 8 7/8" x 3 1/4". Shpg. Wt. 6 1/2 lbs.  
**No. 31A2555 Model RE-1994. Each \$29.95**

# \$29<sup>95</sup>

**PLAYS 8 TRACK TAPES MONAURALLY**



**No. 31A2567. Model DC930. 12 V. Auto adaptor. Each \$3.95**  
**No. 31A2568. Model AC930. 115 V. AC. adaptor. Each \$3.95**



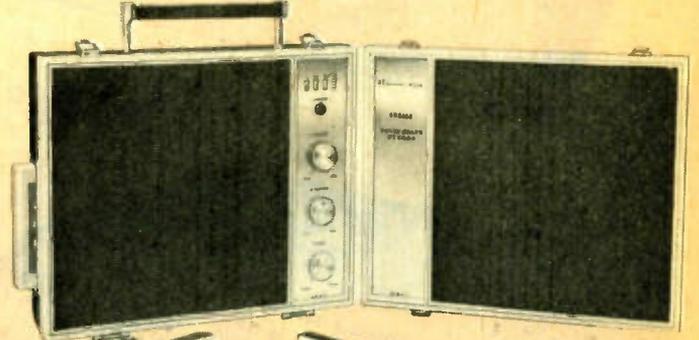
## PORTABLE 3-WAY 8 TRACK STEREO TAPE PLAYER

- Changes Tracks Automatically or Manually
- Operates On 115 V. 60 Hz
- Operates On 8-Self Contained "D" Batteries
- Operates On 12 Volt Positive or Negative Ground (Plugs Into Car Cigarette Lighter)

# \$74<sup>95</sup>

Have beautiful sound indoors or outdoors wherever you are. The attractive portable AC/DC 8-track stereo 8-track stereo operates on 117 V. 50-60 Hz home current or eight self-contained "D" batteries. A cigarette lighter adaptor cord permits this unique tape player to be used in cars and boats with a 12 volt positive or negative ground. Precise selection of the speaker volume is obtained by separate left and right speaker controls. Two Hi Fi speakers may be placed as far as 5 feet apart. A sensitive tone control directs the treble and bass boost function... providing a quality sound response sure to please the most ardent listener. This compact portable tape player measures a mere 9" H, 11" W, 6 1/4" D. The ultra-modern solid state circuitry includes 10 transistors, 4 diodes and 1 thermistor. Quality components and advanced engineering principles incorporated in the manufacturing of this sound masterpiece assure reliable operation and trouble-free enjoyment. Shpg. Wt. 15 lbs. Complete with cords, less batteries.

**No. 31A2560. Shpg. Wt. 12 lbs. Each \$74.95**  
**No. 21A315. "D" cells, requires 8. Each 19c**



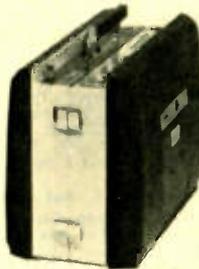
## 8 TRACK PORTABLE STEREO TAPE PLAYER

**WITH BUILT-IN FM/AM RADIO**

**AFC ASSURES DRIFT-FREE FM**

- Beautiful Style
- Console Quality Sound
- Operates on 115 V. AC., Flashlight Batteries, or 12 Volt DC.

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



**USE IN CAR, BOAT OR HOME**

Plays anywhere! Home, car, boat. Take it to the beach on picnics, etc. You just can't find a more versatile unit. Built-in a handsome rugged luggage type case for real durability. Has two heavy duty 6" speakers for finest quality stereo reproduction. Automatic or manual switching of tracks at your discretion. High sensitivity AM/FM radio with AFC provides finest quality reception. Controls include separate left

and right channel volume, tone control, selector switch (tape/radio), tape program selector. Operates on 115 V. 60 Hz., 8-size D alkaline or nicad batteries or car, boat or any 12 V. DC. source. Size 7" deep, 14" wide, 11 3/4" High (In closed carrying position). Shpg. Wt. 17 lbs.

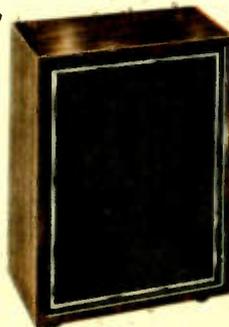
**No. 31A2553. Less batteries. Each \$119.95**

**ENJOY YOUR 8 TRACK TAPES AT HOME!**

## HOME 8 TRACK STEREO CARTRIDGE SYSTEM

**HEAVY DYNAMIC SPEAKERS GIVE BIG STEREO SOUND**

# \$69<sup>95</sup>



**BEAUTIFUL WALNUT FINISH CABINET**



Just slip in a cartridge and enjoy continuous music. Cartridge repeats as often as desired. Automatically switches program at end of tapes until each of the four stereo programs have played; unit then returns to the first program. With the push-button selector you can easily change programs. Pilot light indicates track being played. Both speaker cabinets as well as the player are fine furniture styled in matched walnut finish. The balanced cap-

stan drive gives constant tape speed and the matched dynamic heavy duty speakers allow true stereo reproduction. Features front mounted head adjustment and headphone jack. Size main unit 11 3/8" x 10 1/4" x 3 3/4". Speaker cabinet: 10 1/2" x 7 1/4" x 7" (each). Shpg. Wt. 20 lbs.

**No. 31A2566. Each \$69.95**

# FOR THE FIRST TIME A PROFESSIONAL 8-TRACK CARTRIDGE RECORDER FOR THE HOME!



**WITH LOGIC CIRCUITRY**

**BOTH A RECORDER AND PLAYER**

**BY TELEX**

**\$169<sup>95</sup>**

MODEL 811-R

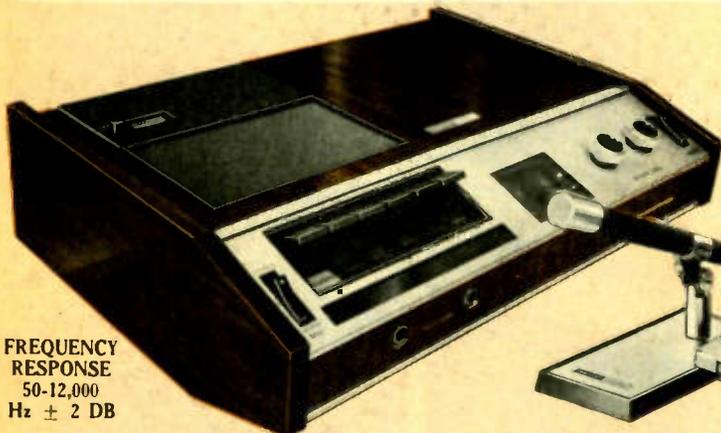
Now record your own 8-track stereo cartridge with superb fidelity for car or home. It is both a recorder and player. Connect it to any music source and for the price of a blank cartridge, record your favorite selections from FM stereo, phonograph, and all other type tape recorders. Features record volume controls for right and left channels, VU meter with channel switch, logic selector switch, push-button or automatic program selection with numerical indicator and overload protection, record interlock with record indicator and on-off pilot light. Four special logic circuits provide simple operating convenience.

Two, in record mode, allow choice of auto-stop at the end of any single program or at the end of the tape. Two additional logic circuits in the play mode let you select auto-stop at the end of the tape or continuous play. Turns on automatically when cartridge is inserted. Attractively styled with solid walnut sides.

**SPECIFICATIONS:** Tape speed 3 $\frac{3}{4}$  IPS. Freq. resp.: 40-15,000 Hz. S/N ratio 50 db. Flutter & Wow 0.3%. Track selection; push-button, auto-stop stereo controls record volume for each channel. Output low impedance for stereo music systems. Input aux. for Hz. Size 15" W., 11" D., 4 $\frac{1}{2}$ " H.

No. 31A7519. Model 811-R  
Shpg. Wt. 15 lbs. Net Each

**\$169.95**



**FREQUENCY RESPONSE**  
50-12,000  
Hz  $\pm$  2 DB

A totally professional tape cassette deck, designed expressly for the serious recording enthusiast. It offers features and performance that rivals the most versatile reel to reel tape recorders. Unlike conventional cassette mechanisms, the new CAD-4 can record and playback with overall band width that is at least a half octave higher and lower than any cassette recorder currently available. Handsomely styled in walnut, brush gold and matte black, the CAD-4 will match all makes of stereo components and will blend readily with any room decor. Push-button switches for recording and shuttling functions plus pause position. Automatic tape cassette ejection switch has automatic shut off. Two separate illuminated professional type VU meters. Overmodulation indicator light on front as well as 2 separate VU meters with separate record level set controls for each channel. Mono/stereo microphone switch with two microphone inputs. Super-refined, narrow gap record and playback heads features low hysteresis effect for broadband response and extremely low distortion. Inputs for low and high level program sources. Handsomely styled in walnut, brushed gold and matte black.

**Specifications:** Tape speed: 1 $\frac{7}{8}$  ips; H.D. less than 1.5%; Speed Variation:

NEW FROM . . . **harman kardon**

## PROFESSIONAL TAPE CASSETTE DECK

**RECORDS & PLAYS BACK IN MONO AND STEREO**

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

MODEL CAD-4

- Carefully balanced Capstan drive and precision guide mechanism for precise tape handling.
- Heavy duty motor to insure low wow and flutter and extremely rapid shuttling of tape.

within 2%. Wow and Flutter .25% RMS @ 1 $\frac{7}{8}$  ips. Freq. Resp. 30-12,500 Hz  $\pm$  2 db. S/N ratio better than 43 db. Bias Osc. Freq.: 105 KHz. Crosstalk better than 35 db. Erasure better than 55 db. Meter Resp.  $\pm$  3 db. 100 Hz, 6000 Hz. Record Amplifier Distortion: .5% THD @ Zero VU. High Level Input Sensitivity: 200 mV  $\pm$  2 db. for Zero VU. High Level Input Imped: 200 K ohms. Low Level Input Sensitivity: 2 mV,  $\pm$  2 db. for Zero VU. Low Level Input Impedance: nominal 2.5 K ohms. Output Level: 8 V RMS  $\pm$  2 db. at maximum recording level. Output Impedance: 5,000 ohms, maximum. Reproduce Amplifier Distortion .5% THD @ Zero VU. .2% THD @ -10 db. Clipping exceeds 10 db. above Zero VU. Size: 12 $\frac{1}{2}$ " W. X 9" D. X 3 $\frac{1}{4}$ " H. Shpg. Wt. 10 lbs.

No. 31A7512. Model CAD-4. Net Each

**\$159.95**

No. 11A1119. H-K 6-60 Tape Cassette. Special low-noise cassette designed for wide range recording. Extends upper range up to 2000 Hz more than standard tapes. Net Each

**\$2.50**

No. 29A646. H-K Model DM11 Dynamic Microphone. Extended range mike for above. Net Each

**\$14.95**



**ALL SOLID STATE**

**SMART WALNUT GRAIN CABINET**

## PANASONIC 4-TRACK AC STEREO CASSETTE DECK

**\$89<sup>95</sup>**

MODEL RS256US

This smart good-looking walnut grain cassette is the perfect match for any high fidelity system. Plays and records on 4-track stereo cassettes. Features Panasonic's push-button, pop up cassette system, push-button controls, pause control. Fast forward and rewind for unsurpassed convenience. Has 3 position digital tape counter and end of tape signal lamp. Special noise suppressor, two roller bar volume controls, and two easy-see VU meters. Convenient switch for stereo/mono selection.

**Specifications:** Has AC bias. Program time 1 hour with C-60 cassette (2 hours on C120 cassette). Fast forward and rewind time on C-60—approx. 90 seconds. Freq. Resp. 30-12,000 Hz. Jacks: 2-microphone input; 2-aux. inputs; 2-line outputs, and 1-headphone. Size: 10 $\frac{1}{2}$ " W. 3 $\frac{3}{4}$ " H. 10" D. Shpg. Wt. 10 lbs. Comes with 4-connection cord. Operates on 115 V. 60 Hz. AC.

No. 31A7521. Model RS256US. Net Each

**\$89.95**

# WOLLENSAK 4200 CASSETTE CARTRIDGE TAPE RECORDER

RANGE 80-10,000 HZ  $\pm$  3 DB.  
DURABLE HARD SHELL CASE . . . PROTECTS RECORDER—PROVIDES REVERB EFFECT

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

- Single master control for simple operation.
- Remote control start-stop switch on ultra sensitive dynamic mike included.

Just insert the tape cartridge and start to operate. Simpler than loading a movie camera. For on-the-spot recordings of interviews, lectures, musical performance, etc. Fully transistorized, instant recording/playback. Single "master control" starts, stops, winds, rewinds tape. Combination recording level/battery life meter. Connections for playback through external amplifiers and headphones. Inputs provided to record from microphone, radio, record player, or other recorder. Capstan drive assures constant speed 1 7/8" dual-track operation. Cartridge (included) contains 300 ft. of triple-play tape providing up to 2 hours playing time. Uses 5 standard C flashlight batteries. High impact plastic case. 4 1/2" W. x 7 7/8" L. x 2 1/4" D. Weighs only 4 lbs. wth batteries. Supplied with carrying case, mike and 1 cartridge (with tape). Shpg. wt. 4 lbs.

No. 31A2507. Net Each **\$59.95**  
No. 31B226. Battery Kit. . . . . \$ 1.05

### ACCESSORIES FOR WOLLENSAK MODEL 4200

No. 31A2510.	A-0492.	110 V. AC Adaptor.	.....	\$14.50
No. 31A2511.	A-0491.	Foot Control.	.....	\$17.75
No. 31A2512.	A-0490.	Dictation Type Earphone.	.....	\$12.75
No. 31A2513.	A-0473.	Patch Cord.	.....	\$ 4.10
No. 31A2508.	A-0479.	Telephone Pickup.	.....	\$ 8.95
No. 31A7506.	A-0494.	Microphone.	.....	\$21.50
No. 11A1055.		Extra 60-Minute Tape Cartridge.	.....	\$2.95
No. 11A1056.		Extra 90-Minute Tape Cartridge.	.....	\$3.75
No. 31A2509.		Car Bracket. Converts recorder to playback thru car radio.	.....	\$29.50



BATTERY OPERATED ALL TRANSISTOR

## WOLLENSAK BATTERY OPERATED MODEL 4000 CASSETTE RECORDER

High efficiency speaker assures superior tone quality.

Features: Solid state for instant warm-up and reliability . . . V.U. meter for precise record level settings and battery life indication . . . push-button operation . . . constant speed capstan drive . . . AC bias and erase for improved signal to noise and erase performance. Accepts AC adapter/battery charger, auxiliary input and output jacks. Complete with dynamic microphone with remote stop/start switch, microphone pouch, recorder carrying strap, earphone and blank Scotch tape cassette.

Play/Record time per Cassette: 60 minutes on C-60 and 90 minutes on C-90. Power requirements: 5 1 1/2 V. C cells.

Size: 8 3/4 x 4 3/4 x 2 3/8". Weight (with batteries): 3 lbs. Net Each **\$49.95**

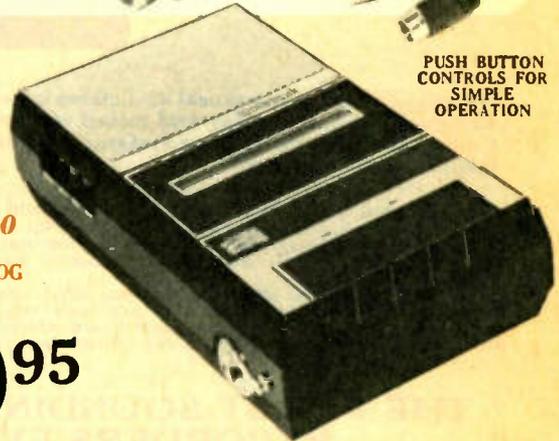
### ACCESSORIES FOR MODEL 4000

No. 31A406.	A-0495.	Foot Control.	Each	.....	\$10.85
No. 31A407.	A-0496.	Telephone Pick-Up.	Each	.....	4.95
No. 31A2562.	A-0502.	AC-Adapter Battery Changer.	Each	.....	13.95
No. 31A2561.	A-0507.	Dictation Earphone.	Each	.....	12.75
No. 31A2563.	A-0505.	Carrying Case.	Each	.....	8.95

EASY TO USE CASSETTES SNAP IN . . . RECORD UP TO 120 MINUTES EACH

**CUT \$5.00**  
OVER 1969 CATALOG PRICE

**\$49<sup>95</sup>**



PUSH BUTTON CONTROLS FOR SIMPLE OPERATION



## WOLLENSAK 4300 CASSETTE RECORDER

- AC-DC portable—no adaptor needed.
- Digital tape counter.
- Automatic record level.
- Excellent tone.

**\$99<sup>95</sup>**

High style plus proven reliability provides superb performance in outstanding functional design.

Operates on batteries or built-in A.C. for use anywhere, anytime. Features automatic record level which adjusts for variation in recording levels. Eliminates need for manual setting. Push-button controls along with easy cassette load and pop-up ejection make it foolproof to operate. Features separate volume, tone and pause controls. Push to reset digital counter. High efficiency speaker. Dynamic mike with remote start-stop switch. Aux. input. A & D output jack. Wt. 7 lbs.

Specifications: Freq. resp. 50-10,000 Hz. Wow and flutter 0.35%. Uses 5 "D" cells or operates 110 or 120 AC 60 cycle. Size 12 1/2" x 10 1/4" x 3 1/2". Supplied with dynamic microphone, personal earphone, patch cord for external recording/play back. Accessory pouch and blank C-60 cassette. Shpg. Wt. 10 lbs.

No. 31A2558. Net Each **\$99.95**

### ACCESSORIES FOR ABOVE

No. 31A406.	A-0495	Foot Control.	Each	.....	\$10.85
No. 31A407.	A-0496	Telephone Pick-up.	Each	.....	4.95
No. 31A2561.	A-0507	Dictation Earphone.	Each	.....	12.75



## WOLLENSAK 4700 CASSETTE STEREO DECK

- Heavy duty full sized motor.
- 3 1/2" flywheel insures excellent wow and flutter characteristics.
- Heavy duty capstan.

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

A professional cassette tape deck the tape enthusiast will be proud to have in his stereo system. Heavy duty mechanism breaks away from conventional cassette mini-drives. Beautifully styled in walnut unit performs vertically and horizontally for any application. Records and plays both monaural and stereo cassettes. Interlocked start, stop, play, and record controls make it possible to go from one function to any other without having to stop recorder. Separate VU meters for each channel. Push to reset digital counter. Jam-proof cassette ejector. Lock-down pause control. Extremely fast high speed wind/rewind. Slip clutch tape protection. Hiss suppression switch. Inputs and outputs for all functions.

Specifications: Freq. Resp. 60-12,000 Hz  $\pm$  3 db. Speed 1 7/8 IPS. Wow and flutter 0.25% RMS. Signal to noise ratio: Greater than 46 db. Fast forward and fast rewind time for C-60 cassette 45 seconds. Pre-amp output 0.5 volts (each channel). Microphone input 1 mV, low impedance. Pre-amp input 25-50 mV. Bias and erase frequency, 95 KHz. Microphone sensitivity 12 mV. Microphone input impedance 40K ohms. Tuner input impedance 470K ohms. Size 13 3/8" X 9 1/4" X 4 1/2". Wt. 16 lbs.

No. 31A7518. Each **\$159.95**

### ACCESSORIES FOR ABOVE

No. 31A2564.	A-0506	Low impedance mike.	Each	.....	\$ 9.95
No. 31A2565.	A-0508	35' mike extension cord.	Each	.....	11.95

FROM **3M**  
COMPANY

# THE FIRST AMERICAN MADE CASSETTE STEREO RECORDER

DESIGNED FOR  
THE PLAYING  
AND RECORDING  
OF MUSIC



**WOLLENSAK  
MODEL 4800**



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

- Records and plays monaural and stereo cassettes.
- Interlock start, stop, play and record controls.
- Compression loaded speaker systems provides sound of high fidelity music systems.

- Separate record level meters for each channel.
- Digital counter for ease in locating recordings.
- 16 watts stereo power EIA.
- Heavy duty drive mechanism.

Now, a cassette system with true high fidelity quality! Engineered specifically for music recording and reproduction. Powerful tape transport is comparable to the most expensive reel-to-reel recorder mechanism. Incorporates full size motor, and full size flywheel reducing wow and flutter to a minimum. System employs newly designed speakers which produces exceptionally clean and distortion-free sound extending well into the low frequency range. Start, stop, play and record controls are interlocked, making it possible to go from one function to another without having to stop the machine.

Specifications: Freq. resp. 60-12,000 Hz  $\pm$  3 db @ 1/8 ips. Wow and flutter .25% RMS. S/N ratio greater than 46 db. Pre-amps output 0.5 V. (each channel). Microphone input .1 MV, low impedance. Pre-amp input: 25-50 MV. Track width: meets standard cassette format. Size: Recorder, 13 7/8 x 9 1/4 x 4 1/2"; Speakers, 13 1/2 x 8 1/8 x 4 1/8". Power consumption 50 watt, 115 V. 60 cy. AC. Two low impedance mikes included. Shipping Wt. 30 lbs.

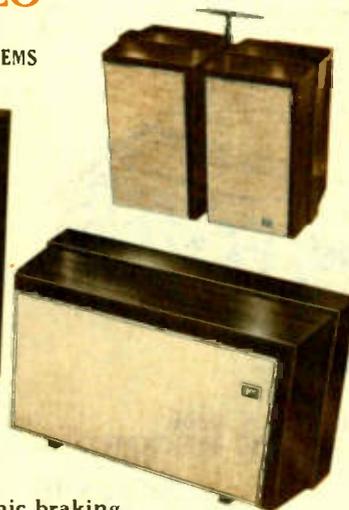
No. 31A7516. Net Each

**\$199.95**

## THE FINEST SOUNDING STEREO RECORDERS EVER!

COMPRESSION-LOADED SPEAKERS PROVIDE SOUND OF HI-FI MUSIC SYSTEMS

ALL SOLID STATE  
16 WATT  
STEREO OUTPUT



**\$229<sup>95</sup>**

MODEL  
6300

OPERATES VERTICALLY  
OR HORIZONTALLY

**WOLLENSAK  
MODEL 6300**

- Frequency response 40-20,000 Hz @ 7 1/2 ips; 40-15,000 Hz @ 3 3/4 ips.
- Two professionally calibrated VU meters.
- Automatic reel locks.
- Two motor drive systems.
- Electro-dynamic braking.
- 3 speeds—7 1/2, 3 3/4, 1 7/8 ips.
- Dual channel tone control.
- Automatic shut off.

Professional quality at lowest prices ever! Features unique compression-loaded speakers equal to those used only in costly hi-fi component systems. Solid state amplifier produces sound absolutely faithful to the original. Full frequency range with flat response and low distortion. New two-motor drive runs whisper-quiet; reduces wow and flutter to less than 0.15%. One motor drives capstan; one handles speed function, exclusive electro dynamic braking. Simple open front threading with all controls interlocked to prevent tape damage. Has stereo headphone jack and monitor facility. Solid die-cast chassis of aluminum provides maximum structural integrity for years of faithful service. Automatic reel locks.

Specifications: 16 watts stereo output (EIA). Pre-amp input: 0.5 volts each channel. Mike input: .1 mv low impedance. Track width: 1/4 track EIA standard. Power consumption: 105-125 volts, 60 Hz 50 watts. Size 16 1/2" W., 14 1/2" H., 10 1/2" D. (with speakers). Crosstalk: greater than 50 db. Model 6300 comes complete with two microphones, two speakers with cables, one 7 inch reel of tape, and self threading take-up reel.

No. 31A5036 Shpg. wt. 30 lbs. Net Each **\$229.95**



MODEL  
6200

**WOLLENSAK MODEL 6120 STEREO DECK.** Brushed chrome deck of Model 6300 above but does not have speakers, power amplifiers, or tone control. The perfect addition for any stereo high fidelity system. Records and plays back stereo. Comes with walnut base. Specifications: 40-20,000 Hz  $\pm$  2 db @ 7 1/2 ips. 40-15,000 Hz  $\pm$  2 db @ 3 3/4 ips. Wow and flutter 0.15% RMS @ 7 1/2 ips. 0.20% @ 3 3/4 ips. Signal to noise ratio. greater than 50 db @ 7 1/2 and 3 3/4 ips. Speeds: 7 1/2, 3 3/4, 1 7/8 ips. Crosstalk: greater than 50 db. Pre-amp output 1.0 volts each channel. Microphone input .1 mv, low impedance. Pre-amp input: 25-50 mv. Track width: 1/4 track meets EIA standard 4-track format. Size 16" W. x 13" H. x 5" D. Power consumption 115 V. 60 Hz AC, 50 watts.

No. 31A5044 Shpg. wt. 15 lbs. Net Each

**\$159.95**

**WOLLENSAK MODEL 6200 PORTABLE STEREO RECORDER.** Portable version of Model 6300. Brushed chrome face plate. Compression loaded speakers built-in. Latch on lid stores mikes, also accessories. Size 16 1/2" W. x 13" H. x 6 1/4" D (with lid attached).

No. 31A411. Wt. 15 lbs. Net Each

**\$199.95**

# WOLLENSAK REEL TO REEL MONO RECORDERS

## WOLLENSAK 3500 TAPE RECORDER

• AC-DC PORTABLE • 5-INCH REELS **\$89.95**

- Dual Speed: 3 3/4 and 1 7/8 ips.
- VU meter for recording level and battery condition.
- Push-button controls.

Versatility plus reliability makes this one of the most sensational recorders made yet! Operates on batteries or can be switched to household current instantly.

Built-in AC, no adaptor required. Features new automatic record level, automatically compensates recording levels for perfect recording every time, eliminates need for manual setting, and adjusts for variation in recording levels. Solid-state design assures years of use. Push-button controls make it simple, foolproof to operate. Features separate volume and tone controls, push-to-reset digital counter. Constant speed Capstan drive. Electric speed change switch. Dynamic microphone with remote stop-start switch. Auxiliary input and output jacks. High efficiency speaker.

Specifications: Freq. resp. 100-8,000 HZ ± 4 db @ 3 3/4 ips. Wow and flutter: RMS: less than .4% @ 3 3/4 ips.

Uses 6 "D" cells or operates from 117 V. AC. Size 11 1/2 x 10 1/4 x 4". Supplied with dynamic microphone, personal earphone, patch cord for external recording/playback, accessory pouch, blank tape and take-up reel. **\$89.95**  
No. 31A403. Shpg. wt. 10 lbs. Net Each.....



**3M**  
COMPANY

## WOLLENSAK KEYBOARD CONTROL MODEL 1500SS

IMPROVED SOLID STATE VERSION OF FAMOUS MODEL 1500...  
FEATURES RECORDING LEVEL METER PLUS ALL TRANSISTOR  
ELECTRONICS—2 TRACK MONAURAL

**\$184.95**

A marvel of compactness using miniaturized components and all-metal airplane construction. A superior monaural tape recorder. Provides up to 4 hours recording time on 7" reel using long play tape. 12 watts push-pull output is four times greater than ordinary recorders. Features keyboard control. Dual speed, operates at 3 3/4 ips and 7 1/2 ips; level recording meter, precision index counter.

Specifications: Frequency response: 40-15,000 cps ± 3 db @ 7 1/2 ips; 40-8,000 cps ± 3 db @ 3 3/4 ips. Both speeds, signal to noise ratio 48 db. Wow and flutter less than .3%. Operates from 110-125 V. 60 cy. AC. Size 6 1/2 x 10 1/4 x 1 3/4".

Complete with dynamic microphone, 2 reels (one with tape). **\$184.95**  
No. 31D232. Shpg. wt. 23 lbs. Net Each.....



**RECORDS 4 HOURS  
ON 7" REEL**

**QUANTITY USERS:** Schools, Churches, Institutions write for special quotes for any Wollensak recorders in lots of 12 or more.

## WOLLENSAK FINE ACCESSORIES

- TF404 Foot Control. Starts and stops tape with manual operation. 1500 Series  
No. 31A5018. Wt. 1 lb. Each.....**\$17.50**  
A-0458 Earphone with pin plug.  
No. 31A54. Wt. 8 oz. Each.....**\$10.50**  
A-0455 Microphone Extension Card. 15 ft. Wt. 12 oz.  
No. 31A55. Each.....**\$7.50**  
A-0454 Dynamic Mike. Wt. 12 oz.  
No. 31A5009. Each.....**\$13.50**  
A-0489 Mike Stand. Wt. 1 lb.  
No. 31A5010. Each.....**\$9.50**  
TSC405 Carrying Case for 1500 series.  
No. 31A5025. Wt. 1 lb. Each.....**\$7.95**

# PANASONIC REEL TO REEL MONO RECORDERS

## PANASONIC SOLID STATE HIGH FIDELITY TAPE RECORDER

ALL SOLID STATE  
TAKES UP TO 7" REELS  
2 TRACK MONAURAL

**\$99.95**



The RQ706S boasts "total" sound reproduction combined with simple lever operation. Perfect distortion free recording in all three speeds—7 1/2, 3 3/4, and 1 7/8 I.P.S. Full bodied sound provided by two self-contained 6 1/2" heavy duty dynamic speakers. Automatic level control assures perfect recordings always. Large VU meter offers immediate indication of recording level. 3-digit counter makes it easy to locate section of tape desired. Has continuous tone control permitting precise adjustment of tone. Pause control permits instant tape stoppage for indexing, etc. Sound monitoring feature permits use of unit for PA system. Operates vertically or horizontally. Operates on 115 V. 60 Hz. A.C. 4 watts music power. Freq. Range 7 1/2 I.P.S. 50-15,000 Hz, 3 3/4 50-9,000 Hz, 1 7/8 50-5,000 Hz. Has automatic tape stop, 2 heads, 2 mike inputs, 1 aux., 1 external speaker output. Size 14" X 12" X 6 3/4". Wt. 17 1/2 lbs. Shpg. Wt. 22 lbs. Complete with pencil dynamic microphone with stand, 7" reel tape, 7" empty reel, 2 patch cords, splicing tape, and 2 reel holders. Model RQ706S. **\$99.95**  
No. 31A412. Model RQ-706S. Each.....

## PANASONIC "VISTA"

MODEL RQ194S

PERFECT FOR  
HOME OR OFFICE

**\$99.95**

4-TRACK RECORDING  
ON A 5-INCH REEL  
FOR UP TO 4 HOURS  
RECORDING TIME

CONVENIENT  
ATTACHE  
STYLE CASE



- New Easy-Matic 3-Position Switch.

- 3 3/4 and 1 7/8 ips.
- Frequency response 100-8,000 HZ.
- Record sound-on-sound.
- Record sound-with-sound.

The total tape recorder in smart travel-case design. Perfect for home or office—for educator or college student, for language study, speech therapy or taping lectures. Fine for music or voice.

Engineered with 3-position Panasonic Easy-Matic switch. Records at constant sound level. Completely automatic with simple push-button operation, digital tape counter VU meter. Separate volume controls, and Panasonic "Sure-Power" so should house current fail batteries take over automatically.

**Sound-on-sound**—record on track one, then re-record track one on track three, while simultaneously making a new recording on track three. Thus you can record voice on track one and lay a musical background on track three. **Sound-with-sound**—listen to track one, record on track three, play both back simultaneously for comparison. Perfect for voice study, language study or speech therapy. Comes complete with 4 "D" cells, microphone and stand, 5" reel of tape, take-up reel, splicing tape, radio patch cord and earphone. Size 14 3/4 x 11 x 3 1/8". Wt. 7 lbs. Shpg. wt. 10 lbs. **\$99.95**  
No. 31A409. Net Each.....

# PANASONIC SOLID STATE CASSETTE RECORDERS

FROM PANASONIC  
AT LOWEST PRICE EVER!

## "POP-UP" CASSETTE RECORDER

**\$29<sup>95</sup>**

COMPLETE WITH REMOTE  
MICROPHONE

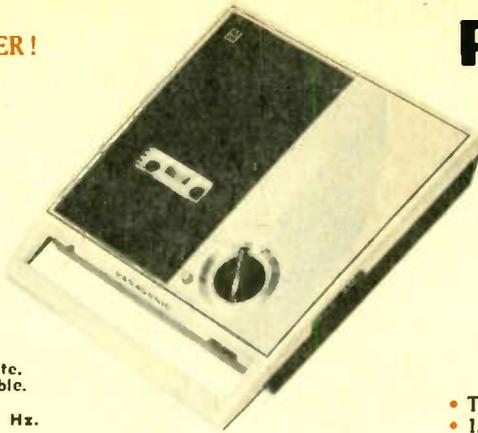
- Uses Standard Phillips Cassette.
- Battery operated, AC adaptable.
- Frequency response 80-8,000 Hz.
- 1 watt output.

Offers the wonderful convenience of a record and playback cassette system with battery-operated portability. Cartridge pops-up for an instant change. Features simple lever operation. Automatic recording level control. AC adaptable. Operates horizontally or vertically with lid up or closed. Has 6 transistors plus 1 diode and 1 thermistor. Handsome charcoal grey and antique white. Size: 9" W. x 2 3/4" H. x 10" D.

Complete with remote microphone, cassette, and 6 Panasonic Hi-Top "C" batteries. Wt. 4 1/2 lbs. Shpg. wt. 6 lbs.

No. 31A2540. Model RQ204S. Each **\$29.95**

No. 31A2541. AC Adaptor for above. AD409. Each **\$9.95**



## PANASONIC

### PUSH BUTTON PORTABLE AC/BATTERY CASSETTE RECORDER

**\$39<sup>95</sup>**

- Travel Designed
- 1.5 Watt Music Power

Boasts true, compact design, tastefully styled in midnight black and silver. Operates from 4 "c" cells or from 115 V. 60 Hz. AC. Unique automatic recording level control assures precise, accurate recording every time. A 3 1/2" dynamic speaker delivers strong full range sound. Push-button operation makes record and playback simple and easy. Push-button fast forward and rewind permits you to quickly select the section of tape you wish to hear. Specifications: 1.5 watt music power. Freq. Resp. 80-8000 Hz. Has provision for external speaker. Size 5 1/2" x 2 3/4" x 10 1/4". Shpg. Wt. 5 lbs.

Complete with remote dynamic microphone, microphone case, cassette, earphone, AC power cord, and 4 Panasonic "c" size Hi-Top batteries. **\$39.95**



## PANASONIC BATTERY/AC CASSETTE RECORDER

**\$49<sup>95</sup>**

MODEL RQ-203S

- Complete with remote control microphone.
- Battery or AC operated—no adaptor needed.
- Single operating control for fast forward, play/record, stop, rewind.
- 2.5 watts music power output.
- Big 3 x 5 inch dynamic speaker with 2.5 watt amplifier.

All the features of cassette recorders selling for \$70.00 and more! Records/plays back with ease... just pop a cassette in for up to 2 hours recording. Features continuously variable tone control, volume control. Jacks for remote mike, aux. input and monitor (for earphone or 8 ohm speaker). Uses 6 standard "C" cell flashlight batteries. Built-in compartment for microphone and AC line cord. Comes complete with remote controlled microphone, batteries and one C-60 blank cassette. Weighs 4 3/8 lbs. Size 9 5/8" W, 2 1/8" H, 9 1/4" D. Shpg. wt. 6 lbs.

No. 31A2529. Each **\$49.95**



## PANASONIC CASSETTE RECORDER WITH SENSITIVE AM RADIO BUILT-IN

**\$49.95**

Offers complete on-the-go entertainment. Features built-in "pop-up" cassette recorder, automatic recording level circuitry assuring you of accurate recording every time. Full range AM radio featuring distinctive slide-rule tuning for easy-see precision station targeting. Also allows you to record your favorite program directly off the air.

Heavy duty 3 1/2" dynamic speaker delivers rich resonant sound. Single lever control for fast forward and rewind permits you to quickly select the section of tape you wish to hear or allows rapid rewind and replay. A speaker on-off switch lets you monitor the material you are recording. Music power 1.5 watts. Freq. Resp. 80-8000 Hz. Inputs 1 mic. Outputs 1 external speaker. Comes complete with remote dynamic microphone, blank cassette, 6 Panasonic Hi-Top batteries. Size 8 5/8" x 2 1/4" x 10 5/8". Shpg. Wt. 5 lbs. **\$49.95**

No. 31A2546. Model RQ233S. Each **\$49.95**



## PANASONIC AC/BATTERY CASSETTE TAPE RECORDER WITH FM/AM RADIO

**\$79<sup>95</sup>**

- Low Profile Design.
- Fast Forward and Rewind.
- Slide-Rule Tuning.
- AFC On FM.
- 1 1/2 Watts Output.

Beautiful tapered design in midnight black and custom silver trim. Operates on 115 V. AC. or 6 "c" batteries. Use it anywhere. Sensitive FM/AM radio provides clean clear reception. AFC on FM locks in signal, provides drift-free reception. Has unique slide-touch controls for volume and tone. Pop-up cassette feature permits sliding a button over and up pops the cartridge. Single lever controls record, playing, rewind and fast forward. You can record directly from the self-contained radio without any external connections. Monitor switch permits you to monitor what you are recording as you are doing it.

Has full range 3" dynamic speaker for excellent tone. Fast forward time with 60 minute cassette is 230 seconds, rewind time 110 seconds. Freq. Response 70-10,000 Hz. Inputs for microphone, aux., remote control mic. Has external speaker output.

Comes complete with remote dynamic microphone with stand, 1 pre-recorded cassette tape, 6 "c" size Panasonic Hi-Top batteries. Size 9 7/8" W x 10" D x 3 1/2" H. Shpg. wt. 10 lbs. No. 31A2554. Model RQ232S. Each **\$79.95**



## PANASONIC "TINY TONE" SMALLEST CASSETTE RECORDER YET!

- Weighs only 2 1/4 pounds.
- Small, only 3 3/4" W. X 6 1/8" H. X 1 7/8" D.
- Uses standard Phillips type Cassettes.

**\$99.95**

The "Tiny Tone" is truly a carry-along, compact cassette tape recorder with many extraordinary features. Cartridge pops up for easy changing. Special electronic motor. Has automatic recording level control. Combination VU and battery level meter. Use simple single lever operation. Has built in full range 2 1/2" dynamic speaker. 70% of all circuitry is composed of new integrated circuits. Perfect for travel, meetings, home or office.

Specifications: 5 integrated circuits plus 5 transistors and 4 diodes. Black with silver trim. Comes complete with remote pencil microphone and desk stand. One C-60 cassette, earphone, carrying case, wrist strap and 4 Panasonic Hi-Top "AA" batteries. Shpg. wt. 3 lbs. **\$99.95**

No. 31A2531. Model RQ210S. Net Each **\$99.95**

Tie Clip Microphone for above unit. Permits unobserved interviewing. **\$14.95**

No. 31A2532. Net Each **\$14.95**

RP8160 Plug-in Microphone for the RQ210S cassette recorder. Gives all the versatility of a built-in microphone leaving one hand free while recording. No. 31A2542. Each **\$19.95**

RP661 AC Adaptor permits operation of the RQ210 from 115 V. 60 Hz. AC. No. 31A2548. Each **\$ 9.95**

RP922 Foot Switch for easy stop and start of the recorder in either the record or playback mode of the RQ209 or RQ210 recorder. No. 31A206. Each **\$ 9.95**

Telephone Pick-Up model RP963 for RQ210 or RQ209 recorders. No. 31A208. Each **\$ 4.95**



# PANASONIC

TOMORROW'S LOOK TODAY"

## SOLID STATE CASSETTE TAPE RECORDER WITH HIGH QUALITY FM/AM/FM STEREO RADIO

# \$179<sup>95</sup>

MODEL RS252S



UNIVERSAL MOUNTS  
PERMITS MOUNTING  
ON CEILING OR  
WALL

- Frequency Response 30-12,000 Hz.
- 2-6½" "Solar Scoop" Spherical Speakers.

The Orbitone introduces exclusive Panasonic "Solar Scoop" spherical speakers which can be ceiling-mounted, shelf-mounted or wall-mounted for exciting futuristic effect. Features Panasonic's push-button, pop-up cassette system. Other Panasonic extras include: convenient "one-touch" power switch, 5-position Select-O-Dial lever-type controls, lock-down lever control for fast-forward and rewind, and a mono/stereo record/playback change-over switch. For further recorder enjoyment there's a Panasonic speaker switch, and aux. input jack, two large VU meters, and AC bias and AC erase. 20 watt peak music power. The radio section is equipped with many exciting features. There's a black out "face" exclusive "Stereo-Eye" system, a specially designed FET tuner, AFC on FM, sliding tone and volume controls and stereo headphone jack. Solid-state engineered for sure reliability. Inputs 2 mic, 2 aux.,

2 phono outputs: 2 line, 2 speakers, 1 headphone. Operates on 115 V. 60 Hz AC.

Complete with one dynamic microphone with stand C-30 Cassette and 2 connection cords. Size main unit 17¾" x 11⅞" x 6". Speakers 8⅞" x 17⅞" x 5¾". Shpg. Wt. 26 lbs.

No. 31A7524. Each..... **\$179.95**

RS250S. Identical in style to above unit except without AM/FM Multiplex Radio. Has all the rest of the features of the RS250S. Comes complete with one dynamic microphone and stand 1-C30 cassette, and 2 connection cords. Shpg. Wt. 13 lbs.

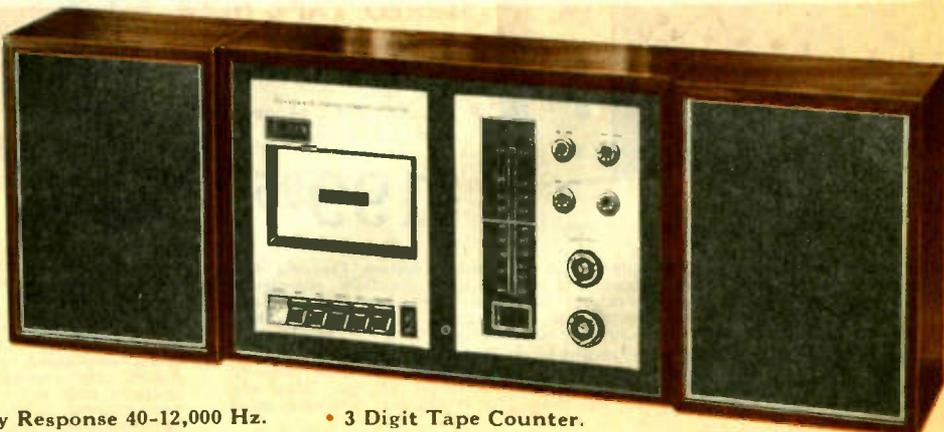
No. 31A7522. Each..... **\$129.95**

# PANASONIC

## LUXURIOUSLY DESIGNED AM/FM STEREO RADIO WITH STEREO CASSETTE RECORDER

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

MODEL RE7060



- 16 Watts Music Power.
- Frequency Response 40-12,000 Hz.
- 3 Digit Tape Counter.

A luxurious look set off by handcrafted walnut wood and tasteful chrome trim. Illuminated slide-rule tuning with "black-out" dial. Twin 6½" dynamic speakers in separate enclosures offer superb full-bodied sound and maximum stereo separation. Functional modular design for varied speaker arrangements. Continuous tone control for true treble-bass balance. "Stereo" eye system. FET tuner provides superb selectivity and eliminates annoying station drift. AFC on FM locks in signal for crystal clear reception, 4 track stereo cassette

deck with push button operation allows you to listen to your favorite pre-recorded music or tape directly off the air. A complete home entertainment unit. VU meter provides easy reading of sound level. Inputs for 2 mikes, 2 phono outputs, 2 line, 2 speakers, 1 stereo headphone, size; control unit 17¾" x 11⅞" x 6". Speakers each 8⅞" x 11⅞" x 5¾". Shpg. Wt. 28 lbs.

No. 31A7514. Model RE7060. Each..... **\$199.95**

# PANASONIC

## ULTRA MODERN DESIGN STEREO CASSETTE TAPE RECORDER WITH AM/FM STEREO RADIO

# \$229<sup>95</sup>

MODEL RS280S



- 20 Watts Music Power.
- "Pana-Ject" Slide-In Cassette System.
- Frequency Response 30-12,000 Hz.

A completely professional sound system. Sleek contemporary design is set off by hand crafted walnut wood cabinetry. Unique one-step slide-in cassette operation. Precision capstan drive, direct recording off aux. source, sound monitor and fast forward and rewind. Two VU meters, digital type counter and separate tone controls assure maximum recording and listening pleasure. The distinctive FM/AM and FM stereo radio offers high quality performance for total listening enjoyment. "Black-Out" illuminated slide rule dial face maintains the elegant fine line design. Two full-range 6½" dynamic speakers assure rich, resonant tone.

Special stereo eye indicates when FM station is broadcasting stereo. FET tuner sorts out incoming signals to insure fine clear reception. AFC locks in FM signals. Inputs 2 mic, 2 aux., 2 phono. Outputs 2-line, 2 speaker, 1 headphone. Size 19¼" x 11½" x 5½". Speaker 8⅞" x 11⅞" x 5¾" each. Comes complete with 2 dynamic microphones with stands, C-30 Cassette and connector cords. Shpg. Wt. 39 lbs.

No. 31A7513. Each..... **\$229.95**

# LATEST IN STEREO RECORDERS AND DECKS

## PANASONIC

### DUAL CAPSTAN STEREO TAPE RECORDER

- Continuous automatic or manual reverse.
- 20 watts music power.
- 3 speeds: 7½, 3¾ and 1⅞ ips.

**\$279<sup>95</sup>**

This Dual Capstan drive stereo tape recorder is a true example of professional mastery. Provides continuous automatic or manual reverse with directional lights. Features 4 track, 3 speed operation. With superb 4-head system. 2 VU meters, 7" reel, Pause control, automatically shuts off at end of tape. Has 4 position digital tape counter. Two 7" oval dynamic speakers with side adjustable baffle boards. Separate volume and tone controls on each channel. 20 watts music power. Has sound-on-sound, sound with sound, safety lock record button. Simple lever operation. Special solar bronze cover protects against dust. Adds a touch of professional beauty. U/L Listed. Has 14 transistors plus 10 diodes and 5 thermistors.

**Specifications:** Recording System: AC bias; Erase System: AC bias. Rewind time 3 minutes, Fast Forward 3 minutes. Wow & Flutter: Less than .1% RMS at 7½ ips. Less than .2% RMS at 3¾ ips. Freq. Resp. 30-18,000 Hz at 7½ ips, 30-13,000 Hz at 3¾ ips. S/N ratio more than 52 db; Jacks: 2 mike, 2 aux. input, 2 ext. speaker, 2 line output, 1 stereo headphone output. Includes 2 dynamic microphones and stands, 7" reel with tape, 7" empty reel, 2 connecting cords "C", 2 reel holders, splicing tape, sensing tape. Size: 17" W, 16½" H, 9" D. Wt. 38½ lbs.

No. 31A5019. Model RS7905. Net Each **\$279.95**  
 Matching Pair of Stereo Speaker Systems for above (optional). Recorder speaker sizes: 16½" H, 9" D, 17" W. Shpg. Wt. **\$79.95**  
 No. 31A5020. Model RP8058. Net Pair.....



## PANASONIC

### NEW CONTINUOUS AUTOMATIC REVERSE STEREO TAPE DECK

- 4 Tape Heads.
- 3 Speeds: 7½, 8¾, 1⅞ ips.
- 85 KC A.C. recording and erase bias.

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



Superb stereo tape deck to complete your home music system. Features dual capstan drive, 4 tape heads. Records and plays in both directions, completely continuous automatic reverse. Features sound-on-sound/sound with sound, automatic shut off, pause control and dust cover. In beautiful walnut grained cabinet. Operates vertically or horizontally.

**Specifications:** Has fast forward, record interlock, 4 position digital counter, 2 VU meters, 2 mike inputs, separate volume controls for each channel. Freq. Resp 30-20,000 Hz at 7½ ips, 30-13,000 Hz at 3¾ ips; Wow and Flutter less than .1% at 7½ ips, less than .2% at 3¾ ips; S/N ratio more than 50 db.

Operates on 117 VAC. Complete with 7" empty reel, 2 reel holders, 4 connecting cords, splicing tape and sensing tape. Size: 19½" W, 14" H, 7¾" D. Wt. 38 lbs.  
 No. 31A5028. Model RS796US. Net Each **\$199.95**

## PANASONIC

### SOLID STATE 4-TRACK STEREO TAPE RECORDER

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

MODEL RS7605

- 2 Self-contained 6" Oval Speakers.
- 8 Watts Music Power.
- 3 Speeds: 7½, 3¾, 1⅞ ips.



Smartly designed compact stereo recorder takes 7" reel for long record/play back pleasure. Capstan drive permits the tape to operate at a continuous, constant speed at all three settings. Lever type control makes for the ultimate in operational ease and efficiency, pause control permits you to stop the tape for immediate reference, indexing, or taping. 4 position digital tape counter indicates precise numerical location of any particular selection or part of tape. The RS7605 features: sound monitor, sound-on-sound, sound-with-sound, and automatic shut-off switch. Two large easy-see VU meters offer immediate indication of recording level. Twin 6" oval dynamic speakers pour out rich sound. Has continuous tone and volume control for each channel. Solid state engineered for sure reliability.

**Specifications:** Freq. resp., 50-17,000 Hz at 7½ ips, 50-10,000 Hz at 3¾ ips, 50-5,000 Hz at 1⅞ ips. Has 2 mic, 2 aux. inputs; 2 line (output), 2 external speakers, 1 headphone output. Size: 14 x 13½ x 7". Complete with 2 dynamic microphones and stands, 7" reel with tape, 7" empty reel, two connection cords, splicing tape and 2 reel holders.  
 No. 31A5008. Model RS-7605. **\$149.95**  
 Shpg. wt. 31 lbs. Net Each

No. 31A5043. Matching Auxiliary Speakers designed to match the RS7605. Size 13½ x 14 x 9". Shpg. wt. 22 lbs. Model RP8048. Per Pair.....**\$49.95**

## PANASONIC

### PROFESSIONAL 4-TRACK STEREO TAPE DECK SOLID STATE RECORD PLAYBACK PREAMP

- In handsome walnut cabinet.
- 3 speeds: 7½, 3¾, 1⅞ ips. Capstan drive.
- 7 inch reel capacity.

**\$99<sup>95</sup>**

Now, complete your music system with one of the finest decks we have seen or heard! Functionally mounted in a walnut cabinet for vertical or horizontal operation. Simply connect to your home entertainment system for playing back pre-recorded tapes or recording your own from stereo or mono tapes. Put your entire record library on tapes. Tapes provide longer lasting fidelity. NARTB equalization assures you the finest playback sound from your own as well as pre-recorded tapes.

Features separate VU meters for each channel. 3-position digital counter with push-button reset. Easy "single lever" operation for all functions. Automatic shut-off at the end of reel. Pause control. Has 2 heads. Frequency response: @ 7½ ips 30-18,000 Hz; @ 3¾ ips 30-13,000 Hz; @ 1⅞ ips 30-6,000 Hz. Size 13¼" W. x 11" H. x 5½" D. Operates on 117 V. 60 cy. AC. Complete with 7" empty reel, 4 connection cords, splicing tape and 2 reel holders. Shpg. wt. 25 lbs.

No. 31A5039. Model RS765. Less Dust Cover. Net Each **\$99.95**  
 No. 31A5040. Dust Cover for above. RP8070. Each.....**\$9.95**



WITH AUTOMATIC SHUTOFF

**WORLD FAMOUS**



**CASSETTE RECORDERS**

**LOWEST PRICE EVER  
ON B-A's BEST SELLING**

**5 PUSH BUTTONS  
CONTROL ALL  
FUNCTIONS**

**CASSETTE TAPE RECORDER**

NOW WITH BUILT-IN AC OR BATTERY OPERATION

**Save \$15<sup>45</sup>**

**REG. PRICE WAS \$59.95**  
**\$44<sup>50</sup>**



Thousands sold Nationally for \$59.95 . . . Do not confuse with cheaper units. Complete with Remote Control Ultra-Sensitive Microphone, Built-in AC, Shoulder Strap, Earphone, Accessory Pouch and Blank Cassette.

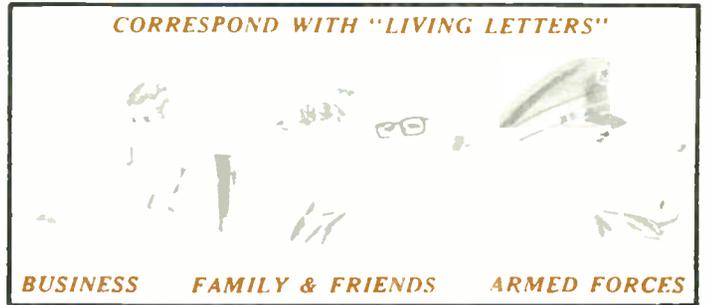
The cassette system is the most versatile recording/playback system ever developed. Just pop a cassette in for up to 2 hours recording of lectures, interviews, musical performances, etc. Fully transistorized, instant recording/playback. Individual push-buttons control start, stop, wind, rewind. Combination battery recording level/battery life meter assures finest recordings always.

Music recordings playback with pleasing fidelity. Freq. response 100-8,500 HZ ± 3 db. Wow and flutter 0.5%. Has built-in connections for playback through external amplifiers and headphones. Single input provided to record from microphone, radio, record player or other recorder.

Capstan drive assures constant speed 1 7/4" dual track operation. Cartridge (included) 60 minute tape. Transparent opening shows tape on reels. Cartridges can be snapped in or out of recorder at anytime—no need to wind or rewind tape. Operates on 5 standard "C" flashlight batteries (not included) or direct from 115 V. 60 cy AC. High impact plastic case. Size 5 1/4" W, 10" L, 2 3/4" D. Weighs only 3 lbs. With remote control, ultra-sensitive dynamic microphone, earphone, accessory pouch and blank cassette tape. Shpg. wt. 8 lbs. Highest quality import

- No. 31A2543. Special Each **\$44.50**
- No. 21A2. "C" cell battery for above (Requires 5). Each..... 17c
- No. 31A2525. Stethoscope Headset. Each..... \$2.95
- No. 31A2526. Foot Control. Each..... \$5.95
- No. 31A2527. Telephone Pick-Up. Each..... \$2.50
- No. 31A2528. 36" Patch Cord with Alligator Clips. Each..... \$1.95
- No. 11A5500. 30 Min. Cassette Blank Tape. Each..... 99c; 12 for Ea..... 88c
- No. 11A5501. 60 Min. Cassette Blank Tape. Each..... \$1.29; 12 for Ea..... \$1.09

**CORRESPOND WITH "LIVING LETTERS"**



**BUSINESS FAMILY & FRIENDS ARMED FORCES**



**DELUXE CASSETTE  
RECORDER WITH  
PADDED LUGGAGE CASE**

**\$34<sup>95</sup>**

- Automatic Level Control For Perfect Recordings
- Operates On 4 "C" Batteries
- Simple One Lever Control
- Expensive Padded Luggage Case

Beautiful sound from a beautiful package is what you'll get from this hot little performer. Beneath the luxurious luggage case there's a luxurious tape recorder to match. With deluxe features that can't be matched by comparably priced units. Like built-in automatic record level, simple one lever control, easy-load, pop-up cassette ejection, earphone auxiliary speaker jack, and AC adaptor input jack. Specs. Freq. Resp. 100-8000 Hz. power output 500 MW. S/N ratio -40 db. Weight 2 1/2 lbs. Size 2 1/2" x 9" x 5". Complete with dynamic microphone, carrying strap, one blank cassette.

- No. 31A2569. Model 20-1002. Each **\$34.95**
- No. 21A2 Batteries for above. Requires 4. Each..... 17c



**CASSETTE TAPE  
PLAYER WITH FULL  
RANGE AM RADIO**

**\$32<sup>95</sup>**

- Convenient One-Lever Control
- Pop-Up Cassette Ejector Door
- Solid-State AM Radio
- Radio-Cassette Switch
- Plays Stereo or Mono Cassettes

Flip the switch; its a great sounding cassette tape player with rewind and fast forward. Flip it again and its pulling in AM broadcasts with solid-state dependability. Go anywhere styling with rugged, hi-impact polystyrene case. Has AC adaptor input jack and earphone auxiliary speaker jack. 8 transistors, 1 diode, 1 thermistor. Freq. Resp. 100-7000 Hz. Power output 750 MW. Speaker size 2 1/2 inch PM. Power source 4 "C" cells. 6 volts DC. Size 11 1/2" x 5 1/2" x 3". Weight 3 lbs.

- No. 31A2570. Model 10-2002. Each **\$32.95**
- No. 21A2. Batteries for above. Requires 4. Each..... 17c

WORLD FAMOUS



CASSETTE RECORDERS

HOME STEREO CASSETTE RECORDER SYSTEM

\$129<sup>95</sup>



- Hysteresis Synchronous Motor
- Dual Volume And Tone Controls
- Walnut Wood Cabinetry

The look is handsome! The sound is brilliant! And the price is surprisingly sensible. Mercury has added all the professional features to this machine to make it an outstanding performer at this low price. Hysteresis synchronous motor assures smooth freq. response and low wow and flutter. Six push-button controls for easy operation: record, rewind, stop/eject, play, fast forward, and pause. Single action pop-up cassette load and eject system make cassette recording simple. Other professional features include 2 over-size VU meters, three digit tape counter, pilot light, dual volume and dual tone controls. Inputs provided for direct recording from phono or tuner. Outputs for stereo headphones and playback through stereo sound system.

Matched bookshelf speaker systems in walnut wood cabinetry match center control unit in styling to make a beautiful addition to any room. Specs. Freq. Response: 80-10,000 Hz. S/N ratio better than -45 db. Power output 3 watts. Wow and flutter less than 0.2%. Bias and erase AC type. Recorder size 13 1/2" x 9 3/8" x 4". Speaker size 10 3/8" x 7 1/2" x 5 1/2". Standard equipment with the model 50-9008 includes 2 dynamic microphones, two microphone stands, four patch cords, one C-60 blank cassette. Shpg. Wt. 27 lbs.

No. 31A2571. Model 50-9008. Each.....

\$129.95

OPERATES ON BATTERIES OR WITH BUILT-IN AC CORD



DELUXE FM/AM RADIO CASSETTE RECORDER

\$79<sup>95</sup>

- Sensitive AM-FM Radio.
- Luxurious Padded Luggage Case.
- Battery Strength Meter.
- Pop-Up Cassette Load System.

Everything needed for music on-the-go incorporated in this high-styled portable. Super sensitive AM-FM radio with AFC on FM. Cassette recorder records direct from AM-FM without any external connections or recording can be made live with high-quality dynamic microphone included. Will play mono or stereo pre-recorded cassettes monaurally. Automatic level control (ALC.) assures perfect recordings each time. Professional 3-digit tape counter and combination VU meter/battery indicator. Big 3 1/2" inch dynamic speaker for superb sound reproduction. Power output; 1 full watt. Freq. Response: 80 to 10,000 Hz. S/N ratio -40 db. Wow and flutter: Less than 0.3% RMS. Six pushbutton controls: record, play, stop, fast forward, rewind cassette eject. Operates on six standard "C" cells (not included). Size 12" x 9 1/2" x 3 1/2". Shpg. Wt. 8 lbs.

No. 31A2572. Model 20-4005. Each.....

\$79.95



STEREO CASSETTE RECORDER DECK

TWO HIGH QUALITY MICROPHONES INCLUDED

\$109<sup>95</sup>

- Hysteresis Synchronous Motor.
- Professional VU Meter.
- 3 Digit Tape Counter.

Deck version of model 50-9008 shown above. This stereo tape deck will round out your present stereo system, be it a console, elaborate component system or stereo table radio. This unit is compatible with any unit having tape recorder inputs/outputs or stereo music can be recorded live with the two high-quality dynamic microphones included. Specifications identical to model 50-9008 illustrated above. Output level 0.5 RMS OVU record level. Comes equipped with 2 microphone stands, four patch cords, one C-60 blank cassette. Size 3 1/2" x 9 3/8" x 4". Shpg. Wt. 14 lbs.

No. 31A2573. Model 50-8008. Each.....

\$109.95

# AMPEX

## PROFESSIONAL RECORDERS

### AMPEX

### SOLID STATE

#### AG-600 RECORDER



AA620 AMPLIFIER

Now . . . Ampex offers a smaller, all new version of the 600 series; the world's finest low-cost professional audio recorder. The new two speed transport (3 $\frac{3}{4}$ -7 $\frac{1}{2}$  IPS) uses the same rugged die cast aluminum frame which made the 600 series so dependable. A new clutch assembly and a new cooling system adds even more reliability. And to simplify indexing, a three digit counter has been added. The new solid-state electronics has one mike and one line input per channel providing built-in mixer capability. The line input can be converted to mike input, balanced line or to a magnetic phono input by using the plug-in accessories listed below. Output is 600 ohm  $\pm$  4 DBM, balanced or unbalanced. Weight: single channel in portable case = 28 lbs. Dual channel in portable case = 42 lbs.

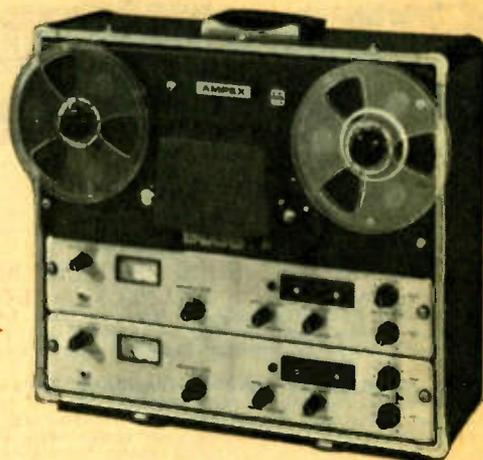
Model AG-600-1 Specify \*Half or Full Track Dual Speed, 3 $\frac{3}{4}$  and 7 $\frac{1}{2}$  IPS. Unmounted. Each ..... \$660.00  
 Portable. Each ..... \$720.00

\*Half track models are shipped with two track stereo heads for later conversion to stereo if necessary.  
 Model AG-600-2 Two Channel Dual Speed, 3 $\frac{3}{4}$  and 7 $\frac{1}{2}$  IPS Unmounted. Each ..... \$ 915.00  
 Portable. Each ..... \$1010.00

The AG-600-2 can be supplied with  $\frac{1}{4}$  track heads at same price.  
 Rack Adaptor For 19 Inch Racks—Single Channel. Each ..... \$21.00  
 Two Channel. Each ..... \$29.00  
 Adapts unmounted models for 19 inch relay rack installation.

### AMPEX

#### SOLID STATE AG-500 RECORDER



The AG-500 all solid state recorder is outstanding for its performance in the studio or field. Compact, rugged and versatile, the AG-500 will maintain this high quality performance in the most demanding assignments. Precision milled, die cast top plate. Eddy current reeling motors and a big cool running synchronous drive motor make-up a smooth low flutter transport. All functions are solenoid—relay activated and is ready for the remote control listed below. Each electronics will accept and mix two incoming line signals. Line inputs can be converted for low impedance microphone, etc. by using accessories listed below. The AG-500-2 can mix up to four inputs without external mixers. Thus, narration over voice, sound with sound or other special recording capabilities is easy with the AG-500-2. Rack Space: Transport: 8 $\frac{3}{4}$ " x 19". Each Electronics: 3 $\frac{1}{2}$ " x 19". Wt. 1 Channel Portable = 42 lbs. 2 Channel Portable = 52 lbs.

Model AG-500-1 Specify \*Half or Full Track—3 $\frac{3}{4}$ -7 $\frac{1}{2}$  IPS or 7 $\frac{1}{2}$ -15 IPS Rack Mounting. Each ..... \$1,275.00  
 Portable. Each ..... 1,380.00

\*Half track models are shipped with two track stereo heads for later conversion to stereo if necessary.

Model AG-500-2 Two Channel Specify 3 $\frac{3}{4}$ -7 $\frac{1}{2}$  IPS or 7 $\frac{1}{2}$ -15 IPS Rack Mounting. Each ..... \$1,495.00  
 Portable. Each ..... 1,626.00

The AG-500-2 can be supplied with  $\frac{1}{4}$  track heads at same price.

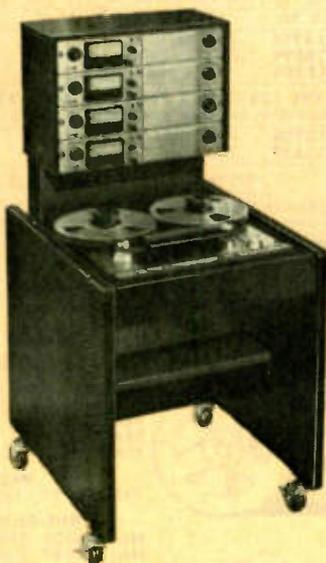
#### SOLID STATE AA-620 AMPLIFIER

Designed as an accessory to all the Ampex recorders the AA-620 is a companion to the AG-600 and AG-500 recorders. This 20 watt amplifier is acoustically flat from 65 Hz. to 10 KHz. The AA-620 offers studio quality sound reproduction in a lightweight and portable package. Separate bass-treble controls provide  $\pm$  6 db range to compensate for room acoustics. Can be rack mounted if necessary but available only in portable case.  
 Professional User Price. Each ..... \$259.00

Write for complete specifications or recommendations.

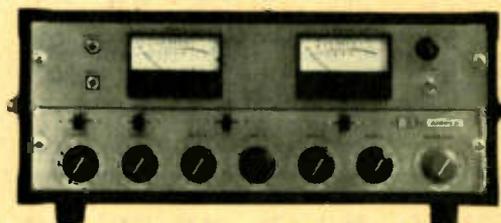
#### AMPEX SOLID STATE AG-440B THE QUIET PROFESSIONAL

The new AG-440B is studio quiet. Same rugged reliable professional recorder as its predecessor but with redesigned electro-mechanical components and circuitry for acoustically quieter operation. All transport controls have been damped to eliminate 80% of mechanical noise. Automatic tape lifters are delayed to eliminate "shrieking" as tape is stopped in fast modes. This new model is quiet enough to use in the studio with live microphones. Stable die cast frame assures perfect tape tracking. Maintenance is easy! Plug-in heads and modular designed plug-in electronics boards provide fast replacement or service. Console models permit rotating of transport for rapid service or adjustment. Expansion and convertibility is easy with the AG-440B. Changing between  $\frac{1}{4}$  inch to  $\frac{1}{2}$  inch tape is fast and easy. Tape guides rotate and "lock in" for either size tape. The single channel models can be expanded up to four channels as shown above. This "stacked" over-bridge modular concept can also be used to mount the AM-10 mixer, accessory meter panel, patch panels or even a AG-600 or AG-500.



Model AG-440B-1 Specify \*Half or Full Track—3 $\frac{3}{4}$ -7 $\frac{1}{2}$  IPS or 7 $\frac{1}{2}$ -15 IPS. Rack Mounting. Each ..... \$2,099.00  
 Console. Each ..... 2,499.00  
 Portable. Each ..... 2,299.00  
 Model AG-440B-2 Two Channel  $\frac{1}{4}$ " Tape Width—Specify 3 $\frac{3}{4}$ -7 $\frac{1}{2}$  IPS or 7 $\frac{1}{2}$ -15 IPS. Rack Mounting. Each ..... \$2,799.00  
 Console. Each ..... 3,229.00  
 Portable. Each ..... 2,999.00  
 Model AG-440B-4 Four Channel  $\frac{1}{2}$ " Tape Width—Available 7 $\frac{1}{2}$ -15 IPS Only. Rack Mounting. Each ..... \$4,399.00  
 Console. Each ..... 4,859.00  
 Portable. Each ..... 4,599.00  
 Model AG-440-8 Eight Channel 1" Tape Console Only ..... \$12,500.00

\*Half track models are supplied with 2 track stereo heads. Can be converted to stereo with addition of electronics and cables.



METER PANEL

AM-10 MIXER

The AM-10 is a two channel, stereo-mono mixer and a greatly improved version of the well-known MX-10 and MX-35. Compact and rugged, this new low noise high output mixer can be case or rack mounted in only 3 $\frac{1}{2}$  inches of panel space. Four microphone and two line inputs can be mixed and silently switched into either or both channels. Line inputs can be converted to mike inputs or magnetic phono inputs by using the plug-in accessory pre-amps listed below. More inputs are available by coupling several AM-10 mixers together. Master gain is controlled by the final unit in the chain. The AM-10 is ideal for recording, dubbing, broadcast remotes or any sound support system, stereo or monophonic! Frequency response:  $\pm$  1 db 30 Hz to 20KHz. Input impedance: Microphone: 200 ohm. Line: 100K ohms unbalanced. \*20K ohms balanced. \*600 ohms matching. \*With accessory transformer.

AM-10 Mixer, Each ..... \$499.00  
 Meter Panel for AM-10. Each ..... 167.00

#### ACCESSORIES FOR AG-440, AG-500, AG-600 AND AM10

Microphone Preamplifier	4010066-01	Each	\$ 55.00
Phono (RIAA) Preamplifier	4010097-01	Each	\$ 50.00
Line Input Transformer, Balanced Bridge	4580200-01	Each	\$ 20.00
Matching Input Transformer, 600 Ohm	4580200-02	Each	\$ 20.00
Meter Panel For AM-10 Mixer	4010098-01	Each	\$167.00
Remote Control For AG-440—Desk Type	4010080-01	Each	\$ 60.00
Remote Control For AG-500—Desk Type	0196510-02	Each	\$ 85.00
Remote Control For AG-500—Panel Type	0196520-02	Each	\$ 57.50
Head Cleaner 4 oz. Can	087-007	Each	\$ 1.45
Lubricating Oil 2 oz. Bottle	4010825-02	Each	\$ .95

WRITE FOR COMPLETE SPECIFICATIONS, RECOMMENDATIONS OR TRADE ALLOWANCE ON YOUR PRESENT EQUIPMENT DEPT. CS-G



# SCOTCH SOUND AND VIDEO



## MINNESOTA MINING "SCOTCH" BRAND TAPES 3M TAPES WITH CELLULOSE ACETATE BACKING

Most widely used of all magnetic recording tapes. Smooth and flexible... provides flawless sound reproduction at lowest cost. Its flexibility allows perfect head conformity, produces excellent wide range response.

**TYPE 111 GENERAL PURPOSE STANDARD TAPE—1½ MIL ACETATE.** Regarded as the performance standard of the recording industry. All-purpose, first-choice of most engineers and recording fans for flawless sound reproduction. On easy threading clear plastic reels. Except: RPL 10½" reel is opaque plastic with 3" (NAB) center hole. Except: RPS 10½" reel is opaque plastic with ⅜" (EIA) center hole.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A551	111-¼-150	3"	150'	2 oz.	\$0.54	\$0.52	\$0.47
11A552	111-¼-300	4"	300'	4 oz.	1.42	1.35	1.21
11A554	111-¼-600	5"	600'	6 oz.	1.78	1.69	1.52
11A559	111-¼-1200	7"	1200'	12 oz.	2.73	2.59	2.33
11A1110	111-¼-2500RPL	10½"	2500'	34 oz.	8.28	7.20	6.48
11A1111	111-¼-2500RPS	10½"	2500'	34 oz.	8.28	7.20	6.48

**TYPE 120 'HIGH OUTPUT'—STANDARD PLAY—1½ MIL ACETATE.** Produces 100% more output, results in greater dynamic range, freedom from distortion or signal peaks... brilliant sound reproduction. A must for hi-fi fans.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A556	120-¼-600	5"	600'	6 oz.	\$1.78	\$1.69	\$1.52
11A562	120-¼-1200	7"	1200'	12 oz.	2.73	2.59	2.33

**TYPE 190 EXTRA PLAY TAPE—1 MIL ACETATE.** Gives 50% greater time than 1½ mil tapes on same reel size. On clear plastic reels. Except: RPL 10½" reel is opaque plastic with 3" (NAB) center hole. Except: RPS 10½" reel is opaque plastic with ⅜" (EIA) center hole.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A567	190-¼-900	5"	900'	6 oz.	\$2.41	\$2.29	\$2.06
11A568	190-¼-1800	7"	1800'	12 oz.	4.20	3.99	3.59
11A1105	190-¼-3600RPL	10½"	3600'	34 oz.	9.81	8.53	7.68
11A1106	190-¼-3600RPS	10½"	3600'	34 oz.	9.81	8.53	7.68

## NEW 3M HEAVY DUTY "TENZAR" BACKED TAPES

Priced only slightly higher than acetate-backed tapes, yet provides 15 times more wearability. Perfect for educational and language-lab use, for all-weather use and long time storage. Has new black oxide coating. On clear plastic reels.

### TYPE 175 "TENZAR"—STANDARD PLAY—1½ MIL BASE

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A755	175-¼-600	5"	600'	6 oz.	\$1.84	\$1.60	\$1.44
11A756	175-¼-1200	7"	1200'	12 oz.	2.88	2.50	2.25

**TYPE 282 'SANDWICH' TAPE—STANDARD PLAY—1½ MIL MYLAR.** Out-wears conventional tapes by up to 30 times. Micro-thin protective plastic shield over the recording surface entirely eliminates oxide rub-off, drastically reduces machine head wear. On clear plastic reels.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A873	282-¼-600	5"	600'	6 oz.	\$2.38	\$2.07	\$1.86
11A874	282-¼-1200	7"	1200'	12 oz.	3.80	3.30	2.97

**TYPE 153 SPECIAL LUBRICATED—1 MIL MYLAR.** For repeater mechanisms and cartridge tape players. Brown oxide externally lubricated, for continuous loop systems.

11A779.	154-¼-1800.	7" Reel.	Ea.	\$4.11	6 Ea.	\$4.02	12 Ea.	\$3.65
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## PROFESSIONAL 3M "DYNARANGE" TAPE

Provides brilliant low noise recording at half the normal recording speeds—twice the time, yet total fidelity plus economy. The No. 1 choice of professionals and advanced non-professionals. The entire Dynarange series is continually updated for finest possible performance. RO 16 ½" reel is aluminum with ⅜" Ctr. hole. RPL and RPS 10½" reels are opaque plastic with 3" NAB and ⅜" EIA Ctr. holes respectively.

### TYPE 201 DYNARANGE—1½ MIL ACETATE

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11B496	201-¼-600	5"	600'	6 oz.	\$2.05	\$1.95	\$1.75
11B501	201-¼-1200	7"	1200'	12 oz.	3.15	2.99	2.69
11B520	201-¼-2500RO	10½"	2500'	34 oz.	9.36	8.14	7.32

### TYPE 202 DYNARANGE—1½ MIL POLYESTER

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11B497	202-¼-600	5"	600'	6 oz.	\$2.10	\$1.99	\$1.79
11B546	202-¼-1200	7"	1200'	12 oz.	3.58	3.40	3.06
11A1112	202-¼-2500RPL	10½"	2500'	34 oz.	9.36	8.14	7.32

### TYPE 203 DYNARANGE—1 MIL POLYESTER

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11B499	203-¼-900	5"	900'	6 oz.	\$2.98	\$2.83	\$2.55
11B597	203-¼-1800	7"	1800'	12 oz.	5.15	4.90	4.41
11A1113	203-¼-3600RPS	10½"	3600'	34 oz.	13.14	11.43	10.29

## 3M POLYESTER (MYLAR) TAPES

Extra strong, extra long lasting Polyester base withstands extremes of temperatures and humidity. The preferred tape for long time storage, for private or business recordings to be played again and again.

**TYPE 102—STANDARD PLAY—1½ MIL MYLAR.** The most rugged long-lasting recording tape base made. Oxide and recording characteristics are identical to type 111. On clear plastic reels.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A870	102-¼-600	5"	600'	6 oz.	\$2.04	\$1.77	\$1.59
11A871	102-¼-1200	7"	1200'	12 oz.	3.25	2.83	2.55

**TYPE 150 EXTRA PLAY TAPE—1 MIL MYLAR.** Same size reel plays 50% longer than 1½ mil base tapes.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A544	150-¼-900	5"	900'	6 oz.	\$2.41	\$2.29	\$2.06
11A545	150-¼-1800	7"	1800'	12 oz.	4.20	3.99	3.59

**TYPE 200 DOUBLE PLAY—½ MIL TENSILIZED MYLAR.** Specially conditioned tough Dupont Mylar extra thin base, allows twice the normal recording-playing time compared to 1½ mil tapes. 200-48R is plastic EIA reel.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A778	200-¼-1200	5"	1200'	6 oz.	\$3.89	\$3.69	\$3.32
11B594	200-¼-2400	7"	2400'	12 oz.	6.83	6.49	5.84
11B564	200-¼-4800RPS	10½"	4800'	34 oz.	16.87	14.67	13.20

**TYPE 290 TRIPLE PLAY—½ MIL TENSILIZED MYLAR.** Extra long play, with ultra-thin backing and coating. Gives up to three hours at 3¾ ips speed.

11B708	290-¼-1800	5"	1800'	6 oz.	\$4.94	\$4.69	\$4.22
11A887	290-¼-3600	7"	3600'	14 oz.	8.40	7.99	7.19

## TYPE 131 LOW-PRINT—1½ MIL ACETATE

Features extremely long storage of recorded material with no magnetic layer-to-layer transfer. Especially recommended for narration.

Stk. No.	Fact. No.	Reel	Lgth.	Wt.	Net Ea.	6 Ea.	12 Ea.
11A1114	131-¼-600	5"	600'	6 oz.	\$2.15	\$1.87	\$1.68
11A1115	131-¼-1200	7"	1200'	12 oz.	3.37	2.93	2.64



## SCOTCH LEADER AND TIMING TAPE AND SPLICING TAPE

### PLASTIC LEADER AND TIMING TAPE

For splicing onto ends of recorded tapes to prevent repeated breakage; or between selections for identification and timing. White. Write on type.

Na. 11A578. Type 24-1W, ¼" x 1.00 Ft. Each 69c 6 Ea. 60c 12 Ea. 54c

Yellow Type 24-1Y Write-On Tape. ¼" x 100 Ft. Na. 11A7510. Each 69c 6 Ea. 60c 12 Ea. 54c

### SCOTCH TYPE 41 SPLICING TAPE

Specially compounded, non-oozing. ⅜" is applied lengthwise, others cross-wise, then trimmed.

No. 11A575.	⅜" x 66 Ft. on roll.	Each	57c	12 @	Each	52c
No. 11A576.	½" x 150' on dispenser.	Each	39c	12 @	Each	35c
No. 11A780.	½" x 66 Ft. on roll.	Each	78c	12 @	Each	89c
No. 11A618.	¾" x 66 Ft. on roll.	Each	\$1.01	12 @	Each	.91c

**CONDUCTIVE CUEING AND REVERSING TAPE.** Electrically conductive metal foil on tough Mylar base with non-oozing adhesive back. Attaches directly to either side of recording tape without splicing. Re-usable. Mfg. List \$2.00. Na. 11B729. Scotch Type 51-7/325. ⅜" wide x 150 in. Roll. Net Each \$1.89 12 @ Each \$1.70

## EMPTY CLEAR PLASTIC TAPE REELS IN SCOTCH BOXES

Stk. No.	Size	Capacity	Wt.	Net Ea.	6 Ea.	12 Ea.
11A570	3"	200'	2 oz.	\$0.21	\$0.18	\$0.17
11A572	5"	600'	4 oz.	.55	.48	.44
11A573	7"	1200'	5 oz.	.63	.55	.50

PRST-7 SELF-THREADING REEL 11B728. 7", 1200', 5 oz. Ea. 1.15 6 Ea. 1.00 12 Ea. 0.90

### TRUE-RUNNING 10½" REELS WITH BOXES

Na. 11A603. Aluminum NAB Type with Flanges. Wt. 1 lb. Na. 11A549. Plastic EIA Type (with 3 holes) Net Ea. \$3.45 6 Ea. \$3.00 12 Ea. \$2.70



### SCOTCH NO. 12 END-OF-REEL TAPE CLIPS

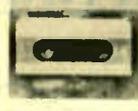
Clips securely to tape. Fits inside reel, won't distort. Wt. 3 oz. Na. 11A186. Package of 10 Far. 35c

LARGE QUANTITY USERS OF RECORDING TAPE ARE INVITED TO SEND THEIR REQUESTS FOR QUOTATIONS TO... BURSTEIN-APPLEBEE CO. INDUSTRIAL SALES DEPARTMENT

# RECORDING TAPE AND ACCESSORIES



## SCOTCH CASSETTE TAPES



MAILER PACKAGE



ALBUM PACKAGE

**FIT PHILLIPS STYLE CASSETTE RECORDERS**

**NEW SEE-THRU HOUSING**

Very highest quality — loaded with professional Dynarange tape. Now available in mailers and album packages. Professional Dynarange is permanently lubricated and tensilized polyester recording tape. Has low-noise oxide. Gives the best possible reproduction. New cartridge design offers less tape drag, more uniform speed and longer tape recorder battery life. Recording or playing time indicated is for both sides of tape. New see-through cartridge housing provides positive visual check on tape movement inside cartridge, even when recorder is operating. Avg. Wt. 2 oz.

**IN MAILER PACKAGE.** Tough plastic enclosure protects cartridge for repeated mailings. Also recommended for all cassette needs where minimum storage space is desirable.

Stk. No.	Fact. No.	Description	Net Each	6 Each	12 Each
11A1123	271-C30M	30 Min.	\$1.84	\$1.75	\$1.58
11A563	271-C60M	60 Min.	2.15	2.05	1.85
11A1047	272-C90M	90 Min.	3.20	3.05	2.75

**IN ALBUM PACKAGE.** Neat "book type" storage box with pivoted hinged lid. Very popular for in-home cassette recorder use.

Stk. No.	Fact. No.	Description	Net Each	6 Each	12 Each
11A1124	271-C30A	30 Min.	1.74	1.65	1.49
11A1125	271-C60A	60 Min.	2.05	1.95	1.76
11A1126	272-C90A	90 Min.	3.10	2.95	2.65
11A1107	273-C120A	120 Min.	4.15	3.95	3.56

## NEW HIGHLANDER TAPE CASSETTES

**FIT PHILLIPS STYLE CASSETTE RECORDERS**



- New Low Price.
- High Quality.
- Dependable Operation.



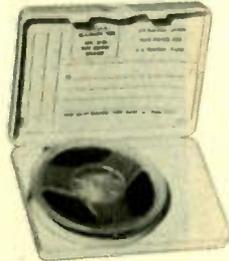
A brand new cassette by the makers of famous Scotch brand products — priced to save you money! Loaded with 3M's standard tape formulation specially modified to meet the toughest cassette recording requirements. Features new see-through packaging, new internal construction and careful assembly to prevent jam-ups or varying speed. New packaging allows you to observe tape action inside cartridge. Packed in sturdy carton suitable for mailing.

Stk. No.	Fact. No.	Description	Net Each	12 Each
11A1120	H-C-30	30 Min.	\$0.99	\$0.89
11A1121	H-C-60	60 Min.	1.19	1.09
11A1122	H-C-90	90 Min.	1.79	1.59

## SCOTCH "LIVING LETTERS" TAPE

3-INCH REELS IN RE-USABLE PLASTIC MAILER-STORING UNIT DESIGNED, ESPECIALLY FOR TAPED CORRESPONDENCE

Tough plastic enclosure provides dust-free protection and safe mailing at lowest postage cost. Sized to meet postal regulations. Highest quality tape. Good for 100's of recordings. Playing recording time 150'-15 Min., 300'-30 Min., 600'-60 Min. Avg. wt. 3 oz.



Stk. No.	Fact. No.	Base	Length	Net Ea.	6 Ea.	12 Ea.
11B623	111-1/4-150-LL	1/2 Mil Acetate	150'	\$0.72	\$0.69	\$0.62
11B635	200-1/4-300-LL	1/2 Mil Polyester	300'	1.46	1.39	1.25
11B637	290-1/4-600-LL	1/2 Mil Polyester	600'	2.09	1.99	1.79

## EMPTY 3" REELS AND MAILERS

Same as used in "Living Letter" tape packages above. Type 11 address labels are self-adhesive, fit any box.

No. 11A7507. RLL-1/4-3. Reel And Box. Each. 46c 6@Each. 40c 12@Each. 36c  
No. 11A7508. LL-1/4-3. Box Only. Each. 35c 6@Each. 30c 12@Each. 27c  
No. 11A7509. Pkg. of 10 Labels. Pkg. 49c 6Pkg. @Each. 39c 12Pkg. @Each. 33c

## SCOTCH "8000" QUICK LOAD CARTRIDGE



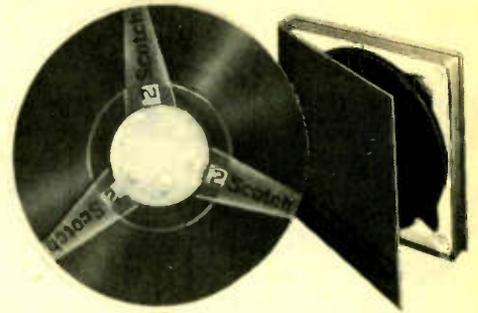
Used in schools, language labs, training programs. Fits RCA type recorders using the large 7 1/8 x 4 1/8 x 1/2" pre-loaded cartridge. Contains specially lubricated 1 mil. polyester recording tape.

Stk. No.	Fact. No.	Description	Net Each	6 Each	12 Each
11A1108	8000-1/4-320-C	Clear-1/4x320'	\$3.07	\$2.67	\$2.40
11A1109	8000-1/4-560-C	Clear-1/4x560'	3.45	3.00	2.70
11B619	8000-1/4-560-O	Opaque-1/4x560'	3.45	3.00	2.70



## PRODUCTS FOR ELECTOGRAPHY

## SCOTCH 351 1/2 INCH VIDEO TAPE FOR HELICAL SCAN VIDEO RECORDING



## USED ON SONY, SHIBADEN, PANASONIC, CONCORD, AND GE EQUIPMENT BLACK AND WHITE AND COLOR CAPABLE

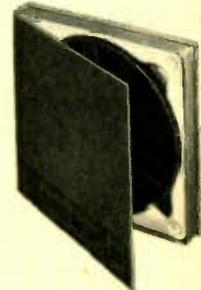
Scotch type 351 longitudinally oriented 1/2" video tape has many outstanding advantages. Heavy-duty binder system and long-wearing, low noise oxide gives superior signal-to-noise, capable of exceeding 45 db., virtually no rub-off, long life, very low drop-out count and is highly conductive. Backing is polyester, 1 mil. thick 1/2" wide having accurately controlled dimensions, superior tensile strength and the very minimum elongation and curvature characteristics. Tape life—capable of exceeding 500 passes. Reels, 7" self-threading, in book-style storage case, and 4 7/8" size, for portable machines in vinyl video box.

Stk. No.	Fact. No.	Length	Reel	Wt.	Net Ea.	10 Ea.	25 Ea.
11A1127	351-1/2-845	845'	4 7/8"	10 oz.	14.95	14.20	13.75
11A1116	351-1/2-1250	1250'	7" PRST	16 oz.	\$21.95	\$20.85	\$20.19
11A1117	351-1/2-2400	2400'	7" PRST	26 oz.	39.95	37.95	36.75

## RECORDING-PLAYING TIME-MINUTES

	Sony	Shibaden	Concord	Panasonic	GE
351-1/2-1250	32	32	20	20	32
351-1/2-2400	64	64	40	40	64

## VIDEO TAPE REELS AND ACCESSORIES



Empty 1/2" x 7" self-threading Video Reel and book-style box.

No. 11A7511. Type PRST-7. Wt. 10 oz.  
Net Each.....\$3.49 10 Each..... \$3.00  
Book Style Video Reel Box Only  
No. 11A7512. Type VB-1/2-7. Wt. 6 oz.  
Net Each.....\$1.89 10 Each.....\$1.75

## ALUMINIZED SPLICING TAPE FOR 1/2" VIDEO TAPE

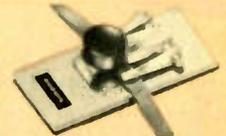
No. 11A7513. Type 390-1/4-66, .5 Mil Mylar 1/4"x66", Ea. \$3.25 12 Ea. \$2.93
No. 11A7514. Type 390-1/2-66, .5 Mil Mylar 1/2"x66", Ea. \$4.87 12 Ea. \$4.38
No. 11A7515. Type 391-1/4-66, .25 Mil Mylar 1/4"x66", Ea. \$3.25 12 Ea. \$2.93
No. 11A7516. Type 391-1/2-66, .25 Mil Mylar 1/2"x66", Ea. \$4.87 12 Ea. \$4.38

## LARGE QUANTITY USERS:

Ask B-A's Industrial Sales Department for Price Quotations.

## ROBINS AUDIO VIDEO

## 1/2 INCH TAPE \$14.95 SPLICER



Heavy-duty splicer with precision features. Has tape guide and arms to secure tape for precision cutting and splicing. Produces perfect mating diagonal cut. Uses self-stitch ready to apply splicing patches. On heavy metal base. Size: 2 1/2 x 6 x 1 5/8". For 1/2" tape only. Shpg. wt. 8 ozs. Mfg. \$19.95.

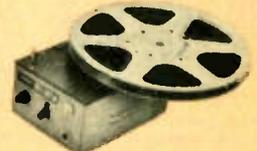
No. 11A7517. Model TSV-50.

\$14.95

## ROBINS HEAVY DUTY BULK TAPE ERASER

FOR AUDIO/VIDEO AND INDUSTRIAL TAPES

\$67.50



Meets the requirements of the industrial user. Erases video and audio from magnetic tapes up to 1" wide in one operation. Will also erase 2" tapes by processing one side, then turning over for second side. Has safety overheat indicator, fused circuits, heavy-duty switches and power cord. Designed for 5 min. on/15 min. off duty cycle. Size: 3 3/4" x 6" x 8". For 10 V. 50-60 cy. AC. Shpg. wt. 8 lbs. Mfg. list, \$100.00.

No. 11A7518. Model TM-100. Net Each.....

\$67.50

# SAVE! B-A DELUXE RECORDING TAPE

## NEW LOW PRICES & QUALITY DARE COMPARISON!



**PRECISION  
MADE**

### CASSETTE RECORDING TAPE

- For all Phillips style recorders.
- Polyester wide-range tape.
- In dust-tight plastic container.

LOW AS **88¢** 12 LOTS EACH  
30 MINUTE CASSETTE



### NEW DELUXE QUALITY RECORDING TAPE

COMPARE THIS LOW PRICE! **\$4.49** 5 LOTS EACH  
3600' POLYESTER ON 7" REEL

Don't be misled by the low price! These are first quality Cassette tapes priced way down to beat all competition. You can buy and save with complete confidence because B-A buyers have checked the important, design, manufacturing and material requirements that assure high fidelity and utmost performance in any make recorder. **Note these facts:** Beryllium copper constant pressure springs, mu-metal magnetic shielding, one-piece molded tape guide rollers on stainless steel pins, anti-static moisture retaining wafer shield, precision assembly techniques and in addition . . . top quality lubricated polyester recording tape and a dust tight enclosure with molded-in tabs that prevent tape jamming in shipment. We know of none better! Produced in the U.S.A. for B-A by a leading manufacturer. Fully covered by B-A's liberal warranty. If you're not satisfied return at once for exchange or your money back!

No. 11A5500. 30 Minute Cassette (15 Minutes per side) Wt. 8 ozs. Each	99¢	12 @	88¢
No. 11A5501. 60 Minute Cassette (30 Minutes per side) Wt. 8 ozs. Each	\$1.29	12 @	\$1.09
No. 11A5502. 1 1/2 Hour Cassette (45 Minutes per side) Wt. 12 ozs. Each	\$1.89	12 @	\$1.69
No. 11A5503. 2 Hour Cassette (60 Minutes per side) Wt. 16 ozs. Each	\$2.49	12 @	\$1.99
No. 11A7519. TAPE MAILERS 10 For			49¢

#### B-A CASSETTE HEAD CLEANER TAPE

Quickly removes accumulated tape oxide from recorder head restoring original recording and playback capability. Highest quality U.S.A. made.

No. 11A7526. Each **\$1.29**

B-A proudly offers this fine new line of recording tape for the critical user who desires the utmost quality recordings and wants to save money too! Precisely formulated for uniform response, no rub-off, no print through. Backing is tensilized polyvinyl chloride (PVC) or polyester (PE) as indicated. Both are unaffected by temperature or humidity and conform to tape heads closely for best frequency response. Each box has plastic seal. Made in U.S.A. If you're not satisfied, return at once for exchange or your money back!

#### Available in these popular Reel Lengths

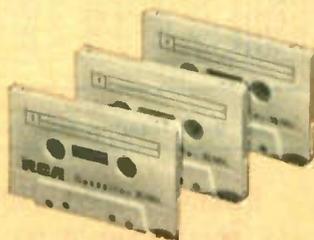
Stock No.	Reel	Feet	Description	Wt.	Net Each	5 Lots Each
11A5504	3"	150	1 1/2 Mil PVC	2 oz.	\$0.35	\$0.29
11A5505	3 1/4"	600	1 1/2 Mil PE	4 oz.	1.09	.99
11A5506	5"	600	1 1/2 Mil PVC	6 oz.	.99	.90
11A5507	5"	900	1 1/2 Mil PVC	6 oz.	1.39	1.29
11A5508	7"	1200	1 1/2 Mil PVC	12 oz.	1.49	1.39
11A5509	7"	1800	Mil PE	12 oz.	2.49	2.25
11A5510	7"	2400	1/2 Mil PE	12 oz.	2.99	2.89
11A5511	7"	3600	1/2 Mil PE	14 oz.	4.95	4.49



# RCA

## MAGNETIC TAPE

"THE NEW LOOK IN SOUND"



An all new product proudly bearing the RCA brand, best known name in electronics.

Manufactured entirely by RCA in the most modern facilities under strict quality controls that assure utmost performance and uniformity. High strength polyester (PE) backing is highly resistant to temperature and humidity extremes.

#### RCA POLYESTER TAPE ON REELS

Stock No.	RCA No.	Reel & Length	Description	Wt. Ozs.	Mfg. Each	Net Each	12 @ Each
11A1128	10M2	3"- 225'	1.0 Mil Long Play	3	\$1.00	\$0.60	\$0.54
11A1129	10M9	5"- 900'	1.0 Mil Long Play	6	3.60	1.90	1.73
11A1130	15M12	7"-1200'	1.5 Mil Std. Play	12	4.25	2.49	2.34
11A1131	10M18	7"-1800'	1.0 Mil Long Play	12	6.20	3.12	2.97
11A1132	5TM24	7"-2400'	0.5 Mil Double Play	12	8.75	4.85	4.64

#### RCA HIGH QUALITY RECORDING CASSETTES

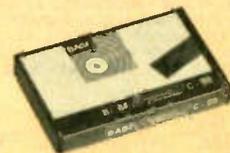
Precision built for use on any Phillips style recorder. Supplied in plastic dust-tight container with molded stud to lock cassette reels and prevent scrambling. Wt. 2 ozs.

Stock No.	RCA No.	Description	Mfg. List	Net Each	24 @ Each
11A1133	10R030	C- 30—30 Minutes	\$1.75	\$1.30	\$1.20
11A1134	10R060	C- 60—60 Minutes	2.25	1.68	1.55
11A1135	10R090	C- 90—90 Minutes	3.25	2.46	2.13
11A1136	10R120	C-120—120 Minutes	3.75	2.99	2.50



# BASF

## DELUXE FULLRANGE RECORDING TAPE



BASF. The "ageless" recording tape. Developed in Europe, now acclaimed by the U.S.A. Hi-Fidelity recording market because of exceptional performance. Perma-store library boxes fit neatly on a shelf. Tip open for easy removal of reel. Luvitherm poly vinyl chloride base is extremely supple, giving highest possible conformation to tape head. Not affected by temperature and humidity variations.

#### BASF LUVITHERM TAPE IN LIBRARY STORAGE BOX

Stock No.	Base No.	Reel & Length	Description	Wt. Ozs.	Net Each	10 @ Each
11A1137	LCS-52	5"- 600'	1.5 Mil Std. Play	10	\$1.79	\$1.59
11A1138	LCS-52	7"-1200'	1.5 Mil Std. Play	16	2.69	2.39
11A1139	LCS-35	5"- 900'	1.0 Mil Long Play	9	2.39	2.09
11A1140	LCS-35	7"-1800'	1.0 Mil Long Play	18	3.89	3.49
11A1141	LCS-26	3"- 300'	3/4 Mil Double Play	3	1.09	.89
11A1142	LCS-26	5"-1200'	3/4 Mil Double Play	10	3.49	3.09
11A1143	LCS-26	7"-2400'	3/4 Mil Double Play	18	5.59	4.99

#### BASF LUVITHERM BASE DELUXE CASSETTES

Low noise tapes for use on any Phillips style Cassette recorder. Full response and uniform speed are inherent in design. Supplied in plastic container.

Stk. No.	Type	Description	Net Each	12 Up Each
11A1144	C- 30	30 Minutes	\$1.79	\$1.58
11A1145	C- 60	60 Minutes	2.21	1.85
11A1146	C- 90	90 Minutes	3.64	3.05
11A1147	C-120	120 Minutes	4.48	3.75

# ENORMOUS SAVINGS ON QUALITY RECORDING TAPE

**HERE'S PROOF OF B-A's EVERYDAY LOW PRICES ON TAPE!**

B-A buyers are constantly searching for "buys" in recording tape that can be passed on at terrific price savings... but the quality must be high to meet our rigid performance standards. We guarantee every roll to satisfy

you or your money back. Order your choice of standard play 1 1/2 mil, 50% longer play 1 mil, or double play 1/2 mil. May be assorted for quantity price.



**LOW AS**  
**44c**  
EACH  
10 LOTS

1/2 MIL POLYESTER BASE.  
No. 11C676. 3"-300'



**LOW AS**  
**\$1.49**  
EACH  
10 LOTS

1/2 MIL POLYESTER BASE.  
No. 11C682. 5"-1200'



**LOW AS**  
**\$1.79**  
EACH  
10 LOTS

1 MIL POLYESTER BASE.  
No. 11A954. 7"-1800'



**LOW AS**  
**\$3.99**  
EACH  
10 LOTS

1/2 MIL POLYESTER BASE.  
No. 11A1151. 7"-3600'

1/2 MIL POLYESTER BASE. 300' on 3" Reel. No. 11C676. Each.....	<b>49c</b>	10 @ Each.....	<b>44c</b>
1/2 MIL POLYESTER BASE. 600' on 3 1/4" Reel. No. 11C677. Each.....	<b>99c</b>	10 @ Each.....	<b>89c</b>
1 1/2 MIL ACETATE BASE. 600' on 5" Reel. No. 11A455. Each.....	<b>89c</b>	10 @ Each.....	<b>79c</b>
1 1/2 MIL ACETATE BASE. 1200' on 7" Reel. No. 11A458. Each.....	<b>\$1.29</b>	10 @ Each.....	<b>\$1.19</b>
1 MIL POLYESTER BASE. 900' on 5" Reel. No. 11A457. Each.....	<b>\$1.29</b>	10 @ Each.....	<b>\$1.15</b>

1/2 MIL POLYESTER BASE. 1200' on 5" Reel. No. 11C682. Each.....	<b>\$1.69</b>	10 @ Each.....	<b>\$1.49</b>
1 MIL ACETATE BASE. 1800' on 7" Reel. No. 11A460. Each.....	<b>\$1.79</b>	10 @ Each.....	<b>\$1.59</b>
1 MIL POLYESTER BASE. 1800' on 7" Reel. No. 11A954. Each.....	<b>\$1.99</b>	10 @ Each.....	<b>\$1.79</b>
1/2 MIL POLYESTER BASE. 2400' on 7" Reel. No. 11B602. Each.....	<b>\$2.79</b>	10 @ Each.....	<b>\$2.59</b>
1/2 MIL POLYESTER BASE. 3600' on 7" Reel. No. 11A1151. Each.....	<b>\$4.39</b>	10 @ Each.....	<b>\$3.99</b>



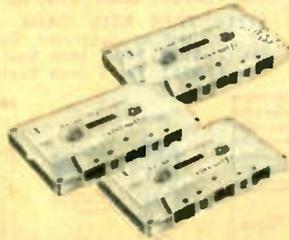
## BARGAIN SPECIAL!

FINE FOR  
TALKING LETTERS

**3 PACK C60  
CASSETTES**

Loaded with High Quality Tape

**3 FOR \$1.79**  
No. 11A1148



## BARGAIN SPECIAL!

LOWEST  
PRICE EVER!

**PVC RECORDING TAPE**

**6 PACK 150'-3" REEL**

**6 FOR \$1.39**  
No. 11A1149

3 PACK 150'-3" REEL  
No. 11A1053. 3 For.....88c

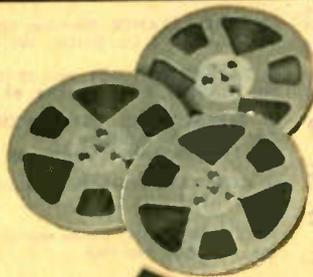


## BARGAIN SPECIAL!

MOST POPULAR  
REEL LENGTH!

**3 PACK 1800'-7" REEL  
TOP QUALITY 1 MIL POLYESTER**

**3 FOR \$4.29**  
No. 11A1150

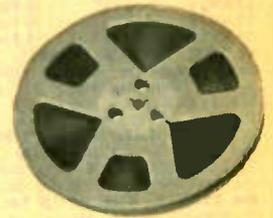


## BARGAIN SPECIAL!

BUY PLENTY  
AT THIS PRICE!

**1200'-7" REEL  
TOP QUALITY 1 1/2 MIL POLYESTER**

**PER REEL 99c**  
No. 11A955



**AT DEEP CUT PRICES WHILE  
SUPPLY LASTS!**



**PREMIUM  
1/2 MIL  
DOUBLE PLAY  
TENSILIZED  
MYLAR TAPE**



At these B-A special low prices you can afford the best professional quality recording tape for all your home sound entertainment needs! Made of tough tensilized polyester with specially compounded oxide coating... far stronger and better than ordinary acetate base tapes. Provides full range fidelity and unsurpassed dependability, usually limited only by your equipment. Extra length on small reel size doubles your normal recording time per reel. Polyester (mylar) backing guarantees repeated replays or storage over the years without deterioration. Better build up your tape reserve stock now! While limited stock lasts.

Weight: 3 1/4" reel 4 ozs.; 7" reel 12 ozs.			
<b>Stock No.</b>	<b>G.E. No.</b>	<b>Size</b>	<b>YOUR SPECIAL PRICE</b>
11A1100	RT7060	600' — 3 1/4" Reel	Each 12. Each
11A1102	RT7070	2400' — 7" Reel	Was \$3.00 \$1.19 \$0.99
			Was \$9.00 3.69 3.49

**BIG SAVINGS ON B-A TOP  
QUALITY 4 AND 8 TRACK  
BLANK CARTRIDGES**

Approved design molded plastic housing fits all decks. Loaded with fine quality specially lubricated recording tape. Will give top performance limited only by your recorder and playback equipment. Use 4 minute cartridges for adjusting and checking recorder settings. Avoids long play—thru delay required when testing with standard length cartridges. Avg. wt. 4 oz.



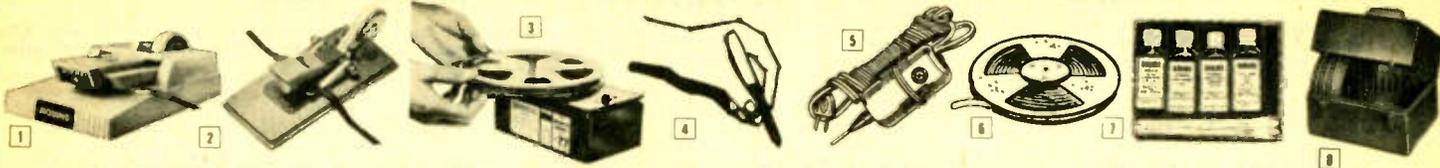
### 8-TRACK UN-RECORDED CARTRIDGES

Stock No.	Playing Time	Length	Net Ea.	12 @ Ea.
11A1152	4 Min.	20 Ft.	\$1.42	\$1.28
11A1153	32 Min.	160 Ft.	1.67	1.49
11A1154	64 Min.	320 Ft.	1.92	1.73
11A1155	128 Min.	640 Ft.	2.17	1.95

### 4-TRACK UN-RECORDED CARTRIDGES

Stock No.	Playing Time	Length	Net Ea.	12 @ Ea.
11A1156	4 Min.	40 Ft.	\$1.42	\$1.28
11A1157	32 Min.	320 Ft.	1.67	1.49

# ROBINS TAPE RECORDING ACCESSORIES



## ROBINS "STEREO 4" TAPE SLICERS

Rapid, accurate splicing of 4 track, 2 track and single track tapes. Makes diagonal cut. "Gibson Girl" trim prevents splicing tape adhesive from contacting critical parts of recorder. All units feature blade centering adjustment and replaceable cutter for lifetime accuracy.

### ① TS-8D DELUXE "STEREO" TAPE SPLICER

"See thru" windows indicate "Cut" and "Trim" positions. Tape guide and fingers secure tape. Easy threading, integral tape dispenser with 100' roll of 1/2" splicing tape. Made of super-strong Cyclocac. With instructions. Wt. 1 lb.

No. 11A704. Net Each **\$7.99**

### ② NEW TS-7S STANDARD "STEREO" SPLICER

Precise cut and "Gibson Girl" trim. See-thru windows show "Cut" and "Trim" positions. Integral dispenser, 3/8" x 100' splicing tape.

No. 11A638. Wt. 12 oz. Net Each **\$5.99**

### NEW TS-7J JUNIOR "STEREO" SPLICER

Same as TS-7S without tape dispenser and splicing tape. Uses 3/8" splicing tape. Wt. 8 oz.

No. 11A407. Net Each **\$4.99**

**ROBINS MYLAR SPICING TAPE.** Special formula Mylar. Tackiness, thickness, strength and cold-flaw controlled for perfect, permanent splices. Use with "Stereo 4" splicers. Avg. wt. 8 ozs.

Stk. No.	Mfg. No.	Width	Length	Net Each
11A990	TST-235	1/4"	300"	69c
11A991	TST-376	3/8"	275"	69c
11A992	TST-501	1/2"	250"	69c
11A993	TST-751	3/4"	150"	85c

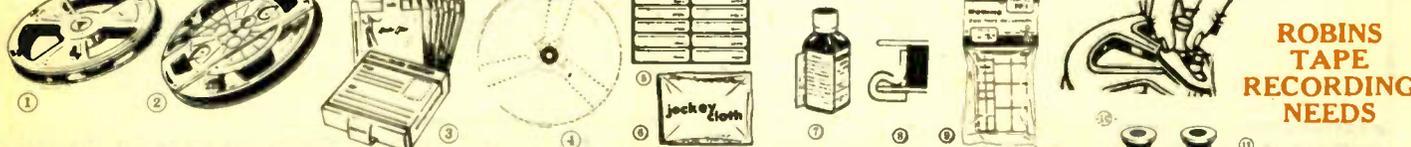
**ROBINS MAGNETIC BULK TAPE ERASERS.** Better erasure without using recorder. Reduces tape background noise. Takes only seconds to erase entire reel.

③ **TM-99.** Erasure 3 to 6 db below normal erase head level. Handles reels up to 10 1/2" dia. x 1/2" wide. Size 3 3/4" x 5 1/4" x 6 3/4". 110 V. 60 cy. AC. UL listed. Wt. 8 1/2 lbs.

No. 11B409. Net Each **\$29.95**

④ **TM-77.** Erasure 2 to 4 db below erase head level. For reels up to 7" dia. x 1/4". Size 2 3/8" x 3 3/4" x 6 1/4". 110 V. 60 cy. AC. Wt. 5 lbs.

No. 11C126. Net Each **\$16.75**



① **EMPTY TAPE REELS OF EVERY SIZE.** Perfectly molded of clear plastic. Standard hub. Average wt. 8 oz.

Stk. No.	Size	Net Price	Stk. No.	Size	Net Price
11A973	2"	6 For 69c	11A977	4"	4 For 79c
11A974	2 1/2"	6 For 69c	11A978	5"	2 For 69c
11A975	3"	6 For 69c	11A979	7"	2 For 75c
11A976	3 1/2"	4 For 69c			

③ **LOW TORQUE 7" REEL.** Larger hub reduces the effect of variable pull on tape caused by recorder take-up drive. Reduces wow and flutter, winds tape evenly. Capacity 1600 ft. 1/2 mil tape, 1200 ft. 1 mil, 800 ft. 1 1/2 mil.

No. 11A980. Package of 2 For **\$1.29**

④ **3-INCH TAPE MAILING BOXES.** For tape correspondence. Wt. 5 oz.

No. 11A981. 15 Boxes For **89c**

⑤ **TAPE LOG DISCS.** Easy indexing of 7" tapes. Space for titles, tape speed, reel numbers, date, etc. Wt. 6 oz.

No. 11A982. Pkg. of 15 For **89c**

⑥ **TITLE LABELS.** Write or type. 2x1 1/2", self-sticking. Wt. 7 oz.

No. 11A984. Pkg. of 180 For **89c**

④ **NEW ROBINS TM-2 MAGNETIC TAPE EDITING PENCIL.** Removes single sounds, noise, etc. from small areas of recording. Makes fade-in and fade-out easy.

No. 11A7506. Net Each **\$1.50**

⑤ **ROBINS HEAD DEMAGNETIZER.** Removes residual magnetism that accumulates in all record heads causing excessive noise and hiss during recording and playback. Easy to use. For 110 v. 60 cy. AC.

TD-6 Professional Model. U/L listed. 4 5/8 x 1 1/2" dia. No. 11A794. Wt. 1 lb. Net Each **\$7.29**

TD-3 Economy Model. 3 1/2 x 1 1/4" dia. No. 11A998. Wt. 8 oz. Net Each **\$3.99**

⑥ **HEAD CLEANING TAPE.** Chemically treated. Just run through recorder to clean recording heads, tape guides, etc. Wt. 6 oz.

No. 11B41. THC-5. 5" Reel. Net Each **\$2.19**

No. 11B404. THC-3. 3" Reel. Net Each **\$1.19**

### ⑦ ROBINS TAPE ACCESSORY AND "KARE" KITS

**TK-8DLX DELUXE TAPE ACCESSORY KIT.** Contains TS-8D Deluxe Splicer, 1/2" Splicing Tape, Tape Threader, Head Cleaner, Head and Guide Lubricant, Tape Jockey Cloth, Tape Clips, Title Labels, Reel Holders and Tape Editing and Splicing Guide Book. Wt. 2 lbs.

No. 11B153. Net Each **\$12.49**

**TK-6 TAPE HEAD CLEANER AND LUBE KIT.** 2 oz. bottles Head Cleaner and Head and Guide Lubricant.

No. 11B154. Wt. 6 oz. Net Each **\$1.29**

**TK-7 CHEMICAL TAPE KARE KIT.** 2 oz. bottles Head Cleaner, Head and Guide Lubricant, Tape and Phono Drive Oil, Non-Slip for Tape and Phono Drives and 50 Swabs for Cleaning and Oiling. Wt. 1 1/2 lbs.

No. 11C124. Net Each **\$2.49**

⑧ **TAPE STORAGE STEEL CHEST AND REEL CANS.** Portable, all steel, baked enamel finish in platinum-gray. For protecting, storing and filing valuable recorded tapes. Dividers for holding 12 tape cans, index card. Wt. 5 lbs.

No. 11A754. Chest Only, for 7 Inch Cans. Each **\$3.49**

No. 11A753. Chest Only, for 5 Inch Cans. Each **\$2.99**

**STEEL TAPE REEL CANS.** Dust-proof, magnetic-proof containers to fit above chest as illustrated. Shpg. wt. 8 ozs.

No. 11A752. For 7 Inch Reel. Each **69c** 6 Each **64c**

No. 11A751. For 5 Inch Reel. Each **49c** 6 Each **45c**

## ROBINS TAPE RECORDING NEEDS

⑨ **TAPE "JOCKEY CLOTH".** Cleans and lubricates tapes. Silicone impregnated. Washable and reusable. Wt. 3 oz.

No. 11A769. Pkg. of 3 For **69c**

⑩ **HEAD CLEANER.** Removes accumulated oxides from recorder.

No. 11A768. 2 Oz. Bottle. Wt. 4 oz. Each **69c**

⑪ **TAPE CLIPS.** Keeps reels of tape from unwinding. Reusable.

No. 11A985. Wt. 8 oz. Pkg. of 75 For **89c**

⑫ **REPLACEMENT TAPE RECORDER PRESSURE PADS.** Pre-cut and U-cut felt pods to fit all recorders

No. 11A986. Large Assortment. Self-Stick. Wt. 2 oz. **79c**

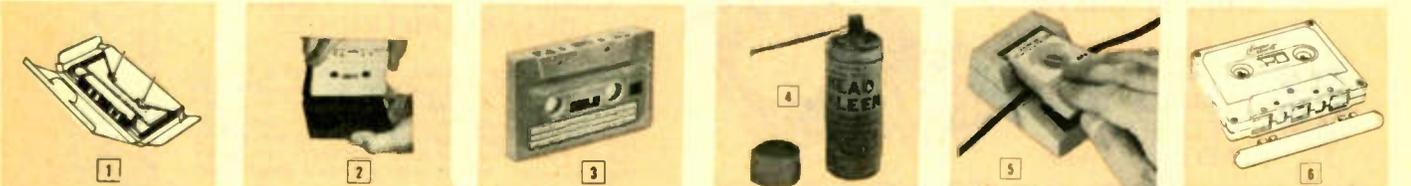
⑬ **FAST TAPE THREADER.** Starts tape on reel easily. Wt. 3 oz.

No. 11A587. Net Each **79c**

⑭ **REEL HOLDERS.** Holds reel on spindle. Prevents wobble. Wt. 3 oz.

No. 11A7505 Per Pair **69c**

## CASSETTE TAPE RECORDING ACCESSORIES



① **Cassette Tape Mailers.** Package of 18 convenient cardboard cassette mailers. Unique design protects cassette for safe mailing.

No. 11A7521. Model TCB-18. Pkg. of 18, Net Each **99c**

② **Impact Resistant Plastic Cassette Canister** protects cassette tape from dust and dirt. Built-in "Stop" prevents cassette tape from unwinding and becoming slack. Clear plastic hinged cover of canister provides instant identification.

No. 11A7520. Model TC-3. Pkg. of 3, Net Each **99c**

③ **Cassette Head Cleaner Tape.** Removes accumulated oxides and dirt from heads to improve fidelity. Easy to use. Simply insert cartridge and start tape player.

No. 11A7523. Model THC-4. Net Each **\$1.80**

④ **Head Cleaner Spray Aerosol** formula removes accumulated oxides for improved fidelity. For all types of tape recorders. Complete with extension nozzle.

No. 11A7522. Model THS-1. 4-oz. Can. Net Each **\$1.25**

⑤ **Cassette Tape Splicer.** Especially for editing and repairing .150" wide tapes. Cuts tape at 45° angle. Includes 25 splicing patches.

No. 11A7528. Robins TS-115. Net Each **\$2.99**

No. 11A7529. Type TT-15. Extra splicing patches. **99c**

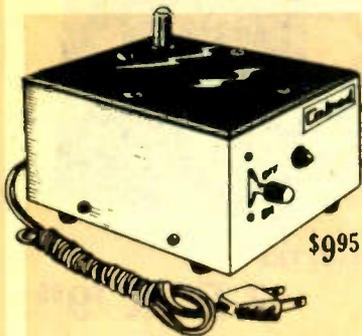
⑥ **Cassette Fast Eraser.** Small magnet assembly clips into cassette cartridge. Rewinding tape on player erases entire recording quickly.

No. 11A7527. Net Each **\$1.98**

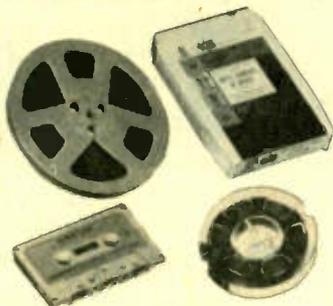
# B-A's TAPE RECORDER ACCESSORIES

## UNIVERSAL BULK TAPE ERASER

FOR REELS UP TO 7", CASSETTES,  
4 TO 8 TRACK CARTRIDGES



\$995



### DOES THE JOB OF UNITS SOLD AT \$16.95

Erases a complete reel of tape quickly, easily with greatest efficiency without rewinding. Takes just seconds. Permits improved, distortion-free recordings by "quieting" tapes 3 to 6 db. Far better than erasing on the average recorder. For 117 V. 60 Hz. AC. Wt. 4 lbs.

No. 11A7504. Quality Import. **\$9.95**

### NEW ROBINS ERASERS AND DEMAGNETIZERS



1



2

#### 1 PROFESSIONAL CASSETTE BULK ERASER

Removes recorded sounds from entire cassette of tape in seconds, restoring tape to like-new blank condition. Far superior to erasing on a recorder. For 117 V. AC. Shpg. wt. 5 lbs.

No. 11A7530. Robins TMC-1. Mfg. List \$20.00. Net Each. **\$11.99**

#### 2 PROFESSIONAL 4 AND 8 TRACK BULK ERASER

Restores entire cartridge of tape to like new blank condition in seconds. For 117 V. AC. Shpg. wt. 5 lbs.

No. 11A7531. Robins TMC-2. Mfg. List \$30.00. Net Each. **\$17.99**



1



2

### CASSETTE PLAYER/RECORDER HEAD DEMAGNETIZER

Deluxe cassette size device simply plugs into machine like a regular cartridge. Removes all tape head magnetic build-up, restoring original fidelity of recorder. For 117 V. AC.

No. 11A7532. Robins TD-10. Mfg. List \$8.30. Net Each. **\$4.98**

### 2 DELUXE 4 AND 8 TRACK HEAD DEMAGNETIZER

For auto cartridge players. Operates on 12 V. DC. Plugs into cigarette lighter. Recommended by equipment manufacturers for restoring original fidelity of player after every 15-20 hours of operation.

No. 11A7533. Robins TD15. Mfg. List \$16.65. Net Each. **\$9.95**

### PLASTIC CARTRIDGE ANTI-DUST CAPS

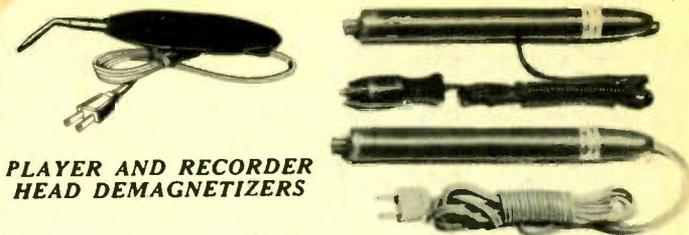
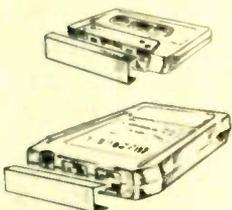
Clips over tape end of cartridge protecting opening from dust, grime and accidental damage. You need one for every cartridge in your valuable tape collection.

No. 11A7534. Robins TJ-12 For Cassettes. **79c**

Package of 12 For. **79c**

No. 11A7535. Robins TJ-10 For 4-8 Track. **79c**

Package of 10 For. **79c**



### PLAYER AND RECORDER HEAD DEMAGNETIZERS

#### UNIVERSAL TAPE HEAD DEMAGNETIZER

Aid for better tape recording. Quickly rids recorder of one cause of high noise... the accumulation of permanent magnetism in recording, erase and playback heads. Simple to operate, with instructions. 115 V. AC.

No. 11A1052. **\$3.95**

#### CARTRIDGE PLAYER/RECORDER HEAD DEMAGNETIZER

Quickly eliminates residual magnetism in record and playback heads, the common cause of high noise level in tape recordings. Long slim 7 1/2" body permits easy access to deep recessed heads in all recorder-player units. Full instructions for use by anyone. Wt. 1 lb. Top quality Import.

1 No. 11A7502. For 115 V. 60 Hz. AC. **\$3.95**

2 No. 11A7503. For 12 V. DC Transistorized. **\$5.98**

Special Each

### SAVE ON THESE TAPE RECORDER AIDS!

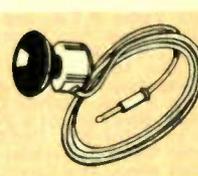


#### TELEPHONE PICKUP COIL

For recording conversations or making loud speaking telephone when used with a standard recorder or mike amplifier. Installs by slipping under phone or laying on ringer.

No. 32A4000 **\$1.49**

Special

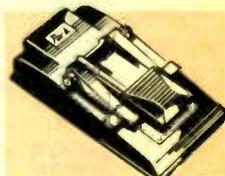


#### JIFFY PHONE PICKUP COIL

Jiffy suction cup attaches to side of telephone or to back of handset. Does not interfere with telephone operation. Giant import savings. With shielded cable.

No. 11A1057 **99c**

Special



#### B-A TAPE SPLICER BARGAIN

Cuts, trims, splices in seconds. Makes splices like a pro... quick, clean, without losing a significant part of the recorded sound. Comes with roll of splicing tape, which feeds out from bottom. Well made import. Wt. 3/4 lb.

No. 11A7501 **\$2.98**

Special Each



#### AUTO & HOME TAPE CARE KIT

A "must" for the cartridge type players. Includes tape lubricant and head cleaning solution with brush, applicators and cloth.

No. 11A7536. Duotone TCK-1. **\$1.79**

Special Each



#### TAPE & PHONO DRIVE OIL

Highly refined lubricant formulated especially for rotating and moving parts of recorder and phono drives. Inhibits rust and oxidation.

No. 11A7537. Duotone DTX-033. **69c**

Special Each



#### NON-SLIP FOR TAPE & PHONO DRIVES

Helps stop slippage of idler wheels, pulley belts, and cords. Fast drying and penetrating material, dries to tack free yet non-slip surface.

No. 11A7538. Duotone DTX-056. **99c**

Special Each



## SUPER BARGAIN VALUE

### CASSETTE RADIO TUNER

NOW ONLY **\$6.95**

NEW! Now convert any Cassette Player-Recorder into a complete radio. So easy to install, simply insert radio the same as you would a cassette tape. No wires to connect. The new low cost way to make your cassette player a complete entertainment center.

No. 31A2533. Special Each. **\$6.95**

No. 21A40. Battery for above. Ea. 10c



REG. **\$9.95**

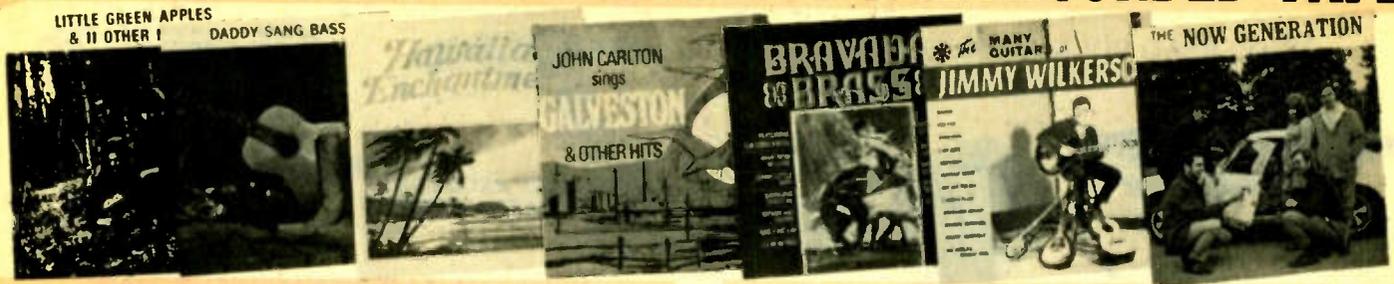


### EXTRA SAVINGS ON B-A's TAPE ACCESSORY OUTFIT COMPLETE KIT

SAVE \$2.75 COMPARED TO SEPARATE PRICES! Always needed aids for better recordings. Kit contains a fast action tape splicer for professional style editing of tapes, a demagnetizer to quickly rid the recorder heads of noise producing permanent magnetism, a telephone pickup for phone recording, universal patch cord for attachment to radio or TV and a Tape Care lubricant and head cleaning kit. Top quality throughout. Shpg. wt. 3 lbs.

No. 11A7539. Complete Kit B-A Special, Only. **\$7.95**

# STEREO 8 TRACK AND CASSETTE PRE-RECORDED TAPES



## TOP SELECTIONS STEREO 8 TRACK CARTRIDGES

**\$3<sup>95</sup> EACH!** **3 FOR \$9<sup>95</sup>**

8 Track No.	Category	Specify Stk. No. 23A178 and Cartridge No. on Orders	Title And Artist
S-1000	Country & Western		Many Guitars of Jimmy Wilkerson—Pickin' Nashville, Ebb Tide, Last Date
S-1011	Pop-Light Jazz		I Left My Heart In San Francisco—Bill Randolph At The Piano—I Love Paris, Me and My Shadow
S-1012	Hawaiian		Hawaiian Enchantment by Aluka Moy—Blue Hawaii, Sweet Lanani
S-1013	Organ Music		Organ Favorites, Buddy Burden—Spanish Flea, Autumn Leaves
S-1020	Pop		What Now My Love By The Bravada Brass—The Lonely Bull, Our Day Will Come, The Lemon Tree
S-1022	Country & Western		Hits Nashville Style By Various Artists—Lonesome 7-7203, Act Naturally, Ring of Fire
S-1024	Pop		Harper Valley P.T.A. and Other Hits—Classical Gas, Hello I Love You, Stoned Soul Picnic
S-1028	Country & Western		Folsom Prison Blues and Other Country Hits—Stand By Your Man, I've Got You On My Mind Again
S-1031	Easy Listening		Pop Hits Easy Listening—Gentle On My Mind, Little Green Apples, Wichita Lineman
S-1033	Pop		12 Great Hits—Son of a Preacher Man, Sittin' On The Dock Of The Bay, Dedicated To The One I Love
S-1034	Country & Western		Country Western Favorites—Daddy Sang Bass, A Satisfied Mind, The Carroll County Accident
S-1035	Country & Western		Collection of Country Hits—D-I-V-O-R-C-E, Skip A Rope, Green Green Grass Of Home
S-1037	Easy Listening		Galveston and Other Hits, John Carlton—Go Away Little Girl, Memphis, Traces
S-1038	Pop		Dizzy and Other Hits—Indian Giver, Crimson & Clover, Yummy, Yummy, Yummy
S-1040	Country & Western		Only The Lonely By Bobby Denver—Waterloo, Gone, New City Limits
S-1041	Easy Listening		The Sound of Love, Music City Orchestra—Red Roses For A Blue Lady, Born Free, Shangri La
S-1042	Country & Western		Golden Country Hits By Various Artists—Crazy Arms, Room Full of Roses, He'll Have To Go
S-1044	Soul Music		Great Soul Hits—Louie, Louie, Lover Please, Baby Work Out, Our Day Will Come
S-2500	Pop		Today's Hits Today By The Now Generation—Touch Me, Soulful Strut, Crimson & Clover, Games People Play
S-3010	Pop		Today's Hits Today By The Now Generation—Magic Carpet Ride, Hey Jude, Those Were The Days

## FINEST QUALITY STEREO CASSETTES

**\$3<sup>95</sup> EACH!** **3 FOR \$9<sup>95</sup>**

Cassette No.	Category	Specify Stk. No. 23A176 and Cassette No. on Orders	Title and Artist
102-K-Q	Pop Pourri		Summer Wind—Columbia Musical Treasury Orchestra & Chorus
103-K-Q	Pop Pourri		A Very Good Year—Columbia Musical Treasury Orchestra & Chorus
105-K-Q	Jazz		Tribute To Getz—Combo Royale
106-K-Q	Jazz		Tribute To Dave Brubeck—Combo Royale
107-K-Q	Country & Western		Young, Warm & Wonderful—Columbia Musical Treasury—Orchestra & Chorus
108-K-Q	Country & Western		Ballads Country Style—Columbia Musical Treasury—Orchestra & Chorus
109-K-Q	Light Classical		Light, Bright Classics—Columbia Musical Treasury—Orchestra & Chorus
111-K-Q	Broadway & Hollywood		Melodies From The Movies—Columbia Musical Treasury—Orchestra & Chorus
112-K-Q	Broadway & Hollywood		Great Moments From The Movies Vol. 1—Columbia Musical Treasury—Orchestra & Chorus
113-K-Q	Broadway & Hollywood		Hits From Broadway—The Showtimers
114-K-Q	Best of the Beat		Rock Sounds—The Top Notchers
115-K-Q	Best of the Beat		A Happening Thing—Paul Revere & The Raiders and Others
117-K-Q	Pop Pourri		Love After Midnight—Columbia Musical Treasury—'I'll Get By, Days of Wine & Roses
118-K-Q	Country & Western		Gentle On My Mind—Columbia Musical Treasury—Release Me, Harper Valley P.T.A.
119-K-Q	Pop Pourri		The Beat Goes On—Columbia Musical Treasury—Do You Know The Way To San José, Mission, Impossible, Up, Up & Away
120-K-Q	Pop Pourri		Those Were The Days—Columbia Musical Treasury—Mrs. Robinson, McArthur Park
121-K-Q	Pop Pourri		Wishin' & Hopin'—Columbia Musical Treasury—The Fool On The Hill, El David Sloan, Windy
122-K-Q	Pop Pourri		Light My Fire—Columbia Musical Treasury—Turn Around Look At Me, Monday-Monday
123-K-Q	Best of the Beat		Super Rock Vol. I By Various Rock Groups—Hush, People Got To Be Free, My Special Angel
124-K-Q	Best of the Beat		Super Rock Vol. II By Various Rock Groups—Hey Jude, Born To Be Wild, Suzy Q

## NEW DELUXE CARRYING CASES



\$9<sup>95</sup>

\$9<sup>95</sup>

### PERFECT FOR CAR... BOAT... HOME... PARTIES!

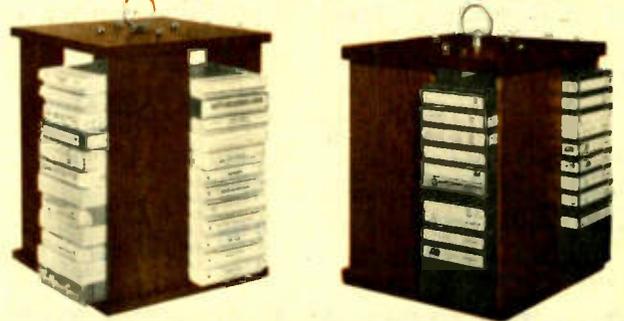
Sturdy wood construction covered in durable black alligator grained vinyl with attractive red plush interior. Holds 24—4 or 8 track cartridges.

Sturdy wood construction covered in durable black alligator grained vinyl with attractive red plush interior. Cassettes stock horizontally. Equipped with lock and key. Storage capacity 30 cassettes.

No. 23A181. Model 85TC. Each..... \$9.95

No. 23A182. Model 86TC. Each..... \$9.95

## NEW HOME STORAGE CABINETS



### FOR TAPE CARTRIDGES AND CASSETTES

- Wooden construction with fine walnut-grain finish. Swivel base allowing easy accessibility. Store 12 tapes in each of 4 shelves.
- Modern decorator styling.

FOR 4 & 8 TRACK TAPE CARTRIDGES. Dimensions 9 1/2" x 9 1/2" x 12 1/2" high. Capacity: 48 cartridges.

No. 23A179. Model 82TC. Each..... \$9.95

FOR CASSETTES. Dimensions: 8 x 8 x 10" high. Capacity 48 cassettes.

No. 23A180. Model 84TC. Each..... \$9.95

## PORTABLE DELUXE TAPE CASE

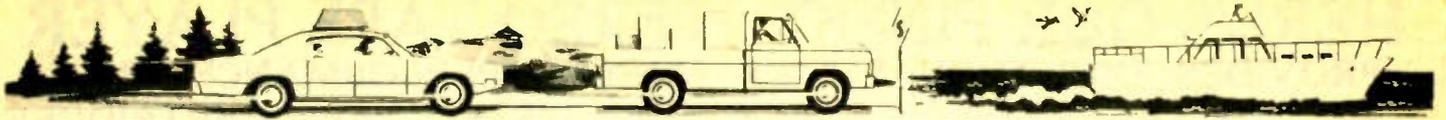
Solves the tape storage problem neatly, attractively. Holds up to nine 4- or 8-track cartridges. Made of high impact polystyrene. Roll-lock doors are tough, flexible polypropylene. Has walnut grain vinyl sides, off-white doors. Won't scratch furniture or snag upholstery. Size 11 5/8" x 6 x 5 3/4". Shpg. wt. 3 lbs.

No. 11A7524. Net Each..... \$5.95

KEEPS AUTO AND HOME TAPES NEATLY FILED

\$5<sup>95</sup>

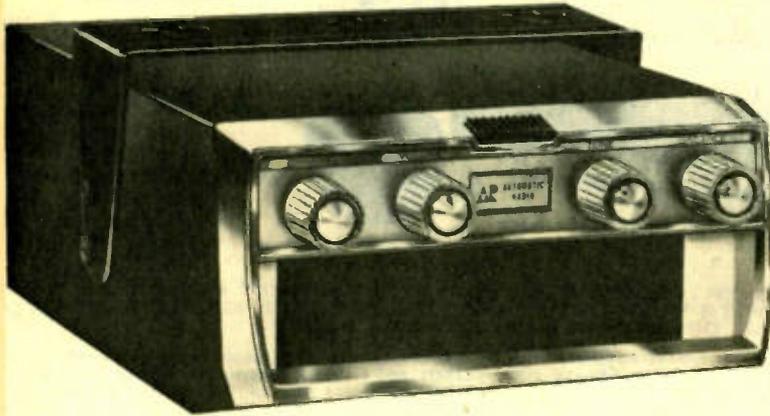




# NOW AT POPULAR LOW PRICE... OUR 8 TRACK STEREO TAPE PLAYER IS SO COMPACT

**IT FITS ANY CAR!**

**\$49<sup>95</sup>**



**AUTOMATIC RADIO**

**MODEL SEL-9606**

- Handsome chrome and black finish.
- All solid state—10 watts power.
- Wide Frequency Response 70-12,000 Hz.

Plays all 8 track cartridges, 4 track with gidget accessory... your best low cost ticket to the exciting world of stereo sound entertainment in your car or boat. Really fine quality built throughout. All solid state, 10 transistors, power output 8 watts, 70-12,000 Hz. Controls: Loudness, Tone, Balance and Channel Selection. In chrome and black, 5 1/2" L. x 7" D. x 3" H. With mtg. bracket which can be reversed for console or floor mounting. Less speakers (see below). Shpg. wt. 7 lbs.

No. 38A2015, Model SEL-9606, Net Each **\$49.95**  
 Gidget Accessory. Simply inserts into any 4-track stereo cartridge. Allows 8-track player above to handle 4-track cartridges. **\$2.98**  
 No. 11A7500, Net Each

## FINE QUALITY AUTO STEREO SPEAKER KITS SPECIALLY PRICED!

USE WITH PLAYER ABOVE OR WITH EXISTING SYSTEMS

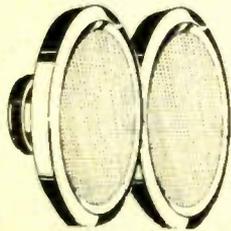
### 5" FLUSH MOUNT MATCHED SPEAKER KIT

**\$8<sup>95</sup>** PAIR

Fine appearance, beautiful tone. Best we have seen for the money! For auto or home. Wide freq. resp. for finest reproduction. Each speaker rated 4 watts, 8 watts peak. Has large ferrite magnets, 8 ohm V.C. Blast-proof, moisture resistant. Heavy chrome plated snap-on grille for door, deck or cabinet mtg. With 2 11-ft. clip-on leads. Shpg. wt. 3 lbs.

No. 34A402.  
Quality Import

**\$8.95**



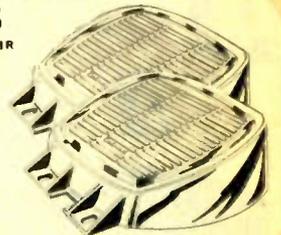
### 5" SURFACE MOUNT MATCHED SPEAKER KIT

**\$8<sup>95</sup>** PAIR

Exceptional tone quality to enhance any stereo music system. Particularly fine for tape players such as shown above. Weatherproof. Multi-mount. Mounts on any flat surface in auto, boat or home. Heavy ferrite magnet, 8 ohm, 15 ft. leads. Size 7 3/4 x 6 x 3 1/2" D. Shpg. wt. 6 lbs. Quality import.

No. 34A431.  
Pair For

**\$8.95**



## OUR BEST SELLING COMPACT COMES COMPLETE READY FOR YOU TO INSTALL WITH TWO SURFACE MOUNT SPEAKERS

### ALL TRANSISTOR COMPACT 8 TRACK STEREO PLAYER

**\$69<sup>95</sup>**

MODEL MNE-6725

Quality stereo equipment... compact... easy to install in car or boat without cutting holes for speakers. Comes with two surface mount 5" ceramic magnet Hi-Fi speakers in black custom molded housings.

Plays all 8 track standard cartridges... and with Automatic's exclusive "Gidget" accessory, will play 4 track cartridges, too. Has automatic and manual channel selector, loudness, balance and tone controls. Advanced solid state circuitry, 8 watts stereo power, 50-15,000 cps. Requires 12 V, DC @ 2 A, neg. ground. Fully enclosed, size 6 1/4" W. x 2 1/2" H. x 6" D. Shpg. wt. 10 lbs.

No. 38A2002, Model MNE-6725.  
With 2 Surface Speakers, Net

**\$69.95**

Gidget Accessory. Simply inserts into any 4-track stereo cartridge. Allows 8-track player above to handle 4-track cartridges.

No. 11A7500, Net Each

**\$2.98**

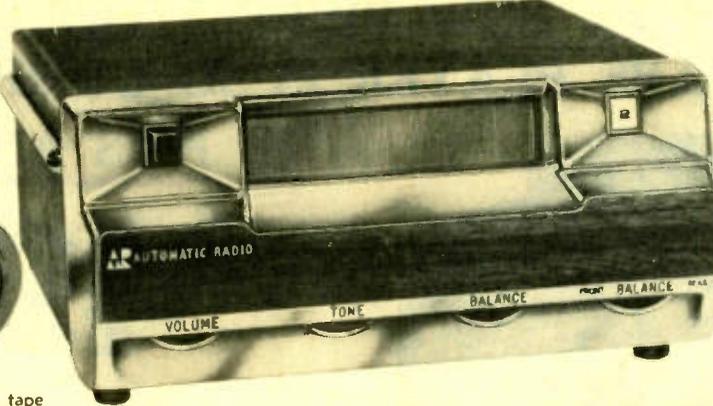
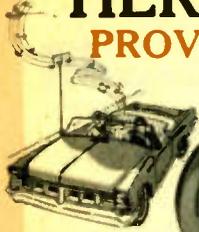


**SPEAKERS INCLUDED**



# HERE'S OUR FINEST STEREO TAPE PLAYER

## PROVIDES EXCEPTIONAL HIGH FIDELITY PERFORMANCE FROM 8 TRACK AND 4 TRACK (WITH GIDGET) STEREO TAPE CARTRIDGES



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

WITH 4 FLUSH MOUNTED SPEAKERS AND CHROME GRILLES

**UNIVERSAL POWER SUPPLY FOR 115 V. AC HOME USE**

Beautiful walnut finish matches tape player. 7 1/2" L. x 4 7/8" W. x 13" H. No. 38A2011. Net Each.....\$26.50

**MOST VERSATILE UNIT EVER... INSTANTLY CONVERTIBLE FROM CAR OR BOAT TO HOME USE! COMPLETE WITH "SLIP-OUT" MOUNTING BRACKET ADAPTS EASILY TO FM-AM OR FM STEREO MULTIPLEX RADIO**

Truly a magnificent innovation in sound entertainment. Tape-deck Convertible brings you the delight... the dimension and scope of either stereo tape or radio for car, boat and home. Plays any 8-track stereo tape cartridge and any 4-track cartridge with gidget accessory listed below.

Tape-deck is converted automatically to an AM-FM or FM Stereo Multiplex Radio-Receiver with the insertion of optional Radio Pak Tuner cartridges. Trouble-free solid state circuitry and modern thumb-dial controls insure professional quality stereo sound reproduction.

**Specifications:** Tape Speed 3 3/4 ips. Wow and flutter: less than .3%. Freq. Resp. 50-15,000 Hz. Power Output: 10 watts. Operates on 12V DC, negative ground system or the universal power supply listed below as an optional accessory. Controls include: volume (loudness), tone, balance for left to right speaker and balance control front to rear speaker. Fine tuning control eliminates crosstalk. Tape selections continue automatically or may be changed manually with the channel selector button. Has back lighted channel indicator. Size: 8 1/2" W., 3 3/4" H., 7 1/2" D.

Comes complete with a "slip-out" under dash mounting bracket with lock and key. Chrome grille speakers and a special antenna for AM or FM operation in car or boat. For home use, add any of the speaker systems on page 13.

No. 38A2010. Shpg. wt. 9 lbs.

**\$109.95**

**Net Each** .....

**Gidget Accessory.** Simply converts 4-track cartridges for playing in above unit.

No. 11A7500. Each .....

**\$2.98**

**Console Mounting Bracket.** For mounting CES-8111 tape player on car floor or console where under-dash space is restricted. With theft-proof key lock.

No. 38A2018. Each .....

**\$8.95**

**Extra Under-Dash Mounting Bracket.** As supplied with CES-8111 unit for using interchangeably in second car, boat, etc.

No. 38A2023. Each .....

**\$9.95**

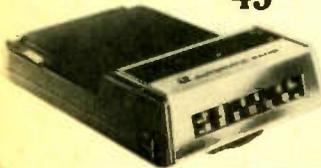


**RADIO TUNER CARTRIDGES CONVERT ANY A-R STEREO PLAYER INTO FM-AM OR FM STEREO RADIO INSTANTLY—JUST PLUG IN! MAKES ALL CONNECTIONS INCLUDING ANTENNA AUTOMATICALLY**



**FM-AM CARTRIDGE**

**\$43<sup>95</sup>**



Provides excellent reception of both AM and FM broadcasts. AFC locks in FM stations. All solid-state utilizes the finest tuner design for the ultimate in radio performance wherever you drive. 4" L. x 6 1/2" D. x 1 1/2" T. Shpg. wt. 1 lb. No. 38A212. Model AFM-9680. Each.....**\$43.95**



**FM MULTIPLEX CARTRIDGE**

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

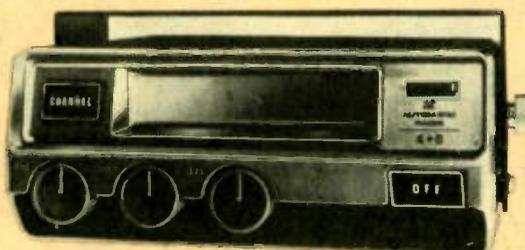


Now thrill to the magnificent sound of stereo multiplex broadcasts... and regular FM programs, too. Just slips into cartridge player for instant use. Finest solid-state radio design provides outstanding performance. Unique roll tuner for smooth, accurate station selection. Soft beacon light glows when FM multiplex station is being received. 4" L. x 7" D. x 1 1/2" H. Shpg. wt. 1 lb. No. 38A211. Model FMX-9692. Each.....**\$59.95**



**DELUXE 4 AND 8 TRACK COMPATIBLE TAPE STEREO WITH 2 SPEAKERS**

**AUTOMATICALLY ACCEPTS AND PLAYS BOTH 4 AND 8 TRACK CARTRIDGES**



**AUTOMATIC RADIO MODEL CFE-8001**

**\$84<sup>95</sup>**

Features finest 10 transistor solid state electronics producing 6 watts undistorted stereo music power output with thrilling high fidelity response from 50 to 14,000 cps. Mechanically regulated motor speed gives near perfect freedom from wow and flutter, less than 0.3% RMS. Fully automatic, operates instantly when a 4-track or 8-track cartridge is inserted. Has both automatic and manual channel selection, volume, tone and balance controls. Speaker outputs 8 ohms. Fully enclosed deluxe cabinet 8 x 3 x 7 1/2" D. Operates on 12 V. DC negative ground. With 2 flush mount speakers. Shpg. wt. 13 lbs. No. 38A2017. Model CFE-8001. Net Each.....**\$84.95**



**COMPACT STEREO CASSETTE TAPE PLAYER FOR CAR OR BOAT**

**COMPLETE... READY FOR INSTALLATION WITH YOUR CHOICE OF TWO FLUSH OR SURFACE MOUNT SPEAKERS**



**PLAYS STEREO CASSETTES**

**\$84<sup>95</sup>**

**MODEL CRS-9440**

Handles the popular Phillips type cassette pre-recorded cartridges with precision! Cartridge slides into slot. Loads from the front. (Star system.) Excellent frequency response 80-10,000 Hz., wow and flutter less than 0.35% RMS. Stereo power output 8 watts. Has full range tone control, volume and balance controls, fast forward and fast reverse for spotting desired selection quickly. All solid state circuitry. For 12 V. neg. ground. Size 6 5/8" L. x 7" D. x 2 3/4" H. Shpg. wt. 10 lbs. No. 38A2021. With 2 Flush-Mount Speakers. Each.....**\$84.95**  
No. 38A2022. With 2 Surface Mount Speakers. Each.....**\$84.95**

# COMPACT "ALL-IN-ONE" DELUXE STEREO UNIT PLAYS 8 TRACK AND 4 TRACK (WITH GIDGET) STEREO TAPE CARTRIDGES... RECEIVES FM & FM MULTIPLEX RADIO BROADCASTS IN AUTO OR BOAT



MODEL  
EMX-6810

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

**TUNES FM-FM STEREO  
88-108 MHz**



Wherever you travel in your car or boat... this unique combination stereo center lets you enjoy the exciting sound of pre-recorded tape or FM-FM stereo broadcasts. Provides the scope and "live" reality of true stereo through its wide-range dual channel audio system.

**All solid state circuitry.** Instant, reliable operation from any 12 volt negative ground system. Power output 8 watts, response 60 to 12,000 cps. Highly selective and extremely sensitive FM radio section features 4 tuned IF stages and 3 gang tuner. Has loudness control, treble and bass boost, balance control and automatic or manual tape channel selection.

In deluxe chrome and black. Size 2 1/2" H. x 7 1/2" W. x 7" D. Shpg. wt. 9

- lbs. Less speakers.
- No. 38A2014. Model EMX-6810. Net Each ..... **\$119.95**
- Set of 2 Surface Mount Speakers. Shpg. wt. 3 lbs. **\$8.95**
- No. 34A402. Pair For .....
- Set of 2 In-The-Door Speakers. Shpg. wt. 3 lbs. **\$8.95**
- No. 34A431. Pair For .....
- Gidget Accessory. Simply inserts into any 4-track stereo cartridge. Allows 8-track player above to handle 4-track cartridges. **\$2.98**
- No. 11A7500. Net Each .....



**TRULY EXCEPTIONAL!  
EXCITING NEW**

**FM MULTIPLEX AUTO  
RADIO** **\$81<sup>95</sup>**

MODEL MXR-8404

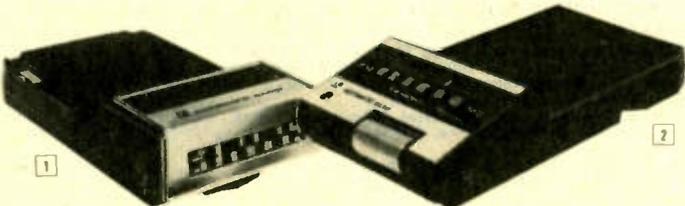
**DECORATIVE SLIM-LINE DESIGN TO FIT... AND TO ENHANCE THE DECOR OF ANY AUTO OR BOAT  
WITH CHOICE OF TWO FLUSH-MOUNT OR SURFACE MOUNT SPEAKERS**

Now enjoy the wonderful world of stereo sound wherever you go in your car or boat. Ultra-modern solid-state components and circuitry assures true high fidelity performance of regular FM and stereo FM multiplex broadcasts. Super powerful, extra sensitive, powered by 24 transistors and 12 diodes with 3-gang tuner, 17 selective tuned circuits and 4 IF stages, 10 watts power output. "Thumb-wheel" volume, tone, balance and tuning controls with

"AFC" to lock in FM stations. For 12 V. DC. negative ground systems. 8 3/4" x 7" x 2" H. in beautiful rich black and chrome. Shpg. wt. 6 lbs. Model MXR-8404.

- No. 38A215. With Two Flush-Mount Speakers. Choice **\$81.95**
- No. 38A216. With Two Surface-Mount Speakers. Each .....

**CONVERT ANY 8 OR 4 TRACK STEREO TAPE PLAYER TO FM-AM OR FM MULTIPLEX RADIO INSTANTLY**



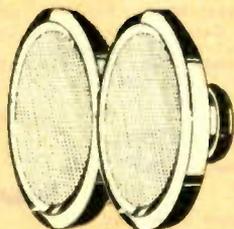
Just slip radio tuner cartridge into tape cartridge slot in tape player and simply attach antenna "Y" connector and adaptor cable supplied. Provides outstanding reception of radio broadcasts of your choice. All solid-state circuitry designed for optimum sensitivity and selectivity. Both models have AFC to lock-in FM stations.

- ① **FM-AM RADIO TUNER PAK.** Size 4" L. x 6 1/2" D. x 1 1/2" H. **\$43.95**
- No. 38A213. Model AFM-9219. Shpg. wt. 1 lb. Net Each .....
- ② **FM MULTIPLEX RADIO TUNER PAK.** Size 4" L. x 7" D. x 1 1/2" H. **\$59.95**
- No. 38A214. Model FMX-8401. Shpg. wt. 1 lb. Net Each .....

**B-A's LOW PRICES DARE COMPARISON ON TOP QUALITY MATCHED STEREO SPEAKER SETS!  
FOR AUTO, BOAT, TRAILER OR HOME MUSIC SYSTEM**

**DELUXE 5-INCH  
FLUSH MOUNT  
MATCHED  
SPEAKER KIT**

**\$895**  
PAIR



Fine appearance, beautiful tone. Best we have seen for the money! For auto or home. Wide freq. resp. for finest reproduction.

Each speaker rated 4 watts, 8 watts peak. Has large ferrite magnets, 8 ohm V.C. Blast-proof, moisture resistant. Heavy chrome plated snap-on grille for door, deck or cabinet mtg. With 2 11-ft. clip-on leads. Shpg. wt. 3 lbs.

No. 34A402. Quality Import. **\$8.95**  
Pair For .....

**DELUXE 5-INCH  
MULTI MOUNT  
SPEAKER FOR ANY  
FLAT SURFACE**

**\$895**  
PAIR

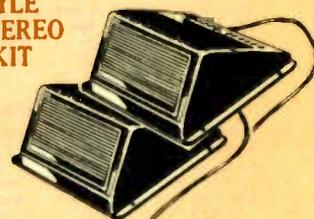


Excellent for cars, station wagons, busses, mobile homes, boats! Mounts on kick panel, rear deck, walls, ceiling or other flat surface. Features extra heavy duty 15 W. RMS 5" weatherproof volumetric speaker with large ceramic magnet and 8 ohm voice coil. Rattle-proof housing has rich black textured mar-proof surface. Overall mtg. size 6" x 7 3/4" x 3 1/8" max. depth. 12 ft. leads. Wt. 3 lbs. Fine Quality Import.

No. 34A431. Each **\$4.95** Pair For **\$8.95**

**B-A SPECIAL VALUE  
WEDGE STYLE  
MATCHED STEREO  
SPEAKER KIT**

**\$695**  
PAIR

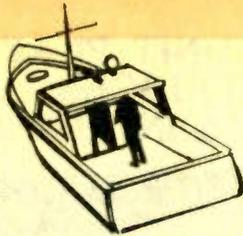


Universal Mount. 5 watts—heavy ferrite magnets. No holes to cut—mounts on the surface. Fits on rear window shelf, under dash, under front seat or side kick plates. Tough resilient plastic enclosures protect speakers and provide exceptional baffling for good bass response. With 5 watt 8 ohm speakers, each 10 watts peak rating, 8 ohm voice coils. Size 7 1/8 x 6 3/8 base. Max. hgt. 3 5/8". Approx. 15 ft. speaker lead. Wt. 3 lbs.

No. 38A6002. Special Pair For **\$6.95**



IN YOUR CAR!



IN YOUR BOAT!



IN YOUR TRUCK!

# OUR BEST AUTO RADIO BUY!

## 7 TRANSISTOR AM RADIO

PRICED WAY BELOW THE MARKET!

INLAND X-203

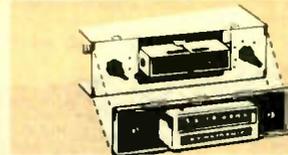
# \$19<sup>95</sup>



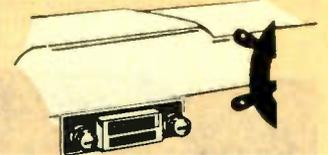
### FITS ANY CAR, TRUCK OR BOAT!

- 7 tuned circuits for fine sensitivity
- Automatic volume control
- 2.5 watts audio output — heavy duty 4 x 6" ceramic magnet speaker.

Most exciting universal auto radio bargain anywhere! Modern all solid-state circuitry makes possible finest AM performance at a fraction of former car radio prices... with no sacrifice in quality, appearance or features that make radio listening a pleasure, such as effective AVC to prevent fading and tuned RF amplification. Mounts neatly and easily under the dash. Front dial trim detaches completely for custom in-dash mount. So small that it just can't



Custom Mounts IN Dash. Has removable chrome and black escutcheon, chrome knobs.



Compact! Also mounts UNDER Dash. Has built-in heavy duty speaker and provision for external speaker.

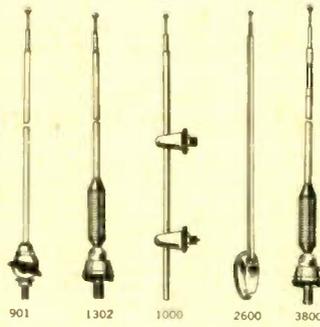
get in the way—Only 6 5/8" W. x 5" D. x 2" H. Has fine tone from built-in 4x6" speaker and provision for external 8 ohm speaker. Ideal for car, truck and boat installation where a remote speaker is desired. Operates with minimum battery drain from 12 volts negative ground. Shpg. wt. 5 lbs.

No. 38A208. Special..... \$19.95

SAVE ON



### FINE QUALITY UNIVERSAL AUTO ANTENNAS



#### ENGINEERED AND BUILT FOR LASTING TOP PERFORMANCE

Triple chrome-plated brass tubing. Completely waterproof, rattle proof construction. Highest quality leads. Quick, one-man installation from top of fender or cowl. Easy-to-assemble Ball mount is adjustable for any mast position up to 30". Has chrome hood and positive grounding rocker for absolute stability. Model 1302 combines 180° swivel mount and chrome plated shock absorbing spring to prevent antenna damage. 48" lead length. Shpg. wt. 2 lbs.

Stk. No.	Mfg. No.	Description and Size	Mfg. List	Net Each
38A48	901	Ball 23" to 57"	\$4.27	\$2.09
38A24	1302	Swivel Spring 23" to 57"	7.00	3.33

#### SIDE MOUNT ANTENNAS

Ideal 3-section antennas for side fender or cowl mounting on domestic or foreign cars as well as for bus or truck cabs. Model 1000 has deluxe chrome caps on insulators. Model 2600, especially designed for Volkswagen, has sturdy 2-hole mount. 36" leads. Shpg. wt. 2 lbs.

Stk. No.	Mfg. No.	Description and Size	Mfg. List	Net Each
38A22	1000	Side Cowl 23" to 57"	\$5.21	\$2.95
38A39	2600	Volkswagen 33" to 57"	5.53	2.66

#### 57" 3-SECTION "POWER HOUSE" ANTENNA BUILT-IN BOOSTER COIL IMPROVES RECEPTION

Far superior to any ordinary antenna. Increases range because antenna is electrically lengthened by the built-in coil. Does not detract from fine appearance. Coil diameter same as antenna itself. Strong mechanical design and stainless steel spring base assure exceptional service life. Heavily chrome plated. With all-angle swivel base and 48" lead. Shpg. wt. 1lb. No. 38A4001. Model 3800. Mfg. List \$8.37. Net Each.....\$4.95



#### SET-SCREW MOUNTED REPLACEMENT ANTENNA MASTS FASTEST AND EASIEST WAY TO REPAIR BROKEN ANTENNAS

① Universal Telescoping Mast. No need to remount a complete new installation. Bell shaped collar slips onto stub of broken mast and fastens with set screws. 3 sections, telescoping 24" to 57". Shpg. wt. 1 lb.

No. 38B44. Mfg. List \$2.79. Each.....\$1.35

② New Elliptical Oval Universal Telescoping Mast. Extra strength, streamlined design, deluxe chrome. Three sections, 23" to 57". Mounts with set screws. Shpg. wt. 1 lb.

No. 38A4002. Mfg. List \$4.90. Each.....\$2.49

③ Flex-O-Rod Replacement Mast. Spring supported 1 piece rod flexes when antenna strikes any object. Prevents damage so often incurred by leaning against antenna while servicing car. Fastens to broken antenna stub with set screw. Length 27". Shpg. wt. 1 lb.

No. 38A125. Mfg. List \$2.37. Each.....\$1.12

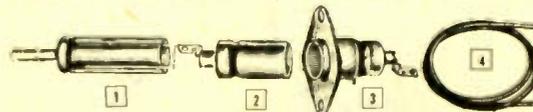
④ Heavy Duty Universal Telescoping Mast With Spring. Stainless steel 3 section 23" to 57". Has socket mount. Secured by Allen set screws. Shpg. wt. 2 lbs.

No. 38A4003. Mfg. List \$5.43. Each.....\$2.95

#### Custom Replacement Masts, For Ford and Chevrolet

① No. 38A4004. For Ford Cars 1967 Thru 1970. Original equipment styling and exact fit. Extends 25 3/4" to 57". Net Each.....\$1.69

② No. 38A4005. For Chevrolet Cars 1966 Thru 1969. Precisely machined. Length extends 18" to 45 1/2". Net Each.....\$1.69



#### AUTO ANTENNA CONNECTORS AND LEADS

① No. 12A1406. Male Motorola Cable Plug. Each.....17c 25 @ Ea.....14c

② No. 12C170. Female Motorola Cable Plug. Each.....17c 25 @ Ea.....13c

③ No. 12A1404. Female Motorola Chassis Plug. Each.....24c 25 @ Ea.....19c

④ Universal Lead Cable. Handy 54" replacement cable. Fully shielded, highest quality. Has 3 sizes of nuts to mate connector on most any make antenna. Standard automotive pin plug on set end. Wt. 8 oz.

No. 38A124. Net Each.....\$1.23

#### EXTENSION LEADS—FINEST COAX TYPE

No.38A8002.12 Inch Extension. Wt. 4 oz. Each.....60c

No.38A8003.24 Inch Extension. Wt. 6 oz. Each.....86c

No.38A8004.36 Inch Extension. Wt. 8 oz. Each.....92c

No.38A8005.12 Ft. Extension. Wt. 1 lb. Each.....\$2.37

No.38A8006.15 Ft. Extension. Wt. 1 1/2 lb. Each.....\$2.94

# SLIM, TRIM . . . A COMPLETE NEW CONCEPT IN SOUND SYSTEMS FOR YOUR CAR!

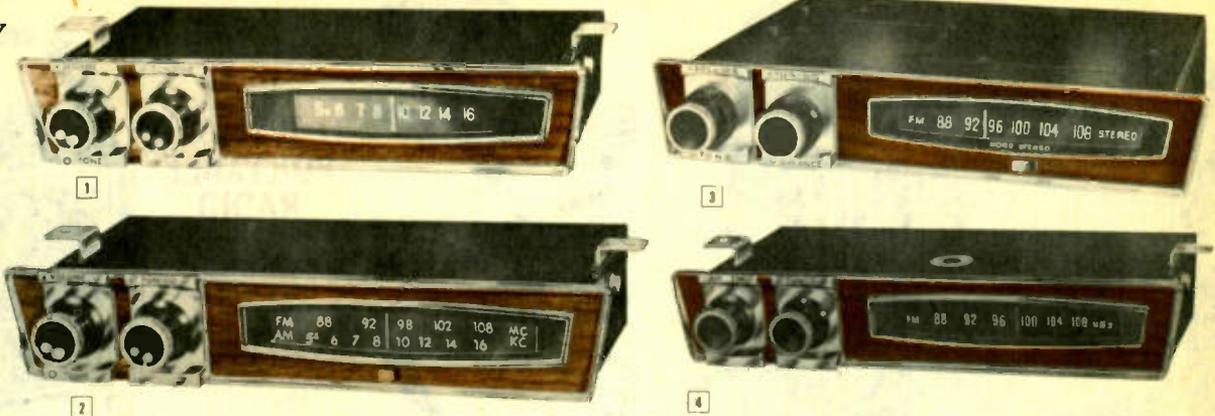
BEAUTIFULLY  
STYLED

RANGER  
CUSTOM  
UNDER  
DASH LINE  
RADIOS

LOW AS

**\$2245**

Model RR-22R.  
STEREO REVERB



ALL SOLID STATE—ALL UNITS ARE 1 7/8" H. x 4" D. x 9" W.

## 1 DELUXE AM RADIO \$2995

FOR CARS, BOATS, HOUSE TRAILERS

Superior quality all solid state, matches or outperforms original factory installed AM car radios.

Completely self-contained in a compact size that fits under dash with only two screws. Adjustable brackets permit custom fit to the contour of the dashboard. Face plate is beautiful walnut wood grain framed in sparkling chrome. Knobs have insets of black leatherette. Extra black leatherette decal is furnished to cover walnut grain area in the event you desire all black and chrome set.

Decal is pressure sensitive just presses into place. Sensitivity 10 mv, gives excellent performance even in areas of weak signals. Has continuously variable tone control, built-in heavy duty full range speaker. Operates on any 6 or 12 volt DC system negative or positive ground covering all American or foreign cars. Size 1 7/8" x 4" x 9" Wt. 5 lbs.  
No. 38A201. Model RR-18M. Each.....**\$29.95**

## 2 DELUXE FM/AM RADIO WITH THE FLICK OF A SWITCH \$5995

Has same elegant appearance of the AM radio listed at left but with additional feature of static free FM reception with AFC for drift-free performance. Includes heavy, duty 5" x 7" speaker with chrome grille. Operates in all American or foreign cars 6 or 12 V. DC negative or positive ground. 4 watt peak music power. External speaker output is 8 ohms. Sensitivity 10 Mv. both AM and FM. Size 1 7/8" x 4" x 9". Shpg. wt. 6 lbs.  
No. 38A202. **\$59.95**  
Model RR-19-M. Net Each.....

## 4 FM AUTO CONVERTER \$3750

Converts your existing AM radio to FM band. Made for 12 V. negative ground cars. Requires only the simplest connection to your radio through the antenna lead, and no dismantling. AM/FM switch returns radio to normal AM operation. Has 6 transistors, 8 diodes, RF stage, AFC. Wt. 4 lbs.  
No. 38A203. **\$37.50**  
Model RR-21FC. Net Each.....

## 3 FM STEREO RADIO \$995

WITH BUILT-IN MULTIPLEX-STEREO AMPLIFIER

Handsome appearance (for detailed appearance see AM radio at left). High fidelity audio circuit provides big sound. All solid state. Stereo indicator lamp lights when station is broadcasting stereo. Comes complete with two "instant-mount" speakers, uses your existing AM antenna. Has dual channel tone and volume controls/Mono/Stereo slide switch. For 12 volt negative ground only. Power 7 watts per channel. Sensitivity 5 Mv. Size 1 7/8" x 6 1/2" x 9". Shpg. wt. 6 lbs. **\$99.95**  
No. 38A218. Model RR-35-MPX-2. Each

## CUSTOM TUNABLE REVERB \$2245

Matches units described at left. Provides big dimensional sound from your radio. Exclusive tuning control "custom matches" the sound to your car acoustics. For 12 V. negative ground. Has 6 x 9" speaker to be mounted like rear seat speaker. Power output 4 watts. Wt. 5 lbs.  
No. 38A6000. **\$22.45**  
Model RR-22R. Each.....

## DELUXE AUTO REAR SEAT SPEAKER KITS POPULAR VARI-CONTROL

DELUXE  
SINGLE  
CONE

**\$595**



TWIN  
CONE

**\$795**

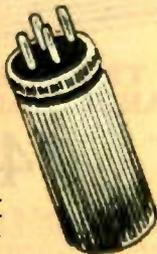
Features new heavy duty 6x9" speakers that flawlessly reproduce the full tonal range—excellent for Hi-Fi FM as well as finest reproduction of AM programs. Designed to mount in shallow space, requires a depth of 2 3/4". Kit includes choice of single cone or wider range twin cone 6x9" speaker, chrome grille, hardware, vari-control for undermounting, wiring and simple instructions. Shpg. wt. 4 lbs.

No. 38A6004. Kit with Deluxe 6x9" 7-Watt Speaker. Complete.....**\$5.95**  
Kit with Twin-Cone 6x9" 10-Watt Speaker. Especially wide-range reproduction with still more power to handle the high peak audio output of modern auto radios. Shpg. wt. 4 lbs. **\$7.95**  
No. 38A6005. Complete.....

No. 34A386. Extra Heavy Duty 6x9" Multi-Imped Speaker Only, 10 oz. ceramic magnet. 1" voice coil, tweeter cone. Strictly Hi-Fi. Wt. 2 lbs. Each.....**\$6.95**

MALLORY  
VIBRATORS  
FRESH STOCK!

**\$189**



3 types to cover most replacement needs at a substantial saving.

6 VOLT  
Standard 4 Prong—Replaces Mallory 294, 859, 901M; Radiart 5300, 5301 etc. Wt. 6 oz. **\$1.89**  
No. 38A8013. Each.....

12 VOLT  
3 Prong—Replaces Mallory G874/G883; ATR 1343; Delco 8550; Radiart 6330, etc. Wt. 6 oz. **\$1.89**  
No. 38A8014. Each.....

4 Prong—Replaces Mallory G859; ATR 1340, 1344; Radiart 6326, etc. Wt. 6 oz. **\$1.89**  
No. 38A8015. Each.....

## MALLORY REPLACEMENT VIBRATORS

If you are unable to identify the vibrator needed then order by stating year, make and model of set. B-A will select the replacement for you. G1601 and 1601 are "standard" 4 prong types; G1602 is "standard" 3 prong. Avg. shpg. wt. 8 oz.

Please Order by Group Stock No. 38A8016. and Mallory Type Number.

Mallory No.	Replaces Type	Rated Volts	Mfg. List	Net Each
1601	859	6	\$4.70	\$2.82
G1601	G859	12	4.70	2.82
W1601	W859	4	4.90	2.94
G1602	G883	12	4.70	2.82
1610		6	5.50	3.30
1701A		6/12	9.60	5.76

## SAVE TO 50% OVER AUTO DEALERS PRICE!



## VOLKSWAGEN CUSTOM CAR RADIOS

EASY INSTALLATION  
DELUXE AM PUSH BUTTON  
ALL TRANSISTOR

**\$3995**

High styled, all transistor push-button AM radio for custom in dash installation. Features trouble-free, solid state circuitry, 7 transistors, 2 diodes. Has 7 tuned circuits, RF stage with AGC, 3 watts output and custom 5" external speaker. Operates on 6 or 12 V. negative ground. Size 6 1/2 x 6 1/2 x 2".

No. 38A205. Model VP-6228. Shpg. wt. 4 lbs. **\$39.95**  
Net Each.....

For 1968, 1969, 1970 VW CARS.  
No. 38A206. Model VP-6235. 12 Volts only. Net Each.....**\$39.95**

## NEW LOW PRICE! GIBBS AUTO RADIO REVERB PRODUCT OF HAMMOND ORGAN

1 YEAR GUARANTEE **\$1488**

Across-the-counter exchange if found electrically defective and has not been physically damaged.

Reverberation unit creates stereo effect. Gives your car concert hall realism. Beautiful front panel enhances installation. Combination off-on and fader control for blending desired reverberation effect. Solid state construction with silicon transistors. For all 12 volt automobiles. Adjustable mounting brackets make it easy to position under dash. Complete with 6x9" rear speaker. Size 7x3 3/4 x 2".  
No. 38A6001 Shpg. wt. 5 lbs. Special Each.....**\$14.88**



# PUBLIC SERVICE RADIOS



**5 BAND PORTABLE RADIO . . .  
POLICE, LONGWAVE/WEATHER,  
SHORTWAVE AND AM-FM**

**BATTERY OR AC**

**TUNE IN FOREIGN STATIONS  
ON THE SHORTWAVE BAND**

Listen to police broadcasts and hear the action as it happens; listen to weather direct from weather bureau . . . be aware of weather conditions as they happen; listen to aircraft as they get landing instructions; or listen to fine music on FM or tune-in favorite AM stations.

SW-4.5-12 MC. "Public Service Band" 148-174 MC for police, fire, mobile telephone etc., LW-Weather 150-350 KC. Operates on batteries or AC with built-in line cord. Housed in a padded leather-like case with rigid carrying handle. Features twin telescoping antennas and dial light. Complete with earphone and 4 "C" cell batteries. Size 10" x 6 1/2" x 3 1/2". Shpg. Wt. 4 1/4 lbs. No. 36A5021. **\$37.95**

Each



**AM-FM  
VHF  
11 TRANSISTOR  
PORTABLE  
RADIO**

**COVERS:  
144-174 Mc  
Police Band  
535-1605 Kc  
AM Band  
88-107 Mc  
FM Band**

**\$24<sup>95</sup>**

- Listen To Police Calls
- Receive Weather Reports Direct From Weather Bureau
- Don't Get Caught! Always Be Alert To Bad Weather Conditions



Tune in and hear the excitement of your Police department in action. Get weather reports instantly as broadcast by the Weather Bureau. Covers local and state Police, Civil Defense, Fire Department, Weather Bureau and other commercial and government agencies assigned to the 147-174 MC band. Terrific performer for AM and FM reception too! Built-in ferrite AM antenna and UHF-FM telescoping antenna. Operates on 4 Penlight batteries (included). Leather-like case, handle and shoulder strap. 7 1/2" x 4 3/4" x 2 3/4". Shpg. Wt. 3 lbs. **\$24.95**

No. 36A5020. Each

You'll find this convenient map and time zone dial effective for "Around the World" listening pleasure. Has easy-to-read geographical boundaries and 24 time zones.

**"WORLD  
MONITOR"  
DELUXE 6-BAND  
SOLID STATE  
BATTERY/AC  
OPERATED  
RADIO**

**RECEIVES:  
HI-LO POLICE  
BANDS, 2 SHORT-  
WAVE BANDS AND  
AM/FM**

**\$74<sup>95</sup>**

Truly a masterpiece of fine craftsmanship and precision engineering. Wood grain finish case with chrome trim . . . completely portable or operates on AC current. The wide range tuning includes "High" (147-174mc) and "Low" (30-50mc) public service bands for police, mobile telephone, civil defense, fire, U.S. Weather Bureau and highway trucks, 2 short wave bands (4-12mc) and (12-22mc) also FM and AM. Front cover opens up to display world map and adjustable world time dial! Features include separate AFC switch, tone control, dual purpose tuning meter and battery indicator, dial light and 2 telescoping and built-in antennas. Self-storing UL listed line cord, earphone and batteries included. Size closed: 13" x 10" x 4". Size open 17" high. Wt. 11 lbs. **\$74.95**

No. 36A5019. Each



**5 BANDS  
MULTI-BAND 20 TRANSISTOR  
DELUXE PORTABLE RADIO**

- Built-in AC or Battery Operation.
- Slide Rule Dial with Electronic Fine Tuning.
- Push Button Dial Light.

**\$49<sup>95</sup>**

Here is one of the Hottest Radios we've seen! 3 tuned IF circuits goes out and gets those hard to receive stations. Listen to Police broadcasts, weather news direct from Weather Bureau and Aircraft receiving take-off and landing instructions direct from airport tower. All solid state for long life, instant play. Covers all AM-FM Band; Shortwave (4-10 MC), Police (148-174 MC) and Aircraft (108-134 MC). Twin telescoping antenna for FM, Police and Aircraft, extra long Ferrite Rod AM and Shortwave Antenna. Clean, clear sound from big, heavy duty 4 x 6" oval speaker. Controls include: AFC switch for drift-free FM reception, Electronic Fine Tuning on Shortwave Band for easy pin-pointing of station desired, Band Selector Switch and High-Low Tone Control for selecting response pleasing to your ear. Beautiful black vinyl padded case. Operates on 4 "C" cell batteries or 110 V. AC. Size 10 3/4" W. x 9 1/2" H. x 4 1/4" D. Shpg. wt. 9 lbs. **\$49.95**

No. 36A5012. Net Each

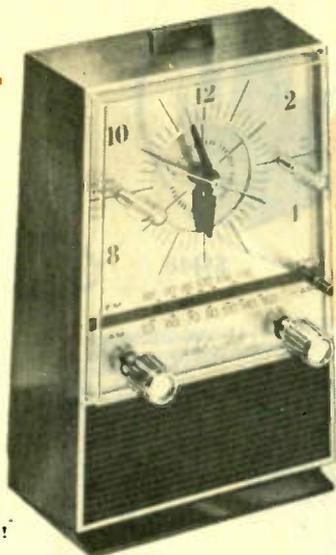
# SPECTACULAR AM-FM CLOCK RADIO VALUES

IN YOUR CHOICE OF TWO POPULAR STYLES!

**NEW VERTICAL FM/AM CLOCK RADIO**

**WITH FULL FEATURE TELECHRON CLOCK**

**BEAUTIFUL WALNUT WOOD-GRAIN CABINET**



- Only 5 1/4" wide . . .
- Fits in anywhere!
- All Transistor

New high style design solid state AM/FM full featured clock radio. Encased in beautiful walnut grained cabinet. Features include illuminated clock dial, sleep switch and doze button for those extra "40 winks". Your choice of rich tone AM or drift-free FM with flick of a switch. Front mounted 4" oval speaker provides big sound. Operates on 115 V. 60 cy. AC. Size 7 7/8" H, 5 1/4" W, 3 3/4" D. Shpg. wt. 3 1/2 lbs.

B-A Full 12-Month Warranty on Parts and Labor . . . just return to B-A or factory for repair or replacement, our option.

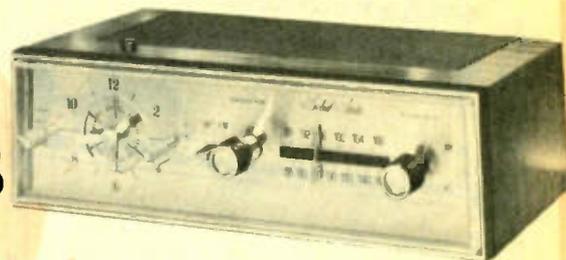
No. 36A8022.

B-A Special Each

Your Choice

**\$28<sup>88</sup>**

**EACH!**



**B-A SPECIAL PURCHASE!**

**SOLID STATE FM/AM CLOCK RADIO WITH FULL FEATURE TELECHRON CLOCK**

**BEAUTIFUL WALNUT WOOD-GRAIN CABINET IN LOW PROFILE DESIGN**

- Wakes you to music or alarm . . . Doze button allows you 10 minutes extra sleep if desired, then awakens you again.
- Lulls you to sleep to music . . . turns itself off automatically.
- Illuminated clock dial glows in the dark.

Best looking clock-radio we've seen! You'll be delighted . . . not only by its handsome appearance, but also by the superior FM/AM radio performance and real convenience it provides. Lulls you to sleep then turns itself off, wakes you to music or alarm. Illuminated clock dial glows in the dark. Big 4" speaker delivers elegant tone. Precision slide-rule tuning, built-in super-sensitive antennas. Attractive walnut wood-grain hi-impact plastic cabinet measures 11 15/16" W., 6 3/8" D., 3 5/8" H. For 110-120 V. 60 cy. AC. UL approved. Shpg. wt. 6 lbs.

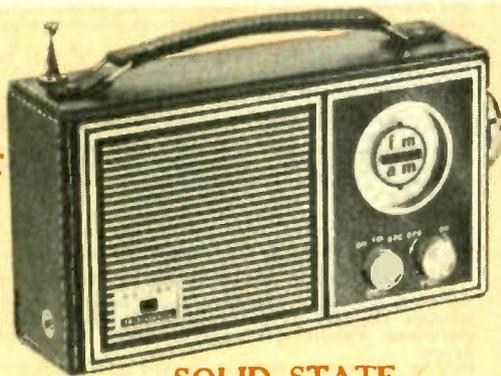
B-A Full 12-Month Warranty on Parts and Labor . . . just return to B-A or factory for repair or replacement, our option.

No. 36A8003. Special Each

**\$28.88**

**REG. PRICE WAS \$24.88**

**OUR HOTTEST RADIO VALUE!**



**SOLID STATE BATTERY/AC FM-AM PORTABLE RADIO**

A TERRIFIC VALUE . . . HAS MORE FEATURES, OUT-PERFORMS ANYTHING WE'VE SEEN AT B-A'S LOW PRICE!

**\$18<sup>88</sup>**

Now . . . take finest FM/AM radio entertainment with you everywhere. Use on batteries or plug it in. Performs like a dream with beautiful tone quality and drift-free reception. AFC keeps stations locked-in.

Powerful chassis with 14 solid state devices combines with fully retractable 20" FM antenna and built-in ferrite core AM antenna to pull-in distant stations with ease. Handsome scuff-resistant black leatherette case with chrome knobs and trim. Measures 9"x5"x3". With 4 penlight batteries, earphone, AC line cord. Shpg. wt. 4 lbs. **\$18.88**

No. 36A3505. Import Special, Each.

**9 TRANSISTOR POCKET SIZE AM/FM PORTABLE RADIO**

Fits easily in shirt-pocket . . . yet packs big power with 12 solid state devices, 3 tuned IF stages! AFC assures drift-free FM reception. Separate tuning for FM and AM. Telescoping antenna. 2 1/4" speaker for fine tone. Handsome hi-impact plastic case in ebony and chrome only 2 7/8" W. x 4 1/4" H. x 1 1/2" D. With earphone and 9 V. battery. Shpg. wt. 2 1/2 lbs. Import. **\$11.88**

No. 36A502. Net Each. **\$11.88**  
No. 21B141. 9 V. Battery. Each. 48c



**SPECIAL PURCHASE!**

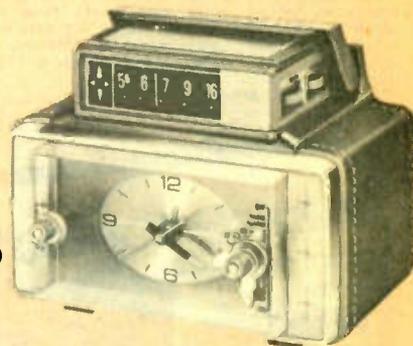


**WAS \$44.95**

**B-A SPECIAL**

**\$24<sup>88</sup>**

**ULTRA MINIATURE RECHARGEABLE CLOCK RADIO**



**FULL FEATURE CLOCK RADIO**



**DETACHABLE, RECHARGEABLE PORTABLE WITH SLIDE-RULE DIAL**

- It's A Clock
- It's A Rechargeable Pocket Portable
- It's A Clock Radio

Innovative micro-electronic circuitry for top reliability in ultra-miniature size only 5 1/8" W. x 3 1/2" H. x 3 7/8" D. Fits on any bedside table, bookcase headboard, etc. Clock has beautiful rich brown leather surrounded with gold face and trim. Is full feature with slumber switch, var-larm, lighted clock dial—wake to music or music and alarm. Rechargeable radio easily removed, so small it can be carried around in shirt pocket only 3" W. x 1" H. x 2 1/8" D. Provides excellent sound from 1 1/2" speaker or may be used with earphone for private listening. Also plays through auxiliary speaker size 1 7/8" x 2 7/8" built into clock giving big sound. Comes complete in gift-packed carton. Wt. 1 lb. Shpg. Wt. 2 lbs. Supplied less earphone. **\$24.88**

No. 36A8018. Each

# PANASONIC multi-band and lightweight portable radios



**11 BANDS  
36 SOLID  
STATE  
DEVICES**

**\$279<sup>95</sup>**

**PANASONIC**

## FINEST MULTI-BAND RADIO

Incomparable, precision product of Panasonic—Listen to the entire world on Short Wave, Long Wave, Marine, and Amateur Radio Bands. It's a Hi-Fi system all its own with standard AM and FM radio, with 2 perfectly matched 7x5" speakers. Fine tuning for precise operation. Continuous bass and treble tone controls. Special mechanical filter for interference-free reception. Beat frequency oscillator with pitch control and manual gain control for clear reception of Morse code and single side band. Five wide range antennas: Ferrite core AM antenna, Ferrite core long wave antenna, 2 FM whip antennas and a swing-up frame antenna for short wave bands. Illuminated Band Indicator. Special signal strength meter for accurate pinpoint tuning, which also indicates battery condition. World time map and time conversion table. Built-in AC power supply. Jacks for earphone, phono, stereo input and FM Multiplex output. Complete with batteries, earphone and leatherette carrying case. Size 16<sup>3</sup>/<sub>4</sub>" wide x 11<sup>1</sup>/<sub>8</sub>" High x 5<sup>5</sup>/<sub>8</sub>" Deep. Shpg. Wt. 23 lbs. Midnight Black with Silver trim. **No. 36A5009. Model RF5000A. Each \$279.95**



## PANASONIC FM/AM RADIO AND CASSETTE RECORDER

**FOR  
PORTABLE  
OR CAR USE**

**27 SOLID STATE  
DEVICES**

**\$99<sup>95</sup>**

**WITH MIKE  
AND ONE  
CASSETTE**

As a fine performing  
tape player recorder.

**CAR  
BRACKET**

New unique, superb sounding portable entertainment center. Doubles as a car radio by installing a simple bracket. Also makes and plays cassette tapes. Perfect for doctors, lawyers, businessmen, etc. for dictation while driving. Rich full sound from self-contained 6" oval dynamic speaker. Built-in telescopic "whip" antenna for FM reception. Ferrite core for AM. Features continuous tone control. AFC on FM. Easy vernier tuning. Hours of commercial free entertainment by simply inserting a pre-recorded tape cartridge. Or make your own from the radio itself. An amazing achievement. Enjoy FM music, AM music or recorded tapes... in car or out. Has 17 transistors plus 10 diodes. Size 11" W. 3<sup>1</sup>/<sub>2</sub>" H. 11" D. Complete with 5 "D" cell batteries; earphone, microphone and C60 Cassette. Shpg. Wt. 11 lbs.

**\$99.95**

No. 31A2503. Model RF-7270. Each

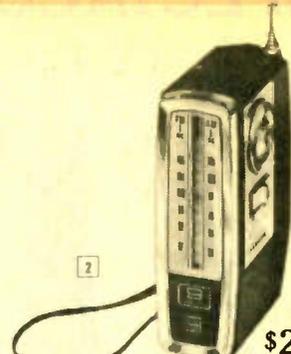
No. 31A2521. Car Bracket for above. Model AS-403. Each \$19.95

No. 31A2544. AC Adaptor for above. Model RD-9742. Each \$ 9.95



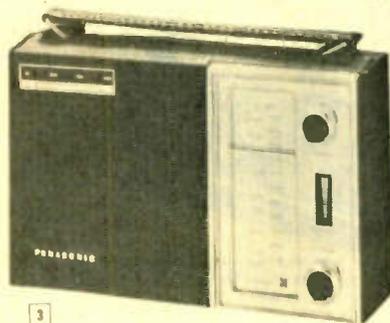
1

**\$948**



2

**\$2995**



3

**\$1995**



4

**\$1395**

### ① PANASONIC 7-TRANSISTOR SHIRT-POCKET PORTABLE RADIO

Handsomely styled and very sturdy. The ideal personal radio to carry with you everywhere. Finest powerpacked superheterodyne circuit, 7 transistors, 1 diode provides fade-free, brilliant reproduction from the speaker or private earphone.

Black with silver trim. Only 2<sup>3</sup>/<sub>4</sub> x 4<sup>3</sup>/<sub>8</sub> x 3<sup>3</sup>/<sub>8</sub>". With 9 V. battery, wrist strap and earphone. Shpg. Wt. 1 lb.

**No. 36A500. Model R1077. Import Special. Each \$9.48**

### ② PANASONIC CAMERA STYLE FM/AM POCKET RADIO

This power-packed beauty provides sparkling performance... and a unique new look that's truly eye-catching! Real station getting ability from superheterodyne circuit with 9 transistors plus 6 diodes. 2<sup>1</sup>/<sub>2</sub>" PM dynamic speaker with tone control and push-pull audio output for fine tone quality. Telescoping swivel whip antenna disappears into leather like case. Size only 2<sup>1</sup>/<sub>4</sub>x5x1<sup>1</sup>/<sub>2</sub>". With battery and earset. Shpg. Wt. 2 lbs.

**No. 36A3501. Model RF526. Import. Black. Each \$29.95**

### ③ PANASONIC SOLID STATE AC/BATTERY PORTABLE RADIO

For those who want the finest sound in a portable! 4 inch dynamic speaker provides full rich tones, Hi-Lo tone control allows adjustment to listeners preference. Handsome travel case design highlighted by vertical slide rule tuning.

Built-in ferrite core antenna, backed up by 8 solid state devices, picks up distant stations. Complete with built-in AC power supply. UL listed. Weighs 2 lbs. 10 ozs. Size 7<sup>7</sup>/<sub>8</sub>" x 5<sup>1</sup>/<sub>2</sub>" x 3<sup>1</sup>/<sub>8</sub>". Complete with AA pencil batteries and earphone. Shpg. Wt. 4 lbs.

**No. 36A2010. Model R1599. Net Each \$19.95**

### ④ PANASONIC CAMERA STYLE AM PORTABLE RADIO

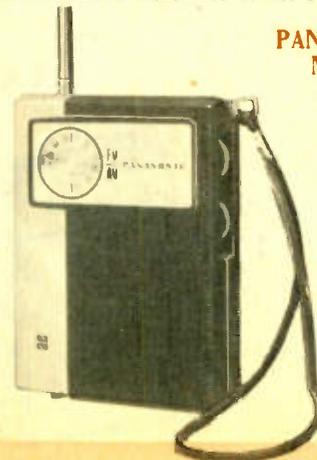
Deluxe leatherette camera styling makes this portable radio a stand out. Sensitive ferrite core antenna pulls in signals loud and clear for unsurpassed AM reception.

Heavy duty 2<sup>1</sup>/<sub>4</sub>" dynamic speaker assures rich resonant sound. Smart roll disk slide rule tuning offers precision station targeting.

Only 2<sup>3</sup>/<sub>4</sub>" x 4" x 1<sup>3</sup>/<sub>8</sub>". With 9 V. battery, wrist strap and earphone. Shpg. Wt. 1 lb. Black.

**No. 36A2009. Model R1329. Net Each \$13.95**

## PANASONIC SOLID STATE MINIATURE FM/AM PORTABLE RADIO



This luxury miniature AM/FM radio is tastefully designed in midnight black grained finish and beautifully accented in silver. The easy to see vernier tuning dial permits instant AM or FM station selection. FM telescopic whip and AM ferrite core antennas pull in both local and distant FM and AM stations loud and clear through the heavy duty 2<sup>1</sup>/<sub>4</sub>" speaker for rich full bodied sound. Size 4<sup>1</sup>/<sub>2</sub>" x 3<sup>1</sup>/<sub>2</sub>" x 1<sup>1</sup>/<sub>2</sub>".

Complete with personal earphone for private listening and 9V battery. Shpg. Wt. 1 lb. **No. 36A3508. \$19.95**  
**Model RF619. Net Each**

# PANASONIC *multi-band radios*

## PANASONIC SOLID STATE FM/AM RADIO

**\$29<sup>95</sup>**

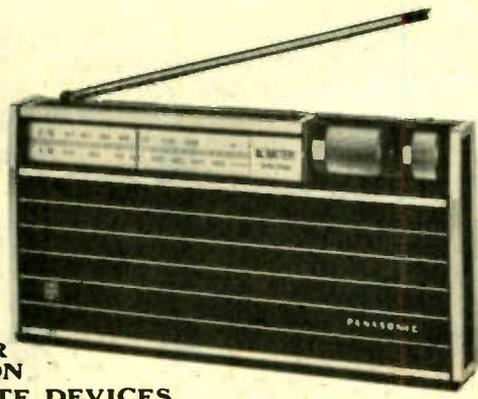


- Complete with AC power supply.
- Top quality . . . budget priced!

This distinctively styled radio in black with silver trim has slide -rule dial for pin point tuning of FM and AM stations. Two step tone control provides true sound reproduction through heavy duty 3" dynamic speaker for exceptional full-bodied sound. FM telescopic whip and AM ferrite core antennas give this radio its great sensitivity for local and distant FM & AM stations. Size 6 1/2" x 5 1/2" x 2 1/4". With 4 AA batteries and earphone. Shpg. Wt. 2 1/2 lbs.  
No. 36A3514. Model RF689. Net Each. **\$29.95**

## PANASONIC ALL TRANSISTOR FM/AM PORTABLE RADIO

**\$34<sup>95</sup>**



### BATTERY OR AC OPERATION 18 SOLID STATE DEVICES

Modern thin-line design enhances the beauty and performance of this versatile portable. Enjoy pleasing and satisfying tone quality from FM or AM, operates on 115 V or batteries. Big 4" oval speaker delivers full-bodied sound. Lighted Slide Rule Vernier tuning. Built-in Ferrite Core AM antenna, and a Telescope Whip Antenna, plus AFC provides drift-free FM reception. Black with Silver trim makes this radio look as good as it sounds. Complete with built-in AC adaptor, batteries, personal earphone, and carrying case. Size 4 1/8" H. x 8 1/8" W. x 1 1/8" D. Shpg. Wt. 2 lbs.  
No. 36A3507. Model RF728. Each **\$34.95**

## PANASONIC FM-AM BATTERY/AC PORTABLE RADIO

**\$39<sup>95</sup>**

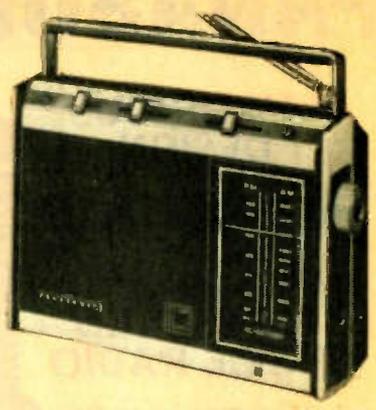


### 19 SOLID STATE DEVICES

Our finest sounding FM/AM portable, with 19 solid-state devices for unexcelled selectivity and sensitivity. Rich, full bodied sound flows from the big 3 1/2" PM Dynamic speakers. Tremendous performer achieving brilliant life-like tone. Automatic frequency control keeps FM station locked in, no drifting. Telescopic whip antenna for FM, Ferrite Rod AM antenna. Complete with tone control, Vernier slide rule tuning, and earphone. Handsomely styled in Black leatherette case with silver trim. 5 3/8" H. 3 3/8" W. 2 3/8" D. Operates on 4 AA Penlite batteries or 110-120 V.A.C. Shpg. wt. 4 lbs.  
No. 36A3500. Model RF738. Each **\$39.95**

## PANASONIC FINEST FM/AM AC/BATTERY SOLID STATE PORTABLE RADIO

**\$49<sup>95</sup>**

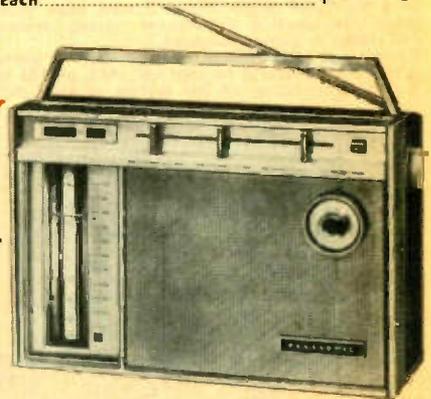


Ultra modern styling with superior sound makes this AC/Battery FM/AM portable radio truly representative of Panasonic quality. Features Panasonic's exclusive slide lever controls with easy-to-see illuminated slide rule tuning. Panasonic motional feed back system. This sophisticated engineering system makes for particularly ultra smooth low frequency response. Reproduces "concert hall" sound with superb fidelity through a heavy duty 5" PM dynamic speaker that pours out rich full bodied sound in a full tonal range. Assures unsurpassed music reproduction. AFC or FM locks in signals for clean crystal clear, drift free reception. Complete with ear phone, 4 "C" batteries and gift box 9 3/8" x 3" x 6 1/4". Shpg. Wt. 5 lbs.  
No. 36A3516. Model RF759. Each **\$49.95**

## PANASONIC AC/BATTERY MULTI-BAND RADIO

UNIQUE ROTO DIAL  
BUILT-IN MULTI-  
BAND ANTENNAS

**\$99<sup>95</sup>**



Listen to the world's broadcasts with Panasonic's new traveler. Six bands VHF-FM 136-174 MC, Air-AM 108-136 MC, FM 87-108 MC, AM 525-1605 KC, MB 1.6-4.5 MC, SW 9-18 MC. Gives a world of listening pleasure on regular house current or batteries. Panasonic slide controls for bass, treble, and volume make operation precise and easy. Fine tuning knob brings in the most distant stations crystal clear. AFC for drift free FM performance. Squelch control filters out static interference for superb sound. Heavy duty 5" PM dynamic speaker for unsurpassed reproduction. The space saving roto-dial makes for complete lightweight portability. This handsomely styled radio comes complete with 4 "C" batteries, earphone, and antenna lead. Size 8 1/2" x 11 1/2" x 3 3/4". Shpg. Wt. 8 lbs.  
No. 36A5015. Model RF1600. Each **\$99.95**

**EXTRA! EXTRA! EXTRA!**  
JUST RELEASED AT B-A's PRESSTIME

# MAN ON THE MOON

IN 8 MM (REG. OR SUPER 8) COLOR HOME MOVIES

OFFICIAL NASA FILM FOOTAGE OF MAN'S  
FIRST LANDING AND STEPS ON THE MOON

This is one movie you simply must get! What a wonderful experience when you relive that unbelievable space adventure. You, your children and grandchildren will enjoy viewing every detail of the space capsule on its way to the moon . . . the exciting descent of the lunar landing craft . . . and man's first footsteps on the moon! This is truly History in the Making! It's a MUST . . . a collector's item you will always cherish.

No. 66A253. Super 8 MM Color.  
No. 66A254. Regular 8 MM Color.  
B-A SPECIAL CHOICE. EACH **\$14.95**

# PANASONIC

the "hallmark" of table model radios

LUXURIOUS  
DESIGN

**PANASONIC**

FM/AM AND  
FM STEREO  
TABLE RADIO

DISTINCTIVE MIDNIGHT  
BLACK CABINET ACCENTED  
WITH WALNUT WOOD TOP

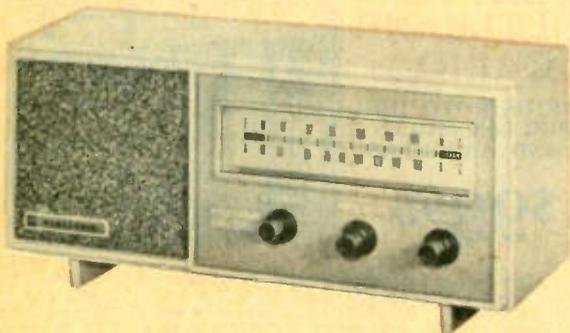
**\$69<sup>95</sup>**

MODEL RE-7300



Perfectly matched twin 5" dynamic speakers pour out rich resonant sound in a full tonal range—up to 6 watt peak music power to assure unsurpassed music reproduction. Convenient "stereo" indicator lights up to tell you when FM stereo is being broadcast. Continuous tone control that provides a perfect bass/treble balance for the sound most pleasing to your ear. AFC on FM locks in signals for crystal-clear, drift-free reception of the station of your choice.

With the Panasonic slide touch stereo balance control you can control the precise amount of sound in each speaker for the ultimate in balanced stereo. When not in use the dial face appears solid black and blends in with Panasonic's custom design for that touch of total elegance. Fm antenna built into line cord for added convenience. Size 21 1/4 x 7 1/4 x 6". Shpg. Wt. 12 1/2 lbs. No. 36A9005. Model RE-7300. Each..... **\$69.95**



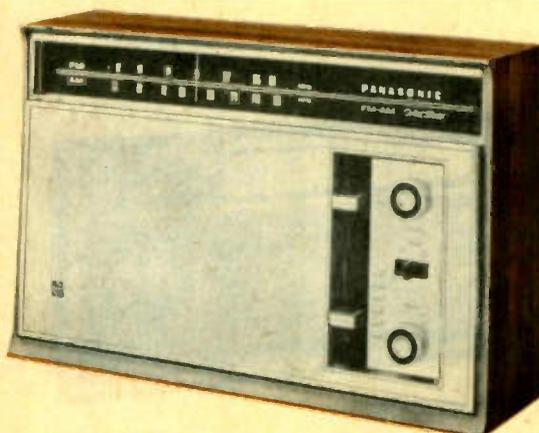
PANASONIC FM/AM TABLE RADIO

**\$24<sup>95</sup>**

The low profile styling of this Panasonic radio is a pleasing addition to the contemporary scene. A full range 4" dynamic speaker delivers true tonal quality. Built-in FM and AM antennas pull in signals loud and clear. AFC on FM locks in signal for crystal-clear reception. Size 12" x 5 1/8" x 4 7/8". Shpg. Wt. 4 lbs.

No. 36A6511. Model RE-6137. Each.....

**\$24.95**



PANASONIC  
DECORATOR  
DESIGNED  
FM/AM  
TABLE  
RADIO

**\$34<sup>95</sup>**

Gracefully designed in walnut grain finish with a champagne gold grille accented in silver. A heavy duty 5" Dynamic speaker assures strong full-bodied sound. Unique slide touch volume control. Two position tone control. Built-in AM/FM antennas for local and distant stations.

No. 36A6512. Model RE-7329. Each.....

**\$34.95**



PANASONIC "THE ALEXANDRIA"

LOW SILHOUETTE FM/AM TABLE RADIO  
WITH DISTINCTIVE SLIDE-RULE TUNING

**\$39<sup>95</sup>**

Handsome walnut wood cabinet . . . for rich appearance and full-bodied sound. Designed for outstanding performance. Has 14 solid state devices. Offers illuminated slide-rule tuning with a "black-out" face to enhance its smart design. Features a front-mounted 4" dynamic speaker, continuous tone control, AFC on FM. Operates on 115 VAC. Size 14 3/8" W. x 5 3/8" H. x 6 15/16" D.

No. 36A6509. Model RE7369. Net Each.....

**\$39.95**



PANASONIC HIGH FIDELITY  
FM/AM TABLE RADIO  
IN BEAUTIFUL WALNUT CABINET

**\$49<sup>95</sup>**

You will be amazed by the depth and beauty of sound provided by this irresistible table radio. Extra powerful 6 1/2" dynamic speaker and 3 watts of power output for unusually fine tone. Quality engineered solid-state chassis with 10 transistors, 7 diodes, 1 rectifier. Tuned RF stage and AFC for improved drift-free reception. Built-in FM/AM antennas. Continuously variable tone control. Slide-rule dial with logging scale for pin-point tuning. Measures 9 3/8 x 17 3/8 x 5 7/8". Shpg. wt. 9 1/2 lbs.

No. 36A6513. Model RE-7259. Each.....

**\$49.95**

# PANASONIC

FM/AM-FM STEREO RADIO  
WITH SEPARATE  
SPEAKER SYSTEMS

**\$99<sup>95</sup>**

NOW ADD RECORD PLAYING OR  
8 TRACK STEREO TAPE OR  
BOTH FOR A COMPLETE STEREO  
HIGH FIDELITY MUSIC SYSTEM

- Stereo phone output jack.
- All solid state, 21 transistors, 13 diodes.
- Beautiful solid walnut cabinetry.
- 12 watts of music power.
- Striking illuminated tuning dial.

As beautiful to look at as it is to listen to! Handsome, matched walnut speaker systems fit anywhere . . . in bookcase, on table, or may be hung on wall.

Permits fullest stereo separation, taking advantage of matched and balanced 6 1/2" console type speakers. Exclusive stereo eye system permits pin-point FM stereo tuning. Built-in FM automatic frequency control assures sharp drift-free reception.

Features Volume, separate Bass, Treble and Balance controls to take fullest

Matching Automatic Turntable in Walnut Cabinet adds stereo phono to 36A9006 Radio. No. 36A9000. Wt. 13 lbs. RD7673. Ea. \$39.95

SEPARATE SPEAKERS FIT  
BEAUTIFULLY ANYWHERE

advantage of radio performance. Has tape and phono inputs and record outputs. Built-in line cord FM antenna and ferrite core AM antenna for super sensitive reception.

Dimensions: 16 1/4 x 3 1/2 x 7 1/8". Speakers 8 1/4 x 8 1/2 x 10". Operates on 115 V. 60 cy. AC. Shpg. wt. 20 lbs. Import Special. **\$99.95**  
No. 36A9006. Model RE7670. Net Each

# PANASONIC

STEREO  
MUSIC SYSTEM

"THE SYMPHONY 8"

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

A SOLID STATE FM/AM STEREO  
RADIO AND SUPERB 8-TRACK  
STEREO TAPE PLAYER

- 41 SOLID STATE DEVICES
- SOLID STATE WALNUT CABINETRY

Particular about design? Demanding of performance? Critical of features? The "The Symphony 8" will please you. Enjoy the finest in FM/AM radios with beautiful illuminated slide rule tuning. Your sensitive ear will thrill to "Concert Hall" sound from 4 perfectly balanced speaker systems. Just check these professional performance features: Exclusive black-out dial—lights up when you turn the set on. Separate bass and treble tone controls. Stereo balance control, lighted program source selector and unique lighted stereo multiplex Indicator. Also a special FM stereo selector position which allows only multiplex broadcast stations to be heard. Has tuned RF stage. Built in AFC on FM. Self-contained FM and AM antennas.

- 18 WATTS OF MUSIC POWER
- FREQUENCY RESPONSE 50-14,000 Hz

Superb quality 8 track tape player. Features push-button channel selector, lighted channel indicators, and a stereo headphone input jack. Enjoy the pleasure and ease of the popular pre-recorded 8 track stereo tape cartridge. A sliding panel covers the cartridge receptacle to preserve the beauty of its uncluttered design. With rich walnut handcrafted cabinets, "The Symphony 8" is truly designed and engineered for particular people. 115 V. 60 Cy. AC. Size—Control Unit—18 1/2" W. x 6 1/2" H. x 11 1/2" D. Speakers—9 3/8" W. x 8 1/4" H. x 12 1/4" D. Shpg. wt. 31 lbs.  
No. 31A7503. Model RE-7070. **\$199.95**  
Net Each

# PANASONIC

"THE MUSIC MASTER 8" STEREO 8-TRACK  
TAPE CARTRIDGE MUSIC SYSTEM

Exceptionally fine quality tape system is especially designed for high fidelity reproduction of stereo 8-track cartridge tapes as used in automobile players. 24 solid state devices deliver 16 watts music power for beautiful room-filling sound. Freq. response 50-12,000 cps. Push-button channel selector with lighted indicators permits easy fingertip selection of channel desired. Tapes play continuously . . . no rewinding or threading needed. Has precision balance control and bass/treble tone control. Jacks provided for use of stereo headphones. Also for use of radio tuners and record players (crystal and magnetic). Control/player unit measures 16 1/2" W. x 4" H. x 9" D. Separate walnut speaker systems measure 8 1/2" W. x 11 1/2" H. x 5 1/2" D. 115 V. 60 cy. AC. Shpg. wt. 21 lbs.

No. 33A328 **\$129.95**  
Model R58105. Each

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

WITH  
SEPARATE  
WALNUT  
SPEAKER  
CABINETS



PANASONIC 8-TRACK  
STEREO CARTRIDGE TAPE DECK

IN SMART WALNUT CABINET **\$69<sup>95</sup>**

Plays all 8 track stereo tapes. Simply plugs into RE767 (No. 36A9001) stereo radio, or may be used with any Hi-Fi Stereo Amplifier. Push-button selector permits instant selection of track desired. Size 16 1/2" W. x 4 1/2" H. x 8 1/2" D. No. 31A7502. Shpg. wt. 10 lbs. **\$69.95**  
R5800AS Tape Unit. Net Each

# PANASONIC

8 TRACK STEREO  
CARTRIDGE TAPE  
PLAYER DECK

**\$49<sup>95</sup>**

- Advanced IC circuitry.
- Solid state for sure reliability.
- Four channel indicators automatically light up to show you the channel you are listening to at the moment.

Low slim modular design will complement the finest hi-fidelity system. Distinctively finished in wood grain and silver trim. Simply plug into any stereo Hi-Fi system and you can enjoy hours of listening pleasure. Features instant program selection, simply push the program selector button and select the channel of your choice. Shpg. wt. 9 lbs. **\$49.95**  
No. 31A7517. Model R5802US. Net Each



# PANASONIC . . . FINEST QUALITY CLOCK RADIOS



NEW . . . EASY-TO-READ  
DIGITAL CLOCK **\$59<sup>95</sup>**

## PANASONIC ADVANCED DESIGN FM/AM DIGITAL CLOCK RADIO

### IN LUXURIOUS WALNUT WOOD CABINET

This exciting digital clock radio is loaded with the most unusual features and sets the pace for years to come. Lulls you to sleep with up to 60 minutes of your favorite music or program and then shuts itself off automatically. In the morning it automatically turns itself on again to wake you with either music or buzzer alarm. Even if the personal earphone is still plugged in from the night before, the radio will automatically switch to full speaker sound to awaken you to brilliant full bodied music. The separate dials for FM and AM tuning light-up independently to tell you at a glance which band you are receiving. Continuous tone control gives perfect bass/treble balance. AFC on FM locks in signals for crystal-clear, drift-free reception. Shpg. wt. 6½ lbs. Size 12½" x 6¾" x 4¾". Complete with earphone. No. 36A8016. **\$59.95**  
Model RC-7469. Each



## PANASONIC FUTURISTIC AM CLOCK RADIO

**\$19<sup>95</sup>**

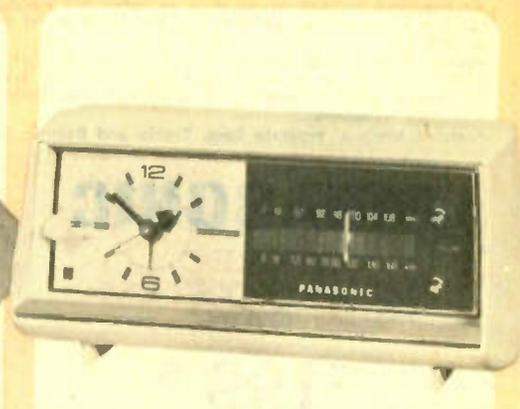
Uniquely designed with full size clock face, making time telling easy. Ultra-sensitive AM radio with built-in antenna gives crystal clear reception. Heavy duty 2¼" dynamic speaker for full-bodied sound. Westclox clock for greater accuracy. Solid state engineering for reliability. Size 6¾" x 3¾" x 5¾". Shpg. wt. 2½ lbs. Choice of Three Decorator Colors: Antique White, Tan or Avocado. No. 36A8019. Specify Color. **\$19.95**  
Model RC-1089. Each



## PANASONIC SPACE AGE FULL FEATURE AM CLOCK RADIO

**\$24<sup>95</sup>**

Advanced design clock radio wakes you gently to music or by alarm and lulls you to sleep with up to 60 minutes of music then turns off automatically. Unique two-level night light. Just gently hold down the night-light button and the clock face returns to its soft illumination. Built-in antenna for sensitive AM reception to deliver strong, pleasing performance through the heavy duty 3" dynamic speaker. Size: 4¾" x 10¾" x 6¾". Shpg. wt. 4 lbs. Choice of Warm Beige or Antique White. No. 36A8020 Specify color. **\$24.95**  
Model RC-1119. Each



## PANASONIC FM/AM CLOCK RADIO

**\$32<sup>95</sup>**

Simplicity in design keynotes the contemporary look of this unusual FM/AM clock radio. Westclox clock movement wakes you gently to music. Built-in antennae pull in both local and distant FM and AM stations loud and clear through heavy duty 2½" full range dynamic speaker for full-bodied sound. Size: 4¾" x 8¾" x 5¾". Case finished in decorator antique white. Shpg. wt. 3½ lbs. No. 36A8015. **\$32.95**  
Model RC-7119. Each

## PANASONIC FM/AM FULL FEATURED CLOCK RADIO

**\$39<sup>95</sup>**



Distinctively tapered styling in a tasteful blend of wood grain, decorator black with white trim will enhance any room decor. Full feature telechron clock movement wakes you gently to music or by alarm, and lulls you to sleep with up to 60 minutes of music then turns off automatically. Easy to see luminous clock hands. Built-in antennae for FM and AM with AFC on FM for drift-free reception through heavy duty 4" full range dynamic speaker. Shpg. wt. 4¼ lbs. Size 5½" x 10¾" x 4¾". No. 36A8014. Model RC-7538. Each. **\$39.95**



## PANASONIC FM/AM SOLID STATE/INSTANT SOUND CLOCK RADIO

**\$49<sup>95</sup>**

14 solid state devices and solid walnut cabinet—purposely engineered and completely matched to achieve unbelievably thrilling sound—yet the convenient 12½x5½x7¼" small size invites its use anywhere in your home as a clock radio . . . as a table radio . . . as a mantel clock adding a touch of elegance to any decor. Finest quality features include: Slide-rule precision tuning dial. Full feature Telechron clock . . . lulls you to sleep and turns itself off . . . next morning you awaken to lovely FM or AM music. Lighted clock face and alarm set indicator. Powerful 4" PM dynamic speaker and built-in antenna for both drift-free FM and AM. Push-pull audio circuitry. High sensitivity and very low power consumption. 117 V. 60 cy. AC. Shpg. wt. 6 lbs. No. 36A8000. Import Special, Each **\$49.95**

# PANASONIC ... WORLD FAMOUS TELEVISION

## PANASONIC "THE CLEARVIEW" PORTABLE TV

38 SQ. INCH VIEWING AREA—ALL CHANNEL VHF-UHF TUNING  
HANDSOME LOW-PROFILE DESIGN

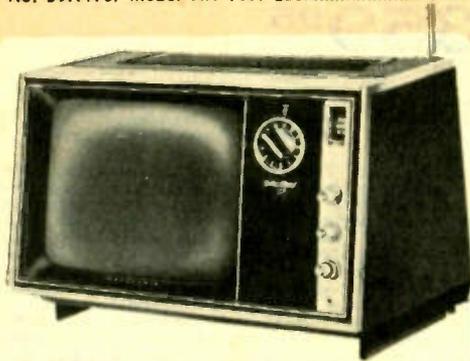
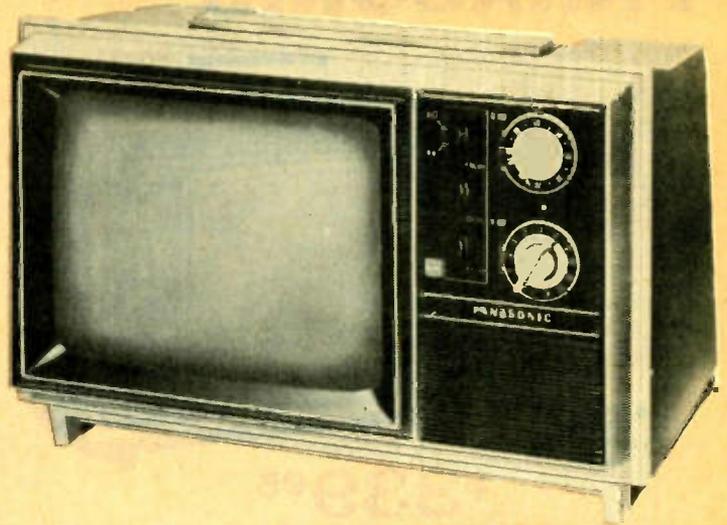
**\$74<sup>88</sup>**

Model AN-109

True horizontal styling complements its miniature compact size. Even the handle is retractable to disappear from sight and preserve the fine clean lines. The control panel with its integrated arrangement of all controls, is a pleasing contrast to the two-tone decorator color scheme of Beige and Brown. 90° Deflection Aluminized Picture Tube delivers sharp picture detail. Built-in VHF and UHF Antennas. Has "Set and Forget" VHF Tuning, requires adjustment only once for each channel. Covers channels 2-13 VHF, 14-83 UHF. Has 11 tubes plus picture tube and 10 solid-state devices. Has front facing 3" heavy-duty PM Dynamic Speaker. Size: 9½" H, 13¾" W, 10½" D. Wt. 11 lbs. 8 oz. Shpg. wt. 15 lbs.

No. 39A410. Model AN-109. Each

**\$74.88**



## PANASONIC "THE LONGVIEW" PORTABLE TV

**\$109.95**

USE IT ANYWHERE... OPERATES  
ON REGULAR AC, BATTERY, CAR

Miniature size, compact... travels wherever you go! 38 square inch viewing area with dark tinted glass that reduces glare and reflections and gives a sharp, clear picture Indoors or out. Aluminized picture tube for maximum contrast. Large 4" dynamic speaker delivers full, rich sound anywhere. All controls up front to permit convenient, instant tuning. Built-in VHF and UHF Antenna for the true portable signal strength. Sleep Timer-Switch of up to 60 minutes. Earphone included.

Optional snap-on battery pack allows converting in seconds to "Take-Along" entertainment. No bulky battery... snaps on and becomes part of TV. 8½" H. x 13¾" W. x 9½" D. Midnight black with silver trim. 120 V. 60 cy. AC. Wt. 12 lbs.

No. 39A439. Model TR429B. Ea. **\$109.95**

No. 39A409. Snap-on Battery. TY700P. Each \$34.95

12 V. DC Cord. Fits cigarette lighter.

No. 39A406. Model TY192. Each \$8.95



## PANASONIC "THE WYCOFF" PORTABLE TV

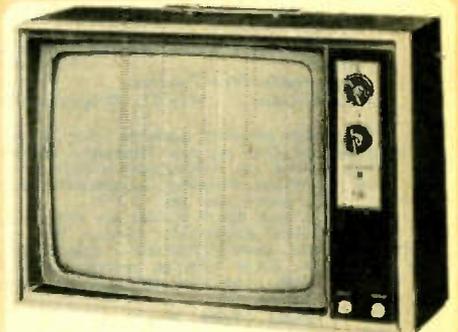
**\$84.88**

75 SQ. INCH VIEWING AREA  
ATTRACTIVE CONTEMPORARY DESIGN

Another example of fine contemporary design, which makes a pleasing addition to any decor. A unique collapsible carrying handle and symmetrically balanced controls enhance its simple uncluttered lines. 110° deflection aluminized picture tube delivers sharp detail with maximum contrast. Speed-O-Vision, sound and picture come on the instant the set is turned on.

Features Set 'N Forget VHF Tuning that requires only one adjustment for each channel. The 3½" heavy duty dynamic speaker is purposely front-mounted to insure forward projection of full range resonant sound. 120 V. 60 cy. AC. Size: 12" H. x 17" W. x 11½" D. Shpg. wt. 16 lbs.

No. 39A434. Model AN72. Each **\$84.88**



## PANASONIC "THE BUXTON" PORTABLE TV

**\$119.95**

184 SQUARE INCH VIEWING AREA  
114° DEFLECTION ALUMINIZED  
PICTURE TUBE

Smart contemporary design in decorator Mist Grey accented in silver. Compact size with clean-lined vertical tuning panel that contains all controls in a well-balanced arrangement. The carrying handle for your convenience does not distract from its stylish simplicity. Fine sound from front facing 3½" heavy duty PM Dynamic Speaker. Offers all channel reception 2-83. Has "Set 'N Forget" VHF tuning knob that requires adjustment only once for each channel.

Engineered to the finest specifications with 13 tubes plus picture tube and 7 solid state devices, built-in antenna for VHF and UHF. Size: 16½" H. x 22¾" W. x 14½" D. Weighs only 35 lbs. Operates on 120 V. AC. Shpg. Wt. 49 lbs.

No. 39A437. Model AN169D. Net Each **\$119.95**

# PANASONIC

## "THE OAKRIDGE" BATTERY/AC MINIATURE PORTABLE TV

16 SQUARE INCH VIEWING AREA  
ALL SOLID STATE

70° DEFLECTION ALUMINIZED PICTURE TUBE

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

Now take TV with you wherever you go! Operates on self-contained Panasonic rechargeable batteries, from 120 V. AC or from car battery with optional adaptor cord. Batteries can be recharged while viewing set on house current. Indicator on front of set tells you at a glance conditions of battery. The aluminized picture tube delivers sharp picture detail and features a special dark tinted glass which reduces annoying glare and reflection. Slide rule UHF tuning for unsurpassable ease in selecting favorite programs. Convenient control knobs on top permit easy adjustment for maximum performance. Built-in UHF and VHF antennas, so important for true portable

picture reception. With automatic anti-interference circuits.

This totally Solid-State set comes in decorator black, accented in silver trim and features a fold-down handle for easy carrying. Snap-on front cover plate to protect screen. Size 9½" H. x 7½" W. x 8½" D. 120 V. 60 cy. AC or self-contained battery operated. Shpg. wt. 14 lbs. No. 39A438. Complete with batteries and Earphone. Model TR415B. **\$129.95**

Each

12 V. DC Cord. Fits cigarette lighter.

No. 39A425. Model TY195P. Each \$8.95



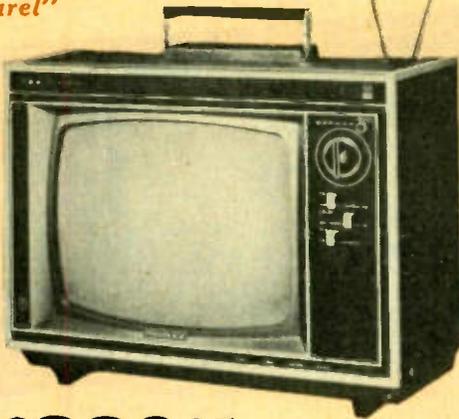
# PANASONIC BIG SCREEN PORTABLE COLOR TV

*"The Laurel"*

**PANASONIC  
DELUXE  
PORTABLE  
COLOR  
TV**

**WITH  
15 INCH  
DIAGONAL  
SCREEN**

**118 SQUARE  
INCH  
VIEWING  
AREA**



**\$339<sup>95</sup>**

**ADVANCED FEATURES:**

- 60 Solid state devices plus 10 tubes.
- Automatic Fine Tuning.
- Pana-Color . . . World's Brightest Color Picture Tube.
- Slide Lever Controls.
- Automatic Color Control Circuits.

This deluxe, large screened portable color TV will thrill you with exceptional performance and exciting new Panasonic features! New Panalock automatic fine tuning control, you simply push a button to let all stations automatically fine tune themselves. Panalock compensates automatically if signal strength varies or if you move your set.

New Speed-O-Vision turns picture on almost instantly after you switch set on. New slide lever controls for volume, tint, and color enable you to make exact tuning adjustments. Automatic color control circuits insure continuous true color tones. Other features include: Set'N Forget fine tuning, antennas for VHF and UHF, color indicator lamp, dynamic up-front speaker and earphone. Shpg. Wt. 56 lbs.

No. 39A444. Model CT65D. Net Each **\$339.95**  
STAND for above with matching black and silver trim. **\$16.95**  
No. 39A431. Model CTS-163. Net Each

*"The Palermo"*

**PANASONIC  
BIG SCREEN  
PORTABLE  
COLOR  
TV**

**WITH  
18 INCH  
DIAGONAL  
SCREEN**

**180 SQUARE  
INCH  
VIEWING  
AREA**

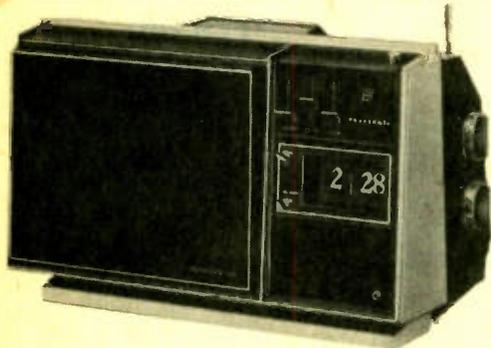


**\$359<sup>95</sup>**

- Speed-O-Vision.
- Pana-Color . . . World's Brightest Color Tube.
- Set'N Forget Fine Tuning.
- Automatic Degaussing.
- Automatic Color Control Circuit.

Panasonic presents a luxurious color TV with quality performance. With Speed-O-Vision you enjoy immediate sound and picture when you turn the set on. Panacolor is a precise scientific method where rare earth phosphors are projected on the face of the picture tube to produce pure, rich color tones that blend into a true fidelity color picture. Keyed AGC adjusts signal strength to a constant level, assuring a consistently sharp picture. A host of additional features: Set'N Forget fine tuning, tint control, automatic degaussing circuit, front mounted dynamic speaker, and easily accessible controls . . . provides you with the finest color viewing with the greatest ease. Picture power 24,500 volts. 20 tubes plus 13 solid state devices. 3 x 5" speaker with earphone jack. Size 23 3/4" W. x 18 1/2" H. x 18 1/2" D. Weight 67 lbs.

No. 39A428. Model CT93P. Net Each **\$359.95**  
No. 39A443. STAND for above. Net Each **\$16.95**



**PANASONIC "DECORA" PORTABLE TV WITH DIGITAL CLOCK**

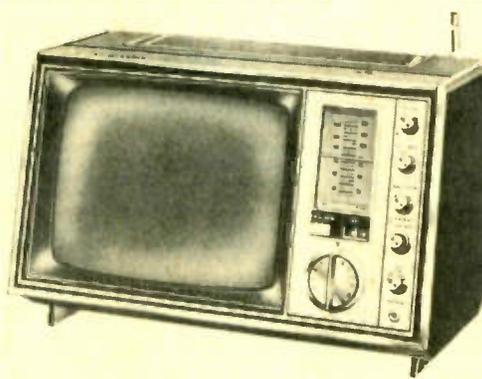
- BUILT-IN AUTOMATIC TIMER.
- DETACHABLE BLACK SCREEN FOR MAXIMUM CONTRAST.

**\$99<sup>95</sup>**

With trim-line design to grace the most elegant decor . . . Panasonic presents the "Decora". Its distinctive easy-see digital clock with 3 hour automatic timer makes it an outstanding advance in leisure television viewing. It features one-touch On-Off power switch, Speed-O-Vision for instant picture and sound. Precision sliding vertical controls for contrast, brightness, and volume. Bow-tie antenna for UHF and telescopic antenna for VHF. Convenient carrying handle molded in cabinet.

11 tubes plus 8 solid state devices. 3 inch round dynamic speaker with earphone jack. Size 9 3/4" H. x 15" W. x 11" D. Shpg. wt. 16 lbs.

No. 39A433. Model AN409T. Net Each **\$99.95**



**PANASONIC "THE SILVERLAKE" AC/BATTERY PORTABLE TV**

- 38 SQ. IN. VIEWING AREA.
- BUILT-IN FM/AM RADIO.
- 51 SOLID STATE DEVICES.

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

A portable miniature entertainment center! A truly compact TV that travels with you everywhere, coupled with a rich sounding FM/AM Radio, for total enjoyment. No separate bulky battery pack with the Silverlake . . . It converts instantly to "Take-Me-Along" entertainment with Panasonics optional snap-on TV battery. Other Pace-Setting features are Aluminized Picture Tube, with a dark tinted glass to reduce glare and reflections, Slide Rule AM-FM and UHF tuning, and VHF Selection Knob conveniently located up front to permit instant tuning. Special earphone for private listening pleasure included. Distinctively designed in Charcoal-Brown, accented with Silver Trim. Size: 9 3/8" H. x 12 7/8" W. x 10 1/8" D. 120 V. AC. or Battery operation with optional pack listed below. No. 39A418. Wt. 12 lbs.

Model TR339. Each **\$129.95**  
No. 39A409. Ty700P Snap-On-Battery. Each \$34.95



**PANASONIC ADVANCED AC/BATTERY PORTABLE TV**

- COLLOID-TYPE BATTERIES.
- DETACHABLE DARK TINT GLASS FOR ADDED CONTRAST.

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

Beautiful trim-line styling in Midnight Black with Silver Trim . . . plus battery/AC operation makes this set the completely portable quality TV!

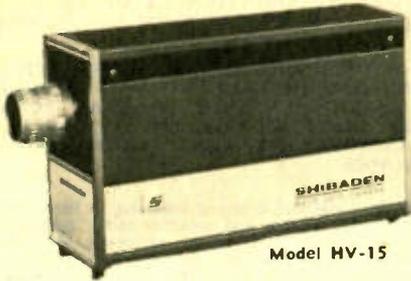
Features aluminized picture tube, detachable dark-screen glass and Speed-O-Vision. Operates on advanced Colloid-type batteries with battery charge lamp. Equipped with precision slide controls, dynamic front mounted speaker, and earphone for private listening.

Battery life over 500 hours with 3.5 hours of un-interrupted viewing without charging.

Size: 12 7/8" H. x 10" W. x 9 1/2" D. Weight: 16 3/8 lbs. (with battery).

No. 39A440. With earphone. Model TR449. Net Each **\$149.95**

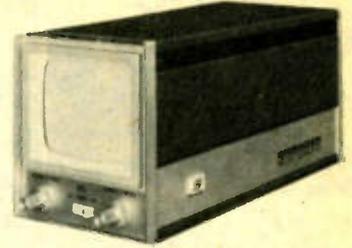
# SHIBADEN VIDEO SYSTEM AND CCTV DEVICES



Model HV-15



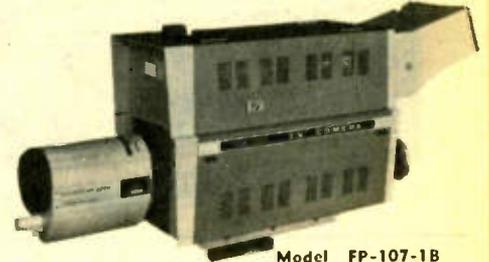
Model TU-19UL



Model VM-502



Model SV-800U



Model FP-107-1B

Shibaden's Model HV-15 is a high quality, moderately priced vidicon television camera utilizing specially selected silicon transistors for compactness and superior picture pick-up capabilities. It is ideally sized and priced for budget-minded educational institutions, government agencies and small businesses for use in an almost unlimited variety of CCTV and Video Tape Recording situations.

For maximum versatility, Model HV-15 is equipped with the standard "C" type lens mount which accepts wide-angle, telephoto, zoom and 16 mm movie lenses, or almost any desired optical system. With a guaranteed Video Standard Resolution in excess of 600 lines and a built-in Automatic Light Control circuit, Model HV-15 offers better reproduction, more versatility and a longer life of service than many of the larger, higher priced vidicon television cameras on the market.

Illumination range: 50-100,000 LUX. Sync: Line-random interlace. Output: Composite video, 1.4V @ 75 ohms or VHF CH2-CH6. Dimensions: 4" W. x 6 1/2" H. x 10 1/2" D. Weight: 7 lbs.

**Model HV-15. Each.....\$450.00**  
**Model HV-155 2:1 Interlace for external sync. Each.....\$525.00**

**Model TU-19UL** is a solid-state TV receiver specially modified for use as an integral part of Shibaden's SV-700U Video Tape Recording system. Featuring special inputs and controls, Model TU-19UL delivers the signal that is actually fed to the SV-700U's video recording heads. It offers a full viewing area of 180 square inches, ideal for educational, industrial and business usage. It also functions as a conventional 80-channel TV receiver.

Model TU-19UL is housed in an attractively styled cabinet designed to withstand rugged commercial abuse and color-coordinated to match the Shibaden SV-700U Video Tape Recorder. The TU-19UL is compatible with all Shibaden VTR and CCTV equipment and will give performance in any CCTV system using RF or where .7. to 2. VPP Video signal is available. Dimensions: 19 1/2" W. x 19 1/2" H. x 13 3/8" D. Weight: 55 lbs.

**Model TU-19UL. Each.....\$250.00**

## WRITE DEPT. CCTV

For complete information and recommendations. B-A has Scanners, Tripods and complete accessories.

**Model VM-502** is a 70° deflected, 5-inch CRT Video Monitor incorporating special silicon transistors and high voltage rectifiers within its circuitry for high stability and efficiency. Intended for use in closed circuit television and commercial broadcasting applications, it features bright and stable picture reproduction (500 lines of horizontal resolution), low power consumption (20VA), and is designed for fast and easy maintenance. Only 6 inches wide, Model VM-502 can be mounted (up to 3-abreast) in the standard 19-inch rack.

Compact and rugged, economical to operate and maintain, Model VM-502 is an ideal Video Monitor for rigorous day-to-day commercial usage. Input: .7-2.0 VPP composite video signal, 75 ohms or hi-impedance bridging. Dimensions: 6" W. x 6" H. x 12 1/2" D. Weight: 10 1/4 lbs.

**Model VM-502. Each.....\$245.00**

**Model FP-107-1B** is a solid-state television camera with 5-inch electronic viewfinder. Operates on the 2:1 interlace scanning system and is synchronized by use of an external sync. generator (SG-104). Guaranteed horizontal resolution of more than 550 lines. This camera offers high reliability and compactness, features especially suitable in educational and industrial applications where mobility and high image definition are primary considerations. Complete with camera control unit, tally and intercom. Includes 50 ft. wired camera cable and telephone headsets, 20/200 mm F: 1.8 zoom lens.

Output: Line out, 1.0 VPP 75 ohms (Video only). Resolution: Over 550 lines (horizontal). Illumination: 10 foot candles min. Power: AC 117 V. 60 C/S 27 W. FP 107 1B. Weight: 39 lbs.

**Model FP-107-1B. Each.....\$1995.00**  
**SC 104 Sync. Generator. Weight: 6 lbs. Each.....\$ 695.00**

**Model SV-800U** is a self-contained, high quality and moderately-priced solid-state Video Tape Recorder featuring a built-in 9-inch Receiver/Monitor, and Audio-Video Modulator, and designed especially for business, industrial, educational and home usage.

The SV-800U can be used to record "live" action in sight and sound using a Shibaden CCTV camera, or record directly off-the-air both the video and audio portions of any standard TV broadcast through its built-in Receiver/Monitor. The built-in Audio-Video Modulator allows taking out a signal modulated to an unoccupied TV channel frequency, following the mixing of audio and video signals, so that conventional TV receivers easily accept the reproduced signals through their antenna terminals.

Employing two rotary heads and operating on the helical scan recording principle, SV-800U delivers more than 300 lines in horizontal resolution, 40 db in signal to noise ratio, and guarantees complete tape interchangeability from one SV-800U to another, or SV-700 series. Dimensions: 30" W. x 11" H. x 17 1/2" D. Weight: 75 lbs.

**Model SV-800U Each.....\$1295.00**

**Model SV-700U** is identical to the SV-800U, except it does not contain the built-in monitor-receiver. The SV-700U is an excellent unit for field or studio recording. Compatible with all Shibaden cameras, monitors or studio equipment. Dimensions: 18 3/8" W. x 10 3/8" H. x 15 1/8" D. Wt. 52.8 lbs.

**Model SV-700U. Each.....\$995.00**

## JAVELIN MC-920 MINI TV CAMERA

CLOSED CIRCUIT TV FOR HOME OR BUSINESS SURVEILLANCE & SECURITY

- Works with any TV set or commercial monitor.
- Simple installation and use by anyone.
- Automatic through the lens light compensation.

**Modern Solid State Miracle!** Very small size and simple foolproof operation makes it an ideal choice for business or home surveillance systems. Connects to any TV set or commercial monitor using 75 ohm coaxial cable, over distances up to 2000 feet. Through-the-lens automatic light control system, sharp F1.8 19 mm. "D" mount lens and electronic focus provides exceptionally clear image. Horizontal video resolution 450 lines. Uses 3/4" vidicon 20PE-11 pickup tube, 21 transistors and 16 diodes, random interlace. Ambient temperatures 140 to 118°F. Power source AC117V 60 Hz. Case size, 2 3/4" W. x 4 3/4" H. x 7 1/4" L. Has standard 1/4" tripod socket. Use matching transformer below when viewing with a TV set.

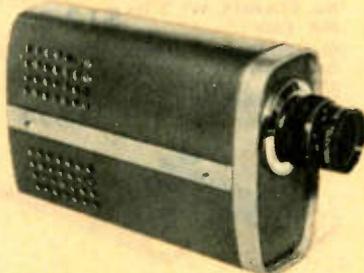
No. 66A208. Wt. 4 lbs. Each.....**\$199.95**

**Universal Swivel Wall Bracket.** All chrome, adjustable mount for TV cameras above. Makes installation easy, neat and professional. Base mtg. flange 2 1/4" dia. Made of 1" dia. tubing.

No. 66A210. Wt. 2 lbs. Net Each.....**\$17.75**

**Matching Transformer for connecting camera with a TV set.**

No. 66A211. Model MT-73. 300/75 ohms./outlet. Net Each.....**\$5.50**



## DELUXE JAVELIN MC-930 CCTV CAMERA COMPLETE WITH LENS

**\$299.50**

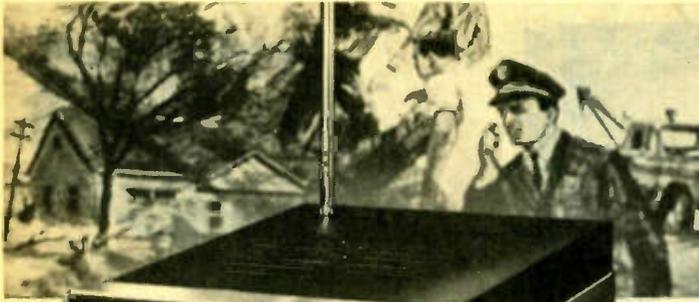
A very high quality all solid state electronic camera. Designed for the most exacting picture quality, yet priced so low that even the smallest business can own one. There is no better method for preventing shop lifting and thievery.

Installation is simple and can be done by anyone. Connects to any home TV set or to a commercial monitor a few feet or up to 2000 ft. away using a single TV type RG59U coaxial cable. Picture is received with TV set tuned to channel 5 or 6.

**Specifications.** Dual focusing standard "C" lens mount, high quality F 1.4 25 mm. click-stop lens, 1" vidicon 7262A pickup tube, random interlace scanning, horizontal resolution more than 550 lines, vertical resolution more than 350 lines. Ambient temperatures 140 to 118°F. Output impedance 75 ohms. Output level 1.4V PP video 30 V RF. Power source AC 117V. 60 Hz. 11 watts. Case size: 3 1/2" W. x 5 1/4" H. x 9 3/4" L. Has standard tripod socket. Wt. 6 lbs. Use matching transformer at left when viewing with a TV set.

No. 66A209. Net Each.....**\$299.50**

# NEW *Regency* MONITORADIO SCANNER



**\$139<sup>00</sup>**

**MONITORS AUTOMATICALLY UP TO 8  
EMERGENCY CHANNELS WITHIN 150-175 MHz**

CAN BE PUSH-BUTTON PROGRAMMED TO SEARCH YOUR CHOICE OF ANY COMBINATION OF 1 TO 8 EMERGENCY FREQUENCY CHANNELS...STOPS TO HEAR ACTION... THEN RESUMES SCANNING. COMPLETELY CAPABLE OF MONITORING COMPLEX SIMULCAST OR DUPLEX BASE/MOBILE NETWORKS.

Appeals to both the professional and hobbyist listening to the exciting signals of police, fire, Civil Defense, marine and weather radio. Simple pushbutton control for each channel, and for manual or automatic operation, enables this handsome receiver to be programmed to hear both sides of two way radio conversations on a wide choice of crystal controlled frequencies. The Monitoradio/Scanner comes complete with AC and DC and mobile mounting bracket, removable telescoping antenna and 4" built-in speaker. External antenna and speaker terminals available on back panel. Front panel controls include On/Off volume and adjustable squelch controls.

**Specifications:** Frequency range 148-174 MHz. Scan Rate: .05 sec. per channel. Sensitivity .5 microvolts. Selectivity: 50 db @ ± 15 KC. Audio output 5 watts at 1 KC. Operates on 117 V. AC or 12 V. DC. Shpg. wt. 6 lbs. Size 2 1/4" x 5 1/2" x 7 1/2".

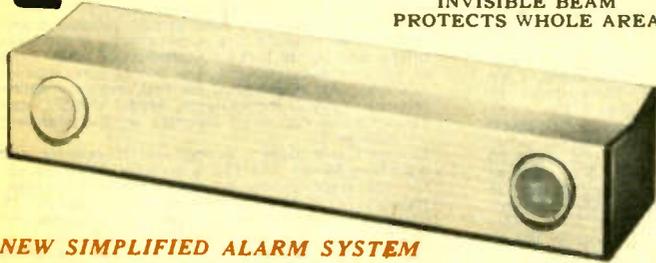
No. 9A454. Model TMR-8H. Each **\$139.00**  
Crystals for above unit. Specify exact frequency desired. **\$4.95**  
No. 9A3180. Each

Note: Crystals will be shipped prepaid from factory.

## Euphonics

**ULTRASONIC  
INTRUSION ALARM**

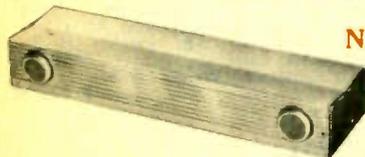
INVISIBLE BEAM  
PROTECTS WHOLE AREA



**NEW SIMPLIFIED ALARM SYSTEM  
FOR HOME, APARTMENT, OFFICE, STORE**

Small portable all electronic unit that installs in minutes. Produces invisible, inaudible ultra-sonic beam which will cover and protect immediate room area. Any person moving within its range will trigger it immediately. Can be used to turn on lights or alarm bells. To use, unit is placed on shelf, desk, etc. at 2 to 6 ft. off floor, then turned on. Unit will arm itself in less than one minute. When intruder enters or moves about, automatic switch actuates your choice of alarm signal devices. Size, 10 x 2 1/2 x 1 1/2" H. For 120V 60 cy AC.

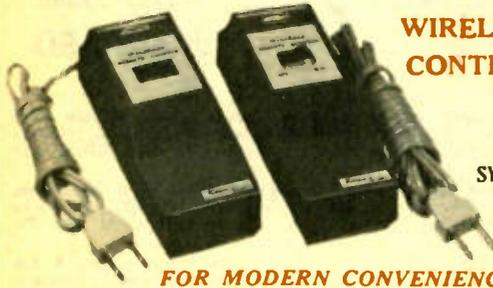
No. 41A4038. Euphonics Model A-1. Wt. 3 lbs. Net Each **\$97.50**  
No. 41A4045. 3" 117 V. AC Alarm Bell. Imported. Special Each **\$ 2.49**  
No. 41A4043. 8" 117 V. AC Weatherproof Bell. Net Each **\$31.50**



**NEW EUPHONICS  
ULTRASONIC  
ANNOUNCER**



Simple plug-in system for automatically signaling the presence of a person entering a protected area. Ideal for small shops, offices, homes. All solid-state electronics system transmits invisible and inaudible beam. Interrupting beam when protected area is entered provides a momentary application of 117 V. AC to your alarm bell, chime, light, or other signal of your choice. Size 10 x 2 1/2 x 1 1/2" H. Wt. 3 lbs. For 117 V. AC operation. **\$64.95**  
No. 41A4048. Model AN-1. Net Each



**WIRELESS REMOTE  
CONTROL SWITCH**

TURNES ON OR OFF  
CONTROLS LIGHTS,  
APPLIANCES, MUSIC  
SYSTEMS . . . ANYTHING  
ELECTRICAL  
FROM BEDSIDE,  
EASY CHAIR, ETC.

**FOR MODERN CONVENIENCE AND SAFETY**

Consists of two small portable AC plug-in units. Uses house wiring to carry the control signal. Receiver unit has pilot-light and AC outlet for powering anything up to 550 watts load. Transmitter unit has pilot light and rocker on/off switch. Will work throughout the home or building where AC outlets are connected by the same wiring system. Both units operate on 120 VAC. In well designed molded plastic cases, size 5 1/8 x 2 x 1 3/4". Shpg. wt. 4 lbs. **\$17.95**  
No. 41A4036. Net Per Pair

**NEW LOW PRICE**



REG.  
WAS  
**\$2995**

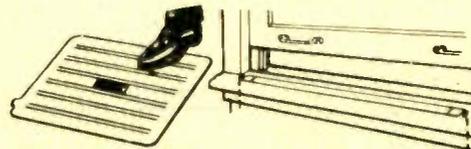
**PHOTO-ELECTRIC WARNING SYSTEM**

INCLUDES LIGHT SOURCE WITH INFRA RED  
FILTER & RELAY CONTROL FOR 117 VAC DEVICE

**\$19<sup>95</sup>**

Interrupting light beam causes fast acting relay control to operate. For indoor warning or automatic counting system. Consists of two 117 V AC powered units, the light source and the photo cell receiver which can be separated 15 ft. or less day or night, when using the infra red filter, and up to 50 ft. at night or 15 ft. during day without the filter. Internal relay controlled outlet supplies 117 VAC at 0.3 A. to your choice of alarm or counting device. Receiver and light source are both housed in all metal enclosures 4 3/4 x 4 x 2 3/4" wide. Shpg. wt. 6 lbs.

No. 41A4041. Imported. Special **\$19.95**



**ENTRANCE  
SWITCH MATS**

PRESS AT ANY POINT  
SWITCHING FOR ALARMS,  
CONTROLS, SAFETY

Reliable, thin switching unit for use under entrance mat, runner or rug. 3/8" thick, 17" x 23" with 6 ft. lead. Fully encased, weatherproof. Responds to light step, closing circuit momentarily.

No. 41A4034. Wt. 5 lbs. **\$12.00** 10 @ **\$10.50**  
Net Each

**WINDOW SILL RIBBON SWITCH.** Sensitive burglar alarm switch. White, completely sealed ribbon 18" long x 5/8" wide x 1/8" thick. Has 12" leads at both ends. Responds to light pressure, closing circuit momentarily.  
No. 41A4035. Wt. 6 oz. **\$5.95** 10 @ **\$5.50**  
Net Each

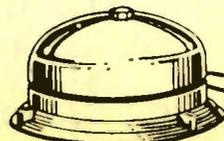


**SWITCHES FOR  
ALARM CIRCUITS**  
MAGNETIC PROXIMITY SWITCH  
FOR WINDOWS AND DOORS

Small molded case with screw terminals contains a reed switch capable of millions of operations. Other case contains permanent magnet. Switch contacts are normally open (unmagnetized). When magnet is brought within 1 inch of switch the circuit is closed. Easily installed on doors and windows so that opening will move magnet away, opening circuit.  
Switch and Magnet.

19A7219 **\$2.85** 25 Prs. **\$1.90** 50 Prs. **\$1.71** 100 Prs. **\$1.42**  
Per Pair

**3-INCH 117 V. AC ALARM BELL**



Produces loud, clear ring. Overcomes high background noises. Operates directly from output receptacle on photo electric warning system above. or from any 117 VAC power source.

Shpg. wt. 8 ozs.

No. 41A4045. Imported. Special Ea. **\$2.49**

# LOW COST INTERCOMS FOR EVERY NEED

DEPENDABLE STEP-SAVING COMMUNICATIONS SYSTEMS



## AC OPERATED 2-STATION WIRED INTERCOM \$14.50

Ultra-sensitive 3-transistor units with high-gain push-pull amplifier circuit produces fine voice clarity through 2 1/2 inch speakers. Saves steps . . . time . . . adds security, safety and convenience. Ideal for office, factory, store, baby-sitting or sick room. Includes UL listed power supply. May be powered by battery if desired. Both Master and Remote have unique "Beep Signal" circuitry and can signal one another even when system is off. Attractive high-impact styrene cabinet, suitable for table or wall use. 50 ft. of cable included. For AC operation. Shpg. wt. 2 1/2 lbs. Mfg. List \$16.95.

No. 32A405. Model EC-3A. Net, Per Sbt **\$14.50**  
 No. 32A418. Like above except for battery operation only. **\$9.95**  
 Per set  
 No. 21B141. Battery. Each . . . .48c



**HANDY FOR CAMPER-TRAILER**

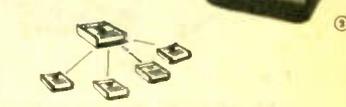
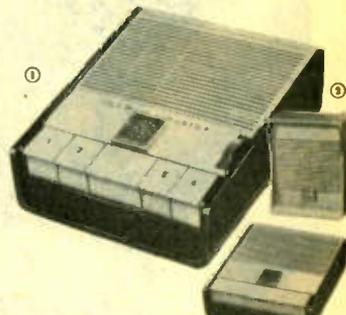
**BATTERY OPERATED MODEL \$9.95**



## 5-STATION MASTER-TO-REMOTE INTERCOM \$18.75

Ultra-sensitive intercom with 3-transistor circuit with high gain, push-pull amplifier for quality sound. Built-in AC power supply. Talk-Listen switch with Talk-Lock position for dictate. Beep tone circuit to signal master even when system is off. Volume control, On-off switch. Smartly finished, 2 1/2" speaker. For use with Remotes below. Each of the four Remotes may be spoken to individually. Overall size 4 3/8 x 5 1/8 x 1 1/2". Wt. 1 1/2 lbs. Supplied less connectors and cable.

① No. 32A406. Model **\$18.75**  
 1605 Master Unit. Each  
**REMOTES for above Master. Less connectors and cable.**  
 ② No. 32A407. Model 161. Outdoor Remote . . . . . \$5.95  
 ③ No. 32A408. Model 162. Indoor Remote . . . . . \$5.95  
 2-Conductor Cable with Plug. Requires one between remote and master.  
 No. 32A400. 50 Ft. . . . . \$2.00  
 No. 32A401. 100 Ft. . . . . \$3.40



## NEW IMPROVED WIRELESS INTERCOM \$24.95

Works where others fail! Just plug units into standard AC outlets and start talking. Fully transistorized, no warm-up necessary. Move them from room-to-room, even between houses (as long as they are on same power line).

Perfect for baby listening. Picks up every sound the baby makes. Ideal for business use, put one on your desk, the other in the stockroom, office, garage, etc. Operates for only pennies a week.

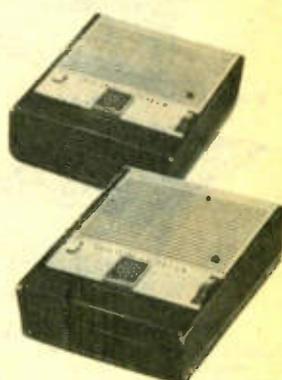
Has special built-in squelch circuit. Units are housed in attractive brown high-impact styrene cabinets 3 x 4 x 2". Each unit has a press-to-talk button and slide lock for continuous talking, on-off volume control and pilot light. Shpg. wt. 1 1/2 lbs.  
 No. 32A409. Fanon **\$24.95**  
 Model EW-3A. Net Per Set



## 2-STATION, 2-CHANNEL WIRELESS INTERCOM \$33.95

**NO WIRES TO RUN . . .** Just plug units into standard AC outlets and start talking. Fully transistorized, no warm-up necessary. Move them from room-to-room, even between houses (as long as they are on same power line). Perfect for baby listening. Picks up every sound the baby makes. Ideal for business use, put one on your desk, the other in the stockroom, office, garage, etc. Operates for only pennies a week. Has special built-in squelch circuit. Units are housed in attractive brown high-impact styrene cabinets 3 x 4 x 2". Each unit has a press-to-talk button and slide lock for continuous talking, on-off volume control and pilot light.

No. 32A422. Wt. 1 1/2 lbs. **\$33.95**  
 Model 1642. Net Per Set.  
 No. 32A446. Single Station for above. Each . . . . . \$17.95



## TRANSISTOR POWERED MEGAPHONE

Amplifies voice clearly up to 200 ft. away. Useful for sports, camps, meetings, construction jobs and plants. Just press trigger and talk into built-in mike . . . weighs only 2 lbs. High impact, shock resistant case, 10 1/2" long. Uses 4 standard 1 1/2 V. "D" batteries. Shpg. wt. 4 lbs.  
 No. 49A208. Net Each. **\$8.99**  
 21A1. Battery (requires 4) Ea. . . . . 17c



**AMERICAN MADE \$8.99**

## WORNER ELECTRONIC RECEPTIONIST

**SOUNDS CHIME WHEN LIGHT BEAM IS INTERRUPTED**

**\$56.25**



Compact single unit with exciter lamp, photo-cell tube, and two lenses. Projects a beam of light across any entrance from 3 to 20 ft. in daylight. Mirror reflects beam back into photocell. Breaking of this beam by any person or moving object operates built-in relay which in turn sounds chime furnished. Perfect for professional offices, stores, factories, homes—anywhere. Grey hammertone metal case, size only 8 3/8 x 6 1/2 x 2 5/8". For 115 volts, 60 cy. AC. Shpg. wt. 8 lbs.  
 No. 41A4039. Model 61. Net Each. **\$56.25**  
 No. 41A4040. Replacement Exciter Lamp. Net Each . . . . . .66

## "GUARD ALL" BURGLAR ALARM

**PROTECTS DOORS, WINDOWS AND PASSAGE WAYS AGAINST INTRUDERS**

Now . . . a fully portable battery operated burglar alarm. Consists of a small 5" high all metal unit containing a gravity operated switch, battery and a very loud alarm device that can be heard 100 feet away. Entire unit tips over easily when touched. Can be rigged to cover windows or large areas by simple thread "trip" lines. Alarm sounds continuously and does not turn off when unit is righted. Hidden switch stops sound. Requires 1 standard "D" flashlight battery for power. Mfg. List. \$12.95. Shpg. wt. 1 1/2 lbs.  
 No. 41A4049. Net Each **\$9.72**  
 6  
 Each . . . . . **\$8.64**



**\$9.72**

**TAKE IT WITH YOU USE AT HOTEL, HOME, OFFICE, STORE**

## FULLY TRANSISTORIZED AUTOMATIC "ON-GUARD" BURGLAR ALARM

**Produces Piercing Sound for 100's of Ft.**

Fits all doors—mounts in minutes—does not require external wiring. Completely self-contained system, housed in an attractive neutral sand-colored enclosure mounts on inside of door close to door frame. Positive acting magnetic reed switch inside unit is triggered by external magnet mounted on door frame. Transistor control circuit allows you to leave through protected door without sounding alarm. Alarm is automatically reset. Has key operated Off-On switch and "panic" button to sound alarm from inside without opening door. Wt. 4 lbs. Made in U.S.A.  
 No. 41A4044. Net Each. **\$39.95**



# TALK-A-PHONE SOLID STATE INTERCOMS

THE ACCEPTED SYMBOL OF QUALITY AND DEPENDABILITY!

- Long trouble-free operation.
- Solid state reliability.
- Modern slim-line low-boy design.
- Economical operation . . . uses less current than an electric clock.
- Compatible with all tube model Talk-A-Phone units.



MFG. LIST \$79.95

**\$46<sup>95</sup>**

NO MONEY DOWN!

## K-LC-2 TWO-STATION INTERCOM SYSTEM

Provides finest two-way communications with unmatched dependability for continuous duty. Complete system includes a master station, a sub station and 50 ft. of cable. Additional cable of up to 2000 ft. may be added (listed below). Both master and remote can be set for private (one cannot "eavesdrop" on the other) yet either can originate calls, even in private setting. Remote in non-private position may be answered from a distance without switching. Only master need be plugged into 110-120V. AC or DC outlet. Master has volume control, talk-listen switch and pilot light. Housing is rugged charcoal grey vinyl finished steel case with brushed chrome face plate. Remote has only talk-listen switch, is same color as master but baked grained enamel finish. Master size: 3 1/8" x 10 1/2" x 8 3/4". Sub. 2 7/8" x 7 1/2" x 8 3/4".

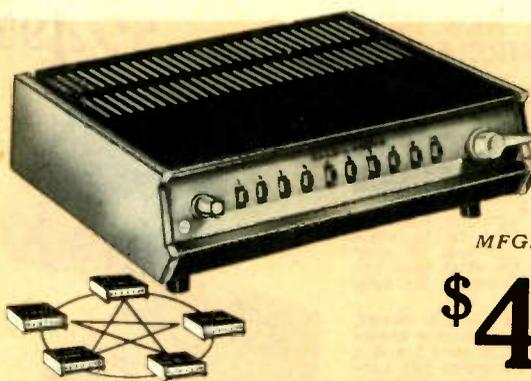
**K-LC-2 COMPLETE 2-STATION SYSTEM** with 50 ft. of cable. Shpg. wt. 13 lbs. No. 32A423. Mfg. list \$79.95. Net **\$46.95**

**5303. 3-CONDUCTOR INDOOR CABLE** for use where additional lengths are required between master and remote. Wt. per 100 ft. 1 lb. No. 2A231. Mfg. list per ft. 7c. Net, Per Ft. **4c**

## MASTER-REMOTE SELECTIVE SYSTEMS



## TALK-A-PHONE MULTIPLE STATION SYSTEMS



SUPER SELECTIVE ALL-MASTER SYSTEMS

MFG. LIST \$78.50

**\$46<sup>00</sup>** NOTHING DOWN

### AVAILABLE IN NORMAL POWER OR HIGH POWER MASTERS

Permits use of up to 5 remotes with KML-5 or K-AC-5406 master or up to 10 remotes with K-ML-10 or K-AC-5411 master. Master can talk and listen to any remote individually, more than one remote at once or to all remotes at same time. Remotes can originate calls to master, but cannot talk to each other.

Remotes can operate as private or non-private. When in non-private remotes can be answered from distance. Master is always private, and cannot be "eavesdropped on."

Only one master can be used in master remote systems. Master is only station that needs power. Masters size 10 1/2" W. x 8 3/4" D. x 3 1/8" H. Wt. 7 lbs. Case is grey vinyl clad and brushed chrome. Remotes size 7 1/2" W. x 8 3/4" D. x 2 7/8" H. Wt. 4 1/2 lbs. Finished in grained baked enamel and brushed chrome. Wall mounting remote model K-LR-3R is 6 1/2" x 4 1/8" x 2" D. Two types of masters are available, one for normal noise areas (offices, etc.) the other for hi-noise areas (factories, etc.).

**K-ML-5 NORMAL POWER MASTER** for up to 5 remotes. For 120 V. AC-DC. No. 32A426. Mfg. List \$78.50 Net Each **\$46.00**

**K-ML-10 NORMAL POWER MASTER** for up to 10 remotes. For 120 V. AC-DC. No. 32A428. Mfg. List \$96.00. Net Each **\$56.40**

**K-AC-5406 HI-VOLUME MASTER** for up to 5 remotes. For 120 V. 60 cy. AC only. No. 32A427. Mfg. List \$96.00. Net Each **\$56.40**

**K-AC-5411 HI-VOLUME MASTER** for up to 10 remotes. For 120 V. 60 cy. AC only. No. 32A429. Mfg. List \$116.00. Net Each **\$68.00**

**K-LR-3M DESK STYLE REMOTE.** No. 32A430. Mfg. List \$26.95. Net Each **\$15.80**

**K-LR-3R FLUSH WALL MOUNTING REMOTE.** No. 32A431. Mfg. List \$26.95. Net Each **\$15.80**

For cable requirements measure from master to each remote. Order cable 5303 listed with two station system above.

All master systems in either 5 or 10 station capacity. Available in normal power models for average room level or high volume models (10 times volume output of normal unit) for noisy and larger areas. Each master can call and converse with other masters, selectively and privately, (cannot be eavesdropped on by other stations) or hold conferences with 2 or more masters. Several 2-way conversations can be held simultaneously without interfering with one another. Each master controls incoming volume. Cabinets of Grey vinyl and brushed chrome. Normal power Masters operate from 120 V. AC or DC. High power Masters operate from 120 V. AC only and cannot be intermixed with normal power models. For 5 Master System run 6 conductor cable listed below between Masters. For 10 Master System run 11 conductor cable between Masters. All masters and remote are 10 1/8" W. x 8 3/4" D. x 3 1/8" H.

**K-LS-5 STATION NORMAL POWER MASTER.** Wt. 7 lbs. No. 32A432. Mfg. List \$78.50. Net Each **\$46.00**

**K-LS-10 10-STATION NORMAL POWER MASTER.** Wt. 7 lbs. No. 32A434. Mfg. List \$96.00. Net Each **\$56.40**

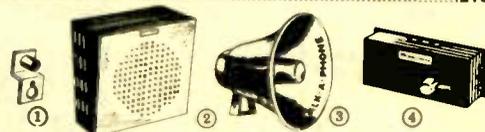
**K-AC-505 HI-VOLUME 5-STATION MASTER.** Wt. 7 lbs. No. 32A433. Mfg. List \$96.00. Net Each **\$56.40**

**K-AC-510 HI-VOLUME 10-STATION MASTER.** Wt. 7 lbs. No. 32A435. Mfg. List \$116.00. Net Each **\$68.00**

**6 CONDUCTOR CABLE** (5506) for connecting K-LS5 or K-AC-505 Master for indoor and outdoor use. Approx. O.D. 1/4". Wt. per 100 ft. 3 lbs. No. 2A229. Net Per Ft. **11c**

**11 CONDUCTOR CABLE** (9911) for connecting K-LS10 or K-AC-510 Master. For indoor and outdoor use. Approx. O.D. 1/8". Wt. per 100 ft. 5 lbs. No. 2A230. Net Per Ft. **21c**

### ACCESSORIES FOR TALK-A-PHONE INTERCOMS



① **K-W1 Wall Mounting Brackets** for Models K-LC-2, K-LR-3, K-LR-3M. K-LR-2. Wt. 1 oz. per pair. No. 32A445. Mfg. List \$1.00 Per Pair. Net Per Pair **60c**

② **K-HP-3 Hi-Power Remotes.** With 8" speaker and 5-watt handling capacity. Charcoal gray metal cabinet. 12" W. x 8" D. x 12" H. Wt. 9 lbs. No. 32A442. Mfg. List \$36.00. Net **\$21.00**

③ **K-C-20 Hi-Power Re-entrant Horn.** 15 watt capacity. For indoor and outdoor use. Charcoal gray 9". Wt. 5 lbs. No. 32A443. Mfg. List \$53.00. Net **\$31.00**

④ **K-5-100 Wall Switch** for originating calls through K-HP-3 Hi-Power Remote or K-C-20 Re-entrant Horn. 5 3/4" W. x 2 1/2" D. x 1 3/4" H. No. 32A444. Mfg. List \$7.85. Wt. 1 lb. Net **\$4.60**



## B-A CAN SUPPLY ALL TALK-A-PHONE UNITS

B-A can supply all Talk-A-Phone Units even though not listed. We will be glad to assist you in determining your requirements. Just send us a rough layout where units are to be used, and what you expect each station to be capable of accomplishing. B-A's sound experts will design a system for you, giving you an immediate reply. Just address your request to Dept. CS

# HOME INTERCOMS BY NuTone

## NuTone

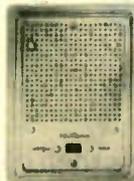
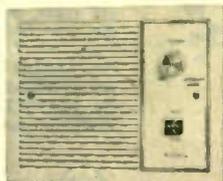
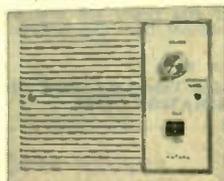
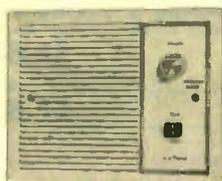
### FM/AM MUSIC-INTERCOM PACKAGE SYSTEM

**NEW SOLID STATE 3-WIRE DECENTRALIZED SYSTEM**

**BASIC PACKAGE SYSTEM INCLUDES:**

- FM-AM Master Station in walnut color.
- 3 inside speakers in eggshell white with "permanent monitoring".
- 1 door speaker.
- A-frames, transformer, antenna, 200 ft. 3-conductor wire.

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



The total system provides AM-FM Radio throughout the house. System has flexibility of adding up to 8 remote stations. Crystal clear intercom and the protection of door answering from any inside speaker. Accurate slide rule tuning, automatic intercom override. Open back Master housings for best sound reproduction. Exclusive "latching" Talk-Listen button on inside speakers, for permanent-monitoring. System fits walls as thin as 2". Extra remotes can be added anytime.

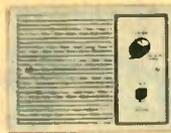
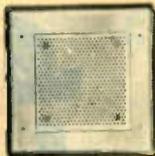
No. 32A453. Model 2065. Complete System..... **\$119.95**  
 Extra Remote for use with above system. **\$7.75**  
 No. 32A454. Model 2028 Remote. Net Each.....

**EASY TO INSTALL**

**Add up to 8 remotes anytime... now or later!**

## AM-FM RADIO PLUS INTERCOMS THROUGHOUT THE HOUSE

REMOTE SPEAKERS FOR USE WITH MASTERS



1 Full Transistor Master

2 8-in. Hi-Fi Remote

3 Hi-Fi Patio Speaker

4 5-in. Full Range Remote

5 Outside Remote

6 Door Remote

### 1 FULL-TRANSISTOR FM-AM INTERCOM-RADIO MUSIC SYSTEM

REQUIRES ONLY 3 CONDUCTOR CABLE TO REMOTE SPEAKERS

**\$124<sup>50</sup> MFG. LIST \$162.50**

- Up to 8 Remote Stations.
- 24 solid state components.
- Large ceramic master speaker.
- Easy to install.
- FM with AFC.
- Phono jack.

MODEL 2090 WITH ROUGH-IN KIT

Never before so many features in a luxury set at a budget price! New all-call lever at the master lets you "page" every room, with speakers, at the same time. Each person can answer without walking to their remote speaker to operate the controls. 3-stage FM tuner including Field-Effect transistor for interference-free performance. Adjustable automatic "Intercom-Override." Tuner adapts for background music only. Intercom section can be left inoperative... ideal for use in professional offices. Economical to use... operates on no more current than a large electric clock. Master panel controls include 8 station selector switches, talk-listen switch, volume control, tone control, master volume control, Phono-AM-FM selector switch, separate AM and FM tuning controls. Master unit only complete with rough-in frame. Use with your choice of remote type units listed right. 16x8 3/4". Choice of two finishes. Shpg. wt. 9 lbs.

No. 32A410-2. Model 2090. Woodgrain Walnut. Net **\$124.50**  
 No. 32A411-2. Model 2091. Eggshell White & Beige. Net **\$124.50**

2 2021B Hi-Fi Speaker Remote, 8" coaxial hi-fi accessory speaker for in-side use. Exclusive "Talk-Listen" button for intercom and door-answering. All controls removable if desired and mount in separate bezel (furnished) which can be mounted in two-gang wall box. Decorative piece (furnished) snaps-in where controls come out. Eggshell White finish. **\$16.95**  
 No. 32A412. Shpg. wt. 6 lbs. Mfg. List \$21.70. Each  
 No. 32A413. Rough-in Frame for 2021B speaker. Shpg. wt. 2 1/2 lbs. Each \$1.85

3 New 2014 Patio Speaker. Includes a 3-wire Remote-Control Unit with exclusive talk-listen button and rotary volume control. Permits speaker to be mounted out of reach. Completely weatherproof **\$18.75**  
 No. 32A414. Shpg. wt. 8 lbs. Mfg. list \$24.40. Each

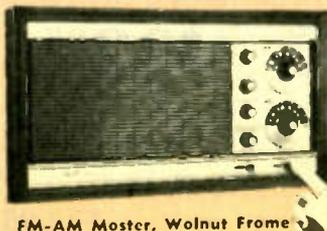
4 Model 2027, 5" Full Range Remote. Eggshell White finish. Complete with rough-in box. Requires rough-in opening of 7x5 1/8". **\$7.75**  
 No. 32A415. Shpg. wt. 4 lbs. Net Each

5 2006 Outside Door Remote. Complete with rough-in box. **\$6.95**  
 No. 32A416. Shpg. wt. 2 lbs. Each

6 New Model 412 Universal Door Speaker. For use with all Nutone 3-wire intercom systems. Eggshell white and gold unit is surface mounting. "Break-away" talk-listen switch permits speaker to be mounted out of reach, with talk-listen button mounted on door jam. Replacement insert included. **\$12.95**  
 No. 32A417. Shpg. wt. 2 lbs. Net Each

3-Conductor. Flat, easy to conceal Cable for Nutone installations. Requires one length from each remote back to master. **\$2.24**  
 No. 2A223. Per Ft. 4c 100 Ft. For

## DELUXE NUTONE INTERCOM-RADIO MUSIC SYSTEMS



FM-AM Master, Walnut Frame

- Decentralized 8-wire Intercom.
- Solid-State AM-FM Radio.
- Room-to-Room Communication.
- Remote music volume separate from Intercom.
- Use up to 16 Remotes in System.

No. 32A447. Model N2561 FM-AM Master Station—Silver Finish. **\$159.95**  
 No. 32A448. Model N2562 FM-AM Master Station—Copper Finish. With rough-in box. Wt. 16 lbs.

YOUR CHOICE EACH

REMOTE SPEAKERS FOR USE WITH MASTERS at left

1 Model 2572 HI-FI 8" Inside Speaker. Shpg. wt. 7 lbs. **\$24.95**  
 No. 32A449. Net Each

2 Model 2570 Wide Range 5" Inside Speaker. Shpg. wt. 2 1/2 lbs. **\$16.95**  
 No. 32A450. Net Each

3 Model 2573 Weatherproof Aluminum Patio Speaker. Includes an 8-wire remote-control unit. **\$24.95**  
 No. 32A451. Net Each

4 Model 2571 Door Speaker. Inside speakers control calls. With rough-in box. Shpg. wt. 8 lbs. **\$12.95**  
 No. 32A452. Net Each

3-Conductor Cable, Type 2425 Per Ft. 10c 100 Ft. for **\$7.50**  
 No. 2A225.

# B-A SUPER BARGAIN SPECIAL!

## REGULAR DIAL TELEPHONE

A COMPLETE EXTENSION PHONE WITH BELL

**\$888**  
EACH



**1¢ SALE**

WITH PURCHASE OF TELEPHONE GET REGULAR 65¢



TELEPHONE PLUG FOR ONLY 1¢ MORE

Make your own telephone intercom or add another phone for extra convenience in your home or business.

These high quality professional phones have been removed from service. They are clean, refinished and ready for use. Each instrument is complete with dial, handset and internal bell. Guaranteed to satisfy or your money back. Shpg. wt. 7 lbs.

No. 18A1417. Special Each **\$8.88**

No. 32A4003. Standard Telephone Plug. Net Each **65¢**

No. 18A1427. COMBINATION OFFER Telephone and Plug. **\$8.89**

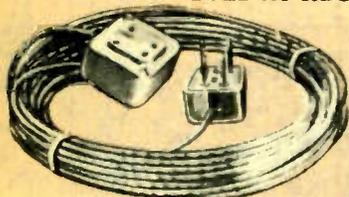


- Works with regular telephone systems.
- Also for private PAX systems.
- Tested — ready to install.

### 25 FOOT TELEPHONE EXTENSION CABLE

1000's SOLD AT REGULAR \$2.99 PRICE!

**\$2.49**



Standard style 4 prong plug and socket as used with regular telephones. Fully assembled with durable resistant plastic 25 ft. 4-wire cord. Fine for telephone-intercoms etc. Shpg. wt. 1 lb. No. 32A4002 Special **\$2.49**

### BELDEN COILED CORDS FOR TELEPHONES

Spade terminals and metal cord clamp attached, vinyl insulated. Less plug.

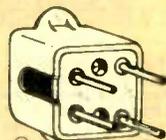


Stock No.	Beld No.	Cond.	Length	Net Each
2A401	8495	3	10" to 4 1/2"	\$1.48
2A402	8494	4	10" to 4 1/2"	1.89

### NEVER PRICED LOWER!

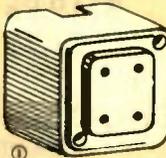
EVERYBODY'S USING THEM

### STANDARD TELEPHONE PLUGS AND JACKS



NOW ONLY

**65¢** Each



Patterned like popular "telephone plugs" and interchangeable with them. Standard 4 wire type, with code marked screw terminals. Perfect for extension speakers, intercom systems, phones, etc. Surface jack, for exposed wiring, mounts with 2 screws. Flush jack, for concealed wiring, has fittings and wall plate for standard electrical outlet box. (Box not supplied). Specify Ivory or Brown.

- ① 32A4003 Portable Plug. Ea. **65¢**
- ② 32A4004 Surface Jack. Ea. **65¢**
- ③ 32A4005 Flush Jack. Ea. **\$1.79**

### SOLID STATE TELEPHONE INTERCOM **\$19.95**

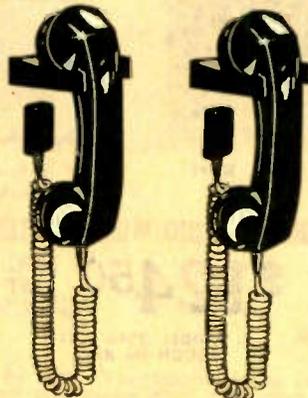
#### AMAZING POWER & CLARITY

Powerful solid state amplifier built into each handset. Only 2 "C" flashlight batteries required for each handset. Simple to install with 2-conductor cable. Push button call system buzzes other handset. Separate push-to-talk button. No current drain when in standby. Each phone supplied with 5 ft. retractile cord, junction box and wall hanger. Impact resistant two-tone grey plastic. Special import value.

No. 32A4010. Special Per Pair **\$19.95**

21A2. Battery (requires 4) Each. **17¢**

No. 2B54. 2 Cond. Cable Per Ft. **3¢**



### WHEELER SOUND POWERED TELEPHONE HANDSETS



Two to 12 may be used in or outdoors. No fire or shock hazards. No batteries used! 2-way talking up to 25 miles over 2-conductor twisted wire as listed below. Ideal for construction work or football fields.

Impact resistant handset with 3 1/2 ft. rubber cable and rubber insulated clips for quick connections.

No. 32A4006. Model SPT102. Net Each **\$12.88**

No. 2C192. 2-Conductor wire.

100 Ft. **\$1.04** 1000 Ft. **\$9.19**

### NEW FANON-MASCO TRANSISTORIZED MEGAPHONE

250 YARDS RANGE **\$32.95**

MV-3. Exceptionally efficient megaphone for all outdoor-indoor coverage such as fire department, police dept., and other municipal organizations. Ruggedly constructed of spun aluminum with baked enamel finish, equipped with a weatherproof mike. Operates on 4 standard "D" cells. Pistol grip switch. Weighs only 4 lbs. Size, 8 3/4 x 13 3/4" overall. Shpg. wt. 5 1/2 lbs. Features a unique anti-howl damping circuit with a high/low volume switch.

No. 49A215. MV3. Net Each **\$32.95**

No. 21A1. "D" Cell Batteries for above. (Requires 4.) Each **17¢**



ALLOWS ROOM FULL OF PEOPLE TO HEAR AND TALK ON THE SAME TELEPHONE

**SOLID STATE TELEPHONE AMPLIFIER**  
**\$14.95**

Ideal for conference calls in home, shop or office. Transistor and battery powered, requires no installation. When in use, telephone headset is simply placed on amplifier to provide room volume. Requires no electrical connection to telephone wires. Durable break-resistant plastic. Wt. 3 lbs.

No. 32A4001. With Battery Ready To Use **\$14.95**

### B-A's NEW PERSONAL TELEPHONE AMPLIFIER

INCREASES VOLUME 5 TIMES OVERCOMES NOISE... HELPS HARD OF HEARING

1,000's SOLD AT **\$9.95** **\$7.95**

NEW LOW PRICE



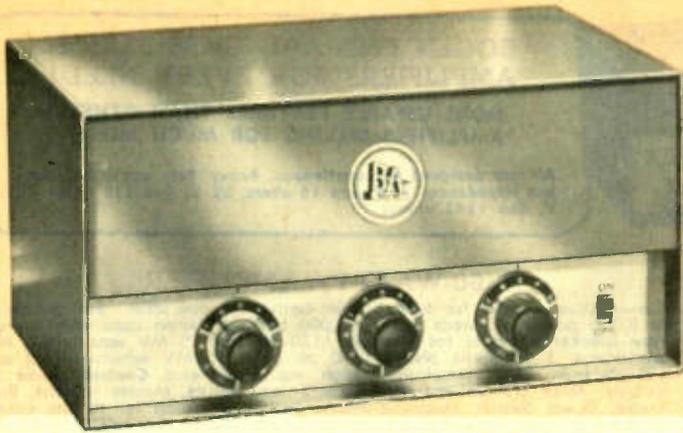
Transforms any ordinary telephone earpiece into a unique sound-control amplifier. Overcomes difficult local noise problems and brings normal private telephone use to those with hearing loss. New solid-state electronic concept assures maximum hearing range and comfort. . . . attaches instantly and securely to any phone with a simple, snug fitting band. Four transistor amplifier raises incoming telephone volume up to 5 times higher with full clarity. Has recessed volume control. Precision built for reliable performance. Shpg. Wt. 1 lb. Less battery.

No. 32A4013. High Quality Import. Each **\$7.95**

No. 21A5000. Battery for above. Net Each **43¢**

# YOUR HEADQUARTERS FOR FINE P.A. EQUIPMENT

Full Year Guarantee Covers Labor and Parts. Just return the Amplifier to us and at our option we will repair or replace it without cost to you.



## B-A's 20-WATT PEAK POWER AMPLIFIER

Ideal for store demonstrations, auctions, clubs, churches, offices, classrooms, etc. Full 20 watts of peak power for improved performance sufficient for 2-12" speakers. Separate volume controls permit mixing microphone and phono. Has two speaker output sockets.

**Specifications:** Power output 20 watts peak, 10 watts RMS. **Tubes**—6EU7, 2-6BQ5, 6V4. Freq. resp.  $\pm 2$  db 40 to 15,000 cps. **Inputs:** Microphone (high imp.), phono, auxiliary. **Sensitivity:** Mic.: .0035 V.; Phono and Aux. .25 V. for rated output. **Controls:** Microphone, phono and auxiliary fader, tone, power switch. **Output impedance:** 4, 8, 16 ohms, 25 volt (62.5 ohms) and 70 volt (500 ohms). **Hum and Noise:** Phono 65 db; Mic. 55 db below rated output. **Dimensions:** 10 1/2" W. x 5" H. x 6 1/2" D. Shpg. wt. 12 lbs.

No. 49A213 **\$39.95**  
Net Each

## B-A's 30-WATT UNIVERSAL ALL TRANSISTOR MOBILE AMPLIFIER

**\$99.95**



The modernistic design of this transistorized amplifier provides a convenient way of obtaining 30 watts of audio power at any location, mobile or fixed. Operates anywhere . . . picnics, outdoor meetings, on boats, planes, cars . . . on 12V. DC battery or 110-120 V. AC. Low current drain of .22 amps idle or 3.5 amps at full power makes it easy on battery system.

**Specifications:** Freq.  $\pm 2$  db. 40 to 20,000 cps. **Inputs:** Microphone (50 to 250 ohms), phono (high impedance). **Sensitivity:** Mic. .0001 V. phono and aux. .15 V. **Controls:** Mic., Phono, and Aux. Fader, Bass, Treble, Master Volume with power switch. **Tone Control Range:** Bass 0 to -15 db; treble 0 to -15 db. **Output impedance:** 4, 8, 16 ohms. Output regulation 2 db. **Hum and noise:** Phono 80 db, mic. 65 db, below rated output. **Semiconductors:** 6 transistors, 3 diodes. **Dimensions:** 11" W. x 3 1/2" H. x 8 1/2" D. Shpg. wt. 11 lbs.

No. 49A202. (Less Phono Top) Net Each **\$99.95**  
No. 29B213. Mike for above. Net Each **\$19.80**

## 4-SPEED PHONO TOP FOR B-A AMPLIFIERS



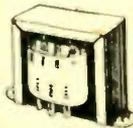
For all B-A Amplifiers except BA10 and BA-Mobile. For playing 78, 45, 33 1/3 and 16 RPM records. 117 V. 60 cy. Wt. 7 lbs.

No. 49A205. Net Each **\$29.95**

## 5-WATT 70 AND 25 V. LINE TRANSFORMERS MATCHES 4 TO 8 OHM VOICE COILS IN MULTIPLE SPEAKER SYSTEMS

Enables volume adjustment at each speaker in the system. Provides excellent wide range response. Primary impedance taps 1000, 2000, 4000, 8000 and 16,000 ohms. For mounting on speaker. Shpg. wt. 1 lb.  
No. 13A955—70 V. Choice **\$1.19**  
No. 13A954—25 V. Each **\$1.19**  
10 Lots, Eo. **\$1.07** 25 Lots, Eo. **.99c**

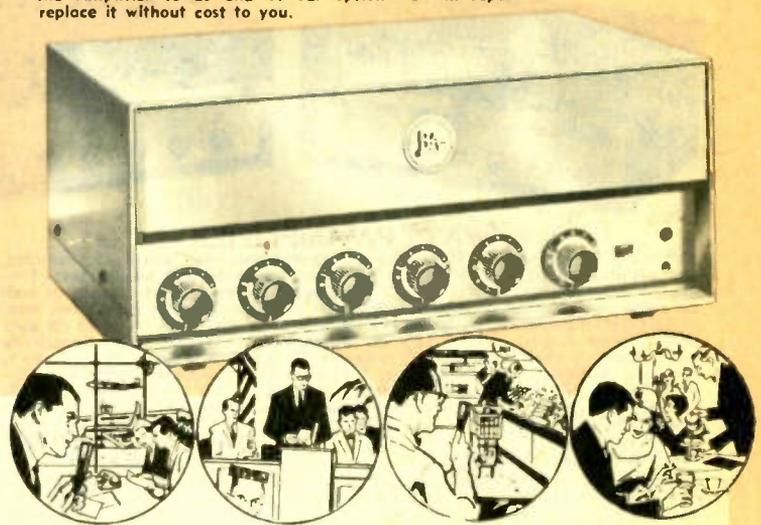
**\$1.19**



**HEAVY DUTY 5 WATT @ 70 V. WITH SCREW TERMINAL STRIPS**  
Terminals for 10, 5, 2.5, 1.25, 0.625 watts. Secondary 4-8 ohms. Mounting centers 2 1/8" nominal. Import.  
No. 13A948. Each **\$1.49** 10 @ Each **\$1.44** 25 @ Each **\$1.37**

**HEAVY DUTY 10 WATT @ 70 V.**  
Tapped for 10, 5, 2.5, 1.25, 0.625 watts. Secondary 8 ohms. Size 2 x 1 1/2 x 1 3/4" H. Wt. 1 3/4 lbs. Imported at big savings!  
13A953 Eo. **\$1.89** 10 Lots Eo. **\$1.89** 25 Lots Eo. **\$1.49**

**HEAVY DUTY 20-WATT LINE-TO-SPEAKER**  
Universal 500-3000 ohm to 3.2, 8, 16 ohms V.C. 3 3/8 x 2 1/2 x 3 1/8". Shpg. wt. 3 lbs.  
No. 13A537. **\$1.99** 10 Lots Each **\$1.75**  
Special Each



## B-A's TOP SELLING 70-WATT PEAK POWER PA AMPLIFIER

Perfect power for small theatres, bands, churches, stores, auditoriums, carnivals, night clubs, industrial plants, etc. Low price and quality construction assures extra profits when used in rentals. Separate bass and treble tone controls permits adjustment to meet all acoustical conditions. Provides coverage up to 100,000 square feet when used with trumpet type speakers. Input mixing is for 2 microphones and phono channels. Phono top may be added.

**Specifications:** Power output 70 watts peak, 35 watts RMS. **Tubes and Diodes:** 2-6EU7, 6C4, 2-7868, 5 silicon rectifiers. Freq. resp.  $\pm 2$  db 20 to 20,000 cps. **Sensitivity:** mic. .002 V.; phono and aux. .2 V.; mag. phono .01 V. **Controls:** Microphone 1, Microphone 2, phono and aux. fader, master volume, bass, treble, power switch, output indicator level adjust, mic. 2—mag. phono switch. **Tone control range:** bass +8 to -15 db @ 50 cps; treble +7 to -13 db @ 10,000 cps. **Output impedance:** 4, 8, 16 ohms, 25 volt (18 ohms), 70 volt (143 ohms), high imp. for booster amplifier. Output regulation 2 db. **Hum and noise:** phono 70 db; mic. 60 db below rated output. **Dimensions:** 15 1/4" W. x 6" H. x 10" D. Shpg. wt. 23 lbs.

No. 49A212 (Less Phono Top) Net Each **\$69.95**

## B-A's 40-WATT PEAK POWER AMPLIFIER

Meets power requirements of chapels, clubs, schools, restaurants, industrial plants, orchestras, paging systems. Ample output for 4-12" PM speakers. New improved circuit using 2-6BQ5/EL84 high output tubes gives wide range frequency response. Covers up to 50,000 square feet when used with trumpet type speakers.

**Specifications:** Power output 40 watts peak, 20 watts RMS. **Tubes**—2-6EU7, 2-6BQ5/EL84, 1-6V4. Freq. resp.  $\pm 2$  db 30 to 15,000 cps. **Inputs:** 2 microphones (high impedance), phono, auxiliary. **Sensitivity:** Mic. .003; phono and aux. .25 V. **Controls:** Mic. 1, Mic. 2, phono and aux. fader, master volume, bass, treble, power switch, output indicator level adjust. **Tone control range:** Bass 0 to -15 db; Treble 0 to -15 db. **Output impedance:** 4, 8, 16 ohms, 25 volt (31 ohms), 70 volt (250 ohms), high imp. for booster amplifier. Output regulation 3 db. **Hum and noise:** phono 75 db; mic. 60 db below rated output. **Dimensions:** 15 1/4" W. x 6" H. x 10" D. Shpg. wt. 20 lbs.

No. 49A201 (Less Phono Top) Net Each **\$59.95**

## B-A's 120-WATT PEAK POWER AMPLIFIER

Super amplifier conservatively rated for long life in continuous operation. Ideal for large installations such as auditoriums, halls and stadiums, factories, fair grounds, airports, rail yards, hotels, outdoor gatherings, etc. Perfect for voice or music. It can be used with up to 12 trumpet type speakers, or 16 cone type 12" PM speakers or any combination of the two types.

**Specifications:** Power output 120 watts peak, 60 watts RMS. **Tubes and Diodes:** 2-6EU7, 6C4, 2-6CT5, OA2, 5 silicon rectifiers. Freq. resp.  $\pm 2$  db 20 to 20,000 cps. **Inputs:** 2 microphone (high imp.), phono, aux., mag. phono. **Sensitivity:** Mic. .003 V., phono and aux. .3 V, mag. phono .013 V. **Controls:** Mic. 1, Mic. 2, phono and aux. fader, master volume, bass, treble, power switch, output indicator level adjust, mic. 2—mag. phono switch. **Tone control range:** bass +8 to -15 db @ 50 cps; treble +7 to -13 db @ 10,000 cps. **Output imp.:** 4, 8, 16 ohms, 25 volt (10.0 ohms), 70 volt (84 ohms), high imp. for booster amplifier. Output regulation 2 db. **Hum and noise:** phono 72 db, mic. 62 db below rated output. **Dimensions:** 15 1/4" W. x 6" H. x 10" D. Shpg. wt. 25 lbs.

No. 49A203 (Less Phono Top) Net Each **\$89.95**

## B-A's 200-WATT PEAK POWER AMPLIFIER

For use where big power is required for large auditoriums and most outdoor areas. Provides up to 150,000 cubic feet of coverage with trumpet type horns.

**Specifications:** Power output 200 watts peak, 100 watts RMS. **Tubes and Diodes:** 2-6EU7, 6C4, 4-6CT5, OA2, 5 silicon rectifiers. Freq. resp.  $\pm 2$  db 20 to 20,000 cps. **Inputs:** 2 mic. (high imp.), phono, aux., mag. phono. **Sensitivity:** Mic. .003 V., phono and aux. .3 V, mag. phono .013 V. **Controls:** Mic. 1, Mic. 2, Phono and Aux. Fader, Master Volume, Bass, Treble, Power Switch, Output indicator level adjust, Mic. 2 mag. phono switch. **Tone control range:** Bass +8 to -15 db @ 50 cps.; treble +7 to -13 db @ 10,000 cps. **Output imp.:** 4, 8, 16 ohms, 25 volt (6.25 ohms), 70 volt (50 ohms), high impedance for booster amplifier. Output regulation 2 db. **Hum and noise:** phono 75 db, mic. 65 db, below rated output. **Dimensions:** 15 1/4" W. x 6" H. x 10" D. Shpg. wt. 28 lbs.

No. 49A204. (Less Phono Top) Net Each **\$119.95**

# MORE OUTSTANDING BUYS IN P.A. AMPLIFIERS & SYSTEMS



1

## 20-WATT PA AMPLIFIER

Extremely versatile amplifier meets requirements for small auditoriums, restaurants, paging systems, etc. For areas up to 50,000 square feet. Frequency response of 20-20,000  $\pm$  2 db gives excellent quality music as well as voice reproduction. 3 inputs, one high impedance microphone, two aux. (Fader) Hi-impedance, Hi-level. Hum and noise -65 db mike, -80 db aux. below rated output. Gain 125 db microphone, 100 db aux. Sensitivity microphone: 3 millivolts, aux. .5 millivolt. Controls: 1-Mike, 1-Aux (Fader), 1-Master Volume, 1-Bass, 1-Treble, 1-Power. Tone controls: Treble (10 KC) +10 db, -16 db.; Bass (50 cps) +14 db, -10 db. Tubes 1-6EU7, 1-6CA4, 2-6GW8, 1 silicon diode. Power consumption 90 watts. Operates from 105-125 V, 50-60 cy. AC. Size 15 $\frac{3}{4}$ " W. x 10" D. x 6 $\frac{3}{4}$ " H. Shpg. wt. 18 lbs.

No. 49A223. Model CHB20A. Mfg. List \$111.25. Net **\$70.50**

① **SOLID STATE CHS-20.** Inputs: one mike (Hi or Low imp.), 2 auxiliary. Operates from 12-15 V. DC @ 2 A. or 115 V. AC. **\$92.25**

No. 49A217. Mfg. List \$153.75. Net

## 35-WATT PA AMPLIFIER

Ideally suited for use in areas of lower noise levels and up to 40,000 cubic feet when used with trumpet type speakers. Power output 35 watts. Inputs for 2 mikes (125 db gain; 4 MV sensitivity), high impedance; 1 magnetic phono (115 db gain; 12 MV sensitivity) and 2 aux. (100 db gain; 2 volt sensitivity), high impedance, high level. Controls are Mike #1 Volume—Mike #2 Volume, Fader for 2 auxiliary inputs—Master Volume—Bass—Treble—Power Switch—Magnetic Phono Switch, provision for remote control of Mike #1 and Mike #2 or magnetic phono. Tubes (6) 1-6EU7, 2-7868, 1-12AX7, 1-6CA4, 1-6C4, 105-125 V. AC. 50-60 cy. Size 6 $\frac{3}{4}$ " H. x 15 $\frac{3}{4}$ " W. x 10" D. Shpg. wt. 18 lbs.

No. 49A224. CHB35A. Mfg. List \$135.00. Net Each **\$85.50**

② **SOLID STATE CHS-35.** Inputs: 2 mike (Hi or Low imp.), 2 auxiliary. Operates from 12-15 V. DC or 115 V. AC. **\$104.95**

No. 49A218. Mfg. List \$174.90. Net



2

## BOGEN CHB AND CHBS SERIES AMPLIFIERS FOR EVERY NEED!

MORE USEABLE FEATURES THAN OTHER AMPLIFIERS SELLING FOR MUCH MORE!

All are designed for continuous, heavy duty operation. Output impedances 4, 8, and 16 ohms, 25 V. line (18 ohm) 70 V. line (143 ohm).

## 50-WATT PA AMPLIFIER

Conservatively rated for long life in continuous operation. For groups up to 8,000 people or areas up to 60,000 cubic ft. when used with trumpet type speakers. Inputs for 2 mikes (120 db gain; 5 MV sensitivity), high impedance; 1 magnetic phono (110 db gain; 15 MV sensitivity), 2 aux. (95 db gain; 3 V. sensitivity), high imp., high level. Controls: Mike #1 Volume, Mike #2 Volume, Fader for 2 aux. inputs, Master Volume, Bass, Treble, Power Switch, Magnetic Phono Switch, provision for remote control of Mike #1 and Mike #2 or Magnetic Phono. Tubes (5) 1-6EU7, 1-12AX7, 2-6L6GC, 1-6C4 and selenium rectifier. 105-125 V. AC, 50-60 cy. Size 6 $\frac{3}{4}$ " H. x 15 $\frac{3}{4}$ " W. x 10" D. Shpg. wt. 21 lbs.

No. 49A226. CHB50. Mfg. List \$162.50. Net Each **\$103.50**

② **SOLID STATE CHS-50.** Inputs: 2 mike (Hi or Low imp.), 2 auxiliary. 115 V. AC operation. **\$127.45**

No. 49A219. Mfg. List \$212.40. Net

## 100-WATT PA AMPLIFIER

Provides ample power for large auditoriums and vast outdoor areas. Provides up to 150,000 cubic feet of coverage with trumpet type horns. Inputs: 2 Mike (125 db gain; 5 MV sensitivity), high imp.; 1 magnetic phono (115 db gain; 15 MV sensitivity), 2 aux. (100 db gain; 3 volt sensitivity), high impedance, high level. Controls: Mike #1 Volume, Mike #2 Volume, Fader for 2 aux. inputs, Master Volume, Bass, Treble, Power Switch, Magnetic Phono Switch, provisions for remote control of Mike #1 and Mike #2 or mag. phono. Tubes (7) 1-6EU7, 1-12AX7, 4-7868, 1-6C4 and selenium rectifier. Size 6 $\frac{3}{4}$ " H. x 15 $\frac{3}{4}$ " W. x 10" D. Shpg. wt. 26 lbs.

No. 49A227. CHB100. Mfg. List \$215.00. Net Each **\$133.50**

② **SOLID STATE CHS-100.** Inputs: 2 mike (Hi or Low imp.), 2 auxiliary. 115 V. AC 50-60 Hz operation. **\$157.15**

No. 49A220. Mfg. List \$261.90. Net



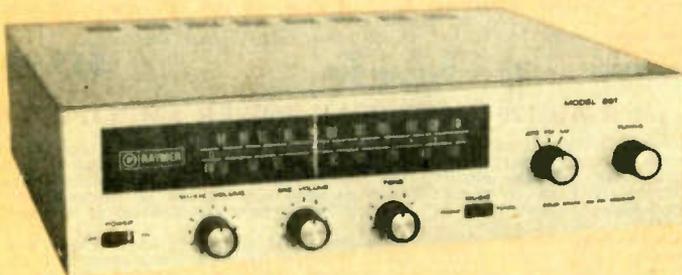
## BOGEN AMPLIFIER ACCESSORIES

(1) **SR-2 Remote Volume Control.** Adjusts amplifier volume of 2 channels from up to 2000 feet. For CHB35A, CHB50, CHB100, and MXMA. Uses 3-cond. unshielded cable. 3 $\frac{1}{4}$ " H. 6" W. 1 $\frac{1}{4}$ " D. Wt. 2 lbs. Mfg. List \$17.15.

No. 49A225. Net Each **\$11.25**

(2) **LPC-4 4-Speed Matching Phono Top.** Attaches to top of CHB20A, CHB35A, CHB50 and CHB100. With tone arm, cartridge, rubber turntable mat and built-in 45 RPM adaptor. Size 4 $\frac{3}{4}$ " H. 13" W. 9 $\frac{1}{2}$ " D. Wt. 8 lbs.

No. 49A207. Mfg. List \$43.75. Net Each **\$27.75**



## AM-FM TUNER-AMPLIFIER WITH MICROPHONE PAGING

15 WATTS RMS, 30 WATTS PEAK  
FREQ. RESP. 20 Hz - 20K Hz

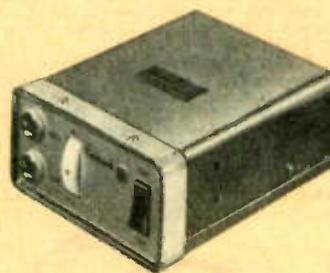
**\$139.90**

Mono background music and paging receiver is a complete solid state high fidelity music system consisting of sensitive AM-FM Tuner complete with AFC for no drift reception and a self-contained audio amplifier with microphone preamplifier. Features include a volume control for program or phono-graphic music, a separate volume control for microphone level for paging and a function switch for source selection. A microphone precedence circuit is incorporated so as to suppress the music if desired when using the microphone. The unit is supplied with a rugged brushed gold aluminum panel and is enclosed in a sturdy metal cabinet.

Specifications: AM-FM solid state audio inputs: 1 Mic-high or low imp. unbalanced, 1 phono/aux. Paging relay output imp. 8 ohm, 25 volt line, 70 volt line; amplifier freq. resp. 50 Hz-20K Hz. Solid state devices: 15 silicon transistors, 13 diodes. Tuner freq. FM: 88-108 M Hz; AM: 510-1650 K Hz. Tuner frequency resp.: FM: 20 Hz-20K Hz  $\pm$  1 db; AM: 20 Hz-5K Hz  $\pm$  3 db. Tuner sensitivity: FM: 2 mv; AM: 10 mv. Power consumption: 30 watts, 117 volts AC. 60 Hz. Size 13 $\frac{1}{2}$  x 10 $\frac{7}{8}$  x 3 9/16".

No. 49A231. Shpg. wt. 12 lbs. Net Each **\$139.90**

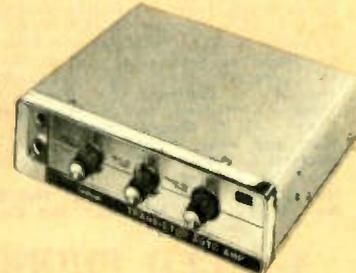
## 12 VOLT MOBILE PA AMPLIFIERS SOLID STATE - NO WARM-UP!



### 15 WATT

Small size, 2" H. x 4" W. x 4 $\frac{1}{4}$ " D. Can be used in any 12 V. car, truck, boat, plane, positive or negative ground. Input for high impedance mike and tape or phono. Use with any 4, 8 or 16 ohm speaker or trumpet.

No. 49A209 **\$29.95**  
Import Special Each



### 22 WATT

Easily installed in cars, trucks or boats. Two standard inputs for mikes, inputs for tape or phono with separate volume control for each input. Output 4, 8, 16 ohms. Complete with mounting hardware and fused battery lead. Size 2 x 7 x 7 $\frac{1}{2}$ " D. Shpg. wt. 6 lbs.

No. 49A200. **\$49.88**  
Import Special, Ea.

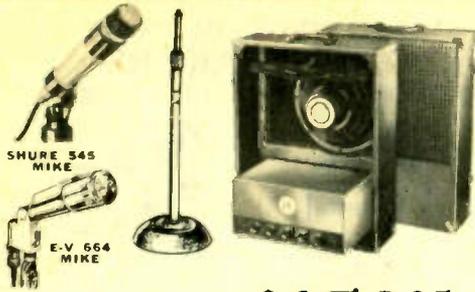


## ADD FM-FM STEREO TO YOUR PA OR STEREO SYSTEM

NEW Solid State Hi-Fi FM-FM Stereo Tuner is designed for the best reception in fringe areas or noisy locations where strong and effective limiting is a prime requirement. AFC circuitry provides positive no-drift operation 24 hours a day. Perfect for use with PA amp, for background noises as well as with stereo systems. Freq. Range 87 $\frac{1}{2}$ -108 $\frac{1}{2}$  MC. Freq. Resp. 15-15000Hz  $\pm$  1 db. Sensitivity 2 MV. Beautiful gold bronze panel in handsome metal cabinet. Small size only 12 $\frac{3}{8}$ " x 7" x 2 $\frac{7}{8}$ " fits anywhere. Shipping wt. 9 lbs.

No. 49A230. Net Each **\$69.95**

**B-A's 70-WATT PEAK POWER PORTABLE PA SYSTEM**



**COMPLETE SYSTEM WITH E-V MIKE \$159.95**

Features B-A's 70 watt feature-packed amplifier (listed on page 63), two 6.8 oz. 12" speakers, each with 35' cable and plug, split type carrying case, size 15 x 17 x 20", provides separate baffles for the two speakers plus convenient, secure carrying case for the amplifier. Your choice of E-V \$89.00 list 664 cardioid dynamic mike or the Shure cardioid dynamic 585 that will slip out of mount for hand-held use. Both mikes have 18' detachable cable and plug and are supplied with B-A's leader value floor stand adjustable from 35" to 64". Amplifier operates from 117 V. 60 cy. AC. Shpg. wt. 74 lbs. Less phono top.  
**No. 49A94. B-A's 70 Watt System with E-V 664 Dynamic Mike. \$159.95**

**Complete No. 49A001. B-A's 70 watt System with Shure 545 Mike. \$154.95**  
**Complete No. 49A205. 4-Speed Phono Top for above. \$29.95**

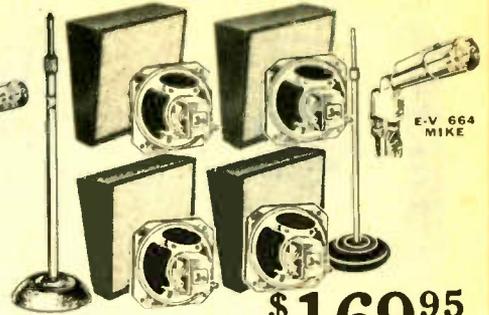
**B-A's 70-WATT PEAK POWER PA SYSTEM WITH COLUMNS**



**FOR CLUBS, CHURCHES, HALLS \$219.95**

Ideal combination for semi-permanent or permanent installations, 2-Argos SR1060 Sound Columns, B-A 70 Watt Amplifier, Mike Stand and either the EV-664 Mike for stand mounting or the Shure 545 Mike which can be removed from stand for hand-held operation.  
**Complete system, everything included and ready to hook up for operation. Shpg. wt. 70 lbs. No. 49A8003...With EV-664 Mike. \$219.95**  
**Net Each No. 49A8002. With Shure 545 mike. \$219.95**  
**Net Each**

**B-A's 70-WATT PEAK POWER PA SYSTEM WITH SPEAKERS & BAFFLES**



**\$169.95**

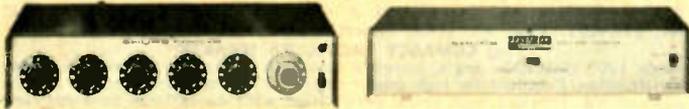
Perfect system for custom installation. Features B-A's 70 watt peak power amplifier, 4 heavy duty 8" speakers, 4 walnut finish baffles. Famous Electro-Voice 664 microphone with cables and B-A's deluxe floor stand. The ideal system for small auditoriums, churches, club rooms, etc.  
**No. 49A8005. \$169.95**

**Complete Identical to above system but with 4 heavy duty 12" speakers and 4 walnut finish baffles. Perfect for larger areas where bigger speakers with more sound output is required. \$179.95**

**No. 49A8006. Complete \$179.95**  
**No. 2A28. 2-Conductor Wire for connecting speakers to above amplifiers.**

**25 Ft....\$1.49 100 Ft....\$4.89 250 Ft....\$9.79**  
**WRITE DEPT. CS-PA FOR SPECIAL QUOTATIONS ON ANY SYSTEM YOU MAY REQUIRE.**

**ADD MORE MIKES TO ANY PA AMPLIFIER WITH SHURE MICROPHONE MIXERS**



**SHURE M68 SERIES MICROPHONE MIXERS**

General specifications: 5 channel, completely transistorized, portable microphone mixer for use with public address, and tape recorders. Total harmonic distortion less than 1%. Accommodates up to 4 high or low impedance microphones in any combination. Does not require line transformers. Has 1 high level, high impedance input for tape, tuner or accessories. Individual volume control on each channel plus master gain control. Output is either high or low impedance. Low impedance output may be balanced or unbalanced permitting long cable to power amplifier input. Also has high impedance auxiliary output for tape recorder. Two or more mixers may be interconnected. For example two will provide inputs for eight microphones and one auxiliary. For 105-130 V. 60 Hz. Size 2 1/2 x 1 3/8 x 5 1/4". Wt. 4 lbs.  
**No. 29A3033. Model M68. With male Cannon-type inputs. \$78.60**  
 (Use XLR-3-11C Type Mating Connector). **Net Each**  
**No. 29A3037. Model M68FC. With Female Cannon-type inputs. \$85.20**  
 (Use XLR-3-12C Type Mating Connector). **Net Each**

**NEW MODEL M68P MIXER. With standard 1/4" phone jack input receptacles for 4 high impedance microphones and a fifth phono plug input for tape, tuners, etc. Otherwise same as M68 above. \$63.00**

**No. 29A3038. Net Each**  
**NEW MODEL M68RM REVERBERATION MIXER. Similar to Model M68FC above except has built-in adjustable intensity reverb for special effects. Response 40-20,000 Hz. Four inputs and jack for remote reverb. No. 29A3039. \$108.00**

**Net Each**

**M62 AUDIO LEVEL CONTROLLER. Insert between microphone and amplifier or between mixer and amplifier. This transistorized variable input level controlling device will prevent fadeout, roller coaster sound level or "close up" blasting. The M62 will permit the microphone to be used at varying distance without changing the output volume. It will upgrade tape recordings by preventing distortion and overloading of the tape recorder. Also prevents "ear splitting" feedback from becoming excessively loud. Distance selector switch can be set at 6", 12" or 18" for best pickup area to maintain an output level from the PA system that is always smooth, intelligible, and comfortable to the ear regardless of shouting or overly close talking. Battery operated (9V. battery included). Frequency response 20 to 20,000 Hz. Requires one each Switchcraft plug, A3F and A3M. Size 2 1/2"x1 1/8"x5 1/4". Wt. 2 3/4 lbs. \$54.00**

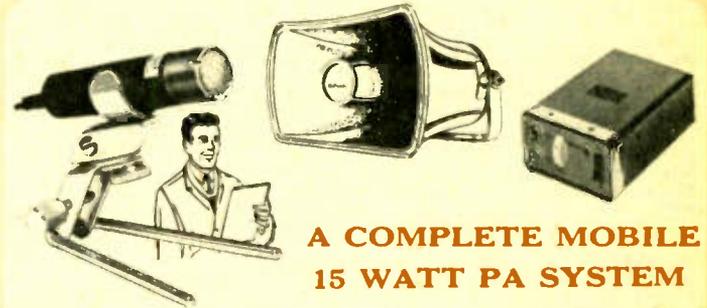
**No. 29A3034. Net Each**

**SHURE M67 PROFESSIONAL MICROPHONE MIXER**



Compact, lightweight microphone mixer/remote amplifier for studio and remote broadcasting, recording and sound reinforcement. Four low impedance balanced microphone inputs and one line input. Built-in tone oscillator for ringing up line. Response ± 2 db from 20 to 20,000 Hz. Gain 90 db. 150 ohm microphone into 600 ohm line. Hum and noise, -125 db maximum equivalent input hum and noise. Has illuminated VU meter calibrated +4 and +10 dbm out, two level headphone monitor jacks. Low noise AC or battery operation. Size 1 3/8 x 7 1/2 x 2 1/2". Wt. 5 1/2 lbs. \$154.20

**No. 29A3040. Net Each**



**A COMPLETE MOBILE 15 WATT PA SYSTEM**

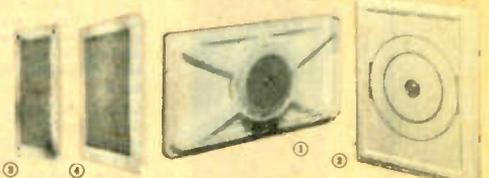
**JUST HOOK TO ANY 12 V. DC SOURCE**

**\$59.95**

Versatile PA system mounts on car or truck in minutes. All-purpose mike comes with lavalier neck cord and desk stand, and 5 ft. cord. Solid state 15 watt amplifier is only 4" wide. (Listed page 64) Speaker is waterproof, rustproof, and shockproof.

A complete system ready to attach. All brackets, plugs, and cables included. Use as mobile sound truck, as stationary PA unit for speakers, rallies, outdoor sporting events, picnics or any gathering where voice or music amplification is necessary. May be used on any 12 volt vehicle or boat.  
**No. 49A8000. Complete 15 watt system. \$59.95**  
**Net Each**

**WAFER-TYPE WIDE RANGE SPEAKERS**



**REPLACES CONE SPEAKERS IN ANY APPLICATION**

① 5 Watt Ultra Thin Poly-Planar Speaker, only 1/8" deep. Unique modern design will enable you to obtain high fidelity sound without using deep, bulky, space taking cone speaker cabinets.

Poly-Planar speakers will mount on cabinet doors, walls, ceiling, car doors. Frequency range 60-20,000 cps. 8 ohm imp. Temperature range -20° F to +175° F. Humidity, shock or vibrations have no effect on the Poly-Planar speaker. Made of expandable polystyrene with a sturdy frame of compatible plastic material. Driven by a 3/4" voice coil over a 2.9 oz. magnet that will provide the proper balance of compliance and damping for wide response characteristics. Size 8 1/2 x 4 1/2 x 1 1/8". Wt. 10 oz. \$6.95

**No. 49A4024. Net Each**

② 20 Watt Poly-Planar Speaker, construction similar to above. 1" voice coil, 4.8 oz. magnet. Frequency range 40 to 20,000 cps. Size, 14 1/2 x 11 3/4 x 1 1/8". Wt. 19 oz. \$10.95

**No. 49A4025. Net Each**

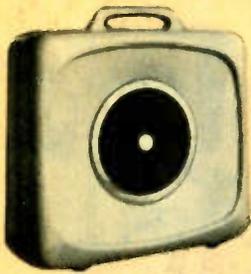
③ Quick-Mount Model 5 Watt Poly-Planar Speaker System, includes 5x9" metal grille for screw or adhesive mounting. Wt. 13 oz. \$9.95

**No. 49A4022. Net Each**

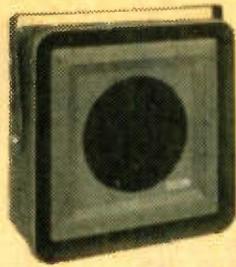
④ Quick-Mount Model 20 Watt Poly-Planar Speaker System includes 16 1/2 x 13 3/4" grille for screw or adhesive mounting. Wt. 31 oz. \$17.95

**No. 49A4023. Net Each**

# POPULAR SPEAKERS AT MONEY SAVING PRICES!



\$22.50



IA - \$69.90 IIA - \$88.50

## ELECTRO-VOICE WEATHERPROOF FULL RANGE OUTDOOR SPEAKERS

### ELECTRO-VOICE SONOCASTERS

An exciting new development in auxiliary speakers by Electro-Voice. Lightweight, easily moved from place to place. Extremely attractive steel-gray housing is molded of a new wonder plastic material similar to that used in air travel luggage. No problem ever with scuffing, chipping or peeling. The 8 inch coaxial speaker unit is specially designed for portable and outdoor high fidelity use. Other distinctive features include an attractive die-cast front trim ring and facilities for permanent mounting on any surface. Freq. resp. 70 to 13,000 Hz. Power handling capacity 30 watts peak. Imp. 8 ohms. Size 16 3/4" H. x 17" W. x 5 7/8" D. Net wt. 6 3/4 lbs. Shpg. wt. 10 lbs.

No. 33A2026. Sonocaster. Special Each. **\$22.50**

### NEW E-V MUSICASTERS IA AND IIA

The IA and IIA are compact wide range integrated loudspeaker systems particularly suited to voice and music. Excellent bass response is achieved by a special 12-inch wide-range driver and through optimum design of the bass reflex enclosure. High frequencies are smoothly and efficiently radiated from the exclusive E-V Radax dual-cone driver assembly. In addition the Musicaster IIA utilizes a Model T35 very high frequency compression driver, providing more uniform high frequency dispersion above 5K Hz and significantly more above 10K Hz. Rugged construction is achieved through use of a one-piece compression molded housing of highly resilient glass-filled polyester. All parts are weatherproofed and fungus proofed for reliable operation under all weather conditions.

The Musicasters may be used indoors or out, in homes, on patios, offices, industrial applications, schools, churches, auditoriums, meeting halls, restaurants, super markets, etc. The speaker may be permanently mounted in any position. The mounting bracket easily converts to a carrying handle, permitting portability of this powerful system.

**MUSICASTER IA Specifications:** Freq. resp. 80-10,000 Hz. dispersion 120°. EIA pressure setting 49 db. Power handling capacity: 30 watts RMS, 60 watts peak. Impedance: 8 ohms. Mechanical crossover 4000 Hz. Mounting "U" bracket (housing designed to stand stable on any surface). Size 21 1/2" H, 21 1/2" W, 8 1/2" D. Wt. 29 lbs.

No. 49A4028. Net Each. **\$69.90**

**MUSICASTER IIA Specifications:** Freq. resp. 80-16,000 Hz. dispersion 120°. EIA 49 db. Power handling capacity same as IA. Imp.: 8 ohms. Mechanical crossover 4000 Hz, electrical crossover 5000 Hz. Mounting and size same as IA. Wt. 31 lbs.

No. 49A4029. Net Each. **\$88.50**

## NEWCOMB SOUND COLUMNS

- No hot spots — sound is equal throughout auditorium or hall.
- Highest quality music reproduction.
- Handle for easy carrying.

**Model CS48. Most Practical Column on the Market!** Combines exceptional directivity with portability. Excellent efficiency, power handling peak 60 watts. 25 ft. cord and plug in "hide-away" cord compartment—extension jack and switch. 39 7/8 x 11 1/4 x 6 3/8".

No. 49A4030 Wt. 22 lbs. **\$74.50** Each

**Model SC5412. Best Column Speaker Ever Heard!** Contains 4-12" speakers specially designed for column use. Power handling peak a husky 120 watts, makes for intelligibility, dependability and low distortion. A man-size system stand 56" high, 15" wide, 7 1/2" deep. Wt. 42 1/2 lbs. 25 ft. cord, "hide-away" cord compartment, series type jack with shorting switch.

No. 49A4031. Each. **\$139.50**

### ARGOS SOUND COLUMNS

Argos Sound Columns actually "focus" sound so one column can cover an entire audience evenly. No loud spots or unintelligible areas. Ideal for churches, auditoriums, meeting rooms, outdoors, wherever sound is required. Units contain 6, or 10 special speakers arranged to provide vertical dispersion from 15 to 22 degrees and horizontal dispersion 120 degrees. Easily mounted with speedy mounting clips.

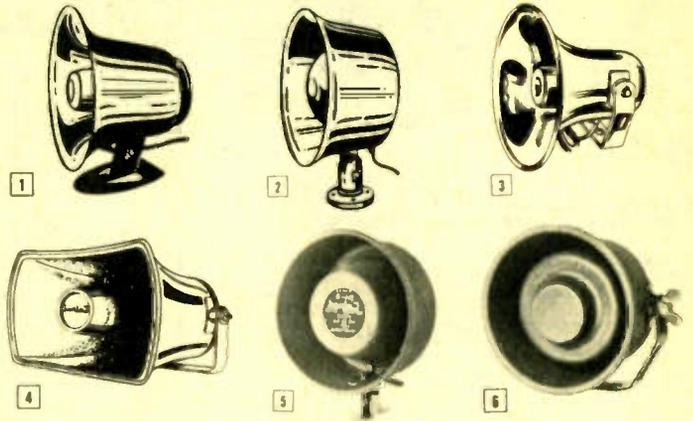
**Model SD-1060. 6-Speaker System** for voice reinforcement in rooms up to 60 ft. 30 watts power, 16 ohms. Clad in walnut wood-grained vinyl with attractive cane grill.

No. 49A4033. Shpg. wt. 10 lbs. Net Each. **\$44.50**

**Model SD-1100. 10 Speaker System** handles up to 50 watts power for voice reinforcement in rooms up to 200 ft. 16 ohms. 200 to 10,000 cps response. Walnut grain vinyl finish, cane grille. Shpg. wt. 26 1/2 lbs.

No. 49A4032. Net Each. **\$69.95**

## SPECIAL IMPORT SAVINGS ON THESE ALL PURPOSE SPEAKERS FOR INDOORS, OUTDOORS, PAGING, PA & MUSIC



### ① PAGING SPEAKER

Natural tone paging speaker for universal application. Wide angle 90° spread. Smooth frequency range, free of peaks, cuts out unintelligible lows and highs for maximum speech penetration. Weatherproof re-entrant type, for indoor or outdoor use. 180° swivel mount with screw flange. 5 watt power rating. 8 ohms. 5 inch horn opening. 5 3/8" long. With wire lead.

No. 49A4008. Shpg. wt. 2 lbs. Import Special. **\$7.95**

### ② OUTDOOR MUSIC AND PAGING HORN

Enjoy outdoor music on lawn, porch, or patio. Response to 10,000 cps. Sturdy metal bell projector horn completely weatherproofs enclosed heavy duty 5 inch cone speaker. Allows musical range not possible with reflex speakers. Swivel base and flange with wing nut. Will stand by itself for portable use. High efficiency, wide range, for good outdoor coverage. Two-tone grey 8" bell. 8 watts, 8 ohms. 5 1/8" D, 11 1/8" H. 3' wire lead.

No. 49A4005. Shpg. wt. 2 lbs. Import Special. **\$12.95**

### ③ COMPACT PAGING PA SPEAKER

Wide 120° dispersion angle, compact size with full power driver unit reflex construction. Excellent for high power paging or medium power public address applications. Provides high sound penetration with exceptional brilliance and clarity. Leave outdoors in any weather, or use indoors. Response 300-13,500 cps. Swivel U-bracket mtg., 28" wire lead. 8 watts. 8 ohms. 6" bell, 6" D. Shpg. wt. 5 lbs.

No. 49A4007. Import Special. **\$12.95**

### ④ HI-POWER OUTDOOR REFLEX SPEAKER

Rugged, high power, trumpet speaker for outdoor public address. Conservatively rated 12 watts. Will handle up to 20 watts of power. Waterproof, rustproof, shockproof. Driver is completely enclosed. Gives crisp, clear, wide-angle response even in high noise level areas. 340-7000 cps. 5x8" horn, 8" L. 8 ohms. Grey hammertone. U-bracket and wire lead.

No. 49A4006. (Less Car Mounts). Shpg. wt. 5 lbs. **\$14.95**

Import Special

### ⑤ 5 1/2-INCH WEATHERPROOF PAGING SPEAKER

Compact speaker with wide frequency range, 300 to 12,000 HZ. Perfect for Public Address, Citizens Band or music. Will fit behind grille on most cars. Has adjustable mounting bracket. Power capacity 5 watts, 8 ohms impedance. Size 5 1/2" dia. x 3" D. Shpg. wt. 1 1/2 lbs.

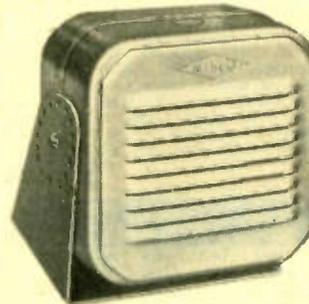
No. 49A4001. Net Each. **\$8.95**

### ⑥ MINIATURE WATERPROOF REFLEX SPEAKER

Unlimited in applications. Penetrating quality makes it ideal for CB and Ham mobile work as well as for paging where a high noise level makes the typical cone speaker ineffective. Small size, only 3 1/4" dia. and 2" deep. Yoke type mounting bracket mounts by two holes, allows over 180° vertical movement. Ideal for mounting under dash, or under hood for listening outside of car. Frequency range 400-6500 cps., handles 3 watts, impedance 8 ohms. Shpg. wt. 1 lb.

No. 49A4009. Import Special. **\$4.95**

## OUTDOOR WEATHER-PROOF SPEAKER



Same as specified for use in U.S. Atomic Submarine

**\$6<sup>95</sup>**

Virtually indestructible, weatherproof and dustproof. Ideal for outdoor extensions, patios, pools, barns, as mobile communication speaker or paging speaker. Perfect for use where corrosive atmosphere destroys other speakers. Resp. 100-10,000 cps. Stands up to 50 G's shock, up to 100 volts RMS. 3.2 ohm V.C. imp. Temperature extremes -80° F. to 160° F. Size 4x4x2 1/2" D. Shpg. wt. 3 lbs.

No. 49A4026. Special. **\$6.95**

### NEW 8-IN. "Music-Mini" OUTDOOR WEATHER-PROOF SPEAKER

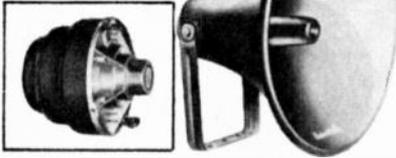
Big brother to the popular "Mini" listed above. Designed for musical reproduction as well as voice. Perfect for background music installations indoors and out. Knock-out plugs permit top or bottom mounting of a volume control if desired—other knock-out plugs permit universal transformer mounting. Connects fast and easy by terminals on back. Key slots permit quick mounting anywhere. Specifications: 9" high, 9" wide, 4 1/4" deep. Imp. 8 ohms. Freq. resp. 70 to 13,000 cps. Shpg. wt. 5 lbs.

No. 34C90. Net. **\$12.95**

# UNIVERSITY PH TRUMPET AND JENSEN 30-WATT DRIVER

BOTH FOR **\$43<sup>95</sup>**

PH TRUMPET... \$27.57  
JENSEN DRIVER \$21.00

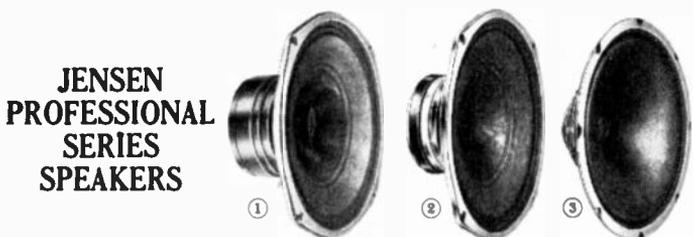


PURCHASED SEPARATELY  
WOULD COST..... **\$48.57**

PH University trumpet and 30 watt Jensen driver, an unbeatable combination for performance and reliability. Re-entrant horn provides more volume over entire range. Low frequency cut-off 150 cps. 41" air column length. 85° dispersion. 20 3/8" bell dia. 15 3/4" long less driver. Overall response 70-12,000 cps. 16 ohm impedance. Peak power 60 watts  
No. 49A144. Shpg. wt. 16 lbs. Special..... **\$43.95**

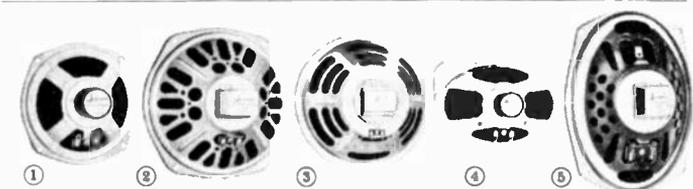
Jensen All-Weather Driver Unit Model D30. 30 watts power handling. As used in above combination. Shpg. wt. 3 1/2 lbs. **\$21.00**

No. 49A4019. Net Each  
University PH Trumpet. As used in above combination. Size 20 1/4" D. x 15 3/4" L. 85° dispersion. Shpg. wt. 11 lbs. **\$27.57**



**JENSEN PROFESSIONAL SERIES SPEAKERS**  
WITH NEW CERAMIC MAGNETS FOR DISTRIBUTED SOUND  
Provides outstanding performance with the New Synto-6 Ceramic Magnet on 8" speakers and Alnico V on 10" and 12" speakers. Gives very high speech intelligibility and music quality of modest cost. Rugged corrosion and weather-resistant construction for long trouble-free life in all indoor and protected outdoor locations. 8 ohm impedance. \*Dual voice coil windings.

Fig. No.	Stock No.	Mag. Size Oz.	Power Wt. Watts	Range Freq.	Spkr. Depth	V.C. Jensen No.	Net Wt.	Net Each	10 Lbs Each
③	34A28	8" 10.0	12	30-13M	3"	C850	2 3/8	\$7.32	\$6.59
③	34A345	8" 10.0	12	30-12M	3"	DCA850	2 1/2	7.83	7.05
③	34A29	8" 6.0	11	30-13M	2 1/2"	C840	2	6.69	5.99
③	34A344	8" 5.4	10	30-12M	2 1/2"	DCA830	1 5/8	6.51	5.86
③	34A30	8" 4.8	10	30-18M	2 1/2"	C835	1 5/8	6.21	5.59
③	34A340	8" 1.47	9	60-13M	3"	P810	1	3.63	3.27
③	34A341	8" 2.5	10	40-13M	3 1/2"	P830	1 1/4	4.83	4.35
③	34A333	12" 27.0	20	30-15M	5 1/2"	C12NC	8 1/4	33.90	.....
③	34A32	12" 6.8	14	30-15M	4 1/2"	C12RC	6	11.10	.....

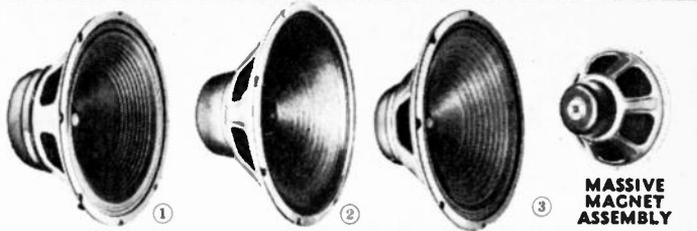


**JENSEN REPLACEMENT CONCERT & VIKING SERIES**  
Includes new sizes and magnet weight to provide a complete range of service replacement and original equipment.

Fig.	Stock No.	Size	Magnet Wt.	Power Watts	Speaker Depth	Jensen No.	Shpg. Wt.	Net Each
①	34A372	3"	.68	3.5	1 1/2"	*3K7	6 Oz.	\$2.28
①	34A373	3 1/2"	.68	4.0	1 3/4"	*35K7	6 Oz.	2.28
①	34A374	3x5"	.55	3.2	1 3/4"	*3X5K5	6 Oz.	2.39
①	34A371	4"	.68	4.5	1 7/8"	*4K7	8 Oz.	2.04
①	34A364	4"	1.47	5.0	2 1/8"	*P4V3	8 Oz.	2.94
①	34A365	4x6"	.68	4.5	1 7/8"	*4X6K7	8 Oz.	2.81
①	34A366	4x6"	1.47	5.0	2 1/8"	*P4X6V3	12 Oz.	3.60
①	34A367	4x8"	1.00	6.0	2 5/8"	*4X8W9	14 Oz.	3.41
①	34A382	5"	.55	5.5	1 7/8"	*5K5	8 Oz.	1.87
①	34A359	5"	1.47	5.5	2 1/4"	*P5V3	10 Oz.	3.09
①	34A360	5 1/2"	.68	5.5	2 1/8"	*525K7	8 Oz.	2.50
①	34A361	5x7"	1.00	6.0	2 1/2"	*5x7W3	1 Lb.	3.11
①	34A362	5x7"	1.73	8	2 1/2"	*P5x7U3	1 Lb.	4.77
①	34A363	5x7"	10.00	10	2 1/2"	*5CX7RD3	2 Lbs.	7.77
①	34A354	5x7"	1.0	6	2 1/8"	*5X7WM	1 Lb.	3.80
①	34A353	6x9"	1.0	7.5	3 3/8"	*6X9WM	1 1/4 Lbs.	3.85
①	34A350	6x9"	1.00	7.5	3 3/8"	*6X9W3	1 1/4 Lbs.	3.47
①	34A351	6x9"	1.47	7.5	3 3/4"	*P6X9V3	1 1/4 Lbs.	4.44
①	34A352	6x9"	10.00	11	3"	*6CX9RD3	2 Lbs.	10.77
①	34A348	6"	.68	6.0	2 3/8"	*6K73	10 Oz.	2.50
①	34A349	6"	4.8	7.5	2 1/2"	*C6T3	1 1/2 Lbs.	5.40
①	34A337	8"	1.00	8.0	3 1/4"	*8BW3	1 1/4 Lbs.	3.41
①	34A338	8"	2.50	10	3 3/8"	*P8T3	1 1/2 Lbs.	5.37
①	34A383	8"	10	12	3 3/8"	*C8R8	2 1/4 Lbs.	7.65
①	34A336	10"	1.73	10	4"	*10J10	2 Lbs.	5.20
①	34A334	12"	1.73	11	4 3/4"	*12J10	2 1/2 Lbs.	6.13
①	34A335	12"	4.8	12	6 1/2"	*C12T3	3 Lbs.	9.75

\*Indicates popular automotive favorites. Features both combination pin-tip jack and soldering terminals. †Multi-impedance 8-10-20-40 Ohms. ‡Dual cone. \*Indicates 3.2 ohm Imp. †Imp. indicates 8 ohms.

# JENSEN MUSICAL INSTRUMENT SPEAKERS



Highly special devices designed to give the correct musical quality required for the particular instrument; the power capability to reproduce without distortion at loud volume, and ruggedness under peak load conditions.

Features: voice coils with hi-temp enamel coatings and phenolic bobbins. Formed specially processed fibre cone material resistant to break-up. High efficiency Syntax 6 magnet.

**BASS GUITAR SPEAKERS**

Fig. No.	Stock No.	Size	Magnet Wt.	Power Wt.	Spkr. Depth	Imp. Ohms	V.C.	Jensen No.	Shpg. Wt.	Net Each
①	34A325	12"	16.0	50	6 1/4"	8	1 1/2"	EM1200	7 Lbs.	\$25.11
②	34A326	15"	27.0	60	7"	8	1 1/2"	EM1500	10 1/2 Lbs.	36.36

**GUITAR SPEAKER**

Fig. No.	Stock No.	Size	Magnet Wt.	Power Wt.	Spkr. Depth	Imp. Ohms	V.C.	Jensen No.	Shpg. Wt.	Net Each
①	34A346	8"	10.0	25	4 1/2"	8	1"	EM801	5 Lbs.	17.07
②	34A327	12"	16.0	50	6 1/4"	8	1 1/2"	EM1202	7 Lbs.	25.11
③	34A328	15"	27.0	60	7"	8	1 1/2"	EM1501	10 1/2 Lbs.	36.36

\*EM1202 and EM 1501 also Accordion Speakers.

**JENSEN GUITAR SPEAKERS**  
Guaranteed against shatter and diaphragm disintegration.

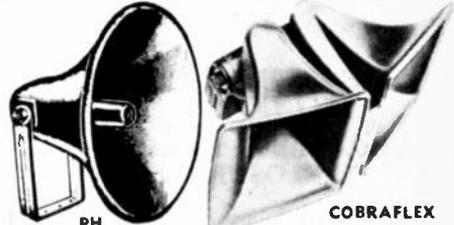
**BASS GUITAR SPEAKERS**

Fig. No.	Stock No.	Size	Magnet Wt.	Power Wt.	Spkr. Depth	Imp. Ohms	V.C.	Jensen No.	Shpg. Wt.	Net Each
①	34A385	10"	1 3/4	100	4 1/4"	8	1 1/2"	EM1020	7 1/4 Lbs.	34.50
②	34A329	12"	1 3/4	100	6 1/4"	8	1 1/2"	EM1220	8 1/2 Lbs.	38.85
③	34A330	15"	3 1/2	100	8"	8	2"	EM1520	17 1/2 Lbs.	74.97

**GUITAR SPEAKERS (Fully Instrumented)**

Fig. No.	Stock No.	Size	Magnet Wt.	Power Wt.	Spkr. Depth	Imp. Ohms	V.C.	Jensen No.	Shpg. Wt.	Net Each
①	34A384	10"	1 3/4	100	4 1/4"	8	1 1/2"	EM1050	7 1/4 Lbs.	34.50
②	34A331	12"	1 3/4	100	6 1/4"	8	1 1/2"	EM1250	8 1/2 Lbs.	38.85
③	34A332	15"	3 1/2	100	8"	8	2"	EM1550	17 1/2 Lbs.	74.97

# WEATHERPROOF TRUMPETS AND DRIVERS



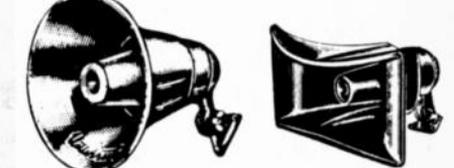
All metal reflex trumpets for deep sound penetration with a narrow sound penetration angle. Fully weatherproof.

Stock No.	Mfgs. Model	Bell Dia.	Horn Length	Low Cutoff	Dis-persion	Wt. Lbs.	Net Each
49A4012	PH	20 1/4"	15 3/4"	150 CPS	85°	11	\$27.57
49A4013	Cobraflex 2	10 1/4"	18 1/2 x 9 1/4"	200 CPS	120 x 60°	11	29.39

# UNIVERSITY'S MOST POPULAR DRIVER

49A4014 Model ID30. 30 Watts power. 85-7500 cps. V.C. 16 ohms. Shpg. wt. 3 3/4 lbs. Net Each **\$21.00**

# INTERCOM TALK-BACK AND PAGING SPEAKERS



All weatherproof, breakdown proof, designed to fit needs of indoor or outdoor systems requiring concentrated power to cover small areas with low output.

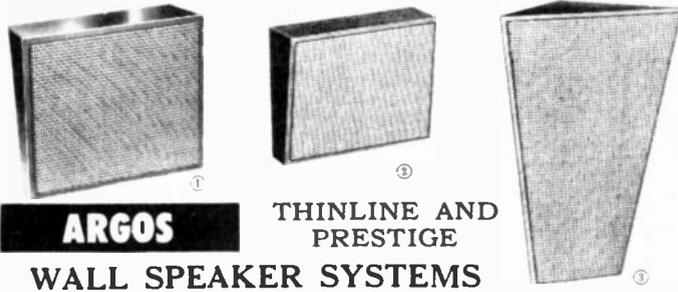
Model IB-A8. World's most widely used medium power speaker, with full 25 watts continuous duty power capacity and improved lower frequency response to 250 cps. Tropicalized, weatherproof for trouble-free lifetime operation. 90 degree wide angle dispersion. Frequency response 250-13,000 cps. Universal swivel mtg. bracket. Size 10 1/4" dia. x 9 1/4" deep. Shpg. wt. 4 lbs.  
No. 49A4015, Model IB-A8. 8 ohm voice coil. Net Each **\$23.97**

Model MIL-A8. 7.5 watt. Full range. Improved lower frequency response to 350 cps. Excellent for limited areas and filling in "dead" spots. Tropicalized, hermetically sealed. Frequency response 350-13,000 cps. 120 degree dispersion. Has universal swivel mtg. bracket. Size 7 1/4" dia. x 6 7/8" deep. Shpg. wt. 3 1/2 lbs.  
No. 49A4016, Model MIL-A8 8-ohm voice coil. Net Each **\$19.77**

No. 49A4017, Model MIL-A45 45 ohm voice coil. Net Each **\$21.90**

Model C1B-A8 25-WATT FULL RANGE. Wide angle 60° x 120° dispersion speaker with built-in hermetically sealed driver. Delivers high output with intelligibility and noise penetration. Exclusive cobra flare insures uniform 250-13,000 cps. response. Excellent "talk-back" characteristics. Steel reinforced fiberglass polyester horn gives superior acoustic qualities and resistance to physical abuse. New Omni-Lok swivel bracket directs sound where desired. Size 7 3/8" x 14" x 12". Shpg. wt. 5 1/2 lbs.  
49A4018, Madel C1B-A6 with 8 ohm voice coil. Net Each **\$28.17**

# SPEAKERS & BAFFLES TO FILL EVERY NEED



## ARGOS THINLINE AND PRESTIGE WALL SPEAKER SYSTEMS

Good looking, excellent quality. Easy to install with the exclusive Argos speedy mounting clip. Has quality 8" speaker with 1 oz. magnet that handles all low-level sound applications, such as TV, radio extensions, PA background music. 6 watts capacity, 8 ohms voice coil. Baffle is vinyl clad in your choice of walnut or blond wood grain, with cane grill cloth. Size, 9 3/4" H. x 12 1/4" W. x 4 3/8" D. Shpg. wt. 4 1/2 lbs.

No. 34B95, Model WB-108CS. Baffle with Speaker. Net Each.....\$7.95  
 No. 34B97, Model WB-108CSV. Baffle with Speaker & Volume Control.....\$10.00  
 Baffle with Speaker, Volume Control and 70.7 Volt Transformer for use in multiple speaker installations. Shpg. wt. 5 lbs.  
 No. 34B98, Model WB-108CSVT. Net Each.....\$12.35

The finest you can buy. New heavy duty 8" Jensen speaker with 6 oz. magnet has 15 watt capacity, handles both voice and music superbly, 8 ohms impedance. Fine furniture finishes in Antique Birch or Dusk Walnut. 9 3/4" H. x 11" W. x 5 3/8" D. Shpg. wt. 5 3/4 lbs.

No. 34B99, Model PB-508CS. Baffle with Speaker. Net Each.....\$11.95  
 No. 34B104, Model PB-508CSL. Baffle, Speaker & L-Pad. Net Each.....\$14.20  
 Baffle, Speaker, L-Pad and 70.7 Volt Transformer for use in multiple speaker installations. Shpg. wt. 6 1/4 lbs.  
 No. 34B105, Model PB-508CSLT. Net Each.....\$16.75

Efficient slant-front corner design aids performance because it aims sound downward and corner location increases effective air mass. Easily installed with Argos speedy mounting clips. Front clips-in. Has 8" Jensen speaker with 6 oz. ceramic magnet, handles 15 watts. 8 ohms impedance. Vinyl clad, in choice of walnut or blond finish. 18" H. x 12 1/2" W. and 6 3/4" D. at top.

No. 34A7004.SCB-2085. Shpg. wt. 6 lbs. Net Each.....\$13.95

## WALL BAFFLES PRICED SO LOW!

### DURABLE SPEAKER ENCLOSURES

- Durable walnut furniture finish.
- Beautiful lasting Saran plastic grille.
- Fine acoustic design for improved tone.

**\$2.95**



Attractive non-resonant solid 3/8" wood baffles with hot-glue locked mitre joints for strength and rigidity. Contrasting non-sag saran plastic grille. Blends easily with any surrounding. Ideal for schools, clubs, hall—any location where good sound distribution is essential.

Stk. No.	Speaker Size	High	Wide	Deep	Wt. Lbs.	Each
34B151	5"	7"	3 1/2"	3 1/2"	1 lb.	\$2.95
34B182	6"	9"	7 1/2"	3 3/4"	1 1/4 lb.	3.45
34B159	8"	10 3/4"	10"	5 1/2"	1 1/2 lb.	3.95
34B160	10"	11 3/4"	11 1/2"	6 3/4"	2 1/4 lb.	4.75
34B161	12"	13 1/2"	13 1/2"	7 1/2"	3 lb.	5.45

## HARDWOOD WALL BAFFLES



Built of solid hand rubbed furniture finished walnut or oak. Mortised and glued construction with 3/8" front panel and full 5/8" sides. Speaker mounts behind modern non-sag saran plastic grille. Strictly "at home" in the finest paneled interiors where beauty of design and decor are essential. For halls, school rooms, paging systems, wherever good sound distribution is necessary. Complete with speaker mounting hardware and wall hanger. Shpg. wts.: 8 inch, 3 lbs.; 12 inch, 6 lbs.

Stk. No.	Speaker Size	Finish	High	Wide	Deep	Net Ea.
34B244	8"	Natural Walnut	10 1/2"	10 1/4"	6 3/4"	\$6.95
34B246	8"	Natural	10 1/2"	10 1/4"	6 3/4"	6.95
34B245	12"	Natural Walnut	14 1/2"	14"	9 5/8"	8.95
34B247	12"	Natural	14 1/2"	14"	9 5/8"	8.95

## BELDEN 2-WIRE SPEAKER CABLE

Type 8782. Bare copper flexible stranded size 24 parallel conductors chrome vinyl plastic insulation. Cable diameter .25 x .115. 37 stranding

2B19. 25 Ft. ... \$0.78 100 Ft. .... \$1.73 1000 Ft. ... \$11.50



## PORTABLE SPEAKER CASE

TAKES 2-12 INCH SPEAKERS **\$19.95**

DUAL SPEAKER - AMPLIFIER CASE. For TWO 12" speakers, amplifier space of 14x16 1/4x8"; overall size, 15x17 1/2x20". Plywood leatherette covered. No. 49A4010. Wt. 13 lbs NET EACH..... \$19.95

## FLUSH MOUNTING WALL AND CEILING BAFFLES AT LOWEST COST EVER

IN PLASTIC OR METAL

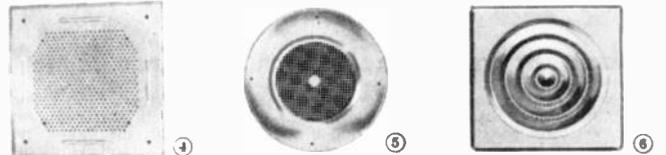


**\$1.69**      **\$2.75**      **\$1.69**

① Inexpensive 9 1/4" Diameter Brushed Aluminum Ceiling or Wall Mounting Baffle. Perfect for extension speaker or background music installations. 8" speaker mounts by two screws. Secures to wall or ceiling by two wood screws, toggle bolts or mollys. Shpg. wt. 1 lb.  
 No. 34A74. Net Each... **\$1.69** 4 @ Each... **\$1.49** 10 @ Each... **\$1.27**

② Beautiful Aluminum Ceiling Mounting Baffle with baked white enamel finish. 8" speaker mounts directly to baffle by four screws supplied. Four holes in 1/2" flange area permit mounting baffle to ceiling with wood screws, mollys or toggle bolts. 12 5/8" diameter. Ceiling hole size 8 1/2" dia. Shpg. wt. 1 lb.  
 No. 34A75. Net Each... **\$2.75** 4 @ Each... **\$2.39** 10 @ Each... **\$2.24**  
 34A227. As above in Brushed Aluminum. Net Each..... **\$3.26**  
 34A228. As above in Brushed Aluminum for 12" Speaker. Net Each. **\$4.47**

③ Round 10" Diameter Spun-Aluminum Baffle takes 8" speaker. Mounts directly to ceiling or wall by wood screws, toggle bolts or mollys. Edge has slight bevel. Shpg. wt. 1 lb.  
 No. 34A76. Net Each... **\$1.69** 4 @ Each... **\$1.49** 10 @ Each... **\$1.34**



④ Flush Mounting Wall or Ceiling Baffle. 10" square, mounts 8" speaker. Attractive brushed aluminum with beveled edges. Mounts readily with wood screws, toggle bolts or mollys. Perfect for background music systems. If desired may be painted to match any decor. Shpg. wt. 1 lb.  
 No. 34A77. Net Each... **\$2.59** 4 @ Each... **\$2.39** 10 @ Each... **\$2.29**

⑤ Similar in appearance to above Grille except is 12" Square and has 1/4" lip. Designed to replace a block of acoustical tile. To install, you need only remove block of acoustical tile and replace with this unit. Takes any 8" speaker. Brushed aluminum. Shpg. wt. 1 lb.  
 No. 34A78. Net Each... **\$2.95** 4 @ Each... **\$2.79** 10 @ Each... **\$2.54**

⑥ NEW 12 5/8" Round White High Impact Styrene Grille. Mounts any 8" speaker by self-tapping screws supplied. May be attached to wall or ceiling by wood screws, toggle bolts or mollys. Can be painted any color desired. Shpg. wt. 12 oz.  
 No. 34C96. Net Each... **\$1.65** 4 @ Each... **\$1.45** 10 @ Each... **\$1.24**

⑦ 10" Square White Plastic Grille with Concentric Spirals. Designed to add beauty as well as camouflage the speaker. Mounts any 8" speaker. Attaches to wall or ceiling by wood screws, toggle bolts or mollys. Can be painted any color desired. Shpg. wt. 1 lb.  
 No. 34A80. Net Each... **\$2.79** 4 @ Each... **\$2.65** 10 @ Each... **\$2.50**

## SPEAKER DIFFUSER GRILLES

Rigid non-rattle construction of heavy 20 gauge steel. Attractive beige finish can be used as supplied or repainted to match room decor. Designed to mount over opening after speaker is installed.

Stk. No.	Size	Each	6 @ Ea.
34A7000	6"	\$2.19	\$2.00
34A7002	8"	2.49	2.19
34A7001	10"	2.89	2.69
34A7003	12"	3.49	3.19

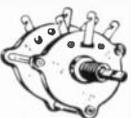
HOME OR COMMERCIAL USE      FOR WALL OR CEILING FLUSH MOUNT



## 8 OHM L-PAD AT LOW COST

For speaker volume control. Simply insert in line between amplifier and speaker to adjust speaker volume independently of other speakers in the system. 2-section wire wound ceramic insulation. Handles speaker power to 6 watts. 1/4" shaft, 3/8" long. 3/8" bushing.

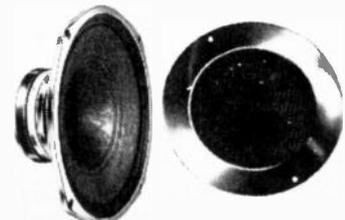
No. 14A1136. 4 For..... **\$5.00**  
 Less Knob. Special... **\$1.39**



## SAVE \$\$\$ WITH B-A'S COMBINATION OFFER

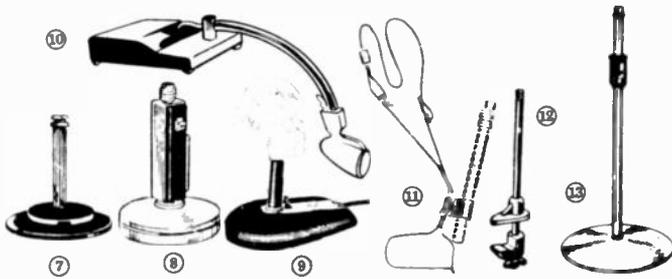
Big, heavy duty 8" speaker plus handsome brushed aluminum baffle. Ideal for background music. Handles up to 10 watts power. Buy in quantities and save... and make more on installations.

Comb. Speaker & Baffle. **\$7.90**  
 No. 49A4011  
 4 Combination Deals, Each **\$6.90**  
 8 Combination Deals, Each **\$5.90**



# MICROPHONE STANDS AND ACCESSORIES!

## DESK & BANQUET MIKE STANDS



⑦ **VALUE! CHROME-BRASS TUBE DESK STAND.** Stem 4" high, base 6" dia., padded feet, grey wrinkle finished.  $\frac{5}{8}$ "-27 thread. Wt. 2 lbs.  
 No. 29A7011, Atlas DS-5. Mfg. List \$4.45. Net Each **\$2.67**  
 ⑦ **LEADER VALUE! ADJUSTABLE DESK STAND.** Velvet action clutch adjust height 8" to 13". Chrome brass  $\frac{5}{8}$ "- $\frac{7}{8}$ " tubes. Padded, grey wrinkle 6" base. 3 lbs. Mfg. List \$7.23.  
 No. 29A7012, Atlas DS-7. Net Each **\$4.34**

⑧ **TOUCH-TO-TALK DESK STAND.** Dependable, DPDT switch action for relay control, paging, radio communications. May be locked "on", or instantly released. Chrome and gray. 7" H.,  $\frac{5}{8}$ " dia.  
 No. 29A7013, Electro-Voice 428. Mfg. List \$31.50 Net Each **\$18.90**

⑨ **"STREAMLINED" DESK STAND.** Features concealed rear cable exit and functional design. Perfect for any mike. Gun metal and chrome with rubber bumpers.  $\frac{5}{8}$ "-27 thread. Wt. 2 lbs.  
 No. 29A7014, Atlas DS-10. Mfg. List \$7.65. Net Each **\$4.59**

⑩ **SWITCHBOARD MIKE SUPPORT** for overhead mounting. Has cable feed through at mike end of 12" flexible arm. Swivel at base joint lets arm and mike swing aside. 13 lb. base, grey wrinkle enameled.  
 No. 29A3000, Atlas SB-1. Mfg. List \$21.95. Net Each **\$13.17**

⑪ **ATLAS "CHESTY" MIKE SUPPORT.** Hangs around neck on lavalier card. Wire frame and flexible gooseneck hold mike—no hands!  
 No. 29A3002, Atlas NS-1. Mfg. List \$8.05. Net Each **\$4.83**

⑫ **CLAMP-ON BRACKET.** Holds securely on flat surface 2" thick or less. Chrome 6" long tube,  $\frac{5}{8}$ "-27 thread. Wt. 2 lbs.  
 No. 29A3018, Atlas BC-1. Mfg. List \$5.00. Net Each **\$3.00**

⑬ **NEW DELUXE BANQUET STAND.** Adjustable height 14 $\frac{1}{2}$ " to 26". Super chrome  $\frac{5}{8}$ "- $\frac{7}{8}$ " brass tubes. New full chrome low silhouette base of trim modern design. Wt. 5 $\frac{1}{2}$  lbs.  
 No. 29A7005, Atlas TS-8. Mfg. List \$13.35. Net Each **\$8.01**



## $\frac{5}{8}$ "-27 MIKE MOUNTING ACCESSORIES ALL CHROME PLATED

Fig.	Stock No.	Description	Net Each
①	29A3004	6" Flexible Goose Neck	\$1.59
①	29A3005	13" Flexible Goose Neck	2.09
①	29A3006	19" Flexible Goose Neck	3.00
②	29A3007	4 $\frac{1}{2}$ " Swivel Adaptor	4.01
②	29A3008	Snap-on Mike to Stand Adaptor	2.34
②	29A3001	Lack on Mike-to-stand Adaptor with thumb release	2.84
③	29A3009	Shack Absorber Adaptor	2.40
④	29A3010	Cable Hanger for stand	2.10
⑤	29A3011	Male Flange 1 $\frac{1}{4}$ " diameter	.80
⑥	29A3012	Female Flange 1 $\frac{1}{4}$ " diameter	.80
⑦	29A3013	Threaded Nipple $\frac{3}{4}$ " L.	.44
⑧	29A3014	Female Threaded Coupling	.59
⑨	29A3015	3" L. Extension Tube	.74
⑩	29A3016	6" L. Extension Tube	.74
⑪	29A3017	Right Angle Bend	1.25

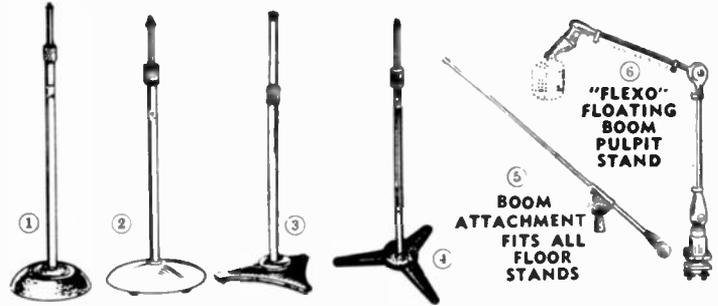
## SWITCHCRAFT TRANSISTORIZED MIXERS

MIXES MICROPHONES  
OR PHONO INPUTS



4-channel high impedance stereo-monaural mixer featuring built-in transistor amplifier in each of two stereo channels with individual gain controls on each input. "Stereo-Mono" switch allows all 4 inputs to be used monaurally. Amplifier powered by 9 volt battery (included) overcomes usual loss encountered in resistance type mixers and provides a 6 db gain. Low noise level, low distortion, frequency response 20 to 20,000 cps. Inputs are phone jacks, phono jacks output. Modern styling with tan finish, brown knobs with gold metallic inserts. Size 6" L. x 2 $\frac{3}{4}$ " H. x 3 $\frac{1}{2}$ " D. Rubber mounting feet. Shpg. wt. 3 lbs.  
 No. 29A115. Model 306TR. Stereo Monaural Mixer. Net Each **\$24.00**  
 Transistorized Monaural Mixer. Same as above except single transistor amplifier and 4 inputs for monaural use only.  
 No. 29A3019, Model 301TR. Monaural Mixer. Net Each **\$19.50**

## MIKE FLOOR STANDS AND BOOMS



① **B-A LEADER VALUE FLOOR STAND.** A top-notch quality stand with heavy high-gloss double chrome plated Brass Tubes. Easily adjustable from 35" to 63" in height by simple, damage-proof one-hand clutch, without mar or scratch on the chrome tubes! Weighted 10" dia. base is finished in baked wrinkle enamel, has pads to prevent floor mars. Clean  $\frac{5}{8}$ "-27 threads.  
 No. 29A7003, Leader Value Floor Stand. Wt. 10 lbs. Net Each **\$8.16**

### ATLAS "VELVET ACTION" MICROPHONE STANDS

No Slipping — No Rattle — No Noise — No Scratching — No Wear  
 Feature full Grip, jam-proof clutch for easy height adjustment, functionally designed "Anti-tip" bases with chrome cover or scuff-proof baked on grey wrinkle finish, and life-time super chrome plated tube assemblies. MS11C uses  $\frac{7}{8}$ " and  $\frac{5}{8}$ " tube; MS-20 and MS-25, 1 $\frac{1}{8}$ " and  $\frac{7}{8}$ " tube. MS-25 has controlled "air lock" cushion for extra quiet collapse of stand. All have  $\frac{5}{8}$ "-27 top thread. MS-11C, MS-14G and MS-20 have new low profile bases.

Stk. No.	Model	Height	Weight	Base	Net Each
①	29A7006	MS-11C	34" to 62"	13 lbs.	10" Chrome \$10.67
②	29A7001	MS-20	37" to 66"	15 lbs.	12" Wrinkle 13.34
③	29A7002	MS-25	38" to 67"	22 lbs.	17" Wrinkle 21.66

③ Gold Floor Stand. Same size as MS-11C above.  
 No. 29A7007, Model MS-14G. Wt. 13 lbs. Mfg. List \$22.50. Net Ea. **\$13.50**

④ **DELUXE "THREE-LEGGED" FLOOR STAND.** Heavy cast iron base padded on each leg. 15" dia. Very stable and more convenient to use since base allows "too room". Demountable 2-section gun metal grey wrinkle base, full chrome stem, 34" to 62" height. Shpa. wt. 9 lbs.  
 No. 29A7004, Atlas CS-52. Mfg. List \$15.55. Net Each **\$9.33**

⑤ **BOOM ATTACHMENT.** An extremely versatile device to center mike over best pickup area. Can be attached to any stand having  $\frac{5}{8}$ "-27 thread. Ideal for piano and similar pickup where obstacles make regular mike stand impossible to use. All swivel parts are die-cast resulting in smooth operation and secure latching positions. 32 inch boom is chrome plated. Wt. 3 $\frac{1}{2}$  lbs.  
 No. 29A7009 Atlas BB-1. Mfg. List \$10.83. Net Each **\$6.49**

⑥ **"FLEXO" MIKESTER Clamp-On Desk or Pulpit Boom Stand.** Has universally adjustable spring controlled floating arms. Clamps to any desk or pulpit, positions microphone in 36" arc in any direction—the BEST Pulpit or Desk Stand! Weight, 6 lbs.  
 No. 29A7010, "FLEXO" MIKESTER Pulpit or Desk Stand. Net Ea. **\$11.97**



## SWITCHCRAFT STUDIO "MIX-MASTER" **\$8700**

Highly versatile transistorized amplifier-mixer for top quality professional PA, recording or studio mixing of four monaural or stereo program sources such as microphones, magnetic phono cartridges, tuners or tape recorders in any combination. Two of the 4 inputs are equalized for stereo or monaural magnetic phono cartridges. Has separate level controls for each channel and master gain control. Amplifies signals to 1 volt line level. In stereo mode, input signals 1 and 2 are mixed for left channel, inputs 3 and 4 are mixed for right channel. Operates with all mikes 50 ohms or higher impedance, balanced or unbalanced. Output is high impedance 50,000 ohms or higher. Response  $\pm 0.5$  db. 20 HZ to 20,000 HZ. Requires 2 "D" cells for power. Has front panel battery voltage indicator. In professional metal cabinet, size 12 x 7 x 2 $\frac{3}{4}$ " H. Shpg. wt. 6 lbs.  
 No. 29A3003 Model 307TR. Battery Powered. Net Each **\$87.00**

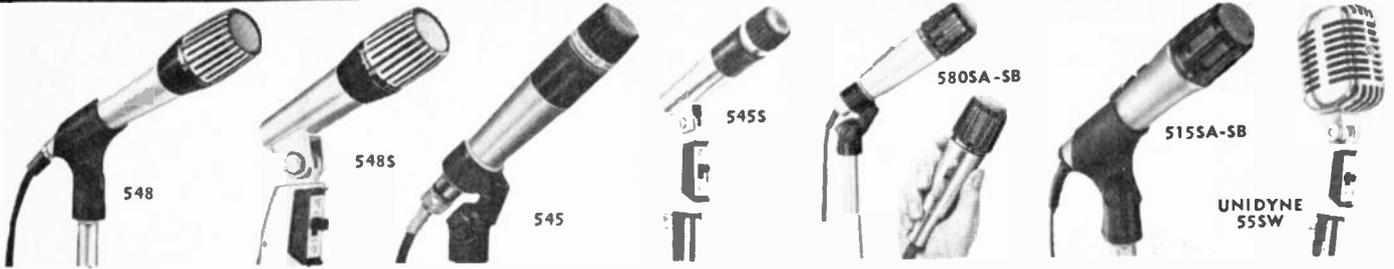
All input jacks are standard  $\frac{1}{4}$ " dia. two-conductor phone jacks. Output, standard phono jacks. Adaptable to all other standard connectors using Switchcraft mike plug adaptors on page 125.

### NEW AC POWERED STUDIO MIX-MASTER

Four channel, portable solid-state amplifier-mixer for use with microphones, electronic musical instruments, tape recorders and phonographs. Features 4 unbalanced microphone inputs for high or low impedance mikes, 4 auxiliary line level inputs, 2 magnetic phono inputs with equalization switches. Has 4 separate level controls and 1 master gain control. Accepts 1 to 4 mono or 2 stereo input signals. Input jacks are standard  $\frac{1}{4}$ " phone jacks, outputs standard phono jacks. Output up to 4 volts into high or low impedance load. Low impedance output accommodates up to 2000' of cable without loss in frequency response. Extremely flat response 20 Hz to 20K Hz. Voltage gain 20 db. Operates on 117 V. AC 60 Hz. Size 12 x 7 $\frac{1}{2}$  x 3 $\frac{1}{2}$ " H.  
 No. 29A3036 Model 308TR. AC Powered. Net Each **\$96.00**

# SHURE

# FINE QUALITY MICROPHONES



## HIGH PERFORMANCE UNIDYNE CARDIOID DYNAMIC MICROPHONES

Shure Cardioid microphones are uni-directional. They pick up sound mainly from the front, while suppressing sound and noise coming from the back. Allows user to work farther away from microphone and greatly reduces

"room" noises, audience noises and reverberation. Provides 70% reduction of background sound and noise over the entire usable audio spectrum.

### NEW! MODEL 548 UNIDYNE IV

The ultimate for PA entertainment. For hand or stand usage. Includes swivel adapter. An ultra high quality, super rugged microphone with an unusually effective Cardioid pickup pattern. Response 40-15,000 Hz. Dual impedance, high and low. Hi-Z output —55 db; Lo-Z —57 db. Size: With 15 ft. 2-cord shielded cable and XLR-3-11C connector on microphone end. Shpg. wt. 3 lbs.

No. 29A612. Chrome 548 with stand adapter. Net Each **\$63.00**

Model 548S. Has switch and chrome swivel stand adapter. Not for hand-held use. Otherwise same as 548 above. Net Each **\$66.00**

No. 29A613. Shpg. wt. 3 lbs. Net Each **\$66.00**

### 545 SERIES UNIDYNE III

Approaches the theoretical ideal Cardioid pickup pattern at all frequencies, providing extended range music and speech pickup for highest quality professional PA and recording. Response 50-15,000 cps. Output —55 db. Dual high or low impedance. 545S has swivel stand mount; 545 slips out of mount for hand-held use. 1-1/8" dia., 5-7/8" lg. 18 ft. detachable cable. Shpg. wt. 3 lbs.

No. 29A208. Satin Chrome 545 (less stand). Net Each **\$53.40**

No. 29A366. Black 533B Desk Stand. Net Each **\$ 9.60**

No. 29B235. Satin Chrome 545S, with Switch. Net Each **\$56.40**

### NEW MODEL 515SA-SB UNIDYNE

For better PA entertainment and improved home recording. Slips out of stand swivel mount for hand-held use. Response 50-11,000 cps. Hi-Z output, —56.5 db; Low-Z, —57 db. Satin chrome. Size: 6-3/8"x1-3/4" dia. 15 ft. attached cable and switch. Wt. 3 lbs.

No. 29B214. Model 580SA. High Impedance. Net Each **\$37.20**

No. 29A614. Model 580SB. Low Impedance. Net Each **\$37.20**

### NEW MODEL 515SA-SB UNIDYNE "B"

Lowest cost Unidyne ever! Excellent choice for PA where budget is prime consideration. Has feedback suppression and symmetrical cardioid pattern features that have made Unidyne world famous. For stand or hand. Size: 6-7/8"x1-1/2" dia. With 15 ft. attached cable, built-in switch and swivel adapter. Response 80-13,000 cps. Shpg. wt. 2 lbs. Hi-Z output —58 db; Lo-Z —59.5 db.

No. 29A615. Model 515SA. High Impedance. Net Each **\$25.20**

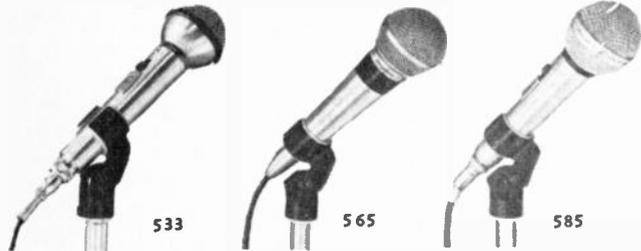
No. 29A616. Model 515SB. Low Impedance. Net Each **\$25.20**

### 55 SERIES UNIDYNE II

Famous for dependable indoor and outdoor service in regular or rugged duty. Response 50-15,000 cps. Output —55 db. Selectable 35-50, 150-250 or high impedance. Tilt head, detachable 18 ft. cable. Size: 7-3/8"x2-3/4"x3-1/4" D. Wt. 3 lbs.

No. 29A207. Satin Chrome Model 55S. Net Each **\$52.20**

No. 29B241. Satin Chrome Model 55SW, with Switch. Net Each **\$53.40**



## SHURE "UNISPHERE" MICROPHONES

These rugged new dynamic microphones are recommended for entertainers, interviewers, singing groups, etc. Spherical screen prevents pop, blast and wind noise. Adaptable to hand or stand use. 533 and 585 have on-off switch and 15 ft. detachable cable. 565 has dual impedance and 18 ft. detachable cable. New 533SAV, 585SAV and 585SBV have built-in volume control on the microphone to permit user to change loudness of the PA system at the microphone location. Satin chrome finish, black trim and black swivel 3/8"-27 stand adaptor. Low impedance types are recommended where long mike cables are to be used. Use A95A transformer at right for matching low impedance mikes to high impedance amplifier input. Average size 6 1/2", approx. 2" dia. Wt. 2 lbs.

Stock No.	Shure Type	Pickup Pattern	Impedance Ohms	Response Cps.	Output Level	Net Each
29B215	533SA	Omnidirectional	High	40-11,000	—55 db.	\$31.80
29B216	533SB	Omnidirectional	Low	40-11,000	—55.5 db.	31.80
29B217	585SA	Cardioid	High	50-12,000	—59 db.	40.80
29B218	585SB	Cardioid	Low	50-12,000	—58 db.	37.20
29A602	585SAV	Cardioid	High	50-15,000	—56.5 db.	45.60
29A603	585SBV	Cardioid	Low	50-15,000	—57 db.	45.60
29B221	565	Cardioid	Hi or Low	50-15,000	—55 db.	60.00
29A617	533SAV	Omnidirectional	High	40-11,000	—55 db.	36.00

## CABLE TYPE MICROPHONE TRANSFORMERS COMPLETE WITH MATING CONNECTORS



A high quality transformer which makes it possible to convert a low impedance microphone to a high impedance amplifier input. Solves problems of excessive high frequency loss and objectionable hum when long lengths of cable are used. Transformer size: 3/4" dia. x 2 1/2" long. Most commonly used to match low impedance mike to high impedance, but also usable for high impedance mike to low impedance amplifier.

Model A95A. XL-3-11 input and MCIF high impedance output. Mating plug supplied. Net Each **\$11.40**

Model A95P. XL-3-11 input with mating connector supplied. High impedance output terminates in permanently attached phone plug with locking ring. Net Each **\$12.60**

No. 29A361. Net Each **\$11.40**

No. 29A3035. Net Each **\$12.60**



## NEW SHURE BALL-TYPE MICROPHONES EVERY NEEDED FEATURE FOR HAND OR STAND USE

588 Series. Feedback-free cardioid pickup pattern, shock-mounted cartridge, wind, pop and blast filters, lockable On-Off switch, broadcast-type Cannon connector. 15 ft. single conductor detachable cable. Includes swivel stand adaptor. 6 1/2" x 2" dia. Wt. 1 1/2 lbs. \*588SAC has prewired 1/4" phone plug on cable end; others, less plug.

579SB. Extremely rugged. Ideal choice for high quality PA, entertaining, recording and studio applications. 20 ft. 2-cond. detachable cable, Cannon connector, lockable On-Off switch.

Stock No.	Shure Type	Pickup Pattern	Imped. Ohms	Response Hz	Output Level	Net Each
29A633	588SA	Cardioid	High	50-13,000	—59.5 db.	\$36.00
29A635	588SB	Cardioid	Low	50-13,000	—59.5 db.	36.00
29A634	*588SAC	Cardioid	High	50-13,000	—59.5 db.	37.20
29A636	579SB	Omnidirectional	Low	50-15,000	—59 db.	45.00

570S size 3 1/2" x 1 1/2" D. High or low imp. 570S size 3/4" dia., has on-off switch, response 50-12,000 cps. 50-250 ohm imp. Attached light weight cables.

Stock No.	Shure No.	Output Level	Cable Length	Net Each
29B268	560	—56.5 db.	18 ft.	\$27.00
29B269	570S	—59 db.	30 Ft.	66.00

## SHURE LAVALIER MICROPHONES

Rugged dynamic mikes having frequency response specially engineered for lavalier use. 560 size 3 1/2" x 1 1/2" D. High or low imp. 570S size 3/4" dia., has on-off switch, response 50-12,000 cps. 50-250 ohm imp. Attached light weight cables.

## CARDIOID DYNAMIC COMMUNICATIONS MICROPHONE

**\$39<sup>60</sup>**

- Noise Suppressing
- Uni-Directional
- Press-To-Talk
- Adjustable Height



Problem-solving paging and communications microphone. Reduces noise pickup. Provides utmost voice intelligibility. Adjustable 9 3/4" to 12 1/2" H. Tough Armo-Dur base and case. Dual high or low impedance. Locking or non-locking push bar for relay and microphone. 7 ft. cord cable. Shpg. wt. 2 lbs.

No. 29A618. Net Each **\$39.60**

# Electro-Voice MICROPHONES FOR EVERY PURPOSE



**ELECTRO-VOICE  
FAMOUS  
DYNAMIC  
MODEL 664**

"VARIABLE D" CARDIOID

**POPULAR CHOICE  
FOR PERFORMANCE  
RUGGEDNESS &  
VERSATILITY**



418 DESK STAND

Carrying Case

Especially recommended for PA service; churches, schools, clubs, recording, communications—truly the work horse of the microphone field.

Has Cardioid directional pattern at all frequencies. Built to take rough treatment, yet a superb performer sounding smooth and natural on voice and music. Response 60-15,000 Hz. —58 db output. Has on-off switch, 16 ft. detachable cable. High impedance or 150 ohm low impedance by moving one wire in connector. 1 7/8" max. dia. 7 1/3" lg. Wt. 26 oz. Mfg. List \$89.00.

- No. 29A200. Satin Chrome Choice **\$53.40**
- No. 29B191. Non-Ref. Grey Each
- No. 29B192. Gold Finished Model 664. Mfg. List \$94.50 **\$56.70**
- Net Each
- Matching Desk Stands Model 418 for 664, 674, 644, 623 and 630 **\$8.10**
- No. 29A408. Model 418. Grey. Net Each
- No. 29B193. Model 418C. Gold. Net Each **\$10.20**

## MODEL 674 CARDIOID DYNAMIC

Newest of the EV "Continuously Variable D" microphones. Excellent choice for entertainers, for voice and music. Will take rough handling. Highly acclaimed because of its outstanding performance and extremely uniform pickup pattern at all frequencies. Has highest rejection of unwanted sound from rear and sides. A three position control selects degree of low-frequency attenuation to overcome feedback and rumble. High or low impedance by changing one pin in connector. Response 60-15,000 Hz. Output —57 db. Has on/off switch in swivel mount for 5/8"-27 stand. Satin chrome. Size 7 7/8" long, 1" to 1 1/4" dia. Detachable 16 ft. cable. Wt. 1 lb.

- No. 29B204. Mfg. List \$89.00. Net Each **\$53.40**

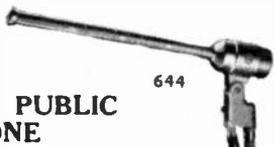
## MODEL 676 CARDIOID - "CONTINUOUSLY VARIABLE"

Rejects side and rear pickup at all frequencies. Has 3-position rumble filter. Finest choice for professional PA, clubs, churches and recording. Response 60-15,000 cps. Output —57 db. Impedance Hi-Z and 150 ohms. Detachable 16 ft. cable. On-off switch, swivel 5/8"-27 slip-in adaptor allowing hand or stand use. Satin chrome finish. Mfg. List \$89.00.

- No. 29B256. Satin Chrome. Choice **\$53.40**
- No. 29B195. Non-Ref. Grey. Each
- Gold Finished Model 676 **\$56.70**
- No. 29B199. Mfg. List \$94.50. Net Each
- Matching Desk Stands for 676 (Inset). Has swivel 1" dia. slip-in adaptor.
- No. 29B189—Model 420. Grey. Mfg. List \$21.00. **\$12.60**
- Net Each
- No. 29B179—Model 420G. Gold. Mfg. List \$27.50. Net Each **\$16.50**

# Electro-Voice

## MODEL 644 DIRECTIONAL PUBLIC ADDRESS MICROPHONE



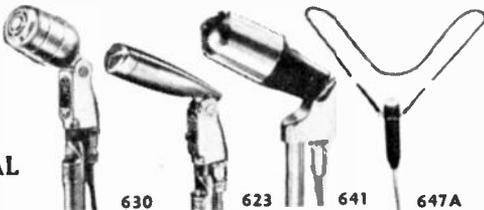
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MODEL 644 SOUND SPOT DYNAMIC—Most directional PA microphone yet! Has farthest front pickup, better than 2.5 times that of non-directional types, yet works close-up, too. Range 40-10,000 cps. High output, —53 db. Dual high or low impedance. Satin chrome. 3/4" dia., 16" long extension tube. Rear dia. 2 1/4". 16 ft. detachable cable. On-off switch swivel stand mounting. 41 ozs. Fits Desk stand Model 418 above.

- No. 29A198. Mfg. List \$115.50. Net Each **\$69.30**

# Electro-Voice

## NON-DIRECTIONAL MICROPHONES



630 623 641 647A

Fine general purpose mikes for paging, communications, home recording. Features uniform pickup from all directions and "Accoustalloy" diaphragm for wide range, blast-proof long-life operation. 630, 623 and 641 have on-off switch, 18 ft. detachable cable, swivel 5/8"-27 mounting.

647A is supplied with lavalier neck cord, belt clip and 5/8"-27 stand swivel mount. Quickly removable for hand use. With 18 ft. attached cable. 3/4" dia. 3 3/8" long. Wt. 2 ozs.

Stock No.	E-V Type	Type Element	Response Hz	Output Level	Mfg. List	Net Each
29A196	630	Dynamic, Hi Imped.	60-11,000	-55 db.	\$55.00	\$33.00
29A194	623	Dynamic, Hi or Low	60-12,000	-56 db.	60.00	36.00
29A637	641	Dynamic, Hi Imped.	70-10,000	-57 db.	41.50	24.90
29A638	641	Dynamic, Low Imped.	70-10,000	-57 db.	41.50	24.90
29A639	647A	Dynamic, Hi Imped.	60-12,000	-60 db.	86.50	\$1.90
29A640	647A	Dynamic, 150 Ohms	60-12,000	-60 db.	86.50	\$1.90

## EV MUSIC MAKER MICROPHONES MODEL 627 CARDIOID FOR HAND AND STAND

A true Cardioid dynamic microphone. Features single direction pickup. Has fast action adaptor for stand. Made for entertainers who like to work "close up." Has smooth, peak-free response, shaped for presence. Emphasizes low frequencies when used close up. Has built-in pop and dust filter, on/off switch, satin chrome finish. Response 80-11,000 Hz. Output —58 db. Size 6 7/8", 1 5/8" dia. 3/4" shank. Wt. 1 lb. Complete with 16 ft. detachable cable, no plug. Mfg. List \$63.00.

- No. 29B203—High Impedance Model 627. YOUR CHOICE **\$37.80**
- No. 29A622—Low Impedance Model 627. EACH

## MODEL 627PC—MIKE IN CARRYING CASE

Complete entertainer's outfit. High impedance microphone and cable with phone plug attached, ready to use. Fitted molded carrying case cushions mike, protects it during travel. Has space for cable. Shpg. wt. 2 lbs.

- No. 29A623. Mfg. List \$70.00. Net Each **\$42.00**

## MODEL 631 OMNIDIRECTIONAL HAND AND STAND MICROPHONE

A versatile, lightweight, rugged and shock-proof entertainer's microphone. Effective 4-stage filter allows use close up without blasting, pops or distortion. Unique silent magnetic on/off switch actuator may be removed leaving microphone "on." Response 80-13,000 Hz. Output —55 db. Satin chrome 6" long, 1 3/8" dia. with 1" dia. shank. Wt. 1 lb. Complete with 16 ft. detachable cable, no plug. Mfg. List \$63.00.

- No. 29A619—High Impedance Model 631. YOUR CHOICE **\$37.80**
- No. 29A620—Low Impedance Model 631. EACH

## MODEL 631PC—MIKE IN CARRYING CASE

Complete entertainer's outfit. High impedance microphone and cable with phone plug attached, ready to use. Fitted molded carrying case cushions mike, protects it during travel. Has space for cable. Wt. 2 lbs.

- No. 29A621. Mfg. List \$70.00. Net Each **\$42.00**

# Electro-Voice PROFESSIONAL MICROPHONES BROADCAST, PA, RECORDING



RE55

635A

RE10

RE15

## OMNIDIRECTIONAL PICKUP

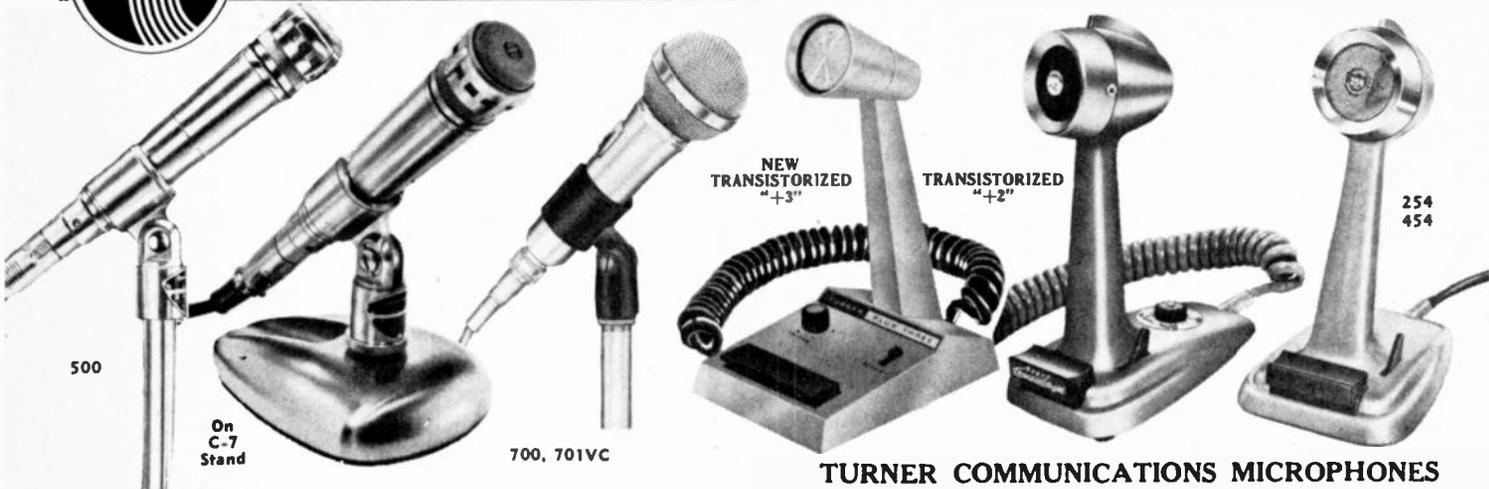
## CARDIOID UNIDIRECTIONAL

635A. Most popular professional quality performers' microphone. Exceptionally good for close-in pickup. Has pop and breath blast filter. RE55. Favorite of the high quality professional EV line. For close instrument miking, audience and interview use, on-the-spot news, etc. RE10. Similar to RE15 below, with slightly less rigid performance tolerances. Matte satin nickel finish, black grille and backbone. RE15. Highest quality super cardioid. Has maximum off-axis rejection at 150° from front. Uniform polar pattern all frequencies. Matte satin nickel finish. All supplied with swivel stand mount, Cannon XLR3 connector and 18 ft. 2-cond. shielded broadcast cable. Wt. less cable approx. 8 ozs.

Stock No.	E-V Type	Pickup Pattern	Response Hz	Imp. Ohms	Output Level	Mfg. List	Net Each
29A641	635A	Omnidirectional	80-13,000	150	-55 db.	\$ 82.00	\$ 49.20
29A642	RE55	Omnidirectional	40-20,000	150	-55 db.	210.00	126.00
29A643	RE10	Unidirectional	80-13,000	150	-55 db.	150.00	90.00
29A644	RE15	Unidirectional	80-15,000	150	-56 db.	255.00	153.00



# TURNER AND ASTATIC MICROPHONES



500

On C-7 Stand

700, 701VC

NEW TRANSISTORIZED "+3"

TRANSISTORIZED "+2"

254 454

## TURNER UNI-DIRECTIONAL DYNAMIC MIKES

**MODEL S-500 CARDIOID.** Outstanding performer everywhere because of technical uniformity, near perfect cardioid pickup and frequency response. "Live" at front, "dead" to sounds from rear, allows close up or moving about with great freedom. Cures feedback problems. Response 40-15,000 cps. High or low impedance selection. Output, high —55 db; 150 ohms, —79 db. Professional Canon XLR 4 pin connector, 20 ft. cable. Very outstanding mechanical and appearance design. Shock mounted for severe service. Withstands extremes of temperature and humidity. Slips from 3/8"-27 tilt stand adaptor for hand held use. Satin chrome, 1 1/2 dia., 6 1/2" lg. Stand illustrated not supplied. Shpg. wt. 3 lbs. No. 29B319. Model S-500 with On/Off Switch. Mfg. List \$94.00. **Net Each \$56.40**

### GOLD FINISHED MODEL 500

Very popular for church installations. Specifications as above. No. 29B303. S500G. Mfg. List \$110.00. **Net Each \$66.00**  
No. 29B300. Chrome C-7 Stand. **Net Each \$5.70**  
No. 29B301. Gold C-7 Stand. **Net Each \$5.70**

**PROFESSIONAL BALL TYPE CARDIOID.** Style and sound for the professional entertainer! For hand or stand. Features true uni-directional cardioid pickup pattern, pop-blast filter, built-in broadcast wind filter and a high quality, dual high-low impedance interior capable of withstanding heavy usage. Response 40-15,000 Hz. Output —55 db. Professional 4 pin Cannon connector on mike with 20 ft. cable. Shpg. wt. 3 lbs. No. 29A624. Model 700. With Switch. Mfg. List \$92.00. **Each \$55.20**

**ENTERTAINER'S CARDIOID WITH VOLUME CONTROL.** For high quality PA or recording. Has high quality dynamic interior with pop-blast filter. Features built-in volume control. High impedance response 100-13,000 Hz. Output —55 db. Detachable 20 ft. cable has phone plug attached. Shpg. wt. 3 lbs. No. 29A625. Model 701 VC. **Net Each \$45.00**  
Mfg. List. \$75.00.



35

S2850



## NEW TURNER MINIATURE MICROPHONES

**MODEL 35 PROFESSIONAL LAVALIER—OMNI-DIRECTIONAL,** very high quality dynamic microphone for professional PA or recording applications. Features small size, 3/4" dia., 3" long. Wt. 12 oz. with attached 25 ft. 3-cord cable. High or 150 ohm low impedance selected at end of cable. Response: 70-10,000 Hz. Output —61 db. Desert Gold finished. No. 29A626. With Lavalier Neck Cord. **Net Each \$39.00**  
Mfg. List \$65.00.

**MODEL S2850 CARDIOID DYNAMIC.** Directional, multi-purpose dynamic for tape recorder use, lectern, PA, etc. Response 70-10,000 Hz. Rear sound pickup reduced 15 db. over most of range. Output —64 db. at high impedance. Choice of high or 150-ohm low impedance selected at end of 12 ft. cable. Size 1 1/2"x6" long. With Off-On switch, Lavalier cord and swivel stand adaptor. Shpg. wt. 1 1/2 lbs. No. 29A627. Mfg. List \$40.00. **Net Each \$24.00**



Turner

Astatic

## ASTATIC AND TURNER MICROPHONE CARTRIDGES

Like new performance for old mikes. Easily installed. Fit models listed exactly. Easily adapted to many others.

Stk. No.	Manufacturer	Type	Fits Mikes	Net Each
29A396	Astatic	MC-151 Crystal	JT30, T3	\$4.20
29A397	Astatic	MC-127 Ceramic	JT30, T3	4.20
29A398	Astatic	MC-320 Crystal	D-104	5.70
29A399	Astatic	MC-321 Ceramic	D-104, D-104C	4.20
29A400	Astatic	MC-563 Dynamic	10D	9.90
29A383	Turner	13C Dynamic	9D, 33D, 2" D. x 7/8"	6.60
29A385	Turner	23 Crystal	80, 95X, 3 1/2" D. x 1 1/2"	4.80
29B292	Turner	21A Crystal	350X, 254X, 1 1/2" D. x 1/2"	3.90
29B293	Turner	21C Ceramic	350C, 254C, 1 1/2" D. x 1/2"	3.90
29B313	Turner	27 Crystal	454X	3.90

## TURNER COMMUNICATIONS MICROPHONES

**NEW "+3" TRANSISTOR AMPLIFIED BASE STATION MICROPHONE.** Bold new styling, new compression amplifier circuit and exclusive new ceramic interior design make the "+3" the finest, most professional base station microphone offered. Allows user to talk close up or far from mike without varying output signal. Response 300-3,000 Hz. for voice clarity. Has slide lock switch, touch bar, volume control, 3 conductor coiled cord. Blue gun metal and chrome. With wiring instructions for more than 100 popular transceivers. Shpg. wt. 3 lbs. No. 29A645 Model +3. Mfg. List \$75.00. **Net Each \$45.00**

**+2 TRANSISTOR AMPLIFIED BASE STATION MICROPHONE WITH VARIABLE OUTPUT LEVEL.** Puts the zip back into your CB set and keeps it up to full strength. Features a two transistor preamp with volume control—gives up to 50 times the output level you now have. Just dial your desired signal for maximum modulation all the time. You can even work close or far away from the microphone or change the output for a big or little voice. Has tailored frequency response 300-3500 cps., exclusive touch-to-talk and lock on-off switching. Works with all tube or transistor sets. Blue and chrome finished. Attached coiled cord. Shpg. wt. 3 1/2 lbs. No. 29B295. Mfg. List \$55.00. **Net Each \$33.00**

### DESK MIKES FOR BASE STATION OR PAGING

Most popular microphone made for desk use. Operates by touch bar on-off switch, or lever lock switch. Comes with 7 ft. cable wired for relay control. Response 100-8000 cps. Deluxe light grey hammertone and chrome finish. 7 3/4" H., 5 1/2"x5" base. Mfg. list \$29.00. Shpg. wt. 3 lbs. No. 29B285. Model 254X. Crystal. Output —48 db. **Net Each \$17.40**  
No. 29B286. Model 254C. Ceramic. Output —54 db. **Net Each \$17.40**

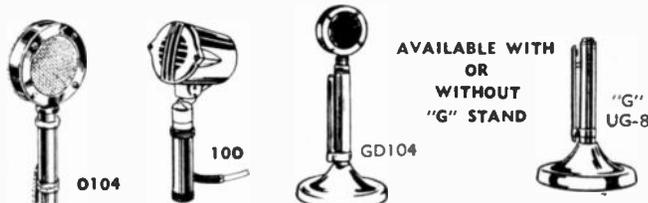
### "SINGLE SIDEBAND" DESK MIKE

Specially tailored voice response for maximum communications intelligibility. Response 300-3,000 cps. Operates by touch bar on-off switch, lever lock switch or VOX, in relay controlled circuits. Lustrous black and chrome. Size as above. Mfg. List \$32.00. Shpg. wt. 3 lbs. No. 29B380. Model 454X. Crystal. Output —48 db. **Net Each \$19.20**  
No. 29B379. Model 454C. Ceramic. Output —52 db. **Net Each \$19.20**

### M+2 TRANSISTOR AMPLIFIED MOBILE MIKE WITH VOLUME CONTROL

Adds range to CB mobiles because of full voice power. Has built-in 2 transistor pre-amp with volume control that lets you adjust your modulation for the best performance. Has tailored frequency response, 350-3500 cps. press-to-talk switch, 5 ft. coiled cord. Internal transistor amplifier takes power from internal battery. Mfg. List \$39.50. Wt. 2 lbs. No. 29B276. Model M+2U. Wired for relay switching. Choice No. 29A607. Model J-M+2U. Wired for electronic switching. **Net Each \$23.70**

## ASTATIC HAM MICROPHONES



0104

100

GD104

UG-8

AVAILABLE WITH OR WITHOUT "G" STAND

Specially tailored frequency response gives "punchy" high intelligibility on crowded bands. Chrome adaptor furnished with 5 ft. cable permits use with any 3/8"-27 stand with cord outside of adaptor as illustrated. "G" stand grip bar operates DPST mike and relay control, can be locked "on" if desired. Model UG-8 stand has DPST switch with all leads terminated in base. Adapts to any circuit. D104 and 10D are all chrome; stand, chrome with gray base. All models, high impedance. Average shpg. wt. 2 lbs. With stand 5 lbs.

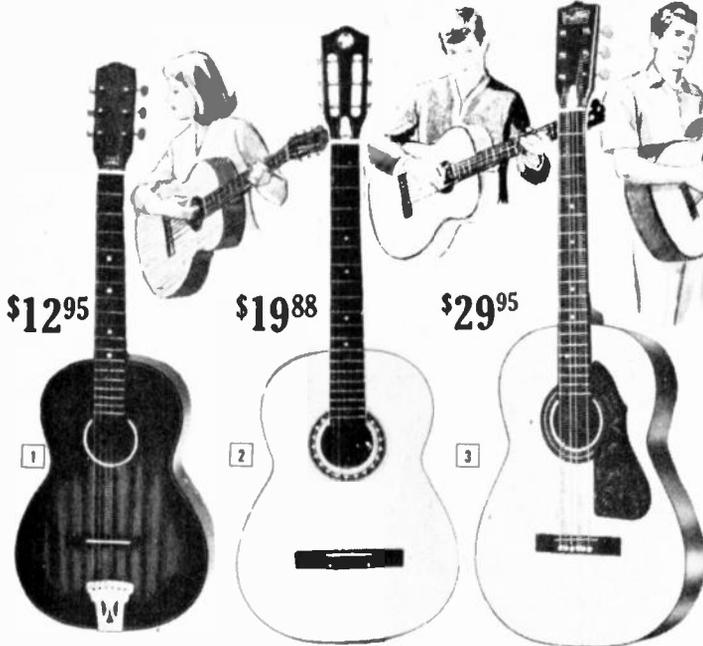
Stk. No.	Astatic Type	Element Type	Response Cps	Output Level	Mfg. List	Net Each
29A393	D104	Crystal	30-7500	—46 db.	\$31.00	\$18.60
29A395	10D	Dynamic	300-3500	—52 db.	39.70	23.82
29A402	GD-104	Crystal with G Stand			51.20	30.72
29A404	G-10-D	Dynamic with G Stand			59.90	35.94
29A405	G	Grip-to-talk Stand only			24.95	14.97
29B389	UG-8	Grip-to-talk Stand only (Read descrip. above)			29.95	17.97

# FINEST GUITARS AND AMPLIFIERS BY



## BEST BUYS IN STEEL FOLK GUITARS

## FINEST ACTION ELECTRIC GUITARS



\$12<sup>95</sup>

\$19<sup>88</sup>

\$29<sup>95</sup>



\$19<sup>95</sup>

\$36<sup>95</sup>

\$49<sup>95</sup>

### ① STUDENT TYPE ACOUSTICAL

Standard size steel string folk guitar. Steel reinforced neck. Inlaid position markers on 18 fret fingerboard. Chrome tailpiece, and pick guard. Length: 37 inches. Shpg. wt. 6 lbs. Highest quality import.

No. 40B160. Each **\$12.95**  
No. 40A504. Carrying Case for above. Each **\$6.95**

### ② DELUXE CONCERT SIZE STEEL STRING FOLK GUITAR

Finest quality concert size steel string folk guitar. Screwed bridge. Slotted head. Steel reinforced neck. Edges bound top and bottom. Ornate trim around sound hole. Inlaid position marker on 19 fret fingerboard. Length 39 1/2". Shpg. wt. 8 lbs. Highest quality import.

No. 40D162. Each **\$19.88**  
No. 40A505. Carrying Case for above. Each **\$9.95**

### ③ AMERICAN MADE ALL-MAHOGANY CONCERT SIZE STEEL STRING FOLK GUITAR

Finest American hand craftsmanship at lowest price ever! All edges including sound hole are bound in ivory. Has screwed Rosewood bridge. Inlaid pearl position markers on 19 fret, Rosewood fingerboard. Length: 39 1/2" inches. Shpg. wt. 9 lbs.

No. 40A506. Each **\$29.95**  
No. 40A505. Carrying Case for above. Each **\$9.95**

### ④ FLARE BODY SINGLE PICK-UP

Beautifully styled double cut-away guitar featuring an adjustable pick-up and chrome bridge. Has volume and tone controls. Removable and adjustable neck features a 22 fret Rosewood fingerboard. Length: 39 1/2". Shpg. wt. 12 lbs. Highest Quality import.

No. 40D144. Each **\$19.95**  
No. 40A507. Carrying Case for above. Each **\$9.95**

### ⑤ TWO PICK-UP WITH TREMOLO

Large body double cut-away style featuring deluxe adjustable roller bridge, chrome compression tremolo, two adjustable pick-ups, standby switches, and volume and tone controls. Removable and adjustable neck features a 22 fret Rosewood finger board. Length 39 1/2". Shpg. Wt. 14 lbs.

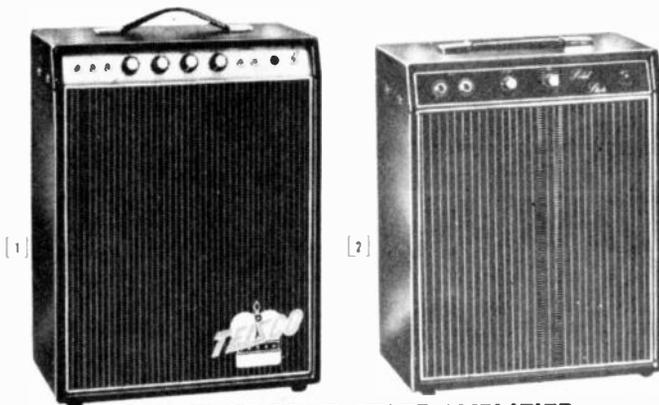
No. 40A511. Each **\$36.95**  
No. 40A507. Carrying Case for above. Each **\$9.95**

### ⑥ HOLLOW BODY TWO PICK-UP WITH ADJUSTABLE NECK

Beautifully detailed double cut-away thin line electric guitar with two ultra-sensitive, adjustable pick-ups. Friction free adjustable roller bridge. Chromed compression tremolo. Individual noiseless velvet-touch standby switches. Volume and tone controls. The delicately arched body is 1 3/8" thin, bound with decorative celluloid both front and back and is protected with a pick guard and control panel guard. The removable and adjustable neck is laminated for extra strength and features a 19 Fret Rosewood finger board 39" x 1 3/4". Shpg. Wt. 20 lbs.

No. 40A512. Each **\$49.95**  
No. 40A507. Case for above. Each **\$9.95**

## PROFESSIONAL ELECTRIC GUITAR AMPLIFIERS



### ① 6-WATT SOLID STATE AMPLIFIER

Advanced solid state circuitry. Provides finest reproduction with complete set of functions. Has heavy duty 6 inch speaker for distortion-free performance. Has separate volume and tone controls. Acoustically designed solid wood enclosure covered with scuff resistant vinyl. Fully UL approved. Wt. 15 lbs. Case size 14 1/2 x 12 x 6". Shpg. wt. 12 lbs.

No. 40A5007. Each **\$26.95**

### ② 18-WATT SOLID STATE AMPLIFIER WITH REVERB AND TREMOLO

Features more power and more features than any amplifier at anywhere near this low price. Has big heavy duty 10 inch musical instrument speaker. Finest response, features volume, tone, tremolo and reverb controls. Beautiful vinyl covered wood case. Fully UL approved. Wt. 17 lbs. Case size 18 1/4 x 12 1/4 x 6 1/4". Shpg. wt. 23 lbs.

No. 40A2001. Each **\$54.95**

## FOR ELECTRIC GUITARS

### RETRACTABLE SHIELDED CABLE

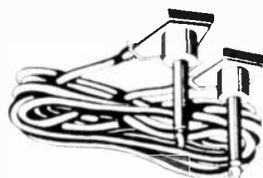
Extends to 15 feet, retracts to 3 feet. Extremely flexible. Both ends angle phone plugs. Shpg. wt. 1 lb.

No. 33A6584. Special Each **\$2.19**  
New 25 ft. shielded retractable cord. Retracts to 4 feet. Plugs as above. Wt. 1 lb.  
No. 33A6596. Special Each **\$3.29**



WAS \$3.95

## STANDARD CABLES FOR GUITARS



Grey vinyl cover shielded cables for any audio use, including music instruments. Good quality. Built to take hard usage. Molded right angle standard phone plug each end.

No. 33A6604. 6 Ft. long. Wt. 8 oz. Ea. **\$1.19**  
No. 33A6605. 10 Ft. long. Wt. 14 oz. Ea. **1.69**  
No. 33A6606. 25 Ft. long. Wt. 2 lbs. Ea. **2.19**

## HIGH QUALITY MUSIC PICK-UPS

### CRYSTAL CONTACT MIKE

Provides brilliant tone. For guitars, pianos, etc. Hi-impedance type. Has 5' shielded cable, brass phone plug.

40A500. Import. **\$2.79**  
Special



### DYNAMIC With Tone & Volume Controls

Use with metallic stringed instruments. With 8' cable and plug. Bright chrome plate. Import. Wt. 1 1/2 lbs.

40A501. Special. **\$7.95**





# argus SUPER 8 MOVIE OUTFITS

EVERYTHING YOU NEED TO TAKE AND SHOW YOUR OWN THRILLING HOME ZOOM COLOR MOVIES . . . AT GREAT PRICES TOO!

## INSTANT LOADING MANUAL ZOOM SUPER 8 MOVIE OUTFIT



ALL FOR \$129.95

PRICED SEPARATELY OVER \$160.00

COMPLETE OUTFIT INCLUDES: 806C Instant Loading Zoom Super 8 Movie Camera, 848B Automatic Threading Super 8 and Regular Holiday Projector, Deluxe Carrying Case for Camera, Trigger Action Pistol Grip, Movie Light, Kodak Color Film Cartridge, "Secret's Of Movie Making" Book, Super 8 Splicer and 4 Batteries for Camera.

Outstanding Bargain Buy! You get real top quality equipment featuring finest mechanical and optical performance.

Camera has the feel of solid precision and operates quietly on battery drive motor. Has manual 2 to 1 zoom for exciting regular, wide angle and telephoto shots, sharp F/1.8 lens, behind-the-lens CdS electric eye exposure control, trigger action detachable pistol grip.

Projector shows Super 8 and Regular 8 MM films, has automatic reel-to-reel film threading, ultra-fast rewind, F/1.6 lens, 500 W. brilliance lifetime lubrication, rugged aluminum alloy construction, self-contained case.

Weight 15 lbs. Argus Price \$162.45.

- |   |          |
|---|----------|
| No. 66A248. Complete Outfit—B-A Special Value     | \$129.95 |
| Model 806C Zoom Super 8 Cartridge Load Camera.    | \$79.95  |
| No. 66A242. Japan. Wt. 3 lbs. Net Each            | \$12.95  |
| No. 66A243. Deluxe Carrying Case, Net Each        | \$59.95  |
| Model 848B Super 8/Regular 8 "Holiday" Projector. |          |
| No. 66A244. Wt. 10 lbs. Net Each                  |          |

## THE ULTIMATE . . . ALL ZOOM SUPER 8 MOVIE OUTFIT



ALL FOR \$259.95

PRICED SEPARATELY OVER \$290.00

COMPLETE OUTFIT INCLUDES: 816G Reflex Instant Loading Push-Button 3 to 1 Power Zoom Super 8 Movie Camera, 882B Automatic Threading Super 8 and Regular 8 Zoom Movie Projector (400 ft. reel), Deluxe Camera Case, Sealed Beam Movie Light, Kodak Color Film Cartridge, Movie Secrets Book and Batteries.

Look at these deluxe features . . . compare the savings too! We know no better movie outfit bargain anywhere!

Camera has the exclusive Argus action light . . . shows picture subjects when camera is running. Ultra fast F/1.8 Selaite coated, 3:1 power zoom lens with full focusing from 5 feet to infinity. Can be zoomed manually. Accurate reflex viewing. Automatic behind-the-lens exposure control, convenient grip-to-handle, extra quiet battery motor film drive.

Projector shows Super 8 and Regular 8 films, has 18.5 to 32 MM F/1.5 zoom lens, automatic reel-to-reel threading, 500 W. brilliance. Rugged aluminum construction, self-contained case.

- |   |          |
|---|----------|
| Argus Price \$319.90. Wt. 20 lbs.                               | \$259.95 |
| No. 66A249. Complete Outfit—B-A Special Value                   | \$129.95 |
| Model 816G Power Zoom Super 8 Cartridge Load Camera             | \$129.95 |
| No. 66A245. Japan. Wt. 6 lbs. Argus Price \$144.95. B-A Special | \$12.95  |
| No. 66A246. Deluxe Camera Case, Net Each                        | \$139.95 |
| Model 882B Zoom Super 8/Regular 8 Dual Master Projector         |          |
| Wt. 12 lbs. Argus Price \$149.95.                               |          |
| No. 66A247. B-A Special Value                                   |          |

## TARON AUTO ELII 35 MM CAMERA FULLY AUTOMATIC ELECTRIC EYE CONTROL

\$59.95

WITH DELUXE LEATHER CASE

A FINE "AIM AND SHOOT" CAMERA FOR THE ENTIRE FAMILY!



Almost box-camera simple—so easy, in fact, the whole family can take perfect color pictures or slides without a thought concerning exposure control. CdS electric eye system in lens housing automatically adjusts for outdoor pictures, yet allows manual override for any combination of lens and shutter speeds from 1 to 1/500 sec. and B. ASA film speed range 25-400. Has M-X sync. for electronic flash or flash bulbs. Easy focusing bright line frame viewfinder has parallax correction marks. Also displays exposure warning and F-stop in use.

With F/1.8 45 MM Taronar coated lens and deluxe carrying case. For 20 or 36 exposure 35MM film. Japan. Wt. 3 lbs.

No. 66A213. B-A Special Value \$59.95

## SAVE ON THESE FINE 35 MM CAMERAS

### YASHICA LYNX 500E 35 MM RANGEFINDER CAMERA

\$89.95

WITH F/1.8 LENS AND CASE MFG. LIST \$115.00

HAS INTEGRATED CIRCUIT EXPOSURE CONTROL AND INTERCHANGEABLE LENS

Always a favorite, easy to handle. Takes all the guess work out of making good pictures or color slides. Now, extra rugged because it has no fragile meter system. Turning aperture ring while framing picture causes lights in viewfinder to indicate over or under exposure. 45 MM lens (supplied) focuses 2 1/2 ft. to infinity. Speeds 1-1/1000 sec. bulb, self-timer, M-X sync, ASA 10-800. Single stroke advance. With hard black case and 45 MM F/1.8 lens. Wt. 5 lbs. Japan. Yashica Price \$115.00

No. 66A250 B-A Special Value \$89.95



### YASHICA TL 35 MM SLR CAMERA

\$157.95

WITH F/2 LENS AND CASE MFG. LIST \$199.95

HAS THROUGH-THE-LENS CdS EXPOSURE CONTROL REFLEX VIEWING INTERCHANGEABLE LENS FOCAL PLANE SHUTTER

Deluxe single lens reflex camera with cross-coupled, match needle exposure control through the lens. Standard 50 MM lens focuses 18" to infinity for beautifully sharp pictures or color slides. ASA range 25-800. Speeds: 1/2-1/500 sec. bulb, self-timer. FP-X sync. Has PC flash connector and "Hot" shoe. Supplied with deluxe black case and 50 MM F/2 lens. Wt. 5 lbs. Japan. Yashica Price \$199.95.

No. 66A251. B-A Special Value \$157.95



## LOW PRICES ON AIREQUIPT MAGAZINES

- |  |                     |
|--|---------------------|
| (1) Metal Magazines. Holds 36 slides. Shpg. wt. 8 ozs.             |                     |
| No. 66A218. Each \$2.25  | 6 Lots, Each \$1.95 |
| (2) Vari-Mount Plastic Magazines. Holds 36 slides. Shpg. wt. 8 oz. |                     |
| No. 66A219. Each \$1.45  | 6 Lots, Each \$1.34 |
| (3) Circular Magazine. Holds 100 slides. Shpg. wt. 1 lb.           |                     |
| No. 66A220. Each \$2.95  | 6 Lots, Each \$2.65 |
| (4) Stack Loader. Holds 150 slides. Shpg. wt. 1 lb.                |                     |
| No. 66A221. Each \$9.95  | 6 Lots, Each \$8.95 |

## SAWYER TRAYS

- |   |                     |
|---|---------------------|
| Roto Tray. Holds 100. Shpg. wt. 1 lb.     |                     |
| No. 66A223. Each \$2.95                   | 6 Lots, Each \$2.65 |
| Fast-Edit Tray. Holds 36. Shpg. wt. 8 oz. |                     |
| No. 66A224. Each \$1.45                   | 6 Lots, Each \$1.29 |

## YANKEE TRAYS

- |  |                     |
|--|---------------------|
| Universal. 30 slot with plastic cover. Fits the Sawyer's Anscomatic, Viewlex, Keystone, AO Executive, Tower Automatic, TDC-Bell & Howell and Kodak Changers. Shpg. wt. 8 oz. |                     |
| No. 66A225. Each 65c   | 6 Lots, Each \$9.95 |
| Revere-Wollensak. 36 slot  |                     |
| No. 66A226. Each \$1.25  | 6 Lots, Each \$9.95 |

# SAVE ON FRESH FILM!

## B-A's KODAK FILM

### PRICES INCLUDE\* PROCESSING



**B-A's LOW PRICE INCLUDES PROCESSING**  
 C X 126  
 12 EXP. **\$3.87**  
 3 LOTS

**B-A's LOW PRICE INCLUDES PROCESSING**  
 35 MM.  
 20 EXP. **\$3.07**  
 3 LOTS

**B-A's LOW PRICE INCLUDES PROCESSING**  
 8 MM.  
 Movie **\$3.24**  
 3 LOTS

### KODAK KODACOLOR-X FILM FOR COLOR PRINTS

PRICES INCLUDE PROCESSING — YOU RECEIVE PRINTS BACK FROM PROCESSOR

Stock No.	Kodak No.	Description	Net Each	3 @ Each	10 @ Each
66A3040	CX126	Instamatic Kodacolor-X, 12 exp.	\$4.30	\$3.87	\$3.45
66A3041	CX126	Instamatic Kodacolor-X, 20 exp.	6.37	5.75	5.11
66A3042	CX127	Kodacolor-X, 12 exp.	4.15	3.74	3.32
66A3043	CX120	Kodacolor-X, 12 exp.	4.15	3.74	3.32
66A3044	CX620	Kodacolor-X, 12 exp.	4.15	3.74	3.32
66A3045	KX135	Kodacolor-X, 20 exp.	5.47	4.92	4.38

### KODAK KODACHROME MOVIE FILM

PRICES INCLUDE PROCESSING

Day Kodachrome II	Type A Kodchrm. II	Description	Net Each	3 @ Each	10 @ Each
66A3014	K 459	8MM 25' Double Roll	\$3.65	\$3.24	\$3.04
66A3015	KA464	Use Outdoors & Indoors Super 8 MM 50' Kodapak Cartridge	4.13	3.67	3.45
66A3016	K 460	8 MM 25' Double Mag.	4.91	4.36	4.10
66A3017	K 449	16 MM 100' Roll	11.79	10.57	9.88
66A3018	K 447	16 MM 50' Mag.	7.84	7.03	6.59

### 35MM & 126 KODACHROME FILM FOR COLOR SLIDES

PRICES INCLUDE PROCESSING AND MOUNTED SLIDES

Stk. No.	Kodak No.	ASA	Description	Each	3 @ Ea.	10 @ Ea.
66A3019	K 135-20	25	20 Exp. Kodachrome II	\$3.41	\$3.07	\$2.73
66A3020	K 135-36	25	36 Exp. Kodachrome II	4.87	4.38	3.90
66A3021	KX135-20	64	20 Exp. Kodachrome X	3.41	3.07	2.73
66A3022	KX135-36	64	36 Exp. Kodachrome X	4.87	4.39	3.90
66A3023	KX126	64	20 Exp. Kodachrome X Instamatic	3.41	3.07	2.73

### 35MM & 126 EKTACHROME FOR COLOR SLIDES

PRICES INCLUDE PROCESSING AND MOUNTED SLIDES

Stk. No.	Kodak No.	Description	ASA	Flash	Each	3 Ea.	10 Ea.
66A3024	EX135-20	35 MM Day or Flash, 20 Exp.	64	Blue	\$3.63	\$3.27	\$2.90
66A3025	EX135-36	35 MM Day or Flash, 36 Exp.	64	Blue	5.14	4.62	4.11
66A3026	EH135-20	35 MM Hi-Speed Day, 20 Exp.	160	Blue	4.05	3.65	3.24
66A3027	EH135-36	35 MM Hi-Speed Day, 36 Exp.	160	Blue	5.72	5.15	4.57
66A3028	EH135-20	35 MM Hi-Speed "B", 20 Exp.	125	Flood	4.05	3.65	3.24
66A3029	EX126-20	Instamatic Ekta X, 20 Exp.	64	Blue	3.63	3.27	2.90
66A3030	EH126-20	Instamatic Hi-Speed Day, 20 Exp.	160	Blue	4.05	3.65	3.24
66A3048	EX127	127 Day or Flood, 12 Exp.	64	Blue	2.62	2.35	2.10

\*High Quality Color Slide Processing by 3M in modern high speed photo labs across the USA. Color print processing by Berkey photo. Send exposed film to address on Prepaid Processing mailers supplied with film order.

### KODAK KODACHROME MOVIE FILM WITHOUT PROCESSING

See separate processing mailers below.

Day Kodachrome II	Type A Kodachrome II	Description	Kodak Price	B-A Net Ea.	3 @ Each	10 Asstd. Each
66A3050	K459	8 MM 25' Double Roll	\$2.70	\$2.43	\$2.38	\$2.30
66A3051	KA464	Use Outdoors & Indoors Super 8 MM 50' Kodapak Cart.	3.20	2.88	2.82	2.72
66A3055	K460	8 MM 25' Double Mag.	4.40	3.96	3.88	3.75
66A3052	K449	16 MM 100' Roll	9.05	8.15	7.95	7.70
66A3053	K447	16 MM 50' Mag.	7.05	6.35	6.21	6.00

### GENUINE KODAK PREPAID PROCESSING MAILERS

Send film in special mailer to any Kodak Photolab listed on mailer. Finished work is promptly returned direct to you. Suffix 35 on Kodak No. indicates size 3 1/2 x 3 1/2" prints; 2R, size 2 1/2 x 3 1/2" prints.

#### FOR COLOR PRINTS FROM KODACOLOR FILM

Stock No.	Kodak No.	For Film Type	Kodak Price	B-A Net Each
66A3077	DP12-35	CX120, 620, 127 and 126—12 Exp.	\$4.25	\$3.82
66A3078	DP20-35	CX126, 20 Exposure	6.40	5.76
66A3079	DP20-2R	CX135, 20 Exposure	5.00	4.50

#### FOR CARDBOARD MOUNT 2 X 2" COLOR SLIDES

66A3080	PK20	For Kodak 35 MM-20 Exposure Slide Film and Kodak 126 20 Exposure Slide Film	2.10	1.89
66A3081	PK36	For Kodak 35 MM-36 Exposure Slide Film	3.40	3.06
66A3082	PK27	For Kodak 127 Slide Film	2.35	2.01

#### FOR 8MM AND SUPER-8 MOVIE FILM

66A3083	PK59	For Kodachrome II Movie Film, Double 8 MM Roll or Super 8-50' Cartridge	2.10	1.89
66A3084	PK60	For Kodachrome II Movie Film 8 MM 25 Ft. Magazine	2.25	2.02
66A3085	PK49	For 16 MM 100 Ft. Roll	5.10	4.49
66A3086	PK47	For 16 MM 50 Ft. Magazine	3.00	2.70

## POLAROID LAND PICTURE FILM

Type 47 or 107

**\$238**

EACH 5 LOTS

Black & White in 10 Sec., Color in 60 Sec. onds.

**SWINGER SPECIAL**  
 Black & White  
 8 Exposure  
 Rolls

66A3049. Each \$1.90  
 5 Lots, Each .....\$1.77

Stock No.	Type and ASA Speed	Pictures	Net Each	3 @ Each	5 @ Each
66A3007	47-3000	Black & White	\$2.69	\$2.53	\$2.38
66A3008	42-200	Black & White	2.69	2.53	2.38
66A3009	37-3000	Black & White	1.99	1.86	1.75
66A3010	32-400	Black & White	1.99	1.86	1.75
66A3011	48-75	Color Roll	4.79	4.45	4.18
66A3012	107-3000	B & W Pack	2.69	2.53	2.38
66A3013	108-75	Color Pack	5.15	4.79	4.49

### SAVE 15% IN 10 LOTS

### KODAK FILM WITHOUT PROCESSING

See separate processing mailers below. All film below for outdoors, electronic flash or blue bulbs.

### 126 CARTRIDGE COLOR FILM

FOR INSTANT LOAD CAMERAS

Buy CX Type for Prints, others for Slides

Stock No.	Kodak No.	ASA Speed	Kodak Price	B-A Net Ea.	3 @ Each	10 Asstd. Each
66A3071	CX126-12	80	\$1.40	\$1.26	\$1.23	\$1.19
66A3072	CX126-20	80	1.95	1.76	1.72	1.66
66A3058	KX126-20	64	2.10	1.89	1.85	1.78
66A3064	EX126-20	64	2.30	2.07	2.02	1.95
66A3065	EH126-20	160	2.70	2.43	2.38	2.29

### POPULAR 35MM COLOR FILM

Buy CX135 for Prints. All others listed are for Slides

Stock No.	Kodak No.	ASA Speed	Kodak Price	B-A Net Ea.	3 @ Each	10 Asstd. Each
66A3076	CX135-20	80	\$1.95	\$1.76	\$1.72	\$1.66
66A3054	K135-20	25	2.10	1.89	1.85	1.78
66A3055	K135-36	25	2.95	2.65	2.60	2.51
66A3056	KX135-20	64	2.10	1.89	1.85	1.78
66A3057	KX135-36	64	2.95	2.65	2.60	2.51
66A3059	EX135-20	64	2.30	2.07	2.02	1.95
66A3060	EX135-36	64	3.20	2.88	2.84	2.72
66A3061	EH135-20	160	2.70	2.43	2.38	2.30
66A3062	EH135-36	160	3.75	3.38	3.30	3.19
66A3063	EH135-20	125	2.70	2.43	2.38	2.30

### COLOR ROLL FILM

CX for Prints, EX for Slides

66A3074	CX120	80	1.25	1.13	1.10	1.06
66A3075	CX620	80	1.25	1.13	1.10	1.06
66A3073	CX127	80	1.25	1.13	1.10	1.06
66A3070	EX127	64	1.35	1.21	1.19	1.15

### COMPARE B-A's HUGE SAVINGS ON PREPAID PROCESSING MAILERS

If any of your films have been purchased less processing from B-A or any place else—you may buy the prepaid process mailers listed below and save \$\$\$! Each mailer is good for prepaid processing of one roll.

### MAILED DIRECTLY TO YOU COAST-TO-COAST PROCESSING LABS

New faster, finer service. Latest electronic automation... in-lab time only one day.

#### MAILERS FOR KODACOLOR

Use mailers below for color prints of any Instamatic, 35 mm, or 120 Kodacolor film.

Stock No.	Kodacolor Print Mailers for:	Net Each	3 @ Each	10 @ Each
66A3036	CX126-12 Instamatic 12 exp.	\$3.34	\$2.90	\$2.49
66A3037	CX126-20 Instamatic 20 exp.	5.09	4.43	3.80
66A3038	CX135-35 mm., 20 exp.	4.08	3.52	2.99
66A3039	CX120, CX127, CX620 Film	3.34	2.90	2.49

### MAILERS FOR KODACHROME, EKTACHROME, DYNACHROME, AND ANSCOCROME FILM

Use mailers below for movie film and still film. You will receive back mounted slides (transparencies).

Stock No.	3M Mailer by Dynachrome	Net Each	3 @ Each	10 @ Each
66A3000	8 MM 25' Roll or Super 8 Kodapak Cartridge	\$1.78	\$1.40	\$1.05
66A3001	8 MM, Magazine	.49	.46	.43
66A3002	16 MM, 100' Roll	2.74	2.53	2.34
66A3003	16 MM, Magazine	.41	.39	.36
66A3004	35 MM & 126-20 Exp.	1.78	1.40	1.05
66A3005	35 MM, 36-Exp.	2.57	2.04	1.53
66A3006	620, 120, 127 & 126-Instamatic 12 Exp.	1.78	1.40	1.05

PLEASE DO NOT MAIL FILM TO BURSTEIN-APPLEBEE CO.

# B-A SAVES YOU MONEY ON PHOTO NEEDS

## COMPARE OUR LOWER PRICES

### SYLVANIA "BLUE DOT" FLASH BULBS



**SYLVANIA BLUE FLASHBULBS.** For all dual-purpose Kodachrome and Ektachrome films—plus daylight color films of any other manufacturer.

Stock No.	Bulb Type	Class	Lumen Seconds	Color Temp. K	Same As	Ctn. List	Per 3 Ctns. *Ctn. @	Case of 144 For
66A6032	FC-1	Cube	2MCP5	5500° K	AG-1B	\$2.25	\$1.57	\$1.47 \$16.56
66A6027	AG-1B	—	4,000	6000° K	AG-1B	2.04	1.43	1.33 15.00
66A6028	M-3B	MGFP	9,000	6000° K	—	2.40	1.68	1.57 17.64
66A6029	M-2B	—	6,000	5100° K	M-2B	2.40	1.68	1.57 17.64
66A6030	25B	M	9,000	6000° K	5B	2.64	1.84	1.72 19.32
66A6031	FP26B	FP	8,500	6000° K	6B	2.88	2.04	1.88 21.12

**SYLVANIA CLEAR FLASHBULBS.** For all Black and White. May be used with the High Speed Ektachrome Type (EHB) with an 81C filter.

Stock No.	Bulb Type	Class	Lumen Seconds	Color Temp. K	Same As	Ctn. List	Per 3 Ctns. *Ctn. @	Case of 144 For
66A6022	AG-1	—	7,000	3800° K	AG-1	\$2.04	\$1.43	\$1.33 \$15.00
66A6023	M-3	MGFP	16,000	3800° K	—	2.40	1.68	1.57 17.64
66A6025	Press 25	M	20,000	3800° K	5	2.64	1.84	1.72 19.32
66A6026	FP-26	FP	19,000	3800° K	6	2.88	2.04	1.88 21.12

### STURDY SUNSET TRIPOD

WITH ELEVATOR AND PAN HEAD

\$19.95



For all still and movie cameras. A good, stable camera support is a prerequisite for clear pictures. This one meets all the requirements for stability, ease of use and appearance, too. Has flip lock channel legs, lateral bracing, non-slip feet. Extends to 58", collapses to 18". Mfgs. list \$29.95. Weight 6 lbs. Sunset GD-3000. No. 66A228. Each ..... **\$19.95**

### MINIATURE ELECTRONIC FLASH

KAKO 818 AC & BATTERY

\$16.95



200 Flashes on one set of alkaline batteries. Guide No. 34 for ASA25 film. 7-10 sec. recycling. Light weight only 6 oz. Fits cameras having "X" flash synch, also Polaroid. Mounts horizontally or vertically, 65° to 55° light dispersion respectively. Color temperature balanced for daylight color films. Flash duration 1/3000 sec. Recycles in 7-10 sec. on batteries, 3-6 sec. on AC. Has ready light, PC cord, flash calculator. Size 3 3/4 x 1 1/4 x 2 1/2". Shpg. wt. 1 lb. No. 66A252. **\$16.95** Less Batteries. Net Each. No. 21A41. Alkaline Pencil (Requires 2). Each .....39c

### BC DELUXE FOLDING FLASHGUN

Has Flashcube Socket

\$745



Accepts press 25, 5, M-2, M-3. AG bulbs plus new Flashcube. Features "hot" shoe for cameras synched through the shoe—plus removable sync cord. Circuit test button lights up when pushed indicating good flashbulb. Built-in flash calculator has ASA range 10 to 1000. Lens settings F1.4 to F22. Less battery. Quality import. No. 66A215 **\$7.45** Flash with Case. No. 21A128. 15V. Battery. Ea. 1.00

### TELEPHOTO AND WIDE ANGLE INSTA LENS SET

NOW ONLY

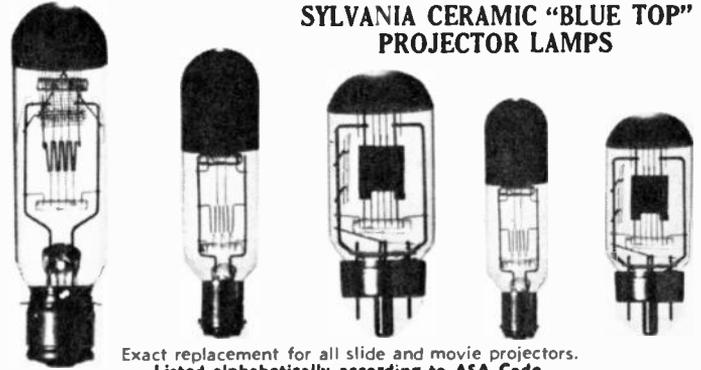
\$9.95



Instamatic Camera owners can enjoy versatility of more expensive cameras by using these very good, inexpensive lenses designed for Kodak Instamatics. 100, 104, 150, 154, 124, 134, 174. Simple snap-on lenses for wide angle photo or bringing distant subjects up close. Telephoto and wide angle lenses, plus viewfinder with adaptors in zippered compartment case. Wt. 2 lbs. **\$9.95** Complete Set

## COMPARE OUR LOWER PRICES!

### SYLVANIA CERAMIC "BLUE TOP" PROJECTOR LAMPS



Exact replacement for all slide and movie projectors.

Listed alphabetically according to ASA Code.

\*Tungsten Halogen, latest constant high output type. All are precision made for maximum life and high output. Buy a pair and keep a spare!

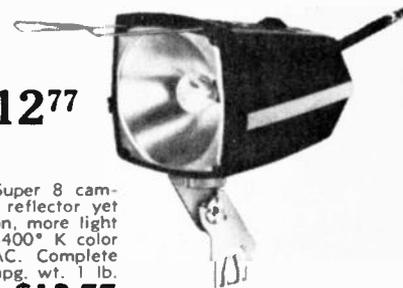
Stock No.	ASA Code	Type No.	List Each	Net Each	2 Lots Each	6 Lots Each
66A6033	*BCK	500T6/Q/TF	\$11.50	\$9.43	\$8.85	\$8.28
66A6048	BEH	150T10TF	2.95	2.42	2.27	2.12
66A6061	BVR	—	1.75	1.43	1.35	1.26
66A6000	CAL	300T10F4	4.35	3.56	3.35	3.13
66A6001	CAR	150T10TF1	3.95	3.24	3.04	2.84
66A6062	CBA	—	11.90	9.76	9.16	8.57
66A6049	CBJ/CBC	75T8/73	2.85	2.34	2.19	2.05
66A6050	CEM	110T8/1085C	2.50	2.05	1.93	1.80
66A6002	CLS/CLG	300T8 1/2/11	3.95	3.24	3.04	2.84
66A6003	CLX/CMB	300T8 1/2/12	3.55	2.91	2.73	2.56
66A6004	CMV/CMT	300T8 1/2/2 SC	4.60	3.77	3.53	3.32
66A6005	CTS/CTT	1M/T12TF3	9.15	7.51	7.05	6.59
66A6006	CWA	750T12/TF1	8.25	6.77	5.70	5.33
66A6007	CWD	300T1DTF1	3.95	3.24	3.04	2.84
66A6008	CXK	300T10P	4.45	3.65	3.43	3.20
66A6063	CXL	—	6.20	5.08	4.77	4.46
66A6009	CYC	300T10SC	3.95	3.24	3.04	2.84
66A6010	CZA/CZB	500T10F1	5.75	4.72	4.43	4.14
66A6011	CZX/DAB	500T10P	5.50	4.51	4.24	3.96
66A6051	DAH	500T12TF/H/200	7.50	6.15	5.78	5.40
66A6012	DAK	500T1DTF	5.25	4.31	4.04	3.78
66A6013	DAY	500T1D/TF/H	6.45	5.29	4.97	4.65
66A6052	DCA	150T12TFR/LV	5.75	4.72	4.43	4.14
66A6014	DCH/DFP	150T12TFR2	5.50	4.51	4.24	3.96
66A6053	DCL	150T12TF1/D	6.25	5.13	4.81	4.50
66A6015	DEB	750T12P	5.75	4.72	4.43	4.14
66A6054	DEJ	750T12/BLR	6.20	5.08	4.77	4.46
66A6055	DEK	500T12TF2/H	5.95	4.88	4.58	4.28
66A6056	DEP	750T12TF	5.10	5.08	3.93	3.61
66A6016	DFA	150T12TF	5.95	4.88	4.58	4.28
66A6017	DFC/DFN	150T12TFR1	5.50	4.51	4.24	3.96
66A6018	DFD	1MT12P	6.15	5.04	4.74	4.43
66A6064	DPE	—	5.00	4.10	3.85	3.60
66A6057	DFK	1M/T12/3LR	6.75	5.54	5.20	4.86
66A6058	DFR	500T12/DFR	5.65	4.53	4.35	4.07
66A6059	DFW	500T12TF2	5.40	4.43	4.16	3.89
66A6019	DFY	1M/T12/5LR	6.75	5.54	5.20	4.86
66A6020	DGH	750T12/500	7.95	6.52	6.12	5.72
66A6034	DJH	500T12TF	7.30	5.99	5.62	5.26
66A6060	DJL	150T12TFR3	5.95	4.88	4.58	4.28
66A6042	DKM	250T14TFR/LVD/1	8.95	7.34	6.89	6.44
66A6043	DLR	250T14/TFR/LVD	8.20	6.72	6.31	5.90
66A6044	DLS/DHX	150T14/TFR/LVD	6.30	5.17	4.85	4.54
66A6035	*DNE	150TB20/D	9.95	8.16	7.66	7.15
66A6045	DRB/DRC	1M/T20/13P	7.15	5.86	5.51	5.15
66A6046	DRS	1M/T20/MP	7.25	5.95	5.58	5.22
66A6036	*DVS	500T3/Clear	15.25	12.50	11.74	10.98
66A6037	*DVG	650Q6/TP	7.35	6.03	5.66	5.29
66A6038	*DYP	600Q6/TP	8.90	7.30	6.85	6.41
66A6039	*DYS	600Q6/TP2	8.90	7.30	6.85	6.41
66A6040	*DYV	600Q6/TP3	9.50	7.79	7.32	6.84
66A6065	*EGH	—	10.50	8.61	8.09	7.56
66A6066	*EHA	—	11.90	9.76	9.16	8.57
66A6021	*FAL	420T4Q	8.80	7.22	6.78	6.34
66A6047	*FCB	600T4/Q	9.30	7.63	7.16	6.70
66A6041	*FFJ	600W120VT/4Q	9.20	7.54	7.08	6.62

Schools, Cities, Municipalities and other large quantity users: Other projector lamps and those for overhead and opaque projectors available on request. Send your Projector Lamp Bid to Bursstein-Applebee for lowest industrial price quotation.

## SYLVANIA SUN GUN MOVIE LIGHT \$12.77

### B-A SPECIAL

New Sun Gun made especially for Super 8 cameras. Bromine lamp has a tiny 2 1/2" reflector yet provides brilliant 650 watt illumination, more light than reflectors many times its size. 3400° K color temp. Rated at 650 watts 115 VAC. Complete with 10 ft. AC cord. Size 4x3x3". Shpg. wt. 1 lb. Mfg. List \$14.95. **\$12.77** No. 66A206. Model SC-8. Net Each No. 66A207. Handle for above. Net Each .....\$1.95





# B-A SPECIAL VALUES ON... jason empire

★ BINOCULARS ★ MICROSCOPES ★ TELESCOPES

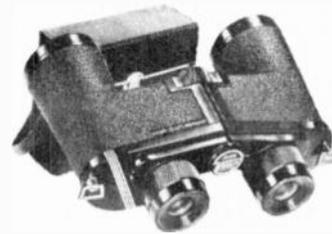


**OUR BEST SELLING  
ALL PURPOSE BINOCULARS**  
**\$24.95**

- Fully Coated Optical System
- Quick Center Focusing
- Field of View 525 Ft. at 1000 Yds.

**Empire 7X35 Wide Angle Binocular.** Follow all the action without missing a play. See 40% more light with this compact binocular. Relative Brightness 37.5. Designed for easy handling. Great for vacations, sight-seeing, bird-watching, all sports. Has chrome trim, soft rubber flexomatic eyecups. Carrying case, shoulder strap, neck strap, cleaning cloth. Height 4". Weight 24 oz. Popularly priced at \$29.95.

No. 66A9000. Japan. **BA Special Value \$24.95**  
**Empire Super Sport 7X35 Wide Angle.** Next best thing to a front row seat. The most handsome of all the Empire wide angle binoculars. Stretches the field of view to 578 ft. at 1000 yds. Brightness 37.5. Deluxe chrome trimmed aluminized body, rich grained case. Height 5". Weight 28 oz. Popularly priced at \$36.95.  
No. 66A9013. Japan. **BA Special Value \$29.95**



**420 FT. FIELD OF VIEW  
SMOOTH CENTER FOCUSING**

**Jason Deluxe Venture 4000 8X32.** Magnificent 8 power binocular for all purpose viewing. Compact size, adjustable eye cups, micro-smooth center focusing, high intensity, coated BA K-4 prisms for brilliant distortion free viewing, one piece magnesium body, deluxe carrying case. Height 5". Popular price \$79.50. Japan.  
No. 66A9015. Wt. 18 oz. **\$49.95**

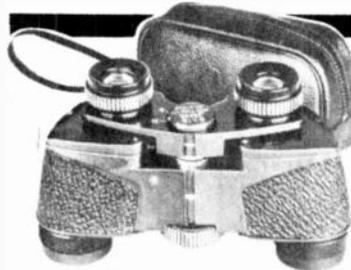
**BA Special Value**  
**Jason Deluxe Venture 7X35 Wide Angle.** Fantastic 631 ft. spread at 1000 yds. The very finest general purpose binocular for viewing at any time of day. Has adjustomatic eye cups for use with or without glasses, fully coated optics, BA K-4 prisms, streamlined magnesium body, genuine leather case. Height 5 1/2". Wt. 30 oz. Popular price \$120.00. Japan.  
No. 66A9016. **\$74.95**  
**BA Special Value**



**FIELD, 314 FT. AT 6X  
CENTER FOCUSING**

**Jason Venture 6X - 12X, 20 Electric Power Zoom.** Watch the action at 6 power, then zoom to 12 power for a face-to-face close-up. Zoom quickly, quietly, smoothly. Ultra violet coated optics for bright, clear sharp images. Deluxe case, straps. Height 6". Wt. 33 oz. Requires 2 penlight batteries. Popular price \$149.95.  
No. 66A9014. Japan. **\$109.95**

**BA Special Value**  
**Statesman 6X to 12X - 30 Zoom.** Imagine the versatility of viewing all the action at 6 or 7 power then zooming in at 10, 11, even 12 power for exciting closeups. Precision crafted, compact, lightweight design. Field at 6X is 310 ft. at 1500 yds. Fully coated optics. Center focusing. Relative brightness 37.5 Adjustable eye-cups. Carrying case, straps. Height 5". Popular price \$59.95. Japan.  
No. 66A9001. Wt. 28 oz. **\$44.95**  
**BA Special Value**



**ULTRA COMPACT  
SPORTS BINOCULAR**

**Jason 6X18 Extra Wide Angle.** Remarkable 578 ft. field of view at 1000 yds. usually possible only in binoculars twice the size. Exclusive UVC fully coated optics. Relative brightness, 54. Center focusing, chrome knurling, black zipper pouch, neck strap. Height 3". Weight 13 oz. Popularly priced at \$59.95. Japan.  
No. 66A9017. **\$39.95**  
**BA Special Value**



**DELUXE ZOOM  
MICROSCOPE  
KITS WITH  
COMPLETE  
ACCESSORIES**

**EMPIRE MICRO  
SCIENCE LABS**  
**\$14.95**

**Model 642. 750X Zoom Microscope Kit.** Learn the "how-to" of the micro-world. Scope has 3-lens turret. Stands 8 1/2" high. Kit includes: 7-piece dissecting kit, culture dish, 2 test tubes, 2 specimen vials, 1 bottle of Canada Balsam, 1 bottle Xyol, 1 bottle of Methylene Blue, 1 bottle of Saffronin, 1 prepared slide, 9 blank slides, pk of cover slips, and 2 replacement bulbs. Shpg. Wt. 8 lbs. Popular price \$18.95. Japan.  
No. 47A8526. **\$14.95**  
**BA Special Value**

**Model 643. 900X Zoom Microscope Kit.** Zoom from 50 power all the way to 900 power... performs experiments with pin-point accuracy. Scope has 4-lens turret, zoom eyepiece, stands 9 1/2" high. Kit includes: 7-piece dissecting set, 6 test tubes, 2 beakers, 1 mortar and pestle, 1 frog, 1 bottle Xyol, 1 bottle Canada Balsam, 1 bottle of Fuchsin, 1 bottle Methylene Blue, 1 prepared slide, 11 blank slides, 1 pk. of cover slips, and 2 replacement bulbs. Shpg. Wt. 8 lbs. Popular price \$26.95. Japan.  
No. 47A8527. **\$21.95**  
**BA Special Value**

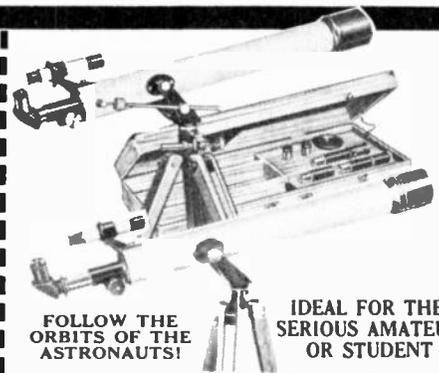


**JASON 8X - 25X**  
**\$19.95**

- 8X To 25X Magnification.
- Streamlined All-Metal Construction.
- Only 12-in. Long. Weight 1 1/2 lbs.
- Tripod and Carrying Case Included.

**Jason 8X-25X, 30 Zoom Sport Scope.** Manually controlled zoom action lets you use lower power for locating general field of action, then come in for thrilling 25 power magnified close ups. Small size and light weight make handling easy. Short 10" tripod gives firm support. Popular price \$23.50. Japan.  
No. 66A9019. **BA Special Value \$19.95**

**Jason 12X-40X, 40 Electric Power Zoom Sport Scope W/Tripod.** Get the big picture with this fast action zoom sport scope. Electric zoom operates with the touch of a button. Has full coated aromatic optics, large 40 mm objective lens and knurled focusing ring in barrel. Height 15 1/2 inches, fully extended. With 12" chrome plated adjustable tripod. Wt. 3 lbs. Requires 2 penlight batteries. Popular price \$49.95. Japan.  
No. 66A9003. **\$34.95**  
**BA Special Value**



**FOLLOW THE  
ORBITS OF THE  
ASTRONAUTS!**  
**IDEAL FOR THE  
SERIOUS AMATEUR  
OR STUDENT**

**Astronomical 400X Explorer Telescope.** All purpose 800 MM focal length telescope with 3 lenses, 40X, 64X and 200X plus a 2X Barlow lens to double each of the powers. Alto-Azimuth mounting, slow-motion controls. Magnesium fluoride coated lens. Height 5 1/2 ft., length 29 1/2". Accessories include 5X 25 finderscope, diagonal prism, solar and lunar lens, erecting lens, 60 MM objective lens and sturdy 5 ft. floor tripod with accessory tray. Height 5 1/2 ft., length 30". Comes in compartmented wood cabinet case with a page illustrated telescope technique book. Popular price \$130.00. Japan.  
No. 66A9020. **BA Special Value \$89.95**

**Astronomical 280X Telescope.** Has 3 lenses plus 2X Barlow lens to provide 47X, 70X, 94X, 140X, and 280X magnification. Focal length 700 MM. Magnesium fluoride coated lens. Accessories 5X 24 finderscope, diagonal prism, erecting prism, solar lens, 60 MM objective lens. Sturdy 5 ft. hardwood tripod with accessory tray included. Wt. 14 lbs. Popular price \$79.50. Japan.  
No. 66A9021. **\$59.95**  
**BA Special Value**

# OPTICAL MAGNIFIERS FOR HOME & SHOP

## FINE BAUSCH & LOMB READER MAGNIFIERS

THE RECOGNIZED  
LEADER IN  
FINE QUALITY  
OPTICS

### ILLUMINATED RECTANGULAR READER

This crystal clear reader utilizes B&L's unique ophthalmic glass, ground and polished with the same care as a prescription eyeglass lens. Light weight, balanced design for long, tireless use. Miniature 110 Volt bulb floods the reading area with light. Can be used for circuit inspection of P.C. boards under chassis. Also for reading schematic diagrams and parts list. Lens size is 3 7/8" x 2". With 9" focus. Ebony color. No. 66A9005. Wt. 1 lb. **\$9.75**  
Net Each

Reader as above less illumination. No. 66A9006. Net Each **\$4.95**

### BAUSCH & LOMB MAGNA-RULE

A 12" bar magnifier that magnifies and isolates long lines of figures or tabular listings. Also acts as a linear guide, has 8" scale. Made of optical-grade plastic, it doubles the height without increasing width. Rests directly on printed matter. Flat on one side, half-round on the other, 1" wide. Shpg. wt. 8 oz. **\$2.50**  
No. 66A9008. Net Each

### BAUSCH & LOMB POCKET MAGNIFIER

1001 uses in the home, office, school, shop, lab, service bench. Lens made of same fine quality as above. Crystal clear, no distortion or aberration. Folds down into its own plastic case, when not in use. Shpg. wt. 4 oz. **\$1.50**  
No. 66A9007. Net Each



## SMALL JOBS GO EASIER... FASTER... WITH INSPECTION MAGNIFIERS

### ADJUSTABLE ILLUMINATED MAGNIFIER

**\$895**

Ideal for laboratories, industry, schools or hobby use. A must for repairing printed circuits or wiring punch boards. 2" x 4" rectangular magnifier adjusts from 1" to 6" high. 7 watt 110 V lamp puts plenty of light right on the work. Lightweight aluminum stand folds compactly for easy storage. Both lens and lamp can be adjusted separately to proper height and visual range. Shpg. wt. 1 1/4 lbs. **\$8.95**  
No. 66A9009. Net Each

### NECK CORD SUPPORTED MAGNIFIER **\$3.49**

Leaves Both Hands Free!  
Powerful 4 1/2" dia. glass lens in black plastic frame. Fine for close work, needle craft and hobbies. Neck cord support lets user move about, yet have magnifier always ready for use. Shpg. Wt. 8 oz. Imported. **\$3.49**  
No. 66A9022. Spec. Each

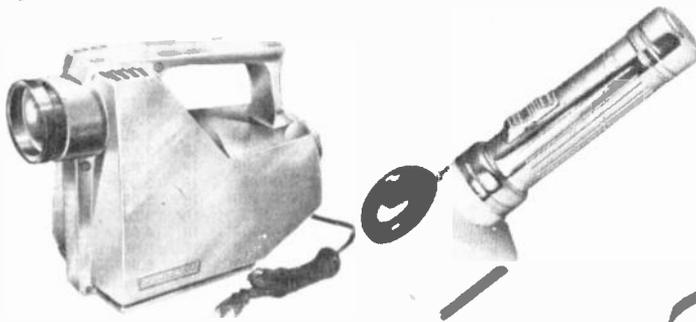


## AMERICAN MADE INSPECTION MAGNIFIERS

### FULLY ADJUSTABLE 4-INCH INSPECTION MAGNIFIER

**\$7.85**

A powerful ground and polished lens 4" dia. mounted on a chrome plated goose neck arm. Ball joint swivel permits easy positioning. Sturdy cast iron base for table or bench use. Shpg. wt. 3 1/2 lbs. **\$7.85**  
No. 66A9010. Net Each



### BRUMBERGER MODEL 290 PROJECT-A-SCOPE

Place over anything flat—magazines, books, photos, drawings, comics, stamps, maps, etc. . . . it projects giant images in true color or black and white on wall or screen. Useful for demonstrators, lecturers, hobby or play. Made of hi-impact polypropylene. 110 V. AC-DC. UL approved. Uses ordinary 60 watt bulb not included. Shpg. wt. 2 lbs. **\$6.40**  
No. 66A9002. Each

### NEW IMPROVED ILLUMINATED 5X MAGNIFIER

Magnifies work 5 times giving clear, fully illuminated view. Field of vision 2" at 1 1/8" working distance with mask (gauge) off. Mask snaps-on giving 1" field, graduated in fractions and metric. Ideal for inspection work, miniature work . . . for hobbyists and countless other uses! Uses 2 size "C" batteries. 7" long. Quality import. Less batteries. **\$1.95**  
No. 37A5504. Wt. 1 lb. Ea.  
21A2 "C" Cell (requires 2) Ea. 17c

### FULLY ADJUSTABLE 4-INCH INSPECTION MAGNIFIER

**\$7.85**

A powerful ground and polished lens 4" dia. mounted on a chrome plated goose neck arm. Ball joint swivel permits easy positioning. Sturdy cast iron base for table or bench use. Shpg. wt. 3 1/2 lbs. **\$7.85**  
No. 66A9010. Net Each



(1)  
ON  
WEIGHTED  
BASE  
**\$2.70**

(2)  
ON  
MAGNETIC  
BASE  
**\$4.95**

### ① 2 IN. MAGNIFIER ON CAST BASE

Ground and polished lens 2" dia. is adjustable to any angle, attached to cast horseshoe base. Just the thing for inspection of microelectronics, subminiature assemblies, stamps or other hobbies. Shpg. Wt. 1 1/4 lbs. **\$2.70**  
No. 66A9011. Net Each

### ② 2 IN. INSPECTION MAGNIFIER WITH MAGNETIC BASE

Adjustable 2 1/2" magnifier rated 6.5 dioptre, 6" focus. Wing-nut ball joint for easy adjustment attached to powerful Alnico permanent magnet which will hold magnifier on any steel machine, such as a lathe, for close inspection of detail. Shpg. Wt. 8 oz. **\$4.95**  
No. 66A9012. Net Each

## ATTENTION VIDEO CAMERA USERS! FANTASTIC LENS BARGAIN! BAUSCH & LOMB 1" F/2.7

**\$4.99**

Standard "C" mount, same as used on 16 MM movie cameras, video cameras, etc. Literally hundreds of optical uses. Click stop apertures F/2.7, 4, 5.6, 8, 11, and 16. **\$4.99**

No. 66A200. Net Each

Quantity Users Write For Price



Worth Many  
Times More!

# SEMICONDUCTOR DIRECTORY

## EXPLANATIONS OF MANUFACTURERS ABBREVIATIONS

RCA is Radio Corp. of America  
ST is Sarks Tarzian

IR is International Rectifier  
TR is Transtron

MOT is Motorola  
MAL is Motorola

FEN is Fenwall  
CL is Clairex

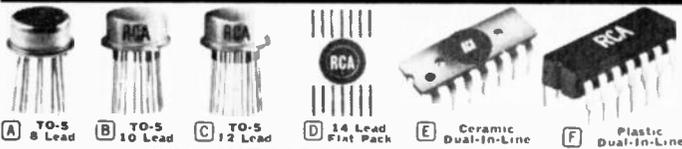
## SPECIFY MANUFACTURERS NAME AND NUMBER ON YOUR ORDER

Type No.	Mfg.	1-4 Each	5-9 Each	Type No.	Mfg.	1-24	25-99	Type No.	Mfg.	1-99 Each	100-999 Each	Type No.	Mfg.	1-99 Each	100-999 Each	Type No.	Mfg.	1-99 Each	100-999 Each
1N34A	IR	.40	.36	1N2070	ST	.35	.30	2N697	RCA	.63	.46	2N3011	RCA	.99	.72	2N5496	RCA	1.29	.94
1N34A	TR	.24	.18	1N2070	IR	1.99	100-999	2N699	RCA	1.16	.84	2N3053	RCA	.75	.54	2N5497	RCA	1.29	.94
1N58	TR	.55	.41	1N2070A	IR	.41	.35	2N706A	RCA	.73	.53	2N3054	RCA	1.16	.84	3N128	RCA	1.45	1.06
1N60	IR	1.4	5-9	1N2071	ST	1.24	25-99	2N709	RCA	1.32	.96	2N3055	RCA	1.82	1.32	3N138	RCA	3.30	2.40
1N64	IR	.40	.36	1N2071	IR	.37	.32	2N718A	RCA	1.08	.78	2N3118	RCA	4.95	3.60	3N139	RCA	2.89	2.10
1N82A	IR	.95	.85	1N2071A	IR	.50	.44	2N720A	RCA	1.32	.96	2N3119	RCA	5.36	3.90	3N140	RCA	1.62	1.18
1N87A	IR	.45	.40	1N2071	IR	1.99	100-999	2N886A	TR	8.50	6.00	2N3228	RCA	1.62	1.18	3N141	RCA	1.55	1.13
1N248	TR	1.40	1.00	1N2071A	IR	.50	.44	2N917	RCA	1.27	.92	2N3241A	RCA	.73	.53	3N142	RCA	1.08	.78
1N248C	RCA	1.65	1.20	1N2326	RCA	.55	.40	2N918	RCA	1.41	1.02	2N3242A	RCA	.83	.60	3N143	RCA	1.39	1.01
1N248RC	RCA	1.65	1.20	1N2389	IR	Use ST14		2N1023	RCA	2.72	1.98	2N3261	RCA	1.32	.96	3N152	RCA	1.78	1.30
1N249C	RCA	2.06	1.50	1N2859A	RCA	.37	.27	2N1026	RCA	1.98	1.44	2N3262	RCA	7.43	5.40	3N153	RCA	1.58	1.15
1N249RC	RCA	2.06	1.50	1N2860A	RCA	.40	.29	2N1177	Use 40242			2N3375	RCA	10.80	8.95	3N154	RCA	1.62	1.18
1N250C	RCA	2.72	1.98	1N2970	TR	5.10	3.85	2N1178	Use 40244			2N3439	RCA	3.71	2.70	3N159	RCA	2.18	1.58
1N250RC	RCA	2.72	1.98	1N3002A	TR	5.20	3.90	2N1179	Use 40243			2N3440	RCA	1.82	1.32	5MA4-D	IR	1-4	.92 5-9 .83
1N270	TR	.31	.23	1N3018	TR	2.40	1.60	2N1180	Use 40245 or 40246			2N3441	RCA	2.48	1.80	9006A	IR	2.30	2.05
1N283	TR	.51	.40	1N3020A	TR	2.25	1.60	2N1183	RCA	1.82	1.32	2N3442	RCA	4.54	3.30	10C1	IR	.32	.29
1N295	IR	1.4	5-9	1N3025A	TR	2.65	1.80	2N1183A	RCA	2.31	1.68	2N3512	RCA	1.08	.78	10C2	IR	.35	.32
		.36	.32	1N3039	TR	2.40	1.60	2N1184	RCA	2.48	1.80	2N3525	RCA	2.31	1.68	10C4	IR	.42	.38
		1-99	100-999	1N3193	RCA	.35	.26	2N1184A	RCA	2.81	2.04	2N3528	RCA	1.58	1.14	10C6	IR	.52	.46
1N4838	TR	.53	.35	1N3193	RCA	.35	.26	2N1184B	RCA	4.13	3.00	2N3529	RCA	1.96	1.43	10C8	IR	.75	.65
1N538	RCA	.45	.32	1N3194	RCA	.38	.28	2N1224	RCA	1.24	.90	2N3533	RCA	4.37	3.18	10C10	IR	1.70	1.20
1N540	RCA	.56	.41	1N3195	RCA	.53	.39	2N1225	RCA	1.41	1.02	2N3583	RCA	2.48	1.80	1002	IR	Use 1N2069	
1N625	TR	.43	.29	1N3196	RCA	.74	.54	2N1226	RCA	1.49	1.08	2N3584	RCA	4.13	3.00	1004	IR	Use 1N2071	
1N681	TR	1.53	1.02	1N3209	TR	2.60	1.60	2N1302	RCA	.42	.30	2N3585	RCA	6.60	4.80	1006	IR	Use 1N2071	
1N695A	TR	.98	.74	1N3253	RCA	.38	.28	2N1303	RCA	.42	.30	2N3600	RCA	3.80	2.76	180B2A	IR	2.38	2.14
1N705	TR	1.50	1.25	1N3254	RCA	.42	.30	2N1303A	RCA	.42	.30	2N3632	RCA	12.75	10.55	180B4A	IR	2.81	2.48
1N752A	TR	1.75	1.50	1N3255	RCA	.56	.41	2N1304	RCA	.50	.36	2N3669	RCA	2.81	2.04	180B6A	IR	2.90	2.75
1N756A	TR	1.75	1.50	1N3256	RCA	.78	.57	2N1305	RCA	.48	.35	2N3870	RCA	3.80	2.76	180B8A	IR	3.42	3.25
1N757	TR	1.50	1.25	1N3287	TR	.60	.42	2N1306	RCA	.62	.45	2N3730	RCA	1.24	.90	180B10A	IR	5.12	4.95
1N759A	TR	1.75	1.50	1N3563	RCA	.94	.69	2N1307	RCA	.58	.42	2N3731	RCA	1.62	1.18	180C6A	IR	2.30	2.05
1N768	TR	1.55	1.30	1N3754	RCA	.32	.23	2N1308	RCA	.91	.66	2N3732	RCA	1.07	.78	180J6A	IR	2.30	2.05
1N770	TR	.48	.38	1N3755	RCA	.33	.24	2N1309	RCA	.91	.66	2N3771	RCA	4.13	3.00	20C1	IR	.85	.72
1N812	TR	2.20	1.55	1N3756	RCA	.35	.26	2N1395	RCA	1.82	1.32	2N3772	RCA	4.13	3.00	20C2	IR	.95	.80
1N816	TR	.40	.27	1N4728	Thru			2N1396	RCA	1.93	1.40	2N3773	RCA	7.43	5.40	20C4	IR	1.10	.93
1N1084	ST	1-24	25-99	1N4764	IR	1.25	.93	2N1397	RCA	2.15	1.56	2N3866	RCA	2.97	2.10	20C6	IR	1.40	1.19
		.75	.63	1N4764A	Thru			2N1480	RCA	2.31	1.68	2N3878	RCA	4.95	3.60	20C8	IR	2.15	1.83
1N1196A	RCA	4.95	3.60	1N4768A	IR	1.90	1.40	2N1481	RCA	2.48	1.80	2N3879	RCA	6.60	4.80	20C10	IR	2.65	2.25
1N1196B	RCA	4.95	3.60	1N4785	RCA	1.08	.78	2N1482	RCA	3.30	2.40	2N3896	RCA	4.37	3.18	20H3N	ST	Use 1N1344R	
1N1198A	RCA	7.01	5.10	1N5211	RCA	.38	.28	2N1483	RCA	2.89	2.10	2N3897	RCA	5.03	3.66	20H3P	ST	Use 1N1344	
1N1198B	RCA	7.01	5.10	1N5212	RCA	.42	.30	2N1484	RCA	2.63	2.64	2N3898	RCA	6.60	4.80	21PT5	IR	1-99	100-999
1N1199A	RCA	1.24	.90	1N5213	RCA	.56	.41	2N1485	RCA	4.46	3.24	2N3899	RCA	8.75	6.36	21PT10	IR	1.10	.82
1N1199B	RCA	1.24	.90	1N5214	RCA	.81	.59	2N1486	RCA	6.77	4.92	2N3932	RCA	1.40	1.02	21PT100	IR	1.20	.90
1N1200A	RCA	1.41	1.02	1N5215	RCA	.42	.30	2N1487	RCA	4.54	3.30	2N3933	RCA	1.62	1.18	21PT20	IR	1.30	.98
1N1200B	RCA	1.41	1.02	1N5216	RCA	.45	.33	2N1488	RCA	4.95	3.60	2N4036	RCA	1.32	.96	21PT40	IR	1.70	1.27
1N1200C	RCA	1.41	1.02	1N5217	RCA	.60	.44	2N1489	RCA	7.43	5.40	2N4037	RCA	1.16	.84	21PT60	IR	2.25	1.70
1N1202	ST	1-24	25-99	1N5218	RCA	.85	.62	2N1490	RCA	8.25	6.00	2N4063	RCA	3.80	2.76	30R2B2AP	IR	1-99	100-999
1N1202R	ST	1.25	1.07	1N5411	RCA	.61	.44	2N1491	RCA	1.82	1.32	2N4064	RCA	1.90	1.38	30R34AP	IR	4.27	3.82
1N1202R	ST	1.25	1.07	2N104	Use 2N217			2N1492	RCA	4.29	3.11	2N4068	RCA	1.34	.97	30R66AP	IR	5.25	4.73
1N1202	IR	2.60	1.75	2N109	Use 2N217			2N1493	RCA	7.01	5.10	2N4069	RCA	1.40	1.02	40H3N	ST	Use 1N1346R	
1N1202A	RCA	2.48	1.80	2N139	Use 2N1638 or 40262			2N1524	RCA	.47	.34	2N4074	RCA	.73	.53	40H3P	ST	Use 1N1346	
1N1202RA	RCA	2.48	1.80	2N140	Use 2N1639 or 40261			2N1525	Use 2N1524			2N4101	RCA	3.05	2.22	40H5F	IR	1.15	.80
1N1204	ST	1.67	1.43	2N175	Use 2N2613			2N1526	RCA	.48	.35	2N4102	RCA	2.64	1.92	40H5FR	IR	1.15	.80
1N1204R	ST	1.67	1.43	2N176	Use 2N2869/2N301			2N1527	Use 2N1526			2N4240	RCA	2.89	2.10	40HF10	IR	1.45	1.05
1N1204A	RCA	4.46	3.24	2N215	Use 2N217			2N1605	RCA	.62	.45	2N4259	RCA	1.90	1.38	40HF10R	IR	1.45	1.05
1N1204RA	RCA	4.46	3.24	2N217	RCA	.57	.41	2N1605A	RCA	1.09	.80	2N4314	RCA	1.24	.90	40HF20	IR	2.00	1.40
1N1206	ST	2.34	2.00	2N218	Use 2N1638 or 40262			2N1613	RCA	.75	.54	2N4346	RCA	2.31	1.68	40HF20R	IR	2.00	1.40
1N1206R	ST	2.34	2.00	2N219	Use 2N1639 or 40261			2N1632	RCA	.58	.42	2N4347	RCA	2.97	2.16	40HF40	IR	3.05	2.20
1N1206A	RCA	6.19	4.50	2N220	Use 2N2613			2N1637	RCA	.57	.41	2N4348	RCA	4.13	3.00	40HF40R	IR	3.05	2.20
1N1206RA	RCA	6.19	4.50	2N220	Use 2N2613			2N1638	RCA	.50	.36	2N4390	RCA	.75	.54	40HF60	IR	4.55	3.30
1N1344	ST	1.20	1.03	2N270	RCA	.76	.55	2N1639	RCA	.53	.39	2N4427	RCA	2.15	1.56	40HF60R	IR	4.55	3.30
1N1344R	ST	1.20	1.03	2N274	RCA	1.24	.90	2N1683	RCA	1.90	1.38	2N4440	RCA	11.90	9.85	40HF100	IR	9.90	

# SEMICONDUCTOR DIRECTORY

Type No.	Mfg.	1-99 Each	100-999 Each	Type No.	Mfg.	1-99 Each	100-999 Each	Type No.	Mfg.	1-4 Each	5-9 Each	Type No.	Mfg.	1-4 Each	5-9 Each	Type No.	Mfg.	1-9 Each	10-99 Each	
40220		Use	2N3261	40474	RCA	.48	.35	CDD5	IR	.80	.72	DD06	IR	.55	.49	M2.5A	MAL	.59	.49	
40231	RCA	.47	.34	40477	RCA	.50	.36	CD07	IR	.90	.81	DD-170	IR	1.95	.....	KD2112	RCA	10.98	.....	
40232	RCA	.53	.39	40478	RCA	.66	.48	CDD9	IR	1.00	.90	E075L	IR	.59	.50				1-9 10-24	
40233	RCA	.60	.44	40479	RCA	.58	.42					E150L	IR	.75	.67	LB21J1	FEN	.85	.68	
40234	RCA	.42	.30	40480	RCA	.48	.35	CD215D	RCA	3.96	2.88	E300L	IR	.92	.....	M50D/40M	ST	Use	1N1084	
40235	RCA	.57	.41	40481	RCA	.53	.39	CD2151	RCA	3.96	2.88	E500L	IR	1.25	1.22	MP100	IR	1.98	.....	
40236	RCA	.48	.35					CD2152	RCA	3.96	2.88	EP50	IR	3.95	.....				1-99 100-999	
40237	RCA	.38	.28	40482	RCA	.50	.36	CD2153	RCA	5.20	3.80	F2	ST	Use	1N2089	NB11J1	FEN	.85	.68	
40238	RCA	.43	.32	40485	RCA	2.06	1.50	CD22000	RCA	5.20	3.80	F4	ST	Use	1N2070	QA51J1	FEN	1.25	1.00	
40239	RCA	.40	.29	40486	RCA	2.39	1.74	CD22010	RCA	5.45	3.95	F6	ST	Use	1N2071				1-4 5-9	
40240	RCA	.38	.28	40513	RCA	1.24	.90	CD22020	RCA	5.45	3.95					R210	IR	1.30	1.17	
40242	RCA	.57	.41	40514	RCA	1.26	.92	CD22030	RCA	6.95	5.05								1-9 10-24	
40243	RCA	.47	.34	40519	RCA	1.41	1.02	CD22050	RCA	5.20	3.80								1-9 10-24	
40244	RCA	.38	.28	40525	RCA	1.57	1.14												1-9 10-24	
40245	RCA	.40	.29	40526	RCA	1.62	1.18	CD2300E/											1-9 10-24	
40246	RCA	.38	.28					830	RCA	1.73	1.26	FW5D	MAL	1.17	.78	RB41L1	FEN	1.20	.96	
40250	RCA	1.16	.84	40527	RCA	2.31	1.68	CD2301E/				FW10D	MAL	1.21	.81				1-9 10-99	
40251	RCA	1.90	1.38	40528	RCA	1.57	1.14	861	RCA	1.73	1.26	FW200	MAL	1.27	.85	S1MC	IR	2.25	2.00	
				40529	RCA	1.62	1.18	CD2302E/				FW300	MAL	1.33	.89	S3MC	IR	3.95	3.51	
40254	RCA	.78	.57	40530	RCA	2.31	1.68	846	RCA	1.90	1.38	FW400	MAL	1.50	1.00	S4MC	IR	3.95	3.51	
40262	RCA	.50	.36	40537	RCA	1.24	.90	CD2303E/				FW600	MAL	1.66	1.11	S5M	IR	4.95	4.40	
40263		Use	40490	40538	RCA	1.36	.99	849	RCA	1.90	1.38	FWLD50	MAL	2.08	1.38				1-9 10-99	
40280	RCA	4.62	3.36	40539	RCA	.66	.48	CD2304E/				FWLD100	MAL	2.18	1.45	S490	ST	2.20	1.58	
40281	RCA	10.60	8.75	40542	RCA	1.31	.95	845	RCA	2.48	1.80	FWLD200	MAL	2.46	1.63				1-24 25-99	
40290	RCA	2.48	1.80	40543	RCA	1.37	1.00	CD2305E/				FWLD400	MAL	3.02	2.00	S6121-1	ST	4.21	3.60	
40291	RCA	10.40	7.55	40544	RCA	.75	.54	848	RCA	2.48	1.80	FWLD600	MAL	3.38	2.25	S6121-3	ST	4.41	3.78	
40309	RCA	.70	.51					832	RCA	1.90	1.38					S6121-5	ST	5.61	4.81	
40310	RCA	.99	.72	40553	RCA	2.75	2.00	CD2306E/				G2	ST	.37	.32	S6239A	ST	1.47	1.26	
40311	RCA	.73	.53	40554	RCA	4.44	3.22	832	RCA	1.90	1.38	G4	ST	.43	.37	S6230A-1	ST	1.77	1.52	
40312	RCA	1.03	.75	40555	RCA	4.76	3.47	CD2307E/				G6	ST	.47	.40	S6230A-2	ST	2.11	1.80	
				40559	RCA	.70	.51	844	RCA	1.90	1.38	G8	ST	.62	.53	S6230A-3	ST	2.54	2.17	
40313	RCA	2.23	1.62	40559A	RCA	.70	.51	CD2308E/				G10	ST	.95	.82	S6230A-4	ST	3.47	2.97	
40314	RCA	.78	.57	40561	RCA	4.54	3.30	862	RCA	1.90	1.38	G701	FEN	9.95	.....	S6240	ST	3.76	3.22	
40315	RCA	.75	.54	40562	RCA	4.54	3.30	CD2309E/								S6240-1	ST	5.15	4.40	
40316	RCA	.99	.72	40563	RCA	4.54	3.30	863	RCA	1.90	1.38					S6240-2	ST	6.93	5.93	
40317	RCA	.78	.57					CD2310E/				GA51J1	FEN	1.96	1.57	S6240-3	ST	9.35	7.85	
40318	RCA	2.10	1.52	40564	RCA	4.54	3.30	836	RCA	1.90	1.38	GA51P2	FEN	2.00	1.60	S6240-4	ST	12.00	10.10	
40319	RCA	1.16	.84	40565	RCA	4.54	3.30	CD2311/				GB32J2	FEN	1.96	1.57				1-4 5-9	
40320	RCA	.78	.57	40566	RCA	7.43	5.40	837	RCA	1.90	1.38	GB32P8	FEN	2.35	1.88	SD500	IR	.67	.59	
40321	RCA	1.24	.90	40567	RCA	6.52	4.74	CD2312E	RCA	1.90	1.38	GD25J1	FEN	3.24	2.60				1-99 100-999	
40322	RCA	2.15	1.56	40568	RCA	7.01	5.10	CD2313E	RCA	1.90	1.38								SK Series RCA—See Page 88	
				40569	RCA	7.43	5.40	CD2314E/												For Complete Listing
40323	RCA	.70	.51	40570	RCA	10.75	7.80	833	RCA	1.49	1.08									
40324	RCA	.99	.72	40571	RCA	8.60	6.24	CD2315E	RCA	4.46	3.24	IR106Y	IR	.94	.63					
40325	RCA	1.90	1.38	40572	RCA	7.01	5.10	CR2316E	RCA	4.46	3.24	IR106F	IR	1.10	.73					
40326	RCA	.78	.57	40573	RCA	8.15	5.94	CD2317E	RCA	4.46	3.24	IR106A	IR	1.18	.79					
40327	RCA	1.24	.90	40574	RCA	10.75	7.80	CD2318E	RCA	4.46	3.24	IR106B	IR	1.34	.89					
40328	RCA	2.19	1.60	40575	RCA	2.48	1.80					IR106C	IR	1.70	1.15					
40329	RCA	.47	.34	40576	RCA	3.29	2.38					IR682	IR	4.95	3.90					
40346	RCA	1.14	.83	40581	RCA	4.87	3.54	CL5M3	CL	1.50	1.25	IR683	IR	6.19	4.13					
40347	RCA	.66	.48	40582	RCA	5.12	3.72	CL5M4	CL	1.50	1.25	IR688	IR	6.60	4.40					
40348	RCA	1.06	.77	B-2MC	IR	1.50	1.35	CL5M7	CL	1.50	1.25	IR688	IR	8.65	5.90					
				B-3MC	IR	1.75	1.55	CL503	CL	1.50	1.25	IR690	IR	11.95	8.00					
								CL504	CL	1.50	1.25	IR160D	IR	3.68	2.94					
40349	RCA	1.56	1.13	BC101	IR	15.00	10.99	CL504L	CL	1.50	1.25	IR1601	IR	4.94	3.40					
40354	RCA	1.18	.86	BCF-100	IR	9.95	8.95	CL505	CL	1.50	1.15	IR1602	IR	5.32	3.70					
40355	RCA	1.24	.90	BCR-100	IR	9.95	8.95	CL602	CL	1.50	1.15	IR1604	IR	7.00	4.65					
40359	RCA	.32	.23					CL603	CL	1.75	1.50	IR1771	IR	4.00	3.22					
40360	RCA	.91	.66	CA3000	RCA	3.80	2.76	CL603A	CL	1.75	1.50	IR1772	IR	5.20	3.60					
40361	RCA	1.03	.75	CA3001	RCA	5.55	4.00	CL603AL	CL	1.75	1.50	IR1774	IR	5.60	3.90					
40362	RCA	1.24	.90	CA3002	RCA	3.71	2.70	CL604	CL	1.75	1.50	IR1777	IR	7.40	4.95					
40363	RCA	1.82	1.32	CA3005	RCA	2.48	1.80	CL604L	CL	1.75	1.50	IR1843A	IR	4.25	3.40					
40364	RCA	4.79	3.48	CA3007	RCA	5.35	3.90	CL605	CL	1.50	1.15	IR1844A	IR	5.78	3.85					
40366	RCA	7.84	5.70	CA3008	RCA	6.44	4.68	CL605L	CL	1.50	1.15	IR1846A	IR	6.19	4.13					
40367	RCA	7.84	5.70	CA3008A	RCA	9.74	7.08	CL607	CL	1.50	1.15	IR1849A	IR	8.25	5.50					
40372	RCA	1.24	.90	CA3010	RCA	2.61	1.90	CL703	CL	1.50	1.25	IR2160	IR	1.49	1.20					
40373	RCA	2.56	1.86	CA3010A	RCA	4.79	3.48	CL703A	CL	1.50	1.25									
40374	RCA	2.56	1.86	CA3011	RCA	1.47	1.07	CL703M	CL	1.50	1.25									
40375	RCA	5.03	3.66	CA3012	RCA	1.82	1.32	CL704	CL	1.50	1.25	J14C1	IR	1.50	1.25					
40389	RCA	.91	.66	CA3013	RCA	2.15	1.56	CL704M	CL	1.50	1.25	J2981	IR	2.4						

# RCA IC's, RECTIFIERS, SCR's & TRIACS



## RCA INTEGRATED CIRCUITS

Specify RCA Number On Your Order

### LINEAR TYPES

RCA No.	Case	Usage	1-99 Each	100-999 Each	1000 Up Each
CA3000	B	DC Amplifier	\$3.80	\$2.76	\$2.30
CA3001	C	Video & Wide Band Amplifier	5.55	4.00	3.35
CA3002	B	IF Amplifier	3.71	2.70	2.25
CA3005	C	RF Amplifier	2.48	1.80	1.50
CA3007	C	AF Amplifier	5.35	3.90	3.25
CA3008	D	Operational Amplifier	6.44	4.68	3.90
CA3008A	D	Operational Amplifier	9.74	7.08	5.90
CA3010	C	Operational Amplifier	2.61	1.90	1.58
CA3010A	C	Operational Amplifier	4.79	3.48	2.90
CA3011	B	FM IF Amplifier	1.47	1.07	.89
CA3012	B	FM IF Amplifier	1.82	1.32	1.10
CA3013	B	FM IF Amp./Disc./AF Amplifiers	2.15	1.56	1.30
CA3014	B	FM IF Amp./Disc./AF Amplifiers	2.48	1.80	1.50
CA3015	C	Operational Amplifier	3.96	2.88	2.40
CA3015A	C	Operational Amplifier	6.44	4.68	3.90
CA3016A	D	Operational Amplifier	11.39	8.28	6.90
CA3018	C	Transistor Array	1.62	1.18	.98
CA3019	B	Diode Array	1.62	1.18	.98
CA3020	C	Multi-Purpose Wide Band Amplifier	2.56	1.86	1.55
CA3020A	C	High Gain Wide Band Amp.	3.26	2.37	1.98
CA3021	C	Video & Wide Band Amplifier	3.14	2.28	1.90
CA3022	C	Video & Wide Band Amplifier	2.64	1.92	1.60
CA3023	C	Video & Wide Band Amplifier	2.56	1.86	1.55
CA3026	C	Transistor Array	2.06	1.50	1.25
CA3028A	A	Differential/Cascode Amplifier	1.47	1.07	.89
CA3028B	A	Differential/Cascode Amplifier	2.06	1.50	1.25
CA3029A	F	Operational Amplifier	3.14	2.28	1.90
CA3030	F	Operational Amplifier	2.61	1.90	1.58
CA3030A	F	Operational Amplifier	4.79	3.48	2.90
CA3031/702A	A	Operational Amplifier	4.95	3.60	3.00
CA3032/702C	A	Operational Amplifier	3.30	2.40	2.00
CA3033	E	Operational Amplifier	4.79	3.48	2.90
CA3033A	E	Operational Amplifier	8.09	5.88	4.90
CA3035	B	Video and Wide Band Amplifier	2.48	1.80	1.50
CA3036	B	Dual Darlington Array	1.47	1.07	.89
CA3037A	E	Operational Amplifier	4.79	3.48	2.90
CA3038A	E	Operational Amplifier	6.44	4.68	3.90
CA3039	C	Diode Array	1.61	1.17	.98
CA3040	C	Video & Wide Band Amplifier	4.87	3.54	2.85
CA3041	G*	Wide Band Amp/FM Detector	2.06	1.50	1.25
CA3042	G*	Wide Band Amp/FM Detector	2.06	1.50	1.25
CA3043	C	Hi Gain IF Amp/FM Detector	2.81	2.04	1.70
CA3044	B	Special Function Subsystem	2.31	1.68	1.40
CA3045	E	Transistor Array	2.47	1.80	1.50
CA3046	F	Transistor Array	1.61	1.17	.98
CA3047	F	Operational Amplifier	2.61	1.90	1.58
CA3047A	F	Operational Amplifier	4.79	3.48	2.90
CA3050	E	Dual Differential Amplifier	3.71	2.70	2.25
CA3051	F	Dual Differential Amplifier	2.72	1.98	1.65

\*Leads Formed To Fit Pattern G Prepunched Boards.

### DIGITAL TYPES

RCA No.	Case	Usage	1-99 Each	100-999 Each	1000 Up Each
CD2150	D	Ultra High Speed ECCSL Gate	3.96	2.88	2.40
CD2151	D	Ultra High Speed ECCSL Gate	3.96	2.88	2.40
CD2152	D	Ultra High Speed ECCSL Gate	3.96	2.88	2.40
CD2153	D	Ultra High Speed ECCSL Gate	5.20	3.80	3.15
CD2200D	E	Low Power DTL Gate	5.20	3.80	3.15
CD2201D	E	Low Power DTL Gate	5.45	3.95	3.30
CD2202D	E	Low Power DTL Gate	5.45	3.95	3.30
CD2203D	E	Low Power DTL Flip-Flop	6.95	5.05	4.20
CD2205D	E	Low Power DTL Gate	5.20	3.80	3.15
CD2300E/830	F	Med Power DTL Gate	1.73	1.26	1.05
CD2301E/861	F	Med Power DTL Gate	1.73	1.26	1.05
CD2302E/846	F	Med Power DTL Gate	1.90	1.38	1.15
CD2303E/849	F	Med Power DTL Gate	1.90	1.38	1.15
CD2304E/845	F	Med Power DTL Clocking Flip-Flop	2.48	1.80	1.50
CD2305E/848	F	Med Power DTL Clocking Flip-Flop	2.48	1.80	1.50
CD2306E/832	F	Med Power DTL Gate	1.90	1.38	1.15
CD2307E/844	F	Med Power DTL Gate	1.90	1.38	1.15
CD2308E/862	F	Med Power DTL Gate	1.90	1.38	1.15
CD2309E/863	F	Med Power DTL Gate	1.90	1.38	1.15
CD2310E/836	F	Med Power Hex Inverter	1.90	1.38	1.15
CD2311E/837	F	Med Power Hex Inverter	1.90	1.38	1.15
CD2312E	F	Med Power Hex Inverter	1.90	1.38	1.15
CD2313E	F	Med Power Hex Inverter	2.39	1.74	1.45
CD2314E/833	F	Med Power OTL Input Expander	1.49	1.08	.90
CD2315E	F	Dual Clocked J-K Flip-Flops	4.46	3.24	2.70
CD2316E	F	Dual Clocked J-K Flip-Flops	4.46	3.24	2.70
CD2317E	F	Dual Clocked J-K Flip-Flops	4.46	3.24	2.70
CD2318E	F	Dual Clocked J-K Flip-Flops	4.46	3.24	2.70

## RCA LINEAR INTEGRATED CIRCUIT MANUAL

Manual 1C-41. 350-page manual gives the design engineer a basic working knowledge of the design and application of linear integrated circuits. Covered are general design considerations, differential amplifiers, operational amplifiers, transfer characteristics, feedback considerations, circuit applications and design features.

No. 16A23. Each.....\$2.00

RCA TRANSISTOR MANUAL SC-14. Over 656 pages of definitive data and easy-to-understand text on RCA Semi-conductor Devices.

No. 16B429. Each.....\$2.50

## RCA SILICON POWER CIRCUITS MANUAL

448 pages on transistors, rectifiers, thyristors (SCR's and Triacs).

16A1013. SP51 Each.....\$2.00

16A24. TO-30 Tunnel Diode Manual, 159 pages.....\$1.50

## SILICON RECTIFIERS

RCA No.	Package	MAX. RATINGS		1-99 Each	100-999 Each	1000 Up Each
		Current Amps.	PRV			
1N3754	A	0.125	100	\$0.32	\$0.23	\$0.19
1N3755	A	0.125	200	.33	.24	.20
1N3756	A	0.125	400	.35	.26	.21
1N3563*	B	0.3	1000	.94	.69	.57
1N3196	B	0.4	800	.74	.54	.45
1N3256*	B	0.4	800	.78	.57	.47
1N3193	B	0.5	200	.35	.26	.21
1N3194	B	0.5	400	.38	.28	.23
1N3195	B	0.5	600	.53	.39	.32
1N3253*	B	0.5	200	.38	.28	.23
1N3254*	B	0.5	400	.42	.30	.25
1N3255*	B	0.5	600	.56	.41	.34
1N5214*	B	0.6	800	.81	.59	.49
1N5218*	B	0.6	800	.85	.62	.51
1N538	D0-1	0.75	200	.45	.32	.27
1N540	D0-1	0.75	400	.56	.41	.34
1N1764A	D0-1	0.75	500	.52	.38	.31
1N2859A	D0-1	0.75	100	.37	.27	.22
1N2860A	D0-1	0.75	200	.40	.29	.24
1N5211	B	0.75	200	.38	.28	.23
1N5212	B	0.75	400	.42	.30	.25
1N5213	B	0.75	600	.56	.41	.34
1N5215*	B	0.75	200	.42	.30	.25
1N5216*	B	0.75	400	.45	.33	.27
1N5217*	B	0.75	600	.60	.44	.36

\*Insulated Case

## RCA SILICON RECTIFIERS

STANDARD POLARITY—CATHODE CONNECTED TO STUD  
REVERSE POLARITY—ANODE CONNECTED TO STUD

RCA No.	RCA No.	Package	MAX. RATINGS		1-99 Each	100-999 Each	1000 Up Each
			Current Amps.	PRV			
1N1612	1N1612R	00-4	5	50	\$1.08	\$0.78	\$0.65
1N1613	1N1613R	D0-4	5	100	1.24	.90	.75
1N1614	1N1614R	D0-4	5	200	1.90	1.38	1.15
1N1615	1N1615R	D0-4	5	400	3.71	2.78	2.25
1N1616	1N1616R	D0-4	5	600	5.36	3.90	3.25
1N1199A	1N1199RA	D0-4	12	50	1.24	.90	.75
1N1200A	1N1200RA	D0-4	12	100	1.41	1.02	.85
1N1202A	1N1202RA	D0-4	12	200	2.48	1.80	1.50
1N1204A	1N1204RA	D0-4	12	400	4.46	3.24	2.70
1N1206A	1N1206RA	D0-4	12	600	6.19	4.50	3.75
1N248C	1N248RC	D0-5	20	55	1.65	1.20	1.00
1N249C	1N249RC	D0-5	20	110	2.06	1.50	1.25
1N250C	1N250RC	D0-5	20	220	2.72	1.98	1.65
1N196A	1N196RA	D0-5	20	400	4.95	3.60	3.00
1N198A	1N198RA	D0-5	20	600	7.01	5.10	4.25

## RCA TRIACS

For control of full wave AC loads. Equivalent to 2 SCR's in a single package. Use Triacs for modern, efficient control of AC powered motors, lighting, heating, etc. 40575 rated @ 1800 watts and 40576 rated at 3600 watts are designed primarily for control of AC loads such as space heaters, oven and furnace controls.

RCA No.	Line Operation	Outline	On State RMS Amps.	Off State Vo. Rat.	Gate Firing Requirements Volts	MA	1-99	100-999	1000 up
40525	low	TO-5	2.5	100	2.2	3	\$1.57	\$1.14	\$0.95
40526	120-V	TO-5	2.5	200	2.2	3	1.62	1.18	.98
40527	240-V	Modified Three	2.5	400	2.2	3	2.31	1.68	1.40
40528	low	TO-5	2.5	100	2.2	10	1.57	1.14	.95
40529	120-V	TO-5	2.5	200	2.2	10	1.62	1.18	.98
40530	240-V	1 1/2 Leads	2.5	400	2.2	10	2.31	1.68	1.40
40429	120-V	TO-66	6	200	2.2	25	2.06	1.50	1.25
40430	240-V	TO-66	6	400	2.2	25	2.39	1.74	1.45
40485	120-V	TO-5 Modified	6	200	2.2	25	2.06	1.50	1.25
40486	240-V	2 - 1/2 Leads	6	400	2.2	25	2.39	1.74	1.45
40668	120-V	Y	8	200	2.5	25	1.62	1.18	.98
40669	240-V	Y	8	400	2.5	25	1.82	1.32	1.10
40575	120-V	TO-66	15	200	2.5	80	2.48	1.80	1.50
40576	240-V	TO-66	15	400	2.5	80	3.29	2.38	1.98
2N5442	240-V	G	40	200	2.5	50	11.47	8.34	6.95

### INTEGRAL TRIGGER TYPES

40431	120-V	TO-5 Modified	6	200	40	.1uF	2.56	1.86	1.55
40432	240-V	2 - 1/2 Leads	6	400	40	.1uF	2.97	2.16	1.80

No. 16A1111. Technical Bulletin on Triacs and SCR's.....FREE

TRIGGER DIODES TO CONTROL TRIACS  
Breakover voltage 32 V. Breakover symmetry ± 3 V. max. Breakover current 50 uA max. DO-26 Package.

RCA No. 1N5411. 1-99 Each.....61c 100-999 Ea.....44c 1000 Up Ea.....37c

## RCA SILICON CONTROLLED RECTIFIERS

RCA Number	Package	Amp. Ratings		Rep. PRV	Gate Firing Requirements Volts	MA	1-99 Each	100-999 Each	1000 Up Each
		RMS	Avg.						
2N3528	TO-8	2	1.3	200	2	15	\$1.58	\$1.14	\$0.95
2N3529	TO-8	2	1.3	400	2	15	1.96	1.43	1.19
2N4102	TO-8	2	1.3	600	2	15	2.64	1.92	1.60
2N3228	TO-66	5	3.2	200	2	15	1.62	1.18	.98
2N3525	TO-66	5	3.2	400	2	15	2.31	1.68	1.40
2N4101	TO-66	5	3.2	600	2	15	3.05	2.22	1.85
40533	TO-66	5	3.2	200	3.5	40	2.75	2.00	1.87
40534	TO-66	5	3.2	400	3.5	40	4.44	3.22	2.68
40555	TO-66	5	3.2	600	3.5	40	4.76	3.47	2.89
2N3669	TO-3	12.5	8	200	2	40	2.81	2.04	1.70
2N3670	TO-3	12.5	8	400	2	40	3.80	2.76	2.30
2N1844A	TO-48	16	10				Use 2N3896		
2N1846A	TO-48	16	10				Use 2N3897		
2N1849A	TO-48	16	10				Use 2N3898		
2N1850A	TO-48	16	10				Use 2N3899		
2N683	TO-48	25	16						



# RCA AUDIO FREQUENCY TRANSISTORS

## AUDIO FREQUENCY SILICON N-P-N POWER TYPES CLASS A-AB-B FOR LINEAR OPERATION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS						
		P <sub>T</sub> or T <sub>M</sub> W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> A	h <sub>FE</sub>		f <sub>T</sub> MHz	1-99 Each	100-999 Each	1000 Up Each
						min	I <sub>C</sub> mA				
40347	TO-5	8.75	60	40	1.5	20	450	1.1	.66	.48	.40
40348	TO-5	8.75	90	65	1.5	30	300	1.1	1.06	.77	.64
40349	TO-5	8.75	160	140	1.5	25	150	1.1	1.56	1.13	.94
2N3439	TO-5	10	450	350	1	40	20	15*	3.71	2.70	2.25
2N3440	TO-5	10	300	250	1	40	20	15*	1.82	1.32	1.10
2N4063	C	10	450	350	1	40	20	15*	3.80	2.76	2.30
2N4064	C	10	300	250	1	40	20	15*	1.90	1.38	1.15
2N5320	TO-5	10	100	75	2	30	500	50*	2.15	1.56	1.30
2N5321	TO-5	10	75	50	2	40	500	50*	1.57	1.14	.95
40436	TO-5	10	175	1	25	10	10*	1.14	.83	.69	
40412	TO-5	10	250	1	40	30	10*	1.06	.77	.64	
40372	E	5.8TA	90	55	4	25	0.5	1.2	1.24	.90	.75
40373	E	5.8TA	160	140	3	20	0.5	1.2	2.56	1.86	1.55
40374	E	5.8TA	250	175	2	10	1	15*	2.56	1.86	1.55
40375	E	5.8TA	120	50	7	50	500	60*	5.03	3.66	3.05
2N1483	TO-8	25	60	40	3	20	750	1.2	2.89	2.10	1.75
2N1484	TO-8	25	100	55	3	20	750	1.2	3.63	2.64	2.20
2N1485	TO-8	25	60	40	3	35	750	1.2	4.46	3.24	2.70
2N1486	TO-8	25	100	55	3	35	750	1.2	6.77	4.92	4.10
2N1701	TO-8	25	60	40	2.5	20	300	1.2	2.31	1.68	1.40
2N3441	TO-66	25	160	140	3	20	500	1.2	2.48	1.80	1.50
2N3054	TO-66	29	90	55	4	25	500	1.2	1.16	.84	.70
40250	TO-66	29	50	40	4	25	1.5A	1.2	1.16	.84	.70
40310	TO-66	29	35	4	20	1A	1.2	1.99	.72	.60	
40312	TO-66	29	60	4	20	1A	1.2	1.03	.75	.62	
40316	TO-66	29	40	4	20	1A	1.2	.99	.72	.60	
40324	TO-66	29	35	4	20	1A	1.2	.99	.72	.60	

\*f<sub>T</sub> MIN MHz

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS						
		P <sub>T</sub> or T <sub>M</sub> W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> A	h <sub>FE</sub>		f <sub>T</sub> MHz	1-99 Each	100-999 Each	1000 Up Each
						min	I <sub>C</sub> mA				
2N3583	TO-66	35	250	175	2	10	10	15*	\$2.48	\$1.80	\$1.50
2N3584	TO-66	35	375	250	2	25	1	15*	4.13	3.00	2.50
2N3585	TO-66	35	500	300	2	25	1	15*	6.60	4.80	4.00
2N3878	TO-66	35	120	50	7	50	0.5	10*	4.95	3.60	3.00
2N3879	TO-66	35	120	75	7	40	0.5	10*	6.60	4.80	4.00
2N4240	TO-66	35	500	300	2	30	0.75	15*	2.89	2.10	1.75
40313	TO-66	35	300	2	40	0.5	....	....	2.23	1.62	1.35
40318	TO-66	35	300	2	50	0.5	....	....	2.10	1.52	1.27
40322	TO-66	35	300	2	75	0.5	....	....	2.15	1.56	1.30
40328	TO-66	35	300	2	20	1	....	....	2.19	1.60	1.33
40364	TO-66	35	60	7	35	0.5	15	....	4.79	3.48	2.90
2N1487	TO-3	75	60	40	6	15	1.5	1	4.54	3.30	2.75
2N5490	Y	50	60	50	7	20	2	0.8*	1.07	.78	.65
2N5491	X	50	60	50	7	20	2	0.8*	1.07	.78	.65
2N5492	Y	50	75	65	7	20	2.5	0.8*	1.19	.86	.72
2N5493	X	50	75	65	7	20	2.5	0.8*	1.19	.86	.72
2N5494	Y	50	60	50	7	20	3	0.8*	1.19	.86	.72
2N5495	X	50	60	50	7	20	3	0.8*	1.19	.86	.72
2N5496	Y	50	90	80	7	20	3.5	0.8*	1.29	.94	.78
2N5497	X	50	90	80	7	20	3.5	0.8*	1.29	.94	.78
2N1488	TO-3	75	100	55	6	15	1.5	1	4.95	3.60	3.00
2N1489	TO-3	75	60	40	6	25	1.5	1	7.43	5.40	4.50
2N1490	TO-3	75	100	55	6	25	1.5	1	8.25	6.00	5.00
2N1702	TO-3	75	60	40	6	15	0.8	1	4.54	3.30	2.75
2N5034	T	83	55	40	6	20	2.5	.8*	1.34	.98	.81
2N5036	T	83	70	50	8	20	2.5	.8*	1.42	1.04	.86
40514	T	83	45	6	20	2.5	.8*	....	1.26	.92	.76
2N5035	U	83	55	40	6	20	2.5	.8*	1.32	.96	.80
2N5037	U	83	70	50	8	20	2.5	.8*	1.41	1.02	.85
40513	U	83	45	6	20	2.5	.8*	....	1.24	.90	.75
40542	T	83	60	6	20	2.5	.8*	....	1.31	.95	.79
40543	T	83	60	8	20	3	.8*	....	1.37	1.00	.83
2N4347	TO-3	100	140	120	5	20	2	.8*	2.97	2.16	1.80
2N3055	TO-3	115	100	60	15	20	4	1	1.82	1.32	1.10
40363	TO-3	115	60	15	20	4	1	1	1.82	1.32	1.10
2N3442	TO-3	117	160	140	10	20	3	.8	4.54	3.30	2.75
40351	TO-3	117	50	40	15	15	8	1	1.90	1.38	1.15
40325	TO-3	117	35	15	12	8	1	1	1.90	1.38	1.15
2N4348	TO-3	120	140	120	10	15	5	.7	4.13	3.00	2.50
2N2015	TO-36	150	100	50	10	15	5	1	9.08	6.60	5.50
2N2016	TO-36	150	130	65	10	15	5	1	9.90	7.20	6.00
2N3771	TO-3	150	50	40	15	15	1	1	4.13	3.00	2.50
2N3772	TO-3	150	100	60	10	15	10	.9	4.13	3.00	2.50
2N3773	TO-3	150	160	140	16	15	8	.7	7.43	5.40	4.50
40411	TO-3	150	90	30	35	4	.7	....	4.29	3.12	2.60

\*f<sub>T</sub> MIN MHz

## AUDIO FREQUENCY SILICON P-N-P POWER TYPES CLASS A-AB FOR LINEAR OPERATION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS						
		P <sub>T</sub> or T <sub>M</sub> W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> A	h <sub>FE</sub>		f <sub>T</sub> MHz	1-99 Each	100-999 Each	1000 Up Each
						min	I <sub>C</sub> mA				
40319	TO-5	5	—40	—40	—0.7	35	—50	100	\$1.16	\$0.84	\$0.70
40362	TO-5	5	—70	—0.7	35	—50	100	1.24	.90	.75	
40537	TO-5	5	—55	—0.7	50	—50	100	1.24	.90	.75	
40538	TO-5	5	—55	—0.7	15	—500	100	1.36	.99	.82	
40406	TO-5	—	—50	—0.7	20	—0.1	100	1.19	.87	.72	
40410	D	—	—90	—0.7	50	—150	100	1.32	.96	.80	
40391	D	—	—60	—40	—1	50	—150	60*	1.24	.90	.75
2N4036	TO-5	7	—90	—65	—1	40	—150	60*	1.32	.96	.80
2N4037	TO-5	7	—60	—40	—1	50	—150	60*	1.16	.84	.70
2N4314	TO-5	7	—90	—65	—1	50	—150	60*	1.24	.90	.75
40394	C	7	—60	—40	—1	50	—150	60*	1.24	.90	.75
2N5322	TO-5	10	—100	—75	—2	30	—500	50*	2.15	1.56	1.30
2N5323	TO-5	10	—75	—50	—2	40	—500	50*	1.57	1.14	.95
2N5415	TO-5	10	—350	—300	—1	30	—50	15*	3.30	2.40	2.00
2N5416	TO-5	10	—200	—1	30	—50	15*	....	4.95	3.60	3.00

\*f<sub>T</sub> MIN MHz

## AUDIO FREQUENCY GERMANIUM N-P-N POWER TYPES CLASS A-AB-B FOR LINEAR OPERATION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS						
		P <sub>T</sub> or T <sub>M</sub> W	V <sub>CB0</sub> V	I <sub>C</sub> mA	h <sub>FE</sub>		f <sub>T</sub> MHz	1-99 Each	100-999 Each	1000 Up Each	
					typ	I <sub>C</sub> mA					
2N647	TO-1	100	25	100	70	50	....	....	\$1.08	\$0.78	\$0.65
2N649	TO-1	100	20	100	65	50	....	....	.86	.63	.52

Complementary Symmetry PNP-NPN Matched Pair \*TC +MIN

40396	TO-1	+300	18	500	+30	250	Pr. .83	Pr. .60	Pr. .50
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## AUDIO FREQUENCY GERMANIUM P-N-P POWER TYPES CLASS A-AB-B FOR LINEAR OPERATION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS						
		P <sub>T</sub> or T <sub>M</sub> W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> A	h <sub>FE</sub>		f <sub>T</sub> MHz	1-99 Each	100-999 Each	1000 Up Each
						min	I <sub>C</sub> mA				
2N407	....	....	....	....	....	....	....	....	....	....	....
2N408	TO-1	.15TA	—20	—18	—70	65	—0.05	....	\$0.48	\$0.35	\$0.285
2N270	TO-7	.27TA	—25	—18	—0.75	70	—0.15	1	.76	.55	.48
2N1183	TO-8	7.5	—45	—20	—3	20	—0.4	....	1.82	1.32	1.10
2N1183A	TO-8	7.5	—60	—30	—3	20	—0.4	....	2.31	1.68	1.40
2N1183B	TO-8	7.5	—80	—40	—3	20	—0.4	....	2.89	2.10	1.75
2N1184	TO-8	7.5	—45	—20	—3	40	—0.4	....	2.48	1.80	1.50
2N1184A	TO-8	7.5	—60	—30	—3	40	—0.4	....	2.81	2.04	1.70
2N1184B	TO-8	7.5	—80	—40	—3	40	—0.4	....	4.13	3.00	2.50
2N176	....	....	....	....	....	....	....	....	....	....	....
2N351	....	....	....	....	....	....	....	....	....	....	....
2N376	....	....	....	....	....	....	....	....	....	....	....
2N2147	TO-3	12.5	—75	—50	—5	100	—1	4	1.57	1.14	.95
2N2148	TO-3	12.5	—60	—40	—5	60	—1	3	1.08	.78	.65
40022	TO-3	12.5	—32	—32	—5	38	—1	0.3	.83	.60	.50
40050	TO-3	12.5	—40	—40	—5	50	—1	0.5	.99	.72	.60
40051	TO-3	12.5									

## RADIO FREQUENCY SILICON MOS FET SMALL-SIGNAL TYPES FOR LINEAR OPERATION

SINGLE INSULATED GATE N-CHANNEL

RCA No.	Package	CHARACTERISTICS			MAX. RATINGS					
		Gps		g <sub>fs</sub> min	V <sub>DS</sub>	I <sub>D</sub>	P <sub>T</sub>	1-99	100-	1000
		typ	MHz	μmho	V	mA	mW	Each	Each	Up
3N143	TO-72	13.5	100	5000	20	50	100	\$1.39	\$1.01	\$0.84
3N139	TO-72	14	200	3000	35	50	400	2.89	2.10	1.75
3N128	TO-72	16	200	5000	20	50	400	1.45	1.06	.88
3N152	TO-72	17	200	5000	20	50	400	1.78	1.30	1.08
3N154	TO-72	20	200	5000	20	50	400	1.62	1.18	.98
40467	TO-72	15	200	7500	20	50	400	1.24	.90	.75
3N142	TO-72	24	100	4000	20	50	400	1.08	.78	.65
40468	TO-72	24	100	7500	20	20	375	.75	.54	.45
40559	TO-72	25.8	100	7500	20	20	400	.70	.51	.42

MOS FET SILICON QUAL INSULATED GATE \* TYP μmho

3N140	TO-72	18	200	1000*	20	50	150	1.62	1.18	.98
3N141	TO-22	18	200	1000*	20	50	150	1.55	1.13	.94

## RADIO FREQUENCY SILICON N-P-N SMALL-SIGNAL CLASS A-B-C FOR UHF-VHF-HF

RCA No.	Package	CHARACTERISTICS			MAX. RATINGS					
		f <sub>T</sub> min	NF		V <sub>CEO</sub>	I <sub>C</sub>	1-99	100-	1000	
		MHz	max	oper. freq.	V	mA	Each	Each	Up	
40354	TO-104	100*	.....	.....	V <sub>CEO</sub> -150V	50	\$1.18	\$0.86	\$0.71	
40355	J	100*	.....	.....	50	50	1.24	.90	.75	
2N2270	TO-5	60	6	1	60	1A	.91	.66	.55	
2N2897	TO-18	100	.....	.....	60	1A	1.16	.84	.70	
2N3053	TO-5	100	.....	.....	60	700	.75	.54	.45	
40084	TO-18	100	8	1	60	1A	.99	.72	.60	
2N2102	TO-5	120	6	1	120	1A	1.13	.82	.68	
2N2405	TO-5	120	6	1	120	1A	1.57	1.14	.95	
2N2895	TO-18	120	8	1	120	1A	1.41	1.02	.85	
2N2896	TO-18	120	.....	.....	140	1A	2.06	1.50	1.25	
2N5188	TO-39	325*	.....	.....	60	.....	.55	.40	.33	
2N5189	V	.....	.....	.....	60	.....	.65	.47	.39	
2N5181	TO-104	700*	3.5	200	45	50	.45	.33	.27	
2N5182	TO-104	700*	4.5	200	45	4	.40	.29	.24	
40405	TO-52	.....	.....	.....	40	500	1.41	1.02	.85	
40519	TO-52	300	.....	.....	40	30	1.27	.92	.77	
2N917	TO-72	500	3.5	60	30	50	1.41	1.02	.85	
2N918	TO-72	600	6	60	30	.....	.48	.35	.29	
2N5180	TO-104	650	4.5	200	30	.....	2.31	1.68	1.40	
2N2708	TO-72	700	7.5	200	35	.....	1.40	1.02	.85	
2N4934	TO-104	700	3.5	200	40	.....	1.90	1.38	1.15	
2N4936	TO-104	700	4.5	450	50	.....	1.90	1.38	1.15	
2N3478	TO-104	750	5	470	30	.....	1.90	1.38	1.15	
2N4259	TO-104	750	5	450	40	.....	1.90	1.38	1.15	
40238	TO-104	800*	.....	.....	45	50	.43	.32	.26	
40239	TO-104	800*	.....	.....	45	50	.40	.29	.24	
40240	TO-104	800*	.....	.....	45	50	.38	.28	.23	
40242	TO-104	.....	2.5	100	45	50	.57	.41	.34	
40243	TO-104	.....	.....	100	45	50	.47	.34	.28	
40244	TO-104	.....	.....	Oscillator	45	50	.38	.28	.23	
40245	TO-104	.....	.....	.....	45	50	.40	.29	.24	
40246	TO-104	.....	.....	.....	45	50	.38	.28	.23	
40478	TO-104	800*	2.5	100	45	50	.66	.48	.40	
40479	TO-104	800*	.....	.....	45	50	.58	.42	.35	
40480	TO-104	800*	.....	.....	45	50	.48	.35	.29	
40481	TO-104	860*	.....	.....	45	50	.53	.39	.32	
40482	TO-104	860*	.....	.....	45	50	.50	.36	.30	
40472	TO-104	900*	3.3	200	45	50	.86	.48	.40	
40473	TO-104	900*	.....	.....	45	50	.80	.44	.36	
40474	TO-104	900*	.....	Oscillator	45	50	.48	.35	.29	
40477	TO-104	800*	.....	.....	45	50	.50	.36	.30	
40235	TO-104	1000*	3.3	216	45	50	.57	.41	.34	
40236	TO-104	1000*	.....	.....	45	50	.48	.35	.29	
40237	TO-104	1000*	.....	Oscillator	45	50	.38	.28	.23	
2N3932	TO-104	750	5	450	30	.....	1.40	1.02	.85	
2N3933	TO-104	750	5	450	40	.....	1.62	1.18	.98	
2N3600	TO-72	850	4.5	200	30	.....	3.80	2.76	2.30	
2N2857	TO-72	1000	4.5	450	30	40	4.46	3.24	2.70	
2N5179	TO-72	1000	4.5	200	20	50	.65	.47	.39	
2N5109	TO-39	1200	3	200	40	400	3.17	2.52	2.10	

\* f<sub>T</sub> Typ MHz

## R.F. GERMANIUM P-N-P SMALL-SIGNAL TYPES FOR LINEAR OPERATION

CONTINUED FROM BOTTOM OF PRECEDING COLUMN

RCA No.	Package	CHARACTER. TYP. OPER.				MAX. RATINGS					
		f <sub>T</sub> typ	f <sub>hfb</sub> typ	Gpe	Oper. freq.	V <sub>CEO</sub>	I <sub>C</sub>	P <sub>T</sub>	1-99	100-	1000
		MHz	MHz	dB	MHz	V	mA	mW	Each	Each	Up
2N1395	TO-33	30	22	12.5	.....	-40	-10	120	1.82	1.32	1.10
2N1524	TO-1	33	54.4	0.455	.....	-24	-10	80	.47	.34	.28
2N1525	TO-40	.....	.....	.....	.....	.....	.....	.....	Use	2N1524	1.10
2N1526	TO-1	33	48.9	1.5	.....	-24	-10	80	.48	.35	.29
2N1527	TO-40	.....	.....	.....	.....	.....	.....	.....	Use	2N1526	.30
2N1638	TO-1	40	61.5	0.262	.....	-34	-10	80	.50	.36	.30
2N1639	TO-1	45	37	1.5	.....	-34	-10	80	.53	.39	.32
2N1631	TO-40	.....	.....	.....	.....	.....	.....	.....	Use	2N1632	.35
2N1632	TO-1	45	47.7	1.5	.....	-34	-10	80	.58	.42	.35
2N1637	TO-1	45	47.7	1.5	.....	-34	-10	80	.57	.41	.34
2N372	TO-7	.....	.....	.....	.....	.....	.....	.....	Use	40243	.....
2N370	TO-7	.....	.....	.....	.....	.....	.....	.....	Use	40242	.....
2N371	TO-7	.....	.....	.....	.....	.....	.....	.....	Use	40244	.....
2N1180	TO-45	.....	.....	.....	.....	.....	.....	.....	Use	40245 or 40246	.....
2N384	TO-44	100	21	50	.....	-40	-10	120	1.65	1.20	1.00
2N1225	TO-33	100	21	50	.....	-40	-10	120	1.41	1.02	.85
2N1396	TO-33	100	21	50	.....	-40	-10	120	1.93	1.40	1.17
2N1023	TO-44	120	24	50	.....	-40	-10	120	2.72	1.98	1.65
2N1066	TO-33	120	24	50	.....	-40	-10	120	1.98	1.44	1.20
2N1397	TO-33	120	24	50	.....	-40	-10	120	2.15	1.56	1.30
2N1177	TO-45	.....	.....	.....	.....	.....	.....	.....	Use	40242	.....
2N1179	TO-45	.....	.....	.....	.....	.....	.....	.....	Use	40243	.....
2N1178	TO-45	.....	.....	.....	.....	.....	.....	.....	Use	40244	.....

## RADIO FREQUENCY SILICON N-P-N POWER TYPES FOR LINEAR AND CLASS C OPERATION

RCA No.	Package	CHARACTERISTICS			MAX. RATINGS						
		P <sub>OE</sub> min. W	oper. freq. MHz	Gpe db	f <sub>T</sub> typ MHz	P <sub>T</sub> Tc W	V <sub>CEV</sub>	1-99	100-	1000	
							Each	Each	Up		
2N1491	TO-5	0.01	70	15	380	3	30	\$1.82	\$1.32	\$1.10	
40080	TO-39	0.1	27	17	350	0.5	30	1.08	.78	.65	
2N1492	TO-5	0.1	70	15	380	3	60	4.29	3.12	2.60	
40405	TO-52	.....	.....	.....	.....	.....	.....	Use	40519	.....	
40081	TO-39	0.4	27	7	350	2	60	1.41	1.02	.85	
2N1493	TO-5	0.5	70	12	380	3	100	7.01	5.10	4.25	
2N3118	TO-5	1	50	10	250*	4	85	4.95	3.60	3.00	
2N4427	TO-39	1	175	10	800	5	55	2.15	1.56	1.30	
40280	TO-39	1	175	9	550	7	36	4.62	3.36	2.80	
2N3866	TO-39	1	400	10	800	5	30	2.97	2.16	1.80	
40290	TO-39	2	135	6	500	7	50	2.48	1.80	1.50	
40291	TO-60	2	135	6	500	11.6	50	10.40	7.55	6.30	
2N3553	TO-39	2.5	175	10	500	7	65	4.37	3.18	2.65	
40082	TO-39	3	27	9	200	5	60	4.04	2.94	2.45	
40446	W	3	27	.....	.....	10	60	4.29	3.12	2.60	
2N3375	TO-60	3	400	5	400*	11.6	65	10.80	8.95	7.45	
40581	TO-39	3.5	27	.....	.....	5	60	4.87	3.54	2.95	
40582	W	3.5	27	.....	.....	5	60	5.12	3.72	3.10	
40281	TO-60	4	175	6	400	10	60	10.60	8.75	7.30	
2N4440	TO-60	5	400	.....	500	11.6	65	11.90	9.85	8.20	
2N2631	TO-39	7.5	50	9	200	8.75	80	3.47	2.52	2.10	
2N3632	TO-60	13.5	175	6	400	23	65	12.75	10.55	8.80	

\* Min. MHz

## COMPUTER SWITCHING & PULSE SILICON N-P-N LOW-LEVEL TYPES FOR MEDIUM-SPEED OPERATION

# RCA SWITCHING & PULSE TRANSISTORS

## COMPUTER SWITCHING & PULSE SILICON P-N-P LOW LEVEL TYPES FOR MEDIUM SPEED OPERATION

RCA No.	Package	CHARACTERISTICS				MAX. RATINGS			1-99 Each	100-999 Each	1000 Up Each
		f <sub>r</sub> min MHz	V <sub>ce</sub> (sat) max V	C <sub>obo</sub> max pF	h <sub>FE</sub>	V <sub>ceo</sub> V	I <sub>c</sub> A	I <sub>c</sub> mA			
2N5322	TO-5	50	0.7	...	30	500	100	-2	2.15	1.56	1.30
2N5323	TO-5	50	1.2	...	40	500	75	-2	1.57	1.14	.95
2N4036	TO-5	60	0.65	30	40	150	-90	-1	\$1.32	\$0.96	\$0.80
2N4037	TO-5	60	1.4	30	50	150	-60	-1	1.16	.84	.70
2N4314	TO-5	60	1.4	30	50	150	-90	-1	1.24	.90	.75
40391	D	60	1.4	30	50	150	-60	-1	1.24	.90	.75
40394	C	60	1.4	30	50	150	-60	-1	1.24	.90	.75

## COMPUTER SWITCHING & PULSE SILICON N-P-N LOW-LEVEL TYPES FOR HIGH-SPEED OPERATION

RCA No.	Package	CHARACTERISTICS				MAX. RATINGS			1-99 Each	100-999 Each	1000 Up Each
		f <sub>r</sub> min MHz	V <sub>ce</sub> (sat) max V	h <sub>FE</sub>	t <sub>on</sub> max ns	V <sub>ceo</sub> V	I <sub>c</sub> A	I <sub>c</sub> mA			
40217	TO-52	250	0.5	50	100	140	100	0.5	\$5.36	\$3.90	\$3.25
40218	TO-52										
2N3119	TO-5	250	0.5	50	100	140	100	0.5	\$5.36	\$3.90	\$3.25
2N914	TO-18	400	0.2	30	10	15	30	0.2	.99	.72	.60
40220	TO-52	400	0.3	25	10	25	10	0.3	.40	.29	.24
2N5186	TO-52	400	0.25	30	10	18	25	0.5	.45	.33	.27
2N2369A	TO-18	500	0.2	20	100	12	40	0.2	1.65	1.20	1.00
2N709	TO-18	600	0.3	20	10	15	15	...	1.32	.96	.80
2N2475	TO-18	600	0.4	30	20	20	15	...	1.62	1.18	.98
2N3261	TO-52	600	0.35	40	10	13	40	0.5	1.32	.96	.80

## COMPUTER SWITCHING & PULSE SILICON N-P-N HIGH-VOLTAGE TYPES FOR HIGH SPEED OPERATION

RCA No.	Package	CHARACTERISTICS				MAX. RATINGS			1-99 Each	100-999 Each	1000 Up Each
		f <sub>r</sub> min MHz	C <sub>obo</sub> max pF	h <sub>FE</sub> min	t <sub>on</sub> max ns	t <sub>off</sub> max ns	V <sub>ceo</sub> V	P <sub>T</sub> A W			
2N2476	TO-5	250	10	20	25	45	60	0.6	\$1.16	\$0.84	\$0.70
2N2477	TO-5	250	10	40	25	45	60	0.6	1.32	.96	.80
2N3512	TO-5	250	10	10	30	45	60	0.8	1.08	.78	.65
2N5188	TO-39	250	10	20	35	50	60	0.8	.55	.40	.33
2N5189	V	250	12	35	40	70	60	1	.65	.47	.39
2N5262	V	250	12	20	30	60	75	1	1.62	1.18	.98
2N3261	TO-52	600	3.5	30	13	16	40	0.3	1.32	.96	.80

## COMPUTER SWITCHING & PULSE GERMANIUM P-N-P LOW-LEVEL TYPES FOR LOW- AND MEDIUM-SPEED OPERATION

RCA No.	Package	CHARACTERISTICS				MAX. RATINGS			1-99 Each	100-999 Each	1000 Up Each
		f <sub>h</sub> min MHz	C <sub>obo</sub> max pF	h <sub>FE</sub>	I <sub>c</sub> mA	V <sub>ceo</sub> V	I <sub>c</sub> mA	I <sub>c</sub> mA			
2N1303	TO-5	3	20	20	-10	-30	-300	...	\$0.42	\$0.30	\$0.25
2N404	TO-5	4	20	30	-12	-25	-100	...	.42	.30	.25
2N404A	TO-5	4	20	30	-12	-40	-150	...	.55	.40	.33
2N581	TO-5	4	20	20	-20	-18	-100	...	.50	.36	.30
2N396A	TO-5	5	20	30	-10	-30	-200	...	.66	.48	.40
40403	TO-5	5	20	40	-10	-30	-200	...	.48	.35	.29
2N1414	TO-5	8	11	...	...	-30	-200	...	.42	.30	.25
2N1307	TO-5	10	20	60	-10	-30	-300	...	.58	.42	.35
2N582	TO-5	14	20	40	-24	-25	-100	...	.66	.48	.40
2N1309	TO-5	15	20	80	-10	-30	-300	...	.91	.66	.55
2N1683	TO-5	50*	12	50	-10	-13	-100	...	1.90	1.38	1.15

## COMPUTER SWITCHING & PULSE GERMANIUM N-P-N LOW-LEVEL TYPES FOR LOW AND MEDIUM-SPEED OPERATION

RCA No.	Package	CHARACTERISTICS				MAX. RATINGS			1-99 Each	100-999 Each	1000 Up Each
		f <sub>h</sub> min MHz	C <sub>obo</sub> max pF	h <sub>FE</sub>	I <sub>c</sub> mA	V <sub>ceo</sub> V	I <sub>c</sub> mA	I <sub>c</sub> mA			
2N585	TO-5	3	25	20	20	25	200	...	\$0.99	\$0.72	\$0.60
2N1302	TO-5	3	20	20	10	25	300	...	.42	.30	.25
2N1605	TO-5	4	20	40	20	25	100	...	.62	.45	.37
2N1605A	TO-5	4	20	40	20	40	100	...	1.09	.80	.66
2N388	TO-5	5	20	60	30	25	200	...	.47	.34	.28
2N388A	TO-5	5	20	60	30	40	200	...	.88	.64	.53
2N1304	TO-5	5	20	40	10	25	300	...	.50	.36	.30
2N1306	TO-5	10	20	60	10	25	300	...	.62	.45	.37
2N1308	TO-5	15	20	80	10	25	300	...	.91	.66	.55

## COMPUTER SWITCHING & PULSE GERMANIUM P-N-P LOW-LEVEL TYPES HIGH-VOLTAGE FOR LOW AND MEDIUM-SPEED OPERATION

RCA No.	Package	MAX. RTG.		CHARACTERISTICS				1-99 Each	100-999 Each	1000 Up Each
		P <sub>T</sub> A mW	f <sub>r</sub> KHz	h <sub>FE</sub>	I <sub>c</sub> mA	h <sub>FE</sub>	I <sub>c</sub> mA			
2N398	TO-5	50	20	20	-5	...	...	\$0.83	\$0.60	\$0.50
2N398A	TO-5	150	40	20	-5	20	1	.91	.66	.55
2N398B	TO-5	250	20	20	-5	40	1	1.16	.84	.70

ILLUSTRATIONS OF RCA SEMICONDUCTOR PACKAGES ARE SHOWN ON PAGE 87

## POWER SWITCHING & PULSE SILICON N-P-N TYPES FOR LOW-SPEED OPERATION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS					1-99 Each	100-999 Each	1000 Up Each
		P <sub>T</sub> W	V <sub>ceo</sub> V	I <sub>c</sub> A	h <sub>FE</sub>	I <sub>c</sub> mA	C <sub>obo</sub> max pF	f <sub>r</sub> min MHz				
40407	TO-5	1Ta	50	0.7	40	1	120	\$0.81	\$0.59	\$0.49		
40408	TO-5	1Ta	90	0.7	40	10	100	1.08	.78	.65		
2N178A	TO-18	1.8	32	1	40	150	25	60	1.08	.78	.65	
2N1720A	TO-18	1.8	80	1	40	150	15	50	1.32	.96	.80	
2N2895	TO-18	1.8	65	1	60	150	15	120	1.41	1.02	.85	
2N2896	TO-18	1.8	90	1	60	150	15	120	2.06	1.50	1.25	
2N2897	TO-18	1.8	45	1	40	150	15	100	1.16	.84	.70	
2N697	TO-5	2	40	0.5	40	150	35	100	.63	.46	.38	
2N699	TO-5	2	80	1	40	150	20	50	1.16	.84	.70	
2N1613	TO-5	3	50	1	40	150	25	60	.75	.54	.45	
2N1711	TO-5	3	50	1	100	150	25	70	.94	.69	.57	
2N1893	TO-5	3	80	0.5	40	150	15	50	1.08	.78	.65	
40409	D	3Ta	90	0.7	50	150	...	100	1.14	.83	.69	
40389	D	3.5Ta	40	0.7	50	150	15	100	.91	.66	.55	
40390	D	3.5Ta	250	1	40	20	10	15	2.15	1.56	1.30	
2N1479	TO-5	5	40	1.5	20	200	150	1.3	2.15	1.56	1.30	
2N1480	TO-5	5	55	1.5	20	200	150	1.3	2.31	1.68	1.40	
2N1481	TO-5	5	40	1.5	35	200	150	1.3	2.48	1.80	1.50	
2N1482	TO-5	5	55	1.5	35	200	150	1.3	3.30	2.40	2.00	
2N1700	TO-5	5	40	1	20	100	150	1.3	1.90	1.38	1.15	
2N2102	TO-5	5	65	1	40	150	15	120	1.13	.82	.68	
2N2270	TO-5	5	45	1	50	150	15	60	.91	.66	.55	
2N2405	TO-5	5	90	1	60	150	15	120	1.57	1.14	.95	
2N3053	TO-5	5	40	0.7	50	150	15	100	.75	.54	.45	
40309	TO-5	5	18	0.7	70	50	...	100	.70	.51	.42	
40311	TO-5	5	30	0.7	70	50	...	100	.73	.53	.44	
40314	TO-5	5	30	0.7	70	50	...	100	.78	.57	.47	
40315	TO-5	5	40	0.7	70	50	...	100	.75	.54	.45	
40317	TO-5	5	40	0.7	40	10	...	100	.78	.57	.47	
40320	TO-5	5	40	0.7	40	10	...	100	.78	.57	.47	
40321	TO-5	5	300	1	25	20	...	100	1.24	.90	.75	
40323	TO-5	5	18	0.7	70	50	...	100	.70	.51	.42	
40326	TO-5	5	40	0.7	40	10	...	100	.78	.57	.47	
40327	TO-5	5	300	1	40	20	...	100	1.24	.90	.75	
40360	TO-5	5	70	0.7	40	10	...	100	.91	.66	.55	
40361	TO-5	5	70	0.7	70	50	...	100	1.03	.75	.62	
40366	TO-5	5	65	1	40	150	...	100	1.24	.90	.75	
40367	TO-5	5	65	1.5	40	200	...	100	1.24	.90	.75	
40372	E	5.8Ta	55	4	25	500	...	100	1.24	.90	.75	
40374	E	5.8Ta	175	2	40	100	120	15	2.56	1.86	1.55	
40375	E	5.8Ta	50	7	20	4A	175	60	5.03	3.66	3.05	
40392	C	7	40	0.7	50	150	15	100	.91	.66	.55	
40347	TO-5	8.75	40	1	20	450	...	100	1.66	.77	.64	
40348	TO-5	8.75	65	1	30	300	...	100	1.06	.48	.40	
40349	TO-5	8.75	140	1	25	150	...	100	1.56	1.13	.94	

# RCA SEMICONDUCTORS & HDWE.—FENWAL

## POWER SWITCHING & PULSE GERMANIUM P-N-P POWER TYPES FOR LOW-SPEED OPERATION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS			1-99 Each	100-999 Each	1000 Up Each
		P <sub>T</sub> W	V <sub>CEV</sub> V	I <sub>C</sub> A	h <sub>FE</sub>					
					min	I <sub>C</sub> A	V <sub>CE</sub> V			
2N586	TO-7	0.25	—25	—0.25	30	—0.25	—0.5	\$1.73	\$1.26	\$1.05
2N1183	TO-8	7.5	—20	—3	20	—0.4	—2	1.82	1.32	1.10
2N1183A	TO-8	7.5	—30	—3	20	—0.4	—2	2.31	1.68	1.40
2N1183B	TO-8	7.5	—40	—3	20	—0.4	—2	2.89	2.10	1.75
2N1184	TO-8	7.5	—20	—3	40	—0.4	—2	2.48	1.80	1.50
2N1184A	TO-8	7.5	—30	—3	40	—0.4	—2	2.81	2.04	1.70
2N1184B	TO-8	7.5	—40	—3	40	—0.4	—2	4.13	3.00	2.50
2N1905	TO-3	30	—100	—6	50	—1	—2	4.13	3.00	2.50
2N1906	TO-3	30	—130	—6	75	—1	—2	6.60	4.80	4.00

## POWER SWITCHING & PULSE SILICON N-P-N POWER TYPES FOR HIGH-VOLTAGE OPERATION

RCA No.	Package	MAX. RATINGS		CHARACTERISTICS			1-99 Each	100-999 Each	1000 Up Each	
		V <sub>CEO</sub> V	P <sub>T</sub> W	f <sub>T</sub> MHz	h <sub>FE</sub>					
					min	I <sub>C</sub> mA				V <sub>CE</sub> V
2N4347	TO-3	120	100	0.8	20	2A	4	\$2.97	\$2.16	\$1.80
2N4348	TO-3	120	120	0.7	15	5A	4	4.13	3.00	2.50
2N4390	TO-104	120	0.5	50	20	20	1	.75	.54	.45
2N3441	TO-66	140	25	1.2	20	500	4	2.48	1.80	1.50
2N3442	TO-3	140	117	0.8	20	3A	4	4.54	3.30	2.75
2N3773	TO-3	140	150	0.7	15	8A	4	7.43	5.40	4.50
40349	TO-5	140	8.75	1.1	25	150	4	1.56	1.13	.94
40373	E	140	5.8	1.2	20	500	4	2.56	1.86	1.55
2N4068	TO-104	150	0.5	50	30	30	10	1.34	.97	.81
2N4069	J	150	1	50	30	30	10	1.40	1.02	.85
40354	TO-104	150	0.5	50	55	10	10	1.18	.86	.71
40355	J	150	1	50	55	10	10	1.24	.90	.75
2N3583	TO-66	175	35	1.5	10	1A	10	2.48	1.80	1.50
40346	TO-5	175	10	1.0	25	10	10	1.14	.83	.69
40374	E	175	5.8	1.5	10	1A	10	2.56	1.86	1.55
2N5415*	TO-5	200	10	1.5	30	50	10	3.30	2.40	2.00
2N3440	TO-5	250	10	1.5	40	20	10	1.82	1.32	1.10
2N3584	TO-66	250	35	1.5	25	1A	10	4.13	3.00	2.50
2N4064	C	250	10	1.5	40	20	10	1.90	1.38	1.15
40390	D	250	3.5	1.5	40	20	10	2.15	1.56	1.30
40412	TO-5	250	10	1.0	40	30	20	1.06	.77	.64
2N3585	TO-66	300	35	1.5	25	1A	10	6.60	4.80	4.00
2N4240	TO-66	300	35	1.5	30	750	10	2.89	2.10	1.75
2N5416*	TO-5	300	10	1.5	30	50	10	4.95	3.60	3.00
2N3439	TO-5	350	10	1.5	40	20	10	3.71	2.70	2.25
2N4063	C	350	10	1.5	40	20	10	3.80	2.76	2.30

\*PNP Type.

## POWER SWITCHING & PULSE SILICON N-P-N POWER TYPES FOR LOW-SPEED OPERATION

RCA No.	Package	MAX. RATINGS		CHARACTERISTICS			1-99 Each	100-999 Each	1000 Up Each		
		P <sub>T</sub> W	V <sub>CEO</sub> V	I <sub>C</sub> A	h <sub>FE</sub>						
					min	I <sub>C</sub> A				f <sub>T</sub> MHz	
2N5034	T	83	40	6	20	2.5	.....	0.8	\$1.34	\$0.98	\$0.81
2N5036	T	83	50	8	20	2.5	.....	0.8	1.42	1.04	.86
2N5035	U	83	40	6	20	2.5	.....	0.8	1.32	.96	.80
2N5037	U	83	50	8	20	2.5	.....	0.8	1.41	1.02	.85
40513	U	83	45	6	20	2.5	.....	0.8	1.24	.90	.75
2N4347	TO-3	100	120	5	20	2	.....	0.8	2.97	2.16	1.80
2N3055	TO-3	115	60	15	20	4	.....	1	1.82	1.32	1.10
40363	TO-3	115	70	15	20	4	.....	1	1.82	1.32	1.10
2N3442	TO-3	117	140	10	20	3	.....	0.8	4.54	3.30	2.75
2N4348	TO-3	120	120	10	15	5	.....	0.7	4.13	3.00	2.50
2N2015	TO-36	150	50	10	15	5	400	1	9.08	6.60	5.50
2N2016	TO-36	150	65	10	15	5	400	1	9.90	7.20	6.00
2N3771	TO-3	150	40	15	15	15	.....	1	4.13	3.00	2.50
2N3772	TO-3	150	60	10	15	10	400	0.9	4.13	3.00	2.50
2N3773	TO-3	150	140	16	15	8	.....	0.7	7.43	5.40	4.50
40411	TO-3	150	90	16	35	4	.....	0.7	4.29	3.12	2.60

## GERMANIUM TUNNEL DIODES FOR SWITCHING & MICROVOLT SMALL SIGNAL TYPES

RCA No.	Package	CHARACTERISTICS								1-99 Each	100-999 Each	1000 Up Each
		I <sub>P</sub>		C max pFW	I <sub>P</sub> /I <sub>V</sub> min	V <sub>PP</sub> max		t <sub>r</sub> typ ps				
		min mA	max mA			min mV	max mV					
40561	M	4.5	5.5	25	6:1	430	590	1800	\$4.54	\$3.30	\$2.78	
40566	M	4.75	5.25	15	8:1	490	560	1200	7.43	5.40	4.50	
40571	M	4.75	5.25	8	8:1	490	560	600	8.60	6.24	5.20	
40562	M	9	11	25	6:1	440	600	900	4.54	3.30	2.78	
40567	M	9.5	10.5	15	8:1	510	580	600	6.52	4.74	3.98	
40572	M	9.5	10.5	8	8:1	510	580	300	7.01	5.10	4.25	
40563	M	18	22	30	6:1	460	620	600	4.54	3.30	2.75	
40568	M	19	21	20	8:1	530	600	400	7.01	5.10	4.25	
40573	M	19	21	10	8:1	530	600	200	8.99	9.94	4.99	
40564	M	45	55	40	6:1	530	640	350	4.54	3.30	2.75	
40569	M	47.5	52.5	25	8:1	550	620	200	7.43	5.40	4.50	
40574	M	47.5	52.5	12	8:1	550	620	100	10.75	7.80	6.50	
40565	M	90	110	40	6:1	540	650	150	4.54	3.30	2.75	
40570	M	95	105	25	8:1	560	630	100	10.75	7.80	6.50	

## GERMANIUM DAMPER DIODES FOR TV HORIZONTAL DEFLECTION

RCA No.	Package	MAX. RATINGS			CHARACTERISTICS			1-99 Each	100-999 Each	1000 Up Each
		V <sub>RM</sub> (peak) V	V <sub>R</sub> cont V	I <sub>FM</sub> (peak) A	I <sub>F(AV)</sub> A	V <sub>F(AV)</sub> V	I <sub>R</sub> μA			
40442	TO-3	200	40	10	7	0.77	150	\$0.83	\$0.60	\$0.50
1N4785	TO-3	320	60	10	7	0.77	150	1.08	.78	.65

## GLASS-METAL-CADMIUM-SULFIDE PHOTOCELLS

RCA No.	Resistance @ 2 f.c. K Ohm	OC or Peak AC max Volts	Power Dissip. Watt	Fig.	1-99 Each	100-999 Each	1000 Up Each	Notes	
								(A) 1/4" Diameter	(B) TO-6 Modified
SQ2503	30	600	0.75	A	\$1.28	\$0.93	\$0.77		
7163	17	600	0.75	A	1.28	.99	.77		
4448	14	600	0.75	A	1.21	.88	.73		
4404	9	600	0.75	A	1.21	.88	.73		
4403	3	350	0.75	A	1.32	.96	.80		
SQ2520	0.85	200	0.35	B	1.32	.96	.80		

## FENWAL THERMISTORS

Thermistors are thermal resistors of ceramic material combined with metals to obtain a definite decrease in resistance as temperature is increased. Features close tolerance and stability with high reliability and unlimited life. An ideal temperature measuring device. Res. ratio 0° C to 50° C.

For Thermistor applications booklet request No. 16A1153. FREE

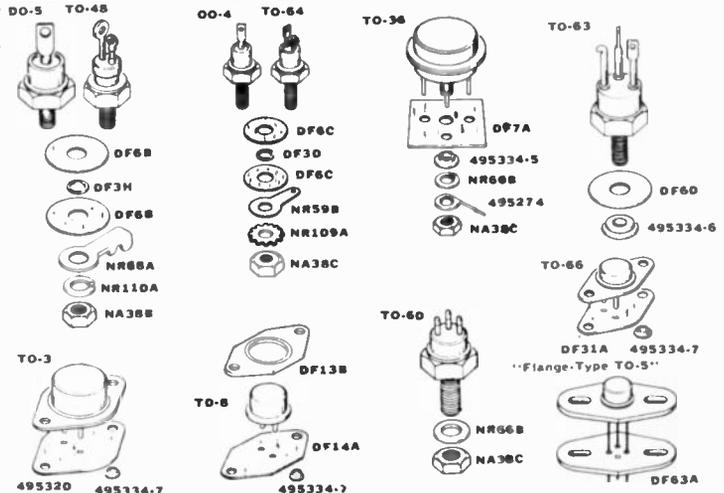
Mfg. No.	Fig.	Ohms @ 25° C	Ratio	1-9 Each	10-24 Each	25-99 Each	100-249 Each
GA51J1	A	100K	10.3:1	\$1.96	\$1.57	\$1.28	\$1.12
GA51P2	B	100K	10.3:1	2.00	1.60	1.30	1.14
GB32J2	A	2K	7.3:1	1.96	1.57	1.28	1.12
GB32P8	B	2K	7.3:1	2.35	1.88	1.53	1.34
G025J1	A	500	5.1:1	3.24	2.60	2.11	1.85
JB25J1	C	500	6.9:1	1.80	.80	.65	.57
JB31J1	C	1K	6.9:1	1.00	.80	.65	.57
JA35J1	C	5K	9.1:1	1.00	.80	.65	.57
KA31L1	C	1K	9.1:1	.85	.68	.56	.49
LB21J1	C	100	6.9:1	.85	.68	.56	.49
NB11J1	C	10	6.9:1	.85	.68	.56	.49
QA51J1	D	100K	9.1:1	1.25	1.00	.82	.72
RB41L1	D	10K	9.1:1	1.20	.96	.78	.69
WA21W1	E	100	9.1:1	1.25	1.00	.82	.72
WB11W1	E	10	6.9:1	1.25	1.00	.82	.72
KB22J1	C	200	6.9:1	.85	.68	.56	.49

## THERMISTOR BASIC APPLICATION KIT

Contains 10 glass bead and rod thermistors. Resistance values from 3K to 135K ohms. Complete with applications manual and thermistor computer. \$9.98 G701. Per Kit, Each.....

## RCA SEMICONDUCTOR HARDWARE

Stock No.	Package Outline For Semiconductors	RCA No.	Description	Standard Pack	Price Per Package
12A2410	DO-4	NA38C	Nut	25	\$0.38
12A2411	and TO-64	NR109A	Lock Washer	25	.27
12A2412		DF6C	Insulator—Mica	50	.68
12A2413	DO-5	DF3D	Insulator—Teflon	25	.81
12A2414		NR59B	Connector	25	.60
12A2415	and TO-48	NA38B	Nut	25	.52
12A2416		NR110A	Lock Washer	25	.30
12A2417	TO-1 & TO-18	NR68A	Connector	25	1.44
12A2418		DF3H	Insulator—Teflon	25	.89
12A2419	TO-3	DF6B	Insulator—Mica	50	.85
12A2420		SA2100	Heat Sink Clip	100	1.15
12A2421	TO-5 Flange	495320	Insulator—Mica	100	2.40
12A2422		495334-7	Washer—Nylon	100	1.64
12A2423	TO-8	DF63A	Insulator—Mica	50	.85
12A2424		DF13B	Mounting Clamp	25	1.09
12A2425	TO-36	DF14A	Insulator—Mica	100	1.96
12A2422		495334-7	Washer—Nylon	100	1.64
12A2410	TO-60	NA38C	Nut	25	.38
12A2426		NR66B	Washer	25	.26
12A2427	TO-63	NR48A	Connector	25	.54
12A2428		495334-5	Bushing—Delrin	25	1.72
12A2429	TO-66	DF7A	Insulator—Mica	25	.92
12A2410		NA38C	Nut	25	.38
12A2426	TO-63	NR66B	Washer	25	.26
12A2440		DF6D	Insulator—Mica	100	1.62
12A2441	TO-66	495334-6	Insulator—Teflon	100	11.14
12A2442		DF31A	Insulator—Mica	100	1.77
12A2422	TO-66	495334-7	Washer—Nylon	100	1.64



# RCA MALLORY SEMICONDUCTORS

## RCA INTEGRATED CIRCUIT EXPERIMENTER KIT

For Practical or Educational Use in Home, Shop or Classroom

Build a 500 milliwatt audio amplifier or a variable-tone oscillator. All needed components are included. Key component in the kit is the RCA linear integrated circuit, a multi-purpose wide band audio amplifier containing the equivalent of 7 transistors, 11 resistors and 3 diodes. A non-operating integrated circuit with metal case removed is also included for educational purposes. Included is a 20 page manual giving complete kit instructions.

RCA No. KD2112 Each **\$10.98**

### RCA EXPERIMENTERS KITS

#### ① BASIC EXPERIMENTER'S KIT KD2105.

Build These 10 Circuits: Electronic Timer, Electronic Time Delay Switch, Electronic Flasher, Battery Charger (6 V.), Battery Charger (12 V.), Model Race Car and Railroad Speed Control, Overload Switch.

Contains one silicon controlled rectifier assembly, 2 transistors, and 5 rectifiers—all the solid state components needed to build 10 control circuits listed. Shpg. wt. 1 lb.

RCA No. KD2105 **\$9.95**  
Net Each.....

#### ② ADD-ON LIGHT-SENSOR KIT KD2106.

Contains one photocell. Used with basic kit to build light-operated switch (turn-on) and light-operated switch (turn-off). Applications: burglar or intruder alarm, yard light control, etc.

RCA No. KD2106 Shpg. wt. 6 ozs. **\$2.75**  
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③ ADD-ON HEAT-SENSOR KIT KD2110. Contains three thermistors each with a different temperature operating range. For building an electronic heat control (turn-on), electronic heat control (turn-off). Applications: fire alarm, attic fan control, electric driver, etc.

RCA No. KD2110 Shpg. wt. 6 ozs. **\$2.45**  
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RCA EXPERIMENTER'S MANUAL KM-71. 136 page illustrated booklet gives detailed information on all 14 circuits built by using RCA's 3 Experimenter's Kits. Includes schematic diagrams, circuit descriptions, construction details, and keyed wired chassis photos. Wt. 6 ozs.

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### RCA TOP-OF-THE-LINE SOLID STATE DEVICES FOR HOBBYIST, EXPERIMENTER & SERVICE TECHNICIANS



Just a few RCA SK types will replace over 7300 transistors and IC's, 2300 selenium and silicon rectifiers. Request 16A1123 Replacement Guide FREE with your order. Specify RCA Number on your Order.

RCA No.	Fig.	Description	Price
SK3003	1	Germanium PNP AF Output, Driver, Low Level Amp. to 9V	\$0.99
SK3004	1	Germanium PNP AF Output, Driver, Low Level Amp. to 15V	1.14
SK3005	1	Germanium PNP RF Amp., Converter, IF Amp. AM	1.17
SK3006	3	Germanium PNP RF Amp., IF Amp., Converter AM-FM 108MHz	1.41
SK3007	3	Germanium PNP RF Amp., IF Amp., Converter to 30 MHz	1.26
SK3008	1	Germanium PNP RF Amp., IF Amp., Converter Auto Radio	1.23
SK3009	4	Germanium PNP AF Audio Output Auto Radios, Hi-Fi Amps.	2.34
SK3010	1	Germanium NPN Class A Voltage Amp. & Driver	1.26
SK3011	2	Germanium PNP RF Amp., IF Amp., Converter AM	1.62
SK3012	6	Germanium PNP Audio Output Auto Radios	4.38
SK3013	4	Matched Pair of SK3009	4.68
SK3014	4	Germanium PNP Audio Output	3.15
SK3015	4	Matched Pair of SK3014	6.30
SK3016	7	Silicon Rectifier 500V @ 1 Amp.	.57
SK3017A	8	Silicon Rectifier 600V @ 1 Amp. Insulated Case	.60
SK3018	3	Silicon NPN VHF TV Tuners, TV IF Amp., FM Tuner	1.35
SK3019	3	Silicon NPN UHF TV Oscillator	1.47
SK3020	3	Silicon NPN AF Amp. & Driver	1.32
SK3021	4	Silicon NPN AF Output for AC Radios, etc., to 120 VDC	1.95
SK3022	5	IC Wide Band Amplifier - Discriminator for TV	3.96
SK3023	5	IC Wide Band Amp. - Discriminator, 10 Formed Leads for TV	3.96
SK3024	2	Silicon NPN Audio Driver to 80 Volts	1.98
SK3025	2	Silicon PNP Audio Driver to 80 Volts	2.70
SK3026	4	Silicon NPN Audio Output	1.80
SK3027	4	Silicon NPN Audio Output to 80 Volts	3.15
SK3028	4	Matched Pair SK3026	3.60
SK3029	4	Matched Pair SK3027	6.30
SK3030	8	Silicon Rectifier 200 Volt 1 Amp.	.42
SK3031	8	Silicon Rectifier 400 Volt 1 Amp.	.51
SK3032	8	Silicon Rectifier 800 Volt 1 Amp.	.61
SK3033	7	Silicon Rectifier 1000 Volt 1 Amp.	.81
SK3034	4	Germanium PNP TV Horiz. Driver & Vert. Deflection	4.50
SK3035	4	Germanium PNP TV Horizontal-Deflection-Output	5.49
SK3036	4	Silicon NPN AF Power Transistor	5.85
SK3037	4	Matched Pair SK3036	11.70
SK3038	3	Silicon NPN AF Preampifier	1.44
SK3039	2	Silicon NPN RF Amp. Mixer, and Converter	1.98
SK3040	9	Silicon NPN Video Output	2.25
SK3041	10	Silicon NPN AF Power Transistor	2.52

### RCA INTEGRATED CIRCUIT PACKAGE CONTAINS 5 IC's AND 12 CIRCUITS UNLIMITED APPLICATIONS



For the Hobbyists and experimenters. Provides an introduction and practical knowledge of the use of integrated circuits. Contains 5 linear integrated circuits, two each of two different transistor arrays, and one audio amplifier that can be used by themselves or as part of a larger circuit system. These IC's have been designed into 12 basic circuits. Features, applications, schematic diagrams, and parts list are included. TO-5 package. 3 are 12 lead, 2 are 10 lead.

The applications book includes construction details on 1/2 watt audio amplifier, crystal calibrator, 2 channel mixer, flip-flop, power supply, microphone preamplifier, crystal oscillator, wireless microphone, audio oscillator, electronic thermometer, wide band amplifier and Marine band converter.

RCA KD2117. Each..... **\$4.40**  
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### RCA SOLID STATE HOBBY CIRCUITS MANUAL

35 solid state circuits, most of which have full size template to simplify circuit board construction. Includes information on circuit operation and trouble shooting. 224 pages profusely illustrated.

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### 2 1/2 AMP — 1000 PIV ACTUAL SIZE EACH 59c MALLORY UNIVERSAL RECTIFIER

Replaces all axial lead rectifiers rated up to 2 1/2 amps and 1000 V. (PIV). Covers all 600 mA, 750 mA, 1000 mA, 2000 mA, and 2500 mA units, with voltages ranging from 50 PIV to 1000 PIV.

Mallory M2.5A. Each..... **59c** 10 Lots Each..... **49c**

### MALLORY RECTIFIER CIRCUITS

Size .687 x .468 x .25. VW is 3 lead, CT is 3 lead, FW is 4 lead. Black molded insulated case.

Mallory No.	Description	PIV	Amps	Prices Each
VB50	Voltage doubler	50	.75	\$1.99
VB100	Voltage doubler	100	.75	100 Up
VB200	Voltage doubler	200	.75	\$0.39
VB400	Voltage doubler	400	.75	.41
VB600	Voltage doubler	600	.75	.45
VBC50	Voltage doubler	50	3	.52
VBC100	Voltage doubler	100	3	.56
VBC200	Voltage doubler	200	3	.63
VBC400	Voltage doubler	400	3	.68
VBC600	Voltage doubler	600	3	.78
CTP50	Full wave bridge Pos. Center Tap	50	2	.39
CTN50	Full wave bridge Neg. Center Tap	50	2	.39
CTP100	Full wave bridge Pos. Center Tap	100	2	.41
CTN100	Full wave bridge Neg. Center Tap	100	2	.41
CTP200	Full wave bridge Pos. Center Tap	200	2	.45
CTN200	Full wave bridge Neg. Center Tap	200	2	.45
CTP400	Full wave bridge Pos. Center Tap	400	2	.52
CTN400	Full wave bridge Neg. Center Tap	400	2	.52
CTP600	Full wave bridge Pos. Center Tap	600	2	.63
CTN600	Full wave bridge Neg. Center Tap	600	2	.63
FW50	Full wave bridge	50	2	.78
FW100	Full wave bridge	100	2	.81
FW200	Full wave bridge	200	2	.85
FW300	Full wave bridge	300	2	.89
FW400	Full wave bridge	400	2	1.00
FW600	Full wave bridge	600	2	1.11
FWLD50	Full wave bridge	50	6	1.38
FWLD100	Full wave bridge	100	6	1.45
FWLD200	Full wave bridge	200	6	1.63
FWLD400	Full wave bridge	400	6	2.00
FWLD600	Full wave bridge	600	6	2.25

### MALLORY SILICON ZENER DIODES

All types rated at 25° C. Cold case design. Tolerance 10%. .405" long x .24" dia. with 1/4" leads.

Mallory No.	Nom. Zener Volts	I <sub>ZT</sub> Test mA	Z <sub>ZT</sub> at I <sub>ZT</sub> Ohms	Mallory No.	Nom. Zener Volts	I <sub>ZT</sub> Test mA	Z <sub>ZT</sub> at I <sub>ZT</sub> Ohms
ZB6.8A	6.8	37	3.5	ZB30A	30	8.5	40
ZB7.5A	7.5	34	4.0	ZB33A	33	7.5	45
ZB8.2A	8.2	31	4.5	ZB36A	36	7.0	60
ZB9.1A	9.1	28	5.0	ZB39A	39	6.5	60
ZB10A	10	25	7	ZB43A	43	6.0	70
ZB11A	11	23	8	ZB47A	47	5.5	80
ZB12A	12	21	9	ZB51A	51	5.0	95
ZB13A	13	19	10	ZB56A	56	4.5	110
ZB15A	15	17	14	ZB62A	62	4.0	125
ZB16A	16	15.5	16	ZB68A	68	3.7	150
ZB18A	18	14	20	ZB75A	75	3.3	175
ZB20A	20	12.5	22	ZB82A	82	3.1	200
ZB22A	22	11.5	23	ZB91A	91	2.8	250
ZB24A	24	10.5	25	ZB100A	100	2.5	350
ZB27A	27	9.5	35				

Choice Each 1-99..... **54c** 100 Per Type..... **36c**

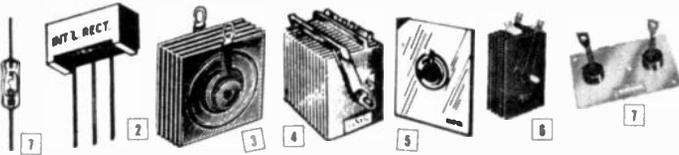
**BE SURE TO SPECIFY MANUFACTURERS NAME AND NUMBER ON YOUR ORDER**

# I. R. SEMICONDUCTORS FOR TV & HOBBY

## UNIVERSAL RECTIFIER

2 AMP - 1,000 VOLT. Provides voltage protection from 10 volts up to 1,000 volts and surge current protection up to 50 Amps. Ideal for use in radios, phonographs, Hi-Fi, tape recorders, B & W TV and color TV.  
Int. Rect. R210. Each..... **\$1.30**

## I. R. DIODES & RECTIFIERS



Int. Rect. No.	Fig.	Description	1-4 Each	5-9 Each	10-99 Each	100-999 Each
1N34A	①	60 Volt, 50 MA Germanium Diode	\$0.40	\$0.36	\$0.32	\$0.29
1N60	①	40 Volt, 50 MA Germanium Diode	.40	.36	.32	.29
1N64	①	25 Volt, 50 MA Germanium Diode	.40	.36	.32	.29
1N82A	①	25 Volt, 50 MA UHF Silicon Diode	.95	.85	.76	.68
1N87A	①	30 Volt, 50 MA Germanium Diode	.45	.40	.35	.32
1N295	①	50 Volt, 30 MA Germanium Diode	.36	.32	.29	.26
DD04	②	Dual Diode Com. Cath. G.E. Equiv. 6GC1	.55	.49	.44	.36
DD05	②	Dual Diode Series Con. G.E. Equiv. 6GD1	.55	.49	.44	.36
DD06	②	Dual Diode Com. Anode G.E. Equiv. 6GX1	.55	.49	.44	.36

## Fig. ③ RADIO & TV LONG LIFE, SELENIUM TYPES

Int. Rect. No.	DC MA	Max. RMS Volts	Inches Size	1-4 Each	5-9 Each	10-99 Each	100-999 Each
E075L	To 75	130	.67x.67x 3/4	\$0.59	\$0.50	\$0.44	\$0.35
E150L	75-150	130	1"x1"	.75	.67	.62	.44
E300L	150-300	130	1 1/4x1 1/4x1 3/4	.92	.92	.92	.61
E500L	400-500	130	1 1/2x1 1/2x1 3/4	1.25	1.22	1.02	.70

## Fig. ④ INDUSTRIAL SELENIUM STACKS

Int. Rect. No.	DC MA	Max. RMS Volts	Inches Size	1-4 Each	5-9 Each	10-99 Each	100-999 Each
J14C1*	36	14	1.5	1 1/2x1 1/2x1 1/4	\$1.50	\$1.25	
J29B1	36	29	1.5	1 1/2x1 1/2x1 1/2	2.40	2.10	
J29B5	36	29	4.8	3 x3 x2 3/8	7.00	5.90	

\*Three terminal full wave center tapped, all others bridge. 1-24 25-99

## BATTERY CHARGING RECTIFIERS

Int. Rect. No.	Fig.	Input V. AC	Output DC V.	Output Amps	Size Inches	1-9 Each	10-99 Each
JD116K	⑤	16.5	6-12	2	3x3x.5	\$1.75	\$1.49
JD117K	⑤	16.5	6-12	3	4x4x.5	2.34	2.00
JD241K	⑤	16.5	6-12	6	6x5x.5	3.35	3.04
BCF-100	com. Pos.	⑥ 33	6-12	50-100†	6x4x3.9	\$9.95	\$8.95
BCR-100	com. Neg.	⑥ 33	6-12	50-100†	6x4x3.9	9.95	8.95

③ Silicon universal 33 volt input 6 or 12 volt. 100 amp max† output 4x6" cooling fin. International Rectifier BC101 1-9..... **\$15.00** 10-99..... **\$13.50**  
†Ratings with FAN Cooling.

## COLOR TV CARTRIDGE RECTIFIER

61-8968 used as voltage booster rectifier and 61-8969 used as focus rectifier.  
Int. Rect. 61-8968. 800 PR Volts. 1-4 Each..... **\$1.15** 5-9 Each..... **\$1.03**  
Int. Rect. 61-8969. 6500 PR Volts. 1-4 Each..... **\$2.95** 5-9 Each..... **\$2.65**

## COLOR CONVERGENCE RECTIFIERS

Meets over 95% of all color TV replacement requirements. Insulated to eliminate shorting. Meet or exceed the specifications of the original part.

I.R. No.	Cell Per Device	PRV.	VRMS.	Output Current	Series Res.	1-4 Each	5-9 Each	10-99 Each
CD-05	3	18	12	65MA	100 ohm	\$0.80	\$0.72	\$0.65
CD-07	4	18	12	65MA	100 ohm	.90	.81	.73
CD-09	5	18	12	65MA	100 ohm	1.00	.90	.81

## SILICON RECTIFIER TUBE REPLACEMENT

A plug-in replacement for 5U4, 5AW4, 5T4, 5V4, 5AV4, 5AX4, 5W4, 5Y3, 5Z4, 6004. Contains a surge limiting resistor which adds to its practically unlimited life. Lower forward voltage characteristic results in higher equipment voltage.  
Int. Rect. No. ST-14/1N2389.  
1-24 Each..... **\$3.50** 25-99 Each..... **\$3.00**

## INTERNATIONAL RECTIFIER BOOKS

SCR Handbook. Basic theory on understanding the principles and use of controlled rectifiers. Circuit data. 132 pages. **\$2.50**  
No. 16A1119. HB-40. Each..... **\$3.00**  
Zener Diode Handbook. Zener diode AC, DC, Audio, RF, Computer, Instrumentation and circuit protection applications included. 74 pages. **\$3.00**  
No. 16A1120. HB-20. Each..... **\$2.00**  
Solar Cell and Photocell Handbook. 75 light operated circuits. Contains projects and demonstrations of selenium and silicon solar cells. 136 pages. **\$2.00**  
No. 16A1118. HB-30. Each..... **\$2.00**

## INTEGRATED CIRCUIT VOLTAGE REGULATOR

Capable of providing a constant output voltage for varying input voltages and varying output load currents. By using conventional electronic components in conjunction with the NJS 300, currents of several amps can be delivered to a load.  
Input voltage range +8 to +30 volts.  
Output voltage range +2 to +20 volts.  
Input-Output voltage differential 3 volts minimum, 20 volts maximum.  
Minimum load current 3 MA.  
Load regulation .5%.  
Line regulation .1% change of output voltage per volt change of input voltage.  
8 lead TO-5 package.  
Order NJS 300. New Jersey Semiconductor. Each **\$4.99**

## INTERNATIONAL RECTIFIER

### ① SILICON CONTROLLED RECTIFIERS



Silicon controlled rectifiers combine many functions of transistors and conventional rectifiers and make it possible to construct simple circuits which will perform things that could be only accomplished with complex circuitry and expensive components in the past. Each of the SCR devices listed below is supplied with a 24 page booklet detailing the theory and operation of an SCR as well as schematically describing many interesting and useful projects. Typical applications, light dimmers, speed controls, relay replacement, etc.

Int. Rect. No.	Max. Peak Reverse Volts	Av. Forward Current	Gate Firing Requirements Volts	Similar JEDEC Type	1-9 Each	10-99 Each	100-999 Each
SCR-01-C	50	3.5	1.5	2N1771	\$2.20	\$1.98	\$1.58
SCR-02-C	200	3.5	1.5	2N1774	3.20	2.88	2.30
SCR-03-C	50	9	2	2N682	3.20	2.88	2.30
SCR-04-C	200	9	2	2N685	4.20	3.78	3.02

### I. R. SCR EXPERIMENTER KIT

Assortment of 5 silicon controlled rectifiers in voltage ranges from 50 to 200 volts at various current ratings from 1.5 amps to 9 amps rms. With 18 page booklet describing 12 practical projects and experiments.  
I.R. No. K505C. Net Each..... **\$7.95**

### ② IR2160 UNIUNCTION TRANSISTOR

Provides accurate timing and triggering for Silicon Controlled Rectifier circuits. Rating 400 MW, 30 V. max.  
I.R. No. 2160. Each..... **\$1.49** 100-999 Each..... **\$1.20**

### 1 WATT ZENER VOLTAGE REGULATORS

Each Zener diode has a 24-page booklet describing interesting and useful projects. Tolerance ± 10%.

Int. Rect. No.	Nom. Voltage	Test Current	Int. Rect. No.	Nom. Voltage	Test Current
Z-1100-C	3.9	50	Z-1112-C	12	15
Z-1102-C	4.7	40	Z-1114-C	15	13
Z-1104-C	5.6	35	Z-1116-C	18	10
Z-1106-C	6.8	30	Z-1118-C	22	9
Z-1108-C	8.2	25	Z-1120-C	27	7
Z-1110-C	10	20			

Specify International Rectifier No. on your order.  
Your Choice, 1-9 Each..... **85c** 10-99 Each..... **74c**

### ZENER DIODE KITS

An assortment of 5 popular 1-watt Zener diodes. With 24-page manual. **\$1.95**  
Int. Rect. DO-170. Net Each..... **\$1.95**  
K-546. 12 assorted Zener diodes, ranging from 400 MW to 10 watts, and from 3 to 27 volts. With 24-page instruction and project manual. **\$6.50**  
Int. Rect. K546. Net Each..... **\$6.50**

### EXPERIMENTER PHOTOCELLS AND SUN BATTERIES

May be used for powering transistor radios, light meters, operating small motors from sunlight. B2MC is 1/2x3/4" with mounting brackets. Others are 1 1/8" square molded case. All have leads. Each cell supplied with project book.

Int. Rect. No.	Material	Fig.	Output Voltage	MA.	Each
B2MC	Selenium	①	2-4	2	\$1.50
B3MC	Selenium	②	2-4	1 1/2-2 1/2	1.75
S1MC	Silicon	③	3-4	10-16	2.25
S3MC	Silicon	④	6-8.5	10-16	3.95
S4MC	Silicon	⑤	3-4	25-40	3.95
S5M	Silicon	⑥	6-8.5	18-25	4.95

### ⑦ CADMIUM SULPHIDE PHOTO-CONDUCTIVE CELL

Light-sensitive resistor for use in operating relays, counting devices, door openers, turning on street lights, etc. Does not generate electricity. Enclosed in plastic case. Max applied volt, 20 Power dissipation, 4 watt. Dark resistance, .11 ohm, resistance, 10 FC illumination 7200 ohm; 100 FC illumination 800 ohm 1 3/16" square.

International Rectifier CS120. Each **\$2.35**

### SOLAR PHOTOCCELL EXPERIMENTER KIT

Contains a selection of selenium, silicon and cadmium sulfide solid state photocells. An instruction manual with circuit diagrams and experiments, plus a Handbook. Ideal kit for schools, experimenters and hobbyists.  
Int. Rect. K421. Kit of 7 For..... **\$5.95**

### EXPERIMENTERS MOTOR

Special Anti-Friction Bearing Type—Designed to operate directly from the power supplied by Solar Cells. Offers many fascinating experiments and science projects. Runs on .3 to 1.5 V. Recommended cell is S4M above.  
Int. Rect. EP50C. **\$3.95**  
Each..... **\$3.95**

### MP100 METER PROTECTOR

MAKES ALL MULTIMETERS BURNOUT PROOF  
Simply install across meter terminals of sensitive meters up to 100 ua on VOM's, Wheatstone and Kelvin Bridge instruments. It also protects against test lead reversal.  
Int. Rect. MP100. Net Each..... **\$1.98**

# RECTIFIERS, CLAIREX PHOTOCELLS

## SARKES TARZIAN BRIDGE RECTIFIERS



### ① 2 AMP. FULL WAVE SILICON BRIDGE RECTIFIERS

Only 1/8" square x 1/4" high. Insulated case with solder lug terminals. Rated 2 Amps. resistive-inductive load, derate 20% for capacitive load.

Sarkes Tarzian No.	Voltage Rating PIV	RMS	1-24 Each	25-99 Each	100-499 Each	500 Up Each
S6230A	200	140	\$1.47	\$1.26	\$1.19	\$1.05
S6230A-1	400	280	1.77	1.52	1.41	1.27
S6230A-2	600	420	2.11	1.80	1.61	1.51
S6230A-3	800	560	2.54	2.17	2.02	1.82
S6230A-4	1000	700	3.47	2.97	2.76	2.48

### ② 6 AMP. FULL WAVE SILICON BRIDGE RECTIFIERS

1 1/2" diameter. 1 3/4" above mounting surface. Epoxy case with solder terminals. 8-32 mounting stud. Rated 6 Amps. for resistive-inductive load.

Sarkes Tarzian No.	Voltage Rating PIV	RMS	1-24 Each	25-99 Each	100-499 Each	500 Up Each
S6121-1	200	140	\$4.21	\$3.60	\$3.35	\$3.01
S6121-3	400	280	4.41	3.78	3.51	3.16
S6121-5	600	420	5.61	4.81	4.47	4.02

### ③ 12 AMP. FULL WAVE SILICON BRIDGE RECTIFIERS

Only .560" diameter. Less than 1" above mounting surface including terminals. Requires no heat sink when mounted on metal chassis. Rated 12 Amps. for resistive-inductive load.

Sarkes Tarzian No.	Voltage Rating PIV	RMS	1-24 Each	25-99 Each	100-499 Each	500 Up Each
S6240	200	140	\$3.76	\$3.22	\$3.00	\$2.70
S6240-1	400	280	5.15	4.40	4.00	3.60
S6240-2	600	420	6.93	5.93	5.40	4.86
S6240-3	800	560	9.35	7.85	7.30	6.60
S6240-4	1000	700	12.00	10.10	9.63	8.65

## SARKES TARZIAN RECTIFIERS



Dimensions: Fig. 1 overall 3/8" dia. x 1" L.; Fig. 2 Body .195" dia. x .335" L.; Fig. 3 Body .125" dia. x .342" L.; Fig. 4 10-32 Stud x 1.25" overall length; Fig. 5 1/4-28 stud x 1.435" overall length; Fig. 6 3/4-16 Stud x 6 1/4" overall length. P—cathode connected to stud. N—anode connected to stud.

Sarkes Tarzian No.	Jedec No.	Fig.	PIV	Current Amps.	1-24 Each	25-99 Each	100 Up Each
M500/40M	1N1084	①	400	1	\$0.75	\$0.63	\$0.59
60M		②	600	1	.85	.70	.66
F2	1N2069	③	200	1	.33	.29	.27
F4	1N2070	④	400	1	.35	.30	.28
F6	1N2071	⑤	600	1	.37	.32	.29
F8		⑥	800	1	.52	.44	.41
G2		⑦	200	1	.37	.32	.29
G4		⑧	400	1	.43	.37	.35
G6		⑨	600	1	.47	.40	.37
G8		⑩	800	1	.62	.53	.49
G10		⑪	1000	1	.95	.82	.76
20H3P	1N1344	⑫	200	6	1.20	1.03	.96
20H3N	1N1344R	⑬	200	6	1.20	1.03	.96
40H3P	1N1346	⑭	400	6	1.50	1.29	1.20
40H3N	1N1346R	⑮	400	6	1.50	1.29	1.20
60H3P	1N1348	⑯	600	6	2.12	1.82	1.69
60H3N	1N1348R	⑰	600	6	2.12	1.82	1.69
ST220P	1N1202	⑱	200	12	1.25	1.07	1.00
ST220N	1N1202R	⑲	200	12	1.25	1.07	1.00
ST240P	1N1204	⑳	400	12	1.67	1.43	1.33
ST240N	1N1204R	㉑	400	12	1.67	1.43	1.33
ST260P	1N1206	㉒	600	12	2.34	2.00	1.86
ST260N	1N1206R	㉓	600	12	2.34	2.00	1.86
ST3A10P		㉔	100	25	1.55	1.33	1.24
ST3A10N		㉕	100	25	1.55	1.33	1.24
ST3A20P		㉖	200	25	2.14	1.83	1.70
ST3A20N		㉗	200	25	2.14	1.83	1.70
ST3A40P		㉘	400	25	3.16	2.70	2.52
ST3A40N		㉙	400	25	3.16	2.70	2.52
ST3A60P		㉚	600	25	3.80	3.28	3.06
ST3A60N		㉛	600	25	3.80	3.28	3.06
ST710P		㉜	100	160	12.90	11.09	10.32
ST710N		㉝	100	160	12.90	11.09	10.32
ST720P		㉞	200	160	14.50	12.50	11.58
ST720N		㉟	200	160	14.50	12.50	11.58
ST740P		㊱	400	160	20.80	17.80	16.60
ST740N		㊲	400	160	20.80	17.80	16.60
ST910P		㊳	100	250	14.20	12.19	11.36
ST910N		㊴	100	250	14.20	12.19	11.36
ST920P		㊵	200	250	15.80	13.50	12.60
ST920N		㊶	200	250	15.80	13.50	12.60
ST940P		㊷	400	250	24.40	20.95	19.52
ST940N		㊸	400	250	24.40	20.95	19.52

## RECTIFIER MOUNTING HARDWARE

No. 12B843. Single Clip-In Mounting for M500 and 60M. Each...12c  
 No. 12A2457. Oval Clip-In Mounting for M500 and 60M. Each...25c  
 Complete set for DO-4 Rectifier includes 2 mica washers, 1 brass washer, 1 teflon washer, 1 solder lug, 1 10-32 lock nut.  
 No. 12A2402. Mallory HO-04. Each...20c 10 Each...13c  
 Complete set for DO-5 Rectifier. Includes one each mica washer, brass washer, teflon washer, solder lug, 1/4-28 lock nut.  
 No. 12A2403. Mallory HD-05. Each...30c 10 Each...23c



## CLAIREX PHOTOCONDUCTIVE CELLS

Resistance tolerance at 2 ft. C ±3 1/3%. Temp. range —50° to +75°C.

CL5M Series. Maximum power air 1/2 watt, heat sink 2 watts .550" dia. x .184" high.

Clairex No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resistance @ 2 Ft. C (Ohms)	Max. Voltage Peak AC	1-99 Each	100-499 Each
CL5M3	CdS	7350	7.2K	.....	1.50	1.25
CL5M4	CdS	6900	1.5K	.....	1.50	1.25
CL5M7	CdS	6150	7.2K	.....	1.50	1.15

CL500 Series. Maximum power: air 1/4 watt, heat sink 1/2 watt. .490" dia. x .500" H.

Clairex No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resistance @ 2 Ft. C (Ohms)	Max. Voltage Peak AC	1-99 Each	100-499 Each
CL503	CdSe	7350	7.2K	250	\$1.50	\$1.25
CL504	CdSe	6900	1.5K	250	1.50	1.25
CL504L	CdSe	6900	.25K	170	1.50	1.25
CL505	CdS	5500	9K	250	1.50	1.15
CL505L	CdS	5500	1.5K	170	1.50	1.15

CL700 Series. Maximum power 125 MW @ 25° C. .360" dia. x .180" H.

Clairex No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resistance @ 2 Ft. C (Ohms)	Max. Voltage Peak AC	1-99 Each	100-499 Each
CL703	CdSe	7350	133K	300	1.50	1.25
CL703A	CdSe	7350	67K	300	1.50	1.25
CL703M	CdSe	7350	30K	250	1.50	1.25
CL703L	CdSe	7350	2.7K	170	1.50	1.25
CL704	CdSe	6900	30K	300	1.50	1.25
CL704M	CdSe	6900	7K	250	1.50	1.25
CL704L	CdSe	6900	.6K	170	1.50	1.25
CL705	CdS	5500	166K	300	2.00	1.55
CL705L	CdS	5500	3.3K	170	1.50	1.15
CL705HL	CdS	5500	28K	170	1.50	1.35
CL707	CdS	6150	133K	300	1.50	1.15
CL707L	CdS	6150	2.7K	170	1.50	1.15
CL707HL	CdS	6200	10K	170	1.50	1.35

CL600 Series. Maximum power 75 MW @ 25° C. .245" dia. x .550" H.

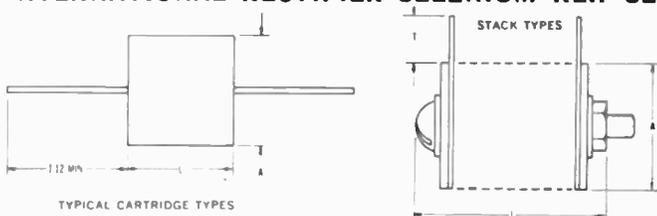
Clairex No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resistance @ 2 Ft. C (Ohms)	Max. Voltage Peak AC	1-99 Each	100-499 Each
CL602	CdSe	5150	1 Meg	300	1.50	1.15
CL603	CdSe	7350	133K	300	1.75	1.50
CL603A	CdSe	7350	75K	300	1.75	1.50
CL603AL	CdSe	7350	3.5K	170	1.75	1.50
CL604	CdSe	6900	30K	300	1.75	1.50
CL604L	CdSe	6900	1.5K	170	1.75	1.50
CL605	CdS	5500	166K	300	1.50	1.15
CL605L	CdS	5500	7.5K	170	1.50	1.15
CL607	CdS	6150	133K	300	1.50	1.15

CL900 Series. Maximum power 50 MW @ 25° C. .210" dia. x .150" H.

Clairex No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resistance @ 2 Ft. C (Ohms)	Max. Voltage Peak AC	1-99 Each	100-499 Each
CL903	CdSe	7350	133K	250	1.50	1.25
CL903A	CdSe	7350	67K	250	1.50	1.25
CL903N	CdSe	7350	66K	100	1.50	1.25
CL903L	CdSe	7350	6K	100	1.50	1.25
CL904	CdSe	6900	30K	250	1.50	1.25
CL904N	CdSe	6900	15K	100	1.50	1.25
CL904L	CdSe	6900	2K	100	1.50	1.25
CL905	CdS	5500	166K	250	1.50	1.15
CL905L	CdS	5500	10K	100	1.50	1.15
CL905HN	CdS	5500	700K	100	1.50	1.35
CL905HL	CdS	5500	100K	100	1.50	1.35
CL907	CdS	6150	133K	250	1.50	1.15
CL907L	CdS	6150	6K	100	1.50	1.15
CL907HL	CdS	6200	24K	100	1.50	1.35

Clairex Technical Information available. Ask for Stock No. 16A1124—Free.

## INTERNATIONAL RECTIFIER SELENIUM KLIP-SELS



Klip-Sels apply transient suppression to protect semi-conductor devices from over-load voltage peaks. Klip-Sels increase reliability without affecting circuit operation. KSA have 8-32 Stud, KSL have 1/4-20 Stud.

All Klip-Sels shown are Non-Polarized. Polarized Klip-Sels available on special order.

### CARTRIDGE

I.R. No.	RMS Volts	Typical Clamp V.	Amps at Clamp Volts	Dimensions — Inches A	L	T	1-99 Each	100-999 Each
KY10PF	26	67	0.25	.57 Dia.	.63	.....	\$0.59	\$0.45
KY20PF	52	133	0.25	.57 Dia.	.63	.....	.65	.49
KY50PF	130	333	0.25	.57 Dia.	.63	.....	.83	.63
KY60PF	156	400	0.25	.57 Dia.	.88	.....	.89	.67
KY100PF	260	666	0.25	.57 Dia.	.88	.....	1.13	.85
KZ10PF	26	67	1.0	.70 Dia.	.63	.....	.66	.49
KZ20PF	52	133	1.0	.70 Dia.	.63	.....	.77	.57
KZ50PF	130	333	1.0	.70 Dia.	.63	.....	1.10	.81
KZ60PF	156	400	1.0	.70 Dia.	.88	.....	1.21	.89
KZ100PF	260	666	1.0	.70 Dia.	.88	.....	1.65	1.21

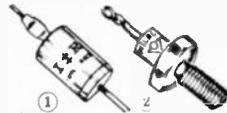
### STACK TYPES

KSA	I.R. No.	RMS Volts	Amps at Clamp Volts	Dimensions — Inches A	L	T	1-99 Each	100-999 Each
KSA10AF	26	67	3.0	1" sq.	1.37	.47	1.35	1.01
KSA20AF	52	133	3.0	1" sq.	1.50			

# INTERNATIONAL RECTIFIER SEMICONDUCTORS

## I. R. Zener Voltage Regulators

Z1100 through Z1120 .38" dia. x .250" L. Top Hat style. Z1122 through Z1134 .22" dia. x .345" L. Z1300 Series 10-32 stud x 1.6" overall length. Cathode connected to stud through Z1320, anode connected to stud Z1322 and higher. 10% tolerance.



Order By International Rectifier Number

① 1 WATT SIZE				② 10 WATT SIZE			
I.R. No.	Volts	I.R. No.	Volts	I.R. No.	Volts	I.R. No.	Volts
Z1100	3.9	Z1118	22	Z1304	5.6	Z1322	33
Z1102	4.7	Z1120	27	Z1306	6.8	Z1324	34
Z1104	5.6	Z1122	33	Z1308	8.2	Z1326	47
Z1106	6.8	Z1124	39	Z1310	10	Z1328	56
Z1108	8.2	Z1126	47	Z1312	12	Z1330	68
Z1110	10	Z1128	56	Z1314	15	Z1332	82
Z1112	12	Z1130	68	Z1316	18	Z1334	100
Z1114	15	Z1132	82	Z1320	27	Z1336	120
Z1116	18	Z1134	100				
Your Choice	1-9 Ea. \$0.85	10-99 Ea. \$0.74	100-999 Ea. \$0.67	1-9 Ea. \$2.05	10-99 Ea. \$1.85	100-999 Ea. \$1.48	

## 1 WATT SILICON ZENER DIODES

Moisture resistant thermosetting polymer. .107" max. dia. x .205" L. Cathode end marked by color band. Available in 10% tolerance (No suffix) and 5% tolerance ("A" suffix).



Int. Rect. No.	Nominal Zener Voltage Vz@Izt Volts	Test Current Izt mA	Max Zener Imped. Zzt@Izt Ohms	Int. Rect. No.	Nominal Zener Voltage Vz@Izt Volts	Test Current Izt mA	Max Zener Imped. Zzt@Izt Ohms
1N4728	3.3	76	10	1N4746	18	14	20
1N4729	3.6	69	10	1N4747	20	12.5	22
1N4730	3.9	64	9	1N4748	22	11.5	23
1N4731	4.3	58	9	1N4749	24	10.5	25
1N4732	4.7	53	8	1N4750	27	9.5	35
1N4733	5.1	49	7	1N4751	30	8.5	40
1N4734	5.6	45	5	1N4752	33	7.5	45
1N4735	6.2	41	2	1N4753	36	7.0	50
1N4736	6.8	37	3.5	1N4754	39	6.5	60
1N4737	7.5	34	4.0	1N4755	43	6.0	70
1N4738	8.2	31	4.5	1N4756	47	5.5	80
1N4739	9.1	28	5.0	1N4757	51	5.0	95
1N4740	10	25	7	1N4758	56	4.5	110
1N4741	11	23	8	1N4759	62	4.0	125
1N4742	12	21	9	1N4760	68	3.7	150
1N4743	13	19	10	1N4761	75	3.3	175
1N4744	15	17	14	1N4762	82	3.0	200
1N4745	16	15.5	16	1N4763	91	2.8	250
				1N4764	100	2.5	350

10% Tolerance (No suffix) IN4728 Thru IN4764. Choice Each 1-99 \$1.25 Asst. Each 100 \$1.05 100 Per Type Each \$3c  
 5% Tolerance ("A" suffix) IN4728A Thru IN4764A. Choice Each 1-99 \$1.90 Asst. Each 100 \$1.60 100 Per Type Each \$1.40

## INTERNATIONAL RECTIFIER LOW COST 2 AMP SCR's

Plastic case. Mtg. tab internally connected to cathode. 1.2" long x .38" wide overall including leads. Mtg. tab .5" long with .12" hole. Body .3" long.

Int. Rect. No.	Reverse Voltage	Gate Firing Requirements Volts	Requirements MA	1-99	100 up
IR106Y	30	1	.5	\$0.94	\$0.63
IR106F	50	1	.5	1.10	.73
IR106A	100	1	.5	1.18	.79
IR106B	200	1	.5	1.34	.89
IR106C	300	1	.5	1.70	1.15

## INTERNATIONAL RECTIFIER SCR's

3 amp and 5 amp have 10-32 stud, .69" high above stud. 10 amp and 16 amp have 1/4-28 stud, 1.193 above stud.

No. Int. Rect.	Rating Amp	Voltage Reverse	Gate Firing Requirements Volts	Requirements MA	1-99	100 up
IR1600	3	50	3.0	30	\$3.68	\$2.94
IR1601	3	100	3.0	30	4.94	3.40
IR1602	3	200	3.0	30	5.32	3.70
IR1604	3	400	3.0	30	7.00	4.65
IR1771	5	50	3.0	30	4.00	3.22
IR1772	5	100	3.0	30	5.20	3.60
IR1774	5	200	3.0	30	5.60	3.90
IR1777	5	400	3.0	30	7.40	4.95
IR1843A	10	50	3.0	90	4.25	3.40
IR1844A	10	100	3.0	90	5.78	3.85
IR1848A	10	200	3.0	90	6.19	4.13
IR1849A	10	400	3.0	90	8.25	5.50
IR682	16	50	3.0	90	4.95	3.90
IR683	16	100	3.0	90	6.19	4.13
IR685	16	200	3.0	90	8.60	4.40
IR688	16	400	3.0	90	8.65	5.90
IR690	16	600	3.0	90	11.95	8.00

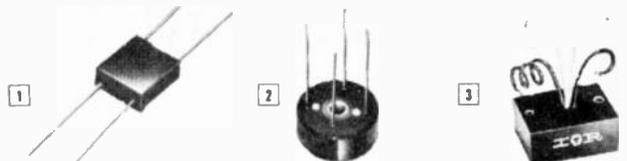
## CENTRALAB SOLAR BATTERY POWERS ANY 9 VOLT TRANSISTOR RADIO FROM SUNLIGHT

Works just like solar panels that power most U.S. satellites. Only 3 3/4 x 2 1/2 x 1/4" thick, yet converts required amount of sunlight into electric current for operating 9 volt transistor radios. Simple to connect with 8 1/2" leads and battery snap-on connector included... no wiring changes necessary. Comes complete with mounting adaptor for attaching to back or top of radio. Shpg. wt. 4 oz. \$7.99 No. 20A1194. Special Each.....

\$7.99



## I.R. SILICON BRIDGE RECTIFIERS



### 1.8 AMP SILICON BRIDGE RECTIFIER ASSEMBLIES

Single-phase miniature bridge rectifier assemblies. Hermetically sealed and completely insulated. Size .56"x.56"x.22".

### FULL WAVE BRIDGE CIRCUIT

I.R. Number	Max. Peak Reverse Voltage	Max. RMS Voltage	Max. dc Output Voltage	Max. dc Output Current (A)	Prices Each	
					1-99	100-999
18DB2A	200	142	125	1.8	\$2.38	\$2.14
18DB4A	400	282	252	1.8	2.61	2.48
18DB6A	600	424	380	1.8	2.90	2.75
18DB8A	800	560	500	1.8	3.42	3.25
18DB10A	1000	707	625	1.8	5.12	4.95

### CENTER TAP CIRCUIT—common positive

18DC6A	600	210	191	1.8	2.30	2.05
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### CENTER TAP—common negative

18DJ6A	600	210	191	1.8	2.30	2.05
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### DOUBLER CIRCUIT

9DD6A	600	423	375	0.9	2.30	2.05
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### 3 AMP SILICON FULL WAVE BRIDGE RECTIFIERS

I.R. Number	Max. Peak Reverse Voltage	Max. RMS Voltage	Max. dc Output Voltage	Max. dc Output Current (A)	Prices Each	
30RB2AP	200	140	125	3	4.27	3.82
30RB4AP	400	280	250	3	4.74	4.27
30RB6AP	600	420	380	3	5.25	4.73

### 10 AMP SILICON FULL WAVE BRIDGE RECTIFIERS

I.R. Number	Max. Peak Reverse Voltage	Max. RMS Voltage	Max. dc Output Voltage	Max. dc Output Current (A)	Prices Each	
100PB05P	50	35	30	10	4.05	3.25
100PB1P	100	70	60	10	4.30	3.35
100PB2P	200	140	120	10	5.15	4.15
100PB4P	400	280	240	10	6.35	5.15
100PB6P	600	420	360	10	9.95	8.00

### Fig. ① 1 AMP SILICON RECTIFIERS

Body .14" dia. x .15" long.

Int. Rect. No.	PRV	Prices Each	
		1-99	100-999
1N2069	200	\$0.32	\$0.28
1N2070	400	.41	.35
1N2071	600	.50	.44



### Fig. ③ 1.3 AMP SILICON RECTIFIERS

.22 dia. — Dimension A .545"

Int. Rect. No.	PRV	Prices Each	
		1-99	100-999
10C1	100	\$0.32	\$0.29
10C2	200	.35	.32
10C4	400	.42	.38
10C6	600	.52	.46
10C8	800	.75	.65
10C10	1000	1.70	1.20

### Fig. ② 2 AMP SILICON RECTIFIERS

.22 dia. — Dimension A .545"

Int. Rect. No.	PRV	Prices Each	
		1-99	100-999
20C1	100	\$0.85	\$0.72
20C2	200	.95	.80
20C4	400	1.10	.93
20C6	600	1.40	1.19
20C8	800	2.15	1.83
20C10	1000	2.85	2.25

## INTERNATIONAL RECTIFIER SILICON RECTIFIERS

Hermetically Sealed. 40 AMP 1/4-28 Stud x 1.55" overall. 70 AMP 1/4-28 Stud x 1.37" overall. Standard Polarity-cathode connected to Stud. Reverse Polarity-anode connected to Stud.



### IR Numbers

Standard Polarity	Reverse Polarity	Volt. PRV	Rating RMS	Current AMPS	1-99 Each	100-999 Each
40HF5	40HF5R	50	35	40	\$1.15	\$0.80
40HF10	40HF10R	100	70	40	1.45	1.05
40HF20	40HF20R	200	140	40	2.00	1.40
40HF40	40HF40R	400	280	40	3.05	2.20
40HF60	40HF60R	600	420	40	4.55	3.30
40HF100	40HF100R	1000	707	40	9.90	7.20
70H10A	70H10AR	100	70	70	3.35	2.56
70H20A	70H20AR	200	140	70	4.80	3.51
70H40A	70H40AR	400	280	70	6.95	4.85
70H60A	70H60AR	600	420	70	8.70	5.85

## 20 AMP PLASTIC HALF WAVE RECTIFIER

Universal tab or terminal mounting. 1.8" long overall x .43" wide without tabs.



I.R. No.	Max. Peak Reverse Volts	Non-Repet. Reverse Volts	Max. RMS Reverse Volts	Max. DC Blocking Volts	Prices	
					1-99	100 up
21PT5	50	75	35	40	\$1.10	\$0.82
21PT10	100	150	70	80	1.20	.90
21PT20	200	275	140	160	1.30	.98
21PT40	400	500	280	320	1.70	1.27
21PT60	600	725	420	480	2.25	1.70

## INTERNATIONAL RECTIFIER TRANSISTOR "HOT" HEAT SINKS

Stk. No.	I.R. No.	Outside Dia.	Fits Case Diameters	Fits JEDEC Case Styles	Prices Each		
					1-49	50-499	500-999
12A2247	HE-101	.64"	.161/.240	TO-18,24,28,40,44	\$0.29	\$0.22	\$0.17
12A2248	HE-102	.72"	.275/.370	TO-5,9,11,12,16,26,29,33,39,42,43,45	.29	.22	.17
12A2249	HE-103	1.4"	.440/.544	TO-8,38,48	.29	.22	.17





# SPECIAL PURPOSE TUBES

Tube Type	Make	Prices Each				Tube Type	Make	Prices Each				Tube Type	Make	Prices Each			
		1-4	5-15	16-49	50 Up			1-4	5-15	16-49	50 Up			1-4	5-15	16-49	50 Up
0A2	RCA	\$ 1.32	\$ 1.25	\$ 1.19	\$ 1.12	NL-623	N.E.	\$13.35	\$12.68	\$12.01	\$11.34	5696	RCA	\$ 1.95	\$ 1.85	\$ 1.75	\$ 1.66
0A3	RCA	1.54	1.46	1.39	1.31	NL-635/7019	N.E.	13.50	12.82	12.15	11.47	5725/6AS6W	RCA	3.12	2.96	2.80	2.65
0A4G	RCA	1.86	1.77	1.67	1.58	NL-635L/7020	N.E.	13.50	12.82	12.15	11.47	5726/6ALS5W	RCA	1.55	1.47	1.39	1.32
0B2	RCA	1.37	1.30	1.23	1.16	NL-635P/6930	N.E.	14.15	13.44	12.74	12.02	5727	RCA	2.90	2.75	2.61	2.46
0C2	RCA	1.50	1.42	1.35	1.28	NL660L/7786	N.E.	13.50	12.83	12.15	11.48	5749/6BA6W	RCA	2.20	2.09	1.98	1.87
0C3	RCA	1.50	1.42	1.35	1.28	NL-710/6011	N.E.	12.70	12.06	11.43	10.79	5751	RCA	2.55	2.42	2.29	2.17
0D3	RCA	1.44	1.37	1.30	1.22	NL-710L/7518	N.E.	14.00	13.30	12.60	11.90	5763	RCA	2.45	2.33	2.20	2.08
0G3/85A2	Mul.	2.30	2.18	2.07	1.95	NL-714	N.E.	10.00	9.50	9.00	8.50	5814A	RCA	2.35	2.23	2.11	2.00
1C21	RCA	4.15	3.94	3.74	3.53	NL-716	N.E.	12.50	11.87	11.25	10.62	5814WA	RCA	2.40	2.28	2.16	2.04
1L4	RCA	1.50	1.42	1.35	1.27	NL-740/6856	N.E.	23.25	22.09	20.92	19.76	5820A	RCA	995.00	.....	.....	.....
1M3/DM70	See DM70					NL-740L/7022	N.E.	24.35	23.13	21.91	20.69	5823	RCA	1.72	1.63	1.55	1.46
1P37	RCA	6.85	6.50	6.16	5.82	NL-740P/6857	N.E.	24.35	23.13	21.91	20.69	5876A	RCA	6.90	6.55	6.21	5.86
1P39	RCA	3.45	3.27	3.10	2.93	NL-760	N.E.	28.10	26.69	25.29	23.88	5894	Mul.	25.50	.....	.....	.....
1P40	RCA	5.60	5.32	5.04	4.76	NL-760L	N.E.	29.40	27.93	26.46	24.99	5915	RCA	1.62	1.54	1.46	1.38
1P41	RCA	6.15	5.84	5.53	5.23	NL-760P	N.E.	29.80	28.31	26.82	25.33	5963	RCA	1.36	1.29	1.22	1.16
2-01C	Eimac	18.00	17.10	16.00	15.30	807	RCA	4.20	3.99	3.78	3.57	5965	RCA	1.92	1.82	1.72	1.63
2C39A	RCA	20.75	19.71	18.67	17.63	810	RCA	30.75	29.21	27.67	26.03	6005/6AQ5W	RCA	3.23	3.07	2.90	2.74
2C40	RCA	31.75	30.16	28.48	26.89	812A	RCA	7.75	7.36	6.97	6.59	6012	RCA	7.65	7.27	6.88	6.50
2D21	RCA	1.29	1.23	1.16	1.10	812A	RCA	7.20	6.84	6.48	6.12	NL-6014/C1K	N.E.	11.80	11.21	10.62	10.03
2D21W	RCA	2.90	2.76	2.61	2.47	813	RCA	25.95	24.56	23.27	22.08	6072	RCA	3.90	3.70	3.51	3.31
2E26	RCA	3.95	3.75	3.56	3.36	816	RCA	4.50	4.27	4.04	3.81	6080	RCA	5.33	5.06	4.80	4.53
2X2A	RCA	4.20	3.99	3.78	3.57	828	RCA	37.00	35.15	33.30	31.45	6082	RCA	5.60	5.32	5.04	4.76
3A4	RCA	1.55	1.47	1.39	1.32	833A	RCA	69.95	66.45	62.95	59.45	6136	RCA	2.70	2.56	2.43	2.29
3B2B	RCA	8.85	8.41	8.00	7.52	866A	RCA	3.75	3.56	3.37	3.19	6146A	RCA	4.30	4.08	3.87	3.65
NL-3C23	N.E.	11.98	11.38	10.78	10.18	868	RCA	6.85	6.50	6.16	5.82	6146B/8298A	RCA	5.15	4.89	4.63	4.38
3CX100A5	Eimac	26.50	25.17	23.85	22.52	872A	RCA	10.70	10.16	9.63	9.09	6146W	RCA	6.60	6.27	5.94	5.61
NL-C3J/AL	N.E.	14.60	13.87	13.14	12.41	884	RCA	2.28	2.16	2.05	1.94	6159B	RCA	5.05	4.80	4.54	4.29
3RP1	RCA	18.30	17.39	16.47	15.55	918	RCA	6.85	6.50	6.16	5.82	6197	RCA	2.30	2.18	2.07	1.95
3RP1A	RCA	27.00	25.65	24.30	22.95	919	RCA	10.15	9.64	9.13	8.63	6201	RCA	2.95	2.80	2.65	2.51
3-400Z/8163	Eimac	34.00	32.30	30.60	28.90	922	RCA	3.75	3.56	3.37	3.19	6202	RCA	2.69	2.55	2.42	2.29
4-125A/4D21	Eimac	36.00	34.20	.....	.....	923	RCA	5.50	5.22	4.94	4.66	6211	RCA	2.15	2.04	1.93	1.83
4-250A/5D22	Eimac	48.00	45.60	43.20	40.80	925	RCA	5.95	5.65	5.35	5.05	6267/EF86	See EF86 6267				
4-400A/843B	Eimac	48.00	45.60	43.20	40.80	927	RCA	7.15	6.79	6.43	6.07	6293	RCA	5.50	5.22	4.94	4.66
4-1000A	Eimac	135.00	128.25	121.50	114.75	929	RCA	3.65	3.47	3.28	3.10	6336A	RCA	19.04	18.09	17.14	16.18
4CX250B/7203	Eimac	35.60	33.82	32.04	30.26	930	RCA	5.60	5.32	5.04	4.76	6350	RCA	1.85	1.76	1.61	1.57
4X150A/7034	Eimac	23.15	21.99	20.83	19.68	931A	RCA	12.10	11.49	10.89	10.28	6360A	RCA	6.25	5.94	5.63	5.32
4X250B	Eimac	35.60	33.82	32.04	30.26	934	RCA	7.00	6.65	6.30	5.95	6386	RCA	7.75	7.36	6.97	6.59
5BP1A	RCA	38.85	36.90	34.97	33.02	955	RCA	7.05	6.70	6.34	5.99	6417	RCA	3.33	3.16	3.00	2.83
5R4GYB	RCA	2.03	1.93	1.83	1.73	991	RCA	1.62	1.54	1.46	1.38	6550	RCA	4.59	4.36	4.13	3.90
5UP1	RCA	21.10	20.04	18.99	17.92	NL1051A "B" Ign.	N.E.	65.00	61.75	58.50	55.25	6570	RCA	12.10	11.49	10.89	10.28
6AS6	RCA	3.43	3.26	3.08	2.91	NL1052A "C" Ign.	N.E.	99.00	94.05	89.10	84.15	6626/0A2WA	RCA	3.35	3.18	3.01	2.85
6AS7G	RCA	4.93	4.68	4.44	4.19	NL1061	N.E.	65.00	61.75	58.50	55.25	6660/6BA6	RCA	1.01	96	91	86
6J4	RCA	4.02	3.82	3.62	3.42	NL1062	N.E.	99.00	94.05	89.10	84.15	6661/6BH6	RCA	1.34	1.27	1.21	1.14
NL-C6J	N.E.	28.10	26.69	25.29	23.88	1612	RCA	5.77	5.48	5.19	4.90	6669/6AQ5A	RCA	1.06	1.01	95	90
NL-C6JL	N.E.	29.40	27.93	26.46	24.99	1614	RCA	4.93	4.68	4.44	4.19	6677/6CL6	RCA	1.85	1.76	1.66	1.57
12A6	RCA	3.36	3.19	3.02	2.86	1619	RCA	6.23	5.91	5.61	5.30	6678/6U8A	RCA	1.62	1.54	1.46	1.38
12AT7WA	RCA	2.53	2.40	2.28	2.15	1620	RCA	7.55	7.17	6.79	6.42	6679/12A77	RCA	1.50	1.42	1.35	1.27
EL37	Mul.	4.26	3.55	3.19	3.03	1621	RCA	3.85	3.68	3.46	3.27	6680/12AU7A	RCA	1.22	1.16	1.10	1.04
KT66	Mul.	4.65	3.88	3.49	3.31	1625	RCA	6.30	5.98	5.66	5.34	6681/12AX7A	RCA	1.26	1.20	1.13	1.07
DM70/1M3	Mul.	1.44	1.20	1.08	.86	1629	RCA	2.04	1.94	1.84	1.73	6688A	RCA	6.80	6.46	6.12	5.78
EF80/6BX6	Mul.	1.83	1.53	1.37	1.22	2050	RCA	2.37	2.25	2.13	2.01	6883	RCA	4.25	4.04	3.82	3.40
EZ80/6V4	Mul.	.96	.80	.72	.61	2050A	RCA	2.03	1.93	1.83	1.72	6922	See E88CC 6922				
EM81/6DA5	Mul.	1.77	1.47	1.32	1.25	5557	RCA	9.50	9.02	8.55	8.07	N1-6989/C6J/KL	N.E.	29.45	27.98	26.50	25.03
ECF82/6U8	Mul.	1.86	1.55	1.40	1.33	5558	RCA	17.50	16.62	15.75	14.87	7054	RCA	1.54	1.46	1.38	1.31
83	RCA	1.89	1.79	1.70	1.61	NL5563A	N.E.	50.00	47.50	45.00	42.50	7059	RCA	1.48	1.41	1.33	1.26
EM84/6F66	Mul.	2.01	1.67	1.50	1.42	5581	RCA	6.20	5.89	5.58	5.27	7060	RCA	1.75	1.66	1.57	1.49
EF85/6BY7	Mul.	1.83	1.53	1.37	1.30	5582	RCA	7.45	7.08	6.71	6.34	7061	RCA	1.16	1.10	1.04	.90
EF86/6267	Mul.	1.56	1.30	1.17	1.11	5583	RCA	9.30	8.83	8.36	7.89	7062	Mul	2.25	2.14	2.02	1.91
E88CC/8922	Mul.	4.87	4.63	4.38	4.14	NL-5632/C3J	N.E.	12.70	12.06	11.43	10.79	7119	Mul	2.95	2.80	2.65	2.51
ECC88/6DJ8	Mul.	2.97	2.82	2.67	2.52	5642	RCA	3.53	3.35	3.17	3.00	7167	RCA	1.41	1.34	1.27	1.20
KT88	Mul.	7.86	6.55	5.89	5.59	5651A	RCA	1.78	1.69	1.60	1.51	7360	RCA	3.77	3.58	3.39	3.20
EBF89/6DC8	Mul.	1.83	1.52	1.37	1.30	5654	RCA	2.41	2.29	2.17	2.05	7551	RCA	3.37	3.20	3.03	2.86
EZ90/6X4	Mul.	1.26	1.20	1.13	1.07	NL-5665/C16J	N.E.	52.50	49.87	45.45	44.62	7558	RCA	3.49	3.31	3.14	2.96
100TH	Eimac	26.00	24.70	23.40	22.10	5670	RCA	2.45	2.33	2.28	2.08	7586	RCA	3.35	3.18	3.01	2.85
FG105	N.E.	59.00	56.05	53.10	50.15	5675	RCA	6.90	6.55	6.21	5.86	7587	Mul	5.20	4.94	4.68	4.42
250TH	Eimac	45.00	42.75	41.50	38.25	5678	R										



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Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over
OZ4	\$3.40	\$2.04	\$1.53	\$1.36	6AF3	\$3.55	\$2.13	\$1.60	\$1.42	6CN7	\$4.45	\$2.67	\$2.00	\$1.78	6HZ6	\$3.00	\$1.80	\$1.35	\$1.20
1AD2	3.40	2.04	1.53	1.36	6AF4A	4.45	2.67	2.00	1.78	6CQ4	3.55	2.13	1.60	1.42	6J5	4.60	2.76	2.07	1.84
1AY2	2.60	1.56	1.17	1.04	6AF6G	6.30	3.78	2.84	2.52	6CQ8	4.10	2.46	1.85	1.64	6J5CT	4.10	2.46	1.85	1.64
1BC2	3.25	1.95	1.46	1.30	6AF9	3.55	2.13	1.60	1.42	6CS6	3.00	1.98	1.49	1.32	6J6A	4.05	2.43	1.82	1.62
1C3GT/1B3CT	3.40	2.04	1.53	1.36	6AF11	5.20	3.12	2.34	2.08	6CS7	3.75	2.25	1.69	1.50	6J7	5.80	3.48	2.61	2.32
1K3 1J3	3.40	2.04	1.53	1.36	6AC5	3.80	2.28	1.71	1.52	6CU5	3.55	2.13	1.60	1.42	6J86A	5.85	3.51	2.63	2.34
1L6	12.55	7.53	5.65	5.02	6AC7	6.85	4.21	3.08	2.74	6CU8	4.60	2.76	2.07	1.84	6JC6A	3.95	2.37	1.78	1.58
1B5	4.45	2.67	2.00	1.78	6AH4CT	3.25	1.95	1.46	1.30	6CW4	4.90	2.94	2.21	1.96	6JC8	3.05	1.83	1.37	1.22
1S2A/DY87	2.55	1.53	1.15	1.02	6AH6	5.20	3.12	2.34	2.08	6CW5/EL86	2.75	1.65	1.24	1.10	6JD6	3.55	2.13	1.60	1.42
1S5	3.40	2.04	1.53	1.36	6AK5/EP95	4.75	2.85	2.14	1.90	6CX8	5.20	3.12	2.34	2.08	6JE6A	See 6LQ6/6JE6C			
1T4	3.85	2.31	1.73	1.54	6AK6	2.40	1.42	1.28	1.14	6CY5	4.25	2.55	1.91	1.70	6JE8	3.70	2.22	1.67	1.48
1U4	3.85	2.31	1.73	1.54	6AL3/EY88	2.60	1.56	1.17	1.04	6CY7	3.05	1.83	1.37	1.22	6JF6	6.85	4.11	3.08	2.74
1U5	3.40	2.04	1.53	1.36	6AL5	2.70	1.62	1.22	1.08	6CZ5	4.75	2.85	2.14	1.90	6JH6	2.95	1.77	1.33	1.18
1V2	2.55	1.53	1.15	1.02	6AL11	4.75	2.85	2.14	1.90	6D10	4.65	2.79	2.09	1.86	6JH8	5.30	3.18	2.39	2.12
1X2B/1X2A	3.70	2.22	1.67	1.48	6AM8A	4.05	2.43	1.82	1.62	6DA4	3.70	2.22	1.67	1.48	6JH6A	4.95	2.97	2.23	1.98
2AF4B/2DZ4	4.10	2.46	1.85	1.64	6AN8A	4.65	2.79	2.09	1.86	6DB5	5.00	3.00	2.25	2.00	6JN6	4.90	2.94	2.21	1.96
2A52	3.30	1.98	1.49	1.32	6AQ5A	2.95	1.77	1.33	1.18	6DE6	3.85	2.31	1.73	1.54	6JN8	3.65	2.19	1.64	1.46
2AV2	2.85	1.71	1.28	1.14	6AQ6	3.25	1.95	1.46	1.30	6DE7	3.25	1.95	1.46	1.30	6JT6A	5.40	3.24	2.43	2.16
2BN4A	3.55	2.13	1.60	1.42	6AQ7GT	4.70	2.82	2.12	1.88	6DE8	4.45	2.67	2.00	1.78	6JS6B	7.30	4.38	3.29	2.92
2CY5	4.40	2.64	1.98	1.76	6AQ8/ECC85	3.00	1.80	1.35	1.20	6DE7	4.45	2.67	2.00	1.78	6JT8	4.00	2.40	1.80	1.60
2E55	4.85	2.91	2.18	1.94	6AR5	2.45	1.47	1.10	.98	6DG6GT	3.85	2.31	1.73	1.54	6JW8A	3.85	2.31	1.73	1.54
2CK5/2FQ5A	4.20	2.52	1.89	1.68	6AR11	4.50	2.70	2.03	1.80	6DJB/ECC88	3.20	1.89	1.74	1.51	6JW8/ECF802	3.10	1.86	1.40	1.24
2MQ5	3.85	2.31	1.73	1.54	6AS5	3.75	2.25	1.69	1.50	6DK6	2.95	1.77	1.33	1.18	6JZ8	3.55	2.13	1.60	1.42
3A3B	3.20	1.92	1.44	1.28	6AS8	4.85	2.91	2.18	1.94	6DL5/EL95	2.95	1.77	1.33	1.18	6K6CT	3.50	2.10	1.58	1.40
3AF4A/3DZ4	4.10	2.46	1.85	1.64	6AT6	2.40	1.44	1.08	.96	6DN7	4.60	2.76	2.07	1.84	6K7	5.90	3.54	2.66	2.36
3AL5	2.70	1.62	1.22	1.08	6AT8A	5.20	3.12	2.34	2.08	6DQ5	7.85	4.71	3.53	3.14	6K11/6Q11	3.80	2.28	1.71	1.52
3AT2	3.40	2.04	1.53	1.36	6AU4GTA	4.40	2.64	1.98	1.76	6DR7	4.60	2.76	2.07	1.84	6KA8	4.50	2.70	2.03	1.80
3AW2	3.20	1.92	1.44	1.28	6AUSCT	5.20	3.12	2.34	2.08	6DS4	4.90	2.94	2.21	1.96	6KD6	8.50	5.10	3.83	3.40
3AU6	2.95	1.77	1.33	1.18	6AUGA	2.65	1.59	1.19	1.06	6DS5	3.65	2.19	1.64	1.46	6KE8	5.65	3.39	2.54	2.26
3BC5 3CE5	2.95	1.77	1.33	1.18	6AUA8	5.20	3.12	2.33	2.08	6DT5	3.55	2.13	1.60	1.42	6KM6	8.20	4.92	3.69	3.28
3BN6	4.75	2.85	2.14	1.90	6AV5CA	5.20	3.12	2.34	2.08	6DT6A	3.70	1.62	1.22	1.08	6KT6	3.30	1.98	1.49	1.32
3BU8/3CS8	4.90	2.94	2.21	1.96	6AV6	1.95	1.17	.88	.78	6DX8	2.75	2.25	1.69	1.50	6KT8	4.90	2.94	2.21	1.96
3BZ6	3.30	1.98	1.49	1.32	6AW8A	4.00	2.40	1.80	1.60	6DW4B	3.50	2.10	1.58	1.40	6KY8	5.85	3.51	2.63	2.34
3CA3	3.20	1.92	1.44	1.28	6AX3	2.90	1.74	1.31	1.16	6DX8/ECL84	2.90	1.74	1.31	1.16	6KX8A	7.25	4.35	3.26	2.91
3CB6 3CF6	2.95	1.77	1.33	1.18	6AX4GTB	3.40	2.04	1.53	1.36	6DZ4	4.10	2.46	1.85	1.64	6KZ8	3.70	2.22	1.67	1.48
3CS6	3.70	2.22	1.67	1.48	6AX5CT	3.85	2.31	1.73	1.54	6E5	5.65	3.39	2.54	2.26	6L6	9.65	5.79	4.34	3.86
3CY5	3.90	2.30	1.76	1.56	6AY8	3.40	2.04	1.53	1.36	6EA7	5.70	3.42	2.57	2.28	6L6CC	5.25	3.15	2.36	2.10
3DC4	5.20	3.12	2.34	2.08	6AZ3B	5.50	3.30	2.48	2.20	6EA8	3.55	2.13	1.60	1.42	6LB6	8.60	5.16	3.87	3.44
3DK6	2.95	1.77	1.33	1.18	6B10	3.80	2.28	1.71	1.52	6E8B	5.05	3.03	2.27	2.02	6L7	6.95	4.17	3.13	2.78
3DT6A	3.25	1.95	1.46	1.30	6BA6/EF93	2.70	1.62	1.22	1.08	6EH4A	8.20	4.92	3.69	3.28	6LE8	6.20	3.72	2.79	2.48
3GK5	4.20	2.52	1.89	1.68	6BA7	5.85	3.51	2.63	2.34	6EH7/EF183	3.85	2.31	1.73	1.54	6LF8	4.65	2.79	2.09	1.86
3HM5/3HA5	3.85	2.31	1.73	1.54	6BA8A	4.65	2.79	2.09	1.86	6EJ7/EF184	3.55	2.13	1.60	1.42	6LJ8	4.10	2.46	1.85	1.64
3HQ5	5.25	3.15	2.36	2.10	6BA11	4.45	2.67	2.00	1.78	6EM7	5.70	3.42	2.57	2.28	6LN8/LCF80	2.40	1.44	1.08	.96
3JC6A	4.40	2.64	1.98	1.76	6BC5 6CE5	3.25	1.95	1.46	1.30	6ER5	4.20	2.52	1.89	1.68	6LQ6/6JE6C	8.50	5.10	3.83	3.40
3V4	3.75	2.25	1.69	1.50	6BC7	3.60	2.16	1.62	1.44	6ES5	2.85	1.71	1.28	1.14	6LQ8	5.55	3.33	2.50	2.22
4AU6	3.40	2.04	1.53	1.36	6BC8/6BZ8	4.45	2.67	2.00	1.78	6ES8	5.45	3.27	2.45	2.18	6LT8	3.50	2.10	1.58	1.40
4BC8	4.00	2.40	1.80	1.60	6BE3/6BZ3	3.75	2.25	1.69	1.50	6EU7	3.60	2.16	1.62	1.44	6LU8	4.75	2.85	2.14	1.90
4B07A	4.90	2.94	2.21	1.96	6BE6	3.10	1.86	1.40	1.24	6E8	3.70	2.22	1.67	1.48	6LX8/LCF802	2.60	1.56	1.17	1.04
4BU8/4CS8	4.45	2.67	2.00	1.78	6BF5	3.35	2.01	1.51	1.34	6EV5	3.55	2.13	1.60	1.42	6LY8	3.90	2.34	1.76	1.56
4BZ6	2.95	1.77	1.33	1.18	6BF6	2.85	1.71	1.28	1.14	6EW6	3.00	1.80	1.35	1.20	6MD8	4.85	2.91	2.18	1.94
4BZ7	4.90	2.94	2.21	1.96	6BGGC	6.45	3.87	2.90	2.58	6EW7	6.00	3.60	2.70	2.40	6ME8	5.05	3.03	2.27	2.02
4CB6	2.85	1.71	1.28	1.14	6BH6	3.60	2.16	1.62	1.44	6F5	5.85	3.51	2.63	2.34	6N7	5.05	3.03	2.27	2.02
4CS6	3.40	2.04	1.53	1.36	6BH8	4.60	2.76	2.07	1.84	6F6	6.15	3.69	2.77	2.46	6Q7	5.90	3.54	2.66	2.36
4DT6A	3.25	1.95	1.46	1.30	6BH11	4.70	2.82	2.12	1.88	6FD7	5.70	3.42	2.57	2.28	6S4A	3.40	2.04	1.53	1.36
4EH7/LF183	3.55	2.13	1.60	1.42	6BJ6	3.60	2.16	1.62	1.44	6FC7	4.15	2.49	1.87	1.66	6S7A	5.90	3.54	2.66	2.36
4EJ7/LF184	3.55	2.13	1.60	1.42	6BJ7	2.95	1.77	1.33	1.18	6FH5	4.55	2.73	2.05	1.82	6SC7	5.35	3.21	2.41	2.14
4EK3	3.90	2.34	1.76	1.56	6BJ8	4.45	2.67	2.00	1.78	6FM7	3.90	2.34	1.76	1.56	6SF5	5.00	3.00	2.25	2.00
4EM6	2.20	1.32	.99	.88	6BK4C	7.55	4.53	3.40	3.00	6FM8	2.85	1.71	1.28	1.14	6SC7	5.60	3.36	2.52	2.24
4M58	3.70	2.22	1.67	1.48	6BK5	3.50	2.10	1.58	1.40	6FQ5A	See 6GK5	6SH7	6.15	3.69	2.77	2.46			
4OC6A	4.60	2.76	2.07	1.84	6BK7B	4.45	2.67	2.00	1.78	6G7	4.15	2.49	1.87	1.66	6SJ7	4.90	2.94	2.21	1.96
4OD6	4.60	2.76	2.07	1.84	6BL7GTA	5.60	3.36	2.52	2.24	6FQ5A	See 6GK5	6SK7	5.00	3.00	2.25	2.00			
4OE8	6.05	3.63	2.72	2.42	6BL8/ECF80	2.70	1.62	1.22	1.08										

Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	Tube Type	Optional List	Net 1-5	Net 6-49	50 or Over	
10DE7	\$4.45	\$2.67	\$2.00	\$1.78	12BF6	\$2.35	\$1.41	\$1.06	\$0.94	13Z10/13J10	5.55	3.33	2.50	2.22	25BQ6CTB/					
10DX8/					12BH7A	3.50	2.10	1.58	1.40	14BL11	5.80	3.48	2.61	2.32	25CUG	\$4.40	\$2.64	\$1.98	\$1.76	
LCL84	2.75	1.65	1.24	1.10	12BK5	3.75	2.25	1.69	1.50	14BR11	5.30	3.18	2.39	2.12	25C5	3.30	1.98	1.49	1.32	
10EC7	4.35	2.61	1.96	1.74	12BL6	3.70	2.22	1.67	1.48	15BD11A	5.50	3.30	2.48	2.20	25CD6CB	6.40	3.84	2.88	2.56	
10CF7A	4.75	2.85	2.14	1.90	12BQ6CTB/					15CW5/PL84	2.45	1.47	1.10	.98	25DN6	6.60	3.96	2.97	2.64	
10GK6	3.45	2.07	1.55	1.38	12CUG	4.45	2.67	2.00	1.78	15KY8A	5.80	3.48	2.61	2.32	25EH5	3.70	2.22	1.67	1.48	
10GN8	4.45	2.67	2.00	1.78	12BR7	3.05	1.83	1.37	1.22	16AQ3/XY88	2.70	1.62	1.22	1.08	25ELG2	3.70	2.22	1.67	1.48	
10HF8	5.35	3.21	2.41	2.14	12BY7A	3.20	1.92	1.44	1.28	17AX4CTA	3.70	2.22	1.67	1.48	25Z6CT	3.85	2.31	1.73	1.54	
10JA8	4.15	2.49	1.87	1.66	12CA5	3.95	2.37	1.78	1.58	17AY3A/	3.40	2.04	1.53	1.36	27CB5/					
10JT8	4.05	2.43	1.82	1.62	12CU5/12C5	3.90	2.34	1.76	1.56	17BE3/					PL500	3.70	2.22	1.67	1.48	
10JY8	3.65	2.19	1.64	1.46	12DB5	2.60	1.56	1.17	1.04	17BZ3	3.20	1.92	1.44	1.28	33CY7A	6.05	3.63	2.72	2.42	
10KJ8	4.85	2.91	2.18	1.94	12DS7	5.40	3.24	2.43	2.16	17BF11	4.70	2.82	2.12	1.88	35C5	2.95	1.77	1.33	1.18	
11AR11	4.10	2.46	1.85	1.64	12DT5	3.10	1.86	1.40	1.24	17BS3A/					35EH5	3.40	2.04	1.53	1.36	
11BQ11	4.10	2.46	1.85	1.64	12DT8	4.00	2.40	1.80	1.60	17DW4A	3.40	2.04	1.53	1.36	35L6CT	3.85	2.31	1.73	1.54	
11BT11	6.50	3.90	2.93	2.60	12EK6	3.55	2.13	1.60	1.42	17C9	7.15	4.29	3.22	2.86	35W4	1.65	.99	.74	.66	
11KV8	5.90	3.54	2.66	2.36	12FK5	3.25	1.95	1.46	1.30	17CK3	3.55	2.13	1.60	1.42	35Y4	4.50	2.70	2.03	1.80	
11LQ8	5.90	3.54	2.66	2.36	12GF5	4.50	2.70	2.03	1.80	17CU5/17C5	3.10	1.86	1.40	1.24	35Z5CT	2.70	1.62	1.22	1.08	
12AB5	3.85	2.31	1.73	1.54	12GN7A	5.10	3.06	2.30	2.04	17D4	4.05	2.43	1.82	1.62	36AM3B	2.55	1.53	1.15	1.02	
12AD6	3.50	2.10	1.58	1.40	12GW6/					17DE4	3.65	2.19	1.64	1.46	38HE7	6.65	3.99	3.00	2.66	
12AE6A	3.10	1.86	1.40	1.24	12DQ6B	4.95	2.97	2.23	1.98	17DM4A	4.05	2.43	1.82	1.62	38HK7	6.55	3.93	2.95	2.62	
12AF3	4.25	2.55	1.91	1.70	12H6	4.45	2.67	2.00	1.78	17EW8/					50B5	2.95	1.77	1.33	1.18	
12AF6	3.15	1.89	1.42	1.26	12HG7	5.10	3.06	2.30	2.04	HCC85	2.75	1.65	1.24	1.10	50C5	2.55	1.53	1.15	1.02	
12AL5	2.75	1.65	1.24	1.10	12JB6A	6.20	3.72	2.79	2.48	17CT5A	5.55	3.33	2.50	2.22	50DC4	2.40	1.44	1.08	.96	
12AQ5	3.50	2.10	1.58	1.40	12L6CT	3.55	2.13	1.60	1.42	17CW6/					50EH5	3.00	1.80	1.35	1.20	
12AT6	2.75	1.65	1.24	1.10	12MD8	4.85	2.91	2.18	1.94	17DQ6B	5.25	3.15	2.36	2.10	50HK6	2.15	1.29	.97	.86	
12AT7/					12SA7	5.90	3.54	2.66	2.36	17JB6A	5.50	3.30	2.48	2.20	50L6CT	4.00	2.40	1.80	1.60	
ECC81	3.20	1.92	1.44	1.28	12SC7	4.70	2.82	2.12	1.88	17JM6A	4.95	2.97	2.23	1.98	60FX5	2.95	1.77	1.33	1.18	
12AU6	2.90	1.74	1.31	1.16	12SJ7	4.30	2.58	1.94	1.72	17JN6	3.90	2.34	1.76	1.56	117L7/					
12AU7A/					12SK7	5.30	3.18	2.39	2.12	17JZ8	3.55	2.13	1.60	1.42	M7CT	14.75	8.85	6.64	5.90	
ECC82	2.75	1.65	1.24	1.10	12SK7CT	4.45	2.67	2.00	1.78	18FX6A	4.95	1.77	1.33	1.18	5879	5.00	3.00	2.25	2.00	
12AV5CA	5.45	3.27	2.45	2.18	12SL7CT	4.95	2.97	2.23	1.98	19AU4CTA	2.35	1.41	1.06	.94	5881	5.20	3.12	2.34	2.08	
12AV6	1.95	1.17	.88	.78	12SN7CTA	3.85	2.31	1.73	1.54	19T8	4.90	2.94	2.21	1.96	6973	4.60	2.76	2.07	1.84	
12AV7	4.15	2.49	1.87	1.66	12SQ7	4.95	2.97	2.23	1.98	21CY5	4.65	2.79	2.09	1.86	7025	3.10	1.86	1.40	1.24	
12AX4CTB	2.95	1.77	1.33	1.18	12V6CT	4.45	2.67	2.00	1.78	21JZ6	4.85	2.91	2.18	1.94	7027A	7.45	4.47	3.35	2.98	
12AX7A/					12W6CT	4.90	2.94	2.21	1.96	12L8R	4.75	2.85	2.14	1.90	7189	3.85	2.31	1.73	1.54	
ECC83	2.70	1.62	1.22	1.08	12X4	2.25	1.35	1.01	.90	21L8U	4.75	2.85	2.14	1.90	7199	4.90	2.94	2.21	1.96	
12AY3A	2.90	1.74	1.31	1.16	13DE7	4.75	2.85	2.14	1.90	22BW3	3.40	2.04	1.53	1.36	7247	3.20	1.92	1.44	1.28	
12AY7	5.70	3.42	2.57	2.28	13DR7	5.30	3.18	2.39	2.12	22DE4	4.20	2.52	1.89	1.68	7355	3.65	2.19	1.64	1.46	
12AZ7A	3.70	2.22	1.67	1.48	13EM7/					22JF6	6.85	4.11	3.08	2.74	7408	3.35	2.01	1.51	1.34	
12BA4	3.50	2.10	1.58	1.40	15EA7	5.85	3.51	2.63	2.34	22JG6A	6.20	3.72	2.79	2.48	7581A	4.55	2.73	2.05	1.82	
12BA6	2.10	1.26	.95	.84	13FD7	5.30	3.18	2.39	2.12	22JU6	6.35	3.81	2.86	2.54	7591A	2.80	1.68	1.26	1.12	
12BD6	2.35	1.41	1.06	.94	13FM7	3.40	2.04	1.53	1.36	23Z9	4.70	2.82	2.12	1.88	7868	4.75	2.85	2.14	1.90	
12BE6	2.55	1.53	1.15	1.02	13CF7A	4.70	2.82	2.12	1.88	24JE6A	8.50	5.10	3.83	3.40	8417	5.65	3.39	2.54	2.26	



**COLOR AND BLACK & WHITE**

**TV PICTURE TUBES**



B-A Full 12 Month Warranty. Hi-Lite tubes contain all new parts and materials. Colorama tubes contain used materials, carefully inspected to meet high quality standards. Silverama tubes contain all new materials except for the envelope which is carefully inspected prior to reuse to meet the standard of the original. Shipped express or truck.

**RCA HI-LITE RARE EARTH COLOR PICTURE TUBES**

Stock No.	Type	Wt. Lbs.	Bulb Allowance	Net Each
6A2511	H15LP22	17	\$20.00	\$106.41
6A2512	H15NP22	17	20.00	102.56
	19EXP22 Use H19GVP22			
	19EYP22 Use H19GVP22			
6A2500	H19GVP22	28	25.00	117.95
6A2501	H19GWP22	32	25.00	127.56
	19GXP22 Use H19GVP22			
	19GYP22 Use H19GVP22			
	19GZP22 Use H19GVP22			
6A2513	H19HNP22	30	25.00	158.65
	21FBP22 Use H21GVP22			
	21FJP22 Use H21GVP22			
	21FKP22 Use H21GVP22			
6A2502	H21GUP22	48	17.50	98.08
6A2503	H21GVP22	52	17.50	104.49
6A2514	H22JP22	50	25.00	151.29
6A2515	H22KP22	50	30.00	151.29
6A2516	H22UP22	50	30.00	168.39
	25AP22 Use H25XP22			
	25ABP22 Use H25XP22			
6A2517	H25AJP22	48	30.00	175.64
6A2504	H25XP22	52	30.00	139.10
6A2505	H25YP22	48	30.00	132.69

**RCA COLORAMA PICTURE TUBES RARE EARTH TYPES**

Stock No.	Type	Wt. Lbs.	Bulb Allowance	Net Each
6A2518	C15LP22	17	\$20.00	\$91.96
6A2519	C15NP22	17	20.00	89.38
6A2520	C19GVP22/19EXP22	28	25.00	99.04
6A2521	C19GWP22/19EYP22	32	25.00	106.73
	19GXP22 Use C19GVP22/19EXP22			
	19GYP22 Use C19GVP22/19EXP22			
	19GZP22 Use C19GVP22/19EYP22			
	21FKP22 Use C21GVP22/21FJP22A			
6A2522	C21GUP22/21FBP22A	48	17.50	79.01
6A2523	C21GVP22/21FJP22A	52	17.50	84.85
6A2524	C22JP22	50	25.00	119.16
6A2525	C22KP22	50	30.00	117.88
6A2508	C23EGP22A	50	15.00	177.69
6A2509	C25XP22/25AP22A	52	30.00	96.80
6A2510	C25YP22/25BP22A	48	30.00	91.66
<b>SULPHIDE TYPES</b>				
6A2506	C21FBP22	48	\$17.50	\$73.08
6A2507	C21FJP22	52	17.50	79.49

**RCA BLACK & WHITE SILVERAMA TUBES**

Stk. No.	Type	Wt. Lbs.	Net Each	Stk. No.	Type	Wt. Lbs.	Net Each
6A200	17BJ/AT/AV/CBP4	17	\$22.63	6A206	21AM/AC/AQ/P4B	27	

# MALLYORY

# EVEREADY

# RCA

# BATTERIES

FRESH BATTERIES FROM B-A LAST LONGER

FABULOUS...



## MALLYORY

**DURACELL BATTERIES**  
LAST UP TO 5 TIMES LONGER  
THAN ORDINARY BATTERIES

21A5000	MN	9100	Replaces 904 or NE.	User Each	\$.043	2 @	Ea.	\$.033
21A5001	MN	1400	C Size Cell, 935 etc.	User Each	.64	4 @	Ea.	.49
21A5002	MN	1500	AA Penlight, 915 etc.	User Each	.51	4 @	Ea.	.39
21A5003	MN	1300	D Size Cell, 950 etc.	User Each	.90	4 @	Ea.	.63
21A5004	MN	2400	AAA Size, 912 etc.	User Each	.51	4 @	Ea.	.39
21A5005	MN	1604	9 Volt Transistor.	User Each	1.28	4 @	Ea.	1.00
21A5006	PX	825	Flashcube #1.	Each	.43	4 @	Ea.	.33

**MALLYORY RECHARGEABLE ALKALINE BATTERIES**

21A230	SA13D	Replaces D Cell.	Each	\$1.49	6 @	Ea.	\$1.17
21A231	SA14C	Replaces C Cell.	Each	1.28	6 @	Ea.	1.00
21A232	SA15AA	Replaces AA Cell.	Each	.85	4 @	Ea.	.65

13A8022. Mallyory BC15 Charger designed specifically for Rechargeable Alkaline Batteries. Each \$8.95  
No. 16A1105. Mallyory Bulletin. Shows how to build recharging circuit. Free

**MALLYORY SILVER OXIDE BATTERIES**

Tiny, long life cells for new Zenith and Audiotek hearing aids.

21A5007.	MS13.	1.5 V.	.21x.31"	Each	38c	6 @	Ea.	30c
21A5008.	MS41.	1.5 V.	.16x.46"	Each	38c	6 @	Ea.	30c
21A5009.	MS76.	1.5 V.	.21x.46"	Each	43c	6 @	Ea.	34c

## RCA AND EVEREADY BATTERIES



**ENERGIZERS — TRANSISTOR BATTERIES**

RCA Stock No.	RCA No.	Eveready Stk. No.	Eveready Number	Price	Volts	Wt. Lbs.	Dimensions	Burgess Equivalent
21A43	VS327	21A304	206	Ea. .... \$0.62	9	.08	3/4" Dia. x 2"	L6
21B141	VS323	21A305	216	Ea. .... .48	9	.08	1 1/2 x 1 1/2 x 1 1/2"	2U6
21B159	VS300A	21A306	226	Ea. .... .68	9	.1	1 1/2" Dia. x 1 1/2"	P6
21A25	VS329	21A307	228	Ea. .... 1.05	12	.14	1" Dia. x 2 1/2"	PM8
21B262	VS304	21A308	239	Ea. .... 1.36	13 1/2	.2	1 1/2 x 1 1/2 x 2 1/2"	XX9
21B142	VS305	21A309	246	Ea. .... 1.36	9	.3	1 1/2 x 1 1/2 x 2 3/4"	2N6
21A30	VS322	21A310	266	Ea. .... 1.36	9	.44	1 1/2 x 1 1/2 x 2 3/4"	M6
21B137	VS306	21A311	276	Ea. .... 1.57	9	1.0	2 1/4 x 2 1/2 x 3 3/4"	D6
21A46	VS332	21A312	333	Ea. .... .68	4 1/2	0.6	.662" Dia. x 1.965	1306
21B78	VS334	21A313	1015	Ea. .... .19	1 1/2	.05	AA Cell	930
21A39	VS335	21A314	1035	Ea. .... .16	1 1/2	.1	C Cell	130
21A38	VS336	21A315	1050	Ea. .... .19	1 1/2	.2	D Cell	230

**ALKALINE LONG LIFE, HIGH DRAIN TYPES**

RCA Stock No.	RCA No.	Eveready Stk. No.	Eveready Number	Price	Volts	Wt. Lbs.	Dimensions	Burgess Equivalent
21A131	VS1073	21A5040	E90	Ea. .... .33	1 1/2	.02	AAA Size	AL-N
21A41	VS1334	21A5041	E91	Ea. .... .39	1 1/2	.05	C Cell Size	AL-9
21A197	VS1074	21A5042	E92	Ea. .... .39	1 1/2	.03	D Cell Size	AL-7
21A133	VS1335	21A5043	E93	Ea. .... .49	1 1/2	.13	.662" Dia.	AL-1
21A53	VS1336	21A5044	E95	Ea. .... .63	1 1/2	.3	Size N	AL-2
21A187	VS1149	21A5045	523	Ea. .... 1.00	4 1/2	.07	Pen Cell Size	PX21
21A224	VS1339	21A5046	532	Ea. .... .82	3	.06	.664" Dia. x 1.67	PK24
21A225	VS1561	21A5047	561	Ea. .... 10.62	15	6.	8 1/2 x 2 1/2 x 5 7/8"	...
21A221	VS1563	21A5048	563	Ea. .... 2.76	4 1/2	9	1 3/4" Dia. x 7 3/8"	...
21A222	VS1564	21A5049	564	Ea. .... 9.94	13 1/2	5.5	8 1/2 x 2 1/2 x 5 7/8"	...

**FLASHLIGHT, LANTERN, EMERGENCY LIGHTING, TOYS**

RCA Stock No.	RCA No.	Eveready Stk. No.	Eveready Number	Price	Volts	Wt. Lbs.	Dimensions	Burgess Equivalent
21A5	VS006S	21A316	No. 6	Ea. .... .99	1 1/2	2	2 5/8" Dia. x 6 3/4"	6 lgn.
21B119	VS138	21A317	W357	Ea. .... 1.92	2.7	2.7	3 3/4 x 2 1/4 x 5 1/4"	4F2H
21A4	VS040C	21A318	509	Ea. .... .99	6	1.3	Lantern	F4H
21B89	VS040S	21A319	510S	Ea. .... .99	6	1.4	2 5/8 x 2 5/8 x 4 3/4"	F4BP
21A213	VS103	21A320	706	Ea. .... 4.01	6	6.5	8 1/2 x 2 1/2 x 6 1/4"	4F4H
21A214	VS139	21A321	715	Ea. .... 4.86	7 1/2	7.9	7 1/4 x 4 3/4 x 6 3/4"	4F5H
21A212	VS140	21A322	716	Ea. .... 5.53	9	9.3	8 3/4 x 4 1/2 x 6 1/4"	4F6H
21B136	VS317	21A323	731	Ea. .... 2.15	6	3.1	Radar Lite	TW1
21B139	VS342	21A324	732	Ea. .... 2.33	12	3.2	Radar Lite	TW2
21A40	VS073	21A325	904	Ea. .... .10	1 1/2	.01	Size N	N
21C60	VS074	21A326	912	Ea. .... .13	1 1/2	.02	AAA Size	Z
21A3	VS034A	21A327	915	Ea. .... .13	1 1/2	.04	AA Size	7
21A2	VS035A	21A328	925	Ea. .... .17	1 1/2	.1	C Cell	#1
21A1	VS036	21A329	950	Ea. .... .17	1 1/2	.2	D Cell	#2
21A211	VS039	21A330	1461	Ea. .... 3.85	6	9.2	Hot Shot	S461
21A189	VS340	21A331	1463	Ea. .... 4.01	12	7.8	Hot Shot	2G8H

**BATTERY PLUGS AND SNAP-ONS**



No.	Illus.	Ratf. No.	Prongs	Ea.	(E) 12A2010, Snap-on strip for 455, 456, etc. Each	(F) 12A2011, Snap-on strip for 437, 477, etc. Each	(E) 12A2012, Snap-on strip for U30, 415, 216, etc. Each
12A573	A	736, 746	2	12c			
12A163	A	718, 744	2	10c			
12A162	A	742, 4F	2	10c			
12A574	B	482, M3	3	10c			

**MALLYORY DURACELL MERCURY BATTERIES**

Stock No.	Mallyory No.	Replaces Eveready	User Each	Pkg. Qty.	@ Each	Volts	Size O.D.	Inches H.
21A5010	RM1	E1	\$0.90	4	\$0.22	1.4	5/8 x 1 1/2	1 1/2
21A5011	RM3R	E3	1.40	4	1.08	1.35	1.2 x 1 1/2	1 1/2
21A5012	RM4R	E4	1.91	4	1.47	1.35	1.2 x 1 1/2	1 1/2
21A5013	RM12	E12	1.28	4	1.00	1.4	5/8 x 1 1/2	1 1/2
21A5014	RM12R	E12N	1.40	4	1.08	1.35	5/8 x 1 1/2	1 1/2
21A5015	RM42	E42	4.04	2	3.20	1.4	1.2 x 2 3/8	2 3/8
21A5016	RM42R	E42N	4.25	2	3.30	1.35	1.2 x 2 3/8	2 3/8
21A5017	RM400R	E400A	.64	6	.50	1.35	1 1/2 x 1 1/2	1 1/2
21A5018	RM401	E401	.72	3	.56	1.4	1 1/2 x 1 1/2	1 1/2
21A5019	RM502R	E502	1.28	4	1.00	1.35	1 1/2 x 1 1/2	1 1/2
21A5020	RM575	.....	.30	6	.24	1.4	.455 x 1.29	1.29
21A5021	RM625	E625	.51	4	.42	1.4	5/8 x 1 1/2	1 1/2
21A5022	RM625R	E625N	.72	4	.56	1.35	5/8 x 1 1/2	1 1/2
21A5023	RM630	E630	.64	4	.50	1.4	5/8 x 1 1/2	1 1/2
21A5024	RM640	E640	.55	4	.43	1.4	5/8 x 1 1/2	1 1/2
21A5025	RM675	E675	.38	6	.32	1.4	5/8 x 1 1/2	1 1/2
21A5026	TR115R	E115N	2.76	2	2.14	6.75	1 1/2 x 1 1/2	1 1/2
21A5027	TR132R	E132N	1.66	4	1.27	2.7	1 1/2 x 1 1/2	1 1/2
21A5028	TR133	E133	1.91	4	1.48	4.2	1 1/2 x 1 1/2	1 1/2
21A5029	TR133R	E133N	1.91	4	1.47	4.05	1 1/2 x 1 1/2	1 1/2
21A5030	TR134R	E134N	2.34	2	1.83	5.40	1 1/2 x 2 1/2	2 1/2
21A5031	TR135R	E135N	2.76	2	2.14	6.75	1 1/2 x 2 1/2	2 1/2
21A5032	TR136R	E136N	3.19	2	2.47	8.1	1 1/2 x 2 1/2	2 1/2
21A5033	TR146X	E146X	1.66	4	1.32	8.4	1 1/2 x 2 1/2	2 1/2
21A5034	TR163	E163	1.91	2	1.48	4.2	1 1/2 x 1 1/2	1 1/2
21A5035	TR164	E164	1.91	4	1.48	5.6	1 1/2 x 1 1/2	1 1/2
21A5036	TR165	E165	2.34	2	1.83	7	1 1/2 x 1 1/2	1 1/2
21A235	TR175	E175	1.49	4	1.15	7	1 1/2 x 1 1/2	1 1/2
21A5037	TR177	E177	1.91	4	1.48	9.8	1 1/2 x 1 1/2	1 1/2
21A5038	TR233	E233N	3.36	2	2.60	4.2	1 1/2 x 1 1/2	1 1/2
21A5057	TR289	E289	3.61	4	2.80	12.6	1 x 2 1/2	2 1/2
21A5039	ZM-9	E9	.85	4	.66	1.4	1/2 x 1 1/2	1 1/2

## EVEREADY BATTERIES FOR RADIO AND ELECTRONICS

**PHOTO FLASH BATTERIES**

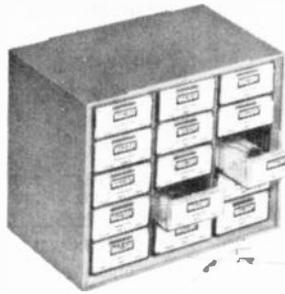
Stock No.	Eveready Type	Burgess Equiv.	Each	Voltage	Wt. Lbs.	Dimensions L. W. H.
21A196	EPX13	HPX-13	\$0.50	1.35	.05	For Polaroid & Oth.
21B116	460K	.....	1.97	.....	.....	Winklite w/Lamp
21A218	489	XX150	6.96	225	2.7	4 1/2 x 1 1/2 x 4 1/2"
21A219	491	U160	6.26	240	.8	2 1/2 x 1 1/2 x 4 1/2"
21A205	497	U320	11.87	510	1.6	3 x 1 1/2 x 5 1/2"
21A128	504	Y10	1.00	15	.03	5/8 x 1 1/2"
21A195	531	.....	1.00	4 1/2	.08	For New Polaroid
21A50	815	920	.17	1.5	.05	Pen Cell Size
21A51	835	120	.19	1 1/2	.1	C Cell Size
21A52	850	220	.19	1 1/2	.2	D Cell Size

**RADIO—INSTRUMENT—ELECTRONIC EQUIPMENT**

Stock No.	Eveready Type	Burgess Equiv.	Each	Voltage	Wt. Lbs.	Dimensions L. W. H.
21A198	222	2MN6	.64	9	.08	1 1/2 x 1 1/2 x 1 1/2"
21B113	W350	Z30NX	2.69	45	1.0	3 1/2 x 1 1/2 x 4 1/2"
21B123	W353	2F	1.22	1 1/2	.8	2 1/2 x 1 1/2 x 4 1/2"
21B71	411	U10	1.00	15	.05	1 1/2 x 5/8 x 1 1/2"
21A27	412	U15	1.37	22 1/2	.1	1 1/2 x 5/8 x 2"
21B69	413	U20	1.10	30	.1	1 1/2 x 5/8 x 2 1/2"
21B138	415	U30	1.75	45	.1	1 1/2 x 5/8 x 3 1/2"
21B164	416	UX45	2.07			

## MALLORY MALLOBINS

SAVE MONEY ON TOP QUALITY MALLORY COMPONENTS AND GET ATTRACTIVE STORAGE CABINETS FREE!



### FREE

Lufkin Automatic Ruler with MTV 15-1 or MTA 15-1. \$3.50 retail value.



MTA 15-1 Mallobin. 53 Assorted MTA (described on Page 99). Molded aluminum electrolytic capacitors in 19 popular values. Regular net price is \$23.20. Save \$5.82, get a free 15 drawer storage cabinet plus a Free Lufkin Automatic Ruler worth \$3.50 retail.

No. 15A5213. Mallory MTA 15-1. Net Each ..... \$17.38

MTV 15-1 Mallobin 48 Assorted MTV (described on page 99) printed circuit molded aluminum electrolytic capacitors in 24 popular values. Regular net is \$23.04. Save \$4.55, get a Free 15 drawer Storage Cabinet plus a Free Lufkin Ruler worth \$3.50 retail.

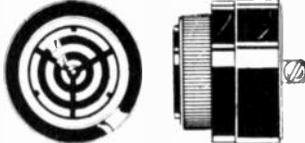
No. 15A5214. Mallory MTV 15-1. Net Each ..... \$18.49

PVC 15-1 Mallobin 58 Assorted PVC (described on page 98) 600 and 1600 volt PVC Mylar capacitors in 29 values. Free 12 drawer Storage Cabinet.

No. 15A2245. Mallory PVC 15-1. Net Each ..... \$12.60

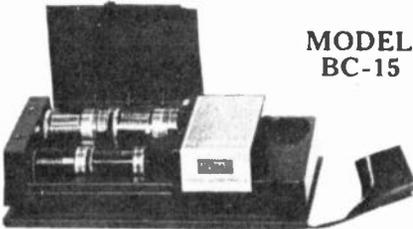
## MALLORY SONALERT ELECTRONIC AUDIBLE SIGNALLING DEVICE

Illustration shows front and side view. Produces a penetrating sound by purely electronic means. Solid state circuitry. There is no arcing or RF noise. Very compact, light and highly versatile. Consumes less current than a normal indicator light. Can also be used to complement visual signals. Positive audible warnings are instantly given in fault alarms for computers, fire signals, instruments, medical electronics, appliances, communications as well as telephone signals and protection equipment. Pulsing unit; pulse rate 3-5 cps (depending on input voltage). \*Furnished with silicon transistors for operation to -40° to +185° F. Frequency tolerance: 2800 ±300 Hz; 4500 ±500 Hz. Mounts in 1 1/8" hole with screw-on ring, neck length 3/4". Overall dia. of unit 1 1/4". max. depth behind panel 1.38". Has two 1/4" combination terminals. Shpg. wt. 3 oz.



Stk. No.	Mfg. No.	Freq. Hz	Voltage	1-24	25-49	50-99
12A2443	SC628	2800	6-28 V DC	\$5.50	\$5.40	\$5.15
12A2444	SC628A	2800	6-28 V AC/DC	8.75	8.60	8.20
12A2445	SC628H	4500	6-28 V DC	6.35	6.25	5.95
12A2446	SC628Pi	2800	6-28 V DC	9.95	9.75	9.30
12A2447	SC628S*	2800	6-28 V DC	6.75	6.65	6.35
12A2448	SC110	2800	110 V AC	8.75	8.60	8.20

### MODEL BC-15



## DURACELL BATTERY CHARGER

Designed specifically for charging Duracell Rechargeable Alkaline Batteries. Charges 2 or 4 batteries in any pair (2 of same size) combination. Indicator light shows batteries are charging. Recharges overnight. For 115 VAC operation. Minimum power consumption. Less batteries.

No. 13A8022. Each ..... \$8.95

### MALLORY RECHARGEABLE ALKALINE BATTERIES

21A230 SA13D Replaces D Cell.	Each	\$1.49	6 @ Ea.....	\$1.17
21A231 SA14C Replaces C Cell.	Each	1.28	6 @ Ea.....	1.00
21A232 SA15AA Replaces AA Cell.	Each	.85	4 @ Ea.....	.65

SAVE ON BATTERY COSTS!

### PREMIUM

## PANASONIC HI-TOP BATTERIES

GIVE UP TO 4 TIMES THE LIFE OF AMERICAN MADE NAME BRAND BATTERIES



An independent testing company report shows they last up to 4 times longer than American made name brand batteries. Three year shelf life. Absolutely the finest zinc carbon battery we have offered.

Stock No.	Panasonic No.	Description	Each
21A333	UM1D	D Cell	25c
21A334	UM2D	C Cell	25c
21A335	UM3D	AA Pencil	20c
21A336	006PD	9 Volt Transistor	59c

## CENTRALAB GENERAL PURPOSE CERAMIC DISCS TYPE DD

Durez insulation with overall protective coating for maximum protection against humidity and voltage breakdown. 1000 DC volts working, \*600 V. Tolerance 10% through 1500 Mmf., balance guaranteed minimum value. Size .156" maximum thickness, 5 thru 820 mfm. .290" dia., 1000 thru 2500 .385" dia., 3300 thru 6800 .59" dia., .01 and .02 are .69" dia. and .05 is .25" thick. .875" dia.



Mmf.	Mfd.						
5	25	56	150	300	560	2000	*.01
10	27	68	180	330	680	2200	*.02
12	30	75	200	350	750	3300	*.05
15	33	82	220	360	800	4000	
18	39	91	240	390	820	4700	
20	47	100	250	470	1000	5000	
22	50	120	270	500	1500	6800	

Specify Stk. No. 15B121 and Capacity from Table Above.

Capacity	1-99	100-199	200-499	500-399	1000-3999	4000 Up
5 Mmf. through 6800 Mmf.	\$0.15	\$0.119	\$0.075	\$0.056	\$0.038	\$0.033
.01 Mfd.	.24	.19	.12	.09	.054	.047
.02 and .05 Mfd.	.45	.356	.225	.169	.155	.145

## CENTRALAB HI-CAPACITY LOW VOLTAGE DISCS TYPE UK10, CK, DDM

For transistor circuits requiring high capacity and very low power factor combined with small size and light weight.

UK 10 V. DC W. +80 -20%

Stk. No.	Mfd.	Dia.	1-99	100-199	200-499	Stk. No.	Mfd.	Dia.	1-99	100-199	200-499
15A858	.05	1/4"	\$0.18	\$0.143	\$0.09	15A860	.2	3/8"	\$0.30	\$0.24	\$0.15
15A859	.1	3/8"	.18	.143	.09	15A861	.47	3/4"	.42	.33	.21

CK-50 V. DC +80 -20%

Stk. No.	Mfd.	Dia.	1-99	100-199	200-499	Stk. No.	Mfd.	Dia.	1-99	100-199	200-499
15A2124	.005	3/8"	.21	.17	.11	15B563	.03	1/4"	.21	.17	.11
15B560	.01	3/8"	.21	.17	.11	15B564	.05	5/8"	.30	.24	.15
15B561	.02	3/8"	.21	.17	.11	15B566	.1	5/8"	.60	.48	.30

DDM-150 V. DC +60 -40 Tolerance

Stk. No.	Mfd.	Dia.	1-99	100-199	200-499	Stk. No.	Mfd.	Dia.	1-99	100-199	200-499
15B773	.005	.385"	.30	.24	.15	15B775	.02	.406"	.54	.43	.27
15B774	.01	.385"	.30	.24	.15						

## CENTRALAB DD16-HI-KAP BUFFERS 1600 VOLT CERAMIC DISCS FOR BUFFER APPLICATIONS

Stk. No.	Mfd.	Dia.	1-99	100-199	200-499	Stk. No.	Mfd.	Dia.	1-99	100-199	200-499
15B954	.003	.60"	\$0.27	\$0.21	\$0.14	15B957	.006	.70"	\$0.27	\$0.21	\$0.14
15B955	.004	.60"	.27	.21	.14	15B961	.01	.83"	.27	.21	.14
15B956	.005	.60"	.27	.21	.14						

## CENTRALAB HIGH VOLTAGE DISCS TYPE DD30 3000 W. V. DC GENERAL PURPOSE

Stock No.	Mmf.	Size Dia.	1-49	50-99	100-499	Stock No.	Mmf.	Size Dia.	1-49	50-99	499
15A869	10	.33"	\$0.24	\$0.19	\$0.12	15A877	220	.33"	\$0.24	\$0.19	\$0.12
15B385	50	.33"	.24	.19	.12	15B386	500	.33"	.24	.19	.12
15A874	68	.33"	.24	.19	.12	15A868	0022	Mfd.	.63"	.30	.24
15A875	100	.33"	.24	.19	.12						
15A876	150	.33"	.24	.19	.12	15A873	005	Mfd.	.8"	.30	.24

## CENTRALAB TEMPERATURE COMPENSATING DISCS TYPE DTZ-NPO ZERO DRIFT WITH TEMPERATURE-500 W. V. DC

Stk. No.	Mmf.	Size Dia.	1-99	100	Stk. No.	Mmf.	Size Dia.	1-99	100
15A768	1.5	.320"	\$0.18	\$0.14	15B334	22	.390"	\$0.18	\$0.14
15A769	2.2	.290"	.18	.14	15B336	33	.390"	.18	.14
15A770	3.3	.290"	.18	.14	15B337	47	.590"	.18	.14
15A771	4.7	.290"	.18	.14	15B338	68	.590"	.18	.14
15A772	6.8	.290"	.18	.14	15B339	100	.590"	.18	.14
15B332	10	.290"	.18	.14	15B379	220	.719"	.30	.24
15B333	15	.290"	.18	.14	15B380	270	.719"	.30	.24

## CENTRALAB CERAMIC TRIMMERS



Type 825. Provides precision adjustment with smooth linear change per degree rotation. Miniature size, 3/16 x 1/16" wide. 500 V. DC W. NPO are zero drift; N300 and N500 have uniform negative change 300 and 500 parts per million per degree C.

Stk. No.	Mmf.	Type	Stk. No.	Mmf.	Type	Stk. No.	Mmf.	Type
15A567	1.5-7	NPO	15A569	4-30	N500	15A570	7-45	N500
15A568	3-12	NPO	15B516	5-20	N300			

Your Choice, 1-4 Each ..... \$1.17 5-25, Each ..... 98c

## CENTRALAB CERAMIC FEED-THRU CAPACITORS



Type FT



Type MFT

FT Feed-thru. Efficient RF bypassing. Tolerance 20% for 1000 mfm. and +50 -20% for 1500 mfm. 500 WV DC.

MFT Feed-thru. .875" overall length, .15" dia. Efficient low cost, solder flange mtg. For modern space saving circuit design. 500 volts DC.

Stk. No.	Mmf.	1-99	100 Up	Stk. No.	Mmf.	Tolerance	1-99	100 Up
15B658	1000	\$0.75	\$0.60	15B522	50	10%	\$0.30	\$0.24
15B659	1500	.75	.60	15B527	100	10%	.30	.24
				15B532	1000	GMV	.30	.24



## CENTRALAB TRANSMITTING CERAMICS

For high frequency circuits. Tolerance type 850 ± 10%; 858 ± 20%. All have 6-32 topped studs except \* which has solder lugs. Size 3/8" x 5/8" long. 5000 volts.

Stk. No.	Mfg. No.	Cap. Mmf.	Temp. Coeff.
15B787*	850SL	100	N750
15A246	850S	100	N750
15A247	858S	500	Hi K
15A248	858S	1000	Hi K

CHOICE, EACH ..... \$2.70

## MALLORY PVC RADIAL LEAD CAPACITORS



100 and 200 volt ratings are flat pressed Mylar dielectric. 400, 600 and 1600 volt ratings have paper and Mylar dielectric. Dipped Epoxy case. End foil swagged over and lead welded plus Epoxy coating protected. No chance for opens or intermittents. Tolerance  $\pm 10\%$ .

### 100 WORKING VOLT DC — 100% MYLAR DIELECTRIC

Order by Stock No. 15C410 and Mfd. No.

Mfd. No.	L	Size Inches W.	Th.	Lead Spacing	1-24 Each	25-49 Each	50-99 Each	100 Up Each
.018	.750	.313	.188	.625	\$0.17	\$0.13	\$0.10	\$0.081
.022	.750	.344	.219	.625	.17	.13	.10	.081
.033	.750	.344	.219	.625	.17	.13	.10	.083
.04	.750	.344	.219	.625	.18	.14	.11	.087
.047	.750	.344	.219	.625	.18	.14	.11	.091
.056	.750	.375	.250	.625	.20	.16	.12	.097
.068	.750	.375	.250	.625	.20	.16	.12	.101
.1	.750	.438	.313	.625	.22	.17	.13	.109
.15	.750	.688	.344	.625	.27	.20	.16	.134
.22	.750	.750	.375	.625	.28	.22	.17	.141
.25	.750	.781	.406	.625	.30	.23	.17	.145
.33	.750	.844	.438	.625	.33	.25	.19	.163
.47	1.125	.750	.375	1.00	.38	.29	.23	.188
.5	1.125	.781	.406	1.00	.38	.29	.23	.188
.68	1.125	.844	.469	1.00	.45	.33	.27	.22
1.0	1.125	.938	.563	1.00	.60	.45	.36	.297
1.5*	1.75 Long x .781 Dia.				.82	.62	.47	.40
2.0*	1.75 Long x .953 Dia.				.98	.75	.68	.487

\*Tubular style with Axial Leads. Mylar wrap, Epoxy end fill.

### 200 WORKING VOLT DC — 100% MYLAR DIELECTRIC

Order by Stock No. 15B420 and Mfd. No.

Mfd. No.	L	Size Inches W.	Th.	Lead Spacing	1-24 Each	25-49 Each	50-99 Each	100 Up Each
.01	.750	.313	.188	.625	\$0.17	\$0.13	\$0.10	\$0.081
.015	.750	.344	.219	.625	.17	.13	.10	.081
.022	.750	.375	.250	.625	.17	.13	.10	.081
.033	.750	.375	.250	.625	.17	.13	.10	.083
.04	.750	.375	.250	.625	.18	.14	.11	.087
.047	.750	.375	.250	.625	.18	.14	.11	.091
.05	.750	.375	.250	.625	.18	.14	.11	.091
.068	.750	.406	.281	.625	.20	.16	.12	.101
.1	.750	.719	.313	.625	.22	.17	.13	.109
.15	.750	.781	.375	.625	.27	.20	.16	.134
.22	.750	.844	.469	.625	.30	.23	.17	.142
.25	.750	.906	.500	.625	.30	.23	.17	.149
.33	.750	.969	.563	.625	.33	.25	.19	.163
.47	1.125	.875	.500	1.00	.38	.29	.23	.194
.5	1.125	.906	.531	1.00	.38	.29	.23	.194
1.0*	1.750 Long x .750 Dia.				.66	.49	.39	.323
2.0*	1.875 Long x .984 Dia.				1.12	.82	.68	.545

\*Tubular style with Axial Leads. Mylar wrap, Epoxy end fill.

### 400 WORKING VOLT DC — PAPER/MYLAR DIELECTRIC

Order by Stock No. 15B421 and Mfd. No.

Mfd. No.	L	Size Inches W.	Th.	Lead Spacing	1-24 Each	25-49 Each	50-99 Each	100 Up Each
.01	.690	.500	.390	.562	\$0.15	\$0.11	\$0.09	\$0.07
.02	.855	.688	.390	.750	.15	.11	.09	.07

### 400 WORKING VOLT DC — PAPER/MYLAR DIELECTRIC

Order by Stock No. 15B421 and Mfd. No.

Mfd. No.	L	Size Inches W.	Th.	Lead Spacing	1-24 Each	25-49 Each	50-99 Each	100 Up Each
.047	1.150	.969	.415	1.062	\$0.21	\$0.15	\$0.11	\$0.09
.05	1.150	.969	.415	1.062	.21	.15	.11	.09
.1	1.180	.969	.520	1.062	.27	.19	.14	.11
.22	1.560	1.344	.620	1.437	.27	.23	.18	.16
.25	1.560	1.344	.650	1.437	.27	.23	.18	.16
.47*	1.625 Long x .700 Dia.				.72	.52	.41	.31
.5*	1.625 Long x .740 Dia.				.83	.54	.42	.322

\*Tubular style with Axial leads.

### 600 WORKING VOLT DC — PAPER/MYLAR DIELECTRIC

Order by Stock No. 15B422 and Mfd. No.

Mfd. No.	L	Size Inches W.	Th.	Lead Spacing	1-24 Each	25-49 Each	50-99 Each	100 Up Each
.001	.66	.500	.340	.562	\$0.15	\$0.11	\$0.08	\$0.07
.0015	.66	.500	.340	.562	.15	.11	.08	.07
.002	.66	.500	.340	.562	.15	.11	.08	.07
.0022	.66	.500	.340	.562	.15	.11	.08	.07
.0025	.66	.500	.340	.562	.15	.11	.08	.07
.003	.66	.500	.370	.562	.15	.11	.08	.07
.0033	.66	.500	.370	.562	.15	.11	.08	.07
.0039	.66	.500	.370	.562	.15	.11	.08	.07
.0047	.69	.500	.400	.562	.15	.11	.08	.07
.005	.69	.500	.400	.562	.15	.11	.08	.07
.0068	.69	.500	.430	.562	.18	.12	.08	.07
.0082	.87	.688	.370	.812	.18	.12	.09	.07
.01	.87	.688	.390	.812	.18	.12	.09	.07
.015	.87	.688	.445	.812	.18	.14	.10	.07
.02	.87	.688	.445	.812	.18	.14	.10	.08
.022	.87	.688	.470	.812	.18	.14	.10	.08
.025	.87	.688	.500	.812	.21	.15	.11	.09
.03	1.15	.969	.415	1.062	.21	.15	.11	.09
.033	1.15	.969	.430	1.062	.21	.15	.11	.09
.039	1.15	.969	.470	1.062	.21	.15	.11	.09
.047	1.15	.969	.490	1.062	.24	.16	.12	.10
.05	1.15	.969	.490	1.062	.24	.16	.12	.10
.1	1.30	1.094	.640	1.187	.27	.21	.15	.13
.15	1.56	1.344	.650	1.437	.30	.25	.18	.15
.25	1.56	1.344	.830	1.437	.48	.35	.27	.206
.47*	2.00 Long x .855 Dia.				1.07	.77	.60	.46
1.0*	2.5" Long x 1.165" Dia.				1.90	1.63	1.26	.977

\*Tubular style with Axial leads.

### 1600 WORKING VOLT DC — PAPER/MYLAR DIELECTRIC

Order by Stock No. 15A2200 and Mfd. No.

Mfd. No.	L	Size Inches W.	Th.	Lead Spacing	1-24 Each	25-49 Each	50-99 Each	100 Up Each
.001	.87	.688	.350	.812	\$0.21	\$0.16	\$0.13	\$0.098
.0022	.87	.688	.420	.812	.21	.16	.13	.098
.0033	.87	.688	.480	.812	.24	.17	.14	.096
.005	.87	.969	.565	.812	.24	.17	.14	.104
.0068	1.18	.969	.485	1.062	.27	.20	.15	.104
.0082	1.18	.969	.510	1.062	.27	.20	.15	.113
.01	1.18	.969	.525	1.062	.30	.21	.17	.123
.022	1.60	1.344	.585	1.437	.42	.31	.26	.172
.033	1.60	1.344	.695	1.437	.45	.34	.27	.192
.05	1.60	1.344	.790	1.437	.51	.40	.32	.222



## MALLORY COMPUTER GRADE CAPACITORS

Type CG high capacity units for filter and storage use in power supplies, computers, telephone networks, high grade test instruments or wherever extreme reliability is required. Temperature range -20 to +85°C. Capacity tol. of 3 to 150 WVDC, -10% +75%; 151 to 450 WVDC -10% +50%. Insulating sleeve furnished.

Stk. No.	Mfg. No.	Cap. Mfd.	V. DC	Size	1-49 Ea.	50-99 Ea.	100 Up Ea.
15A7508	CG143U15D1	14,000	15	2x4 1/8"	\$4.47	\$3.51	\$2.88
15C995	CG152U25A1	1,500	25	1 3/8x2 1/8"	1.72	1.35	1.11
15A7504	CG63U25K1	6,000	25	2x3 1/8"	3.23	2.54	2.08
15B315	CG852U25D1	8,500	25	2x4 1/8"	3.90	3.07	2.51
15C392	CG472U35K1	4,700	35	2x3 1/8"	3.46	2.73	2.23
15C393	CG243U35G1	24,000	35	3x5 3/8"	7.75	6.09	4.98
15A7503	CG82U50A1	800	50	1 3/8x2 1/8"	1.74	1.37	1.12
15A7507	CG152U50B1	1,500	50	1 3/8x3 1/8"	2.05	1.62	1.32
15A7502	CG23U50C1	2,000	50	1 3/8x4 1/8"	2.29	1.80	1.47
15A7505	CG332U50K1	3,300	50	2x3 1/8"	3.25	2.56	2.09
15C369	CG452U50D1	4,500	50	2x4 1/8"	3.47	2.72	2.23
15B316	CG14U50F1	10,000	50	3x4 1/8"	6.70	5.27	4.30
15A7506	CG152U75C1	1,500	75	1 3/8x4 1/8"	2.84	2.23	1.82
15C370	CG345U75D1	3,450	75	2x4 1/8"	4.03	3.17	2.59
15C371	CG822U75F1	8,200	75	3x4 1/8"	7.25	5.70	4.66
15B318	CG155U150D1	1,550	150	2x4 1/8"	4.01	3.15	2.58
15C384	CG562U150G1	5,600	150	3x5 3/8"	9.87	7.76	6.35
15C372	CG13T200D1	1,000	200	2x4 1/8"	4.51	3.54	2.90
15B322	CG241T450D1	240	450	2x4 1/8"	3.42	2.69	2.20

Order Vertical Mounting Brackets Below

## CAPACITOR MOUNTING HARDWARE

For CG, PSU, HC and NP Capacitors



VERTICAL MTG. BRACKETS			
Stk. No.	Mfg. No.	Size	Each
15A491	VR3	1 3/8 to 1 1/2"	\$0.15
15A895	VR4	1 1/2 to 1 3/4"	.15
15A897	VR6	1 3/4 to 1 3/8"	.18
15A492	VR8	2 to 2 1/4"	.30
15A898	VR12	3"	.36

HORIZONTAL BRACKETS			
Stk. No.	Mfg. No.	Size	Each
15A2219	HB-2	3 1/8" L.	\$0.21
15A2220	HB-4	3 3/8" L.	.21
15A2221	HB-8	4 3/8" L.	.24

END CAPS			
Stk. No.	Mfg. No.	Size	Each
15A2222	PL3	1 1/8"	.15
15A2201	PL6	1 1/2"	.18
15A2238	PL8	2 1/4"	.21



## MALLORY HI-CAPACITY DRY ELECTROLYTICS

INDUSTRIAL TYPE CAPACITOR. For filtering dry disc rectifiers, electric fence controls or any use requiring high capacity at low voltage. Plastic case provides complete insulation. Temperature Range -20°C to +85°C. Tolerance HC to 10% WVDC -10% to +150%, 51 to 350 WVDC -10% to +100%, 450 WVDC -10% to +50%. NP  $\pm 25\%$ . Wt. 8 ozs. HC - Polarized; \*NP - Non-Polarized.

Mfd.	Volts	Mfg. No.*	Dia. x L.	Stk. No.	1-9 Ea.	10-24 Ea.
1000	25	HC2510A	1 1/4x2 3/8"	15A790	\$3.19	\$2.73
2000	25	HC2520A	1 1/4x3 3/8"	15A791	4.15	3.56
4000	25	HC2540A	1 1/4x3 3/8"	15A792	5.58	4.79
500	50	HC5005A	1 1/4x2 3/8"	15A793	3.33	2.85
1000	50	HC5010A	1 1/4x3 3/8"	15A794	4.25	3.65
2000	50	HC5020A	1 1/4x3 3/8"	15A795	5.06	4.34
4000	50	HC5040	2 1/4x4 3/8"	15A713	7.32	6.27
1000	150	HC15010A	1 1/2x4 3/8"	15A717	6.44	5.52
500	200	HC20005A	1 1/2x3 3/8"	15A729	5.53	4.74
200	300	*NP3025	2 1/4x4 3/8"	15B765	7.00	6.00
300	450	HC45003	2 1/4x4 3/8"	15A732	8.47	7.26

Order Mounting Brackets At Left Below



## MALLORY MOTOR STARTING CAPACITORS

Housing is water and oil proof molded bakelite. Easily installed, universally interchangeable with capacitors of like dimensions and ratings. All are for 110-125 volt AC motors, except \* is for 220 volt AC motors. Each capacitor replaces any value between minimum and maximum Mfd rating shown.

Size ①—1 1/4" x 2 3/8"; Size ②—1 1/4"

# MALLORY CAPACITORS

## MALLORY TT TINY TUBULAR ALUMINUM ELECTROLYTICS

Very high quality aluminum foil, deep etched to provide maximum capacity for size. Etched construction assures long hum-free operation. All welded construction. Aluminum case with insulating sleeve. 2-inch wire leads. Temperature range: -55° C to +85° C, 3 to 100 volt units; -30° C to +85° C on all others. Tolerance: -10% +150%, 1-50 WVDC; -10% +100%, 60 WVDC and up. Size shown for plain case, insulated sleeve adds .010" dia. x 1/8" L.



Stock No.	Cap. Mfd.	W.V. DC	Size Dia.	Inches Lgth.	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each	500 Up Each
15A5020	25	3	1/4	3/8	\$0.48	\$0.35	\$0.27	\$0.22	\$0.18	\$0.17
15A5021	50	3	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5022	100	3	1/4	3/8	.54	.39	.31	.25	.20	.19
15A5023	250	3	3/8	7/8	.69	.52	.40	.32	.27	.255
15A5024	500	3	3/8	1 3/8	.75	.56	.44	.35	.29	.28
15A5025	1	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5026	2	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5027	5	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5028	10	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5029	15	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5030	25	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5031	50	6	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5032	100	6	3/8	3/8	.66	.50	.39	.31	.26	.245
15A5033	200	6	3/8	7/8	.69	.52	.40	.32	.27	.255
15A5034	300	6	3/8	1	.72	.54	.43	.34	.28	.265
15A5035	10	10	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5036	25	10	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5037	50	10	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5038	100	10	3/8	3/8	.69	.52	.40	.32	.27	.255
15A5039	200	10	3/8	1	.75	.56	.44	.35	.29	.28
15A5040	1	12	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5041	2	12	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5042	5	12	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5043	10	12	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5044	25	12	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5045	50	12	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5046	100	12	3/8	7/8	.69	.52	.40	.32	.27	.255
15A5047	200	12	3/8	1 1/8	.75	.56	.44	.35	.29	.28
15A5048	250	12	3/8	1 3/8	.75	.56	.44	.35	.29	.28
15A5049	1	15	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5050	2	15	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5051	5	15	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5052	10	15	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5053	15	15	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5054	20	15	3/8	3/8	.48	.35	.27	.22	.18	.17
15A5055	25	15	3/8	3/8	.48	.35	.27	.22	.18	.17
15A5056	30	15	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5057	50	15	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5058	100	15	3/8	7/8	.69	.52	.40	.32	.27	.255
15A5059	150	15	3/8	1 1/8	.72	.54	.43	.34	.28	.265
15A5060	200	15	3/8	1 3/8	.75	.56	.44	.35	.29	.28
15A5061	1	25	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5062	2	25	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5063	5	25	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5064	6	25	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5065	10	25	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5066	15	25	3/8	3/8	.48	.35	.27	.22	.18	.17
15A5067	20	25	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5068	25	25	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5069	50	25	3/8	7/8	.66	.50	.39	.31	.26	.245
15A5070	100	25	3/8	1 1/8	.72	.54	.43	.34	.28	.265
15A5071	1	50	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5072	2	50	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5073	3	50	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5074	5	50	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5075	10	50	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5076	20	50	3/8	3/8	.66	.50	.39	.31	.26	.245
15A5077	35	50	3/8	1	.69	.52	.40	.32	.27	.255
15A5078	50	50	3/8	1 1/8	.72	.54	.43	.34	.28	.265
15A5079	1	100	1/4	3/8	.54	.39	.31	.25	.20	.19
15A5080	5	100	3/8	3/8	.66	.50	.39	.31	.26	.245
15A5081	6	100	3/8	3/8	.66	.50	.39	.31	.26	.245
15A5082	10	100	3/8	3/8	.69	.52	.40	.32	.27	.255
15A5083	20	100	3/8	1	.75	.56	.44	.35	.29	.28
15A5084	25	100	3/8	1 1/4	.78	.58	.45	.37	.30	.286
15A5085	1	150	1/4	3/8	.48	.35	.27	.22	.18	.17
15A5086	2	150	1/4	3/8	.54	.39	.31	.25	.20	.19
15A5087	3	150	3/8	3/8	.54	.39	.31	.25	.20	.19
15A5088	4	150	3/8	3/8	.66	.50	.39	.31	.26	.245
15A5089	5	150	3/8	3/8	.66	.50	.39	.31	.26	.245
15A5090	10	150	3/8	7/8	.72	.54	.43	.34	.28	.265

## MALLORY SX POLYSTYRENE CAPACITORS



High purity aluminum foil and polystyrene dielectric gives best temperature stability, small size, high insulation resistance, low power factor and humidity protection. Replaces mica, film, paper and ceramic capacitors in most applications. Voltage 600 WVDC. Tolerance ±1 Mmf. below 20 Mmf., others ±5%. Temperature range -40° C. to 85° C. Size 5 through 270 Mmf., .165-.255" D. x .395" L.; 330 through 5000 Mmf., .19-.47" D. x .59" L.; 5000 through 10,000 Mmf., .46-.59" D. x .79" L.

Mmf.	Mmf.	Mmf.	Mmf.	Mmf.	Mmf.	Mmf.	Mmf.	Mmf.
5	18	30	82	180	270	510	1500	3900
6.8	20	47	100	200	330	680	2000	5000
10	22	56	120	220	390	820	2200	6800
15	27	68	150	240	470	1000	3300	10000
Specify Stock No. 15B10 and Capacity Desired	1-24 Each	25-99 Each	100-249 Each	250-499 Each	500-999 Each	1000 Up Each		
5 thru 1000 Mmf.	\$0.12	\$0.112	\$0.093	\$0.07	\$0.054	\$0.051		
1500 thru 2200 Mmf.	.15	.13	.111	.086	.066	.062		
3300 thru 5000 Mmf.	.18	.153	.13	.103	.076	.07		
6800 thru 10,000 Mmf.	.21	.16	.14	.105	.079	.076		

## MALLORY MTA MOLDED TUBULAR ELECTROLYTICS

Precision molding assures case uniformity and quality. Polypropylene case provides extreme humidity protection. All-welded construction. Temperature range: -20° C to +65° C. Tolerance: -10%, +100%. Case sizes: D is 3/8" Dia. x 3/4" L.; E is 3/8" Dia. x 1" L.; F is 1/2" Dia. x 1 1/8" L.



Stock No.	Cap. No.	W.V. DC	Case Size	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each	500-999 Each	1000 Up Ea.
15A2125	50	6	D	\$0.36	\$0.27	\$0.24	\$0.202	\$0.179	\$0.150	\$0.130
15A2126	150	6	E	.40	.30	.26	.220	.195	.164	.142
15A2127	500	6	F	.51	.38	.33	.270	.248	.209	.181
15A5006	40	10	D	.36	.27	.24	.202	.179	.150	.130
15A5007	100	10	E	.40	.30	.26	.220	.195	.164	.142
15A5008	200	10	F	.45	.34	.30	.252	.222	.188	.162
15A5009	400	10	F	.54	.40	.35	.296	.262	.222	.191
15A2128	30	15	D	.36	.27	.24	.202	.179	.150	.130
15A2129	35	15	D	.36	.27	.24	.202	.179	.150	.130
15A2130	50	15	E	.40	.30	.26	.220	.195	.164	.142
15A2131	80	15	E	.40	.30	.26	.220	.195	.164	.142
15A2132	100	15	E	.40	.30	.26	.220	.195	.164	.142
15A5010	250	15	F	.51	.38	.33	.270	.248	.209	.181
15A2133	300	15	F	.57	.43	.37	.315	.279	.235	.203
15A5011	350	15	F	.57	.43	.37	.315	.279	.235	.203
15A5012	50	25	E	.40	.30	.26	.220	.195	.164	.142
15A5013	200	25	F	.57	.43	.37	.315	.279	.235	.203
15A5014	10	35	D	.36	.27	.24	.202	.179	.150	.130
15A5015	15	35	D	.36	.27	.24	.202	.179	.150	.130
15A5016	25	35	E	.40	.30	.26	.220	.195	.164	.142
15A5017	35	35	E	.40	.30	.26	.220	.195	.164	.142
15A5018	100	35	F	.51	.38	.33	.270	.248	.209	.181
15A5019	150	35	F	.57	.43	.37	.315	.279	.235	.203
15A2134	1	50	D	.36	.27	.24	.202	.179	.150	.130
15A2135	2	50	D	.36	.27	.24	.202	.179	.150	.130
15A2136	5	50	D	.36	.27	.24	.202	.179	.150	.130
15A2137	10	50	E	.40	.30	.26	.220	.195	.164	.142
15A2138	20	50	E	.40	.30	.26	.220	.195	.164	.142
15A2139	25	50	F	.45	.34	.30	.252	.222	.188	.162
15A2140	30	50	F	.45	.34	.30	.252	.222	.188	.162
15A2141	40	50	F	.45	.34	.30	.252	.222	.188	.162
15A2142	50	50	F	.45	.34	.30	.252	.222	.188	.162
15A2143	60	50	F	.51	.38	.33	.270	.248	.209	.181
15A2144	80	50	F	.54	.40	.35	.296	.262	.222	.191
15A5186	50	75	F	.51	.38	.33	.27	.248	.209	.181
15A5187	1	100	D	.45	.34	.30	.252	.222	.188	.162
15A5188	2	100	D	.45	.34	.30	.252	.222	.188	.162
15A5189	5	100	E	.45	.34	.30	.252	.222	.188	.162
15A5190	10	100	E	.45	.34	.30	.252	.222	.188	.162
15A5212	20	100	F	.45	.34	.30	.252	.222	.188	.162
15A5191	25	100	F	.51	.38	.33	.27	.248	.209	.181
15A5192	40	100	F	.51	.38	.33	.27	.248	.209	.181

## MALLORY MTV MOLDED CASE VERTICAL MOUNT ELECTROLYTICS

Precision molding assures case uniformity and quality. Polypropylene case provides extreme humidity protection. All welded construction. Temperature range: -20° C to +6



# CORNELL-DUBILIER CAPACITORS

## "BLUE BEAVER" TUBULAR ELECTROLYTICS

Small size, hermetically sealed in aluminum—with overall cardboard insulating sleeve. Tinned wire leads on all single section, duals and triples have insulated leads with mtg. strap. Rated 85° C except 500 V. and higher 65° C. Tolerance to 50 V. —10% to +150%, 51 to 350 V. —10% to +100%, 351 V. and over —10% to 50%. Can size shown.

### BR/BBR SINGLE SECTION

Stock No.	Mfg. Type	Mfd.	VV DC	Size	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
15B900	5-6	5	6	3/8 x 1 1/4"	\$0.48	\$0.35	\$0.27	\$0.22	\$0.19
15B904	25-6	25	6	3/8 x 1 1/4"	.51	.37	.29	.23	.20
15B905	50-6	50	6	3/8 x 1 1/4"	.57	.41	.32	.28	.22
15A973	100-6	100	6	1/2 x 1 1/4"	.72	.50	.39	.31	.27
15A975	500-6	500	6	1/2 x 1 1/4"	.93	.73	.57	.45	.39
15A607	1000-6	1000	6	5/8 x 1 1/4"	1.14	.89	.69	.55	.48
15B261	2000-6	2000	6	3/4 x 2"	1.38	1.04	.84	.67	.58
15B907	100-15	100	15	1/2 x 1 1/4"	.75	.52	.41	.33	.28
15A544	500-15	500	15	1/2 x 1 1/4"	1.05	.82	.64	.51	.44
15B291	1000-15	1000	15	3/8 x 1 1/4"	1.38	1.07	.83	.67	.58
15A911	2000-15	2000	15	3/4 x 2"	1.92	1.26	.97	.78	.68
15A2011	5000-15	5000	15	1 x 2 1/2"	3.15	2.45	1.91	1.53	1.31
15A241	10-25	10	25	3/8 x 1 1/4"	.60	.42	.33	.26	.23
15A25	20-25	20	25	3/8 x 1 1/4"	.60	.42	.34	.27	.23
15A242	25-25	25	25	3/8 x 1 1/4"	.60	.44	.35	.28	.24
15A243	50-25	50	25	1/2 x 1 1/4"	.66	.47	.37	.30	.25
15A244	100-25	100	25	1/2 x 1 1/4"	.81	.57	.45	.36	.31
15A799	250-25	250	25	1/2 x 1 1/4"	1.02	.79	.62	.49	.42
15A800	500-25	500	25	3/4 x 2"	1.38	1.05	.83	.67	.57
15B760	1000-25	1000	25	3/4 x 2"	2.37	1.82	1.42	1.14	.97
15B784	2000-25	2000	25	3/4 x 2 1/2"	2.91	2.25	1.76	1.41	1.21
15B134	1-50	1	50	3/8 x 1 1/4"	.54	.39	.31	.24	.21
15B431	2-50	2	50	3/8 x 1 1/4"	.54	.39	.31	.24	.21
15A238	5-50	5	50	3/8 x 1 1/4"	.60	.42	.32	.26	.22
15A237	10-50	10	50	3/8 x 1 1/4"	.60	.42	.33	.27	.23
15A238	25-50	25	50	1/2 x 1 1/4"	.63	.44	.35	.28	.24
15A239	50-50	50	50	1/2 x 1 1/4"	.72	.51	.40	.32	.28
15A240	100-50	100	50	1/2 x 1 1/4"	.84	.59	.46	.37	.32
15A801	150-50	150	50	5/8 x 1 1/4"	.93	.66	.51	.41	.36
15A802	250-50	250	50	3/4 x 1 1/4"	1.05	.87	.64	.51	.44
15A839	500-50	500	50	7/8 x 1 1/4"	1.44	1.11	.86	.69	.59
15B785	1000-50	1000	50	1 x 2 1/2"	2.52	1.93	1.49	1.20	1.03
15A788	2000-50	2000	50	1 3/8 x 2 3/4"	3.48	2.60	2.02	1.61	1.38
15A221	4-150	4	150	3/8 x 1 1/4"	.60	.43	.33	.27	.23
15A222	8-150	8	150	1/2 x 1 1/4"	.63	.45	.34	.28	.24
15A2012	10-150	10	150	1/2 x 1 1/4"	.63	.46	.35	.29	.25
15A951	12-150	12	150	1/2 x 1 1/4"	.66	.42	.36	.29	.25
15A224	16-150	16	150	1/2 x 1 1/4"	.69	.49	.38	.31	.26
15A225	20-150	20	150	1/2 x 1 1/4"	.72	.50	.39	.31	.27
15A226	30-150	30	150	3/4 x 1 1/4"	.78	.55	.43	.34	.30
15A227	40-150	40	150	3/4 x 1 1/4"	.81	.58	.50	.36	.31
15A228	50-150	50	150	3/4 x 1 1/4"	.84	.59	.46	.37	.32
15A789	80-150	80	150	7/8 x 1 1/4"	.96	.68	.54	.43	.37
15A797	100-150	100	150	7/8 x 2"	1.05	.74	.58	.46	.40
15B817	150-150	150	150	1 x 2 1/2"	1.14	.82	.63	.51	.44
15A2013	200-150	200	150	1 x 3"	1.32	.98	.77	.62	.53
15B828	250-150	250	150	1 x 3 1/2"	1.53	1.17	.90	.73	.63
15B289	300-150	300	150	1 x 3 3/4"	1.77	1.35	1.04	.84	.72
15A5091	4-250	4	250	1/2 x 1 1/4"	.60	.47	.37	.30	.26
15B870	8-250	8	250	1/2 x 1 1/4"	.69	.54	.41	.33	.29
15A884	12-250	12	250	1/2 x 1 1/4"	.75	.57	.44	.36	.31
15B284	20-250	20	250	3/4 x 1 1/4"	.81	.64	.49	.41	.34
15A2014	30-250	30	250	3/4 x 1 1/4"	.87	.68	.53	.42	.37
15B265	40-250	40	250	3/4 x 2"	.93	.73	.57	.46	.39
15B266	50-250	50	250	7/8 x 1 1/4"	1.02	.80	.62	.50	.43
15B267	100-250	100	250	1 x 2 1/4"	1.47	.96	.75	.60	.52
15C786	200-250	200	250	1 1/4 x 3 1/4"	2.10	1.28	1.00	.80	.69
15A377	2-450	2	450	5/8 x 1 1/4"	.66	.52	.40	.32	.28
15A496	4-450	4	450	5/8 x 1 1/4"	.69	.53	.42	.34	.29
15A202	8-450	8	450	3/4 x 1 1/4"	.75	.59	.46	.37	.32
15A2017	10-450	10	450	3/4 x 1 1/4"	.78	.62	.47	.38	.32
15A205	16-450	16	450	3/4 x 1 1/4"	.84	.65	.53	.42	.36
15A206	20-450	20	450	7/8 x 1 1/4"	.93	.73	.56	.45	.39
15A948	30-450	30	450	1 x 2"	1.02	.80	.62	.50	.43
15A207	40-450	40	450	1 x 2 1/4"	1.08	.83	.64	.52	.45
15A748	50-450	50	450	1 x 2 1/4"	1.26	.97	.75	.61	.57
15A796	80-450	80	450	1 x 3 3/4"	1.68	1.28	.99	.79	.68
15A425	100-450	100	450	1 x 3 1/2"	1.92	1.48	1.15	.92	.80
15A2018	150-450	150	450	1 3/8 x 3 3/4"	2.85	2.00	1.55	1.27	1.07
15A610	200-450	200	450	1 3/8 x 4 1/4"	3.00	2.50	1.95	1.56	1.34
15A2019	4-500	4	500	5/8 x 1 1/4"	.72	.56	.43	.35	.30
15A402	8-500	8	500	3/4 x 1 1/4"	.78	.61	.47	.38	.33
15A403	16-500	16	500	7/8 x 1 1/4"	.90	.70	.54	.43	.38
15B426	20-500	20	500	7/8 x 2"	.96	.74	.60	.47	.40
15B292	30-500	30	500	1 x 2"	1.05	.82	.64	.52	.45
15A725	20-600	20	600	1 1/4 x 3 1/4"	2.31	1.73	1.35	1.07	.92
15A406	8-700	8	700	1 1/4 x 3 1/4"	1.74	1.31	1.02	.81	.70
15A2021	10-700	10	700	1 1/4 x 3 3/4"	1.86	1.40	1.09	.87	.74
15B755	16-700	16	700	1 1/4 x 4 3/4"	2.25	1.69	1.31	1.05	.90

### BBRD DUAL SECTION—150 VOLT

Stk. No.	Mfg. No.	Mfd.	Size	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
15A230	2215	20-20	3/4 x 1 1/4"	\$0.99	\$0.79	\$0.60	\$0.48	\$0.47
15A463	4215	40-20	3/4 x 1 1/4"	1.05	.84	.63	.51	.49
15A400	3315	30-30	3/4 x 1 1/4"	1.08	.84	.64	.51	.49
15A984	4415	40-40	3/4 x 2"	1.11	.87	.66	.53	.51
15A401	5315	50-30	7/8 x 2"	1.17	.87	.67	.53	.51
15A449	5515	50-50	1x2"	1.26	.87	.73	.59	.57
15B551	8515	80-50	1x2 1/2"	1.38	1.02	.78	.62	.60

### BBRD DUAL SECTION—450 VOLT

Stk. No.	Mfg. No.	Mfd.	Size	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
15A209	8045	8-8	7/8 x 1 1/4"	1.02	.91	.69	.55	.53
15A980	2245	20-20	1x3"	1.50	1.23	.94	.75	.72
15B434	4445	40-40	1x4 1/4"	2.04	1.74	1.32	1.06	1.02

### BBRT TRIPLE SECTION—150 VOLT

Stk. No.	Mfg. No.	Mfd.	Size	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
15A803	22215	20-20-20	3/4 x 1 1/4"	1.32	1.23	.94	.75	.72
15A613	42215	40-20-20	1x1 1/4"	1.35	1.33	1.02	.81	.78
15A804	44415	40-40-40	1x2 3/4"	1.47	1.36	1.04	.83	.80
15B546	84215	80-40-20	1x3"	1.65	1.40	1.08	.86	.83

## PKM PAPER MYLAR TUBULARS

Combination dielectric strength of paper and mylar is superior to either paper or mylar alone. High impact resistant case also highly moisture and humidity resistant. Tolerance 10% temperature to 125° C.

### SPECIFY STOCK NUMBER AND CAPACITY ON ALL ORDERS

Stk. No. 15A23—400 WVDC									
Cap. Mfd.	Mfg. Type	Size	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each	100-499 Each	500 Up Each
.0047	PKM4D47	3/4 x 1"	\$0.21	\$0.16	\$0.11	\$0.09	\$0.08		
.01	PKM4S1	3/4 x 1"	.21	.16	.11	.09	.08		
.027	PKM4S27	3/4 x 1 1/2"	.21	.16	.11	.09	.08		
.033	PKM4S33	3/4 x 1 1/2"	.21	.16	.11	.09	.08		
.047	PKM4S47	3/4 x 1 1/2"	.21	.16	.11	.09	.08		
.05	PKM4S5	3/4 x 1 1/2"	.21	.16	.11	.09	.08		
.068	PKM4S68	3/4 x 1 1/2"	.21	.16	.11	.09	.08		
.1	PKM4P1	1 1/2 x 1 1/2"	.24	.19	.12	.10	.09		
.15	PKM4P15	1 1/2 x 1 1/2"	.24	.19	.16	.13	.11		
.22	PKM4P22	1 1/2 x 1 1/2"	.27	.21	.18	.14	.12		
.25	PKM4P25	1 1/2 x 1 1/2"	.33	.26	.21	.18	.14		
.47	PKM4P47	1 1/2 x 1 1/2"	.45	.35	.31	.25	.18		
.56	PKM4P56	1 1/2 x 1 1/2"	.48	.39	.34	.32	.24		
1.0	PKM4W1	1x2 1/2"	.75	.60	.52	.48	.36		

Stk. No. 15A24—600 WVDC									
Cap. Mfd.	Mfg. Type	Size	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each	100-499 Each	500 Up Each
.0012	PKM6D12	3/4 x 1"	.21	.15	.11	.09	.08		
.0015	PKM6D15	3/4 x 1"	.21	.15	.11	.09	.08		
.0022	PKM6D22	3/4 x 1"	.21	.15	.11	.09	.08		
.0033	PKM6D33	3/4 x 1"	.21	.15	.11	.09	.08		
.005	PKM6D5	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.0068	PKM6D68	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.0082	PKM6D82	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.01	PKM6S1	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.015	PKM6S15	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.022	PKM6S22	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.033	PKM6S33	3/4 x 1 1/2"	.21	.15	.11	.09	.08		
.047	PKM6S47	3/4 x 1 1/2"	.24	.15	.12	.10	.09		



# CORNELL-DUBILIER CAPACITORS

## CORNELL-DUBILIER WMF WRAPPED MYLAR TUBULARS

WMF axial lead, Mylar tubular capacitor is ideal where space is limited and requirements are demanding. Minimum size and maximum moisture resistance. Tolerance is ±10%. Operating temperature range is -55C to +125C. For temperature above 85C, derate voltage 10% at 100C, and 50% at 125C.

### SPECIFY STOCK NUMBER AND CAPACITY ON ALL ORDERS

Stock No. 15A996 — 100 WVDC

Mfd.	Mfg. No.	Size	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-499 Ea.	500 Up
.001	1D1	.15 x 1/2"	\$0.21	\$0.17	\$0.14	\$0.12	\$0.10
.01	1S1	.2 x 1/2"	.21	.17	.14	.12	.10
.022	1S22	.27 x 5/8"	.24	.18	.15	.13	.10
.033	1S33	.3 x 5/8"	.24	.18	.15	.13	.12
.047	1S47	.26 x 3/4"	.27	.21	.16	.14	.12
.068	1S68	.28 x 3/4"	.27	.21	.16	.14	.12
.1	1P1	.29 x 7/8"	.36	.25	.20	.14	.12
.22	1P22	.38 x 1"	.39	.29	.22	.15	.13
.33	1P33	.41 x 1 1/8"	.45	.32	.24	.19	.15
.47	1P47	.47 x 1 1/4"	.47	.33	.26	.22	.19
1.0	1W1	.62 x 1 1/2"	.87	.59	.46	.40	.34
2.0	1W2	.95 x 1 3/4"	1.50	.98	.76	.66	.55

Stock No. 15A998 — 400 WVDC

.01	4S1	.3 x 5/8"	.27	.21	.16	.15	.12
.022	4S22	.32 x 3/4"	.27	.21	.16	.15	.13
.047	4S47	.4 x 7/8"	.30	.22	.17	.15	.13
.1	4P1	.46 x 1"	.33	.24	.18	.17	.14
.22	4P22	.56 x 1 1/8"	.42	.29	.23	.20	.17
.47	4P47	.7 x 1 1/2"	.78	.56	.43	.37	.32



## CORNELL-DUBILIER TYPE T OIL-FILLED CAPACITORS

Rectangular can oil-filled, hermetically sealed. Ceramic pillar insulators. Rated -55°C to 85°C. Tolerance ± 10%. Supplied with universal mounting as illustrated. Average shpg. wt. 5 lbs.

Stk. No.	Mfg. No.	Mfd.	DCV	Size	Prices Each			
					1-9	10-24	25-49	50-99
15A1359	T6010	1	600	2 1/4 x 1 1/2 x 1 1/2	\$4.81	\$2.49	\$2.25	\$2.10
15A1360	T6020	2	600	2 7/8 x 1 1/2 x 1 1/2	5.14	2.65	2.40	2.24
15A1361	T6040	4	600	3 1/2 x 1 1/2 x 2 1/2	5.86	3.01	2.73	2.54
15A1368	T10040	4	1000	4 3/4 x 1 1/2 x 2 1/2	6.28	3.22	2.91	2.71
15A1370	T10100	10	1000	4 3/4 x 1 3/4 x 3 3/4	9.42	4.85	4.39	4.08
15A1383	T20010	1	2000	3 1/2 x 1 1/2 x 2 1/2	6.55	3.36	3.04	2.82



## CORNELL-DUBILIER WIDE RANGE TWIST PRONG ELECTROLYTICS

Guaranteed electrical replacement for any capacity within the minimum to maximum ranges shown and any voltage equal to or lower than voltage shown. Example: to replace 18 Mfd @ 150 V, use 15A2047 15 to 20 Mfd. @ 500 V. \*Indicates 1" can dia. All others 1 3/8" dia. Average shpg. wt. 8 ozs.

### SINGLE SECTION

Cap. Mfd.	Volts	Lgth.	Stk. No.	Each	Cap. Mfd.	Volts	Lgth.	Stk. No.	Each
Min. Max.	DC W.				Min. Max.	DC W.			
15 to 20	500	*1 1/2	15A2047	\$1.35	60 to 80	450	2 1/2	15A7512	2.34
30 to 40	500	*2	15A2046	1.50	15 to 20	450	2 1/2	15A7513	2.20
35 to 50	450	*2	15A2045	1.50	60 to 80	450	3	15A2070	3.00
60 to 80	500	2	15A2044	2.40	30 to 40	500	3	15A2061	2.55
60 to 100	150	*1 1/2	15A2035	1.20	60 to 80	300	2	15A7514	3.60
60 to 100	300	*2	15A2042	1.80	60 to 80	500	3 1/2	15A7515	3.42
100 to 125	450	2 1/2	15A7518	2.40	100 to 160	150	*2	15A2056	1.56
100 to 160	250	*3	15A2036	1.92	70 to 100	350	3	15A2062	3.60
100 to 160	250	2 1/2	15A7519	1.92	70 to 100	350	3	15A2063	3.60
100 to 160	350	2 1/2	15A2040	2.40	120 to 200	300	3	15A2060	3.60
130 to 175	150	*1 3/4	15A7520	1.35	60 to 100	150	*2	15A2055	2.40
120 to 200	150	1 1/2	15A7521	1.65	100 to 200	150	2	15A2058	3.60
120 to 200	150	*2	15A2034	1.80	120 to 200	250	3	15A2058	3.60
120 to 200	300	2	15A2041	2.40	250 to 500	25	*1 1/2	15A7509	2.31
275 to 350	350	3 1/2	15A2038	3.90	500 to 1000	25	1 1/2	15A2052	3.00
240 to 400	150	2	15A7522	1.98	1250 to 2500	20	*3	15A7510	3.00
250 to 500	50	2	15A2033	1.80	1250 to 2500	20	*3	15A7510	3.00
300 to 500	100	*3	15A7523	1.80	10 to 15	450			
350 to 750	25	*1 1/2	15A2031	1.53	10 to 15	450			
500 to 1000	25	2	15A2030	2.13	10 to 15	450	*2 1/2	15A2085	\$1.98
750 to 1500	50	2	15A2032	3.00	15 to 20	500			
1500 to 3000	25	2	15A2028	2.85	15 to 20	500	*3	15A7516	2.40
1500 to 3000	40	2 1/2	15A7524	4.50	20 to 30	350			
2500 to 5000	45	4	15A7525	5.97	7 to 10	350	*2	15A7534	1.98

### DUAL SECTION

7 to 10	500								
7 to 10	500	1 3/4	15A2068	\$1.20	10 to 15	450			
15 to 20	500				10 to 15	450			
15 to 20	500	2	15A2067	1.80	10 to 15	450	*2 1/2	15A2085	\$1.98
20 to 30	350				15 to 20	500			
20 to 30	350	*2	15A7511	1.77	15 to 20	500	*3	15A7516	2.40
30 to 40	250				15 to 20	500			
30 to 40	250	*1 3/4	15A2059	1.50	20 to 30	350			
30 to 40	500				15 to 20	500	*2	15A7534	1.98
30 to 40	500	2	15A2066	2.70	20 to 30	500			
30 to 50	150				20 to 30	500			
30 to 50	150	*1 1/2	15A7500	1.29	7 to 10	350	*2	15A7534	1.98
30 to 50	450				30 to 40	500			
30 to 50	450	2 1/2	15A2065	2.34	20 to 30	500			
40 to 60	350				20 to 30	500			
30 to 40	350	*2 1/2	15A2063	1.40	20 to 30	500	3	15A2093	3.15

### TRIPLE SECTION

10 to 15	450								
10 to 15	450								
10 to 15	450	*2 1/2	15A2085	\$1.98	15 to 20	500			
15 to 20	500				15 to 20	500			
15 to 20	500				15 to 20	500	*3	15A7516	2.40
20 to 30	350				20 to 30	350			
15 to 20	350				15 to 20	350			
7 to 10	350	*2	15A7534	1.98	7 to 10	350	*2	15A7534	1.98
30 to 40	500				30 to 40	500			
20 to 30	500				20 to 30	500			
20 to 30	500	3	15A2093	3.15	20 to 30	500			

### SPECIFY STOCK NUMBER AND CAPACITY ON ALL ORDERS

Stock No. 15A997 — 200 WVDC

Mfd.	Mfg. No.	Size	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-499 Ea.	500 Up
.001	2D1	.15 x 1/2"	\$0.21	\$0.17	\$0.14	\$0.12	\$0.10
.01	2S1	.23 x 1/2"	.21	.17	.14	.12	.10
.022	2S22	.27 x 5/8"	.24	.18	.15	.13	.12
.033	2S33	.27 x 3/4"	.24	.18	.15	.13	.12
.047	2S47	.32 x 3/4"	.27	.20	.16	.14	.12
.068	2S68	.35 x 3/4"	.27	.21	.16	.14	.12
.1	2P1	.41 x 7/8"	.36	.25	.20	.14	.12
.22	2P22	.5 x 1 1/8"	.39	.29	.22	.15	.13
.33	2P33	.55 x 1 1/8"	.45	.32	.24	.19	.15
.47	2P47	.6 x 1 1/4"	.51	.36	.29	.23	.19
.68	2P68	.65 x 1 3/8"	.57	.42	.33	.29	.24
1.0	2W1	.75 x 1 3/4"	.87	.59	.46	.40	.34
2.0	2W2	.98 x 1 7/8"	1.50	.98	.76	.66	.55

Stock No. 15A999 — 600 WVDC

.01	6S1	.3 x 3/4"	.30	.23	.18	.16	.14
.022	6S22	.32 x 7/8"	.30	.23	.18	.16	.14
.047	6S47	.41 x 1"	.33	.24	.18	.16	.14
.1	6P1	.52 x 1 3/8"	.42	.31	.24	.21	.18
.22	6P22	.66 x 1 5/8"	.51	.37	.30	.25	.21
.47	6P47	.86 x 2"	1.14	.83	.65	.56	.46

## ANTENNA ROTOR CAPACITORS

Wide range types cover all rotor capacitor needs. Intermittent AC voltage rated. 50 V. AC.

No. 15A5092. CD ETZ 10002-1. 66 to 92 Mfd. 7/8" x 2 3/4". Each ..... 99c  
No. 15A5093. CD ETZ 10011. 120 to 140 Mfd. 1 x 2 7/8". Each ..... \$1.59



## CORNELL-DUBILIER BATHTUB TYPE DYR

All capacitors are single section with two insulated terminals. Oil filled, hermetically sealed in metal can. ± 10% tolerance—operating temperature —55° to 85° C.

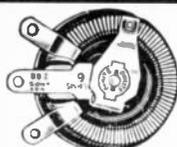


Stk. No.	Mfg. No.	Mfd.	WVDC	Size L. W. H.	Prices Each			
					1-9	10-24	25-49	50-99
15B345	DYR6025	.25	600	1 1/2 x 1 x 3/4	\$1.92	\$1.28	\$1.12	\$0.80
15B349	DYR6050	.5	600	1 1/2 x 1 x 7/8	2.13	1.42	1.24	.89
15B351	DYR6100	1.	600	2 x 1 3/4 x 7/8	2.55	1.70	1.49	1.06
15B359	DYR6200	2.	600	2 x 2 x 1 1/8	3.33	2.22	1.94	1.39
15A328	DYR10100	1.	1000	2 x 2 x 1 1/8	3.00	2.00	1.75	1.25

Cap. Mfd.	Volts	Lgth.	Stk. No.	Each	Cap. Mfd.	Volts	Lgth.	Stk. No.	Each
Min. Max.	DC W.				Min. Max.	DC W.			
30 to 40	450				7 to 10	500			
30 to 40	450				7 to 10	500			
30 to 40	450	3	15A2084	2.94	7 to 10	500			
35 to 50	500				7 to 10	500			
15 to 20	500				7 to 10	500	2	15A2119	\$2.13
25 to 50	25	2	15A2095	3.00	15 to 20	500			
30 to 50	150				15 to 20	500			
30 to 50	150				15 to 20	500	2	15A2118	2.94
30 to 50	150	*1 3/4	15A2075	1.80	15 to 20	500			
50 to 80	450				15 to 20	500			
30 to 40	450				15 to 20	500			
15 to 20	450	3	15A2081	3.24	15 to 20	500			
60 to 80	450				60 to 100	100	2	15A2116	2.85
35 to 50	450				20 to 30	525			
60 to 100	200	3 1/2	15A2080	3.60	15 to 20	525			
50 to 80	350				15 to 20	525			
40 to 60	350				15 to 20	525	3	15A2120	3.90
40 to 60	350	2 1/2	15A2089	3.42	20 to 30	450			
60 to 80	450				15 to 20	450			
60 to 80	450				100 to 160	250			
20 to 30									

# OHMITE RHEOSTATS & ADJUSTABLE RESISTORS

## MINIATURE MODEL "E"



## OHMITE POWER RHEOSTATS

Designed to produce permanently smooth, close control. Construction is all ceramic and metal with pivoted, universal action mounted contact brush of copper-graphite, or silver-graphite, on the heavier current rheostats. Mounting for panels up to 1/4", except Model "E" which mounts on 1/8" panel. Average shipping wt. 1/2 lb. Order Knob and Dial Plate from listing below right.

### MODEL "E" 12 1/2-WATT

Dia. 7/8". Depth 1 1/8". Shaft 1/4". 3/16"-32 bushing. †Rated on metal panel. Uses No. 5151 knob and No. 5007 dial plate.

Stk. No.	Ohms	Max. Amps	Prices Each			
			1-4	5-9	10-24	25-49
148808	1	3.53	\$5.05	\$4.29	\$3.38	\$2.78
148809	10	1.12	5.05	4.29	3.38	2.78
148810	15	.91	4.55	3.87	3.05	2.50
148811	25	.71	4.55	3.87	3.05	2.50
148812	50	.50	4.55	3.87	3.05	2.50
148813	100	.35	4.55	3.87	3.05	2.50
148814	250	.22	4.55	3.87	3.05	2.50
148815	500	.16	4.55	3.87	3.05	2.50
148816	1000	.11	5.05	4.29	3.38	2.78
148817	2500	.071	5.05	4.29	3.38	2.78
148818	5000	.050	5.35	4.55	3.58	2.94
148819	7500†	.041	5.55	4.72	3.72	3.05
148820	10000†	.035	5.55	4.72	3.72	3.05
148821	15000†	.029	6.05	5.14	4.05	3.33

### MODEL "H" 25-WATT

Dia. 1 1/8". Depth, 1 3/8". Shaft 1/4". 3/16"-32 bushing. Uses No. 5150 knob and No. 5000 dial plate.

Stk. No.	Ohms	Max. Amps	Prices Each			
			1-4	5-9	10-24	25-49
144700	1	5.0	\$5.05	\$4.29	\$3.38	\$2.78
144701	3	2.88	5.05	4.29	3.38	2.78
144703	10	1.58	5.05	4.29	3.38	2.78
144774	25	1.00	4.55	3.87	3.05	2.50
144775	50	.707	4.55	3.87	3.05	2.50
144776	100	.500	4.55	3.87	3.05	2.50
144777	250	.316	4.55	3.87	3.05	2.50
144778	500	.222	4.55	3.87	3.05	2.50
144779	1000	.155	5.05	4.29	3.38	2.78
144780	2500	.100	5.05	4.29	3.38	2.78

### MODEL "H" 25-WATT (Cont'd)

Stk. No.	Ohms	Max. Amps	Prices Each			
			1-4	5-9	10-24	25-49
148781	5000	.070	5.35	4.55	3.58	2.94
148823	10000*	.050	5.55	4.72	3.72	3.05
148824	15000*	.041	6.05	5.14	4.05	3.33
148825	20000*	.035	6.00	5.78	4.56	3.74
148826	25000*	.032	7.50	6.38	5.03	4.13

### MODEL "J" 50-WATT

Dia. 2 3/4". Depth 1 3/8". Shaft 1/4". 3/16"-32 bushing. Uses No. 5150 knob and No. 5000 dial plate.

Stk. No.	Ohms	Max. Amps	Prices Each			
			1-4	5-9	10-24	25-49
14A702	1	7.07	\$5.65	\$4.80	\$3.79	\$3.11
14A703	4	3.53	5.65	4.80	3.79	3.11
14A1122	8	2.50	5.05	4.29	3.38	2.78
14A711	16	1.76	5.05	4.29	3.38	2.78
14A704	35	1.19	5.05	4.29	3.38	2.78
14A712	50	1.00	5.05	4.29	3.38	2.78
14A705	80	.79	5.05	4.29	3.38	2.78
14A706	150	.575	5.05	4.29	3.38	2.78
14A707	300	.408	5.05	4.29	3.38	2.78
14B782	500	.316	5.05	4.29	3.38	2.78
14B784	1000	.224	5.35	4.55	3.58	2.94
14B785	2500	.141	5.35	4.55	3.58	2.94
14B786	5000	.100	5.65	4.80	3.79	3.11
14B787	10000	.070	5.65	4.80	3.79	3.11
14C719	15000*	.058	8.40	5.44	4.29	3.52
14C720	20000*	.050	7.25	6.16	4.86	3.99
14C721	25000*	.045	8.00	6.80	5.36	4.40
14C722	30000*	.041	8.85	7.52	5.93	4.87
14C723	40000*	.035	10.30	8.78	6.90	5.67
14C724	50000*	.032	11.25	9.56	7.54	6.19

\*Silicone-Ceramic Coating.

### MODEL "K" 100-WATT

Dia. 3 1/8". Depth 1 3/8". Shaft 1/4". 3/16"-32 bushing. Uses No. 5150 knob and No. 5000 dial plate.

Stk. No.	Ohms	Max. Amps	Prices Each			
			1-4	5-9	10-24	25-49
14A960	1	10.00	\$8.45	\$7.18	\$5.66	\$4.85
14A961	5	4.47	8.45	7.18	5.66	4.85
14A962	10	3.16	8.45	7.18	5.66	4.85
14A963	25	2.00	7.95	6.76	5.33	4.37
14A964	50	1.41	7.95	6.76	5.33	4.37
14A965	100	1.00	7.95	6.76	5.33	4.37
14A966	200	.707	7.95	6.76	5.33	4.37
14A967	300	.575	7.95	6.76	5.33	4.37
14A968	600	.447	7.95	6.76	5.33	4.37
14A969	1000	.316	8.45	7.18	5.66	4.85
14A970	2000	.224	8.45	7.18	5.66	4.85

### MODEL "L" 150-WATT

Dia. 4". Depth 2". Shaft 1/4". 3/16"-32 bushing. Uses No. 5150 knob and No. 5000 dial plate.

Stk. No.	Ohms	Max. Amps	Prices Each			
			1-4	5-9	10-24	25-49
14B788	1	12.30	\$10.75	\$9.14	\$7.20	\$5.91
14B789	5	5.48	10.75	9.14	7.20	5.91
14B790	10	3.88	10.75	9.14	7.20	5.91
14B791	15	3.16	10.75	9.14	7.20	5.91
14B792	25	2.45	10.15	8.63	6.80	5.58
14B793	50	1.73	10.15	8.63	6.80	5.58
14B794	100	1.22	10.15	8.63	6.80	5.58
14B796	150	1.00	10.15	8.63	6.80	5.58
14B797	250	.775	10.15	8.63	6.80	5.58
14B798	500	.548	10.15	8.63	6.80	5.58
14A1123	1250	.346	10.75	9.14	7.20	5.91
14B799	1800	.288	11.35	9.65	7.60	6.24
14B800	3000	.224	11.35	9.65	7.60	6.24
14B807	10000	.122	13.60	11.56	9.11	7.48

### KNOB AND DIAL PLATES

Stk. No.	Type	Prices Each			
		1-4	5-9	10-24	25-49
12A2399	5151 Knob	30¢	26¢	20¢	18¢
12A2397	5150 Knob	30¢	26¢	20¢	18¢
14A872	5007 Plate	30¢	26¢	20¢	18¢
14A873	5000 Plate	30¢	26¢	20¢	18¢

## OHMITE TYPE 210 DIVIDOHMS



Vitreous enameled over resistance wound on ceramic core. Easy to obtain odd resistance values, adjust voltages, etc. Supplied with one adjustable lug and two mounting brackets. Additional taps can be made with adjustable lugs shown at right below. Tolerance ±10%.

### 12, 25 AND 50-WATT VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	10	100	750	2500	15,000
2	25	150	1000	5000	25,000
3	50	250	1500	7500	50,000
5	75	500	2000	10,000	100,000

12-Watt Adjustable Dividohm. Size 1 3/4 x 3/8". Wt. 2 oz. Available in above values from 1 Ohm to 10,000 Ohms. Specify Stk. No. 14A5019 and Resistance when ordering.

Value	1-9 Ea.	10-24 Ea.	25-99 Ea.	100-249 Ea.
1 to 1000 Ohms	\$1.20	\$1.02	\$0.84	\$0.72
1500 to 5000 Ohms	1.24	1.05	.87	.74
7500 to 10,000 Ohms	1.33	1.13	.93	.80

25-Watt Adjustable Dividohm. Size 2 x 3/8". Wt. 2 oz. Available in above values from 1 Ohm to 25,000 Ohms. Specify Stk. No. 14A5020 and Resistance when ordering.

Value	1-9 Ea.	10-24 Ea.	25-99 Ea.	100-249 Ea.
1 to 1000 Ohms	\$1.35	\$1.15	\$0.95	\$0.81
1500 to 5000 Ohms	1.39	1.18	.97	.83
7500 to 10,000 Ohms	1.49	1.27	1.04	.89
15,000	1.54	1.31	1.08	.92
25,000 Ohms	1.69	1.44	1.18	1.01

50-Watt Adjustable Dividohm. Size 4 x 3/8". Wt. 4 ozs. Available in above values from 1 to 100,000 Ohms. Specify Stk. No. 14A5021 and Resistance when ordering.

Value	1-9 Ea.	10-24 Ea.	25-99 Ea.	100-249 Ea.
1 Ohm	\$2.23	\$1.90	\$1.56	\$1.34
2 to 1000 Ohms	1.76	1.50	1.23	1.06
1500 to 5000 Ohms	1.80	1.53	1.26	1.08
7500 to 10,000 Ohms	1.89	1.61	1.32	1.13
15,000 Ohms	2.02	1.72	1.41	1.21
25,000 Ohms	2.22	1.89	1.55	1.33
50,000 Ohms	2.40	2.04	1.68	1.44
100,000 Ohms	2.84	2.41	1.99	1.70

### WORKMAN FUSED RESISTORS



Often needed replacement in series wired TV sets. 5 watt rating. Stk. No. Resistance Stk. No. Resistance Stk. No. Resistance  
14A5028 4.7 Ohms 14A5031 6 Ohms 14A5034 22 Ohms  
14A5029 5 Ohms 14A5032 7.5 Ohms 14A5035 47 Ohms  
14A5030 5.6 Ohms 14A5043 9 Ohms

Choice Each .36¢ 10 Lots Each .30¢  
No. 14A5036. Kit of 10 Assorted Fused Resistors in Handy Plastic Box. Contains: 6-7.5, 2-4.7, plus 1 each 5.6 and 9 ohm.  
Kit .19¢

### OHMITE OHMS LAW CALCULATORS

Pocket size slide rule with parallel resistance scale and standard slide rule scales A, B, C, D on one side and Ohms Law Calculator with full instructions on other side.

No. 14B25. Each .25¢  
No. 14B304. Durable Plastic Model of above. Each...\$1.50



### 100 AND 225-WATT VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	5	50	500	2500	15,000
2	10	100	1000	5000	20,000
3	25	250	1500	10,000	25,000

100-Watt Adjustable Dividohm. Size 6 1/2 x 3/8". Wt. 8 ozs. Available in above resistance values. Specify Stock No. 14A5022 and Resistance when ordering.

Value	1-9 Ea.	10-24 Ea.	25-99 Ea.	100-249 Ea.
1 to 3 Ohms	\$2.87	\$2.44	\$2.01	\$1.72
5 to 1000 Ohms	2.22	1.89	1.55	1.33
1500 to 5000 Ohms	2.28	1.94	1.60	1.37
10,000 Ohms	2.42	2.06	1.69	1.45
15,000 to 20,000 Ohms	2.56	2.18	1.79	1.54
25,000 Ohms	2.84	2.41	1.99	1.70
50,000 Ohms	2.92	2.48	2.04	1.75
100,000 Ohms	3.49	2.97	2.44	2.09

225-Watt Adjustable Dividohm. Size 10 1/2 x 1 1/8". Wt. 1 lb. Available in above resistance values. Specify Stock No. 14A5023 and Resistance when ordering.

Value	1-9 Ea.	10-24 Ea.	25-99 Ea.	100-249 Ea.
1 to 5 Ohms	\$4.54	\$3.86	\$3.18	\$2.72
10 to 1000 Ohms	3.51	2.98	2.46	2.11
1500 to 5000 Ohms	3.58	3.04	2.51	2.15
10,000 Ohms	3.77	3.20	2.64	2.26
15,000 to 20,000 Ohms	3.96	3.37	2.77	2.38
25,000 Ohms	4.05	3.44	2.84	2.43
50,000 Ohms	4.16	3.54	2.91	2.50
100,000 Ohms	4.56	3.88	3.19	2.74

### STANDARD ADJUSTABLE LUGS FOR DIVIDOHMS

Stk. No.	For	1-9 Each	10-24 Ea.	25-99 Each
14A5024	12 Watt Size	\$0.15	\$0.13	\$0.11
14A5025	25 and 50 Watt Size	.15	.13	.11
14A5026	100 Watt Size	.15	.13	.11
14A5027	225 Watt Size	.24	.20	.17

# OHMITE AND IRC FIXED RESISTORS

## 3 1/2-5-11 WATT SERIES 99 MOLDED RESISTORS



Wirewound vitreous enameled resistors with axial tinned wire leads. Consistent uniform size with thicker coating guarantees 1000 V. AC insulation rating, plus ability to withstand high temperatures and high humidity. Especially suited for printed circuit, terminal board and point-to-point wiring applications. Tolerance is 5%. 3 1/2 watt size is 1/4" L. x 1/8" Dia.; 5 watt size is 1/2" L. x 1/4" Dia.; 11 watt size is 3/4" L. x 1/4" Dia.

Specify Both Stock Number and Value on Orders.

3 1/2-Watt Style 99S-3A. Values from 1 to 10,000 Ohms.

Specify Stock No. 14A5038 and Resistance Value on Orders.

Value	1-9 Each	10-24 Each	25-99 Ea.	100-249 Ea.
1 to 1000 ohms	\$0.59	\$0.50	\$0.41	\$0.35
1200 to 5000 ohms	.82	.53	.43	.37
5600 to 10,000 ohms	.86	.58	.46	.40

5-Watt Style 99S-5B. Values from 1 to 25,000 Ohms.

Specify Stock No. 14A5039 and Resistance Value on Orders.

Value	1-9 Each	10-24 Each	25-99 Ea.	100-249 Ea.
1 to 1000 ohms	.82	.53	.43	.37
1200 to 5000 ohms	.86	.58	.46	.40
5600 to 10,000 ohms	.70	.60	.49	.42
12,000 to 20,000 ohms	.78	.66	.55	.47
22,000 to 25,000 ohms	.82	.70	.57	.49

11-Watt Style 99S-10A. Values from 1 to 50,000 ohms.

Specify Stock No. 14A5040 and Resistance Value on Orders.

Value	1-9 Each	10-24 Each	25-99 Ea.	100-249 Ea.
1 to 1000 ohms	.88	.58	.48	.41
1200 to 5000 ohms	.73	.82	.51	.44
5600 to 10,000 ohms	.84	.71	.59	.50
12,000 to 20,000 ohms	.95	.81	.67	.57
22,000 to 40,000 ohms	1.00	.85	.70	.60
47,000 to 50,000 ohms	1.12	.95	.78	.67

### STANDARD STOCK VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	22	82	400	1200	5000
1.5	25	100	470	1500	5600
2	27	120	500	1800	6000
3	30	150	560	2000	6800
4	33	180	600	2200	7000
5	39	200	680	2500	7500
7.5	40	220	700	2700	8000
10	47	250	750	3000	8200
12	50	270	800	3300	9000
15	56	300	820	3900	10,000
18	68	330	900	4000	12,000
20	75	390	1000	4700	15,000



## OHMITE 8-12-20 WATT TYPE 200 "BROWN DEVILS"

Wire-wound units with wire leads for convenient mounting. Sturdy, vitreous enameled coating provides protection from humidity and mechanical damage. Tolerance is ± 5%. Sizes: 8-watt 1 x 1/2"; 12-watt 1 1/4 x 1/2"; 20-watt 2 x 1/2".

8-Watt. Values from 1 to 25,000 ohms except values marked \*.

Specify Stock No. 14A5012 and Resistance Value on Orders.

Value	1-9 Each	10-24 Each	25-99 Ea.	100-249 Ea.
1 to 1000 ohms	\$0.55	\$0.47	\$0.39	\$0.33
1200 to 5000 ohms	.58	.49	.41	.35
6000 to 10,000 ohms	.81	.52	.43	.37
12,500 to 20,000 ohms	.88	.58	.48	.41
25,000 ohms	.71	.60	.50	.43

12-Watt. Values from .5 to 50,000 ohms.

Specify Stock No. 14A5013 and Resistance Value on Orders.

Value	1-9 Each	10-24 Each	25-99 Ea.	100-249 Ea.
.5 to 1000 ohms	.60	.51	.42	.36
1200 to 5000 ohms	.64	.54	.45	.38
6000 to 10,000 ohms	.74	.63	.52	.44
12,500 to 20,000 ohms	.83	.71	.58	.50
25,000 to 30,000 ohms	.87	.74	.61	.52
50,000 ohms	.98	.83	.69	.59

20-Watt. Values from .5 ohm to 100,000 ohms except values marked #.

Specify Stock No. 14A5014 and Resistance Value on Orders.

Value	1-9 Each	10-24 Each	25-99 Ea.	100-249 Ea.
.5 ohms	1.00	.85	.70	.60
1 to 1000 ohms	.71	.60	.50	.43
1200 to 5000 ohms	.74	.63	.52	.44
6000 to 10,000 ohms	.87	.74	.61	.52
12,500 to 20,000 ohms	.89	.78	.62	.53
25,000 to 30,000 ohms	1.04	.88	.73	.62
50,000 ohms	1.21	1.03	.85	.73
100,000 ohms	1.85	1.40	1.16	.99

### STANDARD STOCK VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
5*	12#	100	500	2000	7000
1	15#	125#	600#	2250	7500
1.5#	20#	150	700	2500	8000
2	25	200	750	3000	9000
3	30#	225#	1000	3500	10,000
4	35#	250	1200	4000	12,500
5	40#	300	1250	4500	15,000
7.5#	50	350	1500	5000	20,000
10	75	400	1750	6000	25,000

## IRC TYPE RC COMPOSITION RESISTORS



EIA/MIL color coded. Conforms to MIL-R-11 specs. Formerly known as GBT and SR types.  
RC07 1/4-watt stocked in 10 ohms thru 1 Meg. Size 1/4x3/8".  
RC20 1/2-Watt stocked in 2.7 ohms thru 22 Meg. Size 3/8x3/8".  
RC32 1-Watt stocked in 2.7 Ohms thru 22 Meg. Size 1/2x3/8".  
RC42 2-Watt stocked in 10 ohms thru 22 Meg. Size 1/2x3/8".  
Values may be assorted for quantity price if multiples of 50 of each value are ordered.

Specify Stk. No., Resistance, Wattage and Tolerance on order.

Stock No.	Type	Wattage	Tolerance	1-9 Each	10-49 Each	50-99 Each	100-499 Each	500-999 Each	1000 Up Each
14A5002	RC07	1/4-Watt	5%	\$0.26	\$0.22	\$0.10	\$0.073	\$0.065	\$0.05
14A5003	RC07	1/4-Watt	10%	.13	.11	.06	.05	.035	.027
14A5004	RC20	1/2-Watt	5%	.24	.19	.12	.059	.05	.044
14A5005	RC20	1/2-Watt	10%	.12	.10	.06	.04	.03	.023
14A5006	RC32	1-Watt	5%	.36	.28	.18	.084	.08	.069
14A5007	RC32	1-Watt	10%	.18	.15	.09	.053	.045	.038
14A5008	RC42	2-Watt	5%	.48	.40	.24	.19	.16	.15
14A5009	RC42	2-Watt	10%	.24	.20	.15	.11	.088	.075

### STANDARD STOCK VALUES

All resistances stocked in 5% Tolerance.

10% Tolerance stocked only in resistances listed in Bold Face.

Ohms	Ohms	Ohms	Ohms	Ohms	Meg	Meg	Meg
2.7	16	100	620	3900	24,000	0.1	0.62
3.0	18	110	680	4300	27,000	0.11	0.68
3.3	20	120	750	4700	30,000	0.12	0.75
3.6	22	130	820	5100	33,000	0.13	0.82
3.9	24	150	910	5600	36,000	0.15	0.91
4.3	27	160	1000	6200	39,000	0.16	1.00
4.7	30	180	1100	6800	43,000	0.18	1.1
5.1	33	200	1200	7500	47,000	0.20	1.2
5.6	36	220	1300	8200	51,000	0.22	1.3
6.2	39	240	1500	9100	56,000	0.24	1.5
6.8	43	270	1600	10,000	62,000	0.27	1.6
7.5	47	300	1800	11,000	68,000	0.30	1.8
8.2	51	330	2000	12,000	75,000	0.33	2.0
9.1	56	360	2200	13,000	82,000	0.36	2.2
10	62	390	2400	15,000	91,000	0.39	2.4
11	68	430	2700	16,000	10,000	0.43	2.7
12	75	470	3000	18,000	11,000	0.47	3.0
13	82	510	3300	20,000	12,000	0.51	3.3
15	91	560	3600	22,000	13,000	0.56	3.6

### IRC RESISTOR ASSORTMENTS



Sturdy metal cabinets are FREE with any assortment. Designed for stocking. Four non-spill drawers and 28 compartments. Size: 5 3/8 x 5 1/8 x 10 7/8". Shpg. wt. 5 lbs.

No. 14A5018.7A Assortment. 150 1/4-Watt. Range from 47 ohm thru 1 meg. **\$19.50**

No. 14A5016.4A Assortment. 150 1/2-Watt. Range from 47 ohm thru 10 meg. **\$18.00**

No. 14A5017.5A Assmt. 125 1-Watt. Range from 47 ohm thru 4.7 meg. **\$22.50**

No. 14A5015.3A Assmt. 120 2-Watt. Range 4.7 ohm thru 1 meg. **\$28.80**

### COLOR CODE GUIDE



Here is one of the handiest Color Code Guides for Resistors ever devised. Standard EIA range is automatically and accurately indicated. **25c**

### IRC BWH MOLDED WIRE-WOUND RESISTORS

Exceptional stability, reliability and long-term life characteristics of a wire-wound unit. Provides resistances not available in composition resistors. Rated 1/2-watt @ 137° C Ambient, 1-watt @ 115° C Ambient, and 2-watt @ 70° C Ambient.

Size, 1/2 x 3/8". EIA color coded. Wide first band distinguishes from composition resistors.

IMPORTANT: Specify Stk. No., Resistance and Tolerance on order. Values cannot be assorted for quantity price.

No.	Resistance	1-99 Each	100-249 Each	250-499 Each	500-999 Each
No. 14A5037. BWH — 5% Tol.					
0.24 Ohms to 9.1 Ohms		\$0.48	\$0.285	\$0.189	\$0.143
10 Ohms to 1000 Ohms		.30	.18	.12	.09
1100 Ohms to 1500 Ohms		.33	.198	.132	.099
No. 14A5041. BWH — 10% Tol.					
0.27 Ohms to 8.2 Ohms		.24	.144	.096	.064
10 Ohms to 1500 Ohms		.18	.108	.072	.058

### STANDARD STOCK VALUES

All resistances shown stocked in 5% Tolerance.

10% Tolerance stocked only in resistances listed in Bold Face.

| Ohms |
|------|------|------|------|------|------|------|
| 0.24 | 0.75 | 2.4  | 7.5  | 24   | 75   | 240  |
| 0.27 | 0.82 | 2.7  | 8.2  | 27   | 82   | 270  |
| 0.30 | 0.91 | 3.0  | 9.1  | 30   | 91   | 300  |
| 0.33 | 1.0  | 3.3  | 10   | 33   | 100  | 330  |
| 0.36 | 1.1  | 3.6  | 11   | 36   | 110  | 360  |
| 0.39 | 1.2  | 3.9  | 12   | 39   | 120  | 390  |
| 0.43 | 1.3  | 4.3  | 13   | 43   | 130  | 430  |
| 0.47 | 1.5  | 4.7  | 15   | 47   | 150  | 470  |
| 0.51 | 1.6  | 5.1  | 16   | 51   | 160  | 510  |
| 0.56 | 1.8  | 5.6  | 18   | 56   | 180  | 560  |
| 0.62 | 2.0  | 6.2  | 20   | 62   | 200  | 620  |
| 0.68 | 2.2  | 6.8  | 22   | 68   | 220  | 680  |

## IRC — CTS TRIMMER CONTROLS



### WIREWOUND TRIMMERS 2 WATT ± 10%

Fully enclosed, insulated nylon rotor, cross slot adjustment. 2 watt, linear taper, ± 10% tolerance. Both have printed circuit board terminals.

Type P115. Twist tab for PC board.					
Type 117 have rivet ear mountings.					
5, 10, 25, 50, 100, 250, 500, 1,000, 2,500, 5,000, 10,000 ohm.					
No. 14A8. P115. Your Choice	1-24	25-49	50-99	100 Up	
No. 14A9. 117. Each	\$1.25	\$1.00	\$0.75	\$0.60	

### MINIATURE CARBON TRIMMERS ¼ WATT ± 20%

U201 Series. 1/16" dia. Arrow indicator knob, slotted for front or rear screwdriver adjustment. Snap-in self supporting parallel to printed circuit board. Linear taper. X201 Series. As above with vertical mounting.

100	500	2,500	10,000	50,000	250,000	1 Meg.
250	1,000	5,000	25,000	100,000	500,000	
No. 14A10. U201. Your Choice	1-24	25-49	50-99	100 Up		
No. 14A19. X201. Each	\$0.39	\$0.35	\$0.33	\$0.29		

## MALLORY MLC SUB-MINIATURE CONTROLS

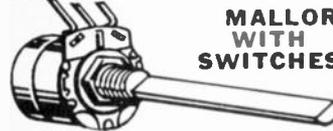
Only 1/2" diameter. 1/4" - 32 bushing with mounting nut, 1/8" steel shaft, 1 1/2" long, SPST switch rated 3 amp 125 VAC.



TYPE MLC LESS SWITCH							
Stk. No.	Type	Ohms	Taper*	Stk. No.	Type	Ohms Taper*	
14A933	MLC13L	1000	4	14A939	MLC15A	.1 Meg 1	
14A934	MLC252A	2500	1	14A940	MLC15L	.1 Meg 4	
14A935	MLC53A	5000	1	14A941	MLC25L	.2 Meg 4	
14A936	MLC53L	5000	4	14A942	MLC254L	.25 Meg 4	
14A937	MLC14L	10,000	4	14A1124	MLC55A	.5 Meg 1	
14A938	MLC54L	50,000	4				
Your Choice Each							
1-24	\$1.14	25-49	\$1.03	50-99	.95c	100-174	.86c
175-299	.81c	300-499	.76c				

TYPE MLC WITH SWITCH							
Stk. No.	Type	Ohms	Taper*	Stk. No.	Type	Ohms Taper*	
14A951	MLC222LS	2200	4	14A956	MLC55AS	.5 Meg 1	
14A952	MLC252AS	2500	1	14A957	MLC55LS	.5 Meg 4	
14A953	MLC53AS	5000	1	14A958	MLC16AS	1 Meg 1	
14A954	MLC53LS	5000	4	14A959	MLC16LS	1 Meg 4	
14A955	MLC14AS	10,000	1				
Your Choice Each							
1-24	\$1.86	25-49	\$1.67	50-99	\$1.55	100-174	\$1.40
175-299	\$1.33	300 Up	\$1.24				

KNOB for 1/8" shaft MLC Controls. No. 12B1205. Each .15c 25 Each .11c 100 Each .10c



## MALLORY VOLUME CONTROLS WITH SWITCHES

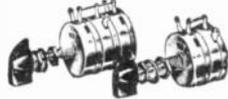
Top quality American made controls available at lower prices! Smooth action. Switch rated 3 A. @ 125 V. AC. Nylon shaft easily cut to proper length with wire cutters. Rotary type has 1/4" shaft. Push-pull has 1/8" shaft.

WITH ROTARY SWITCH				WITH PUSH-PULL SWITCH			
Stk. No.	Resistance	Each	10 Ea.	Stk. No.	Resistance	Each	10 Ea.
14A1101	500K Ohm	\$0.89	\$0.79	14A1103	500K Ohm	\$1.19	\$0.99
14A1100	1 Meg	.89	.79	14A1102	1 Meg	1.19	.99

1-INCH BLACK KNOBS for above. No. 12A2026. With 3/8" brass insert and screw for push-pull. Each .23c 10 Each .20c 100 Each .17c No. 12A692. With 1/4" molded hole and screw for rotary. Each .13c 25 Each .12c 100 Each .10c

## MALLORY "L", "T" & "L-A" PADS

Standard 15 Audio Watts (4 watts DC). L&T pads 1 3/8" dia.; L pad is 1 3/8" deep; T pad is 1 1/4" deep. Both have 1/4" shaft. 2" long with 3/8" bushing. All are complete with mounting hardware, knob, and dial plate.



15-WATT "L" PADS								
Stk. No.	Type	Resistance	Stk. No.	Type	Resistance	Stk. No.	Type	Resistance
14A1104	L-4	4	14A1125	L-250	250	14A1109	L-2000	2000
14A1105	L-8	8	14A1107	L-500	500	14A1110	L-4000	4000
14A1106	L-15	15	14A1108	L-1000	1000			
Choice		1-9	10-24	25-49	50-99	100-249	250-499	
Each		\$2.73	\$2.59	\$2.46	\$2.28	\$2.05	\$1.82	

15-WATT "L-A" PADS WITH 1" BUSHING, 1 1/2" SHAFT								
Stk. No.	Type	Resistance	Stk. No.	Type	Resistance	Stk. No.	Type	Resistance
14A1118	L8A	8	14A1127	L16A	16			
Choice		1-9	10-24	25-49	50-99	100-249	250-499	
Each		\$2.85	\$2.71	\$2.57	\$2.38	\$2.14	\$1.90	

15-WATT "T" PADS								
Stk. No.	Type	Resistance	Stk. No.	Type	Resistance	Stk. No.	Type	Resistance
14A1111	T-4	4	14A1113	T-50	50	14A1116	T-500	500
14A1112	T-8	8	14A1114	T-100	100	14A1117	T-600	600
14A1121	T-15	15	14A1126	T-250	250			
Choice		1-9	10-24	25-49	50-99	100-249	250-499	
Each		\$3.54	\$3.36	\$3.19	\$2.95	\$2.66	\$2.36	

### MALLORY STEREO L-PADS WITH 1-INCH BUSHING

Two L pads in tandem for stereo level control. Bushing 3/8"-32 x 1". Shaft 1/4" dia. x 1 1/2" long. With nuts, washers and deluxe "Level" dial supplied.

Stk. No.	Type	Impedance	Stk. No.	Type	Impedance	
14A1119	LL8	8 Ohms	14A1120	LL16	16 Ohms	
Choice		1-9	10-24	25-49	50-99	
Each		\$5.70	\$5.42	\$5.13	\$4.75	
					100-249	250-499
					\$4.28	\$3.80

## IRC — CTS TYPE Q CONTROLS

### CONTROLS LESS SWITCH



1/8" diameter with universal 3" shaft. Meets most every replacement requirement. Use type 76 switches. Add multi-sections to assemble dual or multisection controls. Shpg. wt. 4 ozs.

Stk. No.	IRC Type	Ohms Res.	Taper
14C377	Q11-201	250	A
14B416	Q11-103	500	A
14A417	Q11-108	1000	A
14C379	Q11-109	1500	A
14C380	Q11-110	2000	A
14C381	Q13-111	2500	C
14B419	Q11-112	3K	A
14B421	Q11-114	5K	A
14B425	Q11-116	10K	A
14B426	Q13-116	10K	C
14A399	Q11-119	20K	A

14B432	Q11-120	25K	A
14B435	Q11-123	50K	A
14B436	Q13-123	50K	C
14C383	Q11-125	75K	A

14B440	Q11-128	100K	A
14B441	Q13-128	100K	C
14B444	Q11-130	250K	A
14B445	Q13-130	250K	C

14B451	Q11-133	500K	A
14B452	Q13-133	500K	C
14B454	Q14-133	500K	D
14B456	Q11-137	1 Meg.	A

14B457	Q13-137	1 Meg.	C
14A395	Q11-139	2 Meg.	A
14B463	Q13-139	2 Meg.	C
14A394	Q11-239	2.5 Meg.	A

14A393	Q11-140	3 Meg.	A
14B470	Q11-141	5 Meg.	A
14B471	Q11-143	10 Meg.	A

CHOICE EACH \$1.39 6 @ EACH \$1.23

EXPLANATION OF IRC CONTROL TAPERS: "A" Linear; "C" Logarithmic for audio; "M" tapped logarithmic; "D" right hand semi-logarithmic for bias, contrast and picture control.

### MULTISECTIONS



Attach to the standard Q control to make dual or multisection controls. Use 76 snap on switch if needed. Wt. 2 ozs.

Stk. No.	IRC Type	Ohms Res.	Taper
14B183	M11-116	10K	A
14B200	M11-120	25K	A
14B201	M11-123	50K	A
14B203	M13-128	.1 Meg.	C
14B204	M11-130	.25 Meg.	A
14B206	M11-133	.5 Meg.	A
14B207	M13-133	.5 Meg.	C
14B208	M11-137	1.0 Meg.	A
14B209	M13-137	1.0 Meg.	C
14B210	M11-139	2.0 Meg.	A
14B319	M13-139	2.0 Meg.	C
14B212	M11-141	5.0 Meg.	A

CHOICE EACH \$1.79 6 @ EACH \$1.62

### SNAP-ON SWITCHES

Type 76-1 S.P.S.T. Switch No. 14B506 EACH .75c Type 76-2 D.P.S.T. Switch No. 14B507 EACH .75c

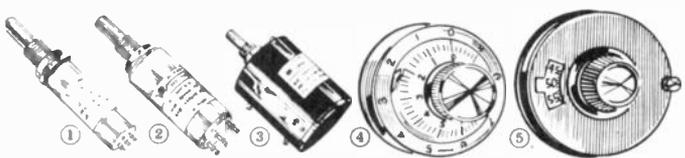
## MALLORY PUSH-PULL REPLACEMENT SWITCHES



Replaces push-pull AC switch sections of linear and dual controls. Rated 6 amp. 125VAC. Easy to replace.

Stk. No.	Type	Each	6 Each
14A1150	KR8M	69c	60c
14A1151	KR9M	99c	90c

## IRC MULTI-TURN PRECISION POTENTIOMETER AND "REVODEX" DIALS



Precision high reliability multi-turn controls. Features close resistance and linearity tolerance.

① Model 5000. Sub-miniature precision pot, 10-turn, 1.5 watts, only 1/2" dia., 1 1/2" L. Res. tolerance 5%, linearity tol. .5%. 1/4" shaft, 1/2" long. Available in following values: 100, 500, 1K, 5K, 10K, 25K, and 50K ohms. No. 14A1128. Model 5000 1-9 Ea. \$10.00 10-24 Ea. \$9.50 25-49 Ea. \$9.00 50-99 Ea. \$8.50 100 Up. \$8.00

② Model 7500. Miniature precision pot, 10-turn, 3 watts, 3/4" dia., 1 1/2" long. Res. tolerance 5%, linearity tol. 0.5%. 1/4" shaft, 1/2" long. Available in following values: 100, 250, 500, 1K, 5K, 10K, 25K, 50, 100K ohms. No. 14A1129. Model 7500 1-9 Ea. \$12.50 10-24 Ea. \$11.88 25-99 Ea. \$11.25 100 Up. \$10.63

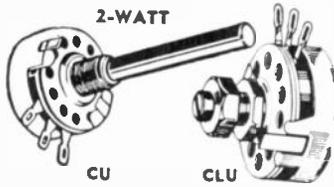
③ Model HD150. Standard, 10-turn rugged pot, rated at 5 watts, case size is 1 1/2" dia. x 2" L. Resistance tolerance 3%, linearity tol. 0.25%. 25" shaft, .405" long. Available in following values: 500, 1K, 5K, 10K, 20K, 30K, 50K, 100K ohms. No. 14A1130. Model HD150 1-9 Ea. \$12.00 10-24 Ea. \$11.40 25-49 Ea. \$10.80 50-99 Ea. \$10.20 100 Up. \$9.60

④ Full Range "Revodex" Dials. For use with above. Gives accurate readings to one part in 1000. Finger tip locking action locks dial without shifting the reading. Body of dial mounts directly on pot bushing and knob attaches to shaft. Dia. 1", pot shaft dia. 1/4". No. 14A1131 Model RD-412—Black Finish. No. 14A1132. Model RD-462—Clear Finish. Choice, 1-9 Ea. \$8.25 10-24 Ea. \$7.84 25-99 Ea. \$7.43 100-249 Ea. \$7.01

⑤ Direct Reading "Revodex" Dial. Even when used above eye level 1 7/8" size gives a direct reading with 3 numbers grouped for fool-proof reading. Full range 000 to 999 to indicate full ten turns. Knobs are secured directly to pot shaft for virtually no backlash. Dia. 1 7/8", pot shaft dia. 1/4". No. 14A1133. Model RD-1—Black Finish. No. 14A1134. Model RD-6—Clear Finish. Choice, 1-9 Ea. \$5.75 10-24 Ea. \$5.46 25-49 Ea. \$5.18 50-99 Ea. \$4.89 100 Up. \$4.60



## OHMITE AB MOLDED COMPOSITION CONTROLS



Used in commercial and military electronic applications where highest quality and dependability are most important. Rated at 2 watts at 70° C. ambient. Resistor element is a thick, solid molded ring for longer life and smoother operation. All units are dust and splash proof, fungus and corrosion resistant, meet all specs. of MIL-R-94. Type CMU military designation RV4N, CLU, RV4L. All are 1 1/2" dia., 1/4" dia. shafts. CU has 2" round shaft, CMU has 3/8" slotted shaft. CLU has 5/8" slotted shaft with locking nut. Wt. 3 oz. Linear taper.

LINEAR TAPER, TYPE CU				LINEAR TAPER, TYPE CLU			
Stk. No.	Resistance	Ohmite No.	Stk. No.	Resistance	Ohmite No.	Stk. No.	Resistance
14A866	50 Ohms	CU5001	14B827	50 Ohms	CLU5001	14A909	50 Ohms
14A865	100 Ohms	CU1011	14B828	100 Ohms	CLU1011	14A910	100 Ohms
14A983	150 Ohms	CU1511	14A947	150 Ohms	CLU1511	14A971	150 Ohms
14A864	250 Ohms	CU2511	14B829	250 Ohms	CLU2511	14A912	250 Ohms
14A984	350 Ohms	CU3511	14A948	350 Ohms	CLU3511	14A972	350 Ohms
14A863	500 Ohms	CU5011	14B830	500 Ohms	CLU5011	14A913	500 Ohms
14B985	750 Ohms	CU7511	14A949	750 Ohms	CLU7511	14A973	750 Ohms
14A862	1,000 Ohms	CU1021	14B831	1,000 Ohms	CLU1021	14A914	1,000 Ohms
14A986	1,500 Ohms	CU1521	14A950	1,500 Ohms	CLU1521	14A974	1,500 Ohms
14A861	2,500 Ohms	CU2521	14B832	2,500 Ohms	CLU2521	14A915	2,500 Ohms
14A987	3,500 Ohms	CU3521	14A991	3,500 Ohms	CLU3521	14A975	3,500 Ohms
14A860	5,000 Ohms	CU5021	14B833	5,000 Ohms	CLU5021	14A916	5,000 Ohms
14A988	7,500 Ohms	CU7521	14A992	7,500 Ohms	CLU7521	14A976	7,500 Ohms
14A859	10,000 Ohms	CU1031	14B834	10,000 Ohms	CLU1031	14A917	10,000 Ohms
14A989	15,000 Ohms	CU1531	14A993	15,000 Ohms	CLU1531		
14A858	25,000 Ohms	CU2531	14B835	25,000 Ohms	CLU2531		
14A990	35,000 Ohms	CU3531	14A994	35,000 Ohms	CLU3531		
14A857	50,000 Ohms	CU5031	14B836	50,000 Ohms	CLU5031		
14A943	75,000 Ohms	CU7531	14A995	75,000 Ohms	CLU7531		
14A856	.10 Meg	CU1041	14B837	.10 Meg	CLU1041		
14A944	.15 Meg	CU1541	14A996	.15 Meg	CLU1541		
14A855	.25 Meg	CU2541	14B838	.25 Meg	CLU2541		
14A945	.35 Meg	CU3541	14A997	.35 Meg	CLU3541		
14A854	.5 Meg	CU5041	14B839	.5 Meg	CLU5041		
14A946	.75 Meg*	CU7542	14A998	.75 Meg*	CLU7542		
14A853	1.0 Meg*	CU1052	14B840	1.0 Meg*	CLU1052		
14A852	2.5 Meg*	CU2552	14B841	2.5 Meg*	CLU2552		
14A851	5.0 Meg*	CU5052	14B842	5.0 Meg*	CLU5052		

Choice	1-9	10-49	50-99	100 Up
Each	\$1.95	\$1.75	\$1.62	\$1.46

Choice	1-9	10-49	50-99	100 Up
Each	\$2.55	\$2.29	\$2.12	\$1.90

### TYPE CMU

14A909	50 Ohms	CMU5001	14A977	15,000 Ohms	CMU1531
14A910	100 Ohms	CMU1011	14A918	25,000 Ohms	CMU2531
14A971	150 Ohms	CMU1511	14A978	35,000 Ohms	CMU3531
14A912	250 Ohms	CMU2511	14A919	50,000 Ohms	CMU5031
14A972	350 Ohms	CMU3511	14A979	75,000 Ohms	CMU7531
14A913	500 Ohms	CMU5011	14A920	.1 Meg	CMU1041
14A973	750 Ohms	CMU7511	14A980	.15 Meg	CMU1541
14A914	1,000 Ohms	CMU1021	14A921	.25 Meg	CMU2541
14A974	1,500 Ohms	CMU1521	14A981	.35 Meg	CMU3541
14A915	2,500 Ohms	CMU2521	14A922	.5 Meg	CMU5041
14A975	3,500 Ohms	CMU3521	14A982	.75 Meg*	CMU7542
14A916	5,000 Ohms	CMU5021	14A923	1.0 Meg*	CMU1052
14A976	7,500 Ohms	CMU7521	14A924	2.5 Meg*	CMU2552
14A917	10,000 Ohms	CMU1031	14A925	5.0 Meg*	CMU5052

\*Indicates 20% tolerance, all others are 10%.

Choice	1-9	10-49	50-99	100 Up
Each	\$1.95	\$1.75	\$1.62	\$1.46

CS-1 S.P.S.T. Switch for above  
No. 14A875 ..... 66c

## MALLORY 3-WATT WIRE-WOUND CONTROLS

Used for AGC, convergence, hum-balance, etc. Cross-slot adjustment or use plug-in shafts below. Rated 3 watts @ 40° C, 250° mechanical rotation. 20% tolerance. 900 VAC rms breakdown.



MR-T 3-WATT TAB MOUNT				MR-F 3-WATT FLANGE MOUNT			
Stk. No.	Resistance	Stk. No.	Resistance	Stk. No.	Resistance	Stk. No.	Resistance
14A1153	10	14A1156	250	14A1159	2500	14A1162	15
14A1154	50	14A1157	500	14A1160	5000	14A1163	100
14A1155	100	14A1158	1000	14A1161	10,000	14A1164	250

Twist-tabs for mounting on PC board or chassis.

YOUR CHOICE	10 LOTS	79c
EACH	.....85c	EACH

YOUR CHOICE	10 LOTS	79c
EACH	.....85c	EACH

SHAFTS FOR MR CONTROLS  
FMS knurled and slotted nylon. Plug into either end of MR control.  
No. 14A1169. MRS 1250. 1/4" dia. x 1 1/4". Choice ..... 15c 10 @ ..... 12c  
No. 14A1170. MRS 1563. 1/4" dia. x 1 1/4". Choice ..... 15c 10 @ ..... 12c

## MALLORY STEREO LEVEL CONTROL

Controls volume on stereo speakers. Rated 10 watts audio. With nuts, washers, dial and knob. Bushing 3/8" x 32 x 1".  
No. 14A1152. RR50. Each ..... \$2.10 10 Each ..... \$2.00

## REAR SEAT SPEAKER CONTROLS

For switching between dual speakers such as auto rear seat and front seat speakers; TV, radio, etc. Operates either speaker separately or both together.  
No. 19A7108. Centralab PK-300. EACH ..... \$1.05  
No. 19A7187. Wired Fader Control Kit. For intermixing front and rear speakers. Shpg. Wt. 3 oz. Net Each ..... \$1.39

## CENTRALAB RV4 HOT MOLDED POTENTIOMETERS



Model 12. Meets all requirements of MIL-R-94 specifications. Designed for long life and noise-free operation. Totally enclosed and sealed against moisture and dirt. Tolerance 50 ohm thru 500K ± 10% above 500K ± 20% Linear taper. Rated 2.25 watts at 70° C. Size 1 1/4" dia., 3/8" deep.

(1) Type HMS has standard 3/8" bushing with 1/4" slotted shaft 2 1/2" long. Meets MIL designation RV4N.  
1-9 Ea. 10-49 Ea. 50-100 Ea. 101-250 Ea. 250 Up, Ea.  
No. 14A217 ..... \$1.90 \$1.55 \$1.45 \$1.25 \$1.10

(2) Type HML has 3/8" locking type bushing with slotted shaft 5/8" long. Meets MIL designation RV4L.  
No. 14A216 ..... \$2.10 \$1.80 \$1.50 \$1.30 \$1.15

STOCKED IN FOLLOWING RESISTANCE VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Meg
50	250	1,000	5,000	25,000	100,000	500,000	2.5
100	500	2,500	10,000	50,000	250,000	1 Meg	5

Order By Stock Number and Resistance Value

## CENTRALAB 5-WATT WIRE-WOUND CONTROLS

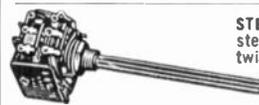


Packs 5-watt capacity into a 2 watt size unit; linear taper, 1 1/2" dia. x 3/8" deep. Model WW has full round aluminum shaft 1/4" dia. x 3" long. Model WN has fingertip knurled, slotted shaft 1/4" dia. x 3/4" long. Linear taper. Breakdown, 900 V. AC rms to ground. WN or WW prefix indicates manufacturer's number. Shpg. wt. 4 ozs.

Ohms	WW or WN								
1	010	15	150	100	101	1500	152	15K	153
2	020	20	200	200	201	2000	202	20K	203
3	030	25	250	250	251	2500	252	25K	253
4	040	30	300	300	301	3000	302	30K	303
5	050	40	400	400	401	4000	402	40K	403
6	060	50	500	500	501	5000	502	50K	503
8	080	60	600	750	751	7500	752	75K	753
10	100	75	750	1000	102	10K	103	100K	104

Specify Stock No. 14B303 for WW, 3 inch shaft.  
Specify Stock No. 14A1099 for WN, 3/4" shaft.

Values	1-9 Ea.	10-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.
1 thru 7500 ohms	\$1.32	\$1.19	\$1.10	\$1.05	\$0.99
10,000 thru 30,000 ohms	1.59	1.43	1.33	1.26	1.19
40,000 and 50,000 ohms	2.01	1.81	1.68	1.59	1.51
75,000 and 100,000 ohms	2.46	2.22	2.05	1.95	1.85



STEREO TWIN COMPENTROLS — Designed especially for stereo preamplifiers and stereo control centers, these twin compentrols provide synchronized compensation to both channels in a stereo system. Complete with 3" shaft, mtg. hardware (less switch) Shpg. wt. 6 oz.

Stk. No.	Factory No.	Front Ohms	Rear Ohms	Net Each	5 Each
14A348	C2-70	1 Meg.	1 Meg.	\$3.30	\$2.97

## VOLUME CONTROL ACCESSORIES

- 14A186. Mounting Bracket. 2 1/2" centers. Each ..... 5c
- 14A189. Extension Shaft. 1/4"x4" with 1/2" flat. Each 57c 10 Ea. 51c
- Dial Plates. Calibrated 0-10, matching rotation of volume controls and rheostat. No. 14A160. For Wire-Wound Controls. Your Choice ..... 21c 10 Each 19c  
No. 14A162. For Carbon Controls. Each ..... 21c 10 Each 19c
- Wall Outlet Plate. Fit standard outlet boxes. Center hole fits any 3/8" bushing. Size 4 1/2" L. x 2 3/4" wide.  
No. 14A218. Brushed Gold Anodized. Choice ..... 90c 10 Each 81c  
No. 14A220. Brushed Aluminum Anodized finish. Each ..... 90c 10 Each 81c
- Adapter Bushing. For mtg. above controls in thick panels or enclosures. Fits any control with standard 3/8" bushing and extends bushings 1".  
No. 14A223. Type AK-31. Brass Adapter. Net Each 45c 10 Each ..... 41c

## LEVITON APPLIANCE SWITCHES



- SINGLE POLE ROTARY  
For lamp and appliance repairs SPST switch. Rated 3 amp—125 volt; 1 amp—250 volt. 3/8" dia. shank, 3/4" long. Black phenolic knob, 6" wire leads. Wt. 2 ozs.  
No. 19A7023. 574T. Each ..... 33c 10 Lots, Each ..... 26c
- 3 POSITION ROTARY  
Rated 3 amps at 125 volts. Bakelite case 1" dia. by 3/8" high. Shank 3/8" dia. by 3/8" long. Metal knob, 6" wire leads.  
No. 19A7106. 582. Each ..... 64c 10 Lots, Each ..... 58c
- 4 POSITION ROTARY  
For 3 light floor and desk lamps. Rated 6 amps at 125 volts. Round metal case and knob. 1 1/4" dia. x 1 1/4" behind panel. 3/8" long shank.  
No. 19A7105. 683. Each ..... 73c 10 Lots, Each ..... 59c
- SINGLE POLE PUSH-BUTTON  
SPST. Rated 3 amp at 125 volts. Bakelite case 1" long x 5/8" wide x 1 1/4" high. Shank, 3/8" dia. by 3/8" long. 6" wire leads. Plastic 3/32" dia. push button. Shp. wt. 2 ozs.  
No. 19A7024. 575. Each ..... 38c 10 Lots, Each ..... 31c
- FLUORESCENT LAMP STARTER SWITCH  
For use with single 15 to 40 W. lamps. Eliminates starter from circuit. Measures 1 1/4" dia. by 3/4" high. Shank 3/8" dia. by 3/4". 6" wire leads. Phenolic push button. Shpg. wt. 2 oz.  
No. 19A7025. 382. Each ..... 71c 10 Lots, Each ..... 57c

# P&B, LINEMASTER, GRAYHILL, SWITCHCRAFT SWITCHES

## POTTER & BRUMFIELD PRECISION SWITCHES

UL and CSA listed. Directly interchangeable with competitive types shown. Improved design provides longer life, precision action, trouble-free service. For detailed specifications request Potter & Brumfield Catalog B-A No. 16A1151—FREE.

### GENERAL PURPOSE SWITCHES

A1G1. SPDT. 15 amps—480 V AC; ¼ HP 250 VAC.

Stock No.	Fig. No.	G1 Type	Micro. Equiv.	Oper. Force Ozs.	1-9 Each
19A857	1	111-1	BZ-2R	9-13	\$1.67
19B658	2	112-1	BZ-2RS	9-13	2.15
19B659	3	113-1	BZ-2RD	9-13	2.20
19B660	4	114-1	BZ-2RQ1	9-13	3.75
19B661	5	115-1	BZ-2RL	5 Max.	1.90
19B662	6	116-1	BZ-2RL2	5 Max.	2.50
19A663	7	117-1	BZ-2RW80	2½ Max.	2.15
19A664	8	117-1-3	BZ-2RW863	1 Max.	2.40
19B666	7	177-1	BZ-2R4	1 Max.	2.15
19B667	9	119-1	BZ-2RW822	6 Max.	2.75
19B668	10	117-1-2	BZ-2RW825	8 Max.	3.25
19B669	9	118-1	BZ-2RW82	3½ Max.	2.75
19B670	1	111-8	BZ-2R-A2	9-13	1.80
19B671	2	112-8	BZ-2RS-A2	9-13	2.30
19B672	3	113-8	BZ-2RD-A2	9-13	2.25
19B673	4	114-8	BZ-2RQ1-A2	9-13	3.85
19A674	11	114-8-1	BZ-2RQ18-A2	9-13	6.65
19B675	5	115-8	BZ-2RL-A2	5 Max.	2.10
19B676	6	116-8	BZ-2RL2-A2	5 Max.	2.65
19B677	7	117-8	BZ-2RW80-A2	2½ Max.	2.20
19C614	9	119-8	BZ-2RW822-A2	6 Max.	2.80

### MINIATURE PRECISION SWITCHES

A1M1. SPDT except 311-1 is SPST NO. Meets UL requirements for 15 amps—250 VAC, ¼ HP 125/250 VAC.

Stock No.	Fig. No.	M1 Type	Micro. Equiv.	Oper. Force Ozs.	1-9 Each
19A626	12	111-B	V3-1	6-14	\$1.10
19A627	12	111-1	V3-19	6-14	1.04
19A629	14	111-2	V3-15	6-14	1.04
19A631	13	311-1	V3-32	6-14	.96
19A634	22	311-B	V3-23	6-14	1.00
19B639	15	131-B	V3-601	6-14	1.50
19B678	17	117-6	V3-L-1-D8	14 Max.	1.05
19B680	16	117-6-1	V3-L-2-D8	8 Max.	1.05
19B681	18	117-6-2	V3-L-5-D8	8 Max.	1.05
19B682	19	117-6-3	V3-L-6-D8	4 Max.	1.05
19B683	20	118-6	V3-L-4-D8	8 Max.	1.25
19A684	21	119-6	V3-L-3-D8	14 Max.	1.25

A1M2. Low operating force—SPDT. Meets UL requirements for ½ HP 125 VAC, 10 amps 250 VAC.

19B640	15	171-B	V3-101	8 Max.	\$1.10
19B643	12	171-1	V3-119	8 Max.	1.04

A1G2. SPDT 20 amps, 480 VAC; 2 HP 250 VAC; 10 amps 125 V when controlling tungsten filament lamp loads on AC circuits.

Stock No.	Fig. No.	G2 Type	Micro. Equiv.	Oper. Force Ozs.	1-9 Each
19A615	1	111-8	BA-2R-A2	14-22	\$1.80
19A616	3	113-8	BA-2RB-A2	14-22	2.25
19A617	4	114-1	BA-2RQ1	14-22	4.10
19A618	4	114-8	BA-2RQ1-A2	14-22	3.85
19A619	5	115-1	BA-2RL	9 Max.	2.25
19A620	5	115-8	BA-2RL-A2	9 Max.	2.10
19A622	6	116-8	BA-2RL2-A2	9 Max.	2.65
19A623	7	117-8	BA-2RV-A2	2½ Max.	2.30
19A624	9	118-1	BA-2RV2	2½ Max.	3.10
19A625	9	118-8	BA-2RV2-A2	2½ Max.	2.90

### SUB-MINIATURE PRECISION SWITCHES

A1M4. SPDT. Meets UL requirements. 10 amps, 250 VAC.

19D636	15	191-B	V3-26	7-12	\$1.35
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A1S1. SPDT. Meets UL requirements for 5 amps, 250 VAC.

19B646	24	111-1	1SM1	3-5	\$1.20
19B647	24	111-3	1SM1-T	3-5	1.20
19B648	24	131-1	11SM1	3-5	1.20
19A651	23	131-3	11SM1-T	3-5	1.20
19A652	24	131-1	11SM1	7 Max.	1.20
19A7225	25	115-1-11	11SM1	7 Max.	1.65
19A653	26	116-1-11	11SM2	7 Max.	2.00
19A654	26	116-3-11	11SM2-T	7 Max.	2.00
19A655	24	121-1	1SM3	3-5	1.20
19A656	24	141-1	11SM3	3-5	1.20

A1S5. SPDT. Gold contacts. ½ amp. 28 VDC.

19B649	23	151-1	1SM23	3-5	\$1.45
19B650	24	161-1	11SM23	3-5	1.70

**QUANTITY DISCOUNT SCHEDULE**—Deduct 10% for 10-19 pieces; 20% for 20-49 pieces; 36% for 50-99 pieces.

### SWITCHCRAFT BOX SWITCHES

Miniature momentary push-button switch ¼" sq. Depth 1¼" max. behind panel. Molded plastic body. Snap-in front panel mounting in .615" sq. hole. ¾" button stroke. Rated 250 MA, 30 watts max. AC.

Stock No.	Mfg. No.	Button	Contacts	Prices Each				
				1-24	25-49	50-99	100-249	250-499
19A7109	BX-01-1	Red	SPST-NO	\$1.95	\$1.79	\$1.63	\$1.30	\$1.24
19A7110	BX-02-1	Black	SPST-NO	1.95	1.79	1.63	1.30	1.24
19A7111	BX-01-6	Fed	DPDT	2.25	2.06	1.88	1.50	1.43

## LINEMASTER TOP QUALITY FOOT SWITCHES



① Model T51-S "Treadlite." Compact, rugged treadle switch. SPDT momentary contacts rated 7 amps at 125-250 VAC. ¼ HP 125 VAC. Has heavy rubber tread and skidproof base pad. Durable black finish. Size 3½x2½x1". Shpg. wt. 7 ozs. No. 19A7091. 1-9 Ea. \$2.75 10-19 Ea. \$2.47 20-49 Ea. \$2.20

② Model 491-S "Compact." Lightweight momentary contact switch with SPDT contacts rated 10 amps at 125 VAC. ½ HP, 115 VAC. Has steel housing, black wrinkle finish, skid-proof base. Size 2½x2½x1½". Wt. 8 ozs. No. 19A7092. 1-9 Ea. \$3.25 10-19 Ea. \$2.92 20-49 Ea. \$2.60

③ Model 632-S "Clipper." Momentary contact heavy duty switch. SPDT contacts take 20 amps at 125-250 VAC. 1 HP 115-230 VAC. Cast iron housing has anti-skid pad, black wrinkle finish, mtg. holes. Size 4½x3½x1½". Shpg. wt. 2½ lbs. No. 19A7093. 1-9 Ea. \$8.25 10-19 Ea. \$7.42 20-49 Ea. \$6.60

④ Model 632-O. As above, but maintains contact until again actuated. Wt. 2½ lbs. No. 19A7094. 1-9 Ea. \$11.00 10-19 Ea. \$9.90 20-49 Ea. \$8.80

⑤ Model L-2-S Lektro-Lock. Teeter-totter principle. Mechanical interlock prevents both sides being operated at same time. Each side SPDT momentary. When pressure is released, switch returns to normal. May be wired normally open or normally closed on each side. 15 A. 125-250 VAC. Black wrinkle metal housing. 5x2½x1½". Wt. 10 ozs. No. 19A7095. 1-9 Ea. \$5.80 10-19 Ea. \$5.22 20-49 Ea. \$4.64

⑥ Model 121-S Junior Footswitch. An ideal unit for office machines and shop equipment. Light pressure required. Popular for knee operation. Momentary SPDT, 15 amp 125-250 VAC. Aluminum housing 5½x3¾x1¼". Wt. 1 lb. No. 19A7096. 1-9 Ea. \$8.25 10-19 Ea. \$7.42 20-49 Ea. \$6.60



### GRAYHILL PUSH SPST SWITCHES

#### ① SILENT ACTION SPST SWITCH

Momentary. Normally open or normally closed. Rating 1 ampere, 115 V. AC. ¼-32 threaded bushing, ¼" O.D., 1½" overall length including solder type terminals. Shpg. wt. 3 ozs.

No. 19A7027. #4001. N.O. Red. 1-49 Each \$1.00 50-99 Each .75c  
No. 19A7028. #4002. N.C. Black. 1-49 Each \$1.00 50-99 Each .75c

#### ② SUB-MINIATURE SILENT ACTION SPST SWITCH

Momentary. Normally open or normally closed. Rated at 1 ampere, 115 V. AC. Button and housing molded phenolic. ¼-32 threaded bushing, ⅜" O.D., ¾" overall length including solder terminals.

No. 19A7029. #30-1. N.O. Red. 1-49 Each .95c 50-99 Each .71c  
No. 19A7030. #30-2. N.C. Black 1-49 Each .95c 50-99 Each .71c

#### ③ MINIATURE PUSH SPST SILENT ACTION SWITCH

Momentary, normally open. Rated ¼ amp., 115 V. AC. Button and housing molded phenolic. ¼-32 threaded bushing, ½" O.D. 1½" overall length including solder terminals. Shpg. wt. 2 oz.

No. 19A7031. Type 23-1. Red. 1-49 Each \$1.10 50-99 Each .83c

#### ④ SNAP ACTION SPST SWITCH

Momentary. Normally open. Rating: 10 amperes, 115 V. AC. ¼-32 threaded bushing. ⅞" O.D., 1¾" overall length including solder type terminals. Shpg. wt. 3 oz.

No. 19A7032. #2201. N.O. Red. 1-49 Each \$2.40 50-99 Each \$1.80

#### ⑤ BUTTON GUARD

Use with series 2000, 4000. Fits ¼-32 thread.

No. 19A7033. Type 10C-1015 1-49 Each .30c 50-99 Each .23c

#### ⑥ DECORATIVE MOUNTING NUT

Use with series 2000, 4000. ¼-32 thread.

No. 19A7034. Type 7C1040 1-49 Each .20c 50-99 Each .15c

## 1 SWITCHCRAFT "TINY SWITCH" & "LITTEL-SWITCHES"

MOMENTARY MINIATURE PUSH-BUTTON SWITCHES  
"Little" 200 Series mounts in ⅜" hole. Black button.  
"Tiny" 950 Series mounts in ¼" hole. Red button.



Stock No.	Type	Action	Prices Each			
			1-24	25-49	50-99	100-249
19A7038	201	SPST-NO	\$0.60	\$0.55	\$0.50	\$0.40
19A7039	202	SPST-NC	.60	.55	.50	.40
19A7040	203	SPDT	.69	.63	.58	.46
19A7043	951	SPST-NO	.60	.55	.50	.40
19A7044	952	SPST-NC	.60	.55	.50	.40
19A7045	953	SPDT	.69	.63	.58	.46

## 2 "BUTTON SWITCH" SWITCHES

### SMALL MOMENTARY PUSH-BUTTON SWITCHES

Metal housing. Mounts in ¼" hole. Rated 250 MA AC.

Stock No.	Type	Action	Prices Each			
			1-24	25-49	50-99	100-249
19A7041	903-Red	SPDT	\$0.87	\$0.80	\$0.73	\$0.58
19A7042	913-Black	SPDT	.87	.80	.73	.58

## EAGLE MOMENTARY PUSH-BUTTON SWITCH

Normally open. Ideal for signal bells, lights, buzzers, etc. Pearl button with a nickel plated outer ring. Screw terminals. Snap mounts in ⅜" dia. hole. Depth of shank ½". Eagle No. 188. Shpg. wt. 2 oz.

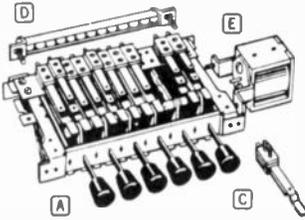
No. 19A7026. 1-9 Ea. \$5c 10-99 Ea. \$4c 100 up Ea. \$3c



# SWITCHCRAFT MULTI-SWITCH

## (A) SERIES 7000 NON-ILLUMINATED FRAMES

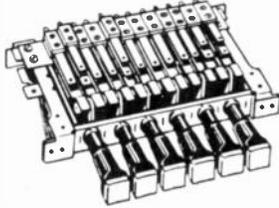
Heavy gauge steel switch frames mount on panels up to 3/8" thick with 3 1/2" depth behind the panel. Round brown push-buttons supplied each station, plus extra red button for use when switch requires release station. 5/8" center steel plunger .050" x .187" accepts standard push-on-buttons and "Glo-Buttons". Standard plunger is 1 1/8" long. Series 7000 Multi-Switch frames are available from 1 to 37 stations, only the most commonly used frames are listed below. For more information request Switchcraft Catalog S-306 B-A Stock No. 19A7113 FREE.



Stock No.	Switchcraft Part No.	No. of Stations	Prices Each			
			1-9	10-24	25-49	50-99
19A7114	7200	2	\$7.48	\$5.61	\$5.14	\$4.68
19A7143	7400	4	10.56	7.92	7.26	6.60
19A7144	7600	6	14.08	10.56	9.68	8.80
19A7145	7800	8	17.60	13.20	12.10	11.00
19A7146	71000	10	21.12	15.84	14.52	13.20
19A7147	71200	12	24.64	18.48	16.94	15.40

## SERIES 21000 ILLUMINATED FRAMES

Similar in switching functions and characteristics to non-illuminated Multi-Switch, but with these outstanding features: modern square button design with bright uniform front and side illumination. Two lamp voltages: 6 V. and 28 V. Buttons with white jewels and white diffusers are furnished for switching and release stations. Standard frames listed below provide "L" type lighting (push-buttons light in "IN" position). Supplied less lamps and stack switches. Use 327 or 328 lamp shown on page 121.



Stock No.	Switchcraft Part No.	No. of Stations	Prices Each			
			1-9	10-24	25-49	50-99
19A7115	21200	2	\$12.76	\$9.57	\$8.77	\$7.98
19A7148	21400	4	21.56	16.17	14.82	13.48
19A7149	21600	6	30.36	22.77	20.87	18.98
19A7150	21800	8	39.20	29.40	26.95	24.50
19A7151	211000	10	48.40	36.30	33.28	30.25
19A7152	212000	12	57.20	42.90	39.33	35.75

## (D) LOCK-OUT BAR "K" SERIES

Prevents operation of more than one switching station at a time. Mounts on back of standard Multi-Switch Series 7000, 21000. Available from 2 to 37 stations for a single frame.

Stock No.	Switchcraft Part No.	No. of Stations	Prices Each			
			1-9	10-24	25-49	50-99
19A7116	K-02	2	\$2.64	\$1.98	\$1.82	\$1.65
19A7153	K-04	4	2.88	2.16	1.98	1.80
19A7154	K-06	6	3.08	2.31	2.12	1.93
19A7155	K-08	8	3.32	2.49	2.28	2.08
19A7156	K-10	10	3.76	2.82	2.59	2.35
19A7157	K-12	12	4.20	3.15	2.89	2.63

## (E) SOLENOID RELEASE—"J" SERIES

Easily added on the end of a standard frame assembly. For 115 VAC. J1 for interlock switch; J3 for all-lock switches up to 12 stations.

Stock No.	Switchcraft Part No.	Prices Each			
		1-9	10-24	25-49	50-99
19A7165	J1	\$7.60	\$5.70	\$5.23	\$4.75
19A7166	J3	8.00	6.00	5.50	5.00

## (C) SWITCH STACKS

Interchangeable switch stacks for mounting to Multi-Switch frames. Series 70P welded cross-bar palladium contacts. Rated at 3 amps, 300 watts max., AC non-inductive load.

Stock No.	Switchcraft Part No.	Circuits	Prices Each			
			1-9	10-24	25-49	50-99
19A7161	71P	1-A	\$0.60	\$0.45	\$0.41	\$0.38
19A7162	72P	1-B	.60	.45	.41	.38
19A7163	73P	1-C	.60	.45	.41	.38
19A7164	73PD	1-D	.68	.56	.51	.47
19A7221	*73SA	1-C	2.60	1.95	1.79	1.55

## HOW TO ORDER "MULTI-SWITCH" SWITCHES

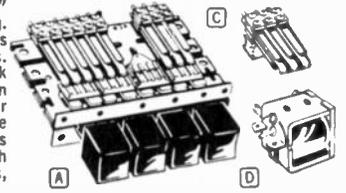
Use this check list to simplify ordering complete switch assemblies.

- Determine part number of frame:
    - Non-illuminated
    - Illuminated
  - No. of stations.
  - Type of functions.
  - Type of illumination.
- (C) Switching needed on each station: Depends on function of switch, circuitry, contact material. Lighting stacks for illuminated switch frame.
- (D) Lock-out function: For Series 7000, 8000, 21000, 22000. Part No. of lock-out bar must match number of stations.
- (E) Solenoid Release Function: Depends on series and type of function.
- (F) Lamps: not furnished with switches. If lamps are to be furnished specify quantity and voltage.
- (G) Push-Buttons: For non-illuminated frames, we recommend "Glo-Buttons": Request No. 19A7113 Catalog for Data.



## (A) SERIES 35000 NON-ILLUMINATED FRAMES

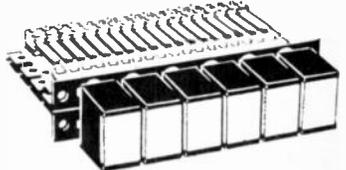
Switch frames mount on panels up to 1/2" thick. Permits 6 PDT switching in .6 sq. in. Narrow rectangular silhouette permits stacking in parallel rows on 3/4" centers. Only 2 1/8" depth behind panel. Square black push-button is furnished for each station and an extra red button is supplied for use when switch requires a release. The following part numbers cover basic frames only. To complete assembly, order switch stacks for each station, solenoid releases, and snap-switch modules if required.



Stock No.	Switchcraft Part No.	No. of Stations	Prices Each			
			1-9	10-24	25-49	50-99
19A7118	35021	2	\$6.80	\$5.10	\$4.68	\$4.25
19A7119	35041	4	9.60	7.20	6.60	6.00
19A7120	35061	6	12.80	9.60	8.80	8.00
19A7121	35081	8	16.00	12.00	11.00	10.00
19A7122	35101	10	19.20	14.40	13.20	12.00
19A7123	35121	12	22.40	16.80	15.40	14.00

## SERIES 37000 SINGLE LAMP ILLUMINATED FRAMES

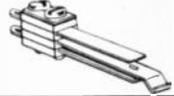
Identical in switching functions and characteristics as non-illuminated Series 35000, but feature large rectangular shaped push-buttons which serve as a color or legend coded panel indicator light which actuates up to 6 PDT switching. Switch frames mount in parallel rows from 1" centers and up. Depth behind panel 2 1/8". Push-buttons with large transparent clear display screen and white legend insert, which can be hot stamped or engraved, are furnished for switching and release stations. A single 6 V. or 28 V. lamp can be used at each station. Use 327 or 328 lamp shown on page 121. Specify if you want button to light in "IN", "OUT" or "BOTH" positions. Interlock function listed below.



Stock No.	Switchcraft Part No.	No. of Stations	Prices Each			
			1-9	10-24	25-49	50-99
19A7124	37021	2	\$9.52	\$7.14	\$6.55	\$5.95
19A7125	37041	4	15.44	11.58	10.62	9.65
19A7126	37061	6	21.36	16.02	14.69	13.35
19A7127	37081	8	27.68	20.76	19.03	17.30
19A7128	37101	10	33.60	25.20	23.10	21.00
19A7129	37121	12	39.52	29.64	27.17	24.70

## (C) SWITCH STACKS

35000, 37000, 38000, Series 80P. Constructed with cross-bar welded palladium contacts. Rated 3 amps, 300 watts max., AC non-inductive load. \*H-83P lamp circuit switch stack for rear-of-frame wiring.



Stock No.	Switchcraft Part No.	Circuits	Prices Each			
			1-9	10-24	25-49	50-99
19A7130	81P	1-A	\$0.60	\$0.45	\$0.41	\$0.38
19A7131	82P	1-B	.60	.45	.41	.38
19A7132	83P	1-C	.60	.45	.41	.38
19A7133	83PD	1-D	.88	.66	.61	.55
19A7134	H-83P	*	1.08	.81	.74	.68

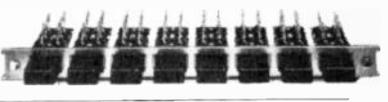
## (D) SERIES NJ SOLENOID RELEASE

A simple solenoid assembly which can be added to the end of a standard Series 35000 or 37000 frame to provide electrical release of activated stations. For 115 VAC. NJ1 for use with up to 18 interlock stations; NJ3 will handle up to 12 all-lock stations.

Stock No.	Switchcraft Part No.	Prices Each			
		1-9	10-24	25-49	50-99
19A7141	NJ-1	\$8.00	\$6.00	\$5.50	\$5.00
19A7142	NJ-3	8.00	6.00	5.50	5.00

## NEW SERIES 65000 DW "MULTI-SWITCH"

Series 65000 switches require only 1 1/8" depth behind mounting panel. Overall switch height is 3 1/2". Push-button actuators are on 5/8" centers. Ratings: 3 amps AC, 0.5 amps DC, 125 V. non-inductive. 2C switching capacity per station.



Stock No.	Switchcraft Part No.	No. of Stations	Prices Each			
			1-9	10-24	25-49	50-99
19A7135	65021K-206	2	\$2.24	\$1.68	\$1.54	\$1.40
19A7136	65041K-206	4	4.00	3.00	2.75	2.50
19A7137	65061K-206	6	5.76	4.32	3.96	3.60
19A7138	65081K-206	8	7.52	5.64	5.17	4.70
19A7139	65101K-206	10	9.24	6.93	6.35	5.76
19A7140	65121K-206	12	11.00	8.25	7.56	6.88

## SWITCHCRAFT LEV-R SWITCHES

Compact lever-action switches. Silver contacts rated at 3 amps AC, non-inductive load. Length 2 1/4" behind panel, width 5/8". Require 1/2" mtg. hole. †N.O. center position off.



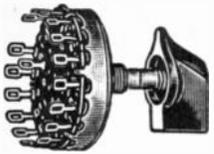
### TWO POSITION TYPES

Stock Numbers	Spring Return	Locking Type	Mfg. No.	Action	Schematic Circuit		Prices Each				
					Pos. 1	Pos. 2	1-24	25-49	50-99	100-249	
19A7167	19A7175	3001	SPST-NO		1-A	\$1.35	\$1.24	\$1.13	\$0.90		
19A7168	19A7176	3003	SPDT		1-C	1.62	1.49	1.35	1.08		
19A7169	19A7177	3004	DPST-NO		2-A	1.77	1.62	1.48	1.18		
19A7171	19A7179	3006	DPDT		2-C	1.95	1.79	1.63	1.30		
19A7223	19A724	3006D	SPDT		ID	2.10	1.93	1.75	1.40		

### THREE POSITION TYPES

Stock Numbers	Spring Return	Locking Type	Mfg. No.	Action	Schematic Circuit		Prices Each				
					1-C†	1-C	1-24	25-49	50-99	100-249	
19A7172	19A7180	3033	SPDT-NO		1-C†	1.77	1.62	1.48	1.18		
19A7173	19A7181	3036	SPDT Ea. Sec.		1-C	2.04	1.87	1.70	1.36		
19A7174	19A7182	3037	SPDT-NO Ea. Sec.		1-C†	2.10	1.93	1.75	1.40		

# MALLORY AND CENTRALAB SWITCHES



## MALLORY SWITCHES

### SINGLE GANG ROTARY 3100J & 3200J SERIES

Compact switches having wide application for use in all electronic equipment. Rating 500 V. breakdown; max. current .2 amp 300 VDC; 5 amp @ 6 VDC; 25 amp @ 300 VAC; 6 amp @ 6 VAC. 1/4" round shaft, 2" long, 3/8" dia. x 3/8" long brass threaded bushing with bar knob and mtg. hardware. All 30° index except \* which are 20°. Shpg. wt. 4 ozs. See Plates below.

Specify B-A Stock No. 19A7035 and Switch No. when Ordering.  
NON-SHORTING — BREAK BEFORE MAKE

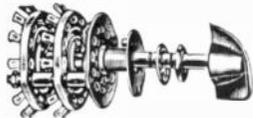
Mfg. No.	Poles	Posi-tions	Base Dia.	1-4	5-9	10-24	25-49	50-99	100-499
3215J	1	5	1 1/4"	\$1.13	\$0.94	\$0.86	\$0.81	\$0.76	\$0.68
32112J	1	12	1 1/4"	1.13	.94	.86	.81	.76	.68
3222J	2	2	1 1/4"	1.13	.94	.86	.81	.76	.68
3223J	2	3	1 1/4"	1.13	.94	.86	.81	.76	.68
3226J	2	6	1 1/4"	1.13	.94	.86	.81	.76	.68
3234J	3	4	1 1/4"	1.17	.98	.88	.83	.78	.70
3242J	4	2	1 1/4"	1.17	.98	.88	.83	.78	.70
3243J	4	3	1 1/4"	1.17	.98	.88	.83	.78	.70
32117J	1	17*	1 1/4"	1.73	1.45	1.30	1.23	1.16	1.04
3229J	2	9*	1 1/4"	1.73	1.45	1.30	1.23	1.16	1.04
3236J	3	6*	1 1/4"	1.83	1.53	1.38	1.31	1.22	1.10
3263J	6	3*	1 1/4"	1.83	1.53	1.38	1.31	1.22	1.10

### SHORTING — MAKE BEFORE BREAK

Mfg. No.	Poles	Posi-tions	Base Dia.	1-4	5-9	10-24	25-49	50-99	100-499
3115J	1	5	1 1/4"	\$1.13	\$0.94	\$0.86	\$0.81	\$0.76	\$0.68
31112J	1	12	1 1/4"	1.13	.94	.86	.81	.76	.68
3123J	2	3	1 1/4"	1.13	.94	.86	.81	.76	.68
3126J	2	6	1 1/4"	1.13	.94	.86	.81	.76	.68
3143J	4	3	1 1/4"	1.17	.98	.88	.83	.78	.70
31117J	1	17*	1 1/4"	1.73	1.45	1.30	1.23	1.16	1.04
3163J	6	3*	1 1/4"	1.83	1.53	1.38	1.31	1.22	1.10

\*Have adjustable stops to prevent turning to unused contacts.

## CERAMIC SECTION ROTARY



1 3/4" diameter, non-shorting, adjustable stops, 2 gang, 1/2" spacing. Rated .75 amp @ 300 VAC; 10 amps @ 6 VAC/DC. Use 30° dial plates below. Shpg. wt. 8 ozs.

Specify B-A Stock No. 1917036 and Switch Number When Ordering

Type	Gang	Pole	Posi-tions	1-4	5-9	10-24	25-49	50-99	100-499
172C	1	1	10	\$2.64	\$2.20	\$1.98	\$1.88	\$1.75	\$1.58
173C*	1	2	5	2.64	2.20	1.98	1.88	1.75	1.58
174C*	1	3	3	2.64	2.20	1.98	1.88	1.75	1.58
176C	2	2	10	3.77	3.15	2.82	2.69	2.51	2.26
177C*	2	4	5	3.77	3.15	2.82	2.69	2.51	2.26
178C*	2	6	3	3.77	3.15	2.82	2.69	2.51	2.26
180C*	3	3	10	4.80	4.00	3.60	3.42	3.20	2.88
181C*	3	6	5	4.80	4.00	3.60	3.42	3.20	2.88

\*Plus off position.

## SWITCH DIAL PLATES

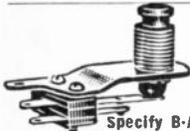


Aluminum figures etched on black background. 1 1/4" O.D. with 1/4" hole. For switches with 30° indexing except those marked \* which are for switches with 20° indexing. Shpg. wt. 2 ozs.

Specify B-A Stock No. 19A7037 and Type When Ordering.

Type	Marked	Type	Marked	Type	Marked	Type	Marked	Type	Marked
372	1 to 2	377	1 to 7	382	1 to 12	387	Off 1 to 7	456*	1 to 6
373	1 to 3	378	1 to 8	383	Off 1 to 3	388	Off 1 to 8	459*	1 to 9
374	1 to 4	379	1 to 9	384	Off 1 to 4	389	Off 1 to 9	467*	1 to 17
375	1 to 5	380	1 to 10	385	Off 1 to 5	390	Off 1 to 10		
376	1 to 6	381	1 to 11	386	Off 1 to 6	453*	1 to 3		Choice Each 12c

## MINIATURE PUSH-BUTTON



Non-locking for test panels, etc. Silver contacts on alloy springs. Rated 0.4 amp at 300 VDC and 220 VAC; 4 amps, 6 VDC. Bushing 3/8" x .32 x 3/8" long. Integral phenolic knob. With nut and washer.

Specify B-A Stock No. 19A7097 and Switch No. When Ordering.

Type	Action	1-4 Ea.	5-9 Ea.	10-24 Ea.	25-49 Ea.	50-99 Ea.	100-499 Ea.
1011	SPST-NO	\$0.77	\$0.65	\$0.58	\$0.55	\$0.51	\$0.46
1012	SPST-NC	.77	.65	.58	.55	.51	.46
1013	SPDT	.87	.76	.66	.62	.58	.52
1014	DPST-NO	.97	.81	.72	.69	.64	.58
1015	DPST-NC	.97	.81	.72	.69	.64	.58
1016	DPDT	1.17	.98	.88	.83	.78	.70

## CENTRALAB UNIVERSAL PHENOLIC SWITCHES



Rating 1.75A @ 24 VDC, 230 milliamps @ 115 VAC. Bushing 3/8" - 32 thread, 3/8" long. With hardware. Shpg. wt. 6 ozs.

Specify B-A Stk. No. 19A7100 and Switch No. When Ordering.

1460:	1 pole, 2 position, shorting.	Positive index.				
1461:	1 pole, 3 position, shorting.	Positive index.				
1462:	2 pole, 2 position, shorting.	Positive index.				
1463:	1 pole, 2 position, non-shorting.	Spring return index.				
1464:	2 pole, 2 position, non-shorting.	Spring return index.				
Your Choice	1-4	5-9	10-24	25-49	50-99	100-249
Each	\$1.14	\$0.95	\$0.86	\$0.82	\$0.76	\$0.68

## 4 POLE, 2 POSITION SWITCHES

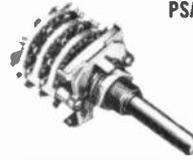


For long hard use in intercom, test equipment, etc. 2.75 amp at 15 VDC, 350 MA at 115 VAC. 1/4" round shaft, 1 7/8" long. With knob and hardware. Wt. 4 ozs.

No. 19A7101. 1450 Positive index. 1-4 Each...\$1.74 5-9 Ea...\$1.38 10-24 Ea...\$1.25 25-49 Ea...\$1.19 50-99 Ea...\$1.11 100-499...\$0.99  
No. 19A7102. 1451 Spring return. 1-4 Each...\$2.52 5-9 Ea...\$2.10 10-24 Ea...\$1.89 25-49 Ea...\$1.80 50-99 Ea...\$1.68 100-499...\$1.51

## CENTRALAB SWITCHES

### PSA SUBMINIATURE ROTARY SWITCHES



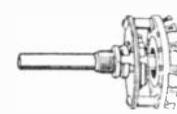
Adjustable stops for extra switching arrangement versatility. Positive 30° index, 1/2" spacing between front plate and first section, 3/2" spacing between sections. Dialyl Phthalate insulation. 3/8-32 bushing 3/8" long. 1/4" round shaft.

Resistive load .550 amperes at 28 volts VDC, 170 MA at 115 VAC. Weight less than 1 ounce.

Specify BA Stock No. 19A7226 and Switch No. When Ordering.

Shorting Number	Non-Shorting Number	Sec-tions	Poles	Posi-tions	1-4	5-9	10-24	25-49	50-99	100-249
200	201	1	1	2-12	\$4.80	\$4.00	\$3.60	\$3.42	\$3.20	\$2.88
202	203	1	2	2-6	4.80	4.00	3.60	3.42	3.20	2.88
204	205	2	1	2-12	6.00	5.00	4.50	4.28	4.00	3.60
206	207	1	3	2-5	4.80	4.00	3.60	3.42	3.20	2.88
208	209	3	1	2-12	7.20	6.00	5.40	5.13	4.80	4.32
210	211	2	2	2-6	6.00	5.00	4.50	4.28	4.00	3.60
214	215	1	5	2-3	4.80	4.00	3.60	3.42	3.20	2.88
220	221	2	3	2-5	6.00	5.00	4.50	4.28	4.00	3.60
222	223	3	2	2-6	7.20	6.00	5.40	5.13	4.80	4.32
228	229	3	3	2-5	7.20	6.00	5.40	5.13	4.80	4.32

### MINIATURE STEATITE PA2000 SERIES ROTARY



Small and compact. Silver plated spring brass clips and contacts; adjustable stop or continuous rotation; 30° indexing; 1/2" spacing between sections; 1/4" round shaft, 1 7/8" long. Includes 1 1/4" bar knob and mounting hardware. All are non-shorting (break before make), except \* which indicates "shorting" types. Rated 2.75 amp at 15 VDC; 230 milliamps at 115 VAC. Use 30° dial plates shown in left column. Avg. shpg. wt. 6 ozs.

Specify B-A Stock No. 19A7098 and Switch No. When Ordering

Type	Gang	Pole	Posi-tions	1-4	5-9	10-24	25-49	50-99	100-249
2000*	1	1	12	\$2.76	\$2.30	\$2.07	\$1.97	\$1.84	\$1.65
2001	1	1	12	2.76	2.30	2.07	1.97	1.84	1.65
2002*	1	2	6	2.76	2.30	2.07	1.97	1.84	1.65
2003	1	2	6	2.76	2.30	2.07	1.97	1.84	1.65
2004*	2	2	12	3.90	3.25	2.93	2.79	2.60	2.33
2005	2	2	12	3.90	3.25	2.93	2.79	2.60	2.33
2006*	1	3	5	2.76	2.30	2.07	1.97	1.84	1.65
2007	1	3	5	2.76	2.30	2.07	1.97	1.84	1.65
2008*	3	3	12	4.98	4.15	3.74	3.56	3.32	2.98
2009	3	3	12	4.98	4.15	3.74	3.56	3.32	2.98
2010*	2	4	6	3.90	3.25	2.93	2.79	2.60	2.33
2011	2	4	6	3.90	3.25	2.93	2.79	2.60	2.33
2013	4	4	12	5.98	4.98	4.49	4.28	3.99	3.58
2015	1	5	3	2.76	2.30	2.07	1.97	1.84	1.65
2017	5	5	12	7.16	5.97	5.37	5.12	4.78	4.29
2019	1	6	2	2.76	2.30	2.07	1.97	1.84	1.65
2021	2	6	5	3.90	3.25	2.93	2.79	2.60	2.33
2023	3	6	6	4.98	4.15	3.74	3.56	3.32	2.98
2025	6	6	12	8.32	6.94	6.24	5.95	5.55	4.98
2027	4	8	6	5.98	4.98	4.49	4.28	3.99	3.58
2029	3	9	5	4.98	4.15	3.74	3.56	3.32	2.98
2031	2	10	3	3.90	3.25	2.93	2.79	2.60	2.33
2033	5	10	6	7.16	5.97	5.37	5.12	4.78	4.29
2035	2	12	2	3.90	3.25	2.93	2.79	2.60	2.33
2037	6	12	6	8.32	6.94	6.24	5.95	5.55	4.98
2039	3	15	3	5.64	4.70	4.23	4.03	3.76	3.38
2041	3	18	2	5.64	4.70	4.23	4.03	3.76	3.38
+2042	1	1	10	2.50	2.08	1.88	1.79	1.67	1.50

+2042 has 9 active contacts, all open in full CCW position and progressively picked up and shorted to common contact with CW rotation.

### MINIATURE PHENOLIC PA100 ROTARY

Same specifications as PA2000 above, except sections are Phenolic. Use 30° dial plates listed at left. All are non-shorting type.

Specify B-A Stock No. 19A7099 and Switch No. When Ordering.

Type	Gang	Pole	Posi-tions	1-4	5-9	10-24	25-49	50-99	100-249
1001	1	1	11	\$2.08	\$1.73	\$1.56	\$1.49	\$1.39	\$1.24
1003	1	2	5	2.08	1.73	1.56	1.49	1.39	1.24
1005	2	2	11	2.96	2.47	2.22	2.12	1.97	1.77
1007	1	3	3	2.08	1.73	1.56	1.49	1.39	1.24
1009	3	3	11	3.76	3.13	2.82	2.69	2.51	2.25
1011	1	4	2	2.08	1.73	1.56	1.49	1.39	1.24
1013	2	4	5	2.96	2.47	2.22	2.12	1.97	1.77
1019	2	6	3	2.96	2.47	2.22	2.12	1.97	1.77
1021	3	6	5	3.76	3.13	2.82	2.69	2.51	2.25
1025	2	8	2	2.96	2.47	2.22	2.12	1.97	1.77
1029	3	12	2	3.76	3.13	2.82	2.69	2.51	2.25

## LEVER ACTION PHENOLIC SWITCHES



Space saving lever switches have many uses. Particularly adaptable to intercoms, PA systems, test instruments, broadcast, antenna interchange, speaker selection, etc. Two 6-32 thread mounting holes on 1 3/8" centers in switch front plate. Rating 1 1/2 amp @ 28 VDC; 230 milliamps at 115 VAC (make and break, resistive load). 30° indexing. All non-shorting except † which is shorting. Complete with screws and black knob. Avg. shpg. wt. 4 ozs.

Specify B-A Stock No. 19A7103 and Switch No. When Ordering.

# Carling ARROW-HART



# STACKPOLE SWITCHES

## CARLING TOGGLE SWITCHES



### AC-DC TOGGLE SWITCHES

1/4" bat handle toggle switch with 1/2" stem length. Dia. 1/2" x 32 thread. \*has wire leads, all others have solder lug terminals.

Stock No.	Mfg. Type	Action	Amperes 125 V. 250 V.	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
19A7000	110-73	SPST	6 3	\$0.67	\$0.60	\$0.51	\$0.46	\$0.41
19A7001	112-73	SPDT	3 1	.84	.76	.64	.58	.52
19A7002	216-73	DPST	3 1	1.15	1.04	.88	.79	.72
19A7003	316-73	DPDT	3 1	1.26	1.13	.96	.87	.78
19A7004	111-16-73*	SPST	6 3	.77	.69	.59	.53	.48

### HEAVY DUTY AC TOGGLE SWITCHES

1/4" bat handle. Metal covered bakelite base. Stem 1/2" long, 1/2" dia. x 32 thread. Solder lug terminals. \*\*Center Off. \*one side momentarily on; other side N.C. †Both sides momentarily on. Center off. All 3/4" H.P.—115-230 V. A.C. Shpg. wt. 2 oz.

Stock No.	Mfg. Type	Action	Amperes 125 V. 250 V.	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
19A7005	2FA53-73	SPST	15 10	.70	.63	.54	.48	.43
19A7006	2FB53-73	SPDT	15 10	.77	.69	.59	.53	.48
19A7007	2FC53-73	SPDT**	15 10	.77	.69	.59	.53	.48
19A7008	2GK50-73	DPST	15 10	1.05	.95	.80	.72	.65
19A7009	2GL50-73	DPDT	15 10	1.26	1.13	.96	.87	.78
19A7010	2GM50-73	DPDT**	15 10	1.26	1.13	.96	.87	.78
19A7011	6FB53-73	SPDT†	15 10	1.02	.91	.78	.70	.63
19A7082	6FC53-73	SPDT†	15 10	1.02	.91	.78	.70	.63

### HI-POWER AC-DC TOGGLE SWITCH

Stem 3/8" long, 1/2" dia. x 32 thread. 3/4" long bat handle. Screw terminals.

Stock No.	Mfg. Type	Action	Amperes 125 V. 250 V.	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
19A7013	600C	SPST	20 10	1.12	1.01	.86	.77	.69

### HEAVY DUTY AC-DC TOGGLE SWITCHES

1/4" bat handle, 1/2" stem length—32 thread. Screw terminals. Wt. 3 oz. DK284-73 rated 1 HP—250 V; EK204-73 rated 1 1/2 HP—250 V.

Stock No.	Mfg. Type	Action	Amperes 125 V. 250 V.	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
19A7014	DK284-73	DPST	16 8	1.29	1.17	.99	.89	.80
19A7015	EK204-73	DPST	20 10	2.20	1.98	1.69	1.52	1.37

## PUSH-PUSH AC-DC SWITCHES



Positive action push on, push again for off. For any application where a pushbutton is preferable. Stem 3/8" L. x 1/2" dia., body 1 1/2" L. x 3/8" W., depth behind panel 1/2". Complete with mtg. nuts. Screw terminals. Shpg. wt. 3 oz.

Stock No.	Mfg. Type	Action	Amperes 125 V. 250 V.	1-24 Each	25-49 Each	50-99 Each	100-499 Each	500 Up Each
19A7016	110-SP	6 3	\$1.22	\$1.10	\$0.94	\$0.84		
19A7017	160-SP	10 5	1.54	1.39	1.18	1.06		

## CARLING SPST MIDGET SWITCH



Type 125RB. 3 amps at 125 volts AC. Solder terminals. Threaded stem diameter 1/8". Step length 3/8". Has bat handle length 3/8". Body 1/2" L. x 3/8" W. With hex and knurled nuts. Wt. 2 oz.

No.	19A7018	1-24 Each	49c	No.	19A7019	Type	Size	Each	10 Ea.
25-49 Each			44c	19A7020	SPDT	1 x 1 1/2"	\$0.30	\$0.27	
50-99 Each		37c	100-499 Ea.	19A7021	DPST	1 1/2 x 1 3/4"	.42	.38	
500 Up Each		30c	19A7022	DPDT	1 1/2 x 2 1/2"		.53	.48	

## KNIFE SWITCHES



Standard knife switches. Ideal for Radio, TV and electrical needs. Porcelain base. Rated 25 amps at 125 volts.

## STACKPOLE SLIDE SWITCHES

### WORLD'S LARGEST PRODUCER OF SLIDE SWITCHES

Low cost switches for use where a small size is needed. Contacts silver plated. Type "A", 1/2" wide x 1 3/8" long with 1 1/4" mtg. ctr.; Type "B", 1/2" wide x 1.890 long, 1 1/4" mtg. ctr.; Type "C", 1 1/4" wide x 1.890 long, 1 1/4" mtg. ctr. Average shpg. wt. 3 ozs. All are positive action except where marked. UL and CSA listed. \*Spring-Return, No Detent.

Stock No.	Mfg. No.	Type	Action	Amps @ 125 V. AC	DC	1-9	10-99	100-499	500-999
19A7046	SS-26	A	SPST	4	1.0	\$0.28	\$0.22	\$0.143	\$0.093
19A7047	SS-26-1	A	SPDT	4	1.0	.29	.23	.145	.095
19A7048	SS-50	A	DPDT	3	0.5	.30	.24	.159	.109
19A7049	SS-36-1	A	SPDT	6	1.0	.30	.24	.160	.110
19A7050	SS-33	B	DPDT	6	0.5	.39	.31	.212	.162
19A7051	SS-9-3	A	*SPDT	6	1.0	.31	.25	.187	.137
19A7052	SS-5	B	*DPDT	6	0.5	.44	.33	.237	.188
19A7053	SS-12	C	4PDT	6	1.0	.60	.48	.347	.297

## ARROW-HART SUBMINIATURE SWITCHES



Only 1/4 x 1/2" SPDT, or 1/2 x 1/2" DPDT. Body 3/16" high, 3/4" dia. stem, 1/4" long. Stationary contacts gold plated coin silver. Terminals gold plated brass. Toggle switches - 5 amp @ 115 V. AC; push-button - 1 amp @ 115 V. AC. Mounting hardware supplied. TC, TS indicates toggle, PM indicates push-button.

Stock No.	Mfg. No.	Action	1-24	25-99	100-499	500 Up
19A7087	TS-3	SPDT	\$3.00	\$2.40	\$2.25	\$2.10
19A7085	TS-6	DPDT	3.90	3.12	2.93	2.73
19A7086	TC-3	SPDT-Center Off	3.00	2.40	2.25	2.10
19A7088	TC-6	DPDT-Center Off	3.90	3.12	2.93	2.73
19A7089	PM-3	SPDT-Mom. Contact	2.86	2.29	2.15	2.00
19A7090	PM-6	DPDT-Mom. Contact	3.51	2.81	2.63	2.46

## ARROW-HART SWITCHES



### LIGHT DUTY TYPE AC-DC TOGGLE SWITCH

Long life and dependability in electronic and fractional horsepower applications. Laminated phenolic sections - 1/2" long slotted sleeve (1/2" dia. 32 threads per inch) with hex and knurled nut - nickel finish. Solder lug connections. UL listed. Bat handle. Shpg. wt. 2 ozs.

Stock No.	Arrow-Hart No.	Circuit	Amperes 125 V. 250 V.	1-24	25-49	50-99	100-499	500 Up
19A7060	20994NV	SPST	3 3	\$0.69	\$0.64	\$0.53	\$0.477	\$0.425
19A7061	21350CF	SPDT	3 1	.87	.81	.67	.603	.536
19A7062	20902AJ	DPST	3 1	1.26	1.17	.97	.873	.777
19A7063	20905AN	DPDT	3 1	1.44	1.34	1.24	1.116	.996

### MOMENTARY ACTION — Normally Open — Bat Handle

Stock No.	Arrow-Hart No.	Circuit	Amperes 125 V. 250 V.	1-24	25-49	50-99	100-499	500 Up
19A7064	80054BE	SPST	3 3	1.20	1.12	.93	.837	.745
19A7065	20907MA	DPST	3 3	1.66	1.54	1.28	1.152	1.023

### STANDARD DUTY TYPE AC TOGGLE SWITCHES

Slow make and break. Designed to offer high capacity on a small phenolic base. Exceptionally long life expectancy. Solder terminals. 1/2" sleeve length. \*Center off; †3/4 HP 120-240 V. AC; ‡ 1/4 HP 120-240 V. AC. Bat handle.

Stock No.	Arrow-Hart No.	Circuit	Amperes 125 V. 250 V.	1-24	25-49	50-99	100-499	500 Up
19A7066	†82601	SPST	15 10	\$0.72	\$0.67	\$0.56	\$0.504	\$0.448
19A7067	†82603	*SPDT	15 10	.83	.77	.64	.572	.512
19A7068	†82609	*DPDT	15 10	1.33	1.24	1.03	.927	.825
19A7069	†83001	SPST	6 3	.62	.58	.48	.432	.384
19A7070	†83004	*SPDT	6 3	.67	.62	.51	.459	.409
19A7071	†83028	*DPDT	6 3	1.02	.95	.79	.711	.632
19A7072	†81027FX	DPDT	6 3	2.06	1.92	1.59	1.431	1.274

### STANDARD DUTY TYPE AC-DC TOGGLE SWITCHES — Ball Handle

Quick make, quick break with wiping blade action designed for small motor use. Screw terminals. 1/2" sleeve length. \*Rated 1 HP 125, 250 V. AC-DC.

Stock No.	Arrow-Hart No.	Circuit	Amperes 125 V. 250 V.	1-24	25-49	50-99	100-499	500 Up
19A7073	80607	SPST	12 6	\$1.38	\$1.28	\$1.06	\$0.954	\$0.849
19A7074	*80600	DPST	16 8	1.38	1.28	1.06	.954	.849

### EXTRA HEAVY DUTY AC-DC TOGGLE SWITCH — 3 POSITION

On-Off-On. Positive off center. Lever can't be moved from one side through center without stopping. For heavy current circuits such as transmitters, amplifiers, etc. "Fast break" contacts. Screw terminals. 3/4 HP 250 V. AC-DC. With 2 hex nuts. UL listed. Ball handle. 1/2" sleeve length. Shpg. wt. 2 ozs.

Stock No.	Arrow-Hart No.	Circuit	Amperes 125 V. 250 V.	1-24	25-49	50-99	100-499	500 Up
19A7075	80638-D	DPDT	10 5	\$4.43	\$4.12	\$3.42	\$3.078	\$2.739

### MOMENTARY PUSH SWITCHES AC — LIGHT DUTY 1 AMP

Slow make and break operated with light pressure—Laminated phenolic sections—slotted sleeve (1/2" dia. 32 threads per inch)—hex and knurled nut assembled. \*Two circuit (one circuit on—one circuit off, reverses when pushed). All have solder terminals. Shpg. wt. 2 ozs.

Stock No.	Arrow-Hart No.	Circuit	Sleeve Length	Button Color	1-24	25-49	50-99	100-499	500 Up
19A7076	3391-GL	SPST-NO	3/8"	Red	\$0.98	\$0.91	\$0.76	\$0.684	\$0.609
19A7077	3391-GL	SPST-NO	3/8"	Black	.98	.91	.76	.684	.609
19A7078	*3392	SP2	3/8"	Metal	.96	.89	.74	.666	.593
19A7079	*3392-A	SP2	3/8"	Red	1.19	1.11	.92	.828	.749
19A7080	*3392-A	SP2	3/8"	Black	1.19	1.11	.92	.828	.749

### MOMENTARY PUSH SWITCHES AC-DC — STANDARD DUTY

Normally open Screw terminals. Rated 1 1/2 HP 125 or 250 V. AC-DC. With 2 hex nuts. UL listed. 1/2" sleeve length. Wt. 2 ozs.

Stock No.	Arrow-Hart No.	Circuit	Button Color	1-24	25-49	50-99	100-499	500 Up
19A7081	80630	DPST	Metal	\$2.06	\$1.92	\$1.59	\$1.431	\$1.272



### MOMENTARY PUSH SWITCHES AC — LIGHT DUTY MIDGET SIZE

Slow make and break. Molded phenolic base, slotted sleeve 1/2" long, 1/2" dia., 32 threads per inch. Hex and knurled nut assembled—brass nickel finish button. Solder lugs. N.O. is normally open; N.C. is normally closed. UL listed. Shpg. wt. 2 ozs. \*Has phenolic snap-on button Fig. 7. All are 3 amp or 1/10 HP 120 V. AC.

Stock No.	Arrow-Hart No.	Circuit	Button Color	1-24	25-49	50-99	100-499	500 Up
19A7054	80511E	SPST-NO	Metal	\$0.51	\$0.47	\$0.39	\$0.351	\$0.312
19A7055	80511	SPST-NC	Metal	.51	.47	.39	.351	.312
19A7056	*80541ER	SPST-NO	Red	.98	.91	.76	.684	.609
19A7057	*80541E	SPST-NO	Black	.98	.91	.76	.684	.609

### ROTO-POWER LOCK SWITCHES

Lockswitch with key for use on power tools, appliances. Fits panels to 1/2". Laminated phenolic sections. Hex and dress nuts, key. Solder lugs. 1/2" sleeve length. UL listed. Wt. 2 ozs.

Key Removable in Off Position only. 6 Amp—125 V, 3 Amp—250 V.

Stock No.	Arrow-Hart No.	Circuit	1-24	25-49	50-99	100-499	500 Up
19A7058	1561L	SPST	\$1.80	\$1.67	\$1.39	\$1.251	\$1.113

Key Removable in Both Positions—3 amp—250 V.

Stock No.	Arrow-Hart No.	Circuit	1-24	25-49	50-99	100-499	500 Up
19A7083	1561LE	SPST	\$1.80	\$1.6			

# POTTER AND BRUMFIELD RELAYS

## INDUSTRIAL QUANTITY DISCOUNT SCHEDULE

B-A offers you factory Net Prices! Save time—we ship from stock. Use this quantity discount schedule for all except mercury wetted and solid state relays. Deduct from the single lot price shown: 5% for 25 to 50 relays of a type, 10% for 51 to 99, 30% for 100 to 249.

## GENERAL PURPOSE TYPES

### MEDIUM DUTY MR POWER RELAYS

For small motors, transmitters and general purpose use.

Full floating armature. Fast action 60 Cy. AC coils 3.25 watts. DC coils 1.6 watts. 1/2" silver contacts rated 8 amps, 115 V. AC non-inductive. Size 2 1/2" x 1 1/2" x 1 1/2" for single pole — 2 1/2" x 2 3/4" x 2" for double pole.

Stk. No.	Type	Contacts	Coil V.	Each
19A1405	MR5A	SPDT	6AC	\$3.85
19A1417	MR5A	SPDT	24AC	3.85
19A1406	MR5A	SPDT	120AC	3.85
19A1316	MR5D	SPDT	12DC	3.55
19A1318	MR5D	SPDT	110DC	4.10
19A1407	MR11A	DPDT	6AC	5.40
19A1319	MR11A	DPDT	12AC	5.40
19A1419	MR11A	DPDT	24AC	5.40
19A1408	MR11A	DPDT	120AC	5.40
19A387	MR11D	DPDT	12DC	5.15
19A1320	MR11D	DPDT	24DC	5.15
19A1440	MR14A	3PDT	24AC	6.45
19A1422	MR14A	3PDT	120AC	6.45

Metal Dust Cover for MR 35D130 \$2.20



### ENCLOSED PLUG-IN KRP SERIES

Choice of 5 or 10 Amp. Contacts

Small size long life relay for dependable use in automation control, communications switching, etc. Enclosed in clear plastic dust cover. Size 1 1/2" x 1 1/2" x 2" high. 10 amp contacts on KRP types ending in G, all others are 5 amps. Dctal base for type P5 and P11, 1 pin for P14. Wt. 3 oz.

Stk. No.	Type	Contacts	Coil V.	Each
19A1354	KRP5A	SPDT	120AC	\$6.00
19A1390	KRP5AG	SPDT	120AC	6.15
19A1391	KRP11AG	DPDT	6AC	6.90
19A1357	KRP11A	DPDT	12AC	6.65
19B1349	KRP11AG	DPDT	12AC	8.90
19A1382	KRP11A	DPDT	24AC	6.65
19A1392	KRP11AG	DPDT	24AC	6.90
19A1439	KRP11A	DPDT	120AC	6.65
19A1393	KRP11AG	DPDT	120AC	6.90
19A1771	KPP11AG	DPDT	240VAC	7.35
19A1383	KRP11D	DPDT	6DC	6.60
19A1394	KRP11DG	DPDT	6DC	6.85
19A1384	KRP11D	DPDT	12DC	6.80
19A1395	KRP11DG	DPDT	12DC	6.85
19A1385	KRP11D	DPDT	24DC	6.80
19A1396	KRP11DG	DPDT	24DC	6.85
19A1358	KRP11D	DPDT	110DC	7.30
19A1462	KRP14A	3PDT	120AC	8.30
19A1397	KRP14AG	3PDT	120AC	8.60
19A1788	KRP14AG	3PDT	240AC	9.00
19A1328	KRP14D	3PDT	12DC	8.20
19A1359	KRP14DG	3PDT	24DC	8.20
19B1350	KRP14DG	3PDT	24DC	8.50
19B1351	KRP14DG	3PDT	110DC	9.20

### KCP SENSITIVE TYPE

Plate Circuit Relays

Same appearance as KRP above. Operates on 125 MW for SP, 250 MW for DP, and 375 MW for 3P. 1/8" silver contacts rated 2 amps. 1 1/2" square x 2" high. Wt. 3 oz. KCP5 and KCP11 have 8 pin base and KCP14, 11 pin base.

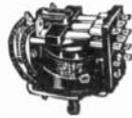
Stk. No.	Type	Contacts	Ohms	Each
19A1353	KCP5	SPDT	5K	\$6.60
19A1312	KCP5	SPDT	10K	7.05
19B1352	KCP11	DPDT	2.5K	6.95
19A1532	KCP11	DPDT	5K	7.05
19A1533	KCP11	DPDT	10K	7.50
19A1311	KCP14	3PDT	10K	9.10



### KRP-N INDICATOR TYPE

Same as regular KRP relays with indicating lamp to show current or voltage availability in power circuit. Wt. 3 oz. All have 10 amp contacts.

Stk. No.	Type	Contacts	Coil V.	Each
19B1364	KRP11AN	DPDT	120AC	\$7.90
19B1379	KRP14AN	3PDT	120AC	9.60



### SMALL LIGHT DUTY KA RELAY

DC and 60 Cy. AC Coils

High quality, all purpose relay. UL listed. Silver contacts, choice, 5 or 10 amps. Single 6-32 stud mounting with locating tab. Solder lug terminals. Size 1 1/2" x 1 1/2" x 1 1/4" high. 110 V. DC Coil res. 10,000 ohms. Wt. 2 oz.

Stk. No.	Type	Contacts	Coil V.	Each
19A1429	KA5AY	SPDT	6AC	\$3.50
19A1332	KA5AY	SPDT	12AC	3.50
19A1430	KA5AY	SPDT	24AC	3.50
19A1431	KA5AY	SPDT	120AC	3.50
19A1432	KA5DY	SPDT	6DC	3.35
19A379	KA5DY	SPDT	12DC	3.35
19A378	KA5DY	SPDT	24DC	3.35
19A1370	KA5DY	SPDT	110DC	4.05
19A1423	KA11AY	DPDT	6AC	4.25
19A1424	KA11AY	DPDT	24AC	4.25
19A1425	KA11AY	DPDT	120AC	4.25
19A1426	KA11DY	DPDT	6DC	3.75
19A1427	KA11DY	DPDT	12DC	3.75
19A1428	KA11DY	DPDT	24DC	3.75
19A1371	KA11DY	DPDT	110DC	4.40
19A1433	KA14AY	3PDT	6AC	4.65
19A1434	KA14AY	3PDT	24AC	4.65
19A1446	KA14AY	3PDT	120AC	4.65
19A380	KA14DY	3PDT	6DC	4.25
19A381	KA14DY	3PDT	12DC	4.25
19A382	KA14DY	3PDT	24DC	4.25
19A1372	KA14DY	3PDT	110DC	4.90

Stk. No.	Type	Contacts	Coil V.	Each
19A1375	KA5AG	SPDT	6AC	\$3.55
19A1445	KA5AG	SPDT	12AC	3.55
19A1447	KA5AG	SPDT	24AC	3.55
19A1448	KA5AG	SPDT	120AC	3.55
19A1501	KA11AG	DPDT	6AC	4.35
19A1502	KA11AG	DPDT	12AC	4.35
19A1503	KA11AG	DPDT	24AC	4.35
19A1504	KA11AG	DPDT	120AC	4.35
19B364	KA14AG	3PDT	12AC	4.85
19B386	KA14AG	3PDT	24AC	4.85

### LATCHING TYPE KB

One coil sets latch, another coil releases it. Both operate on same voltage with only momentary pulse. 5 amp contacts except No. 5 ending in G are 10 amp. Size 2 1/2" x 1 1/2" x 2 3/4". Wt. 6 ozs.

Stk. No.	Type	Contacts	Coil V.	Each
19A1468	KB17AY	4PDT	6AC	\$11.80
19A188	KB17AY	4PDT	12AC	11.80
19A1469	KB17AY	4PDT	24AC	11.80
19A1470	KB17AY	4PDT	120AC	11.80
19A1360	KB17D	4PDT	12DC	10.40
19A1361	KB17D	4PDT	24DC	10.40
19A1443	KB17AG	4PDT	120AC	11.70
19A1399	KB17DG	4PDT	24DC	10.65

### AP RATCHET OPERATED

For applications requiring on-off or reversing action on alternate operations.

Positive action on electrical impulses as short as 60 milliseconds. Each successive impulse reverses contact position. 3/8" fine silver contacts. For intermittent coil operation. Rating 5 A. Size 3 3/4" x 2 1/4" x 2 3/4" H.

Stk. No.	Type	Contacts	Coil V.	Each
19A1435	AP11A	DPDT	24AC	\$9.65
19A1436	AP11A	DPDT	120AC	9.65
19A1529	AP11A	DPDT	240AC	10.20
19A1438	AP17A	4PDT	120AC	11.70

### PC IMPULSE TYPE

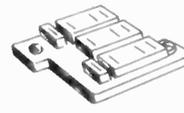
Armature driven rocker type actuator with single coil provides impulse switching for circuit reversing or on-off use. Requires only 30 MS pulse. Contacts rated at 7.5 amps. Size 2 1/2" x 2 1/2" x 2 1/2". Wt. 5 oz.

Stk. No.	Type	Contacts	Coil V.	Each
19A1344	PC11A	DPDT	120AC	\$6.20
19A1345	PC17A	4PDT	24AC	8.55
19A1346	PC17A	4PDT	120AC	8.55

## VERSATILE GENERAL-PURPOSE RELAYS



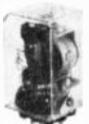
KUP



9KU1



KR3-H



KRP-3H

### KUP 10-AMP SERIES

Covers a wide range of voltages and contact arrangements. Highly reliable, well designed, easy to install or replace. 187 terminals are quick connect/solder type. Enclosed in a clear plastic cover. Silver-cadmium-oxide contacts assure long contact life. Continuous operation. Size 2.25" seated height x 1.406" x 1.531" Wt. 3 oz. Socket for KUP relays listed below.

KUP5A15-SPDT 10-Amp.				KUP11D15-DPDT 10-Amp.			
Stk. No.	Coil V.	Coil Ohms	Each	Stk. No.	Coil V.	Coil Ohms	Each
19A1583	6 V. AC	5.1	\$3.90	19A1597	6 V. DC	32.1	\$4.25
19A1584	12 V. AC	21	3.90	19A1598	12 V. DC	120	4.25
19A1585	24 V. AC	75	3.90	19A1599	24 V. DC	472	4.25
19A1586	120 V. AC	2250	3.90	19A1600	110 V. DC	10K	4.90
19A1587	240 V. AC	9110	4.30				

9KU1 SOCKETS FOR KUP RELAYS. Rated 10 amperes, molded nylon, pierced solder terminals. 2.03 x 1.50 inches overall including mounting tabs. No. 19A1610. Net Each.....60c

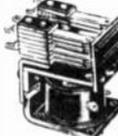
### KR3-H 20-AMP MIDGET

A reliable heavy duty relay for use where space is limited and the contact current requirement is high. Available in both open mounting and plug-in types. All have twin 1/4" silver cadmium contacts SPST-N.O.-DB, rated 20 amp at 120 V. AC 60 cycle.

KR3-H open mounting type have combination 1/4" quick connect or solder terminals. Overall size 1.6 x 1.67 x 1.52 inches. Mounting 6-32 stud. Wt. 2 Oz. KR3-H as described above, enclosed in clear plastic housing. Overall size 1.44" x 1.53" x 2.28" seated height-octal base.

Stk. No.	Mfg. No.	Coil V.	Each	Stk. No.	Mfg. No.	Coil V.	Each
19B1492	KR3AH	12 V. AC	\$4.30	19A1525	KRP3AH	12 V. AC	\$7.00
19B1496	KR3AH	24 V. AC	4.30	19A1526	KRP3AH	24 V. AC	7.00
19B1497	KR3AH	120 V. AC	4.30	19B1527	KRP3AH	120 V. AC	7.00
19B1499	KR3DH	12 V. DC	4.10	19B1530	KRP3DH	12 V. DC	6.75
19B1500	KR3DH	24 V. DC	4.10	19B1531	KRP3DH	24 V. DC	6.75
19A1523	KR3DH	110 V. DC	4.70	19A1540	KRP3DH	110 V. DC	8.75

### GA GENERAL PURPOSE



Low cost, multiple contact 5 amp all-purpose relay for many control circuit applications. Mounting single 8-32 tapped core. 1.06 x 1.71 x 1.78" H. Wt. 3 1/2 Oz.

Stk. No.	Mfg. No.	Contacts	Coil V.	Each
19A1572	GA11A	DPDT	6 AC	\$3.70
19A1573	GA11A	DPDT	12 AC	3.70
19A1574	GA11A	DPDT	24 AC	3.70
19A1575	GA11A	DPDT	120 AC	3.70
19A1576	GA14A	3PDT	24 AC	4.45
19A1577	GA14A	3PDT	120 AC	4.45
19A1578	GA17A	4PDT	6 AC	5.35
19A1579	GA17A	4PDT	12 AC	5.35
19A1580	GA17A	4PDT	24 AC	5.35
19A1581	GA17A	4PDT	120 AC	5.35
19A1582	GA17A	4PDT	240 AC	5.80

### GB SENSITIVE SERIES



High sensitivity at low cost. 5 amp. contacts. Single pole 115 milliwatts, double pole 125 milliwatts, 4 pole 275 milliwatts. Single 8-32 tapped core. 1.06 x 1.71 x 2.93" H. Wt. 5 oz.

Stk. No.	Coil Res.	Coil MA	Each
19A1601	2500	6.8	\$3.80
19A1602	5000	4.8	4.00
19A1603	10,000	3.4	4.50

### GB50-SPDT

Stk. No.	Coil Res.	Coil MA	Each
19A1604	2500	7.	5.35
19A1605	5000	5.	5.45
19A1608	10,000	3.53	6.10

### GB170-4PDT

Stk. No.	Coil Res.	Coil MA	Each
19A1607	2500	10.5	6.40
19A1608	5000	7.4	6.55
19A1609	10,000	5.25	7.05



### KHP & KHS

Small size — rugged 4PDT enclosed relay. For exacting high speed data processing, computer and process control service. 3 amp silver contacts. Solder terminals with 3-48 stud. May be used with sockets listed below.

Stk. No.	Type	Contacts	Coil V.	Each
19A1515	KHP17D11	6 DC	\$5.05	
19A1516	KHP17D11	12 DC	5.05	
19A1517	KHP17D11	24 DC	5.05	
19A1518	KHP17D11	48 DC	5.25	
19A1541	KHS17A11	6 AC	9.55	
19A1542	KHS17A11	12 AC	9.55	
19A1543	KHS17A11	24 AC	9.55	
19A1544	KHS17A11	120 AC	9.90	

### SOCKETS FOR ABOVE

19A1521	9KH1 Solder Terminals.....	70c
19A1830	9KH2 Printed Ckt. Terms. Ea.	70c

### R55D SENSITIVE RELAY



Low price, light weight for model controls, light dimmers, radiosonde, etc. 2

# POTTER AND BRUMFIELD - AMPERITE RELAYS

## SOLID STATE TIME DELAY RELAYS

Electronic timing with solid state switching combined to provide a trouble free timing device with no moving parts. Knob adjustable through delay range shown. All have internal relay with DPDT contacts rated 10 amps. -120 V. DC. Size 1.78 x 1.41. Height including knob, 3.56".

### CHB — DELAY "ON OPERATE"

Accuracy  $\pm 10\%$  of nominal, reset times 100 milliseconds, repeatability  $\pm 2\%$  octal base.

Stk. No.	Mfg. No.	Input Voltage	Delay Seconds	Price Each
19B1459	CHB38-30001	24 V. AC	1.0 to 10	\$19.50
19A1789	CHB38-30003	24 V. AC	1.0 to 180	19.50
19A1746	CHB38-70003	120 V. AC	1.0 to 180	19.50
19B1460	CHB38-70001	120 V. AC	1.0 to 10	19.50

### CHB — DELAY "ON RELEASE"

Release occurs when control circuit is de-energized. Accuracy  $\pm 10\%$  of nominal, reset time 100 milliseconds, repeatability  $\pm 2\%$ . 11 pin base.

Stk. No.	Mfg. No.	Input Voltage	Delay Seconds	Price Each
19B1463	CHB38-70011	120 V. AC	1.0 to 10	\$23.50
19A1747	CHB38-70013	120 V. AC	1.0 to 180	23.50

### CDB DELAY "ON OPERATE"

Accuracy  $\pm 5\%$  of nominal, reset time 60 milliseconds, repeatability  $\pm 1\%$ . Octal base.

Stk. No.	Mfg. No.	Input Voltage	Delay Seconds	Price Each
19B1482	CDB38-70003	120 V. AC	.1 to 10	\$43.80
19B1483	CDB38-70005	120 V. AC	1.8 to 180	43.80

## CUF SOLID STATE TIME DELAY RELAYS

Adjustable thru delay range shown by using external resistor (not furnished). For minimum time two terminals, 2 and 5, must be shorted; for maximum time the listed external resistor between terminals 2 and 5 must be added. For intermediate times select a lesser value resistor, or a potentiometer. 1.53 x 1.41 x 2.50" H. Octal base. Wire in circuit or use 9KU1 socket.

Stk. No.	Mfg. No.	Input Voltage	Delay Seconds	Ext. Resistor	Price Each
19A1740	CUF41-70010	120 V. AC	1.0 to 10	200K	\$14.25
19A1749	CUF41-70120	120 V. AC	1.0 to 120	2.4 Meg.	15.50
19A1750	CUF41-30010	24 V. AC	1.0 to 10	200K	14.25
19A1810.	9KU1. Socket for CUF41.				.80

QUANTITY DISCOUNT SCHEDULE FOR SOLID STATE RELAYS—Deduct from single lot price shown: 5% for 10-24, 10% for 25-49, 20% for 50-99.

## JM MERCURY WETTED CONTACT RELAYS

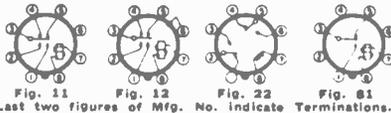
Long life, high speed with unvarying dependability through billions of operations.

Internal silt glass capsule contains contacts, a movable armature, a reservoir of mercury, all hermetically sealed in a high pressure hydrogen atmosphere. A film of mercury is renewed for every operation minimizing contact bounce pits or welds. Upright mounting required, but deviation from upright up to 30° causes only minor deviation in operating characteristics. All have octal bases.

JML contact rating 500 V. max., 2 amp max. with contact protection. Details of R-C contact protection circuit with each relay. Up to 200 operations per second possible. SPDT break before make (form C) non-bridging contacts. Size JML 2.64" seated height. 1.31 max. dia. Wt. 5 ozs.

JM1 contact rating 500 V. max., 5 amp max. up to 100 operations per second. SPDT make before break (form D) bridging contacts. Size 2.64" seated height. 1.31 max. dia. Wt. 4 ozs.

JM2 contact rating 500 V. max., 5 amp max. up to 60 operations per second. DPDT make before break (form D) bridging contacts. Size 3.41" seated height. 1.69" max. dia. Wt. 8 ozs.



Stock No.	Mfg. No.	Coll Ohms	Coll MA	Prices Each		
				1-9	10-24	25-99
19A1753	JML-1110-81	350	13.1	\$13.35	\$ 9.98	\$ 8.48
19A1754	JML-1160-81	1000	8.1	13.35	9.98	8.48
19A1755	JML-1190-81	2500	4.0	14.25	10.63	9.05
19A1756	JML-1200-81	4000	3.4	14.25	10.63	9.05
19B401	JM1-109-12	130	38.8	18.15	12.05	10.26
19B439	JM1-112-11	500	20.1	18.15	12.05	10.26
19B440	JM1-114-11	700	20	18.15	12.05	10.26
19B470	JM1-118-11	2500	10.1	18.40	13.23	10.41
19B472	JM1-119-11	4K	8.1	8.15	8.15	8.15
19B451	JM2-110-22	500	34.8	28.20	19.55	18.84
19A1751	JM2-112-22	1250	22.1	28.20	19.55	18.84
19A1752	JM2-115-22	5000	11.3	28.20	19.55	18.84

## GP COIL AND CONTACT ASSEMBLIES

Complete interchangeability of switch assemblies and contact coils. Separate AC and DC coils to match with 2PDT and 4PDT switches. Assemble to your specifications. Contacts  $\frac{3}{16}$ " dia. silver.



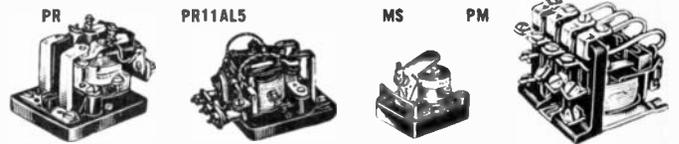
SWITCH ASSEMBLIES				GPD CURRENT COILS			
Stk. No.	Mfg. No.	Contacts	Amps	Each	Stk. No.	Resistance	Each
19A1757	GP11	DPDT	5	\$1.90	19A1764	2,500	\$1.70
19A1758	GP17	4PDT	5	3.25	19A1765	5,000	1.95
					19A1766	10,000	2.30

GPA AC COILS				GPD DC COILS				
Stk. No.	Coil Voltage	Net Each	Stk. No.	Coil Voltage	Net Each	Stk. No.	Coil Voltage	Net Each
19A1759	6 V.	\$1.85	19A1767	6 V.	\$2.30	19A1768	12 V.	2.30
19A1760	12 V.	1.85	19A1769	24 V.	2.30	19A1770	110 V.	3.45
19A1781	24 V.	1.85						
19A1782	120 V.	1.85						
19A1783	240 V.	2.30						

## POTTER & BRUMFIELD POWER RELAYS

FOR HEATING-VENTILATING-AIR CONDITIONING-MOTOR STARTING  
UL and CSA Listed—All Screw Terminals



### PR HEAVY DUTY POWER RELAYS

A highly dependable, fast acting, sturdily constructed relay for continuous heavy duty use in industrial control applications. Molded phenolic base, bobbin and contact carrier. 25 amp silver contacts. 2 1/2" wide x 2 1/2" long x 2 3/4" high (PR11 are 4 3/4" long). AC types are 60 cycles, single throw types are normally open. Wt. 1 lb.

Stk. No.	Type	Contacts	Coil V.	Each	Stk. No.	Type	Contacts	Coil V.	Each
19A366	PR3AY	SPST	24AC	\$4.55	19A368	PR7AY	DPST	24AC	\$5.40
19A1402	PR3AY	SPST	120AC	4.55	19A1404	PR7AY	DPST	120AC	5.40
19A1335	PR3AY	SPST	240AC	5.00	19A369	PR7AY	DPST	240AC	5.90
19A1415	PR3DY	SPST	6DC	4.55	19A1373	PR7DY	DPST	12DC	5.40
19A1336	PR3DY	SPST	12DC	4.55	19A1321	PR7DY	DPST	24DC	5.40
19A370	PR5AY	SPDT	24DC	4.80	19A1369	PR11AY	DPDT	6AC	7.10
19A1403	PR5AY	SPDT	120AC	4.80	19A372	PR11AY	DPDT	24AC	7.10
19A371	PR5AY	SPDT	240AC	5.25	19A160	PR11AY	DPDT	120AC	7.10
19A1337	PR5DY	SPDT	12DC	4.80	19A373	PR11AY	DPDT	240AC	7.65
19A1322	PR5DY	SPDT	24DC	4.80	19A1338	PR11DY	DPDT	12DC	7.10
19A1368	PR7AY	DPST	6AC	5.40	19A377	PR11DY	DPDT	110DC	7.75

METAL DUST COVER for PR Relays. 19A438. PB #35D013 Each.....\$3.45

### PR11A15 TYPE

Same power type PR described above. DPDT with additional set of SPDT contacts  $\frac{3}{16}$ " silver rated 5 amps. Permits use of remote control circuits such as push button, time delay, etc. Not UL or CSA listed.

No. 19A1342. Coil Voltage 120 V. AC. Each.....\$9.00

### PM 4PDT POWER TYPE

For use in polyphase and heavy duty switching.  $\frac{1}{4}$ " contacts rated 16 amps. 120 V. - 25 amp 240 VAC, 1 H.P. per movable arm at 120 to 240 single phase. UL and CSA listed. 2 1/2" W., 3 3/4" D., 2 3/4" H. Heavy 8-32 screw terminals. Wt. 14 oz. For AC volts.

Stk. No.	Mfg. No.	Coll Volts	Net Ea.	Stk. No.	Mfg. No.	Coll Volts	Net Ea.
19A1510	PM17AY	6AC	\$13.80	19A1513	PM17AY	120AC	\$13.80
19A1512	PM17AY	24AC	13.80	19A1514	PM17AY	240AC	14.10

No. 19C91. Cover for PM Relays. PB #35D027. Each.....\$3.45

### MS MOTOR STARTING

For capacitor start, induction run motors. Operates on back EMF of running winding. Carries UL component recognition. Size 2 1/2" x 3 x 2 1/2" high. Pure silver contacts. For Motors up to 3 HP (DB Contacts).

19A1457.	MS4AY.	SPST-NC Contacts.	120 V. AC.	Each.....	\$4.85
19A1458.	MS4AY.	SPST-NC Contacts.	240 V. AC.	Each.....	\$5.10
No. 19A1441.	Metal Dust Cover for MS Relays.	PB #35D130.	Each.....	\$2.20	

### KT ANTENNA RELAYS "P" CLEAR PLASTIC CASE

Low-loss glass Melamine insulation. For switching 300 ohm RF line. DPDT silver contacts rated at 5 amps. Size 1 1/4" x 1 1/4" x 1 1/4". Mounts with 6-32 stud.



With Octal (8 Pin) or 11 Pin Base. Plugs into tube socket. Mount components or make assemblies in case.



Stk. No.	Type	Coll V.	Net Ea.	Stk. No.	Type	Coll V.	Net Ea.
19A1451	KT11A	6AC	\$4.10	19A1400.	35D070.	8 Pin Base.	Ea. 85c
19A1452	KT11A	120AC	4.10	19A1401.	35DQ72.	11 Pin Base.	Ea. 80c
19A1453	KT11D	6DC	4.10	9-KR-15 HOLD DOWN SPRING. Holds "P" case and KRP-KCP plug-in relays securely in any mounting position.			
19A1454	KT11D	12DC	4.10	No. 19B392	Box		
				Each	.....	15c of 50	\$5.80

### AMPERITE TIME DELAY RELAY

Thermostatic type hermetically sealed, unaffected by altitude, moisture or other atmospheric conditions. Operate on AC or DC. Contacts are SPST rated at 3 amps. Heater may be operated continuously. Heater wattage—2 W. approx. For 220 V. use a 6500 ohm 5 watt resistor in series with 115 V. heater.



Standard type are 2 7/8" high, less pins, x 1 1/4" maximum diameter, have octal base. Miniature type are 2 1/2" above pins x 2 7/8" diameter with 9 pin miniature base.

Delay Sec.	NORMALLY OPEN CONTACTS				NORMALLY CLOSED CONTACTS			
	6.3	12	28	115	6.3	12	28	115
2				115N02				115C2
3	6N03	12N03	28N03	115N03	6C3	12C3	28C3	115C3
5	6N05	12N05	28N05	115N05	6C5	12C5	28C5	115C5
8				115N08				115C8
10				115N10				115C10
15	6N015	12N015	28N015	115N015	6C15	12C15	28C15	115C15
20				115N020				115C20
30	6N030	12N030	28N030	115N030	6C30	12C30	28C30	115C30
45				115N045				115C45
60	6N060	12N060	28N060	115N060	6C60	12C60	28C60	115C60
90				115N090				115C90
120	6N0120	12N0120	28N0120	115N0120	6C120	12C120	28C120	115C120
180	6N0180	12N0180	28N0180	115N0180	6C180	12C180	28C180	115C180

STANDARD OCTAL BASE TIME DELAY RELAY  
Specify Stock No. 19A5008 and Amperite Type Number. Any Type, Each.....\$2.40

9-PIN MINIATURE TIME DELAY RELAY  
Stocked only in 115 volt from 2 to 120 second delay.

Specify Stock No. 19A5009 and Amperite Type Number with T suffix. Each.....\$2.40



### MS 40 MINIATURE DC SENSITIVE RELAYS

Contacts rated 2 amps. non-inductive 28 V. DC or 115 V. AC. 1PDT gold alloy cross bar contacts, solder terminals. 4-40 mounting hole. Armature common to frame. 1 1/8 x 1 1/8 x 1 1/8". Shpg. wt. 3 ozs.

Stock No.	Mfg. No.	Nom. Current or Voltage	Resistance	1-24	25-49	50-99	100-249
19A1701	MS40-901	6 V.	250	\$2.11	\$1.90	\$1.69	\$1.48
19A1702	MS40-902	13.5 MA	500	2.18	1.97	1.75	1.53
19A1703	MS40-904	12 V.	1000	2.26	2.04	1.81	1.59
19A1704	MS40-906	6.0 MA	2500	2.38	2.12	1.88	1.65
19A1705	MS40-907	4.3 MA	5000	2.44	2.20	1.96	1.71
19A1700	MS40-909	24 V.	10,000	2.89	2.61	2.32	2.03



### MS 64 MINIATURE DC SENSITIVE RELAYS

Contacts rated 2 amps. non-inductive 28 V. DC or 115 V. AC. 1PDT gold alloy cross bar contacts. Snap on cover. Molded construction. Isolated contacts. 1 1/8 x 3/4 x 1 1/8".

#### (1) PRINTED CIRCUIT TERMINALS

Stock No.	Mfg. No.	Voltage or Current	Resistance	1-24	25-49	50-99	100-249
19A1822	MS64-901	6 V.	400	\$2.21	\$1.99	\$1.77	\$1.55
19A1823	MS64-902	12 V.	1600	2.27	2.05	1.82	1.59
19A1824	MS64-903	24 V.	6500	2.50	2.25	2.00	1.75
19A1825	MS64-904	3 MA	10,000	2.69	2.43	2.16	1.89

#### (2) BRACKET MOUNTING

Stock No.	Mfg. No.	Voltage or Current	Resistance	1-24	25-49	50-99	100-249
19A1826	MS64-911	6 V.	400	2.27	2.05	1.82	1.59
19A1827	MS64-912	12 V.	1600	2.34	2.11	1.88	1.64
19A1828	MS64-913	24 V.	6500	2.56	2.31	2.05	1.80
19A1829	MS64-914	3 MA	10,000	2.76	2.49	2.21	1.94

### MS 50 MINIATURE DC SENSITIVE RELAYS

Contacts rated 2 amps. non-inductive 28 V. DC or 115 V. AC. Gold alloy cross bar contacts. Solder terminals. Isolated contacts. Open type: 1 1/8 x 1 1/8 x 1 1/4". Plug in: 2 x 1 3/8 x 1 3/8". Shpg. wt. 5 ozs.



#### TWO POLE DOUBLE THROW—OPEN TYPE

Stock No.	Mfg. No.	Nom. Current or Voltage	Resistance	1-24	25-49	50-99	100-249
19A1798	MS50-901	6 V.	160	\$4.36	\$3.93	\$3.49	\$3.06
19A1799	MS50-902	12 V.	650	4.36	3.93	3.49	3.06
19A1800	MS50-903	24 V.	2600	4.63	4.17	3.71	3.25
19A1801	MS50-904	6.7 MA	5000	4.86	4.36	3.89	3.41
19A1802	MS50-905	4.7 MA	10,000	5.13	4.62	4.11	3.60
19A1803	MS50-906	3.9 MA	15,000	5.66	5.10	4.53	3.97

#### THREE POLE DOUBLE THROW—OPEN TYPE

Stock No.	Mfg. No.	Nom. Current or Voltage	Resistance	1-24	25-49	50-99	100-249
19A1804	MS50-921	6 V.	100	5.53	4.98	4.43	3.88
19A1805	MS50-922	12 V.	400	5.53	4.98	4.43	3.88
19A1806	MS50-923	24 V.	1600	5.60	5.04	4.48	3.92
19A1807	MS50-924	8.5 MA	5000	6.03	5.43	4.85	4.22
19A1808	MS50-925	6.0 MA	10,000	6.31	5.67	5.07	4.41
19A1809	MS50-926	4.9 MA	15,000	6.83	6.14	5.49	4.78

#### TWO POLE DOUBLE THROW—PLUG IN TYPE

Stock No.	Mfg. No.	Nom. Current or Voltage	Resistance	1-24	25-49	50-99	100-249
19A1810	MS50P-901	6 V.	160	8.05	7.25	6.44	5.64
19A1811	MS50P-902	12 V.	650	8.05	7.25	6.44	5.64
19A1812	MS50P-903	24 V.	2600	8.32	7.49	6.66	5.83
19A1719	MS50P-904	6.7 MA	5000	8.55	7.70	6.84	5.99
19A1720	MS50P-905	4.7 MA	10,000	8.83	7.95	7.07	6.19
19A1721	MS50P-906	3.9 MA	15,000	9.35	8.42	7.48	6.55

### 129 AC POWER RELAYS

Totally enclosed. Screw connections. Contact rating inductive load: 18 amp at 250 V. continuous 1 HP - 125 V, 2 HP - 250 V; resistive load: 18 amp continuous. Operates in any position. 2 3/8 x 1 1/8 x 1 1/8". Shpg. wt. 5 ozs.



Stock No.	Mfg. No.	Coil Voltage	Contact	1-24	25-49	50-99	100-249
19A1744	129-902	24 VAC	1PNO	\$4.11	\$3.70	\$3.29	\$2.89
19A1745	129-903	120 VAC	1PNO	4.35	3.92	3.48	3.05
19A1727	129-906	24 VAC	1PDT	5.11	4.60	4.09	3.58
19A1728	129-907	120 VAC	1PDT	5.37	4.84	4.30	3.76
19A1729	129-908	208/230 VAC	1PDT	5.71	5.14	4.57	4.00

### 84 AC GENERAL PURPOSE RELAYS

Totally enclosed. Screw terminals. Operates in any position. 2 3/8 x 1 1/8 x 1 1/2". Shpg. wt. 5 ozs. Contact Rating at 125/250 V. AC. Inductive load: 8 amp continuous, 25 amps inrush; resistive load: 16 amps continuous.

Stock No.	Mfg. No.	AC Coil Voltage	Action	1-24	25-49	50-99	100-249
19B179	84-902	24	SPNO	\$3.06	\$2.76	\$2.45	\$2.15
19B180	84-903	120	SPNO	3.37	3.04	2.70	2.36
19A1722	84-904	230/240	SPNO	3.67	3.31	2.94	2.57

Contact Rating at 125/250 V. AC. Inductive load: 8 amps continuous, 18 amps inrush; resistive load: 8 amps continuous.

Stock No.	Mfg. No.	AC Coil Voltage	Action	1-24	25-49	50-99	100-249
19A1723	84-906	24	SPDT	\$3.37	\$3.04	\$2.70	\$2.36
19A1724	84-907	120	SPDT	3.65	3.29	2.92	2.56
19A1725	84-908	230/240	SPDT	4.00	3.60	3.20	2.80

### 91 AC GENERAL PURPOSE RELAYS

2PDT. 1/4 quick connect termination. Wiring terminals included. Enclosed contacts. Solenoid action. Operates in any position. Contact rating inductive load: 12 amp continuous, 60 amp in-rush at 125 V. AC, 6 amp continuous; 35 amp inrush at 250 V. AC; resistive load: 15 amp at 277 V. AC max. 2 1/8 x 1 1/8 x 2 3/8". Shpg. wt. 5 ozs.

Stock No.	Mfg. No.	Coil Voltage	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.
19B181	91-901	24 V. AC	\$5.87	\$5.29	\$4.70	\$4.11
19B182	91-902	120 V. AC	6.47	5.83	5.18	4.53
19A1726	91-903	230/240 V. AC	6.33	5.70	5.07	4.44

### 143 AC POWER CONTACTORS

Two pole normally open. Screw power terminals (#10 solid wire max.) Auxiliary quick-connect terminals. Straight through wiring. Double break contacts. 3 1/4 x 2 3/8 x 2 1/2". Wt. 8 ozs. Contact rating inductive load: 18 amp. continuous, 90 amp. inrush @ 277 V. AC per pole. Resistive load: 25 amp @ 277 V. AC per pole.



Stock No.	Mfg. No.	Coil Voltage	1-24	25-49	50-99	100-249
19A1816	143-901	24	\$4.78	\$4.31	\$3.83	\$3.35
19A1817	143-902	120	4.78	4.31	3.83	3.35
19A1818	143-903	208/240	4.78	4.31	3.83	3.35

Contact rating inductive load: 25 amp. continuous, 150 amp. inrush @ 277 V. AC per pole. Resistive load: 35 amp @ 277 V. AC per pole. With cover.

Stk. No.	Mfg. No.	Coil Voltage	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.
19A1819	143-914	24	\$8.00	\$7.20	\$6.40	\$5.60
19A1820	143-915	120	8.00	7.20	6.40	5.60
19A1821	143-916	208/240	8.00	7.20	6.40	5.60

### 75 AC POWER CONTACTORS

Screw terminal contacts (8 solid wire max.) Hardware included. 9" leads on coil. Contact rating inductive load 2 pole rating: 18 amp. continuous, 90 inrush at 230 V. (2 HP-230 V.) Resistive load: 25 amp - 240 volt per pole. 2 1/2 x 2 1/8 x 2 1/4". Shpg. wt. 8 ozs.



Stock No.	Mfg. No.	Coil Voltage	1-24	25-49	50-99	100-249
19A1730	75-901	24 V. AC	\$4.59	\$4.14	\$3.68	\$3.22
19B211	75-902	115/120 V. AC	4.59	4.14	3.68	3.22
19B212	75-903	230/240 V. AC	4.59	4.14	3.68	3.22

### 85 AC POWER CONTACTORS

Three pole normally open. Screw terminals (#8 solid wire max.) 1/4" auxiliary wiring terminals. Straight-through wiring. Contact rating inductive load: 25 amp. continuous, 150 amp. inrush @ 250 V. AC, 12.5 amp continuous, 75 amp inrush @ 600 V. AC. 3 1/2 x 3 3/8 x 2 5/8". Shpg. wt. 8 ozs.



Stock No.	Mfg. No.	Coil Voltage	1-24	25-49	50-99	100-249
19A1813	85-901	24	\$10.80	\$9.72	\$8.64	\$7.56
19A1814	85-902	120	10.80	9.72	8.64	7.56
19A1815	85-903	208/240	10.80	9.72	8.64	7.56

### 10 TO 30 AMP AC INDUSTRIAL CONTACTORS

Doublebreak contacts. Silver alloy contacts. Replaceable contacts and coil. Hi dielectric arc resistant contact block and carrier. 50/60 Hz coil, resilient mounting. All types are 3 1/2 x 2 3/8 x 3 3/8". Shpg. wt. 5 ozs.

#### C10 10 AMP 4-POLE NORMALLY OPEN

Pressure type power terminals, #10 solid wire max. All contacts convert to N.C.

Stock No.	Type	Coil Voltage	1-24	25-49	50-99	100-249
19A1735	C10-901	24 V. AC	\$12.60	\$11.34	\$10.08	\$8.82
19A1736	C10-902	110 V. AC	12.60	11.34	10.08	8.82
19A1737	C10-903	220 V. AC	12.60	11.34	10.08	8.82

#### C15 15 AMP 4-POLE NORMALLY OPEN

Pressure type terminals, #10 solid wire max. All contacts convert to N.C.

Stk. No.	Type	Coil Voltage	1-24 Ea.	25-99 Ea.	50-99 Ea.	100-249 Ea.
19A1738	C15-901	24 V. AC	\$18.72	\$16.85	\$14.98	\$13.11
19B173	C15-902	110 V. AC	18.72	16.85	14.98	13.11
19B174	C15-903	220 V. AC	18.72	16.85	14.98	13.11

#### C30 30 AMP 4-POLE NORMALLY OPEN

Pressure type terminals, #8, solid wire max.

Stock No.	Type	Coil Voltage	1-24	25-49	50-99	100-249
19A1739	C30-901	24 V. AC	\$19.95	\$17.96	\$15.96	\$13.97
19A1740	C30-902	110 V. AC	19.95	17.96	15.96	13.97
19A1741	C30-903	220 V. AC	19.95	17.96	15.96	13.97

### TYPE C REPLACEMENT CONTACT ASSEMBLIES

Reversing type. 2 sets required.

Stk. No.	Mfg. No.	Replaces	For Relays	1-24 Per Set	25 Up Per Set
19A1742	CA901	45997-3-4	C10, C15, CR15	5.76	\$4.33
19A1743	CA902	45997-5	C30, CR30	7.80	5.85

### TYPE 70 DC POWER CONTACTORS

Single pole, normally open. Continuous duty coil. Non-turning studs. Drawn steel dustproof enclosure, copper stud power and coil terminals, double break rotating disc movable contact, solenoid actuated. Contact rating DC inductive load—36 V. max.; normally open 6V. DC, 80 amp continuous, 300 amp inrush; 12 V. DC, 80 amp continuous, 150 amp inrush; 24 to 36 V. DC, 50 amp continuous, 50 amp inrush. Suggested mounting cap down. Size 2 1/2 x 3 1/2 x 2 1/2". Wt. 1 lb.



#### 4 TERMINAL—ISOLATED COIL

Stock No.	Mfg. No.	Coil Voltage	Resistance Ohms	1-24	25-49	50-99	100-249
19B176	70-901	6 V. DC	4	\$4.00	\$3.60	\$3.20	\$2.80
19B177	70-902	12 V. DC	19	4.00	3.60	3.20	2.80
19B178	70-903	24 V. DC	60	4.00	3.60	3.20	2.80
19A1734	70-904	36 V. DC	114	4.00	3.60	3.20	2.80

#### 3 TERMINAL—COIL COMMON TO CASE

Stock No.	Mfg. No.	Coil Voltage	Resistance Ohms	1-24	25-49	50-99	100-249
19A1790	70-913	6 V. DC	4	\$4.00	\$3.60	\$3.20	\$2.80
19A1791	70-914	12 V. DC	19	4.00	3.60	3.20	2.80
19A1792	70-915	24 V. DC	60	4.00	3.60	3.20	2.80
19A1793	70-916	36 V. DC	114	4.00	3.60	3.20	2.80

#### 3 TERMINAL—COIL COMMON TO LEAD

Stock No.	Mfg. No.
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# RELAYS AND SOLENOIDS



## ALL PURPOSE ECONOMY 10 AMP RELAY

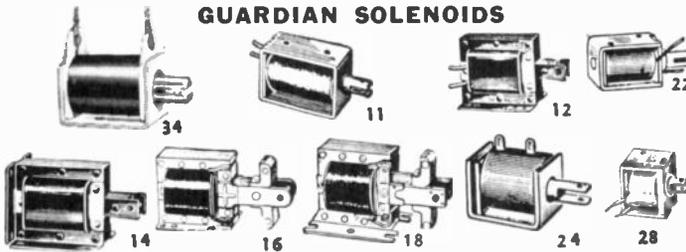
Compact, lightweight relay capable of unusually heavy power control for its size. Long life, high quality relay, available in a variety of AC and DC voltages with a selection of contact combinations. 10 amp. contacts, 115 V. AC non-inductive load. Tapped for 8-32 single screw mounting. Size, 1 1/8" x 1 1/2" x 1". Shpg. wt. 4 oz.

### IR640 60 CYCLE AC

### IR645 DC COILS

Stock No.	Coil Volts	Mfg. No.	Cont. Comb.	Net Each	Stock No.	Coil Volts	Mfg. No.	Cont. Comb.	Net Each
19A417	6	IR640U-A-6	SPST	\$2.90	19A430	6	IR645U-A-6	SPST	\$2.90
19A418	6	IR640U-C-6	SPDT	3.15	19A431	6	IR645U-C-6	SPDT	3.15
19A419	6	IR640U-2C-6	DPDT	3.40	19A432	6	IR645U-2C-6	DPDT	3.40
19A420	6	IR640U-4C-6	4PDT	5.00	19A433	6	IR645U-4C-6	4PDT	5.00
19A421	24	IR640U-A-24	SPST	2.90	19B265	12	IR645U-A-12	SPST	2.90
19A422	24	IR640U-C-24	SPDT	3.15	19B266	12	IR645U-C-12	SPDT	3.15
19A423	24	IR640U-2C-24	DPDT	3.40	19B267	12	IR645U-2C-12	DPDT	3.40
19A424	24	IR640U-4C-24	4PDT	5.00	19B268	12	IR645U-4C-12	4PDT	5.00
19A425	115	IR640U-A-115	SPST	2.90	19A434	24	IR645U-A-24	SPST	2.90
19A426	115	IR640U-C-115	SPDT	3.15	19A435	24	IR645U-C-24	SPDT	3.15
19A427	115	IR640U-2C-115	DPDT	3.40	19A436	24	IR645U-2C-24	DPDT	3.40
19A428	115	IR640U-4C-115	4PDT	5.00	19A412	24	IR645U-4C-24	4PDT	5.00

## GUARDIAN SOLENOIDS



"I" Intermittent types can be energized up to 5 minutes. "C" continuous duty types for unlimited time, if operated within power rating. Plunger has slotted end with 1/8" hole for coupling. \*Maximum lift at minimum stroke.

Stock No.	Mfg. No.	Duty	AC Volts or DC	AC Ohms	Amps	Adj. Stroke	*Max. Lift	Body Size L. W. H.	Wt. Oz.	Each Net
19B142	11	I	6	DC	2	3.00	1/8 - 3/8	34 oz. 1 3/8 1 3/8 1 3/8	7.5	\$3.15
19B143	11	C	6	DC	5	1.2	1/8 - 3/8	25 oz. 1 3/8 1 3/8 1 3/8	7.5	3.15
19B144	11	I	24	AC	5.1	1.10	1/8 - 1	26 oz. 1 3/8 1 3/8 1 3/8	7.5	3.15
19B153	11	C	24	AC	12	.33	1/8 - 1	10 oz. 1 3/8 1 3/8 1 3/8	7.5	3.15
19B155	11	C	24	DC	72	.333	1/8 - 3/8	25 oz. 1 3/8 1 3/8 1 3/8	7.5	3.15
19B156	11	I	115	AC	125	.225	1/8 - 1	26 oz. 1 3/8 1 3/8 1 3/8	7.5	3.15
19B165	11	C	115	AC	300	.072	1/8 - 1	10 oz. 1 3/8 1 3/8 1 3/8	7.5	3.15
19B169	12	C	115	AC	150	.155	1/8 - 3/8	22 oz. 1 3/8 1 3/8 1 3/8	6	4.46
19B103	14	I	115	AC	11	1.4	1/8 - 1 1/2	110 oz. 2 1/8 1 1/8 2 1/8	19	6.04
19B170	14	C	115	AC	18	.52	1/8 - 1 1/2	65 oz. 2 1/8 1 1/8 2 1/8	19	6.04
19B74	16	C	115	AC	85	.19	1/8 - 3/4	50 oz. 1 3/8 1 3/8 1 3/8	7.5	3.68
19B186	18	I	115	AC	8.8	1.45	1/8 - 1	280 oz. 2 1/2 1 1/8 2 1/8	16.5	4.99
19B189	18	C	115	AC	19.7	.39	1/8 - 1	145 oz. 2 1/2 1 1/8 2 1/8	16.5	4.99
19B285	18	I	230	AC	45	.59	1/8 - 1	280 oz. 2 1/2 1 1/8 2 1/8	16.5	5.25
19B286	18	C	230	AC	78	.20	1/8 - 1	145 oz. 2 1/2 1 1/8 2 1/8	16.5	5.25
19A328	22	C	6	DC	9	.66	1/8 - 1/4	13 oz. 1 1/8 3/4 3/4	2.5	2.94
19A337	22	I	24	DC	60	.40	1/8 - 1/4	24 oz. 1 1/8 3/4 3/4	2.5	2.94
19A375	24	C	115	AC	500	.07	1/8 - 3/8	10.5 oz. 1 1/4 2 3/8 3/4	3.0	3.41
19A23	28	I	24	AC	7.5	.9	1/8 - 1/2	35 oz. 1 1/8 1 3/8 1 3/8	3.5	3.15
19A24	28	C	24	AC	17.4	.34	1/8 - 1/2	20 oz. 1 1/8 1 3/8 1 3/8	3.5	3.15
19A25	28	I	115	AC	220	.16	1/8 - 1/2	35 oz. 1 1/8 1 3/8 1 3/8	3.5	3.41
19A27	28	C	115	AC	400	.077	1/8 - 1/2	20 oz. 1 1/8 1 3/8 1 3/8	3.5	3.41
19A43	28	I	6	DC	3.3	1.8	1/8 - 1/2	41 oz. 1 1/8 1 3/8 1 3/8	3.5	2.94
19A44	28	C	6	DC	7.7	.78	1/8 - 3/8	24 oz. 1 1/8 1 3/8 1 3/8	3.5	2.94
19A47	28	I	12	DC	13	.92	1/8 - 1/2	41 oz. 1 1/8 1 3/8 1 3/8	3.5	2.94
19A58	28	C	12	DC	27	.45	1/8 - 1/2	24 oz. 1 1/8 1 3/8 1 3/8	3.5	2.94
19A65	28	I	24	DC	50	.48	1/8 - 1/2	41 oz. 1 1/8 1 3/8 1 3/8	3.5	2.94
19A68	28	C	24	DC	104	.23	1/8 - 1/2	24 oz. 1 1/8 1 3/8 1 3/8	3.5	2.94
19C282	34	I	115	AC	400	.11	1/8 - 1/2	15 oz. 1 1/8 3/4 1 1/4	2.5	2.31
19C254	34	I	6	DC	4.3	1.4	1/8 - 1/4	17 oz. 1 1/8 3/4 1 1/4	2.5	2.31

### GUARDIAN DISCOUNT SCHEDULE

Quantity users may deduct from net prices of all Guardian products as follows: 25-49 of a kind 10%; 50-99 of a kind 15%; 100-249 of a kind 20%; 250 and up 30%. B-A is your authorized stocking distributor for ALL Guardian Products.



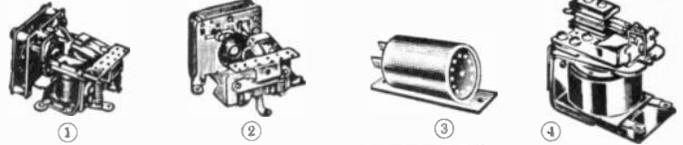
Stock No.	Mfg. No.	AC Volts	Max. Stroke	*Max. Pull Lbs.	Overall Size			Prices Each					
					L.	W.	H.	1-24	25-49	50-99	100-249	250-499	500-999
19A5000	801-101-2	115	5/8	4.5	1 1/8	1 3/8	1 1/2	\$3.90	\$3.40	\$3.20	\$3.05	\$2.65	\$2.35
19A5001	812-101-2	115	1 1/8	12	2 1/2	1 3/8	2	5.15	4.60	4.40	4.10	3.55	3.30
19A5002	813-101-2	115	1 1/8	15	2 1/2	2 1/8	2	6.00	5.20	4.85	4.55	3.80	3.50
19A5003	813-103-2	220	1 1/8	15	2 1/2	2 1/8	2	6.00	5.20	4.85	4.55	3.80	3.50
19A5004	821-101-2	115	1 3/8	29	2 7/8	2 3/8	2 1/8	7.65	6.80	6.20	5.80	4.85	4.50
19A5005	821-103-2	220	1 3/8	29	2 7/8	2 3/8	2 1/8	7.65	6.80	6.20	5.80	4.85	4.50
19A5007	831-101-11	115	1	7.0	2 3/4	2.0	2.23	8.05	7.24	6.24	.....	.....	.....
19A5010	860-201-3	115	1/2	.5	1 1/8	3/4	1 3/8	2.35	2.30	2.20	1.90	1.65	1.45

## CORNELL DUBILIER 10 AMP RELAYS TOP QUALITY AT LOWER COST!

Fast acting reliable relays. 115 V.A.C. Open type is 1x1 1/2 x 1 1/2" H. with single 6-32 threaded mounting stud; Plug-in is 1 3/8 x 1 3/8 x 2" H. DPDT plug-in has octal base. 3PDT plug-in has 11 pin base. Designed to UL specifications. Shpg. wt. 3 ozs.

Stock No.	Mfg. No.	Con-tacts	Style	Prices Each		
				1-24	25-49	50-99
19A1837	302A10-115	DPDT	Open	\$3.70	\$3.52	\$3.33
19A1838	303A10-115	3PDT	Open	4.15	3.94	3.74
19A1839	312A10-115	DPDT	Plug-in	5.70	5.42	5.13
19A1840	323A10-115	3PDT	Plug-in	7.10	6.75	6.39

Write for quotation on bulk relays in larger quantities.



## GUARDIAN STEPPERS

For accurate sequence selecting, pulse multiplying, pulse dividing, circuit selecting, counting and latching. Direct drive. Switching operations completed upon energization.

- MER 24 POINT ELECTRICAL RESET STEPPER.** Capable of counting up to 21 then resetting automatically. Can be reset to zero by 10 MS or longer impulse to reset coil. Two or more may be interconnected to increase count as desired. Size 2 1/4 x 3 3/4" x 2 1/2" H. Contacts 1/2 amp. Intermittent duty coil. Wt. 1 1/2 ozs. **\$15.75**
- IR-MC 24 POINT MIDGET.** Continuous rotation stepper with 24 points. For circuit selecting. Contacts 1/2 amp. Intermittent duty coil. Size 3 1/4 x 3 x 2 1/4" H. Wt. 9 1/2 ozs. No. 19A471. IR-MC-120 V. AC, 20 steps per second. Each **\$14.75**
- ROTOMITE STEPPER—DC.** 12 positions—continuous rotation. Completely metal enclosed. 3 amp contacts resistive load. Used in business machines, computer circuits, automation. Size 2" L. x 1 1/4" dia. Continuous duty. Wt. 5 ozs. No. 19A486. 6 Volts DC. Mfg. No. IR-705-12P-6D. Net Each **\$6.60**  
No. 19A487. 12 Volts DC. Mfg. No. IR-705-12P-12D. Net Each **\$6.60**  
No. 19A488. 24 Volts DC. Mfg. No. IR-705-12P-24D. Net Each **\$6.60**

- LATCHING ON/OFF RELAY.** Midget latching relay for use on 115 V. AC. Provides positive on-off control for positioning devices; remote controls, lighting circuits, etc. 5 amp contacts, snap action switching. Short duration pulse reverses switch and holds last position with coil de-energized. Size 2 1/4 x 1 1/8 x 1 1/8". Intermittent duty coil. Wt. 4 ozs.

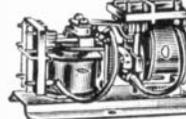
Stk. No.	Volts	Mfg. No.	Contacts	Net Each
19A376	115 V. AC	IR640L-A120	SPST	\$4.45
19A398	115 V. AC	IR640L-C120	SPDT	4.75

## IMPULSE RATCHET RELAYS



Type 660. Contact ratings 12 1/2 amp. resistive load 115 volts AC. Each impulse reverses contacts. Intermittent duty coil. Relay size 3x1 3/4x2 1/4". Wt. 8 oz.  
No. 19A523. Type 660-C-120AC. SPDT. Each **\$6.85**  
No. 19A524. Type 660-2C-120AC. DPDT. Each **\$7.40**

## INTERLOCKING AC RELAYS



TYPE IR-1200/1200. Used to maintain circuits continuously without coil power consumption. Unit is electrically pulse operated with mechanical hold and electrical release. 10 amp contacts 60 cycle, non-inductive. Size 1 1/4 x 1 3/8 x 3 1/4". Wt. 5.5 oz.

Stk. No.	Mfg. No.	Contacts	Volts	Each
19A549	IR-1200/1200-4C-120A	4PDT	115 V. AC	\$10.40

## GUARDIAN 1210 AC PLUG-IN RELAYS

Enclosed in lexan transparent case. DPDT has octal base, 3PDT has 11 pin base. Rated 10 amps 60 Hz., 115 VAC non-inductive load. 2 1/4 x 1 3/8 x 1 3/8". Shpg. wt. 3.5 ozs.

Stock No.	Coil Volts	Mfg. No.	Contact Combination	Net Each
19A1831	6 AC	1210-2C-6A	DPDT	\$6.00
19A1832	24 AC	1210-2C-24A	DPDT	6.00
19A1833	120 AC	1210-2C-120A	DPDT	6.00
19A1834	120 AC	1210-3C-120A	3PDT	7.50
19A1835	230 AC	1210-2C-240A	DPDT	6.25

## WITH BUILT-IN NEON LAMP

Used for indicating circuit faults. For 120 V. AC operation. Rated 10 amps.

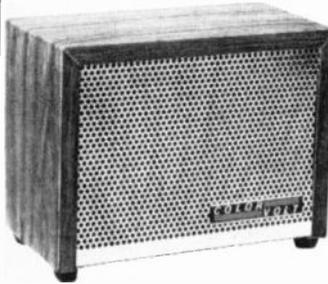
19A1836	120 V. AC	1210N-2C-120A	DPDT	\$6.75
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## CONTROLS COMPANY CONSTANT DUTY SOLENOIDS

Type 801, 812, 813, 821, and 831 are heavy duty solenoids of superior quality for operating valves, clutches, switches, interlocks and mechanical controls. Features "double T" plunger design, moisture proof coil molded in Epoxy plastic, screw terminals. Type 860. Compact unit where a small size is required. \*Maximum pull pounds shown at 1/4" stroke.

# POWER INVERTERS, DC POWER SUPPLIES

## NEW SOLA "COLOR VOLT" COLOR TELEVISION VOLTAGE REGULATOR



Operates automatically . . . turns "on and off" with your regular TV switch. Safeguards against changes in line voltage that cause bad TV pictures. Prevents "shakes", "flips", "rolls", "flashes", "shrinks", "fades", or color changes often brought on or aggravated by the "on and off" operation of your normal household appliances, air conditioners, etc. Also prevents line voltage increases which can seriously shorten the life of tubes, transistors, picture tube and other components in your TV set. Simple plug-in installation, operates silently. Input voltage range 95 to 130 volts AC 60 Hz. Output constant 117 V. AC, 375 watts capacity. In attractive wood grained metal enclosure. 8 1/2 x 4 1/2 x 6 1/2" H. Wt. 13 lbs. Mfg. List \$59.95  
No. 13A8025. Net Each **\$40.21**

## TERADO MOBILE POWER INVERTERS

FOR BOATS — CARS — TRAILERS  
CABINS — CAMPERS



- Provides 117 V. home electricity anywhere.
- Each unit has standard AC receptacle.
- Operates from 12 volt battery.

Transistorized Models for frequency sensitive equipment, such as tape recorders. Output 60 cy.  $\pm$  1/2 cy. With remote control switch and battery cables. Copper clad case.

Atlas Model 50-200. Rated 175 watts continuous, 200 watts intermittent. Size 10 3/4 x 6 x 6". Shpg. wt. 21 lbs.  
No. 13A8001. Each. **\$114.53**

Continental Model 50-191. Rated 275 watts continuous, 300 watts intermittent. Size 10 3/4 x 6 x 6". Shpg. wt. 30 lbs.  
No. 13A8003. Each. **\$158.40**

Galaxy Model 50-205. For equipment not sensitive to frequency. Ideal for radio, lights, etc. Lug terminals for connecting input voltage. Rated 140 watts continuous. 175 watts intermittent. 10 3/4 x 6 x 6".  
No. 13A8004. Shpg. wt. 11 lbs. Each. **\$46.94**

## LOW COST VIBRATOR MODELS

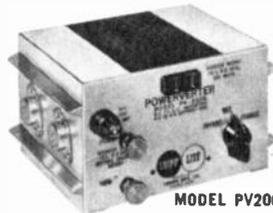
Plug Into 12 Volt Cigarette Lighter Outlet.  
Dynamo Model 50-197. Rated 25-30 watts. Size 2 x 2 x 3 3/4". Wt. 2 lbs.  
No. 13A8005. Each. **\$13.80**

Senior Model 50-116. Rated 40-50 watts. Size 2 1/4 x 2 1/2 x 4 1/4". Wt. 3 lbs.  
No. 13A8006. Each. **\$18.47**

## TERADO TRAV-ELECTRIC COMPLETELY SELF CONTAINED 117 V. AC POWER SUPPLY

Model 50-160 Complete. Contains inverter with battery and automatic recharger. Output 117 volts 60 cy. AC, 125 watts continuous, 175 intermittent. Meter shows charge rate. Frequency controlled. Battery: 25 amp hr. wet storage. Charger operates on 110 V. AC or 12 volts (cigarette lighter socket), 6 amp rate automatically tapers to 0, will not overcharge. Copper clad case 12 x 5 1/2 x 8". Wt. 30 lbs. Shpg. wt. 36 lbs.  
No. 13A8002. Each. **\$74.19**

## TRIPPLITE HEAVY DUTY DC TO AC SOLID STATE POWER INVERTERS



MODEL PV200B



MODEL PV-450B

## 115 V. AC INVERTER AND 12 V. BATTERY CHARGER SUPPLIES PORTABLE POWER FOR RADIOS, LIGHTS & TOOLS

MODEL PV200B. 200 W. Continuous — 250 W. Intermittent. 115 V. AC from 12 V. DC input — Charges 12 V. Battery at 6 Amps on AC Power. Connects easily to any 12 V. DC electrical system. Ideal set-up for campers where AC power source is sometimes available. Your storage battery can then be charged. Later, when external AC may not be available you simply flip the switch from "charge" to "invert." Supplies up to 250 watts intermittently, 200 watts continuous. Battery charger has automatic control . . . tapers current to prevent overcharging. Has four power switching transistors. Rugged construction. Metal parts plated to resist weather and corrosion. Mounts under dash, etc. 3 1/2 x 5 x 5". Fused.  
Shpg. wt. 12 lbs. No. 13A8023. Net Each. **\$57.00**

EXTRA HIGH POWER MODEL PV-450B. 450 W. Continuous — 500 W. Intermittent. 115 V. AC from 12 V. DC input. Also has built-in 12 V. battery charger. All solid state. 10 power switching transistors. Built-in ammeter shows amp battery load, also battery charging rate. Max. charge 10 amps. Neon pilot warns of overloads. Operates hash-free. Size 9 1/4 x 10 x 5 1/4". Shpg. wt. 12 lbs.  
No. 13A8024. Net Each **\$118.00**

NOTE: Triplite Inverters above are recommended for lighting, small power tools, electric razors, tape recorders, radios, TV, phonographs, test equipment, etc. Do not use with refrigerators, air conditioners, toasters, coffee pots, fry pans and other heavy current devices.

## VIKING ENGINEERING REGULATED DC POWER SUPPLIES

FOR SOLID STATE DEVICES



MODEL PZ-131-A



MODEL PZ-451-C

Professional, dependable low voltage power supplies for schools, commercial engineering, research and development, home shops, experimenting. Special stabilized solid state circuitry provides exceptional regulation and low ripple content.

MODEL PZ-131-A. 200 MA GENERAL PURPOSE SUPPLY. Metered regulated output 5-25 V. DC. Features electronic current limiting protecting supply against short circuits. Isolated "floating" output on standard 3/4" spacing allows either positive or negative grounding. Input 110-125 V. 60 Hz Line regulation  $\pm$  10 MV, load regulation 50 MV. AC ripple 1 MV max. Impedance 0.25 ohm. Size 4 1/2 x 2 1/2 x 5". Shpg. wt. 3 lbs.  
No. 13A8026. Net Each **\$39.95**

MODEL PZ-241-A. 1 AMP GENERAL PURPOSE SUPPLY. Similar to PZ-131-A in appearance. Metered, regulated output 5-25 V. DC. Features variable electronic current limiting and variable regulated output voltage. Includes 3 wire line cord. Operates from 110-125 or 220-250 V. 50-60 Hz. Line regulation  $\pm$  10 MV, load regulation 50 MV, AC ripple 1 MV max. impedance 0.1 ohm. Short circuit approx. 125 MA to 1.5 A. Isolated "floating" output, standard 3/4" spaced jack. Size 5 1/2 x 3 x 6". Shpg. wt. 6 lbs.  
No. 13A8027. Net Each **\$69.95**

MODEL PZ-451-C. DUAL  $\pm$  15 V. 300 MA OP AMP SUPPLY. Metered, regulated dual outputs  $\pm$  .5-15 V. DC or 1 to 30 V. DC at currents to 300 MA. Line regulation  $\pm$  10 MV, load regulation 50 MV. AC ripple 1 MV max., impedance 0.2 ohm. Features individual current limiting for each section and "floating" output on standard 3/4" spaced jacks. 3 wire line cord. 110-125 V. 60 Hz input. 5 1/2 x 3 x 6". Shpg. wt. 6 lbs.  
No. 13A8028. Net Each **\$69.95**



MODEL PZ-121



MODEL PZ-131C

MODEL PZ-121 REGULATED EXPERIMENTERS POWER SUPPLY. Variable output 0-15 V. DC @ 100 MA. Fully regulated  $\pm$  .2 V. AC ripple 5 MV max. Features burnout proof circuitry, transformer isolation. Featured in Electronics Illustrated. Designed especially for experimenters, schools, service men and designers working with modern solid state devices. Input 110-125 V. AC 60 Hz. Size 6 1/4 x 3 3/4 x 2".  
No. 13A8029.  
Factory Wired **\$19.95**  
No. 13A8030. Easy to Wire Kit **\$15.95**

MODEL PZ-131C. Similar to PZ-121 above except higher output, .5-15 V. @ 350 MA. Features electronic current limiting, and floating output. Line regulation  $\pm$  10 MV, load regulation 50 MV, AC ripple 1 MV max. Impedance .25 ohm. Input 115-125 V. AC 60 Hz. Size 4 1/2 x 2 1/2 x 4". Shpg. wt. 3 lbs.  
No. 13A8031. Factory Wired Only **\$39.95**

## ALLIED CONTROL RELAYS



T154		BO		PO		
T154 DC Relays. Miniature enclosed type. 1 amp 115 VAC contacts. DPDT (Use 30055-1 Socket) 1 1/2 x 1 1/2 x 1 1/2" H.						
Stk. No.	Mfg. No.	Volts	1-9 Ea.	10-49 Ea.	50-99 Ea.	100 Up Ea.
19A1772	T154-2C	6 DC	\$3.25	\$2.92	\$2.44	\$2.27
19A1773	T154-2C	12 DC	3.25	2.92	2.44	2.27
19A1774	T154-2C	24 DC	3.25	2.92	2.44	2.27
19A1775	T154-2C	48 DC	3.25	2.92	2.44	2.27
19A1776	T154-2C	115 DC	4.95	4.45	3.71	3.46
19A1777-30055-1	Socket for 2C		.55	.50	.43	.38
4PDT (Use 30055-2 Socket) 1 1/2 x 1 1/2 x 1 1/2" H.						
19A1778	T154-4C	6 DC	\$3.63	\$3.27	\$2.72	\$2.54
19A1779	T154-4C	12 DC	3.63	3.27	2.72	2.54
19A1780	T154-4C	24 DC	3.63	3.27	2.72	2.54
19A1781	T154-4C	48 DC	3.63	3.27	2.72	2.54
19A1782	T154-4C	115 DC	5.33	4.80	3.99	3.73
19A1783-30055-2	Socket for 4C		.60	.55	.46	.42
19A1841-30055-8	Socket for 4C with longer center terminals.		.70	.64	.54	.49
BO Series Power Types. DPDT heavy duty power relay. 15 amp. 1 1/2 x 1 1/2 x 1 1/2" H.						
19A1784	BO-6A	6 AC	\$5.80	\$5.22	\$4.35	\$4.06
19A1785	BO-6A	24 AC	5.80	5.22	4.35	4.06
19A1786	BO-6A	115 AC	5.80	5.22	4.35	4.06
PO Series heavy duty 4PDT 15 amp contacts. 1 1/2 x 2 1/2 x 2 1/4" H. Wt. 7.5 ozs.						
19A1787	PO-12A	115 AC	\$7.90	\$7.11	\$5.92	\$5.53



# SUPERIOR AND

**SOLA**

# TRANSFORMERS



Type 10B



Type 21



Type 116BU, 117BU, Type 126U, 136BU, 216BU, 217BU



Type 146U



Type 3PN126, 3PN136B



Type 146



Type 1156D, 1256D



Type 116B, 3PN116B, 117B

## SUPERIOR POWERSTAT VARIABLE TRANSFORMERS WITH "POWRKOTE" HIGH TEMPERATURE INSULATED COILS

For precise variable AC voltage control from zero up to or above line voltage with full rated current available over the entire range. Design is highly efficient auto-former type with single winding over toroidal core. Extremely low heating, zero waveform distortion and excellent regulation from no load to full load. Gold alloy plated commutator, virtually maintenance free.

Uncased open construction Powerstats 10B thru 236BU are panel mounting. Portable types 3PN116B thru 3PN136B are enclosed with 3 wire input cord and output receptacle; 116B enclosed with 2 wire cord and output receptacle; 146 thru 1256D are cased with exposed terminals.

Current and KVA is maximum for a constant-current load.

### OPEN CONSTRUCTION POWERSTATS

Stock No.	Mfg. No.	Input Volts	Input Hertz	Output Volts	Output Amps	KVA	Size Dia.	Depth	Shpg. WL	Net Each
13A941	10B	120	50/60	0-120	2.25	.27	2 1/4"	2 1/4"	2.5 Lbs.	\$12.00
13A942	21	120	50/60	0-120	4.5	.54	3 3/4"	3 3/4"	6 Lbs.	18.00
13A943	116BU	120	50/60	0-120	10	1.2	5"	4 3/8"	12 Lbs.	23.00
13A944	117BU	120	60	0-120	12	1.4	5"	4 3/8"	12 Lbs.	25.00
13A945	126U	120	50/60	0-140	15	1.8	6"	4 5/8"	18 Lbs.	43.00
13A917	136BU	120	50/60	0-120	22	2.6	6 7/8"	4 1/4"	26 Lbs.	63.00
13A918	146U	120	50/60	0-120	30	3.6	9 1/4"	4 3/8"	38 Lbs.	102.00
13A946	216BU	240	50/60	0-240	3.5	.84	5"	4 3/8"	12 Lbs.	28.00
13A919	217BU	240	60	0-240	5	1.2	5"	4 3/8"	12 Lbs.	30.00
13A920	226U	240	50/60	0-240	7.5	1.8	6"	4 5/8"	18 Lbs.	43.00
13A921	236BU	240	50/60	0-280	10	2.4	6 7/8"	4 1/4"	26 Lbs.	63.00

### PORTABLE PLUG-IN POWERSTATS W/2 WIRE CORD

Stock No.	Mfg. No.	Input Volts	Input Hertz	Output Volts	Output Amps	KVA	Size Dia.	Depth	Shpg. Wt.	Net Each
13A937	116B	120	50/60	0-120	10	1.2	5"	5 1/2"	12 Lbs.	\$32.00

### PORTABLE PLUG-IN POWERSTATS W/3 WIRE CORD

Stock No.	Mfg. No.	Input Volts	Input Hertz	Output Volts	Output Amps	KVA	Size Dia.	Depth	Shpg. Wt.	Net Each
13A922	3PN116B	120	50/60	0-120	10	1.2	5"	5 1/2"	12 Lbs.	37.00
13A923	3PN117B	120	60	0-120	12	1.4	5"	5 1/2"	12 Lbs.	41.00
13A924	3PN126	120	50/60	0-120	15	1.8	6 1/8"	5 3/8"	18 Lbs.	61.00
13A925	3PN136B	120	50/60	0-120	22	2.6	7 3/4"	6 1/8"	26 Lbs.	88.00

### CASED POWERSTATS WITH EXPOSED TERMINALS

Stock No.	Mfg. No.	Input Volts	Input Hertz	Output Volts	Output Amps	KVA	Size Dia.	Depth	Shpg. Wt.	Net Each
13A938	146	120	50/60	0-120	30	3.6	9 1/4"	6 3/8"	38 Lbs.	108.00
13A939	1156D	120	50/60	0-120	50	6.0	7.0 13/16"	7 3/8"	82 Lbs.	162.00
13A940	1256D	240	50/60	0-240	28	6.7	7 3/8"	7 3/8"	82 Lbs.	162.00

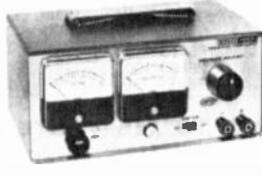
## EICO LOW-RIPPLE DC POWER SUPPLIES



1064S



1020



1025

### MODEL 1064S BATTERY ELIMINATOR AND CHARGER Improved Design with Reliable Silicon Rectifiers

Delivers ripple free DC in two ranges. 0-8 volts and 0-16 volts continuously variable by front panel control adjustment of variable transformer. Ideal for servicing transistor equipment, auto radios, portables, as battery substitute or battery charger. Ranges (selected by toggle switch) 0-8 volts at 10 amp continuous, 20 amp intermittent and 0-16 volts at 6 amps continuous, 10 amp intermittent. Output voltmeter and ammeter permits constant monitoring. Fused primary, automatic reset overload relay on secondary. Cabinet size 8 1/2 x 5 1/2 x 7 1/2". Wt. 16 lbs. Use on 117 volts AC 50-60 cycle line.

No. 35A272. 1064SK Kit, Each .....\$49.95  
No. 35A273. 1064S Factory Wired, Each .....\$64.95

### MODEL 1020 TRANSISTOR POWER AND BIAS SUPPLY

Continuously variable 0-30 volts monitored by dual range voltmeter.  
Versatile, stable, transistorized, capable of up to 300 MA.  
Ideal bench unit which will supply all voltage needed to operate transistor devices, variable bias supply, DC filament supply and to recharge batteries of various kinds. Output voltage continuously variable from 0-30. Current rating 150 MA from 0 to 12 volts. 200 MA from 12 to 24 and 300 MA from 24 to 30. Extremely low ripple 120 cps. at full load is only 0.005%. Silicon rectifier. Size 5 x 4 x 5 1/2". Housed in gray steel cabinet. Fuse protected. Wt. 5 lbs.

No. 35C397. 1020K Kit, Each .....\$25.95  
No. 35C398. 1020 Factory Wired, Each .....\$34.95

### MODEL 1025 TRANSISTOR POWER SUPPLY

Similar to Model 1020 above except has output current meter as well as output voltmeter. Ranges same as 1020. Size 3 3/4 x 8 x 4 3/4".

No. 35A702. Model 1025 Kit, Each .....\$34.95  
No. 35A3042. Model 1025 Factory Wired, Each .....\$49.95

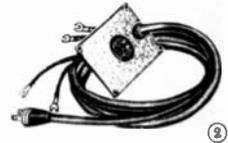
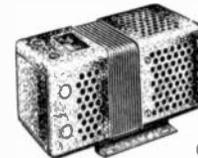
## EICO 1030 VARIABLE REGULATED POWER SUPPLY

Featuring: Regulated continuously variable DC volts 0-400, continuous current at 0-200 volts 100 MA. At 200-400 volts 150 MA. Intermittent current at 0-200 volts 125 MA. Bias voltage from 0-150 volts at 2 MA. Regulation .3%. Variation .4% or .5 volt for ± 10 volt line variation. Ripple, less than 3 MV RMS. Also supplies 6.3 volts 3 amps. 6.3 volts center tapped 3 amps. 12.3 volts at 3 amps, and 6.3 volts at 6 amps. Input 120 volts 50-60 cycle, 160 watts. Has dual range 0-200, 0-400 voltmeter and 0-200 DC milliammeter. 8 1/2" H., 12 1/2" W., 9" D. Wt. 21 lbs.  
35B589. Model 1030. Kit, Ea. ....\$69.95  
35B588. 1030 Factory Wired.....\$99.95

### FOR LABS—SCHOOLS TESTING



## SOLA CONSTANT VOLTAGE TRANSFORMERS



### (1) STANDARD SINUSOIDAL TYPE CVS

Harmonic-free, static-magnetic line voltage regulators having ultra-fast regulating action. Response time 1.5 cycles or less. Output voltage constant within ± 1% with input voltage variation as great as ± 15%. Less than 3% total RMS harmonic content in output. All have exposed core, end housings and screw terminals in outlet box. Parallel units of same type to increase output. Regulation effective at from 20% to 100% of full load rating.

SHIPPING WEIGHTS: 30 VA 8 lbs., 60 VA 10 lbs., 120 VA 14 lbs., 250 VA 20 lbs., 500 VA 45 lbs., 1000 VA 72 lbs., 2000 VA 140 lbs., 3000 VA 194 lbs., 5000 VA 335 lbs.

Stock No.	Mfg. No.	*Input Volts	Output Volts	Volts-Amps	L.	Size W.	H.	Prices Each 1-4	Each 5-9
13A913	23-13-030-2	95 to 130	118	30	6 1/8"	4	5 3/8"	\$30.05	\$27.05
13A926	23-13-060-2	95 to 130	118	60	6 1/8"	4	5 3/8"	35.62	32.05
13A927	23-22-112-2	Note 1	118	120	8 1/8"	4	5 3/8"	45.63	41.08
13A928	23-22-125	Note 1	118	250	9 5/8"	5 3/8"	6 1/8"	62.33	56.10
13A929	23-22-150	Note 1	118	500	12 1/8"	9	6 1/8"	96.83	87.15
13A930	23-25-210	Note 2	118 & 236	1000	17 7/8"	9	6 1/8"	162.50	148.25
Note 3	23-25-220	Note 2	118 & 236	2000	19 1/2"	10 1/2"	9 3/8"	284.95	265.45
Note 3	23-25-230-3	Note 2	118 & 236	3000	21 1/2"	10 1/2"	9 3/8"	398.23	356.61
Note 3	23-25-250	Note 2	118 & 236	5000	20 1/2"	10 1/2"	9 3/8"	618.83	556.95

### (2) NORMAL HARMONIC TYPE CVN

Provide the same ±1% regulation as the Sinusoidal series. Output contains average of 20% rms harmonic content. Recommended for electrical loads not affected by harmonics, such as solenoids, relays, heaters, filaments and where rectification is required.

Stock No.	Mfg. No.	Input Volts	Output Volts	Volt Amps	L.	Size W.	H.	Prices Each 1-4	Each 5-9
13A972	20-13-030-2	95-130	118	30	5 1/4"	4	5 3/4"	\$24.49	\$22.04
13A973	20-13-060-2	95-130	118	60	6 1/4"	4	5 3/4"	30.05	27.05
13A974	20-13-112-2	95-130	118	120	7 1/4"	4	5 3/4"	40.07	36.08
13A975	20-22-125	Note 1	118	250	11 1/4"	6 1/4"	6 1/4"	58.99	53.10
13A976	20-22-150	Note 1	118	500	12 1/4"	6 1/4"	6 1/4"	92.38	83.15
13A977	20-22-210	Note 1	118	1000	15 1/4"	6 1/4"	6 1/4"	153.59	138.23

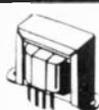
\*Input Volts: Note (1) dual range, 95 to 130 and 190 to 260 volts; Note (2) three range input, 95 to 130, 175 to 235 and 190 to 260 volts. Note 3 shipped direct from factory.

### (3) PLUG-IN ADAPTOR KITS FOR CVS-CVN ABOVE

Fits CVS-CVN	2-Wire	3-Wire	999-104	No.	13A931.	Each	\$4.50
Fits CVS-CVN 30, 60 and 120 VA	2-Wire	3-Wire	999-105	No.	13A932.	Each	\$5.00
Fits CVS 250 VA only	2-Wire	3-Wire	999-005	No.	13A933.	Each	\$2.65
	2-Wire	3-Wire	999-019	No.	13A934.	Each	\$4.00
Fits CVS 500 VA	2-Wire	3-Wire	999-009	No.	13A935.	Each	\$3.45
CVN 250VA, CVN 500 VA	2-Wire	3-Wire	999-020	No.	13A936.	Each	\$4.00



# STANCOR TRANSFORMERS



A & PA



B



BV



C, P & PC



C1



J



NV

## FILAMENT TRANSFORMERS

Primaries for 117 V. 60 cy. AC. P6456, P6454, P6458, P6308, P6309 have tap for 117-107 V. Electrostatic shield on P6133, P6308, P6309 and P6433. Secondary is center tapped except P4026, P8389 and P6469.

Stock No.	Mfg. No.	Secondary Test		Mfg. Fig.	Dimensions			Wt. Lbs.	Prices Each					
		V.CT @ A.	Volts		H.	W.	D.		1-9	10-24	25-49	50-99		
13A335	P4026	2.5	1.5	2500	A	1 5/8 x 2 7/8 x 1 1/2"	.7	\$3.85	\$3.47	\$3.11	\$2.93			
13B139	P6133	2.5	5	7500	S	2 3/4 x 3 1/8 x 2 1/4"	1.5	6.03	5.43	5.13	4.82			
13A329	P6454	2.5	10	7500	S	3 1/8 x 3 3/8 x 2 1/2"	2.5	5.66	5.09	4.81	4.53			
13A399	P6467	5	3	2500	A	2 3/4 x 2 3/8"	1.4	4.40	3.96	3.74	3.52			
13A630	P6433	5	15	2500	B	3 1/8 x 2 3/4 x 2 1/2"	3	9.23	8.31	7.85	7.39			
13A281	P6465	6.3	.6	1500	A	1 3/8 x 2 3/8 x 1 1/2"	.4	2.63	2.37	2.24	2.10			
13B21	P8389	6.3	1	1500	A	1 3/8 x 2 3/8 x 1 1/2"	.6	2.79	2.52	2.38	2.24			
13B99	P6134	6.3	1.2	3000	A	1 3/8 x 2 3/8 x 1 1/8"	.8	2.63	2.37	2.24	2.11			
13A402	P6466	6.3	3	2500	A	2 3/4 x 2 3/8 x 2 1/8"	1.4	4.40	3.96	3.74	3.52			
13A329	P6456	6.3	6	2000	A	2 3/8 x 2 3/4 x 2 3/8"	2	5.66	5.09	4.81	4.53			
13B147	P6308	6.3	10	2500	NV	3 7/8 x 2 3/8 x 2 1/4"	3.4	9.68	8.71	8.23	7.74			
13A721	P6309	6.3	20	2500	NV	4 1/4 x 3 3/8 x 3 3/4"	6.7	12.31	11.08	10.47	9.85			
13A336	P6458	10	5	2000	NV	3 1/4 x 2 1/2 x 2 1/2"	3	7.03	6.33	5.98	5.62			
13A330	P6461	10	10	2000	C	3 7/8 x 3 1/4 x 3 3/4"	5.0	11.91	10.72	10.12	9.53			
13B192	P8130	12.6	2	1500	A	2 3/4 x 3 1/4 x 2 1/8"	1.4	4.35	3.92	3.70	3.48			
13A331	P8358	12.6	3	1500	A	2 3/8 x 3 3/4 x 2 1/8"	1.6	5.13	4.62	4.36	4.10			
13B211	P6469	25.2	1	1500	A	2 3/4 x 2 1/8"	1.4	4.14	3.73	3.52	3.31			
13A978	P8180	25.2	1	1500	A	2 3/4 x 2 1/8"	1.4	4.10	3.69	3.49	3.28			
13A332	P8357	25.2	2	1500	A	2 3/8 x 4 x 2 1/4"	2.2	6.55	5.90	5.57	5.24			

## MULTI-VOLTAGE TRANSFORMERS

Three isolated 12 V. secondaries, one with CT, provide 6, 12, 18, 24, 30 and 36 V. output with varying current capacity by using series or parallel connections. All are S mtg., 8" leads. Excellent for building transistor power supplies.

Stock No.	Stancor No.	Amps Each Sec.	Dimensions			Wt. Lbs.	Prices Each					
			H.	W.	D.		1-9	10-24	25-49	50-99		
13B669	P8361	0.10	1 3/4	2 1/2	1 1/2"	.36	\$4.09	\$3.68	\$3.48	\$3.27		
13B670	P8362	0.15	2 1/2	3 1/8	1 3/4"	.60	4.24	3.82	3.60	3.39		
13B678	P8363	0.25	2 3/8	2 7/8	1 3/4"	.85	4.85	4.37	4.12	3.88		
13B679	P8364	0.50	2 3/8	2 7/8	2 1/4"	1.25	5.62	5.06	4.78	4.50		

## AUTOMATION CONTROL TRANSFORMERS

Typical applications: Relays, solenoids, control valves, small motors, electronic tubes, heating elements, low voltage lighting, signal lamps, buzzers, bells, etc. Dual winding primaries are connected parallel for 115 V. in series for 230 V. 50-60 cy. AC. Dual secondaries also may be connected series or parallel. J mtg. except P6378 and P6379 which are BV type.

Stock No.	Mfg. No.	Secondary		Wt.	Size H. W. D.	Prices Each					
		Parallel	Series			1-9	10-24	25-49	50-99		
13B24	P6375	6 V. @ 2A.	12 V. @ 1A.	1	2 3/8 x 2 7/8 x 1 5/8"	\$4.64	\$4.18	\$3.94	\$3.71		
13A622	P6376	6 V. @ 4A.	12 V. @ 2A.	1.5	2 3/8 x 3 1/8 x 1 7/8"	5.44	4.90	4.62	4.35		
13A623	P6377	12 V. @ 4A.	24 V. @ 2A.	2.5	3 1/8 x 3 3/8 x 2 1/4"	6.49	5.84	5.52	5.19		
13A624	P6378	12 V. @ 8A.	24 V. @ 4A.	4.3	4 1/8 x 2 7/8 x 2 1/2"	11.03	9.93	9.38	8.82		
13A627	P6379	12 V. @ 16A.	24 V. @ 8A.	8	4 1/8 x 3 3/8 x 3 1/8"	18.02	16.22	15.32	14.42		

## POWER TRANSFORMERS

Commercial grade transformers. Primaries 117 V. 60 cy. AC. \*No center tap on indicated winding. Prefix on manufacturers number indicates illustration.

Stock No.	Mfg. No.	H.V. V.CT	Sec. MA	5 @ V. @	8.3 @ V. @	Dimensions			Wt. Lbs.	Prices Each				
						H.	W.	D.		1-9	10-24	25-49	50-99	
13A381	PC8402	480	55	2A	2.5A	CT	3 1/8 x 2 1/2 x 2 3/4"	2.4	\$7.77	\$6.99	\$6.60			
13A382	PC8403	500	70	2A	2.5A	CT	3 1/8 x 2 1/2 x 3 1/8"	3.2	8.51	7.66	7.23			
13A384	PC8405	540	120	3A	3.5A		3 7/8 x 3 1/8 x 3 1/2"	4.9	11.33	10.20	9.64			
13A668	P8356	540	260	3A	8.8A		3 7/8 x 3 1/8 x 3 3/8"	6.5	16.78	15.10	14.26			
13A648	P8355	570	250	3A	9.5A		3 3/8 x 3 3/8 x 3 1/2"	6.5	17.98	16.18	15.28			
13A578	PC8406	650	40	2A	2A	CT	3 1/8 x 2 1/2 x 2 3/4"	2.4	8.07	7.26	6.86			
13A388	PC8409	700	90	2A	3A	CT	3 1/2 x 2 1/2 x 3 3/8"	4.5	11.06	9.95	9.40			
13A389	PC8410	720	120	3A	3.5A	CT	3 7/8 x 3 1/8 x 3 3/4"	5.5	12.71	11.44	10.80			
13A391	PC8412	800	200	3A	5A	CT	4 1/8 x 3 3/8 x 4"	8.2	16.54	14.89	14.06			
13B30	PS8415	*125	15	.6A			1 1/4 x 2 3/8 x 1 3/8"	.7	2.97	2.68	2.53			
13B32	PA8421	*125	50	2A			2 1/4 x 3 1/4 x 2 1/8"	1.5	4.65	4.18	3.95			
13B84	PS8416	250	25	1A			2 1/8 x 2 1/8 x 1 3/8"	1.0	3.90	3.51	3.32			
13A395	PC8419	480	70	3A			3 1/8 x 2 1/2 x 2 7/8"	2.6	7.73	6.96	6.57			
13A979	PC8404	520	90	2A	3A		3 1/2 x 2 1/8 x 3 3/8"	4	9.73	8.76	8.27			

## SMOOTHING FILTER CHOKES

C1001, 3000 V.; all others 1500 V. insulation.

Stock No.	Mfg. No.	Hys.	MA	Ohms	Fig.	Dimensions			Wt. Lbs.	Prices Each				
						H.	W.	D.		1-9	10-24	25-49	50-99	
13A51	C11515	20	15	900	A	1 5/8 x 2 7/8 x 1 3/8"	.7	\$3.02	\$2.72	\$2.57	\$2.42			
13A61	C11279	8.5	50	400	A	1 5/8 x 2 7/8 x 1 3/8"	.7	2.26	2.03	1.92	1.81			
13A43	C1003	16	50	580	A	2 3/4 x 1 1/2 x 1 1/2"	1	2.89	2.60	2.46	2.31			
13A46	C11709	8	85	250	A	2 3/4 x 1 1/2 x 1 1/2"	1.4	2.97	2.69	2.52	2.38			
13A48	C1001	10.5	110	225	A	2 3/8 x 4 x 2 1/4"	2.3	4.52	4.07	3.84	3.62			
13A638	C2304	2.3	150	60	A	2 3/4 x 1 1/2 x 1 1/2"	1	3.11	2.79	2.64	2.49			
13A635	C2327	1.5	200	85	A	1 5/8 x 2 7/8 x 1 1/2"	.7	2.66	2.40	2.26	2.13			
13A600	C2334	2.8	300	60	A	2 3/8 x 4 x 2 1/8"	2.5	6.79	6.11	5.77	5.43			

## HIGH CURRENT FILTER CHOKES

For use in DC power supplies. Mtg. similar to RT series transformers above with leads instead of lugs. RMS voltage rating 1500 V.

Stock No.	Mfg. No.	Ind. Hys.	DC Amps	Ohms Res.	Dimensions			Wt. Lbs.	Prices Each					
					H.	W.	D.		1-9	10-24	25-49	50-99		
13A550	C2685	.035	2	.75	2 1/4	2 3/8	2 1/8"	1.9	\$4.79	\$4.31	\$4.07	\$3.83		
13A551	C2686	.025	4	.425	2 7/8	3 3/8	2 5/8"	3.4	8.36	7.52	7.11	6.69		
13A552	C2687	.01	8	.15	3 3/8	3 3/8	3 3/8"	5.3	10.55	9.49	8.97	8.44		
13A554	C2689	.005	22.5	.03	3 3/8	4 1/2	2 4 3/8"	11.9	19.06	17.15	16.20	15.25		

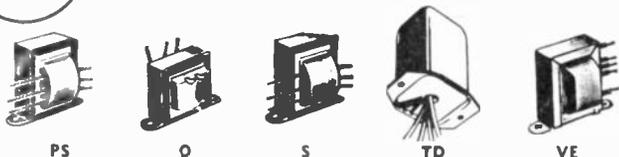
## SILICON OR SELENIUM RECTIFIER TRANSFORMERS

Variable tap isolated primary and secondary windings provide output voltages in 12 steps within ranges shown. In many cases will fill the need for custom made special voltage transformers at great savings in cost and time. DC output voltages are based on conventional circuits employing dry disc selenium rectifiers and high capacity filters. All are figure BV. RT-201, 2 1/2 x 2 3/8 x 3 1/8" H. Wt. 2.5 lbs.; RT-202, 2 1/8 x 2 3/8 x 3 1/8" H. Wt. 3.8 lbs.; RT-204, 3 1/8 x 3 1/2 x 3 3/8" H. Wt. 6.1 lbs.; RT-206, 3 3/8 x 4 x 3 3/8" H. Wt. 9.1 lbs.; RT-208, 3 3/8 x 5 x 4 3/8" H. Wt. 12.6 lbs. Res. = resistive, Cap = capacitive loads.

Stock No.	Stancor No.	Rect. Ckt.	AC Volts Range	DC Amps.	DC V. Out. Res. Load	DC V. Out. Cap. Load	Prices Each				
							1-9	10-24	25-49	50-99	
13A734	RT-201	CT	11.7-29.4	2	3.3 to 11.2	3.5 to 13.8					
			11.1-28.5	1.25	7.4 to 23	8.7 to 30	\$7.40	\$6.66			
13A735	RT-202	CT	12.0-29.8	4	3.7 to 11.1	4 to 14.7					
			12.0-29.8	2	8.9 to 24.3	10.8 to 33	9.73	8.76			
13A736	RT-204	CT	11.7-29.2	8	4.3 to 12	4.5 to 14.5					
			11.6-29.2	4	8.8 to 24	11.4 to 32.4	13.14	11.83			
13A737	RT-206	CT	12 -29.7	12	8.4 to 11.5	3.9 to 14.4					
			12 -29.7	6	8.4 to 24	10 to 32	17.22	15.50			
13A738	RT-208	CT	12.1-29.2	15	3.9 to 11.4	4.4 to 14.8					
			12.1-29.2	8	8.7 to 23.7	10.4 to 32.5	23.38	21.04			



# STANCOR & TRIAD TRANSFORMERS



## 10 WATT LINE-TO-LINE TRANSFORMER

Primary 500/333/200/125/50 ohms. Secondary 500/300/200/125/50 ohms. Primary and secondary 500 and 200 sections have center taps (125 and 50). Figure Q. Size 2" H. x 3 1/4" W. x 1 7/8" D. Wt. 1 lb.  
13A5. A4350. 1-9 Ea. \$5.55; 10-24 Ea. \$5.00; 25-49 Ea. \$4.72; 50-99 Ea. \$4.44

## MICROPHONE AND LINE INPUT TRANSFORMERS

TD mounting is fully shielded for low hum pickup. A4779 is for Sgl. or PP grids, all others for single grid. Wt. 1 lb.

Stock No.	Mfg. No.	Pri. Ohms	Sec. Ohms	Mtg.	Dimensions H.W.D.-Inches	1-9	10-24	25-49	50-99
13A570	A4778	600/500CT	240,000	C1	2 1/4 x 2 7/8 x 1 1/2	\$5.36	\$4.82	\$4.56	\$4.29
13A571	A4779	600/500CT	60,000CT	A	1 3/8 x 2 3/8 x 1 3/8	3.53	3.18	3.00	2.82
13A4	A4351	500/333/200/125/50	89,000	TD	2 1/2 x 2 1/2 x 2 1/4	6.18	5.57	5.25	4.94

## INTERCOM TRANSFORMERS

A4744 is voice coil to grid, A4748 is voice coil or line to grid. A8090 (3 watt) and A8091 (8 watt) are line to voice coil output.

Stock No.	Mfg. No.	Pri.	Secondary	Mtg.	Dimensions H. W. D.	1-9	10-24	25-49	50-99
13A1	A4744	4 Ohm	25K Ohms	VE	1 3/8 x 2 1/8 x 1 1/2	\$2.81	\$2.54	\$2.39	\$2.25
13A410	A4748	45 Ohm	50K Ohms	A	1 1/4 x 2 1/8 x 1 3/8	3.31	2.99	2.81	2.65
13A714	A8090	45 Ohm	3-4 or 6-8	Q	1 3/8 x 2 3/8 x 1 1/4	2.61	2.36	2.22	2.09
13A471	A8091	45 Ohm	3-4 or 6-8	Q	1 3/8 x 2 3/8 x 1 1/2	2.90	2.61	2.47	2.32

## INTERSTAGE TRANSFORMERS

A-53, single plate (7K to 20K) to single grid. A4711 PP plates (7K to 15K) to PP grids, others single plate (7K to 15K) to PP grids. Max. DC in primary 10 MA. Average shpp. wt. 1 lb.

Stock No.	Mfr's No.	Turns Ratio	Mtg.	Size H. W. D.	1-9	10-24	25-49	50-99
13A359	A53	1.3	A	1 3/8 x 2 3/8 x 1 3/8	\$2.83	\$2.55	\$2.41	\$2.26
13A6	A53C	1.3	A	1 3/8 x 2 3/8 x 1 3/8	3.31	2.99	2.81	2.65
13A7	A63C	1.3	A	1 3/8 x 2 3/8 x 1 1/2	3.90	3.51	3.32	3.12
13A10	A4711	1.1	A	1 3/8 x 2 3/8 x 1 3/8	4.24	3.82	3.60	3.39

## PLATE MODULATION TRANSFORMERS

Primary impedance 10,000 ohms CT.

Stock No.	Stancor No.	Class "C" Load Ohms	Max. Sec. DC MA	Audio Watts	Mtg. Fig.	Dimensions H. W. D.	Wt. Lbs.	Net Each
13A613	A-3812	4K	50	5	A	1 3/8 x 2 7/8 x 1 5/8	.7	\$3.40
13B121	A-3845	8K/6.5K/5K/3K	100	25	C	3 1/8 x 2 1/2 x 2 7/8	2.8	7.58

## AUDIO OUTPUT TRANSFORMERS

UNIVERSAL SINGLE OR PUSH-PULL TO VOICE COIL 4K to 14K primary, .05 to 122 ohm secondary. 4 watt. Figure A. 1 3/8" H. x 2 3/8" W. x 1 1/2" D. Wt. .4 lbs. No. 13A19. A3856. 1-9 Ea. \$3.89 10-24 Ea. \$3.50 25-49 Ea. \$3.31 50-99 Ea. \$3.11

## SINGLE PLATE TO VOICE COIL

Figure A Average wt. .5 lbs.

Stock No.	Mfg. No.	Impedance Pri.	Sec.	Watts	Dimensions H. W. D.	1-9	10-24	25-49	50-99
13A378	A3332	2K	3.2	3	1 1/4 x 2 1/8 x 1 1/4	\$1.91	\$1.71	\$1.62	\$1.53
13B127	A3877	5K	4	5	1 3/8 x 2 3/8 x 1 3/8	1.90	1.79	1.68	1.58
13B128	A3879	10K	4	5	1 3/8 x 2 3/8 x 1 3/8	2.07	1.86	1.76	1.66

## PUSH-PULL PLATES TO VOICE COIL

\*Indicates 500/250/15/8/4 ohms except A3311 does not have 250 ohms. A3800, A3801 and A3311 style C mtg. Others similar to A. Wt. .4 to 4.8 lbs.

Stock No.	Mfg. No.	DC Output	Sec.	Watts	Dimensions H. W. D.	1-9	10-24	25-49	50-99
13A36	A3800	5KCT	*	30	3 1/2 x 2 1/2 x 3 3/4	\$8.55	\$7.69	\$7.26	\$6.85
13B132	A3801	6.6KCT	*	35	3 7/8 x 3 1/8 x 3 1/2	10.88	9.79	9.26	8.71
13A12	A4432	10KCT	4	10	2 3/8 x 1 7/8 x 1 5/8	3.98	3.59	3.38	3.18
13B2	A3311	10KCT	*	25	3 1/2 x 2 1/2 x 3 1/4	8.13	7.32	6.83	6.51
13A500	A3831	10KCT	8/4/2	5	1 3/8 x 2 3/8 x 1 3/4	3.83	3.45	3.26	3.06
13B325	A8093	10KCT	3-4	10	1 3/8 x 2 3/8 x 1 1/2	3.16	2.85	2.69	2.53
13A17	A3857	25KCT	4	5	1 3/8 x 2 3/8 x 1 1/2	3.05	2.74	2.59	2.45

## TUBE TO LINE TRANSFORMER

Primary single 20K/10K/5K plate or push-pull 20K plates. 15 MA DC. Secondary 500/333/200/125/50 ohms. Rated 5 watts. Figure A. 2" H. x 3 1/4" W. x 1 7/8" D. Wt. 1 lb.

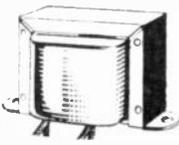
13A377. A3250. 1-9 Ea. \$5.29 10-24 Ea. \$4.76 25-49 Ea. \$4.50 50-99 Ea. \$4.23

## 24 VOLT .3 AMP TRANSFORMERS

B-A's best selling transistor power transformer. Top quality. These are made to B-A's rigid specifications by a leading American manufacturer. Fully enclosed, continuous duty type. Rated .3 amps with fully isolated 115 V. 60 cy. AC primary. Size 1 3/8" H. x 1 1/2" W. 2" mtg. ctrs. Wt. 6 ozs.

No. 13A903 Special Each \$1.69 10 Lots Each \$1.49 100 Lots Each \$1.29

Same as above except has center tap on secondary. No. 13A861 Special Each \$1.89 10 Lots Each \$1.79 100 Lots Each \$1.59



B-A Special

## STANCOR MINIATURE TRANSISTOR AUDIO TRANSFORMERS



300 MW



150 MW

Open frame style with coded wire leads. Size, 150 milliwatt units 3/8" between mounting tabs, 3/8" high, 1/8" wide, 5/8" deep. Wt. .65 ozs. 300 milliwatt units 1 3/8" between holes, 1/2" high, 1 1/8" wide, 3/4" deep. Wt. 1.2 ozs.

\*Indicates 300 MW units. All others rated 150 MW.

Stock No.	Stancor No.	Applic.	Turns Ratio	Imped. Pri.	Ohms Sec.	1-9	10-24	25-49	50-99
13A818	TA52*	In. Stg.	1.00:1.00	500CT	500CT	\$4.74	\$4.27	\$4.03	\$3.79
13A909	TA28	In. Stg.	1.65:1.00	1500	500CT	5.05	4.55	4.29	4.04
13A910	TA32	In. Stg.	1.00:4.00	5KCT	80KCT	5.05	4.55	4.29	4.04
13A832	TA34	In. Stg.	6.97:1	10K	200CT	5.12	4.61	4.35	4.10
13A833	TA35	In. Stg.	2.24:1	10K	2KCT	4.39	3.95	3.73	3.51
13A825	TA21	Output	5.53:1	500CT	4, 8, 16	4.61	4.15	3.92	3.69
13A811	TA33	Output	24.6:1.00	10KCT	4, 8, 16	5.37	4.83	4.56	4.30
13A912	TA39*	Output	2.50:1.00	100CT	4, 8, 16	4.59	4.13	3.80	3.67
13A836	TA42*	Output	5;60:1	500CT	4, 8, 16	4.51*	4.06	3.83	3.61

## TRANSISTOR AUDIO TRANSFORMERS

Designed especially for transistor applications. Highest quality throughout. All A mountings except TA56 is J mtg.; TA57, S mtg.

Stock No.	Type No.	Use	Ohms Imp. Pri.	DC Power MA	Watts	Ht.	Base Area	1-9	10-24	25-49	50-99
13A810	TA-7	Driver	100	100CT	100	0.5	1 1/8 x 2 7/8 x 1 1/8	\$2.89	\$2.60	\$2.46	\$2.31
13A815	TA-16	Driver	20	36CT	400	1W	1 1/4 x 2 1/8 x 1 1/8	2.78	2.50	2.36	2.22
13A813	TA-12	Output	20CT	8	500	10.0	1 3/8 x 2 3/8 x 1 5/8	2.83	2.55	2.40	2.26
13A819	TA-56	Output	48CT	3.2/8/16	550	10	2 3/8 x 2 7/8 x 1 3/8	4.33	3.90	3.68	3.46
13A820	TA-57	Output	100CT	3.2/8/16	550	10	2 3/8 x 2 7/8 x 1 3/8	4.37	3.93	3.71	3.50
13A824	TA-62	Output	25	4	400	4	1 3/8 x 2 7/8 x 1 3/8	2.92	2.63	2.48	2.34
13A922	TA-10	Output	2000	16/8/CT	4	—	7/8 x 1 3/8	6.60	5.94	5.61	5.28

## TRANSISTOR POWER TRANSFORMERS

TP1 has 2 separate 13 or 18 volt secondaries, each rated @ 900 MA for bridge rectification.

TP2, TP3, and TP4 have multiple tapped primary and secondary to furnish \*24 different voltages from 6.5 V. to 42 V. Current rating for bridge rectification with capacitor input filtering.

TP1 and TP4 are Figure S, TP2 and TP3 are Figure A.

Stock No.	Stancor No.	Secondary AC Volts	DC MA	Dimensions H. W. D.	Wt. Lbs.	1-9	10-24	25-49	50-99
13A793	TP-1	13 or 18	900	3 1/8 x 2 1/2 x 3"	2.7	\$6.77	\$6.09	\$5.75	\$5.42
13A632	TP-2	6.5 to 42	100	1 5/8 x 2 3/8 x 1 7/8	0.7	4.98	4.48	4.23	3.99
13A633	TP-3	6.5 to 42	300	2 3/8 x 3 3/4 x 2 1/8	1.5	6.68	6.01	5.68	5.35
13A637	TP-4	6.5 to 42	1000	3 1/8 x 2 1/2 x 3 1/8	3.2	11.21	10.09	9.53	8.97

P8196—80 V. CT secondary, rated 1200 MA for full wave rectifier. Figure C. 3 1/2" H. x 2 1/2" W. x 3 5/8" D. Wt. 4.5 lbs.

13A908. 1-9 Ea. \$9.86; 10-24 Ea. \$8.87; 25-49 Ea. \$8.30; 50-99 Ea. \$7.89

## TRIAD TRANSISTOR POWER SUPPLY TRANSFORMER



TY Toroidal



TY-S Open Type



TY-75A

For use with power transistors and silicon rectifiers to produce HV DC from 12 volt DC.

TY 79 and TY-84 are highly efficient epoxy molded toroidal design. Exceed Grade 5 Class R requirements of specs. MIL-T-27B TF5RX40Z.

TY-69S thru TY-74S are commercial open frame transformers. Typical circuit included.

Order by B-A Stock No. 13A907 and Triad Type No.

Triad No.	DC Output From FW Bridge Rectifier	Dimensions H. W. D.	Wt. Lbs.	1-9	10-24	25-49	50-99
TY-79	300 V. @ 200 MA	1 3/4" Dia. 1" H.	.35	\$14.72	\$13.25	\$11.93	\$11.09
TY-81	375 V. @ 200 MA	2" Dia. 1" H.	.5	15.19	13.67	12.30	11.44
TY-84	600 V. @ 200 MA	2 3/4" D. 1 3/8" H.	1	21.57	19.41	17.47	16.25
TY-68S	250 V. @ 65 MA	1 3/8 x 1 3/8 x 1 1/2"	.2	7.52	6.77	6.09	5.66
TY-69S	300 V. @ 100 MA	1 7/8 x 2 3/8 x 1 7/8"	.5	9.49	8.54	7.69	7.15
TY-70S	325 V. @ 150 MA	2 x 2 3/8 x 2 1/2"	.6	10.10	9.09	8.18	7.61
TY-71S	375 V. @ 200 MA	2 x 2 3/8 x 2 1/2"	.65	10.20	9.18	8.26	7.68
TY-74S	600 V. @ 200 MA	2 x 4 1/8 x 3"	1.07	12.25	11.03	9.93	9.23

FOR 115 V. 60 CY. AC POWER FROM 12 V. DC SOURCE

12 V. inut, 110-115-125 VAC 60 cy. 115 watt output. 3 7/8" H. x 3 3/8" W. x 3 1/2" D. Wt. 5 lbs.

13A907. TY-75A. 1-9 Ea. \$16.54; 10-24 Ea. \$14.89; 25-49 Ea. \$13.40; 50-99 Ea. \$12.46

## VERY TINY TRANSISTOR TRANSFORMERS

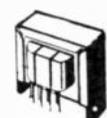
Exceptionally small, only 1/2 inch largest dimension, nicely constructed. Equivalent domestic made units would cost many times more. Impregnation and special coating seals the coil. The right types for building transistor radios, tiny audio or mike amplifiers, etc. Mtg. tabs and wire leads. Size 1/2 x 1/2 x 1/2" H. Shpg. wt. 5 ozs. Import.

No. 13A904. Input. Pri. impd. 200K ohms. Sec. 1000 ohms.

No. 13A905. Driver. Pri. impd. 10K ohms. Sec. 2000 ohms.

No. 13A906. Output. Pri. impd. 500 ohms. Sec. 8 ohms.

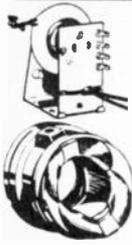
Choice, 10 @ Each 79c 100 @ Each 71c



Choice Each

89c

# TV TRANSFORMERS & COILS—RF CHOKES



## STANCOR TV COMPONENTS FLYBACKS, VERTICAL DEFLECTION OUTPUTS & DEFLECTION YOKES

Order Flyback Transformers below or send us the Stancor part number or make, model and chassis number of set, name of part and original part number. Your TV transformer will be shipped promptly from B-A's stock or direct from the factory to you. Please send adequate remittance with your order, we will refund every penny not used.

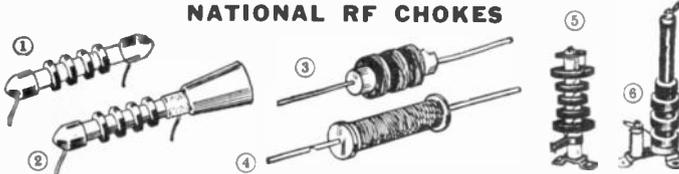
Average Flyback Price is .....\$10.00  
Average Vertical Deflection Output Price is .....\$ 6.00  
Average Deflection Yoke Price is .....\$14.00

## EXACT REPLACEMENT FLYBACK TRANSFORMERS

Average shipping weight 1 lb.

Stock No.	Stancor No.	Net Each	Stock No.	Stancor No.	Net Each	Stock No.	Stancor No.	Net Each
13B477	H0159	\$10.90	13A983	H0272	\$ 8.91	13A984	H0349	\$10.90
13B480	H0164	11.42	13B499	H0280	11.42	13A960	H0351	9.00
13B485	H0194	9.90	13A957	H0289	9.90	13A852	H0357	9.00
13B487	H0202	9.84	13A840	H0293	12.00	13A853	H0362	9.90
13B488	H0203	9.84	13A958	H0299	10.90	13A854	H0363	9.90
13B489	H0204	9.66	13A841	H0301	9.84	13A856	H0366	9.90
13B490	H0205	9.84	13A842	H0304	9.00	13A985	H0402	9.60
13B491	H0213	8.94	13A847	H0344	9.90	13A962	H0600C	15.45
13B494	H0242	8.94	13A959	H0345	10.92	13A963	H0601C	15.45
13B496	H0254	8.94	13A848	H0346	8.02	13A964	H0602C	15.45
13A497	H0271	8.10	13A849	H0347	9.90	13A965	H0607C	15.00

## NATIONAL RF CHOKES



A wide selection of popular RF Chokes for receiver and transmitter circuits. R100-300 are wound on ceramic forms, R33 and R50 on molded phenolic. R175A rated 4000 volts, for 6 through 80 meters, 3000 V. Modulated. Current rating below is 20 degrees rise.

Fig.	Stk. No.	Mfg. No.	Induct.	Current MA	Ohms Res.	Length Inches	Each
①	13A5043	R100	2.5 mh	115	44	2	\$0.57
②	13A5044	R300	1.0 mh	400	11	2 1/4	.57
③	13A5045	R300	2.5 mh	375	17	2 1/4	.74
④	13A5046	R100U	2.5 mh	115	44	2 1/4	.74
⑤	13A5047	R50	.5 mh	150	15	1	.42
⑥	13A5048	R50	1.0 mh	135	23	1	.42
⑦	13A5049	R50	2.5 mh	125	38	1	.72
⑧	13A5050	R50	10 mh	115	36	1	.42
⑨	13A5051	R33	50 uh	225	3.5	5/8	.38
⑩	13A5052	R33	100 uh	200	5	5/8	.38
⑪	13A5053	R33	750 uh	125	16	5/8	.48
⑫	13A5054	R60	4 uh	700	.15	1 1/8	.29
⑬	13A5055	R154U	1 mh	600	6	3 1/8	2.01
⑭	13A5056	R175A	145 uh	800	5	6	4.48

## OHMITE RF CHOKES



Single layer wound to operate best over freq. range indicated. Ohmite number indicates frequency in MHz at which maximum efficiency is obtained.

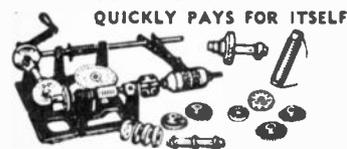
Fig.	Stk. No.	Ohmite No.	Ind. UH	MA	Op. Freq. MC	Length	Each
①	13A5094	Z7	84.	1000	3-20	6	\$1.44
②	13A5095	Z14	44.	600	7-35	2	.71
③	13A5097	Z28	21.	600	20-60	1 3/4	.60
④	13A5098	Z50	7.	1000	35-110	1	.48
⑤	13A5099	Z144	1.8	1000	80-200	3/4	.45
⑥	13A5096	Z235	0.84	1000	160-350	3/4	.45
⑦	13A5155	P300			Parasitic Suppressor		1.68

## MILLEN COIL FORMS

Low loss mica base phenolic. Supplied less prongs for permanent mounting. Dia. 1" x 1 1/2" long.

No. 13A5038. No. 45000. Each .....51c  
No. 45004 with 4 prongs for standard tube socket.  
No. 13A5039. Each .....88c  
No. 45005 with 5 prongs for standard tube socket.  
No. 13A5040. Each .....88c

## MORRIS COIL-WINDER FOR ELECTRONICS



Well constructed hand-powered machine for accurately winding modern style coils, chokes, etc. Fully adjustable for self-supporting, universal and honeycomb windings, solenoids, single layers, spaced pi-sections, etc. Very practical for individuals, labs and shops engaged in electronic experimenting and construction. Literally pays for itself by saving cost for factory made parts. Shpg. wt. 4 lbs.

- Makes all kinds of coils and chokes with factory accuracy.
- Handles size 22 to 40 wire.
- Counter shows number of turns.

No. 37B334. Net Each .....\$9.95

## ORDER ALL J. W. MILLER PRODUCTS FROM BA

All Miller Items available from BA's stock or shipped direct from factory promptly. Let BA help you avoid long delays in getting your projects completed. Send ample remittance with your order. We'll refund every cent not used. Ask for Miller Catalog BA Stock Number 16A1149 free.



## MILLER 3/4" MINIATURE "K-TRAN" IRON CORE IF's

Standard chassis type clip mounted IF's. Slug tuned, top and bottom. Silver mica condensers. 3/4" sq., 2" H. Wt. 2 ozs.

Stk. No.	Type	Description	Net Ea.	Stk. No.	Type	Description	Net Ea.
13A5150	12C1	455 KC Input	\$1.74	13A5153	1464	10.7 MC Discr	\$2.37
13A5151	12C2	455 KC Output	1.74	13A5154	1465	10.7 MC Ratio	2.46
13A5152	1463	10.7 MC Input	2.04			Detector	

## J. W. MILLER TV COILS

6183 Horiz. oscillator and sync. stabilizer coil, 1 1/2" sq. x 2 1/2" H. 13A5112. Each .....\$2.37

## ADJUSTABLE WIDTH CONTROLS

With mtg. clip to fit 3/8" or 1/2" hole. Required in TV, widely used in low frequency oscillator circuits and as adjustable RF chokes.

Stock No.	Miller Type	Induct. Milli-Hy.	Net Each	Stock No.	Miller Type	Induct. Milli-Hy.	Net Each
13A5098	6211*	16-42 Tapped	\$1.74	13A5105	6320	3-3 Tapped	\$1.32
13A5099	6313	5-5	1.38	13A5106	6321	1-5 Tapped	1.62
13A5100	6314	2-18	1.38	13A5107	6322	1.5-10	1.32
13A5101	6315	4-30	1.38	13A5108	6323	5-5 Tapped	1.62
13A5102	6316	4-30 AGC	2.22	13A5109	6324*	60-130 Tapped	1.74
13A5103	6318	3-3	1.29	13A5110	6195	.185-1	1.14
13A5104	6319	8-60	1.74	13A5111	6199B	5-1.7	1.20

All Miller TV components are available from B-A.

## TV AND APPLIANCE FILTER



Designed for use with household appliances and commutator-type motors, communications-type receivers and recording equipment. Useful for elimination of TV interference in radio receivers when inserted in television receiver line cord. Handles load requirements up to 550 watts 115 V. AC. Gray Hammerstone case. 2 1/4" square x 4 1/2" long. No 13A5076 Miller 7815 .....\$11.10

## SUB-MINIATURE R-F. CHOKES

Ultra miniature iron core R.F. chokes designed for high reliability. The coils are ideally suited to network and filter design, delay lines, and computer applications. Impregnated with a moisture resistant lacquer. Tolerance 1.0 UH ±20%, 1.1 to 15 UH ±10%, over 15 UH ±5%.

Stock No.	Miller No.	Inductance	D.C. Resistance	Milliamp Rating	Winding Diameter	Form Length	1-99 Each	100 up Each
13A5077	70F106A1	1.0 uh	.048	636	.165	1/4	\$0.80	\$0.40
13A5079	70F336A1	3.3 uh	.240	159	.150	1/4	.60	.40
13A5080	70F396A1	3.9 uh	.264	159	.150	1/4	.60	.40
13A5081	70F476A1	4.7 uh	.457	100	.150	1/4	.80	.40
13A5082	70F826A1	8.2 uh	.744	100	.150	1/4	.60	.40
13A5083	70F105A1	10 uh	1.56	75	.160	1/4	.69	.48
13A5084	70F125A1	12 uh	1.68	75	.160	1/4	.69	.48
13A5085	70F155A1	15 uh	1.92	75	.165	1/4	.69	.48
13A5086	70F225A1	22 uh	2.28	75	.165	1/4	.69	.48
13A5086	70F335A1	33 uh	2.76	75	.170	1/4	.69	.48
13A5089	70F475A1	4.7 uh	3.36	75	.175	1/4	.69	.48
13A5090	70F124A1	120 uh	8.16	75	.165	1/4	.69	.48
13A5091	70F204A1	200 uh	10.3	75	.170	1/4	.69	.48
13A5158	70F224A1	220 uh	11.5	75	.170	1/4	.69	.48
13A5092	70F564A1	560 uh	19.2	75	.195	1/4	.75	.50
13A5093	70F824A1	820 uh	22.9	75	.210	1/4	.75	.50
13A5062	70F253A1	2.5 mh	45.6	75	.260	3/8	.84	.58
13A5063	70F393A1	3.9 mh	57.6	75	.275	3/8	.84	.58
13A5064	70F753A1	7.5 mh	85.2	75	.310	3/8	.84	.58
13A5065	70F182A1	18 mh	128	75	.325	1/2	1.08	.72
13A5068	70F222A1	22 mh	144	75	.330	1/2	1.17	.78

## MILLER R.F. CHOKES

Stock No.	Mfg. No.	Ind. UH	Cur. MA	Ohms Res.	Net Each	Stock No.	Mfg. No.	Ind. UH	Cur. MA	Ohms Res.	Net Each
13A5113	4580	0.10	3000	.017	\$0.54	13A5120	4606	2.40	1500	.190	\$0.54
13A5114	4586	0.33	2600	.024	.54	13A5121	4609	5.50	850	.67	.54
13A5115	4588	0.47	2500	.034	.54	13A5122	4610	6.20	700	.83	.57
13A5116	4602	1.00	2000	.05	.54	13A5123	4611	8.20	600	1.2	.57
13A5117	4604	1.50	1800	.093	.54	13A5124	4612	10	500	1.5	.57

Stock No.	Mfg. No.	Ind. UH	Cur. MA	Ohms Res.	Net Each	Stock No.	Mfg. No.	Ind. UH	Cur. MA	Ohms Res.	Net Each
13A5118	6302	2.5	160	9	\$0.99	13A5125	6306	10.0	100	31	\$1.28
13A5119	6304	5.0	160	14	1.14	13A5126	6308	25.0	65	82	1.28

## FREQUENCY SELECTIVE R.F. CHOKES

Maximum efficiency and highest impedance at specific operating frequencies eliminates the designer's task of attempting to choose the best coil for a particular application. Covers the major Amateur and Industrial communication frequencies. 600 MA rating. Tolerance 10%.

Fig.	Part No.	Mfg. No.	Inductance	Freq. MHz	Price
①	13A5067	RFC-3.5	266 uh	1.8-5	\$1.32
②	13A5068	RFC-7	208 uh	3-13	1.32
③	13A5069	RFC-14	84 uh	7-20	1.17
④	13A5070	RFC-21	38.5 uh	15-30	.83
⑤	13A5071	RFC-28	24.0 uh	25-40	1.05
⑥	13A5072	RFC-50	8.2 uh	30-90	.80
⑦	13A5073	RFC-144	1.72 uh	75-180	.83
⑧	13A5074	RFC-220	.82 uh	160-340	.83
⑨	13A5075	RFC-420	.22 uh	350-500	.75

## CAPACITY RELAY COIL

Basic oscillator coil for constructing a capacity operated control system for displays, show windows, alarms, etc. System would take the place of normal "off-on" switch and provide automatic control when a person or object moves close. Coil size: 7/8" dia. x 2 1/4" H. With typical wiring diagram. Shpg. wt. 4 oz. No. 13A5022. Type 695. Net Each .....\$2.49



# J. W. MILLER COILS, SUPEREX ANTENNAS

## J. W. MILLER COILS



### ① Air Core Broadcast Band Coils

High gain secondaries, high impedance primaries. Tune 540-1650KHz with 365 mmfd. condenser. Unshielded 3/8" D. x 2 1/8" H.

Stk. No.	Miller No.	Description	Each
13A5010	43-A	Antenna	\$1.23
13A5011	45-C	Tapped Osc.	1.35

Shielded Sub-Miniature Oscillator Coil. 3/8" sq., 5/8" H. Tunes with 78-100 mmfd condenser. Requires no padder.

13A5012 Miller Type 2021. Ea. \$2.22

### ② Miniature Adjustable Coils

Extremely compact iron core units 1/2" dia. 70A is 1 1/2" long. OSC types are 1 1/4" long. Tune 540-1600 KHz with any condenser having maximum capacity between 250 and 450 mmfd. Oscillator coils track with IF amplifier between 100 and 550 KHz. Type 70-OSC has primary and tapped secondary; 69-OSC has capacity coupled winding. Clip mtg. in 3/16" hole. Unshielded.

Stk. No.	Miller No.	Description	Each
13A5013	70-A	Antenna	\$1.35
13A5014	70-OSC	Oscillator	1.20
13A5015	69-OSC	Oscillator	1.20

### ③ COMPACT UNIVERSAL OSCILLATOR COIL

Iron core adjustable for tracking with variable condensers having max. value between 250 and 450 mmfd. in padded circuits and 100 to 200 mmfd. in unpadded circuits with all types of tubes. Size 3/8" dia. x 1 1/2" high. Spring mtg. clips fit 3/16" dia. hole. RF range 540-1800 KHz. IF range 100-550 KHz. 4 oz. No. 13A5016. Miller No. 71-OSC. Net Each.....1.74

### ④ ADJUSTABLE ALL-WAVE RADIO COILS

High Q unshielded. 3/8x2". Tune with 365 mmfd. condenser. Order by Group Stock No. 13A5017 and Miller No. Net Each.....\$1.89

Description	140-420 KHz	540-1700 KHz	1.7-5.5MHz	5.5-15 MHz	12-36 MHz
Antenna	X5495A	A5495A	B5495A	C5495A	D5495A
RF Stage	X5495RF	A5495RF	B5495RF	C5495RF	D5495RF
Std. Osc.	X5495C	A5495C	B5495C	C5495C	D5495C
Tapped Osc.	X5496C	A5496C	B5496C	C5496C	D5496C

## FM RF COILS AND TUNING CONDENSER

Signal frequency, 88-108 MHz, permeability tuned coils for clip mounting in 3/8" dia. hole. Designed to tune with 6.6-23 mmfd. 3 section condenser type 1461BS below. Osc. coil tracks with 10.7 MHz IF.

Stk. No.	Miller No.	Description	Net Each
13A5018	1447	88-108 MHz Ant. Coil	\$1.32
13A5019	1448	88-108 MHz RF Coil	1.32
13A5020	1449	88-108 MHz Osc. Coil	1.32
13A5021	1461BS	3 Sect. FM Tuning Cond.	4.44

## MILLER HIGH Q FERRITE ROD ANTENNAS



Highest quality Litz wire, wound on low loss ferrite cores. Takes place of antenna coil, hank or loop. Range 540-1650 KHz.

Stk. No.	Miller No.	Description	Net Each
13A5145	6300	Tube	\$1.23
13A5146	2002	Transistor	1.44

Stk. No.	Miller No.	Description	Net Each
13A5147	2004	Transistor	365 Mmfd. 2.10
13A5148	2005	Transistor	130 Mmfd. 2.10
13A5149	705A	Tube	300-400 Mmfd. 2.25
13A5144	2000	Transistor	365 Mmfd. 2.16

## SUPEREX POWERFUL RADIO ANTENNAS

REPLACES LOOPS AND ANTENNA HANKS FOR GREATLY IMPROVED PERFORMANCE



### ① EXTRA POWERFUL 7" KING-SIZE LOOPSTICK FOR TUBE RADIOS

Outperforms them all. Almost like adding another stage of amplification to the set. Gives amazing performance because of extreme high "Q" of 425. Self-locking full adjustment for "peaking." With mounting bracket. No. 13A5003. Model L-7. Net Each \$1.35

### ② POPULAR "VARI-LOOPSTICK"

With adjustment knob and circuits. Most popular for experimenters who like to build tiny crystal radios. No. 13A5004. Model VL. Net Each 60c

### ③ POWERFUL "VARI-TENNA" FOR TUBE RADIOS

Boosts sensitivity and gain up to 25 times over old loops and hanks. Completely adjustable by screwing "slug" in and out. Small enough to fit any set. Also popular for tiny tunable crystal radios. 2" long, 1/8" dia. Clip-mounts in 1/8" hole. No. 13A5005. Model VT. Net Each 75c

### ④ TRANSISTOR LOOPSTICK

Micrometer adjustment for maximum performance. Tapped for impedance match. 2" long, 1/8" diameter. 13A5006. Model VLT-240. For 365-410Mmfd. Tuning Cond. Net Ea. 75c 13A5007. Model VLT-950. For 75-365 Mmfd. Tuning Cond. Net Ea. 75c

### ⑤ SUPER ENERGIZED FERRI-LOOPSTICK FOR TUBE RADIOS

Even more powerful than the Vari-Tenna. Has larger ferrite core, fully adjustable, by sliding in and out of coil form. Self-locking. Extended length approx. 4". Clip mounts in 1/8" hole or with bracket supplied. No. 13A5008. Model EFL. Net Each 90c

## MILLER SLUG TUNED CERAMIC COIL FORMS

Precision made of ceramic material, silicone impregnated to reduce moisture absorption. Two adjustable solder terminal clips. Single hole mounting hardware.

Miller Type	With Slug For	With Slug For	With Slug For	Form Size	Mtg. Hole	Net Each
4300	1.0-20 MHz	2.0-25 MHz	25 MHz & Up	Dia. .205	.593	\$1.14
4500	13A5023	13A5026	13A5029	.260	.858	1.23
4400	13A5025	13A5028	13A5031	.375	1.06	1.38

## MILLER SLUG TUNED PHENOLIC COIL FORMS

Constructed of varnish impregnated tubing. Mechanically stronger than ceramic, exhibiting extremely low loss. With 2 adjustable solder rings.

Miller Type	With Slug For	With Slug For	With Slug For	Form Size	Mtg. Hole	Net Each
20A000	1.0-20 MHz	2.0-25 MHz	25 MHz & Up	Dia. .250	.860	\$0.96
21A000	13A5032	13A5034	13A5036	.375	1.125	.96
	13A5033	13A5035	13A5037			

## MILLER HIGH "Q" SLUG TUNED WOUND COILS

On Phenolic forms 1/4" dia. x 3/8" long. Order by stock No. 13A5009 and Manufacturers number of coil selected.

Mfg. No.	Range uh	Min.	Max.	Net Each	Mfg. No.	Range uh	Min.	Max.	Net Each
20A107RBI		.088	.120	\$1.08	20A686RBI		5.08	8.16	\$1.14
20A157RBI		.108	.180	1.08	20A826RBI		7.35	9.84	1.14
20A227RBI		.162	.264	1.08	20A105RBI		8.85	12.0	1.26
20A337RBI		.238	.396	1.14	20A155RBI		10.8	18.0	1.26
20A477RBI		.356	.564	1.14	20A225RBI		16.2	26.4	1.26
20A687RBI		.508	.816	1.14	20A335RBI		23.8	39.6	1.26
20A827RBI		.735	.984	1.14	20A475RBI		35.6	56.4	1.26
20A106RBI		.885	1.20	1.14	20A685RBI		50.8	81.6	1.26
20A156RBI		1.08	1.80	1.14	20A825RBI		73.5	98.4	1.26
20A226RBI		1.62	2.64	1.14	20A104RBI		88.5	120.	1.26
20A336RBI		2.38	3.96	1.14	20A154RBI		108.	180.	1.29
20A476RBI		3.56	5.64	1.14	20A224RBI		162.	264.	1.29

## COIL SELECTOR CHART FOR PHENOLIC FORM COILS ABOVE

Shows proper coil for use in circuits intended for the various amateur bands when parallel capacitance is known.

Band	40 MMFD	90 MMFD	130 MMFD
1.8 MHz (160 Mtrs)	20A224RBI	20A825RBI	20A685RBI
3.6 MHz (75/80 Mtrs)	20A475RBI	20A225RBI	20A155RBI
7.2 MHz (40 Mtrs)	20A155RBI	20A686RBI	20A336RBI
14.2 MHz (20 Mtrs)	20A336RBI	20A156RBI	20A106RBI
21.3 MHz (15 Mtrs)	20A156RBI	20A106RBI	20A337RBI
28.0 MHz (10 Mtrs)	20A827RBI	20A337RBI	20A227RBI
51.0 MHz (6 Mtrs)	20A227RBI	20A107RBI	

## VERTICAL MOUNTED PRINTED CIRCUIT VELVETORK ADJUSTABLE R.F. COILS

The coil form is Polyester impregnated Alpha-Cellulose tubing with internally bonded resilient ribs which provide both thread and torque control. Coils may be adjusted from either end of form. Dimensions (form only) Over Collar 3/8" Dia. x 3/4" long. Proper coil can be selected by substituting similar values in chart above.

Specify No. 13A5143 and Miller No.

Miller No.	Range uh	Minimum	Maximum	Each	Miller No.	Range uh	Minimum	Maximum	Each
23A107RPC		.095	.125	\$1.05	23A686RPC		4.6	8.5	\$1.14
23A157RPC		.130	.170	1.05	23A826RPC		5.6	10.0	1.14
23A227RPC		.185	.265	1.05	23A105RPC		7.1	12.5	1.14
23A337RPC		.285	.410	1.05	23A155RPC		10.0	18.7	1.26
23A477RPC		.420	.580	1.05	23A225RPC		14.8	27.5	1.26
23A687RPC		.540	.850	1.05	23A335RPC		22.0	41.0	1.26
23A827RPC		.640	1.00	1.05	23A475RPC		31.0	58.0	1.26
23A106RPC		.760	1.25	1.05	23A685RPC		43.5	85.0	1.26
23A156RPC		1.20	1.87	1.05	23A825RPC		61.0	100.0	1.26
23A226RPC		1.65	2.75	1.14	23A104RPC		76.0	125.0	1.26
23A336RPC		2.40	4.10	1.14	23A154RPC		105.0	187.0	1.26
23A476RPC		3.40	5.80	1.14	23A224RPC		160.0	275.0	1.26

## TRANSISTOR I.F. COMPONENTS

Modern design shielded transformers for solid state equipment. 8814 incorporates a single section mechanical filter that sharpens the I.F. passband appreciably 4 KHz at 6 db and 12 KHz at 20 db.

### SUB-MINIATURE 10.7 MHz TRANSISTOR TRANSFORMERS

Stock No.	Miller No.	Specs.	Description	Size Inches L. W. D.	Each
13A5127	8849	500 kc. P/P	Ratio Detector	2 3/8 x 3/4 x 1/2	\$2.70
13A5128	8850	300 kc. P/P	Discriminator	2 3/8 x 3/4 x 1/2	2.70
13A5129	8851-A	6 db 300 kc	Double Tuned I.F.	2 3/8 x 3/4 x 1/2	2.10
13A5130	8852	100k-300	Single Tuned I.F.	1 3/8 x 1 3/8 x 5/8	1.80
13A5131	8853	20k-500	Single Tuned I.F.	1 3/8 x 1 3/8 x 5/8	1.80
13A5132	8854	25k-500	Single Tuned I.F.	1 3/8 x 1 3/8 x 5/8	1.80

### STANDARD 10.7 MHz TRANSISTOR TRANSFORMERS

Stock No.	Miller No.	Description	Size Inches L. W. D.	Each
13A5159	1601	Transistor First IF, 10.7 MHZ	3/4 x 3/4 x 2"	\$2.40
13A5160	1602	Transistor Second IF, 10.7 MHZ	3/4 x 3/4 x 2"	2.49
13A5161	1603	Transistor Third I.F., 10.7 MHZ	3/4 x 3/4 x 2"	2.49
13A5162	1604	10.7 MHZ Discriminator	3/4 x 3/4 x 2"	2.87
13A5163	1605	10.7 MHZ Ratio Det. w/Diodes	3/4 x 3/4 x 2"	5.04
13A5164	1606	10.7 MHZ Ratio Detector	3/4 x 3/4 x 2"	2.87

### SUB-MINIATURE 455KHz TRANSISTOR TRANSFORMERS

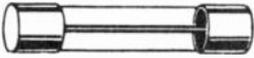
Stock No.	Miller No.	Specs.	Description	Size Inches L. W. D.	Each
13A5133	8805	20 kc. P/P	Ratio Detector	2 3/8 x 3/4 x 1/2	\$2.10
13A5134	8806	20 kc. P/P	Discriminator	2 3/8 x 3/4 x 1/2	2.10
13A5135	8807	6 db 15 kc.	Double Tuned I.F.	2 3/8 x 3/4 x 1/2	2.10
13A5136	8808*	100k Input	Discriminator Pri.	1 1/4 x 1 1/4 x 1/2	1.85
13A5137	8809*	20 kc. P/P	Discriminator Sec.	1 1/4 x 1 1/4 x 1/2	1.85
13A5138	8810	50k-800	Single Tuned I.F.	3/4 x 3/4 x 1 1/2	1.50
13A5139	8811	30k-500	Single Tuned I.F.	3/4 x 3/4 x 1 1/2	1.50
13A5140	8812	20k-5k	Single Tuned I.F.	3/4 x 3/4 x 1 1/2	1.50
13A5141	8813	Oscillator (455 KHz I.F.)	(Tuning Cap. 78 to 110 pf. Max.)	3/4 x 3/4 x 1 1/2	1.50
13A5142	8814	70k-800	Single Tuned I.F. with Mechanical Filter	1 1/2 x 1 1/2 x 3/4	2.70

\*To be used as a pair

# BUSS FUSES AND HOLDERS

## BUSS GLASS TUBE FUSES

Formerly Called 3AG



Quick-acting general purpose fuses for radios, amplifiers, etc. Rated 250 V. UL listed. Size 1 1/4" x 1/4". \*125 V.

Stock No.	Type	Amps Rating	Boxes of Five		
			1-19	20-99	100-199
12A8000	AGC	1/500	\$6.00	\$5.00	\$4.25
12A8001	AGC	1/200	2.50	2.10	1.79
12A8011	AGC	1/100	2.25	1.90	1.62
12A8002	AGC	1/32	2.00	1.65	1.40
12A8006	AGC	1/8	.85	.75	.64
12A8007	AGC	1/6	.85	.75	.64
12A8008	AGC	.15	.85	.75	.64
12A8009	AGC	.175	.85	.75	.64
12A8010	AGC	3/4	.85	.75	.64
12A8011	AGC	1/4	.55	.48	.41
12A8012	AGC	3/10	.55	.48	.41
12A8013	AGC	3/8	.55	.48	.41
12A8014	AGC	1/2	.55	.48	.41
12A8015	AGC	3/4	.55	.48	.41
12A8016	AGC	1	.40	.35	.30
12A8017	AGC	1 1/2	.40	.35	.30
12A8018	AGC	2	.40	.35	.30
12A8019	AGC	3	.40	.35	.30
12A8020	MTH	4	.48	.40	.34
12A8021	MTH	5	.48	.40	.34
12A8022	MTH	6	.48	.40	.34
12A8023	GLH	8*	.70	.60	.51
12A8024	GLH	10*	.70	.60	.51

## ABC CERAMIC FUSES

Formerly Called 3AB

Size 1/4 x 1 1/4". High interrupting capacity fuses for use on circuits delivering as high as 25,000 amps at 125 V. or 10,000 amps at 250 V. \*125 V.

Stock No.	Type	Amps Rating	Boxes of Five		
			1-19	20-99	100-199
12A8032	ABC	1	.75	.65	.55
12A8033	ABC	2	.75	.65	.55
12A8034	ABC	3	.75	.65	.55
12A8035	ABC	5	.70	.60	.51
12A8036	ABC	8	.70	.60	.51
12A8037	ABC	10	.70	.60	.51
12A8038	ABC	12	.75	.65	.55
12A8039	ABC	15	.75	.65	.55
12A8040	ABC	20	.75	.65	.55
12A8110	ABC	25*	.95	.80	.68
12A8109	ABC	30*	.95	.80	.68

## LOW VOLTAGE FUSES

1/4" dia., with various lengths shown.

### BUSS AGC FUSES, 32 VOLT

Formerly Called 3AG.

Stock No.	Amps Rating	Lgth. Ins.	Boxes of Five		
			1-19	20-99	100-199
12A8025	4	1 1/4	\$0.40	\$0.35	\$0.30
12A8026	5	1 1/4	.30	.25	.21
12A8027	7 1/2	1 1/4	.30	.25	.21
12A8028	10	1 1/4	.30	.25	.21
12A8029	15	1 1/4	.30	.25	.21
12A8111	20	1 1/4	.25	.20	.17
12A8030	25	1 1/4	.30	.25	.21
12A8031	30	1 1/4	.30	.25	.21

### BUSS SFE FUSES, 32 VOLT

For Auto, Radio, Instrument Protection.

Stock No.	Amps Rating	Price
12A8041	4	\$0.30 \$0.25 \$0.21
12A8042	6	.30 .25 .21
12A8043	7 1/2	.30 .25 .21
12A8044	9	.30 .25 .21
12A8045	14	.25 .20 .17
12A8046	20	.25 .20 .17
12A8047	30	.25 .21

### AGA FUSES, 32 VOLT

Formerly Called 1AG.

Stock No.	Amps Rating	Price
12A1237	1	.40 .35 .30
12A1238	2	.40 .35 .30
12A1240	3	.40 .35 .30
12A8181	5	.30 .25 .21
12A8182	7.5	.30 .25 .21
12A8183	10	.30 .25 .21
12A8184	20	.30 .25 .21
12A8185	30	.30 .25 .21

### AGW FUSES, 32 VOLT

Formerly Called 7AG

Stock No.	Amps Rating	Price
12A1306	2 1/2	.40 .35 .30
12A1307	4	.40 .35 .30
12A1308	6	.40 .35 .30
12A8196	7 1/2	.30 .25 .21
12A8186	15	.30 .25 .21
12A8187	20	.30 .25 .21
12A8188	30	.30 .25 .21

## INSULATED TWIN CLIPS

For easy replacement of TV pigtail fuses without soldering. Takes ordinary fuse without pigtail on one side. Other side snaps on to blown pigtail fuse in TV set.

No. 12A628, Ea.....16c  
10 @ Each.....14c

## FUSETRON FUSES

Dual-Element, Slow Blowing Formerly Called 3AG



High time lag withstands heavy surges — quick on shorts. Used in circuits having high inductive or capacitive starting loads. Sizes 1/100 to 1 for 250 V, UL listed; 1 2/10 to 6 1/4 for 125 V, UL listed; 8 to 30 for 32 V. 1 1/4 x 1/4".

Stock No.	Buss No.	Amps Rating	Boxes of Five		
			1-19	20-99	100-199
12A821	MDL	1/100	\$1.70	\$1.40	\$1.19
12A8061	MDL	1/2	1.70	1.40	1.19
12A8062	MDL	1/2	1.25	1.05	.89
12A8063	MDL	1/10	1.25	1.05	.89
12A8064	MDL	1/8	1.25	1.05	.89
12A8065	MDL	1/5	1.25	1.05	.89
12A8066	MDL	3/4	1.25	1.05	.89
12A8067	MDL	2/10	1.25	1.05	.89
12A8068	MDL	1/4	1.25	1.05	.89
12A8069	MDL	3/10	1.25	1.05	.89
12A8070	MDL	3/8	1.25	1.05	.89
12A8071	MDL	4/10	1.25	1.05	.89
12A8072	MDL	1/2	1.25	1.05	.89
12A8073	MDL	6/10	1.25	1.05	.89
12A8074	MDL	7/10	1.25	1.05	.89
12A8075	MDL	3/4	1.25	1.05	.89
12A8076	MDL	8/10	1.25	1.05	.89
12A8077	MDL	1	1.25	1.05	.89
12A8078	MDL	1 2/10	1.15	.95	.81
12A8079	MDL	1 1/4	1.15	.95	.81
12A8080	MDL	1 1/2	1.15	.95	.81
12A8081	MDL	1 6/10	1.15	.95	.81
12A8082	MDL	2	1.15	.95	.81
12A8083	MDL	2 1/2	.90	.75	.64
12A8084	MDX	3	.85	.75	.64
12A8085	MDX	3 2/10	.85	.75	.64
12A8086	MDX	4	.85	.75	.64
12A8087	MDX	5	.85	.75	.64
12A8088	MDX	6 1/4	1.00	.85	.72
12A8089	MDX	7	1.00	.85	.72
12A8090	MDL	10	.90	.75	.64
12A8091	MDL	15	.90	.75	.64
12A8092	MDL	20	.90	.75	.64
12A8093	MDL	25	.90	.75	.64
12A8094	MDL	30	.90	.75	.64

## BUSS AGX FAST ACTING FUSES

Formerly Called 8AG



For protection of delicate equipment, meters, etc. Glass enclosed; 1 x 1/4" dia. Provide high speed action. UL listed. Voltage rating: 1/200 to 2, 250 V; 3 and 5, 125 V.

Stock No.	Amps Rating	Boxes of Five		
		1-19	20-99	100-199
12B863	1/500	\$6.00	\$5.00	\$4.25
12A8095	1/200	2.50	2.10	1.79
12A8096	1/100	2.25	1.90	1.62
12A8097	1/2	2.00	1.65	1.40
12A8098	1/4	1.25	1.05	.89
12A8099	1/8	.85	.75	.64
12A8100	1/4	.55	.48	.41
12A8101	3/8	.55	.48	.41
12A8102	1/2	.55	.48	.41
12A8103	3/4	.55	.48	.41
12A8104	1	.40	.35	.30
12A8105	1 1/2	.40	.35	.30
12A8106	2	.40	.35	.30
12A8107	3	.40	.35	.30
12A8108	5	.40	.35	.30

## BUSS AGS FUSES

Formerly Called 4AG

Heavy duty straight element 1/4 x 1/2".

Stock No.	Amps Rating	Volts Rating	Boxes of Five		
			1-19	20-99	100-199
12A8114	1	250	\$0.60	\$0.50	\$0.43
12A8115	2	250	.60	.50	.43
12A8116	3	250	.60	.50	.43
12A8117	5	32	.50	.43	.37
12A8118	10	32	.50	.43	.37
12A8119	15	32	.50	.43	.37
12A8120	20	32	.50	.43	.37
12A8121	25	32	.50	.43	.37
12A8122	30	32	.50	.43	.37
12A8123	40	32	.60	.50	.43

## BUSS FUSE PULLER

For 1/4" dia. fuses. Eliminates danger of breaking fuses or damaging fuse clips.

No. 12A112, FP1. Each.....79c  
10 @ Each.....68c

## LIMITED CURRENT BAYONET TYPE C AND N FUSES



Design safeguards against use of wrong size and type of fuse. Fit only lock-type UL listed.

bayonet holders.

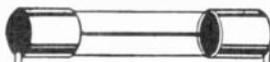
Stock No.	Amps Rating	Boxes of Five		
		1-19	20-99	100-199
12A8151	1/4	\$0.70	\$0.60	\$0.51
12A8152	3/10	.70	.60	.51
12A8153	3/8	.70	.60	.51
12A8154	1/2	.70	.60	.51
12A8155	3/4	.70	.60	.51
12A8156	1	.45	.38	.32
12A8157	1 1/4	.45	.38	.32
12A8158	2	.45	.38	.32
12A8159	2 1/2	.45	.38	.32
12A8160	3	.45	.38	.32
12A8161	3 1/2	.50	.43	.37
12A8162	4	.50	.43	.37

## Fustron Fuse Slo-Blo Type N

250 V. thru 1 1/4 amp.; 125 V. thru 5 amp.

Stock No.	Amps Rating	Price
12A8163	2/10	1.25 1.05 .89
12A8164	1/4	1.25 1.05 .89
12A8165	3/10	1.25 1.05 .89
12A8166	4/10	1.25 1.05 .89
12A8167	1/2	1.25 1.05 .89
12A8168	6/10	1.25 1.05 .89
12A8169	7/10	1.25 1.05 .89
12A8170	3/4	1.25 1.05 .89
12A8171	1	1.25 1.05 .89
12A8172	1 1/4	1.15 .95 .81
12A8173	1 6/10	1.15 .95 .81
12A8174	1 3/4	1.15 .95 .81
12A8175	2	1.15 .95 .81
12A8176	2 1/2	1.15 .95 .81
12A8177	2 8/10	1.15 .95 .81
12A8178	3 1/2	1.15 .95 .81
12A8179	4	1.15 .95 .81
12A8180	5	1.15 .95 .81

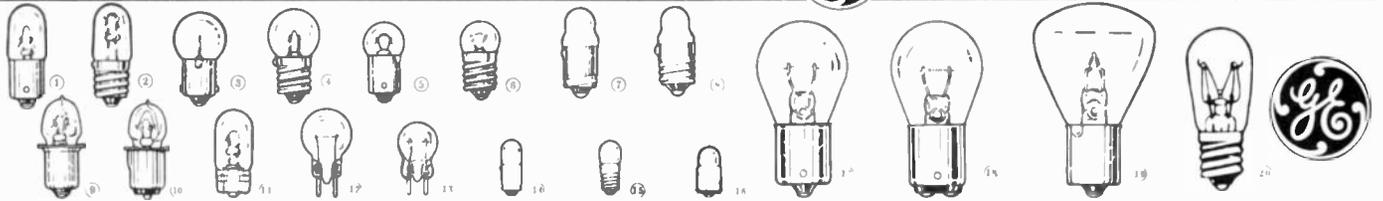
## GJV PIGTAIL FUSES



Formerly 3AG

250 volts. Size 1

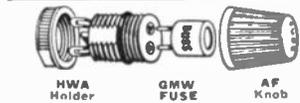
# FUSES, CIRCUIT BREAKERS, GE MINIATURE LAMPS



## MINIATURE INDICATOR AND FLASHLIGHT LAMPS

Stock No.	Mfg. No.	Volts	Amps.	Fig.	Each	Pkg. of 10	Stock No.	Mfg. No.	Volts	Amps.	Fig.	Each	Pkg. of 10	Stock No.	Mfg. No.	Volts	Amps.	Fig.	Each	Pkg. of 10
						1-9 10-99							1-9 10-99							1-9 10-99
12A4086	PR2	2.4	.5	⊙	\$0.20	\$1.23 \$1.06	12A4091	50	7.5	.22	⊙	\$0.16	\$0.92 \$0.81	12A4077	502	5.1	.15	⊙	\$0.17	\$1.05 \$0.93
12A4067	PR3	3.57	.5	⊙	.20	1.23 1.06	12A4057	51	7.5	.22	⊙	.15	.88 .75	12A4064	1133	6.2	3.91	⊙	.46	2.78 2.36
12A4068	PR4	2.33	.27	⊙	.20	1.23 1.06	12A4058	53	14.4	.12	⊙	.14	.84 .72	12A4063	1156	12.8	2.1	⊙	.47	2.77 2.39
12A4074	6S6	115	6 W.	⊙	.21	1.70 1.53	12A4059	55	7.0	.41	⊙	.15	.88 .75	12A4051	1490	3.2	.16	⊙	.21	1.25 1.06
12A4075	6S6DC	115	6 W.	⊙	.31	2.50 2.25	12A4060	57	14.0	.24	⊙	.14	.84 .72	12A4065	1493	6.5	2.75	⊙	1.27	7.76 6.60
12A4087	PR6	2.47	.3	⊙	.20	1.23 1.06	12A4092	112	1.2	.22	⊙	.17	1.05 .90	12A4085	1768	6.0	.2	⊙	.92	5.53 4.77
12A4069	PR12	5.95	.5	⊙	.20	1.23 1.06	12A4093	158	14.0	.24	⊙	.21	1.21 1.05	12A4052	1815	14	.2	⊙	.20	1.45 1.23
12A4088	12	6.3	.15	⊙	.26	1.58 1.34	12A4094	159	6.3	.15	⊙	.26	1.58 1.34	12A4053	1819	28	.04	⊙	.37	2.22 1.89
12A4066	14	2.47	.3	⊙	.17	1.05 .90	12A4070	222	2.25	.25	⊙	.17	1.05 .90	12A4054	1829	28	.07	⊙	.36	2.15 1.89
12A4089	15	7.0	.4	⊙	.51	3.09 2.63	12A4055	224	2.15	.22	⊙	.22	1.39 1.18	12A4055	1847	6.3	.15	⊙	.18	1.13 1.00
12A4090	13	14.4	.1	⊙	.35	2.11 1.79	12A4090	313	28	.17	⊙	.33	1.99 1.69	12A4056	1891	14	.24	⊙	.17	1.02 .90
12A4040	40	6.3	.15	⊙	.15	.86 .74	12A4061	327	28	.04	⊙	.70	4.20 3.57	6S6 CANDELABRA BASE 110-120 V. BULB						
12A4041	41	2.5	.5	⊙	.26	1.55 1.32	12A4062	328	6	.2	⊙	.55	3.29 2.79	6 watts, clear glass, candelabra base. For Indicator and other needs.						
12A4045	43	2.5	.5	⊙	.26	1.58 1.34	12A4081	330	14	.08	⊙	.93	5.56 4.73	Each Package of 10, Per Pkg.						
12A4046	44	6.3	.25	⊙	.15	.86 .74	12A4096	334	28	.04	⊙	.86	5.14 4.37	No. 12A4074...\$0.21 1-9 Pkg....\$1.70 10-99 Pkg....\$1.53						
12A4047	45	3.2	.35	⊙	.22	1.32 1.12	12A4044	335	28	.04	⊙	1.54	9.30 8.20	BAYONET BASE 6S6DC						
12A4042	46	6.3	.25	⊙	.15	.86 .74	12A4082	336	14	.08	⊙	1.54	9.22 7.95	Same as above except with double contact bayonet base.						
12A4049	47	6.3	.15	⊙	.15	.86 .74	12A4083	337	6	.2	⊙	1.73	10.39 8.83	No. 12A4075...\$0.31 1-9 Pkg....\$2.50 10-99 Pkg....\$2.25						
12A4043	48	2.0	.06	⊙	.26	1.55 1.32	12A4084	373	14	.08	⊙	1.75	10.53 8.95							
12A4048	49	2.0	.06	⊙	.22	1.32 1.12	12A4076	407†	4.9	.3	⊙	.22	1.39 1.18							

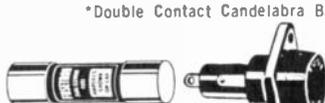
\*Double Contact Candelabra Bayonet Base. †Flasher For Lanterns.



### SUB-MINIATURE GMW FUSES AND FUSEHOLDER

Body size of fuse only .27 x .25". Dia. of holder body .375". Fuse has transparent window for visual inspection of element. Fuse may be used alone for mounting into printed circuit boards. HWA holder can be panel mounted or soldered on printed circuit boards. AF knob makes holder waterproof. Carry 100%, open at 200% within 10 seconds.

Stock No.	Type	Amp Rating	Box of 10	Box of 100
			1-9 10-49 50-99	100-999
12A8214	GMW	1/200	\$7.50 \$6.30	\$5.35
12A8215	GMW	1/100	7.50 6.30	5.35
12A8216	GMW	1/64	7.50 6.30	5.35
12A8217	GMW	1/32	7.50 6.30	5.35
12A8218	GMW	1/16	7.50 6.30	5.35
12A8219	GMW	1/10	5.60 4.70	4.00
12A8220	GMW	2/10	5.60 4.70	4.00
12A8221	GMW	1/4	5.60 4.70	4.00
12A8222	GMW	3/10	5.60 4.70	4.00
12A8228	GMW	4/10	5.60 4.70	4.00
12A8222	GMW	1/2	5.60 4.70	4.00
12A8223	GMW	3/4	5.60 4.70	4.00
12A8224	GMW	1	5.60 4.70	4.00
12A8225	GMW	2	5.60 4.70	4.00
12A8226	GMW	5	5.60 4.70	4.00
			1. 100-500-999	999
12A8212	HWA Holder		.64	.53 .45
12A8213	AF Knob		.09	.075 .064



### FNM FUSETRON FUSES

Dual-Element. Slow Blowing Fibre Tube, 1 1/2 x 1 1/2". Long time lag prevents needless blows from starting currents or surges—yet quick on shorts. Rated 250 V, UL listed; \*125 V.

Stock No.	Buss No.	Amps Rating	Box of 10	Box of 100
			1-9 10 Up	100 Up
12A8197	FNM	1/10	\$3.50	\$2.90
12A8198	FNM	2/10	3.50	2.90
12A8199	FNM	1/2	3.50	2.90
12A8200	FNM	1	3.50	2.90
12A8201	FNM	1 1/2	3.50	2.90
12A8202	FNM	2	3.50	2.90
12A8203	FNM	2 1/2	3.50	2.90
12A8204	FNM	3 2/10	3.50	2.90
18A8205	FNM	4	3.50	2.90
12A8206	FNM	5	3.50	2.90
12A8207	FNM	8	3.50	2.90
12A8208	FNM	10	3.50	2.90
12A8209	FNM	12*	3.50	2.90
12A8210	FNM	15*	3.50	2.90

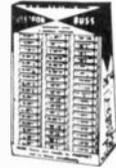
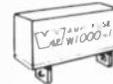
HPC PANEL MOUNTED FUSEHOLDER  
Molded phenolic. Screw knob. For 1 1/2 x 1 1/2" fuse.  
No. 12A8211 1-99 Each .....64c  
100-499 Ea. ....53c 500-999 Ea. ....45c

**FUSE MOUNTINGS**  
① 12A1129. Buss 3828-1. For AGX 1" fuse.  
② 12A1130. Buss 3823-1. For AGC 1 1/4" fuse.  
Your Choice Each  
1-99 19c 100-499 .16c 500 Up....136c  
Spring clips for any length 1/4" dia. fuse.  
③ 12A1134. Buss 5682-41. 1-99 Each .3c  
100-499 Ea. \$0.024 500 Up, Ea. \$0.02

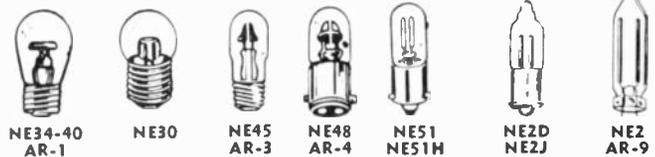


**FUSE ASSORTMENTS**  
With handy inventory feature. Has all fuses normally needed when box is removed label shows what size fuse needs reordering.  
255 Service Fuse Assortment, 30 different sizes. Wt. 3 3/4 lbs. No. 12A8193. Mfg. No. 255. Each .....\$35.30  
133 Special Electronic Fuse Assortment, 26 different sizes. No. 12A8194. Mfg. No. 130. Each .....\$18.30

**WORKMAN AMP FUSES**  
Protective fusing device. Exact replacement for numbers shown. Meets set manufacturer's specifications.  
No. 12A2430. Workman W1000-1. Coded White, replaces Zenith 136-71.  
No. 12A2431. Workman W3-1. Coded Red, replaces RCA part #945392-3.  
No. 12A2432. Workman W400-1. Coded Blue, replaces RCA part #945392-2.  
No. 12A2433. Workman W450-1. Coded Pink, replaces RCA part #945392-4.  
No. 12A2434. Workman W500-1. Coded Black, replaces RCA part #945392-1.  
Emerson 808232, Olympic FU-28146.  
No. 12A2435. Workman W1200-1. Coded Green, replaces Emerson Part #808236, Zenith 136063.  
No. 12A2436. Workman W1400-1. Coded Grey, replaces Emerson Part #808241.  
No. 12A2437. Workman W1700-1. Coded Yellow, replaces Emerson Part #808238, Zenith 136-62.  
No. 12A2438. Workman W2000-1. Coded Maroon, replaces Zenith Part #136-66.  
No. 12A2439. Workman W200-1. Used in Damper Circuit. Replaces RCA Part #945-309-1. Your Choice. 45c 10 Asst. 39c  
Each .....25c Each .....25c



### GE NEON AND ARGON LAMPS



NEON LAMPS				NEON LAMPS					
Standard Screw Base				Midget Flange Type					
For 105-125 volt AC or DC. Built-in resistor.				NE2D requires external 100K resistor for 105-125 volts AC or DC. NE2J high brightness requires external 30K resistor.					
Stk. No.	Type	Watts	Each 10 @ Ea.	Stk. No.	Type	Each 10 @ Ea.	Stk. No.	Type	Each 10 @ Ea.
12A4130	NE30	1	\$1.14 \$0.91	12A4133	NE2D	\$0.78 \$0.62	12A4134	NE2J	.78 .62
12A4131	NE34	2	1.76 1.41						
12A4132	NE40	3	2.56 2.05						
Candelabra Screw Base				NEON LAMPS WITH WIRE LEADS					
For 105-125 volts. AC or DC. Built-in resistor.				Unbased. Bulb is 1/4" dia., 1 1/4" long. NE2 1/17 Watt. Requires 150K series resistor for 105-125 V. AC or DC.					
12A4141	NE45	1/4	.81 .65	12A4073. Each... 10c 10 For.....80c					
Double Contact Candelabra Bay. Base Resistorless Type.				NE2H 1/4 Watt High brightness. Requires 30K series resistor for 105-125 V. AC or DC.					
NE32 requires external 7.5K resistor for 105-125 volts AC or DC. NE48 requires external 30K resistor.				12A4142. Each... 10c 10 For.....80c					
Stk. No.	Type	Watts	Each 10 @ Ea.	ARGON GLOW LAMPS					
12A4135	NE32	1	\$1.14 \$0.91	Blue glow with limited ultra-violet content. For 105-125 volts AC or DC. AR4 requires series external 15K resistor. AR9 requires 200K external resistor.					
12A4136	NE48	1/4	.67 .54	Stk. No. Type Watts Each 10 @ Ea.					
Miniature Bayonet Base Type				12A4137 AR-1 2 \$1.90 \$1.52					
NE51 requires external 200K resistor for 105-125 volts AC or DC. NE51H high brightness requires 47K external resistor.				12A4138 AR-3 1/4 .85 .68					
12A4071	NE51	1/25	\$0.20 \$0.16	12A4139 AR-4 1/4 .75 .66					
12A4072	NE51H		.22 .18	12A4140 AR-9 1/25 .20 .16					

### INTERNATIONAL RECTIFIER REPLACEMENT CRYSTALS FOR COLOR TV

Manufactured to the original specifications of those used in the color sets on the market today.  
CY2 replaces GE41, Westinghouse 296V023C. CY3 replaces Admiral 93B22-3. CY5 replaces Warwick 33-7-3 and Zenith 103-89. CY1 fits most other models.

Stock No.	Mfg. No.	Resonant Frequency	Capacitance (Pico Farads)	Leads	1-4 Ea.	5-9 Ea.
12A2024	CY1	3579.545 KHz	7.0	2	\$2.55	\$2.28
12A2025	CY2	3579.545 KHz	7.0	3	3.35	3.07
12A2002	CY3	3579.545 KHz	3.0	2	3.65	3.27
12A2004	CY5	3579.545 KHz	7.0	2	4.05	3.65

### WORKMAN CIRCUIT BREAKERS

Universal replacement for radio, TV, etc. Top quality American made. Recognized by U.L. Circuit is refused by pushing and releasing button.  
Specify Stock No. of Type Wanted.  
Your Choice Each 1-9 .....76c  
10 Up (You may assort). Each .....69c

Stock No.	Mfg. No.	Break Current	Carry Current	Stock No.	Mfg. No.	Break Current	Carry Current
12A1997	FA1	1 Amp	.65 Amp	12A1998	FA3.5	3.5 Amp	2.2 Amp
12A1313	FA1.5	1.5 Amp	1 Amp	12A1324	FA4	4 Amp	2.5 Amp
12A1318	FA2	2 Amp	1.25 Amp	12A1325	FA4.5	4.5 Amp	3 Amp
12A1320	FA2.5	2.5 Amp	1.6 Amp	12A1332	FA5	5 Amp	3.25 Amp
12A2480	FA2.75	2.75 Amp	1.9 Amp	12A1999	FA5.5	5.5 Amp	3.6 Amp
12A1323	FA3	3 Amp	1.9 Amp	12A1333	FA6	6 Amp	3.9 Amp
12A2481	FA3.25	3.25 Amp	2.2 Amp	12A1334	FA7	7 Amp	4.14 Amp

Color TV Dual Circuit Breaker. B - break current 2.75 amp, horizontal break current .65 amp.  
12A2482. Workman FAD. Each .....76c 10 @ Each.....69c



# SYLVANIA INDICATOR LIGHTS,



# SOCKETS



## INDICATOR SOCKETS AND COLOR CAPS FOR ESB LAMPS

① Strip Sockets for ESB Indicator Lamps. 12 sockets on 1/2" centers. Easily cut to number desired. With 3 Tinnerman clips for mtg. Combination solder/.205" quick disconnect terminal. Black Lexan. Size 6" long x 3/4" wide. Shpg. wt. 3 ozs.

No. 12A1678. Sylvania 33250-0. Individual Contacts. Each...\$3.10 10 Each...\$2.95 20 Each...\$2.75 50 Each...\$2.58 100 Each...\$2.24

No. 12A4113 Sylvania 31250-0. Common Ground. Each...\$2.98 10 Each...\$2.79 20 Each...\$2.54 50 Each...\$2.39 100 Each...\$2.24  
Individual Sockets for ESB Indicator Lamps. Each socket with Tinnerman clip. Combination solder/.205" quick-disconnect terminal. Black color. 1/2" mtg. hole. Shpg. wt. 2 ozs.

② No. 12A1676. Sylvania 30151-0. Rectangular Nylon Socket.  
③ No. 12A1677. Sylvania 30150-0. Round Phenolic Socket.

Choice Each...26c 10 Each...24c 100 Each...22c 500 Each...19c 1000 Each...18c

④ Color Caps. Fit directly on top of ESB Lamps. Plastic profax caps for lamps rated below 1.5 watts. Specify Color: Red, Yellow, White, Green or Blue.  
No. 12A1675. Sylvania 38001-0 thru 38005-0. Each...7c 10 Each...065 100 Each...6c 500 Each...055 1000 Each...55c



## HOUSINGS & LENS CAPS FOR ESB & PSB LAMPS

① Lamp Housing for ESB Indicator Lamps. Black nylon. Tinnerman clip for mtg. 1/2" mtg. hole. Combination solder/.205" quick-disconnect terminals. Order round or square lens caps below.

No. 12A1719. Sylvania 30153-0 Housing Only. Each...28c 10 Each...25c 100 Each...23c 500 Each...21c 1000 Each...19c

② Lamp Housing for PSB Pilot Lamps. Black phenolic. UL approved 125 volts. Tinnerman clips for mtg. 1/2" mtg. hole. Combination solder/.205" quick-disconnect terminals. Order round or square lens caps below.

No. 12A4111. Sylvania 30152-0 Housing Only. Each...30c 10 Each...27c 100 Each...25c 500 Each...23c 1000 Each...21c

Polycarbonate Snap-On Lens Caps for 30152-0 and 30153-0 housings. Specify Color: Red, Clear, Amber, White, Green or Blue.

③ No. 12A1720. Round 3/4" Dia. Sylvania 30160-0 thru 30165-0.  
④ No. 12A1721. Square 3/4" Sq. Sylvania 30170-0 thru 30175-0.

Choice Each...19c 10 Ea...17c 100 Ea...15c 500 Ea...13c 1000 Ea...11c



## PILOT LAMP HOUSINGS & LENS FOR PSB LAMPS

① Lamp Housing for PSB Pilot Lamps. Phenolic body with threaded 1/4" metal bushing and bezel. Mounts in panels up to 1 1/2" thick. With washer and mtg. nut. UL approved for 120 volts. Combination solder/.205" quick-disconnect terminals. Order Lens below.

No. 12A1679. Sylvania 30099-0 Housing only. Each...65c 10 Each...56c 100 Each...51c 500 Each...49c 1000 Each...47c

② Lamp Housing for PSB Pilot Lamps. As above except solid phenolic body and bushing with phenolic mtg. nut. Order Lens below.

No. 12A4112. Sylvania 30094-0 Housing only. Each...51c 10 Each...50c 100 Each...45c 500 Each...39c 1000 Each...34c

Lens for 30099-0 and 30094-0 Housings above. Sylvania 30100-0 series  
③ 12A1680. Jeweled, Specify Red, Green, Blue or Amber.  
④ 12A1681. Transparent, Specify Red, Green, Blue, Amber, Yellow or Clear.

⑤ 12A1682. Fluted, Specify Red, Green, Blue, Amber or Clear.  
⑥ 12A1683. Translucent, Specify Red, Green, Yellow, White.

Choice Each...20c 10 Each...19c 100 Each...17c 500 Each...15c 1000 Each...14c

## CARTRIDGE LIGHT HOUSING AND LENS



① Housing for 900 Series Indicator Lamps shown at right. Black anodized aluminum to Mil. Spec. MIL-A-8625. Phenolic base insulation rated 250 V. Mounts in 3/8" hole. Solder terminals. 1 1/4" long overall. Order Lens below.

No. 12A1716. Sylvania SM-1 30097-0. Each...91c 10 Each...82c 25 Each...76c 100 Each...68c 250 Ea...61c 500 Each...55c

① Housing for Pilot Lamps number 21 thru 81 shown at right. 1 3/8" long overall. Otherwise same as above. Order Lens below.

No. 12A1710. Sylvania SM-2 30095-0. Each...91c 10 Each...82c 25 Each...76c 100 Each...68c 250 Ea...61c 500 Each...55c

Polycarbonate Screw-On Cartridge Lens for SM-1 and SM-2 housings. 1/2" diameter.

② No. 12A1717. Transparent. Sylvania 30140-0 thru 30144-0. Specify Color: Amber, Clear, Red, Blue or Green.

③ No. 12A1718. Translucent. Sylvania 30145-0 thru 30147-0. Specify Color: Yellow, White, Red, Blue or Green.

Each...26c 10 Each...25c 25 Each...24c 100 Each...23c 250 Each...22c 500 Each...21c



## PILOT LIGHT JEWELS

All purpose jewel lenses. Mount with nut in panels 3/8" thick. Specify Choice of Color: Red, Green or Amber.

Stk. No.	Size	Lens	Fig.	1-9 Ea.	10-24 Ea.	25-99 Ea.	100-249 Ea.
12A4110	1"	Faceted	②	\$0.80	\$0.72	\$0.67	\$0.603
12A1159	1/2"	Smooth	①	.16	.15	.14	.122
12B710	1/2"	Faceted	②	.16	.15	.14	.122
12A830	3/4"	Smooth	①	.14	.13	.12	.108
12B709	3/4"	Faceted	②	.14	.13	.12	.108

## PSB PILOT LAMPS — SLIDE BASE

Engineered to give a minimum of 5000 hours life. 1.075" L. x .25" dia.

Stk. No.	Lamp No.	Volts	Amps	1-9	10-99	100-499	500-999	1000 Up
12A1684	6PSB	6	.14	\$0.51	\$0.44	\$0.42	\$0.37	\$0.34
12A1685	12PSB	12	.17	.51	.44	.42	.37	.34
12A1686	24PSB	24	.073	.51	.44	.42	.37	.34
12A1687	28PSB	28	.04	.51	.44	.42	.37	.34
12A1688	48PSB	48	.053	.51	.44	.42	.37	.34
12A1689	60PSB	60	.05	.51	.44	.42	.37	.34
12A1690	120PSB	120	.025	.51	.44	.42	.37	.34

## ESB INDICATOR LAMPS — SLIDE BASE

Engineered to give a minimum of 5000 hours life. .875" L. x .25" dia.

Stk. No.	Lamp No.	Volts	Amps	1-9	10-99	100-499	500-999	1000 Up
12A1698	6ESB	6	.04	\$0.46	\$0.40	\$0.38	\$0.33	\$0.31
12A1699	12ESB	12	.04	.46	.40	.38	.33	.31
12A1700	24ESB	24	.04	.46	.40	.38	.33	.31
12A1701	28ESB	28	.04	.46	.40	.38	.33	.31
12A1702	48ESB	48	.04	.51	.48	.42	.37	.35

## INDICATOR CARTRIDGE LAMPS — SERIES 900

Fits SM-1 cartridge lamp housing. 1.142" long less pins. .328" dia.

Stk. No.	Lamp No.	Volts	Amps	1-9	10-24	25-99	100-249	250-499	500 Up
12A1711	909	6	.04	\$0.97	\$0.87	\$0.80	\$0.72	\$0.63	\$0.56
12A1712	918	12	.04	.97	.87	.80	.72	.63	.56
12A4114	934	24	.04	.97	.87	.80	.72	.63	.56
12A1714	938	29	.04	.97	.87	.80	.72	.63	.56
12A1715	941	48	.04	1.00	.90	.80	.72	.63	.56

## PILOT CARTRIDGE LAMPS

Fits SM-2 cartridge lamp housing. 1.328" long less pins. .328" dia.

Stk. No.	Lamp No.	Volts	Amps	1-9	10-99	100-499	500-999	1000 Up
12A1703	21	6	.14	\$0.97	\$0.87	\$0.80	\$0.72	\$0.63
12A1704	31	12	.17	.97	.87	.80	.72	.63
12A1705	41	24	.073	.97	.87	.80	.72	.63
12A1706	51	28	.04	.97	.87	.80	.72	.63
12A1707	61	48	.053	.97	.87	.80	.72	.63
12A1708	71	60	.05	.97	.87	.80	.72	.63
12A1709	81	120	.025	.97	.87	.80	.72	.63

## ES INDICATOR LAMPS WITH WIRE LEADS

.875" long. .25" dia. 7/8" wire leads.

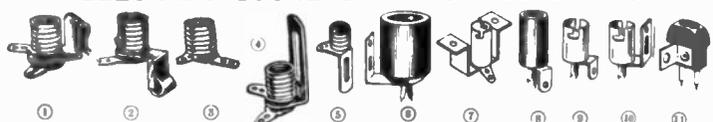
Stk. No.	Lamp No.	Volts	Amps	1-9	10-99	100-499	500-999	1000 Up
12A1151	6ES	6	.04	\$0.36	\$0.31	\$0.28	\$0.25	\$0.23
12A4116	12ES	12	.04	.36	.31	.28	.25	.23
12A4117	24ES	24	.04	.36	.31	.28	.25	.23
12A4118	28ES	28	.04	.36	.31	.28	.25	.23
12A4119	48ES	48	.04	.41	.35	.33	.28	.28

## MINIATURE BAYONET BASE PILOT LAMPS

Replaces any T3 3/4 miniature bayonet lamp such as type 44, 47, etc. May be used in any miniature bayonet pilot light assembly. Engineered for 5000 hours minimum life.

Stk. No.	Lamp No.	Volts	Amps	1-9	10-99	100-499	500-999	1000 Up
12A1691	6MB	6	.14	\$0.51	\$0.44	\$0.42	\$0.36	\$0.34
12A1692	12MB	12	.17	.51	.44	.42	.36	.34
12A1693	24MB	24	.073	.51	.44	.42	.36	.34
12A1694	28MB	28	.04	.51	.44	.42	.36	.34
12A1695	48MB	48	.053	.51	.44	.42	.36	.34
12A1696	60MB	60	.05	.51	.44	.42	.36	.34
12A1697	120MB	120	.025	.51	.44	.42	.36	.34

## LEECRAFT SOCKETS FOR SMALL LAMPS



Sockets insulated from mtgs. Two terminals.

Stock No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12A1142	5-01	①	\$0.35	\$0.26	\$0.20	\$ 9.40	\$ 8.30	\$ 8.30
12A1146	5-07	②	.35	.26	.20	9.40	8.30	8.30
12A1144	5-05	③	.35	.26	.20	9.40	8.30	8.30
12A1145	5-06	④	.35	.26	.20	9.40	8.30	8.30

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12A833	6-07	⑤	.39	.26	.20	10.00	8.60	8.60
12A1154	6-05	⑥	.39	.26	.20	10.00	8.60	8.60
12A1155	6-06	⑦	.39	.26	.20	10.00	8.60	8.60

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B708	4-08	⑧	.50	.37	.30	19.60	18.50	18.50

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B700	14-71	⑨	.55	.43	.36	24.35	18.90	18.90

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12A1152	7-01	⑩	.40	.26	.20	9.40	8.30	8.30
12A1153	7-02	⑪	.40	.26	.20	9.40	8.30	8.30
12A1147	7-07	⑫	.40	.26	.20	9.40	8.30	8.30
12A1150	7-05	⑬	.40	.26	.20	9.40	8.30	8.30
12A1151	7-06	⑭	.40	.26	.20	9.40	8.30	8.30
18C798	.....	⑮	.40	.26	.20	9.40	8.30	8.30

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B702	2-08-1	⑯	.46	.30	.25	14.95	11.60	11.60

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B703	2-08	⑰	.46	.30	.25	14.95	11.60	11.60

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B704	3-08	⑱	.50	.37	.30	21.55	18.25	18.25

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B705	12-271	⑲	.55	.43	.36	22.65	19.55	19.55

Stk. No.	Leecraft No.	Fig.	1-24	25-99	100-249	250-499	Per 100	500-999
12B706	23-223</							

**DRAKE NEON INDICATORS**



Economog Indicator Lights HR117. Attractive inexpensive indicator assemblies. Macro-dome plastic fluted lens extends  $\frac{3}{8}$ " in front of panel,  $\frac{1}{8}$ " behind panel face. Mounts in  $\frac{1}{2}$ " dia. hole. Max. panel thickness  $\frac{3}{8}$ ". High brightness non-replaceable type neon lamp with attached limiting resistor and leads for direct connection to 110-125 V. AC or DC. Specify choice of color: Red, Amber or Clear.

No. 12A993. Drake HR117-323  
1-9 Each.....34c 10-24 Each.....31c 25-99 Each.....29c 100 Up Each.....\$0.257  
Cylindrical Plastic Lens. Extends  $\frac{1}{4}$ " in front of panel,  $\frac{5}{8}$ " behind panel face. Otherwise as above. Specify choice of color: Red, Amber or Clear.

No. 12A4106. Drake HR117-603  
1-9 Each.....34c 10-24 Each.....31c 25-99 Each.....29c 100 Up Each.....\$0.257  
Flushline Indicator Lights. One-piece translucent nylon construction. Mounts with 2 screws. Mtg. centers  $1\frac{1}{2}$ ". Base  $\frac{3}{4}$ " x  $1\frac{1}{8}$ ". High brightness non-replaceable neon lamp with built-in resistor for direct connection to 110-125 V. AC or DC. Solder lug terminals. Specify choice of color: Red, Amber, White or Clear.

No. 12A994. Drake 110-025.  
1-9 Each.....50c 10-24 Each.....45c 25-99 Each.....42c 100 Up Each.....\$0.374  
Postlight Indicator Lights. All polystyrene. Extremely decorative. Lens is  $\frac{5}{8}$ " square, extends  $\frac{3}{4}$ " front of panel,  $1\frac{1}{4}$ " behind panel face. Mounts in panels up to  $\frac{3}{4}$ " thick. Mounts in  $\frac{1}{2}$ " hole. High brightness non-replaceable neon lamp with built-in resistor for direct connection to 110-125 V. AC or DC. Solder lug terminals. Specify choice of color: Red, Amber or Clear.

No. 12A995. Drake 105-025.  
1-9 Each.....69c 10-24 Each.....62c 25-99 Each.....58c 100 Up Each.....\$0.518

**DRAKE MONEY-SAVING INDICATOR LIGHTS**



Hi-Brightness non-replaceable neon lamp assembly ready to operate on 125 volts AC. Designed for minimum 5000 hour life.  $\frac{1}{2}$  watt rated. Gives that new modern appearance at very low cost. Choice of two mountings. One-piece nylon body and lens construction. Size: body dia.  $\frac{3}{8}$ ". Specify choice of color: Red, White or Amber.

Fig.	Stock No.	Drake No.	Description	Mtg. Hole	Length Behind Panel Face	1-9	10-24	25-99	100 Up
1	12B726	6073-001-534	Snap-In Type flush lens	$\frac{1}{2}$ "	$1\frac{1}{2}$ "	49c	44c	41c	\$0.365
2	12B727	6073-001-634	Snap-In Type tapered lens	$\frac{1}{2}$ "	$1\frac{1}{2}$ "	49c	44c	41c	\$0.365
3	12B728	6063-001-534	Tinnerman Nut Mtg. flush lens	$\frac{3}{8}$ "	$1\frac{1}{2}$ "	44c	40c	37c	\$0.333
4	12B729	6063-001-634	Tinnerman Nut Mtg. tapered lens	$\frac{3}{8}$ "	$1\frac{1}{2}$ "	44c	40c	37c	\$0.333

**1 "MINEON" NEON GLOW INDICATOR LIGHTS**

Cylindrical  $\frac{1}{2}$ " plastic translucent lens projects  $\frac{1}{2}$ " in front of panel. Length behind panel face is  $1\frac{3}{4}$ ". Mount in panel up to  $\frac{3}{8}$ " thick in a  $\frac{3}{8}$ " hole. Solder terminals. High brightness non-replaceable neon lamp with built-in resistor for direct connection to 110-125 V. AC. Specify choice of color: Red, Yellow, Colorless or Translucent White.



No. 12B715. Drake HR118-604  
1-9 Each.....84c 10-24 Each.....76c 25-99 Each.....70c 100 Up Each.....63c

**2 MINIATURE BAYONET BASE INSTRUMENT**

Hood type for illuminating front of panel on instruments and equipment. Has miniature bayonet socket. Mounts from front in panels up to  $\frac{1}{2}$ " dia. hole. Bulb replaceable from front. See page 37 for bulb. Black matte finish.

No. 12B716. Drake 188E  
1-9 Each.....\$1.42 10-24 Each.....\$1.28 25-99 Each.....\$1.19 100 Up Each.....\$1.067

**DRAKE "TINYLITE" INDICATOR LIGHTS**  
SMALLEST INDICATOR LIGHTS WITH MIDGET SCREW BASE  
REPLACEABLE LAMP

Fully enclosed. Supplied with midget lamp installed. Lamps replaced and units mounted from front of panels up to  $\frac{1}{2}$ " thick, in  $\frac{1}{8}$ " dia. mounting hole on  $\frac{1}{8}$ " centers. Friction device prevents lamps from loosening in use. Lens dia.  $\frac{3}{8}$ ". Extends  $\frac{3}{4}$ " in front of panel.

Stock No.	Drake No.	Lgth. Behind Panel Face	Lamp Voltage	1-9	10-24	25-99	100 Up
12A4107	121-7-604	$\frac{1}{2}$ "	7	162	\$0.74	\$0.66	\$0.554
12A4108	121-14-604	$\frac{1}{2}$ "	14	163	.75	.68	.563
12A4109	121-28-604	$\frac{1}{2}$ "	28	333	.86	.78	.648

Stock No.	Drake No.	Voltage	1-9 Each	10-24 Each	100 Up Each
12A4120	162	7	\$0.35	\$0.26	\$0.177
12A4121	163	14	.35	.26	.178
12A4122	333	28	.52	.39	.26



1 Hooded Panel Light for front panel illumination. Nickel plated hood.  $\frac{1}{2}$ " mtg. hole. Bulb removable from front. For miniature bayonet base lamps. No. 12B247. Johnson 147-329. Each.....\$1.50

2 12A1170. Bakelite Base, Double Contact Candelabra. Fits neon lamps NE32, NE48. Choice, 1-24 Each.....69c 25-99 Ea.....59c 100 Up, Ea.....54c

3 12A1172. Bakelite Base, Single Contact Candelabra. Fits auto lamp, etc. Choice, 1-24 Each.....69c 25-99 Ea.....59c 100 Up, Ea.....54c

4 Millen 33991 Double Contact Candelabra Socket for type 991 VR tube or neon lamps. Also fits standard auto lamps. No. 12A1421. Each.....79c

5 Bakelite Screw Base for miniature base lamps. No. 12A4079. 1-9 Ea.....22c 10-99 Ea.....19c 100 Up, Ea.....17c

6 Bakelite Screw Base for candelabra base lamps. No. 12A4080. 1-9 Ea.....23c 10-99 Ea.....20c 100 Up, Ea.....18c

7 Bakelite Cleat Receptacle for standard screw base lamps. No. 41A311. 1-9 Ea.....35c 10-99 Ea.....31c 100 Up, Ea.....27c

**1 INCH INDICATOR LIGHTS FOR S6 LAMPS**



1 Torpedo Wide-View Lens. Use S6 screw base candelabra 115 V. lamp, installed from front. UL and CSA listed. Screw terminals. 2" behind panel, 1" mtg. hole.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	80-0901-0511-301	1-9	10-24	25-99	100-249	250-499	500-999
Green	80-0901-0512-301	1-9	10-24	25-99	100-249	250-499	500-999
Amber	80-0901-0513-301	1-9	10-24	25-99	100-249	250-499	500-999
Choice		\$2.11	\$1.92	\$1.75	\$1.60	\$1.46	\$1.35

2 Faceted 1" lens. 1" mtg. hole. Uses S6, 115 volt bulbs. Chrome plated holder. UL and CSA listed. 2 1/2" length. Less lamp.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	32-3101-0431-302	1-9	10-24	25-99	100-249	250-499	500-999
Green	32-3101-0432-302	1-9	10-24	25-99	100-249	250-499	500-999
Amber	32-3101-0433-302	1-9	10-24	25-99	100-249	250-499	500-999
Clear	32-3101-0437-302	1-9	10-24	25-99	100-249	250-499	500-999
Choice		\$1.46	\$1.33	\$1.22	\$1.11	\$1.02	94c

3 Oil-tight, Completely Sealed against oil, water or dust. Front lamp replacement. 1" mtg. hole. Chrome finish. Use S6 115 V. bulbs. UL and CSA listed. Faceted lens.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	103-3101-1331-403	1-9	10-24	25-99	100-249	250-499	500-999
Green	103-3101-1332-403	1-9	10-24	25-99	100-249	250-499	500-999
Amber	103-3101-1333-403	1-9	10-24	25-99	100-249	250-499	500-999
Clear	103-3101-1337-403	1-9	10-24	25-99	100-249	250-499	500-999
Choice		\$2.64	\$2.40	\$2.20	\$2.00	\$1.84	\$1.70

**1/2 INCH INDICATOR LIGHTS FOR MINIATURE BAYONET LAMPS**



For T3 1/4 incandescent lamps. 2-55 volts. Smooth faced translucent jewels in 1/2" brass holder. Bulb replaceable from front. Mounts in 1/4" holes in panels up to 3/8" thick. 2 1/2" long. UL and CSA listed. Solder terminals. Less lamp.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	81-9110-0111-102	82c	77c	72c	68c	65c	61c
Green	81-9110-0112-102	82c	77c	72c	68c	65c	61c
Amber	81-9110-0113-102	82c	77c	72c	68c	65c	61c
Blue	81-9110-0114-102	82c	77c	72c	68c	65c	61c
White	81-9110-0115-102	82c	77c	72c	68c	65c	61c
Choice		82c	77c	72c	68c	65c	61c
Each		82c	77c	72c	68c	65c	61c

3 OPEN TYPE 1/2 INCH INDICATOR LIGHTS  
1/2" transparent faceted jewel. Bulb replaceable from front of panel. 1/4" mtg. hole.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	502-8136-2131-102	50c	46c	43c	40c	37c	34c
Green	502-8136-2132-102	50c	46c	43c	40c	37c	34c
Amber	502-8136-2133-102	50c	46c	43c	40c	37c	34c

4 ANGLE BRACKET 1/2 INCH INDICATOR LIGHT  
Economical angle bracket assemblies. With 1/2" transparent faceted jewel. Mount in 1/4" hole. Bracket held by threaded shank of lens holder. Bulb accessible from rear.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	502-1015-0121-102	1-9	10-24	25-99	100-249	250-499	500-999
Green	502-1015-0122-102	1-9	10-24	25-99	100-249	250-499	500-999
Amber	502-1015-0123-102	1-9	10-24	25-99	100-249	250-499	500-999
Choice		34c	31c	28c	26c	24c	22c

**SUB-MINIATURE INDICATOR LIGHTS**

For midget flange base lamps such as number 327 or 328. Black nickel finish. 1/2" transparent stovepipe (dome) lens. Mounts in 1/8" hole with nut behind panel. Lamp removable from front. Solder lug terminals. Extends 3/8" behind panel.



Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500 Up
Red	101-5030-0931-201	1-9	10-24	25-99	100-249	250-499	500 Up
Green	101-5030-0932-201	1-9	10-24	25-99	100-249	250-499	500 Up
White	101-5030-0935-201	1-9	10-24	25-99	100-249	250-499	500 Up
Choice		\$1.26	\$1.17	\$1.08	\$1.00	92c	85c

As above except black anodized aluminum, 3/8" Stovepipe (dome) Lens, mounts in 1/8" hole with nut behind panel, extends 3/4" behind panel face. Meets MIL MS-25256.

Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500 Up
Red	162-8430-0931-502	1-9	10-24	25-99	100-249	250-499	500 Up
Green	162-8430-0932-502	1-9	10-24	25-99	100-249	250-499	500 Up
Blue	162-8430-0934-502	1-9	10-24	25-99	100-249	250-499	500 Up
Choice		\$1.21	\$1.13	\$1.05	\$0.97c	90c	84c

**NEON INDICATOR LIGHTS**

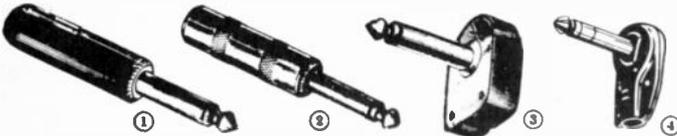
With built-in resistor for 110-125 volts. 5/8" plastic stovepipe (dome) lens. Mounts in 1/4" hole. Length 2 1/4". Solder terminals. UL and CSA listed. Less Lamp.



Color	Dialco No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	95-9108-0931-142	87c	82c	77c	72c	68c	64c
Amber	95-9108-0933-142	87c	82c	77c	72c	68c	64c
White	95-9108-0935-142	87c	82c	77c	72c	68c	64c
Clear	95-9108-0937-142	87c	82c	77c	72c	68c	64c

REPLACEMENT PLASTIC DOME LENS CAPS. For 12A835, 12A886 and 12A887 shown above.  
Specify Stk. No. 12A973 and Color on Orders.  
Red Dialco 95-0931 Amber Dialco 95-0933 White Dialco 95-0935 Clear Dialco 95-0937  
Choice Each 1-9.19c 10-24.18c 25-99.17c 100-249.16c 250-499.15c 500 Up 14c

## "LITTEL PLUG" PHONE PLUGS



Fits standard 1/4" phone jack, except Nos. S-250, S-269, S-280 and S-290 which have a .206" dia. sleeve for .210 jacks. No's. C-240, C-245 and C-270 have cable clamp. Shielded handles are nickel plated brass; others are molded plastic; 5/8" long, 1/2" dia. \*Screw terminals, others solder terminals. Shpg. wt. 2 ozs.

		2 CONDUCTOR TYPES								
		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
①	12B252	240*	Black	\$0.63	\$0.54	\$0.50	\$0.45	\$0.36	\$0.342	\$0.324
①	12B341	C-240*	Black	.74	.63	.58	.53	.42	.399	.378
①	12B253	245*	Red	.63	.54	.50	.45	.36	.342	.324
①	12B342	C-245*	Red	.74	.63	.58	.53	.42	.399	.378
①	12A440	250	Black	.60	.51	.47	.43	.34	.323	.306
①	12B111	S-250	Black	.63	.54	.50	.45	.36	.342	.324
①	12A441	255	Red	.60	.51	.47	.43	.34	.323	.306
②	12B254	270*	Shield	.88	.75	.69	.63	.50	.475	.45
②	12B343	C-270*	Shield	.98	.84	.77	.70	.56	.532	.504
②	12A442	280	Shield	.84	.72	.66	.60	.48	.456	.432
②	12B114	S-280	Shield	.84	.72	.66	.60	.48	.456	.432

		3 CONDUCTOR TYPES								
		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
①	12B336	260*	Black	.98	.84	.77	.70	.56	.532	.504
①	12B337	S-260*	Black	1.37	1.17	1.07	.98	.78	.741	.702
①	12A447	267	Black	.88	.75	.69	.63	.50	.475	.45
①	12C169	269	Red	.88	.75	.69	.63	.50	.475	.45
②	12B338	290*	Shield	1.16	.99	.91	.83	.66	.627	.594
②	12A448	297	Shield	1.09	.93	.85	.78	.62	.589	.558

## SWITCHCRAFT "FLAT PLUGS"

1/4" phone plugs except S-230 is .206" dia. featuring flat, space-saving handles for use where conventional plugs protrude too far. No. 220 has adaptor clips to clamp standard phone tips. Nos. 228 and 238 are shielded, others have plastic handles.

		2 CONDUCTOR TYPES								
		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
③	12B203	220*	Black	\$0.91	\$0.78	\$0.72	\$0.65	\$0.52	\$0.494	\$0.468
③	12B236	227	Black	.74	.63	.58	.53	.42	.399	.378
③	12B108	228	Shield	.81	.69	.63	.58	.46	.437	.414

		3 CONDUCTOR TYPES								
		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
③	12B205	230*	Black	1.12	.96	.88	.80	.64	.608	.576
③	12A292	S-230*	Black	1.44	1.23	1.13	1.03	.82	.779	.738
③	12C209	237	Black	1.09	.93	.85	.78	.62	.589	.558
③	12C207	238	Shield	1.19	1.02	.94	.85	.68	.646	.612



## SWITCHCRAFT EXTENSION JACKS

Rugged jacks feature cable anchor. 1/4" O.D., 2 1/2" long; 121 and 131 are 1/2 x 2 1/2". All for 1/4" plugs except S-128, S-830 and S-1230 which are .210". \*Screw terminals, all others are solder terminals.

		2 CONDUCTOR TYPES								
		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
①	12C229	80*	Black	\$0.95	\$0.81	\$0.74	\$0.68	\$0.54	\$0.513	\$0.486
①	12C282	88	Black	.84	.72	.66	.60	.48	.456	.432
②	12C277	120*	Shield	1.26	1.08	.99	.90	.72	.684	.648
②	12C283	121	Shield	1.33	1.14	1.05	.95	.76	.722	.684
②	12C284	128	Shield	1.16	.99	.91	.83	.66	.627	.594
②	12C285	S-128	Shield	1.23	1.05	.96	.88	.70	.665	.63

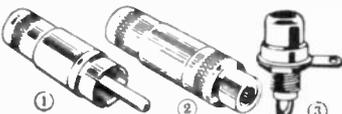
		3 CONDUCTOR TYPES								
		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
③	12C286	131	Shield	1.65	1.41	1.29	1.18	.94	.893	.846
③	12C278	830*	Black	1.26	1.08	.99	.90	.72	.684	.648
③	12C279	S-830*	Black	1.65	1.41	1.29	1.18	.94	.893	.846
③	12D263	838	Black	1.16	.99	.91	.83	.66	.627	.594
③	12C280	1230*	Shield	1.61	1.38	1.27	1.15	.92	.874	.828
③	12C281	S-1230*	Shield	2.00	1.71	1.57	1.43	1.14	1.08	1.03
③	12D265	1238	Shield	1.47	1.26	1.16	1.05	.84	.798	.756

## ① THICK PANEL JACK

Standard 1/4" phone jack with extra long threaded bushing for panels up to 1 1/4" thick. Overall length 2 1/4" x 3/8" dia. Mounts in 1/2" hole. Open circuit type. Solder terminals.

		Prices Each								
Stk. No.	Mfg. No.	Dia.	Conductors	1-5	6-24	25-49	50-99	100-249	250-499	500-999
12B201	151	1/4"	2	1.09	.93	.85	.78	.62	.589	.558
12B202	152B	1/4"	3	1.19	1.02	.94	.85	.68	.646	.612

## SHIELDED PHONO JACKS & PLUGS



3501 FP chassis jack for front panel mount in 1/4" hole up to 1/8" thick. 3503 extension jack has shielded removable handle 1/2" O.D. with cable clamp. 3502 plug has cable clamp with 1/2" O.D. shielded removable handle.

		Prices Each							
Stk. No.	Mfg. No.	1-5	6-24	25-49	50-99	100-249	250-499	500-999	
12A195	3502	\$0.35	\$0.30	\$0.28	\$0.25	\$0.20	\$0.19	\$0.18	
12A196	3503	.45	.39	.36	.33	.26	.247	.234	
12A415	3501FP	.24	.21	.19	.18	.14	.133	.126	

## "TINI PLUG" AND "TINI JAX" MINIATURE PLUGS & JACKS



ONLY 1/4 THE SIZE OF "LITTEL PLUGS" AND "LITTEL JACKS"  
"Tini Plug" is 3/8" dia. x 1 3/8" overall length. \*Screw terminal, others solder.

		Prices Each								
Fig.	Stk. No.	Mfg. No.	Handle	1-5	6-24	25-49	50-99	100-249	250-499	500-999
①	12B420	740*	Black	\$0.63	\$0.54	\$0.50	\$0.45	\$0.36	\$0.342	\$0.324
①	12B421	745*	Red	.63	.54	.50	.45	.36	.342	.324
①	12B422	770*	Shield	.84	.72	.66	.60	.48	.456	.432
①	12B423	750	Black	.60	.51	.47	.43	.34	.323	.306
①	12B425	780	Shield	.81	.69	.63	.58	.46	.437	.414

"Tini Jax" mount in 1/4" hole in panels up to 1/8" thick.  
② 12B426 41 Open Circuit .35 .30 .28 .25 .20 .19 .18  
② 12B427 42A Closed Circuit .39 .33 .30 .28 .22 .209 .198

"Tini-Extension Jax" cable jack Shielded metal housing. Solder lug terminals.  
③ 12A6038 125 .98 .84 .77 .70 .56 .532 .504  
"Tini-D Jax." Bifurcated beryllium copper springs. Phenolic housing. Threaded bushing for conventional mtg. Tip spring terminals snap in P.C. boards. Mount on 3/8" centers, in 1/4" dia. hole in panels up to 1/8" thick. Depth behind panel 1/8".

		Prices Each							
Fig.	Stk. No.	Mfg. No.	1-5	6-24	25-49	50-99	100-249	250-499	500-999
①	12A6040	142A	\$0.42	\$0.36	\$0.33	\$0.30	\$0.24	\$0.228	\$0.216

## "MICRO" PLUG AND JACK

Ultra-miniaturized version of Tini-Plugs above. Plug is 1 1/4" long, 1/4" O.D. with .097" dia. finger. Jack is 1/2" long, mounts in 1/4" hole on panels up to 3/8" thick. For 2 cond. cable up to 3/8" dia. Jack is closed circuit.

		Prices Each								
Fig.	Stk. No.	Mfg. No.	Description	1-5	6-24	25-49	50-99	100-249	250-499	500-999
①	12A287	850	Plug-Black	\$0.56	\$0.48	\$0.44	\$0.40	\$0.32	\$0.304	\$0.288
②	12A288	TR-2A	Jack	.42	.36	.33	.30	.24	.228	.216

## "LITTEL-JAX" PHONE JACKS

Small economical standard jacks. Mount in single 3/8" hole, panels to 3/8" thick. For 1/4" plugs except S-11 and S-12B are .210" dia. Wt. 1 oz.

		2 CONDUCTOR JACKS							
		Prices Each							
Stock No.	Mfg. No.	Schematic	1-5	6-24	25-49	50-99	100-249	250-499	500-999
12A396	11	A	\$0.35	\$0.30	\$0.28	\$0.25	\$0.20	\$0.19	\$0.18
12B347	S-11	A	.39	.33	.30	.28	.22	.209	.198
12A397	12A	C	.39	.33	.30	.28	.22	.209	.198

		3 CONDUCTOR JACKS							
		Prices Each							
Stock No.	Mfg. No.	Schematic	1-5	6-24	25-49	50-99	100-249	250-499	500-999
12A398	12B	D	.46	.39	.36	.33	.26	.247	.234
12B340	S-12B	D	.60	.51	.47	.43	.34	.323	.306

		STEREO 3 CONDUCTOR JACKS							
		Prices Each							
Stock No.	Mfg. No.	Schematic	1-5	6-24	25-49	50-99	100-249	250-499	500-999
12A6039	14B	G	.84	.72	.66	.60	.48	.456	.432

## SWITCHCRAFT HI-D JAX

Smaller, compact phone jacks, mate with standard 1/4" phone plugs. Molded body protects silver-plated springs. Mounts in 3/8" O.D. hole in panels up to 3/8" thick. Wt. 1 oz. 111 and 112A are 2 conductor, 112B and 113B are 3 conductor.

		Prices Each							
Stock No.	Mfg. No.	Schematic	1-5	6-24	25-49	50-99	100-249	250-499	500-999
12D296	111	A	\$0.35	\$0.30	\$0.28	\$0.25	\$0.20	\$0.19	\$0.18
12B352	112A	C	.39	.33	.30	.28	.22	.209	.198
12B353	112B	D	.42	.36	.33	.30	.24	.228	.216
12B362	113B	E	.56	.48	.44	.40	.32	.304	.288

## SWITCHCRAFT SHORT FRAME PHONE JACKS

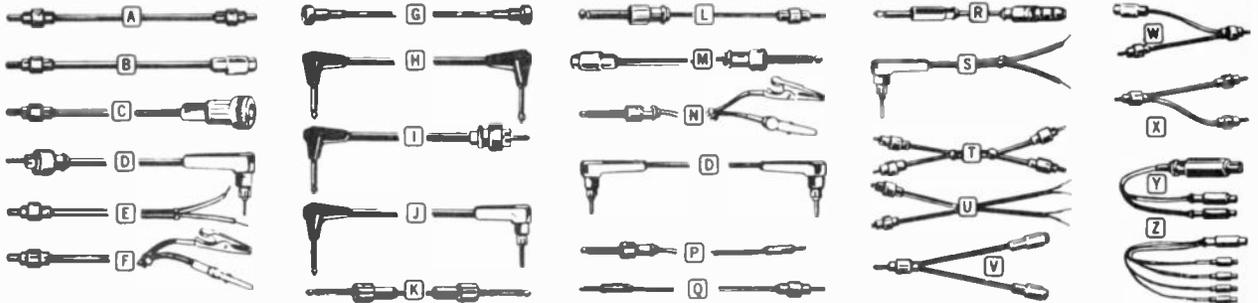
Mate with standard 1/4" phone plug. Size: 3/8" high, 1 1/4" wide. Mount in panels 1/4" thick. Require 3/8" hole. Extends 1/4" back of panel. Wt. 1 oz.

		Prices Each							
Stock No.	Mfg. No.	Schematic	1-5	6-24	25-49	50-99	100-249	250-499	500-999
12A381	51	A	\$0.56	\$0.48	\$0.44	\$0.40	\$0.32	\$0.304	\$0.288
12A382	52	B	.70	.60	.55	.50	.40	.38	.36
12A383	52A	C	.70	.60	.55	.50	.40	.38	.36
12A379	52B	D	.70	.60	.55	.50	.40	.38	.36
12A380	53C	E	.81	.69	.63	.58	.46	.437	.414
12A306	54	F	.84	.72	.66				

# SWITCHCRAFT CABLES, CONNECTORS AND ADAPTORS

## SWITCHCRAFT AUDIO CABLES AND ADAPTORS

High quality for hi-fi equipment, recorders, speaker extensions, etc. Connectors are molded in plastic directly to cable, with molded-in finger grip for easy removal. Chrome-gray wire. All shielded except \* which are unshielded.



Stk. No.	Fig.	Length	Description	Each	6-24 Ea.	25-49 Ea.
33A6514	A	1½ Ft.	RCA Plug/RCA Plug	\$0.91	\$0.78	\$0.715
33A6515	A	3 Ft.	RCA Plug/RCA Plug	1.02	.87	.80
33A6516	A	6 Ft.	RCA Plug/RCA Plug	1.26	1.08	.99
33A6517	A	10 Ft.	RCA Plug/RCA Plug	1.72	1.47	1.35
33A6518	A	25 Ft.	RCA Plug/RCA Plug	2.98	2.55	2.34
33A6519	B	3 Ft.	RCA Plug/RCA Jack	1.16	.99	.91
33A6520	B	6 Ft.	RCA Plug/RCA Jack	1.51	1.29	1.18
33A6521	B	10 Ft.	RCA Plug/RCA Jack	1.72	1.47	1.35
33A6522	B	25 Ft.	RCA Plug/RCA Jack	2.98	2.55	2.34
33A6523	C	6 Ft.	RCA Plug/Mike Connector	2.10	1.80	1.65
33A6524	D	6 Ft.	RCA Plug/Angle RCA Plug	1.26	1.08	.99
33A6525	D	10 Ft.	RCA Plug/Angle RCA Plug	1.72	1.47	1.35
33A6526	E	6 Ft.*	RCA Plug/Tinned Leads	.77	.66	.61
33A6527	E	1½ Ft.	RCA Plug/Tinned Leads	.70	.60	.55
33A6528	E	3 Ft.	RCA Plug/Tinned Leads	.81	.69	.63
33A6529	E	6 Ft.	RCA Plug/Tinned Leads	.98	.84	.77
33A6530	E	10 Ft.	RCA Plug/Tinned Leads	1.40	1.20	1.10
33A6531	E	25 Ft.	RCA Plug/Tinned Leads	2.77	2.37	2.17
33A6532	F	6 Ft.*	RCA Plug/Clips	1.51	1.29	1.18
33A6533	G	25 Ft.	Mike Connector/Mike Connector	4.24	3.63	3.33
33A6534	H	6 Ft.	Angle Phone Plug/Angle Phone Plug	2.21	1.89	1.73
33A6535	I	6 Ft.	Angle Phone Plug/RCA Plug	1.68	1.44	1.32
33A6536	J	6 Ft.	Angle Phone Plug/Angle RCA Plug	1.68	1.44	1.32
33A6537	K	6 Ft.	Phone Plug/Phone Plug	2.21	1.89	1.73
33A6538	K	10 Ft.	Phone Plug/Phone Plug	2.98	2.55	2.34
33A6539	K	25 Ft.	Phone Plug/Phone Plug	3.92	3.36	3.08
33A6540	L	6 Ft.	Phone Plug/RCA Plug	1.68	1.44	1.32

Stk. No.	Fig.	Length	Description	Each	6-24 Ea.	25-49 Ea.
33A6541	L	10 Ft.	Phone Plug/RCA Plug	\$2.31	\$1.98	\$1.82
33A6542	M	6 Ft.	Phone Plug/RCA Jack	1.86	1.59	1.46
33A6543	*N	6 Ft.	Phone Plug/Clips	1.61	1.38	1.27
33A6544	*N	20 Ft.	Phone Plug/Clips	2.56	2.19	2.01
33A6545	O	1½ Ft.	Angle RCA Plug/Angle RCA Plug	.88	.75	.69
33A6546	O	3 Ft.	Angle RCA Plug/Angle RCA Plug	1.02	.87	.80
33A6547	O	6 Ft.	Angle RCA Plug/Angle RCA Plug	1.26	1.08	.99
33A6548	O	10 Ft.	Angle RCA Plug/Angle RCA Plug	1.68	1.44	1.32
33A6549	P	6 Ft.	Phone Plug/Miniature Phone Plug	2.31	1.98	1.82
33A6550	Q	6 Ft.	RCA Plug/Miniature Phone Plug	2.14	1.83	1.68
33A6551	R	6 Ft.	Min. Phone Plug/Min. Phone Jack	2.31	1.98	1.82
33A6552	S	3 Ft.	Angle RCA Plug/Tinned Leads	.81	.69	.63
33A6553	S	6 Ft.	Angle RCA Plug/Tinned Leads	.98	.84	.77
33A6554	T	3 Ft.	2 RCA Plugs/2 Pin Plugs	2.77	2.37	2.17
33A6555	T	6 Ft.	2 RCA Plugs/2 Pin Plugs	3.19	2.73	2.50
33A6556	T	10 Ft.	2 RCA Plugs/2 Pin Plugs	3.82	3.27	3.00
33A6557	U	3 Ft.	2 RCA Plugs/Tinned Leads	2.45	2.10	1.93
33A6558	U	6 Ft.	2 RCA Plugs/Tinned Leads	2.77	2.37	2.17
33A6559	U	10 Ft.	2 RCA Plugs/Tinned Leads	3.19	2.73	2.50
33A6560	V	4 In.	RCA Plug/2 RCA Jacks	1.75	1.50	1.38
33A6561	W	4 In.	RCA Plug/1 RCA Plug & Phono Jack	1.75	1.50	1.38
33A6562	X	4 In.	RCA Plug/2 RCA Jacks	1.75	1.50	1.38
33A6563	Y	4 In.	European 3 Pin Plug/2 RCA Jacks	2.80	2.40	2.20
33A6640	Y	6 Ft.	European 3 Pin Plug/2 RCA Jacks	2.84	2.43	2.23
33A6639	Y	8 In.	European 5 Pin Plug/2 RCA Jacks	2.73	2.34	2.15
33A6564	Z	1 Ft.	European 5 Pin Plug/4 RCA Jacks	4.73	4.05	3.71

## SWITCHCRAFT AUDIO CONNECTORS



Interchangeable with Canon XLR-3, XLR-4 and Amphenol 91-850 series. Professional style audio connectors made for rugged service. Connectors are polarized with exclusive grounding lug on all units. Shells are made of die-cast zinc, satin nickel finish. Inserts are of high-impact plastic. Wall plates are brushed stainless steel and fit standard electrical outlet boxes.

### CORD PLUGS

Fig.	Stk. No.	Mfg. No.	Contacts	Description	1-5	6-24	25-49	50-99	100-249
①	12B348	A3F	3	Female	\$1.72	\$1.47	\$1.35	\$1.23	\$0.98
①	12A6042	A4F	4	Female	2.14	1.83	1.68	1.53	1.22
②	12B349	A3M	3	Male	1.47	1.26	1.16	1.05	.84
②	12A6043	A4M	4	Male	1.58	1.35	1.24	1.13	.90

### PANEL AND WALL RECEPTACLES

Fig.	Stk. No.	Mfg. No.	Contacts	Description	1-5	6-24	25-49	50-99	100-249
③	12B350	B3M	3	Male	2.10	1.80	1.65	1.50	1.20
③	12A6044	B4M	4	Male	2.21	1.89	1.73	1.58	1.26
④	12B351	C3M	3	Male	1.12	.96	.88	.80	.64
④	12A6045	C4M	4	Male	1.23	1.05	.96	.88	.70
⑤	12A6002	C3F	3	Female	2.24	1.92	1.76	1.60	1.28
⑤	12A6046	C4F	4	Female	2.35	2.01	1.84	1.68	1.34
⑥	12A6003	G3MS	3	Male	3.64	3.12	2.86	2.60	2.08
⑥	12A6048	G4MS	4	Male	3.85	3.30	3.03	2.75	2.20
⑦	12A6098	H3MS	3	Dual Male	5.11	4.38	4.02	3.65	2.92
⑦	12A6104	H4MS	4	Dual Male	5.53	4.74	4.35	3.95	3.16
⑧	12A6004	J3FS	3	Female	3.78	3.24	2.97	2.70	2.16
⑧	12A6051	J4FS	3	Female	3.99	3.42	3.14	2.85	2.28

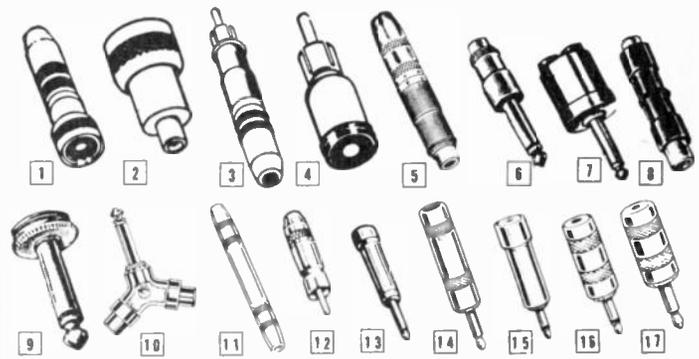
## SWITCHCRAFT AUDIO CONNECTOR ADAPTORS



Adapts male or female three conductor Switchcraft (above) or Cannon plugs to standard ¼" phone plugs and jacks or mike connectors.

Fig.	Stk. No.	Mfg. No.	Description	1-5 Ea.	6-24 Ea.	25-49 Ea.
①	12A6092	389	Double Female A3F	\$3.33	\$2.85	\$2.61
②	12A6093	390	Double Male A3M	2.80	2.40	2.20
③	12A6094	383	Female A3F to ¼" Jack	2.22	2.76	2.53
④	12A6095	384	Male A3M to ¼" Jack	2.87	2.46	2.26
⑤	12A6096	386	Female A3F to ¼" Plug	3.15	2.70	2.48
⑥	12A6097	387	Male A3M to ¼" Plug	2.80	2.40	2.20
⑦	12A6105	335A	Male Mike to A3F	2.35	2.01	1.84
⑧	12A6106	339A	Female Mike to A3M	2.35	2.01	1.84

## SWITCHCRAFT SHIELDED ADAPTORS



Adaptors to interconnect components that do not have mating jacks or plugs. Positive mating contacts prevent resistive line losses. Nickel plated finish. 1½" long, 1½" diameter. Wt. 5 ozs.

Stk. No.	Type	Input	Output	1-5 Ea.	6-24 Ea.	25-49 Ea.
①	12B225	332A	Phone Jack	Female Mike Conn.	\$1.40	\$1.20
②	12B226	334A	RCA Jack Conn.	Female Mike Conn.	1.16	.99
③	12B227	336A	Phone Jack	RCA Plug Conn.	1.40	1.20
④	12B228	338A	Male Mike Conn.	RCA Plug Conn.	.88	.75
⑤	12A6011	336B	Phone Jack	RCA Jack	1.40	1.20
⑥	12B230	345A	RCA Jack	Phone Plug	1.02	.87
⑦	12B231	346A	2 Phone Tip Jacks	Phone Plug	1.82	1.56
⑧	12B238	349A	RCA Jack	RCA Jack	.84	.72
⑨	12A6022	44	Male Mike	Phone Plug	.42	.36
⑩	12A6052	330P	Two RCA Jacks	Phone Plug	1.65	1.41
⑪	12A6053	361	Phone Jack	Phone Jack	1.82	1.56
⑫	12A6054	365	Min. Phone Jack	RCA Plug	1.22	1.05
⑬	12A6055	370	RCA Jack	Min. Phone Plug	.94	.81
⑭	12A6056	374	Phone Jack	Min. Phone Plug	1.40	1.20
⑮	12A6057	375	RCA Jack	Micro Plug	1.26	1.08
⑯	12A6058	376	Min. Phone Jack	Micro Plug	1.26	1.08
⑰	12A6059	377	Micro. Jack	Min. Phone Plug	1.26	1.08

## HIRSCHMAN MULTI-POLE PLUGS



Small, shielded plugs with molded-on strain reliefs. Mate with input and output jacks on many foreign built tape recorders and radios including Norelco, Sony, Uher, Telefunken, Korting, Dual, Kuba, etc. Shpg. wt. 2 oz.

Stk. No.	Type	No. Pins	Pin Diagram	Shell	Net Ea.
①	12A6005	MASS	A	Metal	79c
①	12A6006	MASS	B	Metal	89c
①	12A6007	MASS5	C	Metal	89c
①	12A6008	MASS0	A	Ivory Plastic	55c
①	12A6009	MASS0	B	Ivory Plastic	69c
①	12A6010	MASS0S	C	Ivory Plastic	69c

Contact Our Industrial Department For Quotations On Larger Quantities

# PLUGS, JACKS AND CONNECTORS

## AMPHENOL MICROPHONE AND SHIELDED CABLE CONNECTORS



Standard single contact pressure type connectors with 5/16-27 male or female thread as illustrated. Made of brass, chrome plated. Type 75-MC1F has a removable coupling ring (see inset) and will mate with both male and female fittings. Shpg. wt. 1 oz. \*Made by Switchcraft.

Stk. No.	Type	Description	1-49	50-249	250-499	500-999	1000 Up
① 12A311	75-MC1F	Univ. Male or Female	\$0.64	\$0.53	\$0.45	\$0.38	\$0.340
② 12A317	75-MC1F-A	Female, Angle	1.31	1.09	.92	.79	.697
③ 12A313	75-PC1M	Male, Chassis	.41	.35	.29	.25	.221
④ 12A318	75-MC1P	1/4" Phone Plug Adapter	.52	.43	.36	.31	.276
⑤ 12A319	75-CCC1	Dust Cover	.45	.37	.31	.27	.239

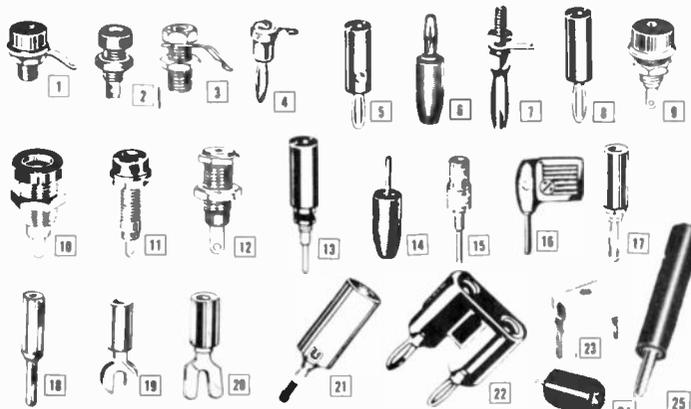
⑥ 12A307	25Y*	Y Connector	1-49	50-249	250-499	500-999	1000 Up
			\$1.61	\$1.38	\$1.27	\$1.15	\$0.874

### AMPHENOL MIKE SWITCH

Male one end, female on other, mates with all standard 5/16-27 single contact connectors. Push-to-talk or slide switch for permanent contact. Shorts across circuit in "OFF" position. Wt. 2 oz.

No. 12A316. Type 75-MC1S	1-49	50-249	250-499	500-999	1000 Up
Prices Each	\$1.89	\$1.58	\$1.33	\$1.14	\$1.01

## BANANA & PHONE TIP PLUGS & JACKS



MANUFACTURERS ABBREVIATIONS USED BELOW: HS for Herman H. Smith, EJ for E. F. Johnson. Shpg. wt. 2 oz. DESCRIPTIVE ABBREVIATIONS: BP for banana jack, BJ for banana jack, TP for tip plug, TJ for tip jack, and I for insulated. All jacks will mount in panels up to 3/8" thick except HS240 (to 5/8") and HS206 (to 5/8"). HS stocked in Red, Black, Green and Yellow, EJ stocked in Red, Black, Green, Yellow and White. Please specify both B-A Stock Number and Color.

Illus. Fig.	Stock No.	Mfg. Type	Mtg. Hole	Over. Lgth.	Description	1-24 Each	25-99 Each	100-499 Each	500-999 Each
①	12A1048	HS205	3/16"	3/2"	BJ, Insulated head	.10	.09	.08	.075
②	12A681	EJ108	3/16"	3/2"	BJ, I Nylon, 900 Series	\$1.15	\$1.13	\$1.12	\$1.11
③	12A1047	HS109	3/16"	5/8"	BJ, Brass Nickel Plated	.13	.11	.10	.0975
④	12A1046	HS100	1 1/2"	BP, Bronze N.P., 6/32 screw	.20	.17	.16	.15	
⑤	12A1042	HS204	1 1/2"	BP, I Solderless screw	.20	.17	.16	.15	
⑥	12A682	EJ108	1 3/8"	BP, I Nylon, 300 Series	.19	.16	.152	.143	
⑦	12A1044	HS103	1 1/2"	BP, Brass N.P. 6/32" thrd.	.20	.17	.16	.15	
⑧	12A901	HS211	1 5/8"	BP, I solder or solderless	.20	.17	.16	.15	
⑨	12A1058	HS202	3/16"	1 3/4"	TJ, I Ph. Bronze contact	.15	.13	.12	.11
⑩	12A900	HS240	3/8"	1 1/2"	TJ, I Nylon, 4000 V. AC	.20	.17	.16	.15
⑪	12A694	EJ105	1/4"	1 1/2"	TJ, I Nylon, 800 Series	.13	.11	.104	.098
⑫	12A1049	HS206	1/4"	1 1/2"	TJ & BJ, Comb. Insulated	.20	.17	.16	.15
⑬	12A1057	HS107	1/4"	1 1/2"	TJ, Brass Nickel Plated	.15	.13	.12	.11
⑭	12A1050	HS200	2 1/4"	TP, I Solderless Type	.17	.14	.136	.128	
⑮	12A719	EJ105	1 1/2"	TP, I Nylon, 300 Series	.15	.13	.12	.113	
⑯	12A1052	HS105	1 1/2"	TP, Brass N.P. Solderless	.15	.13	.12	.11	
⑰	12A1055	HS235	1 1/4"	BP, I Meter, Red or Black	.30	.26	.24	.23	
⑱	12B905	HS295	1 1/2"	BP, Ins. Solderless	.28	.24	.22	.21	
⑲	12A1085	HS158	1 1/2"	Standard Phone Tip N.P. Brass	.03	.02	.018	.015	
⑳	12B909	HS400	1 1/2"	Solder Type Red or Black	.13	.11	.10	.098	
㉑	12B915	HS218	1 1/2"	Banana Plug-In Red or Black	.11	.09	.088	.082	
㉒	12A997	HS324	1 3/4"	BP, I Solderless, Stack, Red or Black (Half of HS210 Below)	.48	.41	.384	.36	
㉓	12A996	HS210	1 3/4"	Dbt. BP, Solderless, will Stack BP's Red or Black	.72	.61	.576	.54	

### RCA TYPE PHONO CONNECTORS

Fig.	Stk. No.	Description	Each	10 Ea.	100 Up
①	12A1087	Phono Plug	6c	4c	\$0.036
②	12A1088	Phono Jack	7c	5c	.042
③	12A676	Double Jack	12c	11c	.096
④	12A543	Easy Grip Plug	14c	12c	.108

FOR MORE PHONO PLUGS AND JACKS SEE PAGE 124



Equipped with threaded coupling ring to prevent accidental disconnection. Brass chrome-plated. 2 and 3 contact cable connector has 3/16" spring cord protector, 4-contact has 3/8". Type ③ chassis connector mounts in 5/16" hole. Type ④ mounts in 3/32" hole. Shpg. wt. 1 oz.

Fig.	Stk. No.	Type	Cont.	Description	1-49	50-249	250-499	500-999	1000 Up
⑦	12A320	80MC2M	2	Male, Cable	\$0.69	\$0.57	\$0.48	\$0.41	\$0.386
⑧	12A321	80MC2F	2	Female, Cable	.71	.59	.50	.42	.378
⑨	12A323	80PC2F	2	Female, Chassis	1.01	.80	.72	.61	.571
⑩	12A324	91-MC3M	3	Male, Cable	.60	.50	.42	.36	.317
⑪	12A326	91-MC4M	4	Male, Cable	1.01	.85	.71	.61	.539
⑫	12A325	91-MC3F	3	Female, Cable	1.03	.86	.72	.62	.548
⑬	12A327	91-MC4F	4	Female, Cable	1.07	.89	.75	.64	.569
⑭	12A329	91-PC3F	3	Female, Chassis	1.10	.92	.77	.68	.588
⑮	12A331	91-PC4F	4	Female, Chassis	.73	.61	.52	.44	.392
⑯	12A332	91-CCC-3	4	Dust Cover for 91	.72	.60	.51	.43	.384
					.48	.40	.34	.29	.258

## AMPHENOL MINIATURE CONNECTORS



Any plug in this group mates with any socket with same number of pins. 78 series mount in 5/16" hole with push-on spring ring. Can be chassis mounted or wired to cable. 7-pin sockets fit 7-pin miniature tubes. Avg. shpg. wt. 5 ozs. per 20. Fig. ③ and ④ are 5/16" dia., 1 1/4" long cadmium plated brass. Fig. ⑤ is shielded chassis socket. Avg. shpg. wt. 1/2 ozs.

Fig.	Stk. No.	Type	Pins	1-49	50-249	250-499	500-999	1000 Up
①	12A140	78-S3S	3	\$0.12	\$0.10	\$0.09	\$0.07	\$0.084
②	12A141	78-S4S	4	.16	.13	.11	.10	.084
③	12A125	78-S5S	5	.21	.18	.15	.12	.112
④	12A118	78-S6S	6	.22	.18	.16	.13	.118
⑤	12A123	78-7P	7	.29	.25	.21	.18	.157
⑥	12A138	86-CP3S	3	.16	.13	.11	.09	.083
⑦	12A139	86-CP4S	4	.16	.14	.11	.10	.087
⑧	12B171	71-5S	5	.15	.12	.10	.09	.078
⑨	12B172	71-6S	6	.17	.14	.12	.10	.092
⑩	12A148	91-MPF3L	3	.47	.39	.33	.28	.251
⑪	12A149	91-MPF4L	4	.49	.41	.34	.29	.261
⑫	12A142	91-MPM3L	3	.42	.35	.29	.25	.223
⑬	12A143	91-MPM4L	4	.43	.36	.30	.28	.230
⑭	12B22	91-MPMSL	5	.44	.37	.31	.27	.235
⑮	12B23	91-MPM6L	6	.47	.39	.33	.28	.249
⑯	12A150	78-PCG3	3	.31	.26	.22	.19	.163
⑰	12A151	78-PCG4	4	.35	.29	.24	.21	.184
⑱	12B24	78-PCG5	5	.39	.32	.27	.23	.205
⑲	12B25	78-PCG6	6	.40	.33	.28	.24	.211



## AMPHENOL STANDARD CONNECTORS

"CP" plugs made of black bakelite, for chassis mounting, fits 1 1/4" hole. PM and PF connectors are molded black bakelite with steel shell. Rubber grommet in hole. Avg. shpg. wt. 1 oz.

Fig.	Stk. No.	Type	Pins	1-49	50-249	250-499	500-999	1000 Up
①	12A58	86-CP4	4	\$0.23	\$0.19	\$0.16	\$0.14	\$0.121
②	12A59	96-CP5	5	.23	.19	.16	.14	.123
③	12A63	86-CP8	8	.25	.21	.18	.15	.134
④	12A80	78-PF4	4	.41	.34	.29	.24	.218
⑤	12A82	78-PF5	5	.43	.36	.30	.26	.228
⑥	12A82	78-PF6	6	.45	.37	.31	.27	.238
⑦	12A83	78-PF7S	7S	.47	.39	.33	.28	.250
⑧	12A85	78-PF8	8	.43	.36	.30	.26	.231
⑨	12A86	78-PF9	9	.46	.39	.32	.28	.245
⑩	12A87	78-PF11	11	.50	.42	.35	.30	.266
⑪	12A73	86-PM5	5	.45	.38	.32	.27	.240
⑫	12A74	86-PM6	6	.47	.40	.33	.28	.242
⑬	12A75	86-PM7S	7S	.47	.40	.33	.28	.252
⑭	12A77	86-PM8	8	.47	.40	.33	.28	.253
⑮	12A78	86-PM9	9	.48	.40	.33	.29	.256
⑯	12A79	86-PM11	11	.49	.41	.35	.30	.262
	No. 12A91, 79CCA Cable Clamp for above (not shown)			.09	.08	.06	.05	.048

## NU-WAY SNAP CONNECTORS

For Permanent or Temporary Circuits

Permits quick simple connection of wires. Nickel plated brass. Terminals snap together making positive contact. Any number of snaps can be pyramided together for multiple connections (as shown at right). Shpg. wt. 2 oz.

Can be pyramided together

① Snaps—Snaps on to studs or lugs listed below. With crimp-on solder lug.

12A642. Ea. 10c 100 For. \$7.19 1M For. \$64.80

② Studs—With snap for use with snaps above. Mounts in chassis or panel. Size 6-32 x 1/2" long.

12A643. Ea. 7c 100 For. \$5.40 1M For. \$51.33

# TUBE SOCKETS, SHIELDS & ACCESSORIES

## AMPHENOL SOCKETS AND MOUNTS



Quality engineered sockets for every need. MIP, RS and S type are black phenolic, RSS is steatite. MIP type has molded-in steel mounting plate. Avg. shp. wt. 1 oz.

Fig.	Stock No.	Amphenol Number	Pins	Mtg. Hole	1-49	50-249	250-499	500-999	1000 Up
①	12A93	77MIP4	4	1 3/8"	\$0.19	\$0.16	\$0.13	\$0.11	\$0.099
①	12A94	77MIP5	5	1 3/8"	.21	.17	.15	.12	.110
①	12A95	77MIP6	6	1 3/8"	.23	.19	.16	.14	.121
①	12A96	77MIP7S	7S	1 3/8"	.25	.21	.18	.15	.133
①	12A97	77MIP7L	7L	1 3/8"	.28	.23	.19	.17	.148
①	12A98	77MIP8	8	1 3/8"	.21	.18	.15	.13	.114
①	12A1440	77MIP9	9	1 3/8"	.25	.21	.17	.15	.132
①	12A1441	77MIP11	11	1 3/8"	.29	.24	.20	.17	.152
①	12B166	77MIP12	12	1 3/8"	.30	.25	.21	.18	.159
①	12B167	77MIP20	20	1 3/8"	.67	.56	.47	.40	.356
①	12A100	88-8	8	1 1/8"	.23	.19	.16	.14	.120
①	12A101	88-8X	Loc.	1 1/8"	.33	.27	.23	.20	.174
②	12A110	78-RS8	8	1 3/8"	.29	.24	.20	.17	.152
②	12A112	49-RSS4	4	1 1/4"	.92	.77	.65	.55	.491
②	12A116	49-RSS7L	7L	1 1/4"	1.69	1.42	1.19	1.02	.904
②	12A117	49-RSS8	8	1 1/4"	1.12	.93	.78	.67	.596
③	12A54	78-S8	8	1 3/8"	.21	.18	.15	.13	.112
③	12A57	78-S11	11	1 3/8"	.28	.23	.19	.17	.148

"S" SOCKET MOUNTINGS. Fits all "S" type sockets except 9 and 11 pin, CP Plugs and 61M and 61F AC connectors. Steel mtg. plate has slotted holes with 1/2" to 1 7/8" centers. Above surface mount Type 23-1S raises socket 1/4" above surface, 1 3/4" dia. Below surface mount Type 61-61 extends 1 3/4" below surface. Mounts in 1 1/4" hole on 1 3/4" centers.

Fig.	Stock No.	Description	1-49	50-249	250-499	500-999	1000 Up
④	12A66	Mounting Plate	\$0.06	\$0.05	\$0.04	\$0.038	\$0.036
⑤	12A67	Above Surface Shell	.26	.22	.18	.16	.139
⑥	12A70	Below Surface Shell	.14	.12	.10	.09	.077

## AMPHENOL INDUSTRIAL SOCKETS



① 11-Contact Industrial Relay Socket. High, thick insulating barriers between contacts provide long creepage paths. Rated 600 volts RMS at 10 amps. reversible screw terminals with 4 threaded brass insert tie points. Shpg. wt. 8 oz.  
No. 12C152. Amphenol 146-817.  
1-24, Each.....\$3.47 25-99, Each.....\$2.91  
250-499 Ea.....\$2.07 500 Up Ea.....\$1.854

② Octal Industrial Socket for relays or high power tubes. Molded melamine base, reversible screw terminals. Rated 1250 RMS volts at 5 amp. Wt. 5 ozs.  
Stk. No. Type Description Stk. No. Type Description  
12C153 146-103 Top Mtg. No Tie Points 12C154 146-104 Top Mtg. 4 Tie Points  
12C155 146-203 Bottom Mtg. No Tie Points 12C156 146-204 Bottom Mtg. 4 Tie Points  
Choice Ea. 1-24.....\$1.50 25-99.....\$1.25 Choice Ea. 1-24.....\$1.91 25-99.....\$1.59  
100-249 \$1.05 250-499 90c 500 Up \$0.799 100-249 \$1.34 250-499 \$1.15 500 Up \$1.017

## POMONA ELECTRONICS SURFACE MOUNTED BREADBOARD SOCKETS

For experimental circuit design. Insulated base prevents shorts. Connections are numbered on base for easy identification.

Pins	Stk. No.	Type	1-49 Ea.	50-99 Ea.	100-249 Ea.
7-Min	12A5040	XS-7	65c	59c	55c
Octal	12A5041	XS-8	85c	77c	72c
9-Min	12A5042	XS-9	75c	68c	64c



## CINCH AC SOCKET

Fits standard AC plugs. UL listed. Rated 15 A., 110 V. Mounts in 2 3/4" x 2 3/4" hole. Mounting centers 1 1/8". Type 2R2.  
No. 12A899. 1-24 Ea.....21c 25-49.....17c 50-99.....15c  
100-249.....13c 250-499.....12c

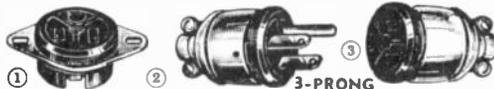


## AMPHENOL AC CONNECTORS

Molded of high dielectric black bakelite, UL listed, rated 15 amps at 110 volts. Fig. ① and ② have metal shell with built-in cable clamp. Fig. ③ mounts in 1 3/4" hole on 1 1/2" mtg. centers. Fig. ④ and ⑤ snap mount in 1 3/4" hole. Includes mounting ring. Avg. shpg. wt. 1 oz.

Fig.	Stk. No.	Type	1-49 Each	50-249 Ea.	250-499 Ea.	500-999 Ea.	1000 Up
①	12B89	61-M11	\$0.58	\$0.48	\$0.41	\$0.35	\$0.309
②	12B90	61-F11	.58	.48	.40	.35	.307
③	12A354	61-MIP-61F	.40	.33	.28	.24	.211
④	12A121	61-M	.37	.31	.26	.22	.198
⑤	12A122	61-F	.37	.31	.26	.22	.196

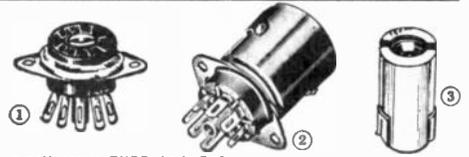
## AMPHENOL POLARIZED AC CONNECTORS



UL listed for home appliances and power tools. Third prong grounded. Made of black phenolic bakelite, contacts and ground prong are copper alloy. Caps are cad. plated steel, mounting plate is nickel plated steel. Rated at 15 amp, 125 V. Type 160-2 receptacle mounts in 1 1/2" hole, has 1 1/2" mtg. centers. Cable type are 1 1/2" long with cable clamp, less prongs. Avg. shpg. wt. 2 ozs.

Fig.	Stk. No.	Type	1-24 Ea.	25-99 Ea.	100-249	250-499	500 Up
①	12A1	160-2 MIP Recept.	\$0.93	\$0.78	\$0.65	\$0.56	\$0.497
①	12A2	160-3 MIP Plug	1.10	.92	.77	.66	.587
②	12A41	160-9 Plug	1.22	1.02	.85	.73	.648
③	12A33	160-8 Socket	1.06	.88	.74	.63	.563

## CINCH-JONES SOCKETS AND SHIELDS



### 7-PIN MINIATURE SOCKETS

Unshielded types are bottom mount. Shielded types are top mount. Both mount in 5/8" hole with 7/8" mtg. center.

Fig.	Stk. No.	Type	Body	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.	250-499 Ea.
①	12A5007	7EB	Bakelite	\$0.13	\$0.11	\$0.10	\$0.084	\$0.074
①	12A5008	7EM	Mica	.15	.12	.11	.095	.084
②	12A5009	7XB1	Bakelite	.19	.14	.12	.11	.10
②	12A5010	7XM1	Mica	.22	.18	.15	.13	.12
②	12A5011	7XC	Ceramic	.46	.37	.32	.24	.23

### TUBE SHIELD FOR 7-PIN MINIATURE SOCKETS

Durable steel shields with "J-Slot" for locking on to base. Tube holding spring in top. Stk. No. Type Size 1-24 Ea. 25-49 Ea. 50-99 Ea. 100-249 Ea. 250-499 Ea.  
12A5026 7S3 1 3/4" L. \$0.21 \$0.15 \$0.13 \$0.12 \$0.11  
12A5046 7S4 2 1/4" L. .28 .23 .20 .15

### 9-PIN MINIATURE SOCKETS

Unshielded type are bottom mount, shielded type are top-mount. Mounts in 3/4" hole with 1 1/8" mtg. center.

Fig.	Stk. No.	Type	Body	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.	250-499 Ea.
①	12A5012	9EB	Bakelite	\$0.15	\$0.12	\$0.11	\$0.095	\$0.084
①	12A5013	9EM	Mica	.18	.13	.12	.11	.10
②	12A5014	9XB	Bakelite	.22	.18	.15	.13	.12
②	12A5015	9XM	Mica	.24	.20	.16	.14	.13
②	12A5016	9XC	Ceramic	.37	.29	.24	.20	.19

### TUBE SHIELD FOR 9-PIN MINIATURE SOCKETS

Stk. No. Type Size 1-24 Ea. 25-49 Ea. 50-99 Ea. 100-249 Ea. 250-499 Ea.  
12A5027 9S2 1 3/4" L. \$0.25 \$0.21 \$0.17 \$0.14 \$0.13  
12A5047 9S3 2 3/4" L. .48 .39 .33 .25 .24  
Durable steel shields with "J-Slot" for locking on to base. Tube holding spring on top.

## NUVISTOR, NOVAR & COMPACTRON SOCKETS



① 5-Pin Nuvistor Socket with steel saddle mount. Top mounting.  
No. 12A5018. Cinch Type 5NS-1.  
Each.....28c 25 Each.....21c 50 Each.....18c 100 Each.....15c 250 Each.....14c

② 5-Pin Nuvistor Socket of low loss phenolic with crimp tab mount for snap-in PC mounting.  
No. 12A5017. Cinch Type 5NS.  
Each.....18c 25 Each.....14c 50 Each.....12c 100 Each.....11c 250 Each.....10c

③ 7-Pin Nuvistor Socket of general purpose bakelite. Saddle mounting type.  
No. 12A5043. Eby Type NU-7.  
Each.....90c 10 Each.....81c 100 Each.....\$0.728

④ 9-Pin Nuvistor Socket. Phenolic with bottom mount saddle.  
No. 12A5019. Eby Type 9369.  
Each.....18c 10 Each.....16c 100 Each.....\$0.143

⑤ 12-Pin Compactron Socket. Phenolic, bottom mount saddle.  
No. 12A5020. Eby Type 9371.  
Each.....27c 10 Each.....24c 100 Each.....\$0.214

## CINCH WAFER TYPE SOCKETS

Laminated sockets made of high grade XP bakelite. Wafer is 3/8" thick with solder coated brass contacts. 7 and 9 pin sockets have center shield.

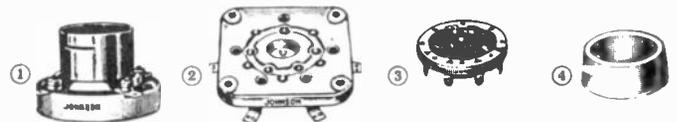


Stk. No.	Type	Mtg. Centers	Mtg. Hole	1-24	25-49	50-99	100-249	250-499
12B405	7W2A	7/8"	3/8"	\$0.13	\$0.11	\$0.10	\$0.09	\$0.08
12B406	7W2L	1"	3/8"	.11	.10	.09	.08	.07
12B408	9W1	1 1/8"	3/4"	.15	.12	.11	.10	.09
12B411	46-1-E	1 1/2"	1"	.15	.13	.13	.12	.11

## CINCH PRINTED CIRCUIT SOCKETS

Pins	Stock No.	Cinch Type	1-24	25-49	50-99	100-249	250-499
7-Min.	12A5035	7PC-B	\$0.12	\$0.10	\$0.09	\$0.08	\$0.07
Octal	12A5036	8PC-B	.15	.12	.11	.095	.084
9-Min.	12A5034	9PC-B	.15	.12	.11	.095	.084

## JOHNSON TRANSMITTING TUBE SOCKETS

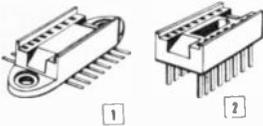


Bayonet types have porcelain bases, glazed top and sides, cad. plated phosphor bronze contacts, nickel plated hardware, etched aluminum bayonet shells. Wafer types have glazed steatite base and plated brass contacts with steel reinforcing springs.

Stk. No.	Johnson No.	Description	Fits Tube Types	Net Ea.	
①	12A174	123-209-1	4 P. Med Bayonet	866A, 811A	\$2.25
①	12A175	123-211-1	4 P. Jumbo Bayonet	203A, 810, 872A, 250TH	2.90
①	12A571	122-275-1	5 P. Giant Wafer	4-125A, 4-250A, RK48	2.85
①	12A173	122-237-1	7 P. Giant Wafer	4E27, 813, HK257	1.85
②	12A5044	124-109-1	Kel-F Plastic	4X150A, 4X250B	5.00
③	12A5045	124-111-1	Steatite Air Chimney for above		.45

# SEMICONDUCTOR COMPONENTS

## HERMAN H. SMITH DIP IC SOCKETS



Phenolic body. Fig. ① has brass cadmium plated contacts. Fig. ② has electro plated contacts.

Stock No.	Smith No.	Conts.	1-24	25-99	100 Up
① 12A5155	6250	14	\$0.50	\$0.43	\$0.40
② 12A5156	6251	16	.50	.43	.40
③ 12A5157	6252	14	.40	.34	.32
④ 12A5158	6253	16	.40	.34	.32

## CINCH INTEGRATED CIRCUIT SOCKETS

TO-5 case IC sockets. Molded diallyl phthalate type SDG per MIL-M-14. Contacts are .00003 gold plated beryllium copper.

Stock No.	Cinch No.	Contacts	1-24	25-49	50-99	100-249	250-499
12A5051	6 ICS	6	\$0.55	\$0.44	\$0.37	\$0.30	\$0.29
12A5052	8 ICS	8	.66	.53	.45	.35	.34
12A5025	10 ICS	10	.73	.58	.49	.40	.37

## DIP SOCKETS

Accept standard 14, 16 or 24 lead DIP with round or flat leads. Socket leads on same centers as DIP leads. Solder in PC board or use 4-40x1/4 Fillister head screw for chassis mount.

Stock No.	Cinch No.	No. of Conts.	Body Material	Contact Plating	1-24	25-49	50-99	100-249	250-499
12A5159	14DIP	14	Black Phenolic	Electro Tin	\$0.82	\$0.65	\$0.55	\$0.436	\$0.414
12A5160	14DIP-1	14	Diallyl Phthalate	Gold	1.07	.85	.71	.568	.540
12A5161	16DIP	16	Black Phenolic	Electro Tin	.91	.73	.61	.484	.460
12A5162	16DIP-1	16	Diallyl Phthalate	Gold	1.17	.94	.78	.624	.593
12A5163	24DIP	24	Black Phenolic	Electro Tin	1.36	1.09	.92	.738	.703
12A5164	24DIP-1	24	Diallyl Phthalate	Gold	1.61	1.29	1.08	.87	.828



## CINCH TRANSISTOR SOCKETS

① RECTANGULAR TRANSISTOR SOCKETS. Low loss phenolic with push-on mtg. ring. Contacts are beryllium copper, silver plated.

Stk. No.	Cinch No.	Prongs	1-24	25-49	50-99	100-249	250-499
12A5001	2H3	3	\$0.27	\$0.23	\$0.19	\$0.15	\$0.14
12A5002	2H5	5	.23	.18	.15	.13	.12

② CINCH UNIVERSAL SOCKET. For use with all transistors with 3 or 4 leads. Gold plated copper contacts. Snap-in P.C. mount.

③ CINCH ALL-MOLDED SOCKET. Fits triangular base .2 X .1" centers, or 3-contact in-line, .048 X .192 contact centers. Bakelite with phosphor bronze contacts.

Stk. No.	Cinch No.	Prongs	1-24	25-49	50-99	100-249	250-499
12A5122	7-UTS		.96	.77	.64	.51	.49
12A5003	2TS-4		.16	.13	.11	.102	.092



## POWER TRANSISTOR SOCKETS FOR TO-3 CASE & INSULATOR WAFERS

① POWER TRANSISTOR SOCKETS. Wafer type for 2-prong transistors with 7/8" spacings. Size 1 1/2" X 1". Cadmium plated brass contacts.

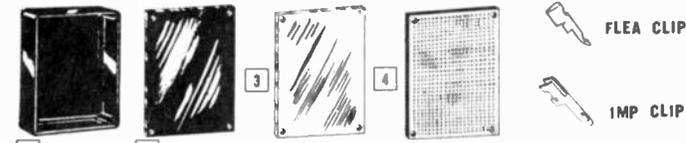
Stk. No.	Cinch No.	1-24	25-49	50-99	100-249	250-499
12A5004	2TS-1	\$0.12	\$0.10	\$0.09	\$0.082	\$0.072
12A5005	2TS-2	.12	.10	.09	.082	.072

② MOLDED PHENOLIC SOCKET. Phosphor bronze contacts. Mounting ctrs. .425".

③ INSULATOR WAFER. Anodized aluminum for use with TO-3 power transistors. Has high thermal conductivity. 3/8" X 3/8". 4-hole type.

Stk. No.	Cinch No.	1-249 Ea.	50c	250-499 Ea.	38c
12A53	2W-1				

## PROFESSIONAL QUALITY PHENOLIC CASES AND PANELS



① PRECISION MOLDED BLACK PHENOLIC CASES. Matching panels recess mount. Model 220 has 4 tapped 4-36 holes for panel screws. Others have 6-32 tapped brass inserts. Davies except \* which are Keystone.

Stock No.	Mfg. No.	Dimensions Inches	1-24	25-99	100 Up
5A3040	220	4 X 2 1/4 X 1 1/4	\$0.46	\$0.42	\$0.33
5A3041	240B	6 1/4 X 3 3/4 X 2	.86	.78	.61
5A3042	260K	6 1/4 X 5 1/2 X 2 1/4	1.12	1.12	.79
5A3004	*702	8 3/4 X 7 3/4 X 3	2.50	2.25	1.75

② BLACK PHENOLIC PANELS

Stk. No.	Mfg. No.	Fits Case	Material	1-24	25-99	100 Up
5A5583	221	Fits 220 Case	Stamped	.28	.25	.20
5A5584	241	Fits 240B Case	Molded	.54	.49	.38
5A5585	261	Fits 260K Case	Molded	.75	.68	.54
5A5508	*2039	Fits 702 Case	Stamped	.99	.89	.70

③ KEYSTONE ALUMINUM PANELS

Stk. No.	Mfg. No.	Fits Case	1-24	25-99	100 Up
5A5500	2044	Fits 220 Case	.60	.54	.42
5A5502	2046	Fits 240B Case	.70	.63	.49
5A5504	2047	Fits 260K Case	1.00	.90	.70
5A5507	2048	Fits 702 Case	1.28	1.15	.90

④ KEYSTONE PUNCHED PHENOLIC NATURAL PANELS

Stk. No.	Mfg. No.	Fits Case	1-24	25-99	100 Up
5A5501	2044	Fits 220 Case	.44	.40	.31
5A5503	2046	Fits 240B Case	.64	.58	.45
5A5505	2047	Fits 260K Case	.88	.79	.62
5A5508	2048	Fits 702 Case	1.10	.99	.77

12A2309. FLEA CLIP PUSH-IN TERMINALS for above. Package of 100.....\$1.75

12A2310. IMP CLIP PUSH-IN TERMINALS for above. Package of 100.....\$1.75

## GEORGE RISK INDUSTRIES HEAT SINKS FOR SEMICONDUCTORS

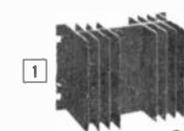
Optimum combinations of fin design and fin spacing—giving maximum heat transfer per ounce of dissipator weight. All are extruded aluminum with a high emissivity black anodized finish.



### MILLIWATT COOLERS

For .318 dia. semiconductors. Fits TO-5, TO-9, TO-11, TO-12, etc.

Stock No.	GRI No.	Inches	1-99	100-499	500-999	1000-9999
12C393	202A318	1/2x1/2x3/8	\$0.26	\$0.23	\$0.20	\$0.173
12A2224	212A318	5/8x5/8x3/8	.27	.23	.20	.175
12A2225	222A318	3/4x3/4x3/8	.27	.23	.20	.179
12A2226	232A318	1x1x3/8	.29	.25	.22	.191



### NATURAL CONVECTION COOLERS

Stock No.	GRI No.	H.	W.	O.	1-49	50-99	100-249	250-499	500-999
12C322	*170613	3	4.6	1	\$1.02	\$0.87	\$0.74	\$0.61	\$0.55
12C328	170610	3	4.6	1	1.18	1.02	.87	.71	.65
12C330	*171213	6	4.6	1	1.52	1.32	1.12	.91	.84
12C333	171210	6	4.6	1	1.79	1.55	1.31	1.07	.98
12A2227	14A0610	3	4.5	2.5	1.47	1.28	1.08	.88	.81
12A2228	14A1110	5.5	4.5	2.5	2.19	1.90	1.60	1.31	1.20

\*Plain Aluminum—not anodized, all others are black anodized.

### FLAT BOTTOM COOLERS

Stock No.	GRI No.	H.	W.	O.	1-49	50-99	100-249	250-499	500-999
12A2229	110610	3	4.4	1.3	1.08	.94	.79	.65	.60
12A2230	111110	5.5	4.4	2.1	1.50	1.30	1.10	.92	.83

### LOW PROFILE PC BOARD COOLERS

Stock No.	GRI No.	H.	W.	O.	1-49	50-99	100-249	250-499	500-999
12A2231	190610	3	4.8	.45	.85	.73	.62	.51	.47
12A2232	191110	5.5	4.8	.45	1.18	1.02	.86	.71	.65

GRI TYPE 17 3-FOOT EXTRUSIONS

Same pattern as Type 17 above except no mounting notches.

No. 12A2245. Plain Aluminum, soap cleaned and deoxidized.

1-4 Each.....\$7.00    5-9 Each.....\$5.75    10-24 Each.....\$5.25

No. 12A2246. Black Anodized Aluminum.

1-4 Each.....\$8.20    5-9 Each.....\$6.95    10-25 Each.....\$6.45

## RADIAL RECTIFIER COOLERS

M indicates tapped 10-32 thread, N indicates tapped 1/4-28 thread for stud mount rectifiers (up to 1/2" hex case). Tap is 5/8" deep. R indicates ream .4975", RR indicates ream both ends for press fit rectifiers. All are 2" square.

Stock No.	GRI No.	Ins.	High	1-49	50-99	100-249	250-499	500-999
12A2233	180310M	.75	\$0.99	\$0.85	\$0.73	\$0.61	\$0.57	
12A2234	180310N	.75	.99	.85	.73	.61	.57	
12A2235	180310R	.75	.96	.83	.71	.59	.55	
12A2236	180610M	1.5	1.24	1.07	.92	.76	.71	
12A2237	180610N	1.5	1.24	1.07	.92	.76	.71	
12A2244	180610R	1.5	1.21	1.05	.90	.74	.69	
12A2238	180610RR	1.5	1.39	1.21	1.04	.86	.81	
12A2239	181210M	3	1.70	1.47	1.25	1.03	.96	
12A2240	181210N	3	1.70	1.47	1.25	1.03	.96	
12A2241	181210R	3	1.67	1.45	1.23	1.01	.94	
12A2242	181210RR	3	1.83	1.61	1.37	1.13	1.06	

## HEAT SINK COMPOUND

Eliminates air gap between heat sink and semiconductor. Reduces thermal impedance.

17A1308	GC 8101. 1 Oz. Tube.	Each.....\$2.39
17A1309	GRI XL500. 4 Oz. Jar.	Each.....2.65
17A1310	GRI XL500. 8 Oz. Jar.	Each.....5.10

## KEYSTONE PRE-PUNCHED BOARDS

3/4" with .062" holes spaced .187x.187 center to center.

Stock No.	Keystone No.	Size W. L.	1-19	20-99	100-249
12A9625	1761	1.38x8.50	\$0.39	\$0.35	\$0.33
12A9626	1812	2.44x3.38	.16	.14	.12
12A9627	1735	2.84x8.50	.53	.48	.43
12A9628	1824	3.66x6.75	.45	.40	.38
12A9629	1762	5.69x8.50	.84	.76	.71
12A9630	1826	6.75x7.31	.75	.68	.63
12A9631	1828	7.31x10.50	1.20	1.08	1.02
12A9554	1763	8.50x17.00	1.90	1.68	1.58

## XXXPC COPPER CLAD ONE SIDE

12A9632	1825	3.66x6.75	.70	.63	.59
12A9633	1834	5.69x8.50	1.60	1.44	1.36
12A9634	1827	6.75x7.31	1.60	1.44	1.36
12A9635	1829	7.31x10.5	1.90	1.71	1.61

## KEYSTONE PUSH-IN TERMINALS

Made to fit perforated boards. Sub-miniature size with .062" holes. Beryllium copper, silver plated.

① 12A2309. "Flea" Clips. Keystone 1500	
100 For.....\$1.75	1000 For.....\$15.70
② 12A2310. "Imp" Terminal. Keystone 1499SP.	
100 For.....\$1.75	1000 For.....\$12.00

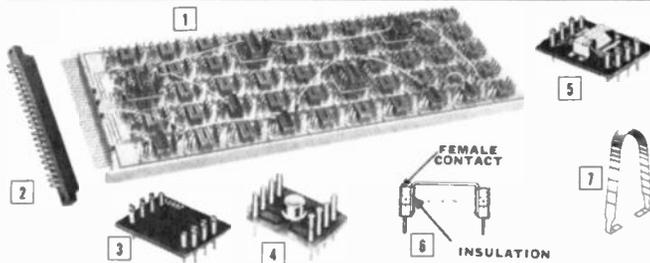
## PHENOLIC UNPUNCHED PANELS

Stock No.	Keystone No.	Size	1-19	20-99	100-249
12A9621	1973	4.5x6.5	.45	.42	.40
12A9622	1974	4.5x8.5	.60	.55	.50
12A9623	1976	9 x12	1.45	1.40	1.35

BLACK PHENOLIC PANEL 1/2" THICK

12A9624	G.C.590	6 x6	.42		
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# AUGAT ELECTRONIC COMPONENTS



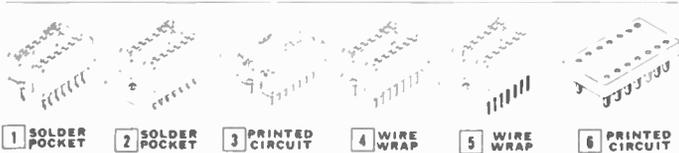
## 8130 SERIES BREADBOARD AND TEST PANELS

Breadboard or test up to 50 IC's on one panel. Round or flat pin dual-in-line IC's plug into panel. Use adaptors for flat-pack and TO-5 IC's. Solderless interconnection concept throughout. Sockets have large contact entry holes for easy IC insertion; wiping gold-plated contacts for low contact resistance and high reliability. Standardized interconnection layout allows Flat Pack and TO-5 breadboard "stacking." Bus bars with common power and ground takeoffs at each pattern. Temperature range -65° to 150° C. Order jumper assortments, 36 pin edge connector and accessories listed below.

Stock No.	Augat No.	BREADBOARD PANELS			Prices Ea.	
		No. Of Patterns	Dimensions Inches	No. Of Pins	1-4	5-9
12A9548	8130-36DGIR-10	10	6 1/8 x 4 5/8	16	\$ 63.00	\$ 59.00
12A9549	8130-36DGIR-25	25	6 1/8 x 9 1/4	16	150.00	140.00
12A9550	8130-36DGIR	50	6 1/8 x 17 3/8	16	290.50	270.00

### ACCESSORIES FOR USE WITH BREADBOARD TEST PANELS

Stock No.	Augat No.	Fig.	Description	Prices Each		
				1-99	100-499	500-999
12A5056	8076-10G1	(3)	Discrete Component Adaptor	\$2.24	\$1.96	\$1.71
12A5057	8095-1G2	(4)	6 Pin TO-5 Adaptor	3.60	2.97	2.43
12A5058	8095-1G3	(4)	8 Pin TO-5 Adaptor	4.46	3.68	3.00
12A5059	8095-1G4	(4)	10 Pin TO-5 Adaptor	5.36	4.42	3.62
12A5060	8095-1G5	(4)	12 Pin TO-5 Adaptor	6.24	5.15	4.21
12A5061	8076-1G7	(5)	1/4x3/8 Flat Pack Adaptor	4.10	3.38	2.77
12A9551	8076-12AS-1	(6)	140 Pcs. Std. Jumper Asst.	\$60.00	\$52.50	
12A9552	8076-12AS-2	(6)	290 Pcs. Std. Jumper Asst.	106.50	100.00	
12A9553	T114-1	(7)	Extractor Tool	.50		
12A5062	14005-5P1	(2)	36 Pin Edge Connector	6.45		4.04



## DUAL IN-LINE SOCKETS

### FOR TESTING AND PACKAGING INTEGRATED CIRCUITS

Sockets accept packages with flat or round leads. Printed circuit terminals are same dimension as IC lead with direct interchangeability. Unique contact construction eliminates capillary action of solder or flux. Wire Wrap terminal has sufficient length for 3 levels of 30 gauge wire. \* has .6" spacing on terminals.

Stock No.	Part No.	Fig.	No. of Contacts	Body Material	Contact Plating	Prices Each		
						1-99	100-499	500-999
12A5063	314-AG1A	(1)	14	Diallyl Phthalate	Gold/Nickel	\$0.84	\$0.73	\$0.63
12A5064	314-AG3A	(2)	14	Diallyl Phthalate	Gold/Nickel	.94	.83	.72
12A5065	314-AG5D-2R	(3)	14	Phenolic	Tin	.45	.40	.35
12A5133	314-AG5D-R	(4)	14	Diallyl Phthalate	Gold/Nickel	.70	.61	.53
12A5134	314-AG5D-3R	(5)	14	Phenolic	Gold Nickel	.61	.53	.46
12A5066	314-AG5F-2R	(6)	14	Phenolic	Tin	.73	.64	.56
12A5067	314-AG6F-R	(7)	14	Diallyl Phthalate	Gold/Nickel	1.37	1.20	1.04
12A5141	114AG2A	(8)	14	Teflon	Gold	2.92	2.30	2.03
12A5069	316-AG1A	(1)	16	Diallyl Phthalate	Gold/Nickel	.93	.81	.71
12A5070	316-AG3A	(2)	16	Diallyl Phthalate	Gold/Nickel	1.06	.93	.81
12A5071	316-AG5D-2R	(3)	16	Phenolic	Tin	.54	.47	.41
12A5135	316AG5D-R	(4)	16	Diallyl Phthalate	Gold/Nickel	.93	.81	.71
12A5136	316AG5D-3R	(5)	16	Phenolic	Gold/Nickel	.71	.62	.54
12A5072	316-AG5F-2R	(6)	16	Phenolic	Tin	.83	.72	.63
12A5073	316-AG6F-R	(7)	16	Diallyl Phthalate	Gold/Nickel	1.65	1.44	1.25
12A5142	116AG7A	(8)	16	Teflon	Gold	3.33	2.61	2.31
12A5137	324AG2D	(9)	24*	Diallyl Phthalate	Beryllium	2.05	1.79	1.56
12A5138	324AG2F	(9)	24*	Diallyl Phthalate	Gold	2.64	2.30	2.00
12A5139	336AG2D	(9)	36*	Diallyl Phthalate	Beryllium	2.28	1.99	1.74
12A5140	336AG2F	(9)	36*	Diallyl Phthalate	Gold	3.18	2.78	2.42

## TEST SOCKETS FOR FLAT PACK & LSI CIRCUITS

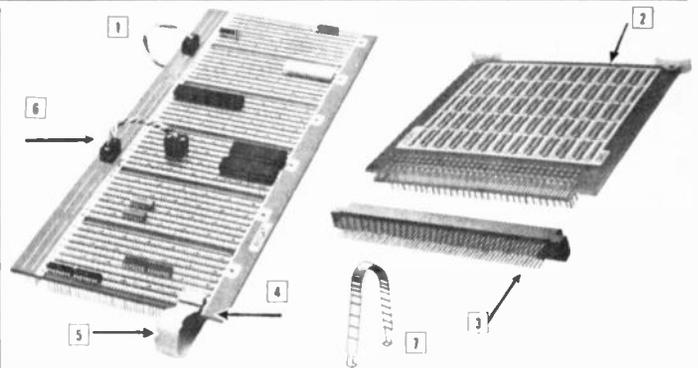
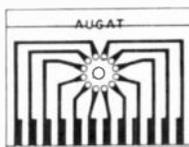
Molded insert with barriers for lead separation and fast loading. Lead spacing .05". Snap action cover assures positive contact, low contact resistance, firm retention of package and removal of flat pack without lead damage. Double sided etched board.  
 No. 12A9646. 8075-121G1. Handles flat packs up to 1/4 x 3/8" max. size, min. lead length .5". max. length 1". Use with 14 to 24 lead flat packs. Each \$7.50  
 No. 12A9647. 8133-AG2. Handles .36" dia. flat packs with 80" max. lead length. Use with 14 to 28 lead flat packs. Each \$7.16  
 No. 12A5132. Cinch 50-30A-30. Edge Connector for above. Each \$2.22



## TEST SOCKETS FOR TO-5 IC's

Plug into single side printed circuit edge connectors.

Stock No.	Augat No.	No. of Contacts	Pin Circle Diameter	Each
12A9643	8117-AG3	8	.250	\$3.28
12A9644	8117-AG4	10	.300	3.52
12A9645	8117-AG5	12	.360	3.88
EDGE CONNECTOR FOR ABOVE				
12A5131	Cinch 50-12A-20.	Each		\$1.90



## UNIVERSAL DUAL-IN-LINE PACKAGING PANELS

8136 UP1 Series. Accepts a combination of 14, 16, 24 and 36 lead dual-in-line IC's. 1/8" glass epoxy, 2 oz. copper both sides, tin plated. Wire wrap terminals. Power and ground planes connected to additional wire wrap terminations outside of contact row. -65° C to 150° C operation. Each 9 row section accepts 3 inter-facing plugs for input-output connections. 6.875" long overall. Female contact, beryllium copper, gold over nickel plated.

Fig.	Stock No.	Augat No.	No. of Rows	Panel Width	Prices Each	
					1-4	5-9
(1)	12A9636	8136-UG1-9	9	2.675"	\$63.00	\$56.50
(1)	12A9637	8136-UG1-18	18	5.375"	123.00	110.00
(1)	12A9638	8136-UG1-27	27	8.075"	184.00	164.50

## HIGH DENSITY DUAL-IN-LINE PACKAGING PANELS

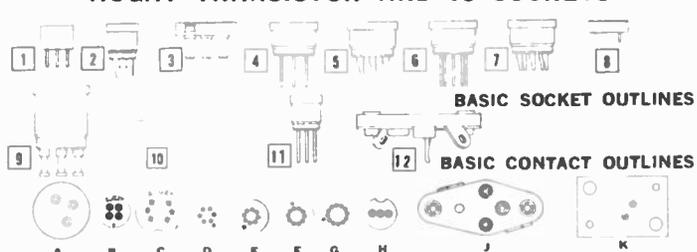
Edge connector take-off. 60 I.C. pattern. Accepts 14 or 16 dual-in-line IC's with flat leads. Double sided board with ground and power planes connected at each pattern. -65° C to 150° C operation. Wire wrap termination for 30 gauge wire. 1/8" glass epoxy, 2 oz. copper both sides, tin plated. Overall size 7 x 7.35 x .70".

Fig.	Stock No.	Augat No.	Pins per Patterns	Power & Grd. Pins	Prices Each	
					1-4	5-9
(2)	12A9639	8136-RG1	14	7 & 14	\$131.00	\$117.50
(2)	12A9640	8136-RG2	14	V & G Dummy's	139.00	124.50
(2)	12A9641	8136-RG3	16	8 & 16	144.00	128.50
(2)	12A9642	8136-RG4	16	V & G Dummy's	150.50	134.50
(3)	12A5129	14005-1P1	Edge Connector for above		13.20	11.80

## ACCESSORIES FOR PACKAGING PANELS

(4)	12A6107.	Augat 2P14-1.	Flat 14 Pin Cable Plug for use with Flat cable.	Ea.	\$1.23
(5)	12A6108.	Augat 14010-1P1.	Flat 14 Cond. 28 Gauge Wire.	100 Ft. Roll	\$19.10
(6)	12A6076.	Augat 8136-34G1M.	Plug for round cable.	Each	\$1.26
(7)	12A9544.	Augat T-114-2.	Extractor Tool.	Each	\$5.00

## AUGAT TRANSISTOR AND IC SOCKETS



Stock No.	Augat No.	For Case Size	Socket Outline	No. Conts.	Cont. Outline	Pin Circle Diam.	Prices Each		
							1-99	100-499	500-999
12A5085	8060-1G3	T0-18	(1)	3	A	.100"	\$0.64	\$0.56	\$0.49
12A5086	8060-1G4	T0-18	(4)	4	B	.100"	.78	.69	.60
12A5087	8060-1G5	T0-18	(2)	3	A	.100"	.61	.53	.46
12A5088	8060-1G6	T0-18	(4)	4	B	.100"	.75	.66	.57
12A5089	†8069-1G1	T0-5	(6)	3	A	.200"	.59	.52	.45
12A5091	8058-1G23	T0-5	(6)	3	A	.200"	.61	.53	.46
12A5092	8058-1G24	T0-5	(6)	4	B	.200"	.75	.66	.57
12A5093	8058-1G29	T0-5	(6)	3	A	.200"	.61	.53	.46
12A5094	8058-1G30	T0-5	(6)	4	B	.200"	.75	.66	.57
12A5095	8058-1G33	R0-52	(6)	6	C	.200"	1.04	.91	.79
12A5099	8058-1G49	T0-5	(7)	8	E	.200"	1.34	1.18	1.02
12A5100	8058-1G19	T0-5	(7)	8	E	.200"	1.34	1.18	1.02
12A5101	8058-1G50	T0-5	(7)	8	E	.230"	1.34	1.18	1.02
12A5102	8058-1G46	T0-5	(7)	8	E	.230"	1.34	1.18	1.02
12A5103	8058-1G34	T0-5	(7)	10	F	.230"	1.65	1.44	1.26
12A5104	8058-1G22	T0-5	(7)	10	F	.230"	1.65	1.44	1.26
12A5105	8058-1G51	T0-5	(7)	12	G	.280"	1.94	1.69	1.48
12A5106	8058-1G28	T0-5	(7)	12	G	.280"	1.94	1.69	1.48
12A5107	†8070-1G1	T0-8	(8)	3	A	.280"	1.07	.94	.82
12A5130	*8112-AG1	T0-66	(8)	2	K		.58	.50	.44
12A5109	8060-1G20	T0-92/T0-98	(8)	3	H	.062" in line	.61	.53	.46
12A5110	†8080-1G1	T0-3	(8)	2	J		.35	.31	.28

8058 requires .367" chassis cutout, 8060 requires .221" chassis cutout, 8070 requires .437" chassis cutout.

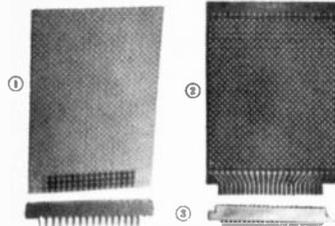
Materials (unless otherwise specified)—Insulator—Teflon—Contact—Beryllium copper per QQ-C-530; Terminal Sleeve—Brass per QQ-B-626; Contact and terminal sleeve are gold plated .00040" thick per MIL-G-45204 over nickel plate .00005/.00001" thick.

\*Contact/Terminal phosphor bronze, gold over silver plated.

†Insulator glass epoxy.

‡Contact/Terminal Beryllium copper gold over nickel plated.

§Insulator black phenolic per MIL-M-14, type CFG, contact beryllium copper, electro tin plated, mounting saddle and eyelet brass, electro tin plated, chassis insulator mica.



## VECTOR PLUGBOARDS AND RECEPTACLES

Ready to wire Plugboards for prototypes and short runs. All are furnished with over-all grid of pre-punched  $\frac{1}{16}$ " dia. holes located on alternate intersections of a 0.1" grid. Contacts along bottom edge of board mate with listed receptacles. Pre-drilled to accept T-28 miniklips, standard turned terminals, or  $\frac{1}{16}$ " dia. eyelets. All are  $\frac{1}{16}$ " thick, epoxy paper per MIL-P-22324 or "WE" types are epoxy glass per MIL-P-18177.

### ① PLUGBOARDS WITH ATTACHED ELCO VARICON CONTACTS

Stock No.	Vector No.	Size	Contacts	Prices Each			
				1-19	20-99	100-199	200-999
12A9526	812	4 1/2 x 6 1/2"	16	\$2.98	\$2.68	\$2.50	\$2.00
12A9527	812WE	4 1/2 x 6 1/2"	16	3.53	3.10	2.97	2.37
12A9528	837	3 x 4 1/2"	12	2.33	2.18	1.96	1.56
12A9529	837WE	3 x 4 1/2"	12	2.58	2.32	2.17	1.73
12A9530	848WE	6 1/2 x 4 1/2"	35	6.09	5.48	5.12	4.08

### ② COPPER CLAD ETCHED CONTACT PLUGBOARDS

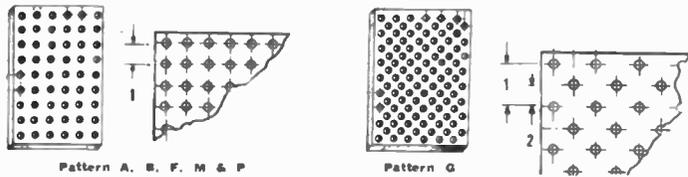
All are 6 1/2 x 4 1/2". GN indicates nickel plated gold flashed contacts.

Stock No.	Vector No.	Contacts		Prices Each			
		Front	Back	1-19	20-99	100-199	200-999
12A9531	838A	22	---	\$2.81	\$2.53	\$2.36	\$1.88
12A9532	838AWE	22	---	3.17	2.85	2.66	2.12
12A9533	838AWE-1GN	22	---	4.70	4.23	3.95	3.15
12A9534	838	22	21	3.89	3.50	3.27	2.61
12A9535	838WE	22	21	3.86	3.47	3.24	2.59
12A9536	838WE-1GN	22	21	5.81	5.23	4.88	3.89

### ③ RECEPTACLES FOR ABOVE PLUGBOARDS

Stk. No.	Vector No.	Contacts	For	Prices Each		
				1-99 Ea.	100-249 Ea.	250-999 Ea.
12A9537	R616-1	16	812, 812WE	\$2.24	\$1.74	\$1.49
12A9538	R612-1	12	837, 837WE	1.80	1.32	1.12
12A9539	R635	35	848WE	4.91	3.27	2.73
12A9504	R644	44	All 838 Series	2.62	2.10	2.10

## VECTORBOARD PREPUNCHED INSULATING BOARDS



Convenient and economical method of assembling circuit components. All boards accept zip push in terminals shown, turned terminals and eyelets may be used. All are unclad phenolic except those marked \* which are Epoxy paper; † Epoxy glass; \*\* 2 oz. copper clad one side.

Pattern A—Dimension 1 is .265" between centers; Pattern B—Dimension 1 is .188" ( $\frac{3}{16}$ ") between centers; Pattern F—Dimension 1 is .2" between centers; Pattern M—Dimension 1 is .05" between centers; Pattern P—Dimension 1 is .1" between centers; Pattern G—Dimension 1 is .2" between centers, Dimension 2 is .1" between centers.

Stock No.	Mfg. No.	Pattern	Hole Dia.	Size Inches	Prices Each			
					1-19	20-99	100-199	200-999
12A9505	18A18	A	.093	4.8x4.8x $\frac{1}{16}$	\$0.45	\$0.41	\$0.38	\$0.30
12A9506	32A9	A	.093	8.51x2.41x $\frac{1}{16}$	.47	.42	.39	.31
12A9649	32A47	A	.093	8.51x1.88x $\frac{1}{16}$	.56	.50	.47	.38
12A9507	64A18	A	.093	16.99x4.8x $\frac{1}{16}$	1.30	1.17	1.09	.87
12A9511	72A32	A	.093	19.11x8.51x $\frac{1}{16}$	2.33	2.10	1.96	1.56
12A9508	64A18	A	.093	16.99x4.8x $\frac{1}{16}$	1.66	1.49	1.39	1.11
12A9509	64A32	A	.093	16.99x8.51x $\frac{1}{16}$	2.86	2.57	2.40	1.92
12A9650	64A132	A	.093	35.01x16.99x $\frac{1}{16}$	10.41	9.45	8.78	7.00
12A9510	*85F24EP	F	.062	16.99x4.8x $\frac{1}{16}$	2.14	1.93	1.80	1.43
12A9511	*85F24EP	F	.062	16.99x8.5x $\frac{1}{16}$	3.30	2.97	2.77	2.21
12A9512	**3106-1XXXP	F	.062	4.5x3x $\frac{1}{16}$	.47	.42	.39	.31
12A9513	**3070-1XXXP	F	.062	6.5x4.5x $\frac{1}{16}$	.87	.78	.73	.58
12A9514	85G24	G	.062	16.99x4.8x $\frac{1}{16}$	1.30	1.17	1.09	.87
12A9515	*85G24EP	G	.062	16.99x4.8x $\frac{1}{16}$	2.14	1.93	1.80	1.43
12A9516	†42G24WE	G	.062	8.51x4.8x $\frac{1}{16}$	1.97	1.77	1.65	1.32
12A9517	45B30	B	.062	8.51x5.69x $\frac{1}{16}$	.87	.78	.73	.58
12A9518	†85G24WE	G	.052	16.99x4.8x $\frac{1}{16}$	3.96	3.56	3.33	2.56
12A9519	90B30	B	.062	16.97x5.69x $\frac{1}{16}$	1.68	1.51	1.41	1.13

### NEW MICRO-VECTORBOARD\* FOR MOUNTING D.I.P.'S AND FLAT PACKS

Stock No.	Mfg. No.	Pattern	Hole Dia.	Size Inches	Prices Each			
					1-19	20-99	100-199	200-999
12A9520	*64P44-062EP	P	.042	6.5x4.5x $\frac{1}{16}$	1.82	1.64	1.53	1.22
12A9521	†126M76/032	M	.025	6.5x4x $\frac{1}{16}$	3.04	2.74	2.55	2.04
12A9522	*169P47-062EP	P	.042	17x4.8x $\frac{1}{16}$	3.54	3.19	2.97	2.37
12A9523	**169P59/032C1	P	.042	17x6x $\frac{1}{16}$	6.87	6.18	5.77	4.60
12A9524	†169P59/047	P	.042	17x6x $\frac{1}{16}$	6.42	5.78	5.39	4.30
12A9652	†169P84-062	P	.042	17x8 1/2 x $\frac{1}{16}$	6.07	5.46	5.10	4.07
12A9525	†336M76/032	M	.025	17x4x $\frac{1}{16}$	8.84	7.96	7.43	5.92

### UNPUNCHED VECTORBOARD — 2 OZ. COPPER CLAD ONE SIDE

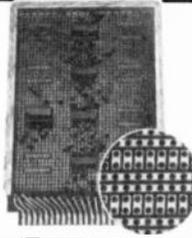
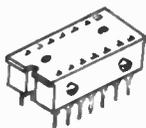
XXXX phenolic except WE types which are Epoxy glass.

Stock No.	Vector No.	Size	Prices Each			
			1-19	20-99	100-199	200-999
12A9653	CU45/30-1	4 1/2 x 3 x $\frac{1}{16}$ "	\$0.31	\$0.28	\$0.26	\$0.21
12A9654	CU65/45-1	6 1/2 x 4 1/2 x $\frac{1}{16}$ "	.62	.56	.52	.42
12A9655	CU85/45-1	8 1/2 x 4 1/2 x $\frac{1}{16}$ "	.73	.66	.61	.49
12A9656	CU45/30WE-1	4 1/2 x 3 x $\frac{1}{16}$ "	.72	.65	.60	.48
12A9657	CU65/45WE-1	6 1/2 x 4 1/2 x $\frac{1}{16}$ "	1.39	1.25	1.17	.93
12A9658	CU85/45WE-1	8 1/2 x 4 1/2 x $\frac{1}{16}$ "	1.78	1.60	1.50	1.19

### VECTOR I.C. SOCKETS FOR DUAL-IN-LINE PACKAGES

Tabs fit "P" pattern Micro-Vectorboard or "DIP" Plugboards. Castings are glass filled nylon with phosphor bronze nickel gold plated contacts on wire wrap type, and tin plated contacts on solder tab type.

Stk. No.	Mfg. No.	Contacts	Terminals	Each	Pkg. of 5
12A9663	R714	14	Wire Wrap	1.19	4.90
12A5049	R716-1	16	P.C. Solder	.85	3.85
12A9664	R716	16	Wire Wrap	1.44	5.90
12A9553	Extractor Tool		Assists removal of IC. Ea.	50c	



3474 D.I.P. Plugboard (Built-Up Model)

## "D.I.P." VECTOR PLUGBOARDS FOR DUAL-IN-LINE IC'S

Plug-in mounting boards for 14 or 16 lead dual-in-line integrated circuits, Boards are  $\frac{1}{16}$ " thick epoxy paper material measuring 4 1/2 x 6 1/2" overall with an aluminum frame on 3 sides which fits  $\frac{1}{16}$ " card guides. Boards have overall "P" pattern of .041" diameter holes spaced on 0.1" spaced grid and an X-Y matrix pattern of .070" etched copper lines running vertically on board front and horizontally on board back.

Pad layouts for 12 D.I.P.'s are provided on all listed types with matrix. Copper lines may be broken with listed line cutter chisel. T42-1 Miniklip push-in terminals shown below make possible speedy circuit construction.

Stk. No.	Mfg. No.	Description	Prices Each			
			1-19	20-99	100-199	200-999
12A9500	3474	4 1/2 x 6 1/2", 44 etched contacts, X-Y matrix	\$10.50	\$9.45	\$8.82	\$7.04
12A9501	3474-2	4 1/2 x 6 1/2", 44 etched contacts, no matrix	7.95	7.16	6.68	5.33
12A9502	3474-3	4 1/2 x 6 1/2", 22 etched contacts, Y matrix back side	8.08	7.27	6.79	5.41
12A9659	3477-7	4 1/2 x 6 1/2", 72 etched contacts, X-Y matrix	9.94	8.95	8.35	6.66
12A9661	3477-8	4 1/2 x 6 1/2", 36 etched contacts, Y matrix back side	8.94	8.05	8.76	5.95
12A9660	3477-6	4 1/2 x 6 1/2", 72 etched contacts, no matrix	7.53	6.78	6.33	5.05
12A9503	P-139	Line Cutter Chisel	1.50			
12A9504	R644	Receptacle for 3474 Series	1-24 Ea.	2.62		25-Up Ea. 2.10
12A9662	R636	Receptacle for 3477 Series	Each			\$5.21



## PUSH-IN "ZIP" TERMINALS & INSERTION TOOLS

Bright tinned, serrated teeth grip several leads for good contact. T32 series provides reliable solderless contact for up to 6 leads and may be used over and over. Nickle plated.

Fig. Stk. No.	Mfg. No.	Pkg. Quantity	Per Pkg.	5 Pkgs. Ea.
① 12A2210	T9-4	Fits .093 holes	100	\$1.44
① 12A2211	T9-4	Fits .093 Holes	1000	10.18
① 12A2212	T28	Miniklip Fits .062 Holes	100	1.61
② 12A2213	T28	Miniklip Fits .062 Holes	1000	11.44
② 12A2214	T42-1	Microklip Fits .042 Holes	1000	1.82
② 12A2215	T42-1	Microklip Fits .042 Holes	1000	13.51

### SPRING CLIP PUSH-IN TERMINALS

Provides fast, reliable circuit set-ups without soldering, bending or crimping component leads.

③ 12A2216	T32A-1	Fits .062 Holes	10	1.40
③ 12A2217	T32A-1	Fits .062 Holes	100	10.30
③ 12A2218	T32A	Fits .093 Holes	10	1.40
③ 12A2219	T32A	Fits .093 Holes	100	10.30

### INSERTION TOOLS FOR ABOVE CLIPS

④ 12A2220	P122B	For T9-4 Terminals. Each		\$1.40
④ 12A2221	P91A	For T28 Terminals. Each		\$1.50
④ 12A2222	P136	For T32 Terminals. Each		\$1.20
④ 12A2223	P149A	For T42-1 Terminals. Each		\$1.50

## 22X TRANSISTOR EXPERIMENTER'S CHASSIS KIT



4.8"x8.5" Vectorbord ("A" Pattern) mounted on 2" aluminum rails, plus 75 push-in and 20 springclip terminals; 3 bus strips, 6 patch cords, terminal installing tool, 2 spools hook-up wire, layout paper, asst. screws, nuts, spacers, thumb pins, washers and brackets.

20A195. Each..... **\$11.50**

## 25X SOLDERLESS EXPERIMENTER'S CHASSIS KIT



Big 8.5x17x $\frac{1}{16}$ " pre-punched phenolic Vectorbord deck with Frame Loc expandable aluminum chassis support. 6 transistor sockets, 3 each 7 and 9 pin miniature sockets, 2 octal sockets, 204 (total) solderable and solderless terminals, 10 patchcords, 2 spools hook-up wire and switch plus asst. nuts, screws, spacers, lugs, brackets, etc.

No. 20A196. Each..... **\$21.45**

## VECTOR 27XA ETCHED CIRCUIT KIT



Contains everything you need to make 2 etched circuit boards except hot water! Supplied complete with 2 phenolic one side 2 oz copper clad boards 4 1/2 x 6 1/2 x $\frac{1}{16}$ " (one punched with .062 holes on .2 centers and one unpunched), 8 1/2 x 11 1/2 sheet multipurpose rub-on Vectorresist sheet with assorted width lines, dots and 43 contact .156 spaced connector pattern, 2 bags etching chemical with activator.

No. 12A9648. Each..... **\$6.50**

## CINCH PRINTED CIRCUIT EDGE CONNECTORS

Bifurcated contacts. For  $\frac{1}{16}$ " copper clad PC board. Glass-filled diallyl phthalate insulation. Phosphor bronze contacts with gold plate. Conventional wiring tails.

Contact Positions	SINGLE ROW	Stk. No.	Cinch No.	DDUBLE ROW	Stk. No.	Cinch No.	Prices Each			
							1-24	25-49	50-99	100-249
6	12A5143	50-6A-20	12A5149	50-12A-30	\$1.25	\$1.00	\$0.84	\$0.67	\$0.63	
10	12A5144	50-10A-20	12A5150	50-20A-30	1.68	1.35	1.12	.90	.86	
12	12A5131	50-12A-20	12A5151	50-24A-30	1.90	1.52	1.26	1.01	.96	
15	12A5145	50-15A-20	12A5132	50-30A-30	2.22	1.77	1.48	1.18	1.12	
18	12A5146	50-18A-20	12A5152	50-36A-30	2.54	2.03	1.69	1.36	1.29	
22	12A5147	50-22A-20	12A5153	50-44A-30	2.97	2.38	1.98	1.58	1.50	
25	12A5148	50-25A-20	12A5154	50-50A-30	3.54	2.83	2.36	1.89		



# PRINTED CIRCUIT MATERIALS

**Standard Etching Kit S101A.** A complete assortment of material used for manually producing a basic printed circuit. Contains 2 copper clad unsensitized sheets 3x6 $\frac{1}{8}$ ", 1 perforated 3x6 $\frac{1}{8}$ " copper clad unsensitized phenolic sheet, etching resist, etching solution, plastic etching tray, etc. with step-by-step instructions. So simple that anyone can successfully produce printed circuit boards.

12A9610, S101A Kit. Wt. 1 $\frac{1}{2}$  lbs. Net Each... **\$3.95**  
12A9611 S101A-G. Same kit with glass base material. **\$5.25**



**Professional Etching Kit P101A.** An etched circuit kit utilizing photo engraving process for fine professional quality work. A negative of layout is produced, then the sensitized sheet of copper clad phenolic board is exposed through the prepared negative after which it is developed and etched. Contains three sensitized boards (2—3x6, 1—3x3), 3 mechanical negatives of the same size, etch solution, wand developer, printing frame, trays, etc. with instructions. Wt. 3 lbs.

No. 12A9612. **\$5.85**  
P101A Kit. Net Each.....  
12A9613, P101A-G. Same Kit with Glass Material..... **\$7.40**



**NP-303A Enamel Nameplate & Panel Kit.** Produces professional high contrast blue and aluminum panels. Kit supplies pressure sensitive opaque letters and numerals in three fonts which are arranged on a clear acetate sheet and used as a positive film to expose a photosensitized blue aluminum plate. In development, the opaque areas are washed away producing sharply detailed aluminum letters on a blue background. A double-face pressure sensitive sheet adheres the panel to desired area. Produces 160 sq. in. of plate.

No. 12A9688 Wt. 1 lb. 1 oz. Each... **\$7.25**



## NAMEPLATE AND PANEL SUPPLIES

Stk. No.	Kepro No.	Description	Shpg. Wt.	Each
12A9689	NP-EP810	Sensitive Enamel Plate 8 X 10"	6 Ozs.	\$1.45
12A9690	NP-1220	Sensitive Enamel Plate 12 X 20"	1 Lb.	4.13
12A9691	NPD-2A	2 Oz. Developer	6 Ozs.	.75
12A9692	NPD-16A	16 Oz. Developer	2 $\frac{3}{4}$ Lbs.	2.90
12A9693	NP-AS	8 X 10" Adhesive Sheet	6 Ozs.	.70
12A9694	NP-AS1722	17 X 22" Adhesive Sheet	1 Lb.	2.75

**FK-701 Photo Reversing Kit.** Simple two-step process to prepare line negatives and positives from taped or ink artwork or to reserve existing negatives and positives. Needs no darkroom, 2-10x24" reversing film, chemicals, and instructions included. Shpg. wt. 2 lbs.

No. 12A9665. Each... **\$7.20**

## ETCHED CIRCUIT COPPER CLAD MATERIALS

Laminated 1 ounce (.00135) copper clad materials, one or two sides, both in  $\frac{1}{4}$ " XXXP paper base phenolic,  $\frac{1}{8}$ " G-10 glass epoxy and  $\frac{1}{8}$ " polyester laminate. All copper clad materials meet standard NEMA grade tolerances.

**MATERIAL 5 PIECES PER PACKAGE ARE BULK PACKED—NOT INDIVIDUALLY SEALED IN SINGLE PACKAGES.**

### XXXP PAPER BASE PHENOLIC, 1 OZ. (.00135) COPPER CLAD

MATERIAL INDIVIDUALLY PACKAGED					MATERIAL 5 PIECES PER PACKAGE									
Stock No.	Kepro No.	Description	Size Inches	Wt. Oss.	Net. Each	Stock No.	Kepro No.	Description	Size Inches	Weight Pk. of 5	1-4 Pks. Each	5-9 Pks. Each	10-24 Pks. Each	25-49 Pks. Each
12A9555	P1-33	Unsen. 1 side	3x3	1 $\frac{3}{4}$	\$0.40	12A9579	P1-335	Unsen. 1 side	3X3	9 Ozs.	\$ 1.45	\$ 1.25	\$ 1.15	\$ 1.05
12A9556	P1-36	Unsen. 1 side	3x6	2 $\frac{1}{8}$	.54	12A9580	P1-365	Unsen. 1 side	3X6	11 Ozs.	2.05	1.80	1.65	1.50
12A9557	P1-1212	Unsen. 1 side	12x12	9 $\frac{3}{4}$	2.48	12A9581	P1-12125	Unsen. 1 side	12X12	3 Lbs.	11.15	9.45	7.35	7.00
12A9558	P2-33	Unsen. 2 side	3x3	1 $\frac{3}{4}$	.44	12A9582	P2-335	Unsen. 2 side	3X3	9 Ozs.	1.65	1.45	1.30	1.20
12A9559	P2-36	Unsen. 2 side	3x6	2 $\frac{1}{8}$	.64	12A9583	P2-365	Unsen. 2 side	3X6	11 Ozs.	2.55	2.25	2.05	1.85
12A9560	P2-1212	Unsen. 2 side	12x12	10 $\frac{1}{2}$	3.22	12A9584	P2-12125	Unsen. 2 side	12X12	3 $\frac{1}{2}$ Ozs.	14.85	12.60	9.80	9.45
12A9561	S1-33	Sen. 1 side	3x3	1 $\frac{3}{4}$	.58	12A9585	S1-335	Sen. 1 side	3X3	9 Ozs.	2.35	2.00	1.85	1.70
12A9562	S1-36	Sen. 1 side	3x6	2 $\frac{1}{8}$	.90	12A9586	S1-365	Sen. 1 side	3X6	11 Ozs.	3.85	3.30	3.00	2.80
12A9563	S1-66	Sen. 1 side	6x6	3 $\frac{1}{2}$	1.52	12A9587	S1-665	Sen. 1 side	6X6	1 $\frac{1}{8}$ Lbs.	6.80	5.85	5.30	4.90
12A9564	S1-1212	Sen. 1 side	12x12	9 $\frac{3}{4}$	5.36	12A9588	S1-12125	Sen. 1 side	12X12	3 Lbs.	25.55	21.20	16.85	16.10
12A9565	S2-36	Sen. 2 side	3x6	2 $\frac{1}{8}$	1.22	12A9589	S2-365	Sen. 2 side	3X6	11 Ozs.	5.45	4.70	4.25	3.95
12A9566	S2-66	Sen. 2 side	6x6	3 $\frac{1}{2}$	2.18	12A9590	S2-665	Sen. 2 side	6X6	1 $\frac{1}{8}$ Lbs.	10.10	8.70	7.90	7.30
12A9567	S2-710	Sen. 2 side	7x10	5 $\frac{1}{8}$	3.86	12A9591	S2-7105	Sen. 2 side	7X10	1 $\frac{3}{4}$ Lbs.	18.25	15.70	14.25	13.15
12A9568	S2-1212	Sen. 2 side	12x12	10	7.62	12A9592	S2-12125	Sen. 2 side	12X12	3 $\frac{1}{2}$ Lbs.	36.85	30.60	24.30	23.20

### G-10 GLASS EPOXY 1 OZ. (.00135) COPPER CLAD

12A9569	P1-36C	Unsen. 1 side	3x6	3 $\frac{1}{8}$	.66	12A9593	P1-365C	Unsen. 1 side	3X6	1 Lb.	4.75	4.20	3.80	3.45
12A9570	P1-1212C	Unsen. 1 side	12x12	10 $\frac{3}{4}$	6.76	12A9594	P1-12125C	Unsen. 1 side	12X12	3 $\frac{1}{2}$ Lbs.	32.55	27.65	21.50	20.50
12A9571	P2-36C	Unsen. 2 side	3x6	3 $\frac{1}{8}$	1.12	12A9595	P2-365C	Unsen. 2 side	3X6	1 Lb.	4.95	4.35	3.95	3.60
12A9572	P2-1212C	Unsen. 2 side	12x12	11 $\frac{1}{2}$	7.06	12A9596	P2-12125C	Unsen. 2 side	12X12	3 $\frac{3}{4}$ Lbs.	34.05	28.95	22.45	21.45
12A9573	S1-36C	Sen. 1 side	3x6	3 $\frac{1}{8}$	1.44	12A9597	S1-365C	Sen. 1 side	3X6	1 Lb.	6.55	5.75	5.25	4.80
12A9574	S1-66C	Sen. 1 side	6x6	4 $\frac{1}{2}$	2.58	12A9598	S1-665C	Sen. 1 side	6X6	1 $\frac{1}{2}$ Lbs.	12.10	10.65	9.70	8.85
12A9575	S1-1212C	Sen. 1 side	12x12	10 $\frac{3}{4}$	9.64	12A9599	S1-12125C	Sen. 1 side	12X12	3 $\frac{1}{2}$ Lbs.	46.95	38.95	31.00	29.55
12A9576	S2-36C	Sen. 2 side	3x6	3 $\frac{1}{8}$	1.70	12A9600	S2-365C	Sen. 2 side	3X6	1 Lb.	7.85	6.90	6.30	5.75
12A9577	S2-66C	Sen. 2 side	6x6	4 $\frac{1}{2}$	3.16	12A9601	S2-665C	Sen. 2 side	6X6	1 $\frac{1}{2}$ Lbs.	15.00	13.20	12.00	10.95
12A9578	S2-1212C	Sen. 2 side	12x12	11 $\frac{1}{2}$	11.72	12A9602	S2-12125C	Sen. 2 side	12X12	3 $\frac{3}{4}$ Lbs.	47.60	37.85	36.10	34.40

### GLASS MAT POLYESTER 1 OZ. COPPER CLADS

Offers high impact strength at low cost. Excellent physical and electrical stability.

12A9671	P1-36M	Unsen. 1 Side	3x6	3 $\frac{1}{8}$	\$0.58	12A9679	P1-365M	Unsen. 1 Side	3x6	1 Lb.	\$ 2.25	\$ 2.00	\$ 1.80	\$ 1.65
12A9672	P1-1212M	Unsen. 1 Side	12x12	10 $\frac{3}{4}$	2.84	12A9680	P1-12125M	Unsen. 1 Side	12x12	3 $\frac{3}{4}$ Lbs.	12.95	11.00	8.55	8.15
12A9673	P2-36M	Unsen. 2 Side	3x6	4	.70	12A9681	P2-365M	Unsen. 2 Side	3x6	1 $\frac{1}{8}$ Lbs.	2.85	2.50	2.30	2.10
12A9674	P2-1212M	Unsen. 2 Side	12x12	11 $\frac{1}{2}$	3.82	12A9682	P2-12125M	Unsen. 2 Side	12x12	3 $\frac{1}{2}$ Lbs.	17.85	15.15	11.75	11.25
12A9675	S1-36M	Sen. 1 Side	3x6	3 $\frac{1}{8}$	.94	12A9683	S1-365M	Sen. 1 Side	3x6	1 Lb.	4.05	3.50	3.15	2.90
12A9676	S1-1212M	Sen. 1 Side	12x12	12	5.72	12A9684	S1-12125M	Sen. 1 Side	12x12	3 $\frac{1}{2}$ Lbs.	27.35	22.70	18.05	17.20
12A9677	S2-36M	Sen. 2 Side	3x6	4	1.28	12A9685	S2-365M	Sen. 2 Side	3x6	1 $\frac{1}{8}$ Lbs.	5.75	4.95	4.50	4.15
12A9678	S2-1212M	Sen. 2 Side	12x12	14	8.42	12A9686	S2-12125M	Sen. 2 Side	12x12	3 $\frac{1}{2}$ Lbs.	40.85	33.90	29.95	25.75

### ETCHED CIRCUIT PROCESSING CHEMICALS

Stock No.	Kepro No.	Size	Description	Wt. Lbs.	Net Each
12A9614	R-2	2 Ozs.	Paint Etch Resist	$\frac{1}{2}$	\$0.60
12A9615	T-2	2 Ozs.	Paint Resist Thinner	$\frac{1}{2}$	.50
12A9616	D-1PT	1 Pt.	Developing Solution	2 $\frac{3}{4}$	1.15
12A9617	D-1C	1 Gal.	Developing Solution	16	5.50
12A9667	D-5G	5 Gal.	Developing Solution	80	25.00
12A9618	E-1PT	1 Pt.	Etching Solution	2	.85
12A9619	E-1C	1 Gal.	Etching Solution	15 $\frac{1}{2}$	3.50
12A9666	E-5C	5 Gal.	Etching Solution	75	15.25

### PHOTO LAYOUT SUPPLIES

Stock No.	Kepro No.	Description	Wt. Ozs.	Net Each
12A9604	TC-125	144 Terminal Circles, $\frac{1}{8}$ " O.D., $\frac{1}{2}$ " I.D.	2 Ozs.	\$0.55
12A9605	TC-250	96 Terminal Circles, $\frac{1}{4}$ " O.D., $\frac{1}{2}$ " I.D.	2 Ozs.	.55
12A9606	CS-062	Conductor Strips, $\frac{1}{8}$ " wide, 216 inches	2 Ozs.	.55
12A9607	CS-125	Conductor Strips, $\frac{1}{8}$ " wide, 108 inches	2 Ozs.	.55
12A9670	AT-810	Pressure Sensitive Letters and Numerals For Artwork Nomenclature	4 Ozs.	2.50
12A9669	MN-1212	12x12" Mechanical Negative	4 Ozs.	1.25
12A9668	AS-3	Acetate Layout Film .005 Th. 18x24" Sheet	8 Ozs.	1.15

## KEPRO 12 INCH SHEAR

Easily shears and trims copper clad and unclad XXXP phenolic, G-10 glass epoxy, and polyester laminates up to  $\frac{3}{8}$ " thick. Also cuts metal up to  $\frac{1}{8}$ " thick. Cuts material up to 12" wide. Blade clearance adjustable and shear blade may be reversed for new cutting edge. Fixed side squaring gauge, adjustable length gauge up to 5 $\frac{1}{4}$ " long. Shpg. wt. 18 lbs.

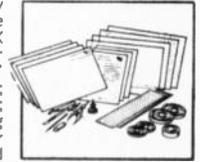
No. 37A3287. **\$94.00**  
Kepro MIS-12. Each.....



## MASTER PHOTO LAYOUT KIT PL-200A

Produce professional PC artwork accurately and rapidly without inking and lettering. Includes: 2-18X24" Matte Surface Mylar; 2-18X24" Mechanical Negative; 4-17X21" Graph Paper; 1-18X24" Master Mylar Grid Sheet; 112- $\frac{1}{8}$ " Term. Dots; 224- $\frac{3}{16}$ " Term. Dots; 288- $\frac{1}{4}$ " Term. Dots; 192- $\frac{3}{16}$ " Term. Dots; 252- $\frac{1}{2}$ " Term. Dots; 18 Yds. each of  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{3}{4}$ " and  $\frac{1}{2}$ " conductor strips; 1-8X10" sheet of letters; Bow Compass, Blue Drawing Pencil, Pen Holder, Pen Point, Cutting Knife Set, Center Dot Cutter, Tweezers, Bottle Opauqing Fluid, Brush and Instructions. Shpg. wt. 4 lbs.

No. 12A9687. **\$38.70**  
Complete Kit Each.....



**Photo Layout Kit PL-2A.** For preparing camera-ready artwork without inking and lettering. Reduced layout time by use of pressure-sensitive tapes, dots, letters and numerals. Contents: 96- $\frac{1}{4}$ " Tape Dot Terminations, 108"- $\frac{1}{8}$ " Tape Conductor Strips, 216"- $\frac{1}{8}$ " Tape Conductor Strips, 1 Sheet letters and numerals assorted sizes, 1-8x10" acetate sheet, 1-8x10" Mech. Neg., 2-8X10" sheets of Graph paper and instruction sheet. Wt. 1 lb.

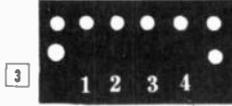
No. 12A9603. PL-2A. Each... **\$3.95**

**Printed Circuit Lab L505A.** Meets all circuit board development needs of the industrial, laboratory or serious experimenter. Contains 15 sensitized boards, 3 copper clad unsensitized boards (1 perforated), trays for developing and etching, safelite, photoflood lamp, photo layout kit PL2A, 4x10 mechanical negative, etch and developer solutions with accessory items. With instructions. Wt. 21 lbs.

No. 12A9608. L505A Kit. With XXXP **\$34.75**  
Boards. Each.....  
12A9609. L505A-G Kit. With G10 Glass Boards. \$42.95



# CINCH JONES BARRIER & TERMINAL STRIPS



## JONES BARRIER STRIPS

PRICES BELOW ARE FOR ONE TYPE ONLY—NOT ASSORTED

① SERIES 140. Base  $\frac{7}{8}$ " W. x  $\frac{1}{2}$ " H. overall,  $\frac{1}{4}$ " H. to terminal bottom.  $\frac{3}{8}$ " centers. Uses 5-40 x  $\frac{3}{8}$ " binder head screws. Avg. shpg. wt. 3 oz.

Stock No.	Terms. & Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1526	2-140	\$0.23	\$0.19	\$0.16	\$0.13	\$0.12
12A1527	3-140	.27	.22	.18	.15	.14
12A1528	4-140	.34	.27	.23	.19	.18
12A1529	5-140	.42	.33	.28	.23	.22
12A1530	6-140	.48	.38	.32	.26	.25
12A1474	7-140	.55	.44	.37	.29	.28
12A1531	8-140	.63	.50	.42	.33	.32
12A1475	9-140	.70	.56	.46	.37	.35
12A1532	10-140	.77	.62	.52	.41	.39
12A1476	11-140	.83	.67	.56	.44	.42
12A1533	12-140	.92	.73	.61	.48	.46
12A1477	13-140	.98	.78	.66	.53	.49
12A1534	14-140	1.06	.84	.71	.57	.54
12A1478	15-140	1.13	.91	.75	.60	.58
12A1535	16-140	1.19	.96	.80	.64	.61
12A1479	17-140	1.27	1.01	.84	.68	.64
12A1536	18-140	1.34	1.07	.90	.71	.68
12A1480	19-140	1.41	1.12	.94	.75	.71
12A1537	20-140	1.47	1.18	.99	.78	.75
12A1481	21-140	1.56	1.25	1.04	.82	.78

② SERIES 140-Y. Like above except with thru panel solder lugs.

Stock No.	Terms. & Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A2264	2-140Y	\$0.29	\$0.23	\$0.20	\$0.16	\$0.15
12A2265	3-140Y	.36	.29	.24	.19	.18
12A2266	4-140Y	.47	.38	.32	.25	.24
12A2267	5-140Y	.58	.46	.39	.31	.30
12A2268	6-140Y	.68	.55	.45	.36	.34
12A2269	7-140Y	.78	.63	.53	.41	.39
12A2270	8-140Y	.89	.71	.60	.47	.45
12A2271	9-140Y	1.00	.79	.67	.54	.50
12A2272	10-140Y	1.10	.89	.74	.59	.56
12A2273	12-140Y	1.31	1.04	.88	.70	.68
12A2274	14-140Y	1.52	1.22	1.02	.81	.77
12A2275	16-140Y	1.72	1.38	1.15	.92	.88
12A2276	18-140Y	1.94	1.55	1.29	1.03	.98
12A2277	20-140Y	2.13	1.71	1.42	1.13	1.08

③ SERIES 141. Base  $1\frac{1}{8}$ " W. x  $\frac{1}{2}$ " H. overall,  $\frac{1}{8}$ " H. to terminal bottom.  $\frac{1}{4}$ " centers. Uses 6-32 x  $\frac{1}{4}$ " binder head screws. Avg. shpg. wt. 5 oz.

Stock No.	Terms. & Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1550	2-141	\$0.26	\$0.20	\$0.17	\$0.14	\$0.13
12A1551	3-141	.34	.27	.23	.18	.17
12A1552	4-141	.44	.35	.30	.24	.23
12A1553	5-141	.54	.42	.36	.29	.27
12A1554	6-141	.61	.48	.41	.33	.31
12A1555	7-141	.72	.58	.48	.38	.36
12A1556	8-141	.80	.64	.54	.43	.41
12A1454	9-141	.89	.71	.60	.47	.45
12A1556	10-141	.99	.79	.66	.53	.50
12A1557	12-141	1.16	.93	.77	.62	.59
12A1417	14-141	1.35	1.07	.90	.72	.68
12A1418	16-141	1.52	1.22	1.02	.81	.77
12A1419	18-141	1.71	1.37	1.14	.91	.87
12A1420	20-141	1.90	1.51	1.27	1.01	.96

④ SERIES 141-Y. Like above except with thru panel solder lugs.

Stock No.	Terms. & Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A2250	2-141Y	\$0.35	\$0.28	\$0.23	\$0.18	\$0.17
12A2251	3-141Y	.47	.38	.32	.25	.24
12A2252	4-141Y	.63	.50	.42	.33	.32
12A2253	5-141Y	.76	.61	.50	.40	.38
12A2254	6-141Y	.88	.70	.59	.46	.44
12A2255	7-141Y	1.03	.82	.69	.55	.53
12A2256	8-141Y	1.15	.92	.77	.62	.59
12A2257	9-141Y	1.28	1.02	.85	.68	.65
12A2258	10-141Y	1.42	1.13	.95	.76	.72
12A2259	12-141Y	1.69	1.35	1.12	.90	.85
12A2260	14-141Y	1.97	1.58	1.32	1.05	1.00
12A2261	16-141Y	2.25	1.80	1.50	1.19	1.14
12A2262	18-141Y	2.52	2.02	1.69	1.35	1.28
12A2263	20-141Y	2.81	2.25	1.87	1.50	1.42

⑤ SERIES 142. Base  $1\frac{1}{8}$ " W. x  $\frac{5}{8}$ " H. overall,  $\frac{3}{8}$ " H. to terminal bottom.  $\frac{1}{4}$ " centers. Has 8-32 x  $\frac{3}{8}$ " binder head screws. Avg. shpg. wt. 6 oz.

Stock No.	Terms. & Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1566	2-142	\$0.30	\$0.24	\$0.20	\$0.16	\$0.15
12A1567	3-142	.41	.32	.27	.22	.21
12A1568	4-142	.53	.42	.35	.28	.27
12A1569	5-142	.64	.50	.42	.34	.32
12A1570	6-142	.75	.60	.50	.40	.38
12A1439	7-142	.87	.69	.58	.46	.44
12A1571	8-142	.98	.78	.65	.52	.49
12A1442	9-142	1.08	.87	.72	.58	.55
12A1572	10-142	1.21	.97	.80	.64	.61
12A1573	12-142	1.43	1.14	.96	.76	.72
12A1423	14-142	1.66	1.33	1.11	.89	.84
12A1425	16-142	1.90	1.51	1.27	1.01	.96

## MARKER STRIPS

Used to number terminals for identification. Mounts under terminal strips. TYPE MS 140Y for either 140 or 140-Y barrier strips.

Stk. No.	Terms & Type	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.	250-499 Ea.
12A2292	MS2-140Y	\$0.15	\$0.12	\$0.10	\$0.09	\$0.08
12A2293	MS3-140Y	.15	.12	.10	.09	.08
12A2294	MS4-140Y	.15	.12	.10	.09	.08
12A2295	MS5-140Y	.17	.13	.11	.10	.09
12A2296	MS6-140Y	.17	.13	.11	.10	.09
12A2297	MS7-140Y	.17	.13	.11	.10	.09
12A2298	MS8-140Y	.17	.13	.11	.10	.09
12A2299	MS9-140Y	.17	.13	.11	.10	.09
12A2300	MS10-140Y	.19	.15	.13	.11	.10
12A2301	MS12-140Y	.19	.15	.13	.11	.10
12A2302	MS14-140Y	.21	.17	.14	.12	.11
12A2303	MS16-140Y	.23	.19	.16	.13	.12
12A2304	MS18-140Y	.23	.19	.16	.13	.12
12A2305	MS20-140Y	.26	.20	.17	.14	.13

TYPE MS 141Y for either 141 or 141-Y barrier strips

Stk. No.	Terms & Type	1-24 Ea.	25-49 Ea.	50-99 Ea.	100-249 Ea.	250-499 Ea.
12A2278	MS2-141Y	\$0.15	\$0.12	\$0.10	\$0.09	\$0.08
12A2279	MS3-141Y	.17	.13	.11	.10	.09
12A2280	MS4-141Y	.17	.13	.11	.10	.09
12A2281	MS5-141Y	.17	.13	.11	.10	.09
12A2282	MS6-141Y	.17	.13	.11	.10	.09
12A2283	MS7-141Y	.19	.15	.13	.11	.10
12A2284	MS8-141Y	.19	.15	.13	.11	.10
12A2285	MS9-141Y	.19	.15	.13	.11	.10
12A2286	MS10-141Y	.21	.17	.14	.12	.11
12A2287	MS12-141Y	.23	.19	.16	.13	.12
12A2288	MS14-141Y	.26	.20	.17	.14	.13
12A2289	MS16-141Y	.27	.22	.18	.15	.14
12A2290	MS18-141Y	.27	.22	.18	.15	.14
12A2291	MS20-141Y	.29	.23	.20	.16	.15

## ADAPTER SOLDER TERMINALS FOR JONES BARRIER STRIPS

"3/4 W" lugs for wiring above the chassis. "Y" lugs for wiring below the chassis. Avg. shpg. wt. 3 Oz. per 100.

Stock No.	Type	Fit Strip	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1434	3/4 W	140	\$0.10	\$0.09	\$0.08	\$0.07	\$0.06
12A1435	3/4 W	141	.10	.09	.08	.07	.06
12A1436	3/4 W	142	.12	.10	.09	.08	.07
12B1329	Y	140	.10	.09	.08	.07	.06
12B1330	Y	141	.10	.09	.08	.07	.06
12B1331	Y	142	.12	.10	.09	.08	.07

## JONES NO. 2000 TERMINAL STRIPS

Terminal .019" brass, tin-plated—all terminals insulated from terminal. Insulation: phenolic, base and mounting brackets steel, cadmium plated. Terminals spaced on  $\frac{1}{4}$ " centers.

Stock No.	Terms. & Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1582	2-2002	\$0.10	\$0.09	\$0.08	\$0.07	\$0.06
12A1583	3-2003	.12	.11	.09	.08	.07
12A1584	4-2004	.13	.12	.10	.09	.08
12A1585	5-2005	.13	.12	.10	.09	.08
12A1586	6-2006	.15	.13	.11	.10	.09
12A1460	7-2007	.15	.13	.11	.10	.09
12A1587	8-2008	.18	.14	.12	.11	.10
12A1461	9-2009	.19	.15	.13	.12	.11
12A1588	10-2010	.19	.15	.13	.12	.11
12A1462	11-2011	.21	.17	.15	.13	.12
12A1589	12-2012	.21	.17	.15	.13	.12
12A1463	13-2013	.24	.20	.17	.14	.13

## CINCH-JONES SOLDERING LUG STRIPS



Phenolic strips handy for all types of circuit wiring. Solder coated steel lugs are spaced on  $\frac{3}{8}$ " centers. Mtg. feet have .140" dia. holes. Types 1, 2, 3, have one mtg. foot and no ground lug; type 4 has two mtg. feet with no ground lug; type 5 has one mtg. foot and one ground lug; type 6 has two mtg. ft. and two ground lugs. "No. of lugs" below refers to total number of lugs on a strip, including ground lugs.

PRICES BELOW ARE FOR ONE TYPE ONLY—NOT ASSORTED

Stock No.	Fig.	Cinch No.	No. of Lugs	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1256	1	51F	1	\$0.06	\$0.05	\$0.04	\$0.03	\$0.02
12A1257	2	51T	1	.07	.06	.05	.04	.03
12A1260	2	52T	2	.08	.07	.06	.05	.04
12A1263	2	53T	3	.09	.08	.07	.06	.05
12A1261	3	51	1	.06	.05	.04	.03	.02
12A1267	3	52	2	.06	.05	.04	.03	.02
12A1264	3	53E	3	.07	.06	.05	.04	.03
12A1265	3	54B	4	.07	.06	.05	.04	.03
12A1266	4	53	3	.07	.06	.05	.04	.03
12A1269	4	54	4	.07	.06	.05	.04	.03
12A1270	4	55	5	.08	.07	.06	.05	.04
12A1273	4	56	6	.08	.07	.06	.05	.04
12A1262	5	51A	2	.06	.05	.04	.03	.02
12A1268	5	52A	3	.06	.05	.04	.03	.02
12A1275	5	53F	4	.07	.06	.05	.04	.03
12A1282	5	54C	5	.07	.06	.05	.04	.03
12A1274	6	53A	5	.07	.06	.05	.04	.03
12A1257	6	54A	6	.07	.06	.05	.04	.03
12A1283	6	55A	7	.08	.07	.06	.05	

# CINCH JONES CONNECTORS



## CINCH JONES SERIES 300 CONNECTORS

Small in size with good separation between contacts, black molded phenolic insulation rated at 730 RMS volts. 302 numbers below have  $\frac{3}{32}$ " dia. case, all others are rectangular. Plug prongs  $\frac{1}{32}$ " wide x  $\frac{3}{32}$ " thick.

24 to 33 contact connectors have special long polarizing pin for correct insertion. UL and CSA listed. Average shipping weight 4 ozs.

WHEN ORDERING SPECIFY BOTH B-A STOCK NUMBER AND JONES TYPE NUMBER

### 300 SERIES PLUGS & SOCKETS CABLE TYPE WITH CLAMP

Cont.	Jones No.	① PLUGS — Stk. No. 12A179				
		1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
2	P302CCT	\$0.62	\$0.49	\$0.41	\$0.33	\$0.31
3	P303CCT	.68	.58	.45	.36	.34
4	P304CCT	.72	.58	.48	.38	.36
6	P306CCT	.82	.66	.55	.43	.41
8	P308CCT	.89	.71	.60	.47	.45
10	P310CCT	.98	.78	.66	.53	.49
12	P312CCT	1.06	.85	.71	.57	.54
15	P315CCT	1.41	1.13	.95	.75	.72
18	P318CCT	1.65	1.32	1.10	.88	.83
21	P321CCT	1.97	1.58	1.32	1.05	1.00
24	P324CCT	2.31	1.84	1.55	1.24	1.17
27	P327CCT	2.65	2.11	1.76	1.41	1.34
30	P330CCT	2.98	2.38	1.99	1.59	1.50
33	P333CCT	3.30	2.64	2.20	1.76	1.67

Cont.	Jones No.	② SOCKETS — Stk. No. 12A179				
		\$0.64	\$0.52	\$0.43	\$0.34	\$0.33
2	S302CCT	.70	.56	.46	.37	.35
3	S303CCT	.74	.60	.49	.39	.38
4	S304CCT	.86	.68	.57	.45	.43
6	S306CCT	.96	.76	.64	.52	.48
8	S308CCT	1.08	.87	.72	.58	.55
10	S310CCT	1.23	.98	.81	.65	.62
12	S312CCT	1.57	1.26	1.05	.83	.79
15	S315CCT	1.78	1.42	1.19	.95	.90
18	S318CCT	2.11	1.69	1.41	1.12	1.07
24	S324CCT	2.44	1.96	1.63	1.30	1.24
27	S327CCT	2.77	2.22	1.85	1.48	1.40
30	S330CCT	3.13	2.50	2.09	1.67	1.59
33	S333CCT	3.45	2.76	2.31	1.84	1.75

### CHASSIS TYPE WITH ANGLE BRACKETS

Cont.	Jones No.	⑤ PLUGS — Stk. No. 12A180				
		\$0.30	\$0.24	\$0.21	\$0.17	\$0.16
2	P302AB	.34	.27	.23	.19	.18
3	P303AB	.38	.30	.26	.21	.20
4	P304AB	.47	.38	.32	.25	.24
6	P306AB	.54	.43	.36	.29	.28
8	P308AB	.61	.48	.41	.33	.31
10	P310AB	.68	.55	.45	.36	.34
12	P312AB	.92	.73	.61	.48	.46
15	P315AB	1.10	.88	.73	.59	.56
18	P318AB	1.38	1.10	.92	.73	.70
24	P324AB	1.67	1.34	1.11	.89	.85
27	P327AB	1.96	1.57	1.31	1.04	.99
30	P330AB	2.25	1.79	1.49	1.20	1.13
33	P333AB	2.52	2.02	1.68	1.34	1.28

Cont.	Jones No.	④ SOCKETS — Stk. No. 12A180				
		\$0.32	\$0.26	\$0.22	\$0.18	\$0.17
2	S302AB	.40	.32	.27	.22	.21
3	S303AB	.46	.32	.24	.22	.21
4	S304AB	.51	.40	.34	.27	.26
6	S306AB	.61	.48	.41	.33	.31
8	S308AB	.71	.57	.48	.38	.35
10	S310AB	.85	.67	.57	.45	.42
12	S312AB	1.07	.86	.71	.57	.54
15	S315AB	1.23	.98	.82	.66	.62
18	S318AB	1.51	1.22	1.01	.80	.77
24	S324AB	1.80	1.44	1.21	.96	.92
27	S327AB	2.09	1.67	1.39	1.11	1.06
30	S330AB	2.40	1.92	1.60	1.28	1.22
33	S333AB	2.68	2.14	1.78	1.42	1.36

### SERIES 202 PLUGS AND SOCKETS

Polarized, nickel plated two-conductors, ideal for mike and speaker connections. Knurled nut screws on to matching unit for positive locking connection. P202CCT mates with S202CCT-THR and S202B. S202CCT mates with P202B. Specify Stk. No. 12A181 and Jones No. when ordering.

Jones No.	Type	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
① P202CCT	Cable Plug	\$1.09	\$0.86	\$0.73	\$0.58	\$0.54
② S202CCT	Cable Socket	1.11	.88	.74	.59	.56
③ S202CCT-THR	Cable Socket	1.46	1.18	.98	.77	.74
④ S202B	Chassis Type Socket	1.32	1.06	.88	.70	.67
⑤ P202B	Chassis Type Plug	1.39	1.14	.96	.76	.72

### CINCH SCREW TERMINAL STRIPS WITH SOLDER LUGS

Solder coated brass terminals. .136" dia. mtg. holes. Strips with 1 to 6 lugs are of  $\frac{1}{8}$ " phenolic; 7 to 10 terminals mounted on  $\frac{3}{32}$ " phenolic. Ends of screws captivated to prevent removal. Terminals spaced on  $\frac{3}{16}$ " centers. Avg. shpg. wt. 1 oz.

Stock No.	Type & Lugs	Mtg. Centers	1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
12A1509	17-1	$\frac{7}{8}$ "	\$0.10	\$0.08	\$0.07	\$0.063	\$0.053
12A1510	17-2	$1\frac{1}{8}$ "	.11	.10	.08	.074	.063
12A1511	17-3	$1\frac{3}{8}$ "	.13	.11	.10	.084	.074
12A1512	17-4	$2\frac{1}{8}$ "	.17	.14	.12	.105	.095
12A1513	17-5	$2\frac{5}{8}$ "	.19	.15	.13	.116	.105
12A1514	17-6	$3\frac{1}{8}$ "	.23	.19	.16	.137	.126
12A1515	17-7	$3\frac{1}{2}$ "	.28	.22	.19	.158	.147
12A1516	17-8	$3\frac{3}{4}$ "	.29	.24	.20	.168	.158
12A1517	17-9	$4\frac{1}{8}$ "	.36	.27	.23	.189	.179
12A1518	17-10	$4\frac{1}{4}$ "	.38	.29	.25	.20	.189

### CABLE TYPE WITH CLAMP-LOCKING

Cont.	Jones No.	⑤ PLUGS WITH LATCH — No. 12A183				
		1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
2	P302CCT-L	\$0.77	\$0.62	\$0.52	\$0.41	\$0.38
3	P303CCT-L	.83	.67	.56	.44	.42
4	P304CCT-L	.88	.70	.59	.46	.44
6	P306CCT-L	.98	.78	.65	.52	.49
8	P308CCT-L	1.04	.83	.70	.56	.53
10	P310CCT-L	1.13	.91	.76	.61	.58
12	P312CCT-L	1.22	.97	.81	.65	.62

Cont.	Jones No.	⑥ SOCKETS WITH KEEPER — No. 12A183				
		\$0.79	\$0.64	\$0.54	\$0.42	\$0.40
2	S302CCT-K	.86	.68	.57	.45	.43
3	S303CCT-K	.90	.72	.60	.47	.45
4	S304CCT-K	1.01	.80	.67	.54	.51
6	S306CCT-K	1.11	.89	.74	.60	.57
8	S308CCT-K	1.24	.99	.82	.66	.63
10	S310CCT-K	1.38	1.10	.92	.73	.70
12	S312CCT-K					

### CHASSIS TYPE WITH FLUSH PLATE MOUNTING

Cont.	Jones No.	⑦ PLUGS — Stk. No. 12A199				
		\$0.51	\$0.40	\$0.34	\$0.27	\$0.26
2	P302-FP	.54	.43	.36	.29	.27
3	P303-FP	.58	.45	.38	.31	.29
4	P304-FP	.67	.54	.44	.35	.34
6	P306-FP	.73	.59	.49	.39	.37
8	P308-FP	.80	.64	.54	.43	.41
10	P310-FP	.88	.70	.59	.46	.44
12	P312-FP					

Cont.	Jones No.	⑧ SOCKETS — Stk. No. 12A199				
		\$0.53	\$0.42	\$0.35	\$0.28	\$0.26
2	S302-FP	.55	.44	.37	.29	.28
3	S303-FP	.60	.47	.40	.32	.30
4	S304-FP	.70	.56	.46	.37	.35
6	S306-FP	.80	.64	.54	.43	.41
8	S308-FP	.91	.72	.61	.48	.46
10	S310-FP	1.03	.82	.69	.56	.53
12	S312-FP					

### CHASSIS TYPE SOCKET — Stk. No. 12A182 With Deep Bracket

Cont.	Jones No.	⑨ CHASSIS TYPE SOCKET — Stk. No. 12A182 With Deep Bracket				
		\$0.76	\$0.61	\$0.52	\$0.41	\$0.39
2	S302DB	.76	.61	.52	.41	.39
3	S303DB	.81	.65	.55	.43	.41
4	S304DB	.92	.73	.61	.48	.46
6	S306DB	1.02	.81	.68	.55	.52
8	S308DB	1.26	1.00	.83	.67	.64
10	S310DB					
12	S312DB					

### SERIES 400 CONNECTORS



400 Series. Heavy duty polarized connectors for high power applications. Rated 1200 RMS volts at 15 amps. Cadmium plated brass. Plug prongs are  $\frac{1}{4}$ " wide and  $\frac{1}{8}$ " thick. CCT rectangular caps are black wrinkle with fibre lining. Average shpg. wt. 6 ozs. Specify B-A Stock No. and Jones Type No. when ordering.

### CABLE TYPE WITH CLAMP

Cont.	Jones No.	① PLUG — Stk. No. 12A176				
		1-24 Each	25-49 Each	50-99 Each	100-249 Each	250-499 Each
2	P402CCT	\$1.23	\$0.98	\$0.81	\$0.65	\$0.62
4	P404CCT	1.39	1.11	.93	.74	.70
6	P406CCT	1.60	1.28	1.07	.86	.81
8	P408CCT	1.77	1.41	1.18	.95	.90
10	P410CCT	2.04	1.63	1.36	1.09	1.03
12	P412CCT	2.23	1.78	1.48	1.19	1.12

Cont.	Jones No.	② SOCKET — Stk. No. 12A176				
		\$1.38	\$1.10	\$0.92	\$0.73	\$0.70
2	S402CCT	1.65	1.32	1.10	.88	.83
4	S404CCT	1.92	1.54	1.28	1.02	.97
6	S406CCT	2.18	1.75	1.46	1.16	1.11
8	S408CCT	2.46	1.97	1.65	1.32	1.25
10	S410CCT	2.74	2.18	1.82	1.46	1.39
12	S412CCT					

### CHASSIS TYPE WITH ANGLE BRACKET

Cont.	Jones No.	⑤ PLUG — Stk. No. 12A177				
		\$0.73	\$0.59	\$0.49	\$0.39	\$0.37
2	P402AB	.90	.72	.60	.47	.45
4	P404AB	1.06	.85	.71	.57	.54
6	P406AB	1.23	.98	.81	.65	.62
8	P408AB	1.38	1.10	.93	.74	.70
10	P410AB	1.55	1.24	1.03	.82	.78
12	P412AB					

Cont.	Jones No.	④ SOCKET — Stk. No. 12A177				
		\$0.86	\$0.68	\$0.57	\$0.45	\$0.43
2	S402AB	1.10	.88	.73	.59	.56
4	S404AB	1.35	1.08	.91	.72	.69
6	S406AB	1.60	1.28	1.06	.85	.80
8	S408AB	1.84	1.47	1.23	.98	.93
10	S410AB	2.09	1.67	1.39	1.11	1.06
12	S412AB					

B-A'S HUGE STOCK OF ELECTRONIC COMPONENTS AND NEW MODERN FACILITIES ASSURE YOU OF FAST EFFICIENT SERVICE.

# Mueller CLIPS, SOLDERLESS TERMINALS

## MUELLER CLIPS AND INSULATORS

SCREW OR LUG CONNECTIONS—NO SOLDER NEEDED. TYPES MARKED WITH ASTERISKS (\*) ARE COPPER. OTHERS ARE OF STEEL (Cadmium-Plated). "S" AFTER TYPE NUMBER INDICATES SCREW CONNECTORS. †SOLDER TYPE. Standard Packages of 10 and 100 Clips. Shpg. wt. 2 oz.



### ① 34 SERIES MICRO-GATOR CLIPS

Has microscopic tip, no larger than a pin head. Makes firm connection on printed circuits, transistors and other tiny terminals. use No. 36 Insulators listed below.

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12A1069	†34	1 1/2"	3/32"	.06	.041	.036	.034
12A1070	*†34C	1 1/2"	3/32"	.08	.053	.046	.043

### ② "MINI-GATOR" CLIP

For testing miniature and sub-miniature equipment.

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12B1035	†30	1 1/4"	3/16"	\$0.07	\$0.05	\$0.043	\$0.041
12B1036	*†30C	1 1/4"	3/16"	.09	.061	.053	.05

### ③ ALLIGATOR CLIPS (Fit Banana Plugs)

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12B1026	†60	2"	3/16"	.08	.054	.047	.044
12A1006	60S	2"	3/16"	.09	.063	.054	.051
12A1007	*60CS	2"	3/16"	.14	.096	.082	.078

### ④ INSULATED ALLIGATOR CLIPS

Red or Black shank. Fits banana plugs.

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12A1008	60HS	2 1/2"	3/16"	.13	.089	.076	.072
12A1009	*60CHS	2 1/2"	3/16"	.17	.118	.101	.096

### ⑤ ALL-INSULATED ALLIGATOR CLIPS

Protects against shocks and shorts in compact equipment. Red or black.

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12A1638	63	2"	1/4"	.19	.13	.11	.105
12A1639	*63C	2"	1/4"	.22	.15	.13	.124



### ⑥ "70" SERIES ALLIGATOR CLIPS

Utilizes cord strain relief ears to prevent breakage of lead wire.

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12A923	†70	1 1/2"	3/16"	\$0.07	\$0.045	\$0.038	\$0.036
12A924	70S	1 1/2"	3/16"	.08	.054	.046	.044
12A925	*70CS	1 1/2"	3/16"	.12	.085	.073	.069

### ⑦ CROCOOILE CLIP

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12A1010	85	2 3/8"	3/16"	.11	.076	.065	.062
12B1041	*85C	2 3/8"	3/16"	.21	.148	.127	.121
12A1011	†85T	2 3/8"	3/16"	.27	.187	.16	.152

### ⑧ GENERAL PURPOSE TEST CLIPS

Needle type makes a quick temporary contact through insulation.

Stock No.	Type	Lgth.	Description	1-9	10-99	100-499	500 up
12B1022	50-C	2 1/4"	Needle Type	\$0.32	\$0.22	\$0.188	\$0.179
12B1023	51-C	2 1/4"	Less Needle	.22	.153	.131	.124

### ⑨ BATTERY CLIPS WITH GRIP TEETH—LEAD PLATED

Stock No.	Type	Amps.	Lgth.	Open	1-9	10-99	100-499	500 up
12A671	24A	25	2 7/8"	3/4"	\$0.26	\$0.177	\$0.152	\$0.145
12A672	21A	50	4"	1 1/4"	.46	.32	.276	.26

### ⑩ TEST CLIPS WITH MESH TEETH

Stock No.	Type	Lgth.	Open	1-9	10-99	100-499	500 up
12A1000	45	1 1/2"	3/16"	.09	.061	.052	.05
12A1001	*45C	1 1/2"	3/16"	.15	.107	.092	.087
12A1002	†48B	2"	1/2"	.13	.09	.078	.074
12A1079	*48C	2"	1/2"	.20	.139	.119	.113
12A1003	†27	20	2 3/4"	5/8"	.16	.107	.092
12A1004	*†27C	40	2 3/4"	5/8"	.27	.187	.16
12A1078	†25C	75	3"	3/4"	.49	.34	.29

### ⑪ FLEXIBLE VINYL INSULATORS ONLY

Red or black, specify colors wanted.

Stk. No.	Type	For Clip	1-9	10-99	100-499	500 up
12A674	23	21A	\$0.41	\$0.287	\$0.246	\$0.234
12A673	26	24A	.23	.16	.138	.131
12A1016	29	27, 27C	.17	.12	.104	.098
12B1037	32	30, 30C	.05	.033	.029	.027
12A1071	36	34, 34C	.05	.033	.029	.027
12A1014	47	45, 45C	.07	.05	.042	.04
12A1015	49	48B, 50C, 51C	.10	.069	.059	.056
12B1064	62	60S, 60CS, 60, 70S, 70CS, 70	.06	.04	.033	.031
12A1074	72	70, 70-S, 70-CS	.06	.04	.033	.031
12A1017	87	85, 85-T, 85C	.07	.05	.042	.04

### GRAYHILL INSULATED TEST CLIP

Completely insulated (including hinge pin), may be placed side-by-side without shorting. Terminal and tip of silver plated brass.

No.	Type	Red or Black	Your Choice	Each
No. 12C517				\$1.40



## SOLDERLESS CRIMP-ON TERMINALS

Choice of Flared vinyl insulated for easy wire insertion and to accommodate wire insulation or non-insulated type. Electrolytically pure copper. Multiple barrel serrations guarantee full contact with wire. Electro-annealed for extra life. Average wt. 8 ounces per 100.

### ① RING TONGUE TERMINALS

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
22-18	4	12A2312	\$0.50	\$2.16	\$15.55	12A2316	\$1.08	\$4.47	\$33.05
22-18	6	12A1804	.50	2.16	15.55	12A1811	1.08	4.47	33.05
22-18	8	12A2313	.50	2.16	15.55	12A2317	1.08	4.47	33.05
22-18	10	12A1805	.50	2.16	15.55	12A1812	1.08	4.47	33.05
22-18	1/4	12A1806	.72	2.96	21.30	12A1813	1.40	5.79	42.80
22-18	3/8	12A1807	.72	2.96	21.30	12A1814	1.40	5.79	42.80
16-14	6	12A1808	.54	2.26	16.25	12A1815	1.08	4.47	33.05
16-14	8	12A2314	.54	2.26	16.25	12A2318	1.08	4.47	33.05
16-14	10	12A1809	.54	2.26	16.25	12A1816	1.08	4.47	33.05
12-10	8	12A2315	.75	3.14	22.55	12A2319	1.40	5.79	42.80
12-10	10	12A1810	.75	3.14	22.55	12A1817	1.40	5.79	42.80

### ② SPADE TONGUE TERMINALS

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
22-18	4-6	12A1818	.50	2.16	15.55	12A1823	1.08	4.47	33.05
22-18	8	12A2320	.50	2.16	15.55	12A2323	1.08	4.47	33.05
22-18	10	12A1819	.50	2.16	15.55	12A1824	1.08	4.47	33.05
16-14	4-6	12A1820	.53	2.26	16.25	12A1825	1.08	4.47	33.05
16-14	8	12A2321	.53	2.26	16.25	12A2324	1.08	4.47	33.05
16-14	10	12A1821	.53	2.26	16.25	12A1826	1.08	4.47	33.05
12-10	8	12A2322	.75	3.14	22.55	12A2325	1.40	5.79	42.80
12-10	10	12A1822	.75	3.14	22.55	12A1827	1.40	5.79	42.80

### ③ FLANGED SPADE TERMINALS

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
22-18	4-6	12A1828	.50	2.16	15.55	12A1832	1.08	4.47	33.05
22-18	8	12A2326	.50	2.16	15.55	12A2328	1.08	4.47	33.05
22-18	10	12A1829	.50	2.16	15.55	12A1833	1.08	4.47	33.05
16-14	6	12A1830	.54	2.26	16.25	12A1834	1.08	4.47	33.05
16-14	8	12A2327	.54	2.26	16.25	12A2329	1.08	4.47	33.05
16-14	10	12A1831	.54	2.26	16.25	12A1835	1.08	4.47	33.05

### ④ BUTT CONNECTORS

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
22-18		12A1836	.56	2.38	17.10	12A1839	1.28	5.28	39.05
16-14		12A1837	.56	2.38	17.10	12A1840	1.28	5.28	39.05
12-10		12A1838	1.01	4.22	30.40	12A1841	1.72	7.21	53.35

### ⑤ MALE QUICK DISCONNECTS — PUSH-ON TYPE

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
18-14	.187	12A1842	.58	2.48	17.85	12A1844	1.15	4.80	35.50
18-14	.250	12A1843	.58	2.48	17.85	12A1845	1.15	4.80	35.50

### ⑥ FEMALE QUICK DISCONNECTS — PUSH-ON TYPE

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
18-14	.187	12A1846	.63	2.64	21.65	12A1848	1.15	4.79	35.50
18-14	.250	12A1847	.63	2.64	21.65	12A1849	1.15	4.79	35.50

### ⑦ NYLON INSULATED CLOSED-END CONNECTORS

Wire Size	Stud Size	Non-insulated Stock No.	20 For	100 For	1000 For	Insulated Stock No.	20 For	100 For	1000 For
20-14						12A1850	.89	3.70	26.60
16-10						12A1851	1.28	5.41	38.95

## TAP-OFF TERMINAL

Pierces through insulation of 10 to 18 stranded wire for solid electrical contact. Installs with pliers or crimp tool. Plug in terminal supplied to fit tap-off terminal.

Simplest way to connect trailer lights to your auto, or use anywhere to make a connection to existing wiring

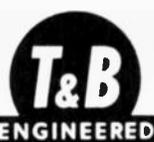
Completely insulated. Shpg. wt. 6 pcs.—1 oz. **99c**

No. 12A1852, 6 Sets For **\$9.90**

100 Sets For **\$9.90**

## BINDING POSTS

Stock No.	Type	100 For	500 For	1000 For
① H. H. Smith No. 266. 1/2" dia. bakelite head, 8/32 brass threaded insert. Red or Black.		100	500, Per	1000, Per
No. 12A619. Each		24c	For \$20.40	100 \$18.00 1000 \$16.00
② H. H. Smith No. 386. 5-way connection insulated post of molded Butyrate. 1/2" dia. Mounts in 1/4" hole. 15 amp.				
12B742-Black Choice		100	500, Per	1000, Per
12B743-Red Each		25c For	\$21.25 100	\$18.75 1000 \$16.67



# STA-KON TERMINALS & TY-RAPS

## THOMAS & BETTS SNAP ON TERMINALS



Stock No.	T & B Numbers	Tab Size	Wire Size	Insulation	Prices Per 100		
					100-999	1000-4999	5000 Up
① 12A2120	RB14-250F(RB250)	.25X.032	16-14	Nylon	\$8.50	\$5.76	\$4.42
② 12A2121	B1RA-250F(RA257)	.25X.032	22-18	Vinyl	7.25	4.99	3.83
③ 12A2122	14RB-250F(RB257)	.25X.032	16-14	Vinyl	7.25	4.99	3.83
④ 12A2123	10RC-250F(RC257)	.25X.032	12-10	Vinyl	9.00	6.36	4.88
⑤ 12A2124	A18-250(A250)	.25X.032	22-18	None	4.63	4.05	3.11
⑥ 12A2125	B14-250(B250)	.25X.032	16-14	None	4.63	4.05	3.11
⑦ 12A2126	C10-250F(C250)	.25X.032	12-10	None	8.38	8.11	6.22
⑧ 12A2127	B14-250A(B252G)	.25X.032	20-14	None	5.38	4.13	3.17
⑨ 12A2128	A18-205(A205)	.205X.02	22-18	None	6.63	5.41	4.15
⑩ 12A2129	B14-205(B205)	.205X.02	16-14	None	6.63	5.41	4.15
⑪ 12A2130	A18-187(A187)	.187X.032	22-18	None	6.63	5.41	4.15
⑫ 12A2131	B14-187(B187)	.187X.032	16-14	None	6.63	5.41	4.15
⑬ 12A2132	A18-110F(A10)	.110X.032	22-18	None	7.25	5.80	4.45
⑭ 12A2133	B14-110F(B10)	.110X.032	16-14	None	7.25	5.80	4.45
⑮ 12A2134	14RB-250T	.25X.032	16-14	Vinyl	7.50	6.00	.....



## THOMAS & BETTS STA-KON TERMINALS

### ① LOCKING SPADE TERMINALS—FIT BARRIER STRIPS

Stock No.	T & B Number	Wire Size	Stud Size	Prices Per 100		
				100-999	1000-4999	5000 Up
12A2357	A18-6FL(A221)	22-18	6	\$ 4.13	\$ 3.34	\$ 2.56
12A2358	A18-8FL(A224)	22-18	8	4.13	3.34	2.56
12A2359	A18-10FL(A225)	22-18	10	4.13	3.34	2.56
12A2360	B14-6FL(B221)	16-14	6	4.13	3.34	2.56
12A2361	B14-8FL(B223)	16-14	8	4.13	3.34	2.56
12A2362	B14-10FL(B225)	16-14	10	4.13	3.34	2.56

### ② NYLON SELF INSULATING FORK—MS25036

12A2176	RA18-6F(RA1103)	22-18	6	7.63	5.33	4.09
12A2177	RA18-8F(RA1123)	22-18	8	7.63	5.33	4.09
12A2178	RA18-10F(RA1153)	22-18	10	7.63	5.33	4.09
12A2179	RB14-6F(RB1113)	16-14	6	7.63	5.33	4.09
12A2180	RB14-8F(RB1123)	16-14	8	7.63	5.33	4.09
12A2181	RB14-10F(RB1153)	16-14	10	7.63	5.33	4.09

### ③ VINYL INSULATED FORK

12A2182	18RA-6F(RA1167)	22-18	6	5.50	3.66	2.81
12A2183	18RA-8F(RA1147)	22-18	8	5.50	3.66	2.81
12A2184	18RA-10F(RA1157)	22-18	10	5.50	3.66	2.81
12A2185	14RB-6F(RB647)	16-14	6	5.50	3.66	2.81
12A2186	14RB-8F(RB657)	16-14	8	5.50	3.66	2.81
12A2187	14RB-10F(RB297)	16-14	10	5.50	3.66	2.81
12A2188	10RC-8F(RC1147)	10-12	8	7.13	4.69	3.80
12A2189	10RC-10F(RC1157)	10-12	10	7.13	4.69	3.80
12A2190	10RC-14F(RC1167)	10-12	1/4	8.50	5.23	4.01

### ④ NON-INSULATED FORK

12A2191	A18-6F(A116)	22-18	6	3.38	2.35	1.81
12A2192	A18-8F(A114)	22-18	8	3.38	2.35	1.81
12A2193	A18-10F(A29)	22-18	10	3.38	2.35	1.81
12A2194	A18-14F(A71F)	22-18	1/4	4.50	3.18	2.44
12A2195	B14-6F(B64)	20-16	6	3.38	2.35	1.81
12A2197	B14-8F(B65)	20-16	8	3.38	2.35	1.81
12A2198	B14-10F(B115)	20-16	10	3.38	2.35	1.81
12A2199	C10-6F(C33F)	16-10	6	4.75	3.42	2.82
12A2200	C10-8F(C114)	16-10	8	4.75	3.42	2.82
12A2201	C10-10F(C115)	16-10	10	4.75	3.42	2.82
12A2202	C10-14F(C116)	16-10	1/4	5.38	3.90	2.99

### ⑤ NON-INSULATED RING TERMINALS

12A2141	A18-4(A7)	22-18	4	3.38	2.35	1.81
12A2142	A18-6(A85)	22-18	6	3.38	2.35	1.81
12A2143	A18-8(A86)	22-18	8	3.38	2.35	1.81
12A2144	A18-10(A87)	22-18	10	3.38	2.35	1.81
12A2145	A18-14(A71)	22-18	1/4	4.50	3.18	2.44
12A2146	B14-4(B132)	20-14	4	3.38	2.35	1.81
12A2147	B14-6(B133)	20-14	6	3.38	2.35	1.81
12A2148	B14-8(B86)	20-14	8	3.38	2.35	1.81
12A2149	B14-10(B87)	20-14	10	3.38	2.35	1.81
12A2150	C10-6(C33)	16-10	6	4.75	3.42	2.82
12A2151	C10-8(C77)	16-10	8	4.75	3.42	2.82
12A2152	C10-10(C26)	16-10	10	4.75	3.42	2.82
12A2153	C10-14(C71)	16-10	1/4	5.38	3.90	2.99

### ⑥ NYLON INSULATED RING TERMINALS—MS 25038

12A2155	R222-4(R243)	26-22	4	7.63	5.29	4.06
12A2156	R222-6(R263)	26-22	6	7.63	5.29	4.06
12A2157	R222-8(R283)	26-22	8	7.63	5.29	4.06
12A2159	RA18-4(RA323)	22-16	4	7.63	5.33	4.09
12A2160	RA18-6(RA853)	22-16	6	7.63	5.33	4.09
12A2161	RA18-8(RA863)	22-16	8	7.63	5.33	4.09
12A2164	RB14-4(RB1323)	16-14	4	7.63	5.33	4.09
12A2165	RB14-6(RB853)	16-14	6	7.63	5.33	4.09
12A2166	RB14-8(RB863)	16-14	8	7.63	5.33	4.09
12A2167	RB14-10(RB873)	16-14	10	7.63	5.33	4.09

### ⑦ VINYL INSULATED RING TERMINALS

12A2168	18RA-4(RA77)	22-18	4	5.50	3.66	2.81
12A2169	18RA-6(RA857)	22-18	6	5.50	3.66	2.81
12A2170	18RA-8(RA867)	22-18	8	5.50	3.66	2.81
12A2171	18RA-10(RA877)	22-18	10	5.50	3.66	2.81
12A2172	14RB-4(RB1327)	16-14	4	5.50	3.66	2.81
12A2173	14RB-6(RB857)	16-14	6	5.50	3.66	2.81
12A2174	14RB-8(RB867)	16-14	8	5.50	3.66	2.81
12A2175	14RB-10(RB877)	16-14	10	5.50	3.66	2.81

### ⑧ NON-INSULATED BUTT CONNECTORS

12A2203	2A18(AA2)	22-18	4.13	2.80	2.15
12A2204	2B14(BB2)	20-14	4.13	2.80	2.15
12A2205	2C10(CC2)	16-10	5.63	4.05	3.11

### ⑨ INSULATED BUTT CONNECTORS

12A2206	2RA-18(RAA21)	22-18	6.75	4.93	3.78
12A2207	2RB-14(RBB21)	16-14	6.75	4.93	3.78
12A2208	2RC-10(RCC21)	12-10	9.63	6.44	4.94

### INSULATED BUTT SPLICE—MS 25181

12A2483	2RA(RAA23)	22-18	29.50	21.50	16.49
12A2484	2RBB(RBB23)	16-14	29.50	21.50	16.49
12A2485	2RCC(RCC23)	12-10	41.38	33.23	25.50

### ⑩ WRISTLOCK DISCONNECTS

12A2330	B14-D(B23)	20-14	6.00	5.49	4.21
12A2331	T209W	Insulator	3.63	2.90	.....

### ⑪ STA-KON WIRE JOINTS

12A2332	RB44(RB4)	2 #20	3.25	2.62	2.01
12A2333	RC55(RC6)	3 #16	5.25	4.45	3.42



## STA-KON CRIMP TOOL

Stakes both plain and insulated terminals, splices, and wire joints, #22 to #10 wire. Cuts up to #10 bolt. • Measures bolt lengths. • Chases and cleans threads. • Cuts wires. #37A3210. T&B #WT-100M. Wt. 1 lb. Net Each .....\$6.20

## STA-KON KIT

Contains 100 each A18-10, B14-10, 50 type C10-10 ring terminals and one W111M installing tool. A practical universal combination. Wt. 3 lb. T&B #20. 37A3209. Each .....\$12.70

## THOMAS & BETTS TY-RAPS



### TY-RAP SELF-LOCKING

Stock No.	T & B Numbers	Max. Dia.	Prices Per 100		
			100-999	1000-4999	5000 Up
① 12A2135	TY523M(TY23M)	5/8"	\$3.88	\$2.45	\$2.32
② 12A2136	TY525M(TY25M)	1 3/4"	5.38	3.50	3.15
③ 12A2137	TY535M(TY35M)	1 3/4"	6.13	4.00	3.60

### TY-RAP TWIST TYPE

④ 12A2138	TY503(TY3)	5/8"	3.13	1.70	1.65
⑤ 12A2139	TY505(TY5)	1 3/4"	4.50	2.80	2.66
⑥ 12A2140	TY515(TY15)	1 3/4"	5.13	3.10	2.95

### HEAVY DUTY REUSABLE LASHING TIE

No. 12A2486. TY5409(TY409) 1 3/4 to 3 3/4" Dia. 25.13 17.90 17.30

## WALDORF CRIMP TOOL & TERMINAL KITS

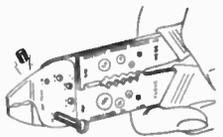
Non-Insulated Terminal Kit contains 214 assorted terminals—flanged spade, ring tongue, hook tongue, quick disconnects, spade tongue, butt connectors. With crimp tool in compartmented plastic box. Wt. 3 lbs. No. 37A3030. Type K-170. Each .....\$9.85

Insulated Terminal Kit. 138 assorted insulated terminals—spade tongue, butt connectors, quick disconnects, ring tongue, flanged spade. With Crimp Tool in compartmented plastic box. No. 37A3031. Type K-180. Shpg. wt. 2 1/2 lbs. Each .....\$12.05

## AMP HAND TOOL DOES 5 JOBS!

# \$4.95

CRIMPS TERMINALS!  
SHEARS BOLTS! STRIPS,  
CUTS AND GAUGES WIRE!



The ideal tool for TV, Radio and electrical work. Crimps terminals to wire ends for clean and true connections—no solder needed. Shears screws, bolts sizes 10-24, 10-32, 8-32, 6-32, 4-40 to desired length without thread damage. Strips and cuts wire sizes 22 to 10 fast, clean. Stripper notches also serve as Wire gauge. Wt. 1 lb.

37A3028. Type 49B35-1. For Non-insulated Terminals. Each .....\$4.95  
37A3029. Type 47100-1. For Insulated Terminals. Each .....\$4.95

## GRAYHILL BINDING POSTS, TEST CLIPS



Illus. Fig.	Stock No.	Mfg. No.	Mtg. Hole	Lgth.	Description	1-499	500 up
(A)	12B495	29-100	1/4"	1.48	Spring loaded. Brass. Red or Black	\$0.45	\$0.34
(B)	12B499	29-101	.....	1.8	Adapts Banana Jack to Spring loaded post. Red or Black	.60	.45
(C)	12C505	29-104	3/8"	1.48	For chassis mtg. ins. Red or Black	.60	.45
(D)	12C507	2-0	1/4"	1.59	Panel mounted spring Test Clips	.25	.....
(E)	12B508	2-1	.....	2.07	Banana adapter spring Test Clip	.40	.....
(F)	12B509	2-4	3/8"	1.56	Ins. Mtg. Type	.40	.....

Request Prices On Larger Quantities

# KNOBBS AND DIALS

## ALCO FLUTED ALUMINUM KNOBS



Solid machined aluminum with fluted sides. Fit 1/4" shafts. 2 Allen hex screws. Natural knobs have black pointer line. Black anodized knobs have white pointer line.

Stock No.	Alco No.	Size Dia.	High	Color	1-99 Each	100-249 Each	250-499 Each	500-999 Each
12A2363	K500A	.500	.625	Natural	\$0.45	\$0.39	\$0.37	\$0.35
12A2364	K500B	.500	.625	Black	.45	.39	.37	.35
12A2365	K700A	.750	.625	Natural	.50	.44	.41	.38
12A2366	K700B	.750	.625	Black	.50	.44	.41	.38
12A2367	K900A	.937	.625	Natural	.55	.49	.47	.45
12A2368	K900B	.937	.625	Black	.55	.49	.47	.45
12A2369	K1250A	1.250	.750	Natural	.65	.59	.56	.53
12A2370	K1250B	1.250	.750	Black	.65	.59	.56	.53

## ALCO KNURLED ALUMINUM KNOBS



Solid machined aluminum with diamond shaped knurl on side. 2 Allen hex screws. Fit 1/4" shaft. Natural knobs have black pointer line. Black anodized knobs have white pointer line.

Stock No.	Alco No.	Size Dia.	High	Color	1-99 Each	100-249 Each	250-499 Each	500-999 Each
12A2371	KD500A	.500	.625	Natural	\$0.55	\$0.49	\$0.47	\$0.45
12A2372	KD500B	.500	.625	Black	.55	.49	.47	.45
12A2373	KD700A	.750	.625	Natural	.60	.54	.51	.48
12A2374	KD700B	.750	.625	Black	.60	.54	.51	.48
12A2375	KD900A	.937	.625	Natural	.70	.63	.60	.57
12A2376	KD900B	.937	.625	Black	.70	.63	.60	.57
12A2377	KD1250A	1.250	.750	Natural	.85	.77	.73	.69
12A2378	KD1250B	1.250	.750	Black	.85	.77	.73	.69
12A2379	KR-1 Reducer Adapts 1/4" Knob to 1/8" Shaft. Knob covers Entire Reducer				.06	.05	.045	.042

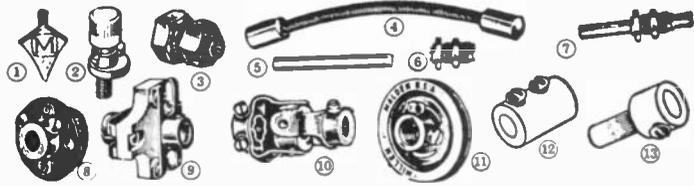
## J. W. MILLER FRONT PANEL DIALS



High quality panel dials with black crackle finish on the exterior metal work while the calibration plate is finished in a light gray color with the calibration scale 0-100 printed in red. The self calibration scales are in black and a supply of numerals for use on these scales are included to give a professional finish.

Stk. No.	Miller No.	Tuning Ratio	W.	H.	Net Each
12A2381	MD-5	9 to 1	6 1/4"	4 1/2"	\$8.25
12A2382	MD-6	9 to 1	7 1/2"	4 7/8"	9.00
12A2383	MD-7	36 to 1 & 6 to 1	6 1/4"	4 1/2"	15.00
12A2384	MD-8	36 to 1 & 6 to 1	7 1/2"	4 7/8"	15.00

## DIAL ACCESSORIES, 1/4" COUPLINGS, SHAFTS



High quality American made 1/4" shaft accessories. "M" items are Miller; "J" Johnson; "N" National.

Fig.	Stk. No.	Description	Net Ea.	Fig.	Stk. No.	Description	Net Ea.
①	12A1910	M10021 Marker	\$0.35	⑦	12A10	Bearing W/6" Shaft	\$0.61
②	12A1911	M10050 Dial Lock	.69	⑧	12A1361	NTX10 Ins. Cplg.	.79
③	12A1912	M10061 Shaft Lock	.55	⑨	12A1360	J250 Steatite Cplg.	1.35
④	12A11	John. 3" Flex Shaft	.85	⑩	12A1960	M39005 Univ. Joint	.99
⑤	12A12	John. 6" Flex Shaft	.99	⑪	12A1961	M39016 Hi Volt Cplg.	.85
⑥	12A5	Brass 1/4x12" Shaft	.59	⑫	12A1184	Br 1/4x1/4" Coupling	.29
⑦	12A7	Ins. 1/4x12" Shaft	.59	⑬	12B1185	Br 1/4x3/8" Coupling	.29
⑧	12A1359	John. Shaft Bearing	.25	⑭	12A1196	Br Extend 1 3/8" L 1/4x1/4"	.39
⑨	12A9	Bearing W/3" Shaft	.49	⑮	12B1197	Br Extend 1 3/8" L 3/8x1/4"	.39

## NATIONAL RIGHT-ANGLE DRIVE



National TYPE RAD No. 12A1919. Net Each.....

For coupling 1/4" shafts. Zinc housing and brass gears. Overall length 4 3/4". 1/4" shaft extends 2 5/8". Ideal for driving condensers, etc. Wt. 6 oz. **\$4.31**

## POLYSTYRENE SHEETS, TUBING, RODS



Polystyrene is excellent for high frequency insulation. It is an ideal material for coil forms and insulators because of its very low loss factor. Does not deteriorate with age. Aside from radio applications many attractive articles may be built of this material.

RODS 12" LENGTH				TUBING—12" LENGTH			
Stock No.	O.D.	Wt. Ozs.	1-9 Each	Stock No.	O.D.	I.D.	Wt. Ozs.
12B300	1/4"	1/4	\$0.05	12B212	1/4"	1/4"	1/4
12B301	3/8"	1/4	.07	12B309	3/8"	3/8"	1/4
12B219	1/4"	1/4	.12	12B213	3/8"	1/2"	1/4
12B302	3/8"	1	.18	12B214	1/2"	3/8"	1/4
12B220	3/8"	1	.26	12B310	5/8"	1/2"	1/2
12B221	1/2"	1 1/2	.48	12B215	3/4"	5/8"	1/2
12B304	5/8"	2	.72	12B216	1"	7/8"	1 1/2
12B222	3/4"	3	1.00	12B218	2"	1 3/4"	5 1/2
12B223	1"	6	1.90				

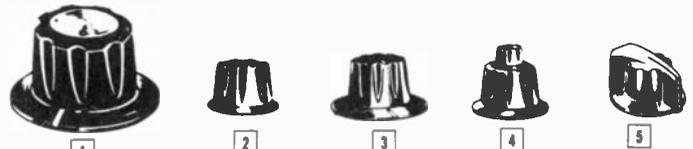
  

POLYSTYRENE CEMENT			
No.	17A1307 GC No.	37—2 Oz.	Net Each
			.55c

12" X 12" SHEETS			
No.	12A2311	8	\$4.15
	12A1908	13	5.50
	12A1909	22	8.15

## DAVIES INSTRUMENT AND CONTROL KNOBS



Dress up knobs for panels and equipment. Precision molded of tough black plastic, gloss finished. All have 1/4" hole and set screw. Figure ① has spun silver inlay. Figure ③ for dual shaft concentric controls. Has white filled pointer line.

Fig.	Stock No.	Type No.	Size	1-24 Each	25-99 Each	100-499 Each
①	12A1216	1913	1 1/8" D x 5/8" H	\$0.49	\$0.43	\$0.37
②	12A1217	1925	1 1/4" D x 3/4" H	.37	.33	.28
③	12A1218	1930	1 1/2" D x 7/8" H	.52	.45	.39
④	12A1229	1940	2" D x 1 1/2" H	.63	.55	.48
⑤	12A1222	1910	3/4" D x 1/2" H	.19	.17	.14
⑥	12B60	1913D	1 1/8" D x 5/8" H	.30	.26	.22
⑦	12A1224	1920	1 1/4" D x 3/4" H	.24	.21	.18
⑧	12A1226	1930	1 1/2" D x 7/8" H	.26	.22	.19
⑨	12B61	1940D	2" D x 1 1/2" H	.44	.39	.33
⑩	12A1228	Dual	3/4" x 1 1/4"	.45	.39	.33
⑪	12B62	1919	1 1/4" Lg. x 5/8" H	.27	.23	.20

## DAVIES MOLDED KNOBS



Set screw knobs for 1/4" shaft. Fig. ① has brass insert.

Fig.	Stk. No.	Davies No.	Size	1-24	25-99	100-499
①	12A34	4100	1 1/8" x 3/8" H	\$0.28	\$0.24	\$0.21
②	12A35	4102	1 3/8" x 3/4" H	.33	.29	.25
③	12A36	4103	2 3/8" x 7/8" H	.47	.41	.35
④	12A1227	1400	1 1/4" x 1 1/2" H	.10	.09	.07
⑤	12A1236	1450	1 1/4" x 1 1/2" H	.10	.09	.07
⑥	12B433	2110	1 3/8" Lever	.24	.21	.18



Lustrous black molded bakelite with white filled pointer line. †Except 12A44 is Red. For 1/4" shaft. \*Indicates brass bushing insert. All are set screw type.

Fig.	Stk. No.	Size	1-24	25-99	100-499
①	12A1203	3/4"	\$0.18	\$0.16	\$0.13
②	12B26	1 1/8"	.14	.12	.10
③	12B27	1 1/2"	.17	.15	.13
④	12A919	2 1/8"	.18	.14	.12
⑤	12A920	1 3/4"	.13	.12	.10
⑥	12A692	1"	.13	.12	.10
⑦	12A693	1"	.16	.14	.12
⑧	12A45	1 1/4"	.11	.09	.08
⑨	12A44†	1 1/4"	.13	.10	.09
⑩	12B1033*	1 1/4"	.16	.14	.12
⑪	12A43	2"	.19	.17	.15
⑫	12B1034*	2"	.24	.21	.18

## BLACK CONTROL KNOBS

WITH WHITE POINTER LINE  
PLASTIC HOLE WITH SET SCREW

Stock No.	Description	1-4 Each	5-9 Each	10-24 Each
12A2397	1 1/2" Dia. Black—1/4" Shaft. Ohmite 5150	30c	26c	20c
12A2398	1" Dia. Black—1/4" Shaft	30c	26c	20c
12A2399	3/4" Dia. Black—1/8" Shaft. Ohmite 5151	30c	26c	20c



NATIONAL SOLID ALUMINUM KNOBS 1/4" SHAFTS

Single 6-32 slotted head set screw in types HG and HGF; 8-32 in type HRB: 2—4-40 Allen head screws at 90° in type HRM. Shp. wt. 1 oz.

Stock No.	Mfg.	Description	1-49 Each	50-99 Each	100-499 Each
12A2393	HRM	Satin Chrome black arrow, 1/2x5/8"	\$0.96	\$0.91	\$0.86
12A2394	HRB	Polished 1 1/4" Lg. x 1/2" H.	.85	.82	.59
12A2395	HG	Polished 3/8" x 5/8" H., 1 1/4" flange, Red Line	.60	.57	.54
12A2396	HGF	Like HG, with flat sides, red dot	.75	.71	.68

## CLOCK-RADIO KNOB KIT



**99c**  
Kit of 25

- SAVES TIME TRYING TO FIND EXACT DUPLICATES
- REPLACE ALL KNOBS WITH NEW MATCHING SET

Handy Kit of 25 Miniature Knobs. 5 each white, black, red, brown and clear. Fit 1/8" split shafts on clocks, electric range controls, clock radios, etc. 3/32" dia., 1/2" long. Import Savings. **99c**  
No. 12A2380. Per Kit of 25. Special. Shpg. wt. 1 lb.

# VARIABLE CAPACITORS, ELECTRONIC HARDWARE



## ① HAMMARLUNO MC

Steatite insulated midget condenser. 1/4" shaft extends 3/8" to the front and also 3/8" to rear for ganging. Mounts on base or with single hole through the panel. Air gap .024". \*Semi-circular plates (straight line capacity) all others are mid line plates. Avg. shpg. wt. 7 oz.

Stock No.	Mfr's No.	Max. Mmf.	Min. Mmf.	Net Each
12A1920	*MC20S	20	5.5	\$2.40
12A1921	*MC50S	50	6.5	2.86
12A1922	*MC100S	100	8.3	2.95
12A1923	*MC140S	140	10	3.15
12A1924	MC250M	250	12	3.70
12A1925	MC325M	320	13.5	4.20

## ③ HAMMARLUNO APC MICROS

Particularly adaptable to S.W. Steatite base. Air gap .015". Screwdriver adjustment. Shpg. wt. 4 oz.

Stock No.	Mfr's No.	Max. Mmf.	Min. Mmf.	Net Each
12A1933	APC-25	25	3.0	\$1.20
12A1934	APC-50	50	3.9	1.35
12A1935	APC-100	100	5.5	1.60
12A1936	APC-140	140	6.7	1.80

## SHAFT TYPE APC

APC-B has 1/4 inch shaft, otherwise exact same size as APC illustrated above. Shaft length 1/2".

Stock No.	Mfr's No.	Max. Mmf.	Min. Mmf.	Net Each
12A1937	APC-25B	25	3	\$1.30
12A1938	APC-50B	50	3.9	1.40
12A1939	APC-100B	100	5.5	1.70
12A1940	APC-140B	140	6.7	1.90

## ② HAMMARLUNO HF MICROS

Very efficient in critical high frequency circuits. Steatite insulation. Equipped with special wide front bearing. Plate spacing .015. \*Have .045 spacing. Shpg. wt. 6 oz.

Stock No.	Mfr's No.	Max. Mmf.	Min. Mmf.	Net Each
12A1926	HF-15	17.5	2.8	\$1.30
12A1927	HF-35	36	3.2	1.40
12A1928	HF-50	52	3.7	1.60
12A1929	HF-100	102	5.3	1.80
12A1930	HF-140	142	6.3	1.95
12A1931	*HF-15-X	15	3.6	1.30
12A1932	*HF-30-X	30	5.2	1.70

## JOHNSON SUB-MIDGETS

Type M. Steatite end plate only 5/8" x 3/4". 3/8" dia. slotted shaft extending 1/4" from bushing and mount in 1/4" hole. Rigidly soldered rotor and stator assemblies. Plate spacing .017, rating 750 volt RMS. Avg. wt. 6 oz.



## ③ BUTTERFLY—TYPE M

Stock No.	Mfg. No.	Cap. Mmf. Min.-Max.	Net Each
12A1944	160-205	1.8 5.1	1.30
12A1945	160-208	2.2 8	1.45
12A1946	160-211	2.7 10.8	1.80

## ① SINGLE SECTION—TYPE M

Stock No.	Mfg. No.	Cap. Mmf. Min.-Max.	Net Each
12A1947	160-102	1.5 5.0	\$0.90
12A1948	160-104	1.8 8.7	.95
12A1949	160-107	2.3 14.2	1.00
12A1950	160-110	2.7 19.6	1.10

## CERAMIC TRIMMERS AND PADDERS

With low loss ceramic base and clear mica dielectric.



Type A: 3/4"x3/8" Type B: 3/8"x1/8"

No.	ARCO	MMFD.	Fig.	Each	10 Ea.	100 Ea.
12A1951	461	3-30	A	\$0.33	\$0.29	\$0.20
12A1952	463	9-180	A	.42	.38	.26
12A1953	464	25-280	A	.45	.40	.27
12A1954	466	80-480	A	.57	.51	.34
12A1955	303	65-340	B	.69	.62	.41
12A1956	306	275-970	B	.87	.78	.52

## HIGH VOLTAGE GRID CAPS

For TV replacement. With 10" wire leads.

No.	12A2352	3/8" Cop.	Choice Each	49c
No. <th>12A2353</th> <th>1/4" Cop.</th> <th></th> <th></th>	12A2353	1/4" Cop.		

## GRID & PLATE CAPS

Stock No.	Fig.	Top	Hdwe.	NET
12A1349	3/8" National	1		10c
12A1356	3/8" Ins. Millen	3		49c
12A2354	3/8" Ins. Millen	3		49c
12A1357	Comb. 3/8-1/4"	4		25c

## JOHNSON INSULATORS



## THRU-PANEL TYPE

Furnished with nickelled brass hardware for mounting in panels up to 1/2" thick. Dimension shown is height above panel. Average weight 12 ozs. Steatite except type 45, Porcelain.

Stk. No.	Type	Fig.	Top	Hdwe.	NET
12A262	40	①	1 1/4"	10-32	55c
12A266	44	①	5/8"	6-32	39c
12A267	45	②	1 3/8"	10-32	74c

## STAND-OFF TYPE

Types 65, 66, have Cnumbr steel bases. "J" after type Number indicates Jack Type. Average wt. 12 oz.

Stk. No.	Type	Fig.	Hgt.	Hdwe.	NET
12A249	20	①	1 1/2"	10-32	43c
12A250	20J	①	1 1/2"	7-32	48c
12A251	22	①	1"	8-32	26c
12A256	65	①	1 3/8"	10-32	44c
12A258	66	①	2 3/4"	1/4-20	99c

## STEATITE CONES

Stk. No.	Type	Hgt.	Bat.	Hdwe.	NET
12A271	500	3/8"	5/8"	6-32	26c
12A272	501	1"	3/4"	8-32	35c
12A274	502	1 1/2"	1"	8-32	65c
12A276	503	2"	1 1/8"	10-32	96c

## STEATITE FEED-THRU BUSHINGS

Stk. No.	Type	Fig.	Hgt.	Dia.	NET
12A248	55	⑤	1/4"	3/4"	37c

## GROMMETS, PLUGS AND BUMPERS



## ① SNAP HOLE PLUGS — NICKEL PLATED

Stock No.	G-C No.	Fits Hole Dia.	Each	100 For	500 For	1000 For
12A1448	1711A	1/4"	\$0.05	\$2.84	\$12.47	\$22.67
12A1335	1711	3/8"	.08	3.22	14.17	25.75
12A1336	1712	1/2"	.08	3.91	17.17	31.21
12A1337	1713	5/8"	.08	4.20	18.47	33.59
12A1338	1714	3/4"	.09	4.23	18.62	33.86
12A1343	1714A	7/8"	.10	5.88	25.86	47.02
12A1344	1715A	1"	.10	5.63	24.79	45.07
12A1339	1715B	1 1/8"	.14	7.52	33.10	60.18
12A1340	1715	1 1/4"	.15	8.20	36.10	65.64

## ② SCREEN PLUG

Stk. No.	Cinch	Screen Ventilator plug snaps in	1" diameter hole.
12B200	41V	1-24 \$0.17	25-49 \$0.11
		50-99 \$0.11	100-249 \$0.10
			250-499 \$0.09

## ③ VINYL GROMMETS

Soft like rubber.	Greater resistance to age, oils, chemicals.	Stock No.	G-C No.	Mtg. Hole	I.D. Hole	10 For	100 For	500 For	1000 For	5000 Per M
12A1759	7030	1/4"	1/8"	3/16"	\$0.23	\$1.16	\$ 4.86	\$ 9.38	\$ 8.44	
12A1760	7032	3/8"	3/8"	1/2"	.26	1.28	6.36	11.55	10.40	
12A1761	7034	3/8"	1/2"	5/8"	.34	1.70	6.91	12.56	11.30	
12A1762	7036	1/2"	3/8"	1/2"	.37	1.86	7.45	13.53	12.18	
12A1763	7038	5/8"	1/2"	3/4"	.58	2.91	11.80	21.41	19.27	

## ④ RUBBER GROMMETS

Stock No.	G-C No.	Mtg. Hole	I.D. Hole	10 For	100 For	500 For	1000 For
12A1497	1041-2	1/4"	1/8"	\$0.28	\$1.42	\$ 6.24	\$11.34
12A1483	1041	3/8"	3/8"	.32	1.62	7.08	12.87
12A1484	1042	3/8"	1/2"	.43	2.12	9.32	16.94
12A1485	1043	3/8"	3/4"	.48	2.42	10.63	19.21
12A1486	1043-1	5/8"	1/2"	.72	3.65	16.09	29.25

## ⑤ RUBBER BUTTON BUMPERS

Stock No.	G-C No.	O.D.	Hole	High	10 For	100 For	500 For	1000 For
12A1449	7596	3/8"	3/8"	3/8"	\$0.50	\$2.70	\$11.86	\$21.56
12A1450	7597	1/2"	1/4"	1/4"	0.50	2.70	11.86	21.56
12A1451	7598	5/8"	3/8"	3/8"	0.50	2.70	11.86	21.56

## ⑥ RUBBER FEET

Stock No.	G-C No.	O.D.	Takes Screw	High	10 For	100 For	500 For	1000 For
12A1447	1075B	3/8"	#4 or 6	3/8"	\$0.33	\$1.68	\$ 7.39	\$13.43
12A1444	.....	5/8"	#6 or 8	3/8"	.50	2.98	13.12	23.86

## RUBBER GROMMETS

High quality, tough black rubber. Approx. 50 pieces in popular sizes to fit holes from 1/4 to 3/8" dia. in metal panels. Big Savings! No. 18A509. Per Assortment, Special. . . . . 69c

ASST. APPROX. 50



## KEYSTONE ALUMINUM BATTERY HOLDERS

Stock No.	Keystone No.	"AAA" MINIATURE CELL HOLDERS	1-19 Holds No. of Cells	Fig.	Each	20-99 Each	100 Up Each
12A2013	137	1	①	\$0.23	\$0.21	\$0.18	
12A2014	138	2	②	.38	.34	.30	
12A2015	139	1	③	.23	.21	.18	
12A2016	140	2	④	.38	.34	.30	
12A2335	171	3	⑤	.49	.44	.36	
12A2336	182	4	⑥	.64	.57	.51	
12A2337	189	2	⑦	.45	.36	.33	
12A2338	191	3	⑧	.49	.44	.39	
12A2339	192	4	⑨	.64	.54	.51	
12A2340	193	6	⑩	.93	.81	.75	
12A2017	173	1	⑪	.30	.26	.24	
12A2018	174	2	⑫	.38	.34	.30	
12A2341	187	3	⑬	.45	.36	.33	
12A2342	185	2	⑭	.45	.36	.33	
12A2343	195	3	⑮	.49	.44	.39	
12A2344	196	4	⑯	.64	.54	.51	
12A2345	197	6	⑰	.93	.81	.75	
12A2021	175	1	⑱	.30	.26	.24	
12A2022	176	2	⑲	.38	.34	.30	
12A2346	190	3	⑳	.49	.44	.39	
12A2023	186	2	㉑	.46	.37	.34	
12A2347	199	3	㉒	.50	.45	.40	
12A2348	200	4	㉓	.65	.55	.52	
12A2349	201	6	㉔	.95	.85	.78	
12A2350	205	6	㉕	.95	.85	.78	
12A2351	203P	1	㉖	.44	.36	.30	
12A2019	177	1	㉗	.30	.26	.24	

# THE FINEST ELECTRONIC HARDWARE

## MACHINE SCREWS



**BRASS NICKEL PLATED**  
Bright finish — Rustproof Non-Magnetic.

**STEEL NICKEL PLATED**  
Bright finish — Rust-proof. Greater strength.

Please indicate B-A Stock No. and Quantity desired when ordering.  
Weights, average per 100: 4-36, 4-40—3 oz.; 6-32—4 oz.; 8-32—6 oz.; 10-32—9 oz.; 1/4"—2 lbs.

### ① BINDER HEAD

4-36 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2070	1/4	.85	1.45	6.42	11.18	9.70
12A2071	3/8	.71	1.58	6.95	12.08	10.50
12A2072	1/2	.80	1.77	7.81	13.57	11.80

6-32 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2073	1/4	.72	1.61	7.05	12.26	10.66
12A2074	3/8	.78	1.73	7.57	13.18	11.46
12A2075	1/2	.86	1.92	8.46	14.72	12.80
12A2076	3/4	1.05	2.34	10.28	17.88	15.55
12A2077	1	1.14	2.54	11.19	19.46	16.92

8-32 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2078	1/4	.96	2.13	9.41	16.33	14.20
12A2079	3/8	1.04	2.31	10.19	17.71	15.40
12A2080	1/2	1.19	2.64	11.64	20.24	17.60
12A2081	3/4	1.38	3.06	13.48	23.44	20.38
12A2082	1	1.59	3.54	15.61	27.14	23.60

### ② ROUND HEAD

2-56 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2083	1/4	.41	.90	3.97	6.90	6.00
12A2084	1/4	.43	.96	4.23	7.36	6.40
12A2085	3/8	.56	1.25	5.46	9.49	8.25

4-38 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2086	1/4	.65	1.45	6.42	11.18	9.70
12A2087	3/8	.71	1.58	6.95	12.08	10.50
12A2088	1/2	.80	1.77	7.81	13.57	11.80
12A2089	1	.84	1.86	8.20	14.26	12.40

6-32 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2090	1/4	.62	1.38	6.08	10.55	9.20
12A2091	3/8	.72	1.61	7.05	12.26	10.66
12A2092	1/2	.78	1.73	7.57	13.18	11.46
12A2093	3/4	.86	1.92	8.46	14.72	12.80
12A2094	1	1.05	2.34	10.28	17.88	15.55
12A2095	1	1.14	2.54	11.19	19.46	16.92
12A2096	2	1.66	3.69	16.27	28.29	24.80

8-32 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2097	3/8	1.04	2.31	10.19	17.71	15.40
12A2098	1/2	1.19	2.64	11.64	20.24	17.60
12A2099	1	1.59	3.54	15.61	27.14	23.60

10-32 Nickel Plated BRASS						
Brass Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2100	3/8	1.16	2.58	11.37	19.78	17.20
12A2101	1/2	1.22	2.70	11.90	20.70	18.00
12A2102	1	1.71	3.80	16.73	29.18	25.38

4-40 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A1859	1/4	.30	.66	2.89	5.01	4.36
12A1860	3/8	.31	.69	3.01	5.24	4.56
12A1861	1/2	.35	.77	3.40	5.91	5.14

6-32 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A1862	1/4	.31	.66	3.01	5.24	4.56
12A1863	3/8	.32	.71	3.12	5.41	4.70
12A1864	1/2	.35	.78	3.43	5.95	5.17
12A1865	3/4	.36	.81	3.60	6.26	5.44
12A1866	1	.40	.89	3.91	6.80	5.91

8-32 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A1867	1/4	.37	.83	3.67	6.37	5.54
12A1868	3/8	.39	.86	3.77	6.56	5.70
12A1869	1/2	.51	1.13	4.97	8.63	7.50
12A1870	3/4	.54	1.20	5.29	9.20	8.00
12A1871	1	.59	1.32	5.82	10.12	8.80

2-56 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2106	1/4	.30	.66	2.89	5.01	4.36
12A2107	1/4	.30	.66	2.89	5.01	4.36
12A2108	3/8	.31	.69	3.01	5.24	4.56

4-40 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2109	1/4	.30	.66	2.89	5.01	4.36
12A2110	3/8	.31	.69	3.01	5.24	4.54
12A2111	1/2	.35	.77	3.40	5.91	5.14
12A2112	1	.41	.92	4.04	7.02	6.10

6-32 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A1873	1/2	.31	.69	3.05	5.29	4.60
12A1874	3/8	.32	.71	3.12	5.41	4.70
12A1875	1/2	.35	.78	3.43	5.95	5.17
12A1877	1	.40	.89	3.91	6.80	5.91
12A1878	2	.87	1.93	8.46	15.39	13.90

8-32 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A1879	3/8	.39	.86	3.77	6.56	5.70
12A1880	1/2	.51	1.13	4.97	8.63	7.50
12A1881	1	.59	1.32	5.82	10.12	8.80
12A1882	1 1/2	.82	1.83	8.10	14.08	12.24
12A1883	2	.97	2.15	9.46	16.45	14.30

10-32 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2113	3/8	.43	.95	4.14	7.19	6.25
12A2114	1/2	.56	1.25	5.50	9.55	8.30
12A2115	3/4	.63	1.40	6.14	10.67	9.28
12A2116	1	.78	1.74	7.67	13.36	11.82

1/4-20 Nickel Plated STEEL						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2103	1	1.16	2.59	12.19	21.20	18.15

③ Oval Head (Rack Screws) N.P. Steel						
Steel Stock No.	Lgth. Inch.	20 For	100 For	500 For	1000 For	5000 Per M
12A2104	6-32-1/2	.35	.77	3.38	5.87	5.10
12A2105	8-32-1/2	.43	.96	4.23	7.36	6.40
12A2118	10-32-1/2	.47	1.05	4.66	8.10	7.04
12A2119	10-32-1/2	.54	1.20	5.30	9.22	8.02



## BRASS CADMIUM PLATED MOUNTING SPACERS

Ideal for use in raising sub panels, transformers, spacing switch decks, mounting sockets and other components, etc.

### NON-THREADED

① 1/4" O.D.—Hole for #8 Screw						
Stk. No.	Lgth.	Each	10 For	100 For	500 For	1000 For
12A1173	1/4"	\$.05	\$.37	\$3.30		
12A1174	3/8"	.07	.49	4.35		
12A1175	1/2"	.08	.58	5.28		
12A1176	3/4"	.09	.69	6.30		
12A1177	1"	.10	.79	7.20		

THREADED FOR 6-32 SCREW						
① Round 1/4" O.D.						
Stk. No.	Lgth.	Each	10 For	100 For	500 For	1000 For
12A1469	1/4"	\$.07	\$.43	\$3.90		
12A1470	3/8"	.08	.54	4.95		
12A1471	1/2"	.09	.66	6.00		
12A1472	3/4"	.11	.92	8.40		
12A1473	1"	.13	1.14	10.40		

② 1/4" Hexagonal						
Stk. No.	Lgth.	Each	10 For	100 For	500 For	1000 For
12A1386	1/4"	\$.07	\$.46	\$4.20		
12A1387	3/8"	.08	.58	5.25		
12A1388	1/2"	.09	.69	6.30		
12A1389	3/4"	.12	1.01	9.20		
12A1390	1"	.14	1.23	11.20		



### ① HEXAGON NUTS

**BRASS NICKEL PLATED**  
Rustproof, Non-Magnetic. Avg. Wt. Pkg. 100, 6 oz.

Stock No.	Size Inches	20 For	100 For	500 For	1000 For	5000 Per M
12A2027	2-56-3/8	.57	1.26	5.55	9.86	8.40
12A2028	4-36-1/4	.67	1.49	6.58	11.39	9.90
12A2029	6-32-3/8	.67	1.49	6.58	11.39	9.90
12A2030	6-32-1/2	.74	1.65	7.28	12.65	11.00
12A2031	8-32-1/4	.67	1.49	6.58	11.39	9.90
12A2032	10-32-3/8	.74	1.65	7.28	12.65	11.00

**STEEL NICKEL PLATED**  
Rustproof—greater strength

Stock No.	Size Inches	20 For	100 For	500 For	1000 For	5000 Per M
12A2049	2-56-3/8	.36	.81	3.60	6.26	5.44
12A1884	4-40-1/4	.34	.75	3.30	5.73	4.98
12A1885	6-32-1/4	.34	.75	3.30	5.73	4.98
12A1886	6-32-3/8	.39	.86	3.77	6.56	5.70
12A1887	8-32-3/8	.39	.86	3.77	6.56	5.70
12A2050	10-32-3/8	.51	1.13	4.95	8.60	7.48
12A2051	1/4-20-3/8	.54	1.20	5.29	9.20	8.00

### ② MOUNTING NUTS

**NICKEL PLATED STEEL**  
Rotary switch type is 3/8" wide. All others are 1/2" wide.

Stock No.	Type	Thrd.	20 For	100 For	500 For	1000 For
12A1888	Rot.S.	1/4-32	1.12	2.49	10.98	19.88
12A1889	Vol.C.	3/8-27	.84	1.87	8.23	14.97
12A1890	Pil.L.	3/8-27	1.89	4.20	18.46	33.59
12A1891	Tog.S.	1/4-32	1.03	2.29	10.09	18.33

### ③ KNURLED NUT

BRASS NICKEL PLATED, Wt. 100, 1 lb.						
Stock No.	Size	20 For	100 For	500 For	1000 For	5000 Per M
12A2209	Tog.S. 1/4-32	1.35	2.79	12.31	21.39	

### ④ ACORN NUTS

BRASS NICKEL PLATED, Wt. 100, 1 lb.						
Stock No.	Size	20 For	100 For	500 For	1000 For	5000 Per M
12A2052	6-32	1.58	3.52	15.48	28.13	
12A2053	8-32	1.68	3.			

# ELECTRONIC HARDWARE & ALPHA TUBING

## M.N. NEWMAN HELI-TUBE

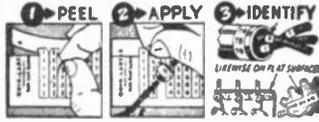
Spiral cut clear polyethylene tubing for cabling of harness wiring. Allows taps or lead off at any point. Retains original form and may be reused if desired. 1/4" O.D. expands for acids up to 2" in dia. Not affected by solvents, acids or alkalis. Operating temp.—105° to 215° F. Cables Bundles From 3/4" to 2" Diameter. 1/4" O.D. Wall Thickness .045". Wt. 100' 1 lb.



2W300. Per Ft.....	7c	100 Ft.....	\$5.40	1000 Ft.....	\$45.00
Cables Bundles From 3/4" to 4" Diameter. 1/2" O.D. Wall Thickness .062". Wt. 100' 4 lb.					
2W301. Per Ft.....	14c	100 Ft.....	\$12.00	1000 Ft.....	\$112.00

## PRESSURE SENSITIVE LABELS

Codes wires, leads, circuits, relays, and other parts fast and cheap. Easy to use, they stick-quick without moistening. No. 2A8033. Card of numbers 1 to 33, 6 of each.



No. 2A8034. Card of Letters—A to E, 7 strips of each letter, 6 letters per strip. Choice Per Card, Each..... **22c** Lots of 25 Each..... **20c** Lots of 100 Each..... **16c**



**1 CABLE CLAMPS**  
Heavy gauge steel, nickel plated. 3/8" wide with No. 6 mounting hole. Fits cable up to size shown.  
No. I.D. 10 For 100 For 1000 For  
12A1303 1/2" \$0.24 \$1.54 \$12.26  
12A1304 1/4" .22 1.43 11.46

**2 NYLON CABLE CLAMPS**  
Hold their shape under severest stress. Stands temp. of —60 to 300 degrees F., do not support combustion. All are 3/8" wide except 1/4" and larger are 1/2" wide—white color.  
No. I.D. 10 For 100 For 1000 For  
12A1098 1/8" \$0.36 \$2.44 \$19.53  
12A1081 3/8" .38 2.58 20.63  
12A1099 1/4" .42 2.83 22.68  
12A1255 3/8" .45 3.11 24.89  
12A1345 3/8" .48 3.28 26.22  
12A1082 1/4" .51 3.47 27.80  
12A1346 1/2" .54 3.69 29.53  
12A1083 3/8" .82 5.54 44.34  
12A1347 5/8" .87 5.82 46.62  
12A1084 3/4" .99 6.61 54.87

**3 ANGLE BRACKETS**  
Brass, Nickel Plated  
12A1314. 1 1/2" x 1 1/2" x 3/4" Wide.  
10 For..... **40c** 100 For..... **\$ 2.00**  
1000 For..... **\$16.00**  
12A1315. 2 1/2" x 2 1/2" x 3/8" Wide.  
10 For..... **75c** 100 For..... **\$ 4.00**  
1000 For..... **\$23.00**

**4 G-C BRASS EYELETS**  
Specify B-A No. 12A2355 & G-C No.  
G.C. Shank Length 100 1000  
No. Dia. Under Head For For  
7251 .087 1/8" \$0.37 \$2.94  
7252 .087 3/8" .49 3.92  
7253 .087 1/2" .61 4.89  
7257 .123 3/8" .68 5.46  
7260 .123 1/2" .71 5.73  
7261 .123 3/4" .71 5.73  
7269 .182 1/45" .42 3.36

**5 SPADE MTG. BOLTS**  
Cadmium Plated. 6-32 screw end.  
No. 12A1302. 10 For..40c 100 For..\$2.40  
1000 For..... **\$20.00**

## WALDOM PHENOLIC WIRE NUTS

Solderless screw-on connectors for securely joining stripped ends of wire together. All are UL approved except (\*). Rated 300 volts except (+) 300-600 V. (1000 V. enclosed in fixtures).

Stock No.	Wire Combinations		25 For	100 For	1000 For
	Minimum	Maximum			
12A1853*	2-#24	2-#18	27c	\$0.85	\$7.30
12A1854†	2-#18	3-#16	50c	1.65	13.85
12A1855†	1-#18 & 1-#16	5-#16	51c	1.65	14.40
12A1856	1-#14 & 1-#18	2-#12 & 1-#18	55c	1.75	15.25
12A1857	1-#14 & 1-#16	3-#10	96c	3.20	27.70

KIT OF 169 WIRE NUTS above in compartmented plastic box. No. 12A1858. Waldom K210. Shpg. wt. 1 lb. Per Kit..... **\$2.74**

Stk. No.	Type	Lgth.	Hole	100	1000	Stk. No.	Type	Lgth.	Hole	100	1000
12A1286	A	3/8"	8	\$1.36	\$9.75	12A1294	H	3/4"	10	\$1.20	\$9.60
12A1287	B	3/8"	8	1.34	9.62	12A1296	I	1 1/2"	10	2.00	16.00
12A1288	C	3/8"	8	1.34	9.62	12A1297	L	1 1/4"	1/4	2.50	20.00
12A1289	D	3/8"	8	1.20	9.60	12A1298	J	4 1/2"	4	1.28	10.20
12A1290	E	1 1/2"	6	1.05	7.50	12A1299	J	4 1/2"	6	1.28	10.20
12A1293	F	1 1/2"	Rivet	1.16	8.25	12A1300	J	7/8"	8	1.28	10.20
12A1291	G	1 1/2"	6	1.16	8.25						

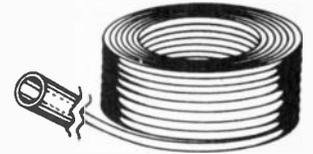
## FAHNESTOCK CONNECTORS

Positive contact clips. \*Bronze. All others are Brass. Avg. shpg. wt. 5 oz., per 100.

Illus. Fig.	Stock No.	Mfg. Type	Lng.	Wd.	Max. Wire	Mtg. Hole	10 For	100 For	1000 For
(1)	12A1089	2	1"	3/8"	#10	#8	\$0.25	\$ 2.00	\$18.00
(1)	12A1090	10	3/4"	3/8"	#14	#8	.20	1.80	16.20
(1)	12A1091	5	1 1/2"	3/8"	#10	#8	.36	3.40	
(2)	12A927	*15	1 1/2"	3/8"	#16	#4	.20	1.84	16.60
(3)	12A1093	18	1 1/2"	3/8"	#14	#6	1.50	12.00	
(4)	12A1095	45	3/4"	3/8"	#12	#6	.35	3.15	27.00

## ALPHA PVC-105 PLASTIC TUBING

For all electronic, electrical and aircraft applications. Conforms to MIL-1-631D. ASTM-D876 and D922 specs. High dielectric strength, non-flammable and resistant to oils and corrosion. Flexible from —20°C to +105°C. Stocked in clear only. Available on special order in Black, White, Yellow, Red, Green colors. Minimum special order amount \$25.00. Wt. of Size 1 is 1.2 lb.



Stock No.	Size	I.D.	25' For	50' For	100' For	250' For	500' For	1000' For
2A8002	24	.022	\$0.81		\$2.43		\$8.80	\$13.00
2A8003	22	.027	.81		2.44		8.85	13.10
2A8004	20	.034	.83		2.49		9.05	13.50
2A8005	19	.038	.85		2.55		9.30	13.50
2A8006	18	.042	.86		2.58		9.40	13.80
2A8007	17	.047	.87		2.61		9.55	14.00
2A8008	16	.053	.91		2.72		10.00	14.80
2A8009	15	.059	.93		2.80		10.35	14.90
2A8010	14	.066	.96		2.89		9.95	*
2A8011	13	.076	.98		2.94		10.20	*
2A8012	12	.085	1.02		3.07		10.70	*
2A8013	11	.095	1.05		3.15		11.05	*
2A8014	10	.106	1.09		3.27		11.55	*
2A8015	9	.118	1.42		4.27		15.70	*
2A8016	8	.133	1.52		4.57		16.95	*
2A8017	7	.148	1.61		4.84		18.10	*
2A8018	6	.166	1.73		5.19		19.55	*
2A8019	5	.186	1.86		5.58		21.15	*
2A8020	4	.208	2.00		6.00	13.75	*	*
2A8021	3	.234	2.13		6.38	14.70	*	*
2A8022	2	.263	2.30		6.91	16.03	*	*
2A8023	1	.294	2.43		7.42	17.32	*	*
2A8024	3/4"	.312	2.48		9.42	22.30	*	*
2A8025	0	.330	2.66		7.96	18.70	*	*
2A8026	3/8"	.375	2.83		10.81	25.78	*	*
2A8027	1/2"	.438	3.15		11.58	*	*	*
2A8028	3/4"	.500	3.44		12.77	*	*	*
2A8029	1/2"	.562	4.50		17.00	*	*	*
2A8030	3/8"	.625	4.85		18.38	*	*	*
2A8031	3/4"	.750	6.95	12.67	*	*	*	*
2A8032	7/8"	.875	7.38	14.25	*	*	*	*

## ALPHA HEAT SHRINK TUBING FIT-221 IRRADIATED POLYEFIN TUBING

Application of 225° to 255° F. heat shrinks tubing 50% in diameter, only 5% in length within 7 seconds. Use heat gun below for fastest shrinkage. Insulates connectors, splices, terminal lugs, tool handles. Excellent resistance to oil, solvent and flame. 4 Ft. standard factory length. We cut to 1 Ft. length for shipping unless you specify 4 Ft.

Size	Original I.D.	I.D. After Heating	Wall Thickness	Per Foot	Net per 20 Ft.	100 Ft.
3/4"	.046	.023	.016	\$0.18	\$3.04	\$13.80
1/2"	.063	.031	.017	.20	3.21	14.80
3/8"	.093	.046	.020	.21	3.72	16.90
1/4"	.125	.062	.020	.22	3.94	17.90
3/16"	.187	.093	.020	.30	4.82	21.90
1/8"	.250	.125	.025	.36	6.07	27.80
3/16"	.375	.187	.025	.45	8.73	30.80
1/4"	.500	.250	.025	.51	6.90	*
3/8"	.750	.375	.030	.60	9.25	*
1"	1.00	.500	.035	.90	13.00	*

No. 16A1152 Catalog of Alpha Tubing and Accessories FREE on Request.  
\* REQUEST QUANTITY PRICES FROM OUR INDUSTRIAL DEPARTMENT

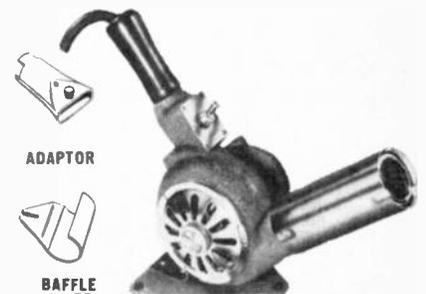
## 6-INCH FIT-221 SHRINK TUBING ASSORTMENTS

Assorted colors, red, black, white, yellow, blue and clear of the same shrink tubing described above. Each length identified as to size.

Stock No.	Alpha No.	Tubing Size Range	Lengths in Package	Per Package
2A8035	FIT221 MS-1	3/4" thru 3/8"	30	\$4.00
2A8036	FIT221 MS-2	1/4" thru 3/8"	16	8.00
2A8037	FIT221 MS-3	1" thru #4	10	7.00

## MASTER APPLIANCE HEAT GUN

Handiest, quickest, safest way to get quick instant heat needed without the dangers of open flame! Air intake adjusts for 500 to 750° F air blast temperature; double jacketed heater housing; sturdy die-cast aluminum housing and 8 ft. neoprene jacketed 3-wire cord and plug that is oil and grease resistant. Turbo type fan blade is efficient and quiet in operation. 115 V. AC operation. 14 amp. Nozzle 4" long, 11" overall. Shpg. wt. 5 lbs.



No. 37A9089. Model HG501. Each..... **\$49.90**  
3 Lots Each..... **\$44.81**

No. 37A9090. Model 100. Nozzle Adaptor to adapt baffle plate to gun. Each..... **\$2.95**  
3 Each..... **\$2.65**

No. 37A9091. Model 145. Baffle Plate for tubing up to 3/4" O.D. Each..... **\$2.75**  
3 Each..... **\$2.48**

No. 37A9092. Model 150. Baffle Plate for tubing up to 1 1/4" O.D. Each..... **\$2.95**  
3 Each..... **\$2.65**

# BELDEN WIRE AND CABLE

## MIL-W-76 TYPE MW VINYL HOOK-UP WIRE

Rated 1000 V., -80° C. Tinned copper conductors. Strips easily and clean. Specify Color: Brown, Red, Orange, Yellow, Green, Light Blue, Violet, Gray, White or Black. \*Stocked in Red, Green, White, and Black only.

Stock No.	Belden No.	AWG & Stranding	O.O. Inch	Insulation Thickness	Wt. 1000'	25 Ft. Length	100 Ft. Length	500 Ft. Length	1000 Ft. Length
2B13	8525	24 (7X32)	.058	.017	3		\$1.41	\$ 4.83	\$ 8.98
2B14	8524	22 (7X30)	.064	.017	4	\$0.69	1.54	5.67	10.55
2A32	8523	20 (16X30)	.070	.017	5	.76	1.75	6.41	11.92
2B7	8522	18 (16X30)	.080	.017	8	.88	2.21	8.51	16.38
2B15	8521	16 (26X30)	.098	.019	12		2.95	11.76	23.00
2B67*	8520	14 (41X30)	.111	.02	18		4.20	18.90	35.44
2B68*	8527	12 (65X20)	.130	.02	26		5.99	25.99	49.61
2B69*	8528	10 (101X20)	.154	.02	38		8.51	35.44	72.25
2B34	8530	22 (Solid)	.059	.017	4	.65	1.29	4.25	8.19
2A2	8529	20 (Solid)	.066	.017	5	.69	1.54	5.46	10.24
2A36	8528	18 (Solid)	.074	.017	7		1.95	7.35	13.97

## MIL-W-16878 TYPE B VINYL 600 V. 105° C.

Tinned copper stranded. Colors: Solid white and white striped with black, red, green, yellow, blue, brown, orange, gray or violet. Please specify color.

Stock No.	Belden No.	AWG & Stranding	O.O. Inch	Insulation Thickness	Wt. 1000'	100 Ft. Length	500 Ft. Length	1000 Ft. Length
2C151	8500	16 (19X29)	.077	.01	10	\$2.51		\$19.64
2C152	8501	18 (7X26)	.068	.01	8	2.08		15.86
2C153	8502	20 (7X28)	.058	.01	5	1.92		12.86
2C154	8503	22 (7X30)	.050	.01	4	1.72	6.46	11.60
2C155	8504	24 (7X32)	.044	.01	3	1.60	5.67	10.76
8505 stocked in solid colors only—specify choice.								
2A400	8505	26 (7X34)	.039	.01	2	1.47	5.51	10.24

## TYPE E-MIL-W-16878 TEFLON 600 V. 200° C

Concentrically stranded silver coated copper conductor. Extruded TFE Teflon insulation thickness .010". Specify Color: Brown, Red, Orange, Yellow, Green, Light Blue, Gray, White or Black.

Stock No.	Belden No.	AWG Stranding	O.O. Inch	Wt. 1000 Ft.	100 Ft. Length	500 Ft. Length	1000 Ft. Length
2A409	83000	30 (7X38)	.033	1	\$3.78	\$13.16	\$24.73
2A410	83001	28 (7X36)	.036	2	3.94	13.86	26.15
2A411	83002	26 (7X34)	.041	2	4.36	15.68	29.77
2A412	83003	24 (19X36)	.046	3	5.46	20.61	40.16
2A413	83004	24 (7X32)	.045	3	4.57	16.54	31.50
2A414	83005	22 (7X30)	.051	4	5.46	20.09	38.59
2A415	83006	22 (19X34)	.052	4	5.99	22.58	43.58
2A416	83007	20 (19X32)	.060	6	7.25	26.78	51.98

## PRIMARY WIRE — MARINE AND AUTO S.A.E. TYPE G.P.T.

For high current with minimum voltage drop for mobile electrical systems. Vinyl insulated to withstand heat, oil, abrasion.

Stock No.	Belden No.	AWG & Stranding	O.O. Inch	Color	Wt. 100 Ft.	25 Ft.	100 Ft.
2B127	8685	16 (19X20)	.102	Black	1	\$0.79	\$ 2.73
2B126	8684	14 (19X27)	.117	Green	2	1.05	3.57
2B129	8683	12 (19X25)	.142	Red	3	1.58	5.04
2C130	8682	10 (19X23)	.175	White	4	2.10	7.09
2C132	8681	8 (19X21)	.219	Chrome	7	4.20	14.49

## SHIELDED HOOK-UP WIRE

No.	25-Ft. Coil	500 Ft. Spool
2A70.	\$ 1.58	22.05
100 Ft. Coil	4.73	
500 Ft. Spool		22.05

## HI-FI CONNECTING CABLE

Belden 8421. Size 25 (7X33) 3 strands tinned copper and 4 tinned Copperweld, cellular polyethylene insulated, tinned copper spiral wrapped shield, chrome vinyl jacket. .180" O.D. Wt. 100' 4 lbs.

2A168.	25 Ft.	\$1.80
	100 Ft.	\$5.30

## SHIELDED BELDEN 8882

Conductor is size 18 (16X30) gauge tinned copper, black vinyl insulated, tinned copper braid shield overall. Ideal for lead-in or hookup. .105" O.D. Wt. 100' 2 lbs.

2A137.	25 Ft.	\$ 1.63
	100 Ft.	\$4.25
	1000 Ft.	\$38.27

## TEST PROD WIRE

Extremely flexible high voltage wire. Conductors are tinned copper stranded cotton wrap and rubber insulation overall. 8899 stocked in red, black, green and yellow, others stocked in red and black only. Specify Color.

Stock No.	Belden No.	Cond.	O.O.	Brkdwn.	Wrkg. Vltg.	Wt. Per 100 Ft.	25 Ft.	100 Ft.	1000 Ft.
2A64	8899	18 (65X36)	.144	20 KV	5 KV	2 Lbs.	\$1.29	\$4.10	\$29.51
2C77	8898	18 (65X36)	.230	29 KV	10 KV	4 Lbs.	2.21	5.67	47.57
2A80	8890	24 (45X40)	.066	10 KV	1 KV	1/2 Lb.	1.03	2.57	21.42
2A421.	7 Ft.	Each of Red and Black 8899 above							94c

## HIGH VOLTAGE CRT LEAD

For replacement anode lead and high voltage experimental projects. Tinned copper, poly-insulated. Red vinyl jacket overall.

Stock No.	Belden No.	AWG & Stranding	O.O.	Working Voltage	Breakdown Voltage	25 Ft.	100 Ft.
2A261	8868	22 (7X30)	.150	25,000	50,000	\$1.25	\$3.08
2A406	8866	18 (41X34)	.208	40,000	110,000	2.05	5.83

## SOUND SYSTEM, ALARM OR SPEAKER EXTENSION

Solid conductor wire, twisted, color conductors.

Stock No.	Belden No.	Size	Cond.	O.O.	Wt. Per 100 Ft.	25 Ft.	100 Ft.	1000 Ft.
2C192		22	2	.10	1 Lb.	\$0.51	\$1.04	\$ 9.19
2B54	8492	19	2	.17	2 Lbs.	1.05	3.15	22.05
2B55	8483	19	3	.14	2 Lbs.	1.31	3.31	26.15

## MICROPHONE CABLES

Designed to withstand the flexing and normal abuse of studio, lab and home usage. Plastic jacket cables have polyethylene insulated conductors, rubber jacket cables have rubber insulated conductors.



Stock No.	Belden No.	No. Cond.	O.O.	Use	AWG & Stranding	Cap. Per Ft.	Per Ft.	25 Ft.	100 Ft.	1000 Ft.
2A101	8401	1	.200	Hi Imp.	25 (7X33)	25 Pf.	3	\$1.73	\$5.62	\$47.57
2A102	8411	1	.144	Lapel Mike	25 (7X33)	37 Pf.	2	1.48	4.41	37.59
2A104	8422	2	.231	Low Imp.	22 (16X34)	32 Pf.	4	2.55	8.24	73.08
2C197	8404	4	.255	Low Imp.	20 (26X34)	45 Pf.	6	3.99	11.97	110.25

## BLACK RUBBER JACKET OVERALL

Stock No.	Belden No.	No. Cond.	O.O.	Use	AWG & Stranding	Cap. Per Ft.	Per Ft.	25 Ft.	100 Ft.	1000 Ft.
2A78	8410	1	.245	Hi Imp.	25 (7X33)	33 Pf.	4	3.15	10.24	95.40
2A79	8412	2	.268	Low Imp.	20 (26X34)	68 Pf.	5	3.26	11.29	103.79
2A105	8423	3	.277	Low Imp.	20 (26X34)	85 Pf.	6	4.39	13.18	122.54
2A106	8424	4	.295	Low Imp.	20 (26X34)	95 Pf.	7	4.94	14.81	139.55

## NEW BELDEN HYPALON JACKET MIKE CABLES FOR EXTRA HEAVY DUTY SERVICE



Especially designed for studio applications. Highly resistant to heat, impact, abrasion. Extra resistance to sunlight, ozone, water, oil and chemicals, makes it suitable for outdoor applications. Brown color DuPont Hypalon jacket blends readily with backgrounds. Useful for shielded power cables up to 600V.

Stock No.	Belden No.	No. Cond.	O.O.	AWG & Stranding	Cap. Per Ft.	Per Ft.	100 Ft.	250 Ft.
2A422	8402	2	.268	20 (26X30)	68 Pf.	\$0.15	\$12.76	\$29.77
2A423	8408	2	.385	16 (65X34)	56 Pf.	.26	21.89	51.19

## BELDEN RETRACTILE (COILED) MIKE CORDS BLACK NEOPRENE JACKET WITH RUBBER INSULATION



SINGLE CONDUCTOR with spiral tinned copper shield. Size 24 (45X40) stranded for extra flexibility. Length—4 ft., retracts to 7 1/2 inches. Dia. .160". Wt. 1/2 lbs. 29B247. Belden 8499. Each \$1.10

3 CONDUCTOR with Beldfoil shield with drain wire on one conductor. Size 23 (21X36) stranded. Length—6 ft., retracts to 11 1/2 inches. Dia. .250". Wt. 1/2 lb. 29B249. Belden 8497. Each \$1.64	50 Each	\$1.50
4 CONDUCTOR unshielded. Length—6 ft., retracts to 11 1/2 inches. Size 23 (21X36) stranded. Dia. .250". Wt. 1/2 lbs. 29B251. Belden 8415. Each \$1.58	50 Each	\$1.44

## BELDEN RETRACTILE (COILED) TELEPHONE CORDS

Spade terminals each end, strain relief one end. Vinyl insulated. Black vinyl jacket. Size 23 (21X36) stranded. Unshielded. Length—4 1/2 ft., retracts to 10 inches. Wt. 1/2 lb. 2A401. Belden 8495. 3 Conductor. Each \$1.48

2A402. Belden 8494. 4 Conductor. Each \$1.89

## BELDEN 2-WIRE SPEAKER & INTERCOM CABLE



Stranded copper parallel conductor, coded, 1-tinned, 1-copper. Zip apart vinyl insulation.

No. 2B19. Belden 8782. Size 24 (7X32). .058 x .115 O.D. Wt. per 1000 ft. 6 lbs. Stocked in Chrome, Sand, White and Clear—Specify Choice. 25 Ft. For \$0.78	100 Ft.	\$1.73	1000 Ft.	\$11.50
No. 2A16. Belden 8649. Size 20 (17X28). .073 x .146 O.D. Wt. per 1000 ft. 11 lbs. Stocked in Chrome and Clear—Specify Choice. 25 Ft. For \$1.04	100 Ft.	\$2.55	1000 Ft.	\$18.43

## 2 CONDUCTOR UNSHIELDED AUDIO CABLE



Stranded, color coded and cabled. Ideal for most audio or speaker installations. Vinyl insulated with chrome vinyl jacket overall.

Stk. No.	Belden No.	AWG & Stranding	O.O.	Wt. 100'	Per Ft.	100 Ft.
2A186	8205	20 (10X30)	.190	2 lbs.	\$0.04	\$3.26
2A187	8461	18 (7X26)	.226	3 lbs.	.05	4.62
2A191	8471	16 (19X29)	.256	4 lbs.	.06	5.15

## BELDEN PARALLEL LAMP CORD



Two flexible stranded 18 (41X34) copper conductors. Brown color. U.L. listed. Wt. 3 lbs. per 100'. Maximum spool size 250 ft.

Stk. No.	Belden No.	AWG & Stranding	O.O.	25'	100'	250'	1000'
2A28	18115	Rubber 18 SP-1(41X34)	.110x.213	\$1.47	\$4.89	\$9.79	\$36.42
2A408	18122	Plastic 18 SPT-1(41X34)	.110x.207	1.26	4.18	8.36	31.11

## HEAVY DUTY PORTABLE RUBBER CABLE



For extra hard use such as portable tools, battery chargers and heavy equipment when up to 300 volts are required.

Stranded copper conductors wrapped and color coded with rubber insulation. Black rubber jacket overall. UL listed.

Stock No.	Belden No.	AWG & Stranding	No. of Cond.	UL Type	O.O.	Lbs. 100'	25 Ft.	100 Ft.	250 Ft.
2A26	8452	18 (41X34)	2	"SV"	.245	4	\$2.21	\$ 6.56	\$14.91
2A404	8453	18 (41X34)	3	"SV"	.265	5	2.89	8.66	21.26
2A407	8479	14 (41X30)	3	"SV"	.380	10	4.20	13.88	33.71
2A27	8472	16 (65X34)	2	"SJ"	.325	7	2.99	10.40	24.73
2A112	8454	18 (41X34)	4	"SV"	.265	5	3.41	10.03	23.00
2A91	8455	18 (41X34)	5	"SV"	.280	5	3.15	10.19	25.36

## 8-CONDUCTOR POWER CABLE



Belden 8418. Conductors are size 20(26X34) tinned copper stranded, each cotton wrapped, rubber insulated and color coded. Rayon braid over conductors and fillers, with tinned copper shield, cotton serve and black rubber jacket overall. O.D. .386. Wt. per 100 ft. 12 lbs. 2B195. Per Ft. \$0.32

100 Ft. for	\$26.78
250 Ft. for	\$64.89

# BELDEN WIRE AND CABLE

## NEW BELDFOIL 100% SHIELDED CABLES

Beldfoil shielding has superior low noise characteristics compared to braided copper shield, at greatly reduced cost. Shielding is made of continuous sheath of Mylar backed aluminum foil with ground drain wire for each shield provides positive ground connection. Provides superior flexibility and more continuous shielding when flexed. Chrome vinyl jacket overall. No. 8417 has 3 strands tinned copper and 4 tinned copperweld, double beldfoil shield. Others, stranded copper cond.

### SINGLE CONDUCTOR

Stk. No.	Belden No.	Size	O.D.	Wt. 100'	Per Ft.	100 Ft.	500 Ft.
2A234	8417	25(7x33)	.140	1	\$0.08	\$4.52	\$19.53

### TWO CONDUCTORS

2A235	8761	22(7x30)	.167	2	.04	3.60	16.38
2A236	8762	20(7x28)	.196	3	.06	5.04	20.90
2A237	8760	18(16x30)	.222	3	.08	5.46	25.20
2A238	8719	16(19x29)	.274	5	.08	7.76	35.28
2A239	8720	14(19x27)	.340	6	.14	12.13	55.13

### THREE CONDUCTORS

2A240	8771	22(7x30)	.175	2	.05	4.53	20.63
2A241	8772	20(7x28)	.200	3	.06	5.72	25.99
2A242	8770	18(16x30)	.236	4	.07	7.02	31.92

### PAIRED CABLE—STRANDED CONDUCTORS

Beldfoil shield, each pair individually shielded.

Stk. No.	Belden No.	Pr.	Size	O.D.	Wt. 100'	Per Ft.	100 Ft.	500 Ft.
2A249	8723	2	22(7X30)	.165	2	\$0.07	\$6.14	\$27.20
2B172	8777	3	22(7x30)	.270	6	.14	11.97	58.70
2A250	8725	4	20(7X28)	.360	8	.29	27.21	123.64
2A251	8778	6	22(7X30)	.394	9	.26	23.63	116.08

### PAIRED CABLE—SOLID CONDUCTORS

All vinyl insulated except\* which has Beldsol coating and white vinyl jacket.

Stk. No.	Belden No.	No.	Pr.	Size	O.D.	Wt. 100'	Per Ft.	100 Ft.	500 Ft.
2A252	*8640	1	26	Solid	.089	1	\$0.03	\$3.03	\$13.81
2A253	*8642	3	26	Solid	.140	1	.09	8.42	38.27
2A254	8767	3	22	Solid	.270	5	.13	10.40	47.57
2A255	8768	6	22	Solid	.394	9	.24	20.48	96.86
2A256	8764	9	22	Solid	.440	14	.34	28.61	139.39
2A257	8765	11	22	Solid	.485	14	.40	33.88	164.59

### TWO CONDUCTOR MINIATURE AUDIO CABLE

2A258	8450	22	Solid	.118	2	\$0.05	\$4.04	\$14.91
2B124	8451	22	(7X30)	.135	2	.05	4.60	18.74

Both conductors size 25 (7X33) stranded color coded vinyl insulated, with individual spiral wrapped tinned copper shield. Chrome vinyl zip apart jacket. O.D. .106X.213. Wt. 100' 2 lbs.

Belden 8416	25 ft.	100 ft.	250 ft.
No. 2B38	\$1.95	\$6.25	\$14.33

## DUAL CHANNEL AUDIO CABLE

## SHIELDED SOUND CABLES

2 Conductor, spiral shield—Size 18 (7X26), tinned copper stranded, copper spiral wrapped shield, chrome vinyl jacket. Recommended for long cable runs. .231 O.D. Wt. 100' 4 lbs.

2B125	Belden 8790	
Per Ft.....\$0.08	100 Ft.....\$6.56	1000 Ft.....\$56.07

Tinned copper size 22 (7X30) stranded conductors, vinyl plastic insulated and color coded chrome vinyl jacket overall. 8734 (illus.) has tinned copper shield over one conductor only. 8735 has tinned copper braid shield over entire cable. 8737 has spiral wrapped shield over entire cable.

Stock No.	Belden No.	No. Cond.	O.D.	Wt. 100'	Per Ft.	100 Ft.	1000 Ft.
2A88	8734	3	.194	3	\$0.06	\$5.30	\$44.10
2A87	8735	3	.199	3	.11	5.99	51.03
2A86	8737	2	.170	2	.05	4.25	37.49

## BROADCAST AUDIO CABLES

2 solid conductors size 22 with black vinyl jacket overall.  
\*Indicates drain wire.

Stock No.	Belden No.	Color	Shield	O.D.	Wt. 100 Ft.	Per Ft.	100 Ft.	1000 Ft.
2B58	*8437	Black	Braid	.200	3 lbs.	\$0.08	\$6.30	\$47.57
2A89	8739	Chrome	Spiral Wrap	.160	2 lbs.	.05	4.04	34.02

## SMALL DIAMETER FLEXIBLE WIRES

Shielded Single Conductor #24 (16X36) stranded. O.D. .095". Brown cotton braid overall. For phono leads, etc. Wt. 100' 1 lb.  
2A103. Belden 8431. 10 Ft.....85c 25 Ft.....\$1.45 100 Ft.....\$4.60

Shielded 3 Conductor #32 (7X40) stranded color coded. O.D. .067". For stereo phono arms etc. Wt. 100' 1 lb.  
2A82. Belden 8419. 10 Ft.....\$1.03 25 Ft.....\$1.80

Unshielded 2 Conductor twisted pair #32 (7X40). O.D. .050". For phono arms, pigtail leads etc.  
2A260. Belden 8430. 10 Ft.....65c 25 Ft.....91c

Litz Wire 5X44 stranded-enamel, Nylon wrap. O.D. .008". For winding RF, IF coils. No. 2A405. Belden 8817. 100 Ft. Spool For.....75c

## INDOOR AERIAL WIRE

Belden 8014. Size 25 (13X36) stranded tinned copper. .010 wall of chrome vinyl plastic insulation. O.D. .044".  
No. 2A1. 25 Ft.....\$0.85  
100 Ft.....\$1.26 500 Ft.....\$3.78

## ANTENNA LOOP

Replaces antenna coil on most any type set. Good pickup and selectivity.  
No. 13A5081  
Each.....39c  
10 Lots, Each.....34c

## MULTIPLE CONDUCTOR UNSHIELDED CABLE

All conductors are size 22, (7X30) stranded tinned copper except 6, 7, 8, and 9 conductor cables in which 2 of the conductors are size 18, (16X30) stranded tinned copper; all are color coded, vinyl plastic insulated, and cabled together with gray vinyl jacket overall.

Stock No.	Belden No.	No. Cond.	O.D.	Wt. 100'	per Ft.	100 Ft.	1000 Ft.
20120	8442	2	.165	1 1/2	\$0.03	\$2.63	\$21.11
2A113	8443	3	.150	2	.06	3.26	25.52
2A114	8444	4	.168	2	.07	4.36	35.80
2A115	8445	5	.180	3	.08	5.04	42.53
2A116	8446	6	.222	4	.13	7.51	65.21
2A117	8447	7	.246	5	.12	8.35	73.71
2A118	8448	8	.250	5	.14	8.98	80.64
2A119	8449	9	.261	5	.16	9.71	88.20

## UNSHIELDED PAIRED CABLE

### SOLID CONDUCTORS

Conductors are size 22 solid tinned copper, color coded and cabled in pairs. Vinyl plastic insulation with chrome vinyl jacket over-all.

Stock No.	Belden No.	Pairs	O.D.	Wt. 100'	per Ft.	100 Ft.	1000 Ft.
2A94	8740	1	.150	2	\$0.03	\$2.52	\$17.96
2A95	8741	2	.201	3	.05	4.25	34.02
2A96	8742	3	.240	3	.07	5.62	47.72
2A97	8743	6	.305	6	.11	8.82	81.59
2A98	8744	9	.354	8	.15	12.60	118.13
2B181	8753	11	.384	10	.19	15.59	149.63
2A99	8745	15	.420	12	.25	21.68	200.03
2A100	8746	27	.550	17	.43	40.43	366.98

### STRANDED CONDUCTORS

Size 22 (7X30) more flexible and easier to pull through conduit. Color coded and cabled in pairs.

Stock No.	Belden No.	Pairs	O.D.	Wt. 100'	per Ft.	100 Ft.	1000 Ft.
2B182	8747	6	.340	7	\$0.13	\$10.97	\$100.80
2B183	8748	9	.389	9	.18	15.44	148.05
2B184	8749	15	.425	14	.32	26.78	255.15
2B185	8750	27	.595	21	.57	53.34	485.10

## UNSHIELDED CONTROL AND AUDIO CABLES

Vinyl plastic insulated, chrome vinyl jacket. Suggested working voltage 8466-400v., all others 600v.

Stock No.	Belden No.	No. Cond.	Size	O.D.	Wt. 100'	per Ft.	100 Ft.	500 Ft.
2A243	8466	12	18 (16X30)	.412	13	\$0.27	\$23.00	\$112.61
2A244	8620	4	16 (19X29)	.375	8	.15	12.13	56.33
2A245	8621	7	16 (19X29)	.455	13	.24	20.63	92.14
2A246	8622	12	16 (19X29)	.600	21	.41	34.65	160.65
2A247	8623	15	16 (19X29)	.650	27	.58	48.83	233.89
2A248	8627	4	14 (19X27)	.495	14	.24	20.79	95.29

## TINNED COPPER SHIELDING

Electrostatic and interference shield for wires. Very flexible. Expands to nearly double its original diameter, reducing length about 25%. Extensively used in mobile radio installations for shielding and bonding.

Stock No.	Belden No.	I.D.	Wt. 100'	10 Ft.	50 Ft.	280 Ft.
2A134	8660	3/8	1 lb.	\$0.79	\$2.36	\$10.71
2B139	8668	1 1/4	1 lb.	1.12	3.21	14.02
2A135	8661	3/4	1 lb.	1.10	3.83	17.64
2B140	8669	3/8	3 lb.	1.89	7.98	38.12
2A136	8662	1/2	4 lb.	2.57	11.29	54.60

## BELDEN MAGNET WIRE

Tough dual-film insulated copper wire meets Mil W583—Beldsol film replaces all enameled magnet wire. Use Beldsol for applications where easy insulation removal is desirable. Will solder at 750° F. without stripping. IEEE thermal rating 130° C. Use Poly-Thermaleze where tougher, higher temperature wire is needed. Replaces Belden Nylclad. For motors, solenoids, transformers rated 155° C.

POLY-THERMALEZE—1 Lb. Spool					BELSOL—1/2 Lb. Spool Except † are 1/4 Lb.				
Size	Stock No.	Belden No.	Ft. per Spool	Each	Size	Stock No.	Belden No.	Ft. per Spool	Each
14	2A6000	8073	80	\$2.27	14	2A6025	8047	40	\$1.32
16	2A6001	8074	126	2.36	16	2A6026	8048	63	1.32
18	2A6002	8075	199	2.49	18	2A6013	8049	100	1.35
20	2A6003	8076	315	2.49	20	2A6014	8050	160	1.35
22	2A6004	8077	501	2.49	22	2A6015	8051	254	1.35
24	2A6005	8078	793	2.57	24	2A6016	8052	404	1.39
26	2A6006	8079	1260	2.74	24	2A6017	8053	645	1.45
28	2A6007	8080	1990	3.01	26	2A6018	8054	1020	1.54
30	2A6008	8081	3140	3.39	28	2A6019	8055	1615	1.72
32	2A6009	8082	4880	3.74	30	2A6020	8042	1257	1.16
34	2A6010	8083	7860	4.35	32†	2A6027	8043	2030	1.22
36	2A6011	8084	12400	5.39	34†	2A6028	8044	3200	1.38
38*	2A6024	8085	19400	6.49	36†	2A6029	8045	5070	1.75
40*	2A6012	8086	32100	8.44	38†	2A6021	8046	8050	2.36

\*Single Film Insulated, Blue Color.



## FISH PAPER

High grade fibre sheet paraffined for insulation purposes. 240 square inches .010" thick.  
No. 17A7038 GC 560 Per Sheet.....50c



## INSULATING CAMBRIC

Breakdown voltage 10,000 volts. Prevents grounds and shorts on field coils, transformers, resistors, condensers, wires, etc. Dry, yellow varnished Cambric in rolls of over 210 sq. inches.  
No. 17A7039 GC 549.....78c

# COAXIAL CABLE & CONNECTORS

## ESSEX INTERNATIONAL COAX CABLE

FORMERLY AMPHENOL

Highest quality coax cable used for commercial, amateur, military or citizens band transmitting or receiving. Eliminates "stray" fields and confines signal within cable. Vinyl jacket overall for temperatures from -40° C to +80° C, but remains flexible and is impervious to most acids, oils, alkalis and gasoline. Polyethylene insulation over center conductor provides low loss and mechanical stability. Mig. to MIL C-17 Spec.



Stock No.	Military AN No.	Imp. Ohms	O.D.	Pf FL.	Size Center Conductor	Lb. Wt. Per C Ft.	100 Ft.	1000 Ft.
2W21-004	RG8U	52	.405	29.5	7X21	11	\$0.14	\$12.75
2W21-290	RG8A/U	50	.405	29.5	7X21	11	.14	13.20
2W21-007	RG11U	75	.405	20.5	7X26	10	.13	11.93
2W21-024	RG58U	53.5	.195	28.5	#20	3	.05	4.65
2W21-199	RG58A/U	50	.195	30	19X.007"	3	.06	5.40
2W21-316	RG58C/U	50	.195	30	19X.007"	3	.06	5.55
2W21-025	RG59U	73	.242	21.5	#22	4	.06	5.48
2W21-794	RG59B/U	75	.242	21	#22	4	.06	5.87
2W21-026	RG62U	93	.242	13.5	#22	4	.06	5.85
2W21-598	RG174U	50	.100	30	7X34	1	.04	3.30
2W21-597	Sub Minax	75	.150	20	7X.0056	2	.05	4.58

## ESSEX CATV POLYFOAM CABLE

Signal attenuation is less than regular 59U, lighter weight and lower cost. 75 ohm impedance, O.D. .242", 17.3 PF/FT. Capacitance, size 20 Copperweld conductor, black polyethylene jacket. Wt. 100' 3 lbs. Formerly Amphenol 621-186.

No. 2C123. Per Ft. ..... 5c Ft. .... \$4.60 Ft. .... \$43.00

## "BLITZ BUG" COAX CABLE LIGHTNING ARRESTOR

Added lightning protection for receiving and transmitting equipment, ham gear, citizens band transceivers etc. using 52 ohm or 72 ohm coaxial antenna lead.



Threaded for standard PL259 and SO239 fittings. Shpg. wt. 1 lb.  
No. 10A3001. Cush Croft LAC-1. Net Each .... \$3.95

## COPPERWELD ANTENNA WIRE

Tensile strength 3 times that of ordinary copper. Minimum stretch or sag. Electrical properties are the same as copper at high frequencies. Enamelled type is non-corrosive. All are solid conductors.

Stk. No.	Size (AWG)	100' Coil		250' Coil		500' Coil	
		Wt.	Each	Wt.	Each	Wt.	Each
2A44	10	3 lbs.	\$4.41	7 lbs.	\$10.49	14 lbs.	\$20.86
2A45	12	2 lbs.	3.39	5 lbs.	8.03	9 lbs.	13.86
2A46	14	1 lb.	2.92	3 lbs.	6.30	6 lbs.	10.32
2A47	18	1/2 lb.	1.07	1 1/2 lbs.	2.21	3 lbs.	4.02
<b>ENAMELLED COPPERWELD</b>							
2B50	12	2 lbs.	4.41	4 1/2 lbs.	10.71	9 lbs.	20.40
2B51	14	1 1/4 lbs.	3.23	3 lbs.	6.86	5 1/4 lbs.	13.63

## COPPER ANTENNA WIRE

Excellent for antenna requirements; as bus bar hookup wire; for winding coils, etc. Poly-Thermalize type is non-corrosive.

SOLID COPPER				SOLID BRIGHT TINNED			
POLY-THERMALIZE INSULATION				POLY-THERMALIZE INSULATION			
Stock No.	Belden No.	Size	Wt.	Stock No.	Belden No.	Size	Wt.
2A12	8008	12	2 lbs.	2A37	8012	14	2
2A42	8009	14	2 lbs.	2A39	8013	16	1
STRANDED BARE				STRANDED BARE			
No. 2A43.	Belden 8002.	Size 16 (7X24)		2B52	8020	20	1
Stranded.	Wt. 100' 1 lb.			2B53	8021	22	1
100 Ft.			\$1.73	2B73	8022	24	1
				2B75	8023	26	1

## ANTENNA KIT

Contains 100 ft. size 16 (7x24) stranded copper bare wire, 25 ft. #16 rubber covered lead-in wire, 1 adjustable ground clamp, 2 porcelain insulators, 2 porcelain nail knobs, 1 window lead-in strip, installation instructions. Wt. 2 1/2 lbs.  
No. 9A3094. Each. \$2.85



## INSULATORS FOR LONG WIRE AND DOUBLET ANTENNAS



Fig. ① and ② are molded high strength Cycloc. Fig. ③ and ④ are glazed porcelain. Fine for receiving antennas.  
① No. 9A173. HyGain C1 heavy duty center insulator. Each. \$4.95  
② No. 9A174. HyGain E1 heavy duty end insulator. Pair for. 2.95  
③ 9A3029. Birnbach 668 4 1/2" porcelain end insulator. Each. .30  
④ 9A3030. Birnbach 468 4 1/2" porcelain center insulator. Each. .58

## DOW-KEY C 60 P CONNECTOR

Single hole panel mounting connector requires only one 5/8" hole. Two serrated jam nuts hold connector firmly to panel.



No. 12A1994.  
1-4 Each ..... 69c  
10-24 Each ..... 57c

## DOW-KEY AF2 DOUBLE COAX CONNECTOR

Special double male coax connector for mounting relay directly onto output of transmitter or S.W.R. meter. Silver plated.



No. 12A1995.  
1-4 Each ..... 76c  
10-24 Each ..... 62c

## AMPHENOL COAX CONNECTORS



### UHF SINGLE CONTACT CONNECTORS

Most popular screw-on coaxial connector series. Used extensively for RF power transmission lines in amateur, CB and commercial services. Items with \* are female connectors mating with all plugs in same series. Fig. 2 reducers are for use with Fig. 1 plug. Fig. 4 hoods provide fully shielded line connection to rear of Fig. 3 socket.

Fig.	Stock No.	Amphenol No.	Military No.	Description	For RG Cable	1-24 Each	25-99 Each	100-499 Each
①	12A1914	83-ISP	PL-259	Cable Plug	8, 11	\$0.59	\$0.49	\$0.41
①	12A1915	83-776	UG-203U	Cable Plug	58	1.53	1.25	1.05
①	12A2307	83-750	UG111U	Cable Plug	59, 62	.96	.79	.66
②	12A1916	83-168	UG176U	.257" I.D. Reducer	59, 62	.18	.15	.12
②	12A1917	83-185	UG175U	.207" I.D. Reducer	58	.18	.15	.12
③	12A1918	83-1R	SO-239*	Panel Receptacle		.55	.46	.38
④	12A1957	83-1H	UG106U	.345" I.D. Hood	8, 11	.41	.33	.28
④	12A1958	83-765	UG177U	.155" I.D. Hood	58	1.68	1.38	1.15
⑤	12A1959	83-1AP	UG646U	Right Angle		1.15	.95	.79
⑥	12A1962	83-1J	PL-258*	Double Female Adapt.		2.65	2.18	1.83
⑥	12A1963	83-1F	UG363	Feed Thru		2.95	2.42	2.03
⑥	12A1964	83-1T	*	Tee				



### TYPE "BNC" CONNECTORS

Fast Bayonet style especially suited for smaller RG58 and RG59 coax cables. Fig. 16 and 17 are "between series" adapters providing greater convenience where small coax is used with equipment having UHF or N style receptacles. (\*) Female connectors mating with all plugs in same series.

Fig.	Stock No.	Amphenol No.	Military No.	Description	For RG Cable	1-24 Each	25-99 Each	100-499 Each
①	12A1965	31-002	UG88U	Cable Plug	58	\$0.70	\$0.58	\$0.49
①	12A1966	31-018	UG88B/U	Cable Plug	58	.81	.67	.56
①	12A1967	31-202	UG88C/U	Cable Plug	58	.75	.61	.52
①	12A1968	31-012	UG260U	Cable Plug	59, 62	.75	.61	.52
①	12A1969	31-212	UG260B/U	Cable Plug	59, 62	.85	.70	.59
②	12A1970	31-005	UG89U*	Cable Receptacle	58	1.09	.89	.75
②	12A1971	31-015	UG261U	Cable Receptacle	59, 62	1.23	1.01	.85
②	12A1972	31-003	UG290U*	Panel Receptacle		.79	.65	.54
②	12A1973	31-203	UG290A/U*	Panel Receptacle		.85	.70	.59
②	12A1974	31-102	UG657U*	Recept. 1-Hole Mtg.		1.25	1.03	.87
②	12A1975	31-001	UG291U*	Recept. Rear Clamp	58	1.21	1.00	.84
②	12A2308	31-011	UG262U	Recept. Rear Clamp	59, 62	1.36	1.12	.94
②	12A1976	31-219	UG914U*	Dbl. Female Junct.		1.28	1.05	.88
②	12A1977	31-008	UG274U*	Tee		2.29	1.88	1.58
②	12A1978	81-30	UG201U	BNC Jack to N Plug		2.53	2.07	1.74
②	12A1979	31-028	UG273U	BNC Jack to UHF Plug		1.40	1.15	.97
②	12A1980	31-217	UG349A/U	BNC Plug to N Jack		2.57	2.11	1.77



### "N" SERIES CONNECTORS

Highest quality, 50 ohm constant impedance style connectors. Generally specified for more critical applications because of lower SWR and weatherproof construction. Recommended where coax line will be supported by the connector. \*Female connectors mating with all others in same series.

Fig.	Stock No.	Amphenol No.	Military No.	Description	For RG Cable	1-24 Each	25-99 Each	100-999 Each
①	12A1981	82-61	UG218/U*	Male Cable Plug	8	\$1.32	\$1.08	\$0.91
①	12A1982	82-63	UG238/U*	Female Cable Jack	8	1.49	1.22	1.03
①	12A1983	82-24	UG58U*	Panel Recept.		1.00	.82	.69
①	12A1984	82-101	UG298/U*	Dbl. Recept. Junction		1.68	1.38	1.16
①	12A1985	82-100	UG57B/U*	Dbl. Plug Junction		2.15	1.76	1.48
①	12A1986	82-213	UG27C/U*	Right Angle		2.76	2.27	1.90
①	12A1987	82-99	UG28A/U*	Tee		3.31	2.72	2.28



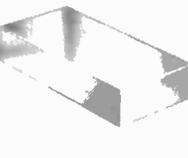
## ANTENNA SPECIALISTS COAX CABLE CONNECTOR ADAPTORS

For connecting PL-259, SO-239 plugs to Motorola pin plug and RCA phono plug type sockets and cable plugs. Designed for RF transmitter-receiver cables, test equipment for fast conversion without altering original connectors.  
M-41. Converts Motorola type pin plug on lead to SO-239 on set. \$1.35  
No. 12A1988. Net Each  
M-42. Converts phono plug on lead to SO-239 on set. \$1.35  
No. 12A1989. Net Each  
M-43. Converts Motorola type pin plug on lead to phono plug on set. 69c  
No. 12A1990. Net Each  
M-44. Converts PL-259 on lead to phono plug on set. \$1.35  
No. 12A1991. Net Each  
M-45. Converts phono plug on lead to Motorola type pin plug on set. 69c  
No. 12A1992. Net Each  
M-46. Converts PL-259 on lead to Motorola type pin plug on set. \$1.35  
No. 12A1993. Net Each



# CHASSIS, MINIBOXES AND CABINETS

## BUD ALUMINUM CHASSIS BASES



One piece aluminum. Corners reinforced and spot welded. 4 sides folded in at bottom for added strength and attaching bottom plate (listed below). 18 gauge, except \* which are 16 gauge, and † which are 14 gauge. Natural finish.

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A347	AC1401	2½x4½x1	¼	\$1.30	\$1.15	\$1.05
5A348	AC1402	3½x4½x1	¼	1.30	1.15	1.05
5A349	AC1403	3½x5½x1	¼	1.30	1.15	1.05
5A350	AC1404	4x5x2	¼	1.60	1.45	1.30
5A351	AC1405	4x6x1½	¼	1.40	1.25	1.10
5B180	AC431	4x6x2	½	1.60	1.40	1.30
5B154	AC430	4x6x3	½	1.80	1.60	1.40
5A352	AC1406	4x8x2	¾	1.80	1.60	1.45
5B164	AC432*	4x17x3	1¼	3.10	2.80	2.50
5A353	AC1407	4½x8x1½	¾	1.60	1.45	1.30
5A313	AC402	5x7x2	½	1.70	1.50	1.35
5B168	AC429	5x7x3	¾	1.90	1.70	1.50
5A354	AC1408	5x9x1½	¾	1.60	1.45	1.30
5A355	AC1409	5x9½x1½	¾	1.70	1.50	1.35

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A314	AC403	5x9½x2	½	\$1.80	\$1.70	\$1.50
5A202	AC421	5x9½x3	¾	2.20	2.00	1.70
5B169	AC404	5x10x3	¾	2.20	2.00	1.70
5A203	AC422	5x13x3	¾	2.50	2.30	2.00
5A356	AC1410	5x13½x2½	¾	2.10	1.90	1.70
5A357	AC1411	5½x5½x1	¼	1.50	1.35	1.20
5A358	AC1412	5½x9½x1½	½	1.70	1.50	1.35
5A359	AC1413	6x8x2	½	1.80	1.60	1.45
5A360	AC1414*	6x14x3	1	3.30	2.90	2.60
5B170	AC433*	6x17x3	1¼	3.70	3.30	2.90
5A204	AC405	7x7x2	½	1.80	1.65	1.45
5A205	AC406	7x9x2	½	1.90	1.70	1.50
5A315	AC407	7x11x2	¾	2.20	2.00	1.70
5A206	AC408	7x12x3	1	2.70	2.40	2.10
5A316	AC409	7x13x2	¾	2.30	2.00	1.80
5A361	AC1415*	7x15x2	1	2.90	2.60	2.30
5A207	AC411*	7x15x3	1	3.70	3.30	2.90
5A362	AC1416*	7x17x2	1	3.30	3.00	2.70
5A363	AC1417*	7x17x2½	1½	3.40	3.10	2.70
5A208	AC423*	7x17x3	1¾	3.70	3.30	2.90
5A364	AC1418	8x10x2½	1	2.80	2.50	2.20
5A365	AC1419*	8x12x2½	1½	3.30	2.90	2.60
5A209	AC424*	8x12x3	1½	3.20	2.90	2.50
5A317	AC425*	8x17x2	1½	3.30	3.00	2.70

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A219	AC412*	8x17x3	1¾	\$3.80	\$3.40	\$3.00
5A366	AC1420*	8½x15x3	1½	3.50	3.20	2.80
5A367	AC1421*	9x15x3	1½	4.00	3.60	3.20
5A210	AC413*	10x12x3	1½	3.80	3.40	3.00
5A263	AC414*	10x14x3	1¾	3.80	3.40	3.00
5A318	AC415*	10x17x2	1¼	3.70	3.30	2.90
5A211	AC416*	10x17x3	2	4.30	3.80	3.40
5B172	AC427†	10x17x4	3½	6.00	5.40	4.80
5A368	AC1422†	10x17x5	2½	6.70	6.00	5.30
5A369	AC1423†	10x23x3	3	8.70	7.80	6.90
5A155	AC426†	11x17x2	2¼	4.60	4.10	3.70
5A319	AC417†	11x17x3	2¾	5.30	4.80	4.25
5A370	AC1424*	12x12x3	1¾	3.80	3.50	3.10
5A371	AC1425*	12x17x2	1½	4.80	4.40	3.90
5A212	AC418†	12x17x3	2¾	5.40	4.90	4.30
5A163	AC419†	13x17x2	2½	4.80	4.30	3.80
5A213	AC420†	13x17x3	2¾	5.70	5.10	4.50
5B173	AC428†	13x17x4	3¾	7.00	6.30	5.60
5A372	AC1426†	13x17x5	3½	9.50	8.60	7.60
5A373	AC1427†	14x17x3	3	6.80	6.10	5.40
5A374	AC1428†	15x17x4	3½	9.50	8.60	7.60
5A375	AC1429†	15x17x5	3¾	13.00	11.70	10.40
5A376	AC1430†	17x17x3	3¼	8.00	7.20	6.40
5A377	AC1431†	17x17x4	4	11.30	10.10	9.00

## NATURAL ALUMINUM BOTTOM PLATES

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-49 Each	50-99 Each	100-149 Each
5A5509	BPA1501	2½x4½x2	¼	\$0.70	\$0.65	\$0.55
5A5510	BPA1502	3½x4½x2	¼	.80	.70	.65
5A5511	BPA1503	3½x5½x2	¼	.80	.70	.65
5A5512	BPA1504	4x5	¼	.80	.70	.65
5A5513	BPA1505	4x6	¼	.80	.70	.65
5A5514	BPA1506	4x8	¼	1.00	.90	.80
5A5549	BPA1532	4x17	¼	1.00	.90	.80
5A5515	BPA1507	4½x8	¼	1.10	1.00	.90
5A5516	BPA1508	5x7	¼	.90	.80	.70
5A5517	BPA1508	5x9	¼	.90	.80	.70
5A5518	BPA1590	5x9½x2	¼	.90	.80	.70
5A5519	BPA1591	5x10	¼	.90	.80	.70
5A5520	BPA1509	5x13	¼	1.40	1.25	1.10
5A5521	BPA1510	5x13½	¼	1.40	1.25	1.10

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-49 Each	50-99 Each	100-149 Each
5A5522	BPA1511	5½x5½x2	¼	\$0.90	\$0.80	\$0.70
5A5523	BPA1512	5½x9½x2	¼	1.00	.90	.80
5A5524	BPA1513	6x8	¼	1.10	1.00	.90
5A5525	BPA1514	6x14	¾	1.40	1.25	1.10
5A5526	BPA1515	6x17	¾	1.80	1.60	1.45
5A5527	BPA1592	7x7	½	.90	.80	.70
5A5528	BPA1593	7x9	½	1.00	.90	.80
5A5529	BPA1594	7x11	½	1.10	1.00	.90
5A5530	BPA1595	7x12	½	1.30	1.15	1.05
5A5586	BPA1596	7x13	½	1.40	1.25	1.10
5A5531	BPA1516	7x15	¾	1.60	1.45	1.30
5A5532	BPA1517	7x17	¾	1.60	1.45	1.30
5A5533	BPA1518	8x10	¾	1.50	1.35	1.20
5A5534	BPA1519	8x12	¾	1.80	1.60	1.45

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-49 Each	50-99 Each	100-149 Each
5A5535	BPA1520	8x17	¾	\$1.90	\$1.70	\$1.50
5A5536	BPA1521	8½x15	½	2.20	2.00	1.70
5A5537	BPA1522	9x15	½	2.30	2.00	1.80
5A5538	BPA1523	10x12	½	1.80	1.60	1.45
5A5539	BPA1524	10x14	½	1.80	1.60	1.45
5A5540	BPA1597	10x17	¾	1.80	1.60	1.45
5A5541	BPA1525	10x23	1¼	2.70	2.40	2.10
5A5542	BPA1526	11x17	1	2.00	1.80	1.60
5A5543	BPA1527	12x12	¾	2.00	1.80	1.60
5A5544	BPA1528	12x17	¾	2.40	2.20	1.90
5A5545	BPA1598	13x17	¾	2.60	2.30	2.10
5A5546	BPA1529	14x17	1	2.80	2.30	2.10
5A5547	BPA1530	15x17	1	3.50	3.20	2.80
5A5548	BPA1531	17x17	1¼	3.60	3.20	2.90

## MINIATURE ALUMINUM CHASSIS

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A501	CB1624	1¾x3¼x1	¼	\$0.60	\$0.55	\$0.50
5A500	CB1623	2½x2¾x1¼	¼	.50	.45	.40
5A503	CB1626	2¾x4¼x1	¼	.70	.65	.55
5A505	CB1628	3x6¼x1¼	¼	.80	.70	.65
5A502	CB1625	3¼x4¼x2	¼	.70	.65	.55
5A504	CB1627	3¾x4¼x1½	¼	.70	.65	.55
5A507	CB1617	4x3¼x1	½	.60	.55	.50
5A236	CB1618	4x4¼x1	½	.70	.65	.55
5A508	CB1619	4x5¼x1	½	.80	.70	.65
5A509	CB1620	4x6¼x1	½	.80	.70	.65

Open end chassis are perfect for miniature tube application or sub-assemblies. Made of aluminum alloy 5005H-14 with ¼" flange on bottom permitting chassis to be fastened down or a bottom plate attached. Ends folded over ¾" for added strength on all except 1600 Series. Natural finish.

Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A232	CB996	5½x9x1½	¼	\$1.50	\$1.35	\$1.20
5A506	CB1629	5¾x4¾x1½	¼	.80	.70	.65
5A220	CB38	7x6x2	¼	1.30	1.20	1.10
5A223	CB41	7x7x1½	¼	1.60	1.40	1.30
5A221	CB39	7x8x2	½	1.60	1.40	1.30
5A222	CB40	7x10x2	½	1.80	1.60	1.40
5A234	CB997	7x11x1½	½	1.80	1.60	1.45
5A510	CB998	7x13x1½	½	2.20	2.00	1.70
5A233	CB976	7½x9x1½	½	1.80	1.70	1.50

## BUD ALUMINUM MINIBOXES

Size Inches	L.	H.	W.	Wt. Lbs.	Natural Bud No.	Finish Stk. No.	1-49 Each	50-99 Each	100-149 Each	Hammertone Bud No.	Stk. No.	1-49 Each	50-99 Each	100-149 Each
2¾x2½x1½	¼				CU3000A	5A3005	\$0.80	\$0.70	\$0.65	CU2100A	5A3018	\$0.90	\$0.80	\$0.70
3¼x2½x1½	¼				CU3001A	5A3014	.80	.70	.65	CU2117A	5A3025	1.10	1.00	.90
3¼x2½x1½	¼				CU3001A	5A3006	.80	.70	.65	CU2101A	5A3019	.90	.80	.70
4x2x2	¼				CU3001A	5A3012	1.00	.90	.80	CU2115A	5A3023	1.10	1.00	.90
4x2½x1½	¼				CU3002A	5A3007	.80	.70	.65	CU2102A	5A3020	1.00	.90	.80
4x2½x2½	¼				CU3003A	5A3008	1.10	1.00	.90	CU2103A	5A3021	1.10	1.00	.90
4¼x2½x1½	¼				CU3001A	5A3013	1.00	.90	.80	CU2116A	5A3024	1.10	1.00	.90
5x2¼x2½	¼				CU3004A	5A3009	1.10	1.00	.90	CU2104A	5A3022	1.20	1.10	.95
5x4x3	½				CU3005A	5A3010	1.10	1.00	.90	CU2105A	5A333	1.50	1.35	1.20
5¼x3x2½	¼				CU3006A	5A3011	1.10	1.00	.90	CU2106A	5A334	1.30	1.15	1.05
6x5x4	¾				CU3007A	5A271	1.40	1.25	1.10	CU2107A	5A335	1.90	1.70	1.50
7x5x3	¾				CU3008A	5A272	1.80	1.60	1.45	CU2108A	5A336	2.80	2.60	2.30
8x6x3½	1				CU3009A	5A273	2.30	2.10	1.90	CU2109A	5A337	2.80	2.60	2.30
10x2x1½	½				CU3013A	5A277	1.30	1.15	1.05	CU2113A	5A282	1.80	1.45	1.30
10x6x3½	1¼				CU3010A	5A274	2.50	2.30	2.00	CU2110A	5A279	3.10	2.80	2.50
12x2½x2½	¾				CU3014A	5A278	1.80	1.60	1.45	CU2114A	5A283	2.10	1.90	1.70
12x7x4	1¾				CU3011A	5A275	3.50	3.20	2.80	CU2111A	5A280	4.20	3.80	3.40



# METAL CABINETS

## MARK-T CABINETS

Distinctively designed enclosure for controls, meters, indicators, etc. 16 gauge steel with hinged door and removable front panel provide visibility of entire contents. Panel angle permits easy operation and viewing. Recessed and safety shielded carrying handles. With 4 rubber feet. Charcoal grey vinyl texture with light grey enamel panel and door.



Stock No.	Bud No.	W.	Panel Area	Wt. Lbs.	1-14 Each	15-24 Each	25-34 Each
5A3026	MT214	16"	5 3/4 x 14"	9	\$30.40	\$27.40	\$24.30
5A3027	MT219	21"	5 3/4 x 19"	12	33.30	30.00	26.70
5A3028	MT224	26"	5 3/4 x 24"	14 1/2	39.20	35.30	31.40

## NEW TRANSICASES

Handsome aluminum portable instrument case. Contoured design with chrome plated fittings. .040" aluminum with flush mounted .050 aluminum panels. Slip hinge, foam lined lid protects knobs, dials, etc. Clearance lid to panel 1 1/2". Rubber feet on both back and bottom. Textured vinyl gray finish. Blue textured vinyl on special order.



Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-9 Each	10-14 Each	15-19 Each
5B132	TC-300	10 1/2 x 7	6 3/4	\$27.80	\$25.00	\$22.20
5B137	TC-301	11 1/2 x 8 1/4	6 4/2	28.50	25.60	22.80
5B138	TC-302	13 x 9	7 1/2	29.10	26.20	23.20
5B148	TC-303	16 1/2 x 9	7 1/2	29.60	26.60	23.60
5B149	TC-304	20 1/2 x 8	9	31.20	28.10	25.00

## BUD FUTURA CABINETS

Modern rectangular modular cabinets. One-piece top and sides removable for easy access to interior. 20 gauge steel with 18 gauge front panel held in place by body flanges eliminating panel mounting screws. Available with inclined (see illustration) or straight panel. Choice of light grey Hammertone body with smooth light grey panel or smooth dark blue body with smooth light blue panel. Add HG to stock number for Hammertone Gray or SB for Smooth Blue.



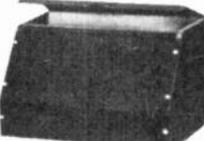
		VERTICAL PANEL					
Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5B32	MD1960	7 13	8 CB40	6 3/4	\$9.00	\$8.10	\$7.20
5B37	MD1961	8 14	9 CB997	7 3/4	9.70	8.70	7.70
5B42	MD1962	8 16	9 CB998	8 1/2	10.00	9.00	8.00

		INCLINED PANEL					
Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5B43	MD1963	7 13	8 CB40	7	10.50	9.50	8.40
5B44	MD1964	8 14	9 CB997	8	11.30	10.10	9.00
5B45	MD1965	8 16	9 CB998	8 3/4	12.00	10.80	9.60

## SLOPING FRONT CABINETS

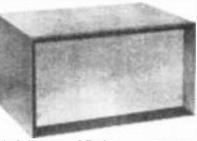
Provided with a hinged top for easy access to tubes and other components mounted on the chassis without removing the front panel. The front panel, however, may be removed if necessary. Stocked in light gray Hammertone finish.



Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5B135	C1584	6 1/2 x 7 1/2	7 3/4 CB38	2 1/2	\$4.30	\$3.80	\$3.40
5B136	C1585	6 1/2 x 9 1/2	7 3/4 CB39	3	4.70	4.20	3.70
5B139	C1586	6 1/2 x 11 1/2	7 3/4 CB40	3 1/2	5.40	4.90	4.30
5A326	C1587	8 x 8 1/2	8 CB41	2 3/4	5.70	5.10	4.50
5A134	C1588	8 x 10 1/2	8 CB976	3 1/4	6.30	5.60	5.00
5B142	C1892	8 x 13 1/2	8 1/2 AC409	3 1/4	7.40	6.70	5.90
5A130	C1894	8 x 14 1/2	8 AC407	4	6.70	6.00	5.30
5A131	C1896	9 x 18 1/2	8 1/2 AC425	7	9.40	8.50	7.50
5B144	C1893	10 x 18 1/2	10 1/2 AC415	8 1/2	9.80	8.80	7.80

## BUD SHADOW CABINET

Front panel bevelled and recessed 1". Front and back panel as well as the bottom are removable. 18 gauge steel with 16 gauge panels. Rubber feet. Light gray Hammertone.



Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A246	SB2143	6 15 1/2	9 AC409	9 1/2	\$6.80	\$6.10	\$5.40
5A244	SB2141	7 1/2 13 1/4	9 AC407	9 3/4	7.10	6.40	5.70
5A243	SB2140	8 14 1/2	10 AC424	11 1/2	8.90	8.00	7.10
5A245	SB2142	9 1/2 17 11	11 AC411	15 1/4	11.90	10.70	9.60

## BUD QUALITY HANDLES WITH MOUNTING HARDWARE



Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A5567	H9158	4"	AC409	9 1/2	\$1.60		
5A5581	H9116B	6"	AC407	9 3/4	1.80		

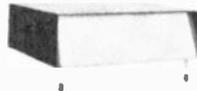
Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A5569	H9166B	1 3/4"	AC409	9 1/2	.90		
5A5570	H9168B	3"	AC407	9 3/4	.90		

Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A5571	UH70A	4 5/8"	AC409	9 1/2	\$0.60		
5A5572	UH71A	3 1/4"	AC407	9 3/4	.50		
5A5575	H9140B	3 1/2"	AC409	9 1/2	1.60		
5A5576	H9122B	6 1/2"	AC411	15 1/4	4.80		

## TILT-A-VIEW CABINET

Slanted front face and vertical rear face, may be used with or without detachable legs to change panel angle. Two piece 16 gauge permits easy access to interior. Top and bottom sections interlock for strength and rigidity. No fasteners show on front or rear panels. Charcoal grey vinyl texture cabinet with light sand panels.



Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-14 Each	15-24 Each	25-34 Each
5A3029	TV2155	4 1/2 x 15	10	\$8.10	\$7.30	\$6.50
5A3030	TV2156	6 1/2 x 16	12	9.50	8.60	7.60
5A3031	TV2157	8 1/2 x 17	14	13.80	12.40	11.00

## BUD PORTACAB

High styled housings for instrumentation or other equipment. Body is one piece .050 aluminum. Removable panel is .062. Flexible recessed handle, detachable rubber feet. Gray Hammertone finish only.



Stock No.	Bud No.	Size Inches	Use Chassis	Wt. Lbs.	1-24 Each	25-49 Each
5A3000	WA1540	8 6 1/8	8 AC402	2 1/2	\$11.30	\$10.10
5A3002	WA1542	8 10 1/8	8 AC406	3 1/2	13.10	11.80
5A3001	WA1541	9 8 1/2	12 AC407	3	14.70	13.20
5A3003	WA1543	11 11 1/8	18 AC416	6 1/2	18.20	16.40
5A7518	WA1544	12 14 1/8	18 AC420	7 3/4	21.00	18.90

## GRAND PRIX CABINET

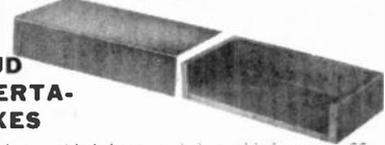
Unique styling accessibility. Top and bottom separate for complete access. Made of 20 gauge steel, aluminum extrusions serve as handles. Choice of light Hammertone Gray with matching panel or smooth dark grey with smooth light grey panel. Add HG to stock number for Hammertone Gray or SG for Smooth Gray.



Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5B51	MD-3	4 1/2 x 12 1/2	8 3/4	\$13.50	\$12.20	\$10.80
5B46	MD-1	4 1/2 x 19 1/2	10 1/2	16.70	15.00	13.40
5B50	MD-2	7 1/2 x 19 1/2	10 1/2	17.50	15.80	14.00

## BUD CONVERTA-BOXES

Consists of a welded base and two sided cover. 20 gauge steel assures rigidity and protection. Cadmium plated finish.

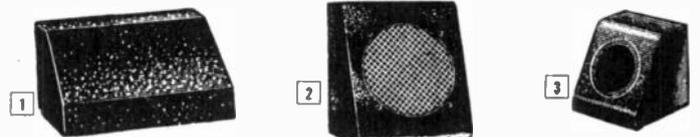


Stock No.	Bud No.	Size Inches	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A340	CU341	1 1/2 x 4	3 1/2	\$2.40	\$2.20	\$1.90
5A341	CU452	2 x 5	4	2.30	2.10	1.90
5A342	CU482	2 x 8	4 1/4	2.50	2.30	2.00
5A343	CU592	2 1/2 x 9 1/2	5 1/4	2.70	2.40	2.10
5A344	CU622	2 1/2 x 12	6 3/4	2.90	2.60	2.30
5A345	CU712	2 1/2 x 15	7 3/4	3.80	3.50	3.10

## UTILITY TYPE CABINETS

Sturdy spot welded steel. Removable front and back covers for complete accessibility. Stocked in Hammertone gray only.

Stock No.	Bud No.	Size In.	Wt. Lbs.	1-49 Each	50-149 Each	100-149 Each
5A78	CU-883	4 x 4	2 3/4	\$1.40	\$1.25	\$1.10
5A79	CU-728	4 x 5	3 3/4	1.60	1.45	1.30
5A7	CU-1098	6 x 6	6 2/2	2.80	2.50	2.20
5A8	CU-1099	6 x 6	5	3.00	2.70	2.40
5A9	CU-879	10 x 8	7 5	4.30	3.90	3.50
5A10	CU-880	10 x 10	8 5 1/2	5.20	4.70	4.10
5A11	CU-881	12 x 11	8 6	5.70	5.10	4.50



## MIDGET SIZE CABINETS

BUD SLOPING FRONT CABINETS for miniaturized equipment. Hammertone gray. Size 4 1/2" deep x 4 1/2" high. One-piece detachable back and sides.

Stock No.	Bud No.	Width	Uses Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5B145	C1606	4"	CB1617	3/4	\$1.90	\$1.70	\$1.50
5A19	C1607	5"	CB1618	3/4	2.00	1.80	1.60
5A20	C1608	6"	CB1619	1 1/8	2.20	2.00	1.70
5A14	C1609	7"	CB1620	1 1/8	2.50	2.30	2.00

## ALUMINUM CABINETS

Stock No.	Bud No.	Width	Uses Chassis	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A224	AC1610	4"	CB1617	1/2	\$2.40	\$2.20	\$1.90
5A225	AC1611	5"	CB1618	1/2	2.30	2.10	1.80
5A226	AC1612	6"	CB1619	3/4	2.50	2.30	2.00
5A228	AC1613	7"	CB1620	3/4	2.80	2.60	2.30

## BUD MIDGET WALL TYPE STEEL SPEAKER CASES

For wall or table. Brown wrinkle finish. Both are 7 1/2" H, 6 1/2" W, 5 1/4" D. Wt. 1 3/4 lb.

Stock No.	Bud No.	For	Wt. Lbs.	1-24 Each	25-49 Each	50-99 Each
5A48	CS1948	For 4 Inch Speaker	1 3/4	\$3.60	\$3.20	\$2.90
5A49	CS1939	For 5 Inch Speaker	1 3/4	3.80	3.40	3.00

## BUD UNIVERSAL CASES FOR 2 AND 3 INCH METERS

Punches for 2" meter with easily removable knock-out ring to increase hole size for 3" meter. One-piece removable sides and bottom. Two 3/8" knock-outs in top for installing insulators, etc. Gray hammertone. 4x4x4 1/4".

Stock No.	Bud No.	Material	Wt. Lbs.	1-49 Ea.	50-99 Ea.	100-149 Ea.
5A39	CM1935	Steel	1 Lb.	\$1.70	\$1.50	\$1.35
5A40	CMA1936	Aluminum	3/4 Lb.	1.90	1.70	1.50
LARGER SIZE CASE.	4 1/4" H. x 6" W. x 4" D.	Aluminum, Hammertone Gray.	3/4 Lb.	\$3.30	\$2.90	\$2.60
5A33	CMA1930	Aluminum	3/4 Lb.	\$3.30	\$2.90	\$2.60

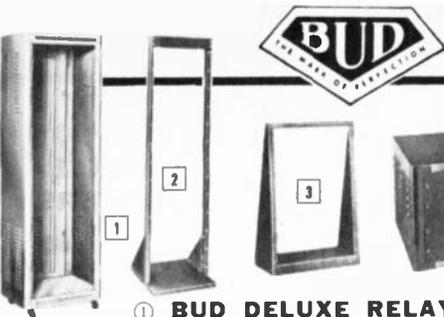
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# RELAY RACKS—DATAK TRANSFERS



## ① BUD DELUXE RELAY RACKS

Attractive rounded corner design with red filled chrome trim and recessed panel supports for flush panel mounting. Racks of 16 gauge steel, 3/4" panel supports. Drilled and tapped for 10-32 screws, spacing for all standard 19" panels. Well ventilated, louvers side and rear. Hinged rear door with snap catches. All are 22" wide, 17 1/2" deep. Supports for mounting free-rolling casters listed below. Shipped knocked down. Hammertone Gray finish.

Stock No.	Bud No.	Hgt. Ins.	Panel Space	Wt. Lbs.	1-9	10-14	15-19
5A7514	CR1774	42 3/4	36 3/4	82	\$61.50	\$55.40	\$49.20
5A7500	CR1771	47 3/4	42"	92	69.70	62.80	55.80
5A7515	CR1772	66 3/4	61 1/4	115	87.20	78.50	69.70
5A7516	CR1773	82 3/4	77"	135	100.40	90.30	80.30

BUD RC7756. 2 3/4" CASTERS FOR BUD DELUXE RELAY RACKS  
No. 5A310. Wt. 6 ozs. (Requires 4)  
1-49 Each .....\$1.20    50-99 Each .....\$1.10    100-149 Each .....95c

## ② BUD TELEPHONE TYPE RELAY RACKS

Uprights 3/4" steel channels, 3" deep. Chassis type base. Stocked in Hammertone Gray.

Stock No.	Bud No.	Hgt. Ins.	Panel Space	Wt. Lbs.	1-9	10-14	15-19
5A7509	RR1264	70 3/4	66 1/2	46	\$31.10	\$28.00	\$24.80
5A7510	RR1364	75 3/4	71 3/4	48	32.60	29.40	26.10
5A7511	RR1366	81 3/4	77"	50	35.70	32.20	28.60

## ③ TABLE MOUNT TELEPHONE RACKS

For desk or bench mtg. of equipment, permitting easy access for building or operating. Panel supports are recessed for flush panel mounting. Hammertone gray.

Stock No.	Bud No.	Hgt. Ins.	Panel Space	Wt. Lbs.	1-14	15-24	25-34
5A7519	RR1248	24	21"	15	\$12.20	\$11.00	\$ 9.80
5A7520	RR1249	31	28"	18	14.40	12.90	11.50

## ④ BUD DELUXE CABINET RACKS

Professional quality and appearance for equipment builders. All have hinged top with recessed snap lock and the five larger sizes also have hinged rear door. "No scratch" metal feet embossed on bottom. Red lined chrome trim. For use with standard relay rack panels. Overall O.D. is 22" wide, 14 3/4" deep. Aluminum relay rack panel covering entire panel space now supplied at no extra cost. Stocked in Hammertone Gray.

Stock No.	Bud No.	Hgt. Ins.	Panel Space	Wt. Lbs.	1-14	15-24	25-34
5A7503	CR1741	10 3/4	8 3/4	28	\$21.00	\$18.90	\$16.80
5A7501	CR1740	12 3/4	10 1/2	31	24.80	22.20	19.70
5A7504	CR1742	14 3/4	12 1/4	32	25.40	22.80	20.30
5A7502	CR1739	15 3/4	14"	35	34.40	31.00	27.50
5A7506	CR1743	19 3/4	17 1/2	40	33.70	30.40	27.00
5A7507	CR1727	22 3/4	21"	43	36.20	32.50	28.90
5A7512	CR1744	28 3/4	26 1/4	51	38.90	35.00	31.10
5A7508	CR1728	33 3/4	31 1/2	58	41.30	37.20	33.10
5A7513	CR1745	36 3/4	35"	63	43.40	39.10	34.70

## ⑤ ALUMINUM RELAY RACK PANELS

All panels are 19" wide, 1/8" thick. Notched to RMA specifications which fits all standard racks. Hammertone Gray finish.

Stock No.	Bud No.	Height Inches	Wt. Lbs.	1-49	50-99	100-149
5A5550	PA1101	1 3/4	1/4	\$1.40	\$1.25	\$1.10
5A5551	PA1102	3 1/2	3/4	2.00	1.80	1.60
5A5552	PA1103	5 1/4	1	2.60	2.30	2.10
5A5553	PA1104	7	1 3/4	3.30	3.00	2.70
5A5554	PA1105	8 3/4	2	3.80	3.50	3.10
5A5555	PA1106	10 1/2	2 1/2	4.80	4.40	3.90
5A5556	PA1107	12 1/4	2 3/4	5.70	5.10	4.50
5A5557	PA1108	14	3	6.40	5.80	5.10
5A5558	PA1109	15 3/4	3 1/2	7.20	6.50	5.70
5A298	PA1110	17 1/2	4	7.80	7.10	6.30
5A299	PA1111	19 1/4	4 1/2	8.60	7.70	6.90
5A300	PA1112	21	5	9.50	8.60	7.60

## ALUMINUM SURFACE SHIELD RACK PANELS

Bright aluminum with blemish-free Mill finish. Covered both sides with pressure sensitive white paper for layout and drilling; paper is removed when ready to install. Standard notching, 19" width, 1/8" thick.

Stock No.	Bud No.	Height Inches	Wt. Lbs.	1-49	50-99	100-149
5A5559	SFA1831	1 3/4	1/4	\$1.30	\$1.15	\$1.05
5A5560	SFA1832	3 1/2	3/4	2.00	1.80	1.60
5A5561	SFA1833	5 1/4	1	2.60	2.30	2.10
5A5562	SFA1834	7	1 3/4	3.20	2.90	2.50
5A5563	SFA1835	8 3/4	2	3.80	3.40	3.00
5A5564	SFA1836	10 1/2	2 1/2	4.80	4.40	3.90
5A5565	SFA1837	12 1/4	2 3/4	5.50	5.00	4.40
5A5566	SFA1838	14	3	6.30	5.70	5.10

## ⑥ BUD PAN-L-LITE

Bright, glare-free lighting for racks, cabinets, desks, tables and other areas requiring a concentrated source of light. Better illumination for more accurate reading of dials, recorders, circuit designs, etc. Mounted on standard Bud 1 3/4x19" steel rack panel with gray Hammertone finish. Bronzitone aluminum frame. Translucent plastic light diffuser. Push button starter switch, convenience outlet. Heavy duty 6-ft. cord with plug. Uses 15-watt Fluorescent tube (not supplied). U.L. listed. Size 5x18x1 1/2".  
No. 5A5582. Bud PL-5. Wt. 2 lbs.  
1-9 Each .....\$10.70    10-14 Each .....\$9.70    15-19 Each .....\$8.60

## ⑦ BUD TRANS-AIRE BLOWERS

Features greater air displacement for given area and panel space. Exhaust or intake, operates in any position. 110 volt 2 speed motor, rubber mounted. Has oilite bearings. Has thermal overload protection and automatic reset. Mounted on 19" rack panels with 18" 3-wire cord. Complete with disposable air filter and chrome grille.

Stock No.	Bud No.	Panel Space	Depth Ins.	Air Displacement High	Air Displacement Low	Motor Size	Wt. Lbs.	Prices Each
5A200	B23	3 1/2"	12	200CFM	100CFM	1/20 HP	17 1/4	\$74.20 \$66.80
5A214	B25	5 1/4"	14 1/2	500CFM	250CFM	1/6 HP	33	84.80 76.30
5A215	B27	7"	14 1/2	750CFM	350CFM	1/4 HP	35 3/4	95.30 85.80

### AIR FILTERS FOR ABOVE

Stk. No.	Mfg. No.	Descriptions	1-24 Ea.	25-49 Ea.	50-99 Ea.
5A5578	BF24	For B23 Blower	\$1.80	\$1.70	\$1.50
5A5579	BF26	For B25 Blower	2.00	1.80	1.60
5A5580	BF28	For B27 Blower	2.30	2.00	1.80

## ⑧ ADJUSTABLE BUD TEM-STAT

Tem-stat thermostat mounted in an enclosure. Responds quickly to gradual or sudden temperature changes. Actuates warning devices or turns Blowers on and off. Adjustable temp. range. 2 3/4"x1x1 1/2". UL listed.

Stock No.	Bud No.	Adjustable Temp. Range	1-9	10-14	15-19
5C146	TS-15	80 to 170° F.	\$5.60	\$5.00	\$4.40
5C147	TS-16	150 to 240° F.	5.60	5.00	4.40

## ⑨ BUD PANEL CHASSIS

For vertical chassis installation on relay rack panels where space in depth is limited. Provides easy access to circuitry. Horizontal design permits easier access for testing and maintenance. All have 17" chassis length and 5 1/2" depth. Notched for mounting with 19" relay rack panels. Made of .062" natural aluminum.

Stock No.	Bud No.	Height Inches	Wt. Lbs.	1-24	25-49	50-99
5A321	CB1371	3 1/2	1 1/4	\$3.30	\$3.00	\$2.70
5A322	CB1372	5 1/4	1 1/2	3.80	3.40	3.00
5A323	CB1373	7	2	4.30	3.80	3.40
5A324	CB1374	8 3/4	2 1/4	5.10	4.60	4.10

## ⑩ BUD CHASSIS BRACKETS

Essential for proper chassis support. Heavy gauge steel, black finish. Cut out to mount chassis flush against panel. MB450 and MB451 for 4 inch chassis, all others up to 3 inches high.

Stock No.	Bud No.	Size Inches Depth	Hgt. Ins.	Wt. Lbs.	1-49	50-99	100-149
5A99	MB458	8	6 1/2	1 1/4	\$1.60	\$1.40	\$1.30
5A113	MB448	10	6 1/2	1 3/4	1.60	1.40	1.30
5A98	MB459	11	6 1/2	2	1.80	1.70	1.50
5A156	MB449	12	6 1/2	2	2.10	1.90	1.70
5A284	MB460	13	6 1/2	2 1/2	2.00	1.80	1.60
5A157	MB450	10	8 1/2	2 1/4	2.30	2.10	1.90
5A158	MB451	13	8 1/2	3	2.50	2.30	2.00

## DATAK INSTANT LETTERING DRY TRANSFERS

Not a decal . . . goes on instantly . . . looks like printing. Transfers dry to practically any surface—metal, wood, glass, plastic, paper. Lettering is clean, crisp and opaque, with no background film. Applies to panels, chassis, meter faces, etc. by rubbing over lettering as it appears on see-thru backing sheet, giving professional appearance to equipment. Each kit contains hundreds of markings.



Type used (Shown actual size)

## ▶ ASTIGMATISM

SPECIFY COLOR.

- No. 12A2471. Titles for Electronic Equipment. Specify Black or White. Contains 22 3x5" sheets with hundreds of titles plus one Alphabet and 1 numeral sheet. For .....\$4.95
- No. 12A2472. Refill Alphabet. 12 sheets 3x5". Specify Black or White.....\$2.50
- No. 12A2473. Refill Numerals. 12 sheets 3x5". Specify Black or White.....\$2.50
- No. 12A2474. Terminal & Chassis Marking Kit. Contains 24 3x5" sheets of letters, letter combinations and numerals. Specify Black or White.....\$4.95
- No. 12A2475. Meter & Dial Marking Kit. Contains 12 4 3/4x7 1/4" sheets with patterns, arcs, graduation lines, letters and numerals. Ass't'd. Black, White and Red.....\$4.95
- No. 12A2476. Protective Coat. Will not crack or chip, affords complete protection to 180° F. 1 Oz. Bottle with Brush.....\$1.00
- No. 12A2477. 16 Oz. Glossy Spray.....\$2.95
- No. 12A2478. 16 Oz. Matte Spray.....\$2.95

## ELECTRONIC SYMBOL DRAFTING KIT

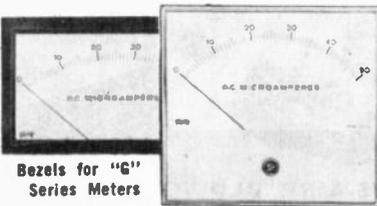
Precision drawn schematic symbols save time and effort. Line widths and symbol sizes fit in with standard military and ASA standards. Contain 40 5x7" sheets of black dry transfer symbols, letters and numerals, plus instruction booklet. Shpg. wt. 1 lb.

No. 12A2479 Complete... **\$15.95**



# Shurite TRIPLET AND Simpson PANEL METERS

## "G" SERIES TRIPLETT PANEL METERS



Bezels for "G" Series Meters

"G" Series Meters

Modern design that features a greater degree of flexibility and interchangeability. Two types of mountings are available—conventional flush type or behind-the-panel with a bezel for modern picture window appearance. Triplett's famous self-shielded BARRING magnet and one-piece diecast frame standard on all DC types. Pivot and jewel D'Arsonval type movements.

Quantity Discounts for All Triplett Panel Meters: 10 to 24 deduct 10%; 25 and over deduct 20% from each price.

2 1/2" DC Meters Are Model 220 G, 2 1/2" AC Meters Are Model 230 G. Both are 2.77x2.39" high, mount in 2.2" dia. hole. DC scale length 2.48", AC scale length 2.11".

3 1/2" DC Meters Are Model 320 G, 3 1/2" AC Meters Are Model 330 G. Both are 3.5" X3.00" h. Mount in 2.75" dia. hole. DC scale length 3.16", AC scale length 3.16".

4 1/2" DC Meters Are Model 420 G, 4 1/2" AC Meters Are Model 430 G. Both are 4.55 X4.07" high. DC scale length 4.03", AC scale length 3.43".

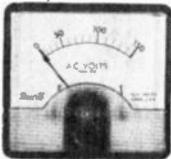
Range	2 1/2" METERS		3 1/2" METERS		4 1/2" METERS	
	Stock No.	Price Each	Stock No.	Price Each	Stock No.	Price Each
0-50 DC Volts	35A6191	\$18.00	35A6142	\$19.00	35A6057	\$20.00
0-300 DC Volts	35A6192	18.00	35A6143	19.00	35A6058	20.00
0-50 DC MV	35A6190	17.00	35A6054	18.00	35A6059	19.00
0-1 DC MA	35A6185	16.50	35A6144	17.50	35A6060	18.50
0-10 DC MA	35A6186	16.50	35A6055	17.50	35A6061	18.50
0-50 DC MA	35A6187	16.50	35A6145	17.50	35A6062	18.50
0-100 DC MA	35A6188	16.50	35A6146	17.50	35A6063	18.50
0-500 DC MA	35A6189	16.50	35A6147	17.50	35A6064	18.50
0-50 DC uA	35A6193	21.50	35A6148	22.50	35A6065	23.50
0-100 DC uA	35A6199	20.00	35A6149	21.00	35A6066	22.00
0-150 AC Volts	35A6197	17.00	35A6150	18.00	35A6067	19.00
0-300 AC Volts	35A6198	17.00	35A6151	18.00	35A6068	19.00
0-5 AC Amp	35A6194	16.00	35A6152	17.00	35A6069	18.00
0-10 AC Amp	35A6195	16.00	35A6056	17.00	35A6070	18.00
0-50 AC Amp	35A6196	16.00	35A6153	17.00	35A6071	18.00

Bezels for "G" Series Meters. Meter mounts back of panel. Overall size for 2 1/2" meter, 3.09 X 1.69" H.; for 3 1/2" meter, 3.83" W. X 2.27" H.; for 4" meter, 4.92" W. X 2.85" H.  
No. 35A6203. For 2 1/2" Meters. 13A-233. Each.....\$1.70  
No. 35A6155. For 3 1/2" Meters. 13A-234. Each.....1.70  
No. 35A6167. For 4" Meters. 13A-235. Each.....1.70

## TRIPLETT NULL METERS G SERIES

Sensitivity at Null Point is 0.3 ua per degree. End scale value is 40-0-40 ± 20%. Center spot mirrored for elimination of parallax in reading. Suspension type movements.  
40-0-40 320 G 3 1/2" meter. With 1700 ohms resistance. Triplett 8069752. No. 35A6200 Each.....\$39.00  
40-0-40 420 G 4 1/2" meter. With 1700 ohms resistance. Triplett 8069852. No. 35A6201 Each.....\$40.40

## POPULAR PRICED SHURITE PANEL METERS



MODEL 850

- Attractive new design.
- For sturdy dependable service.
- Wide selection of ranges.

Calibrated for non-magnetic panels. Accurate within 5%. White, metal scale, black calibrations. DC meters polarized-vane solenoid type; AC meters double vane repulsion type, jeweled bearings. All mount in 2 1/2" round hole. Extend 1 1/4" behind panel.  
Model 850—Clear Plastic Case. Case front 2 1/2" W. x 2 3/4" H. Shpg. wt. 8 oz.

DC MICROAMMETER—Clear Plastic			
Range	Stk. No.	Mfg. No.	Each
0-500	35A6000	8902	\$4.50
DC MILLIAMMETER—Clear Plastic			
0-1	35A6165	8336	\$4.25
0-3	35A6166	8301	3.45
0-5	35A6003	8302	3.15
0-10	35A6004	8303	3.05
0-15	35A6005	8304	2.85
0-25	35A6006	8305	2.85
0-50	35A6007	8306	2.85
0-100	35A6008	8307	2.85
0-150	35A6009	8308	2.85
0-200	35A6010	8309	2.85
0-300	35A6011	8310	2.85
0-500	35A6012	8312	2.85
DC AMPS—Clear Plastic			
0-3	35A6013	8202	\$2.85
0-5	35A6014	8203	2.85
0-10	35A6015	8205	2.85
0-15	35A6016	8206	2.85
0-25	35A6017	8207	3.15
0-50	35A6018	8208	3.15
10-0-10	35A6021	8213	3.15
20-0-20	35A6022	8214	3.15

DC VOLTS—Clear Plastic			
Range	Stk. No.	Mfg. No.	Each
0-3	35A6023	8102	\$2.85
0-5	35A6024	8104	2.85
0-10	35A6025	8107	2.85
0-15	35A6026	8108	2.85
0-25	35A6027	8109	3.00
0-50	35A6028	8122	2.95
0-150	35A6029	8115	3.15
AC VOLTS—Clear Plastic			
0-10	35A6030	8403	\$4.05
0-25	35A6031	8412	4.05
0-150	35A6033	8406	4.85
0-300	35A6034	8407	5.05
AC AMMETER—Clear Plastic			
0-3	35A6035	8502	\$4.00
0-5	35A6036	8503	4.00
0-10	35A6037	8504	4.00
0-15	35A6038	8508	4.00
0-30	35A6039	8505	4.25
OHMMETER			
Measures resistance 0-10K ohms.			
Stk. No.	Model	Net Ea.	
35A6020	8701 Sq. Plastic	\$3.35	

## LIGHTING LEVEL INDICATOR

A handy pocket-size meter (3 1/4"x2 1/4"x1 1/4") for checking the lighting level of various working areas. Simply place the meter on bench, desk, or other working surface, and it quickly shows whether the light level is adequate for efficient operation, or whether eye strain or fatigue may result because the level is too high or too low. Shielded to minimize the effect of external magnetic influences.  
No. 35A6202. Shurite 7902 FC. Each.....\$9.75



①



②

## SIMPSON PANEL METERS

① MODERN "WIDE-VUE" 3 1/2" METER MODELS 1327, 1357 with 3.14" scale length. One piece molded clear plastic wrap around cover. Black case 3 1/4"x3 1/4". All DC movements are self shielded core magnet movement eliminating calibration problems in metal panels or in magnetic fields. AC meters are moving vane type. Mount in 2 3/4" hole. Average shpg. wt. 12 ozs.

② 4 1/2" RECTANGULAR MODEL 29 and 59. Large, accurate, open face instruments with long easy-to-read scale. Black bakelite case 4.66" W., 4.20" H. Mount in 2 3/4" hole. Scale length 3.9". Calibrated ±2%. Average shpg. wt. 1 lb.

QUANTITY PRICES: 10 to 24 deduct 10% from "Each" price; 25 up deduct 15% from "Each" price.

DC MILLIAMMETER						
Range MA	Model No.	Stock No.	Net Each	Model No.	Stock No.	Net Each
0-1	1327	35A6072	\$19.50	29	35A6113	\$20.85
0-5	1327	35A6073	19.50	29	35A6114	20.85
0-10	1327	35A6074	19.50	29	35A6115	21.75
0-15	1327	35A6075	19.50	29	35A6116	21.75
0-50	1327	35A6076	20.10	29	35A6117	21.75
0-100	1327	35A6077	20.10	29	35A6118	21.75
0-150	1327	35A6078	20.10	29	35A6119	21.75
0-300	1327	35A6079	20.10	29	35A6120	21.75
0-500	1327	35A6080	20.10	29	35A6121	21.75

DC MICROAMMETERS						
UA	Model	Stk. No.	Each	Model	Stk. No.	Each
0-50	1327	35A6082	24.75	29	35A6118	26.85
0-100	1327	35A6083	22.80	29	35A6119	25.35
0-200	1327	35A6084	20.85	29	35A6120	22.80
0-500	1327	35A6085	20.55	29	35A6121	22.20
500-0-500	1327	35A6086	19.80	29	35A6122	21.00

DC AMMETERS						
Amps	Model	Stk. No.	Each	Model	Stk. No.	Each
0-1	1327	35A6087	\$20.10	29	35A6123	\$21.75
0-3	1327	35A6088	20.10	29	35A6124	21.75
0-5	1327	35A6089	20.10	29	35A6125	21.75
0-10	1327	35A6090	20.10	29	35A6126	21.75
0-25	1327	35A6091	20.10	29	35A6127	21.75
0-50	1327	35A6092	20.10	29	35A6128	21.75

DC VOLTMETERS (1000 OPV; 500 VOLTS is 2000 OPV)						
Range V.	Model	Stk. No.	Each	Model	Stk. No.	Each
0-5	1327	35A6093	\$20.85	29	35A6127	\$22.80
0-10	1327	35A6094	20.85	29	35A6128	22.80
0-25	1327	35A6095	20.85	29	35A6129	22.80
0-50	1327	35A6096	20.85	29	35A6130	22.80
0-100	1327	35A6097	20.85	29	35A6131	22.80
0-150	1327	35A6098	20.85	29	35A6132	22.80
0-300	1327	35A6099	20.85	29	35A6133	23.55
0-500	1327	35A6100	21.75	29	35A6134	23.55

AC VOLTMETERS						
Range	Model	Stk. No.	Each	Model	Stk. No.	Each
0-5	1357	35A6101	\$19.05	59	35A6134	\$21.30
0-10	1357	35A6102	19.05	59	35A6135	21.75
0-15	1357	35A6103	19.05	59	35A6136	21.75
0-100	1357	35A6104	19.80	59	35A6137	21.75
0-150	1357	35A6105	19.80	59	35A6138	21.75
0-300	1357	35A6106	20.55	59	35A6139	21.75

AC AMMETERS						
Range	Model	Stk. No.	Each	Model	Stk. No.	Each
0-1 A.	1357	35A6107	\$18.15	59	35A6137	\$19.35
0-3 A.	1357	35A6108	18.15	59	35A6138	19.35
0-5 A.	1357	35A6109	18.15	59	35A6139	19.35
0-10 A.	1357	35A6110	18.15	59	35A6140	21.75
0-25 A.	1357	35A6111	18.90	59	35A6141	21.75
0-50 A.	1357	35A6112	18.90	59	35A6142	21.75

① MODEL 57 AC MILLIAMMETERS				① MODEL 37 R.F. AMMETERS			
No.	Range	Ohms	Each	No.	Range	Thermo.	Each
35A6174	0-15	875	\$18.15	35A6176	0-1.5	Internal	\$23.10
35A6175	0-100	20	18.15	35A6177	0-3	Internal	23.10

② SIMPSON TAUT BAND MICROAMMETERS						
Taut band movement offers increased reliability, higher sensitivity, lower resistance and greater ruggedness.						
No.	Model	Size	Range	Type	Net Ea.	Each
No. 35A6178.	Model 1327T.	3 1/2 Inch	0-10 Microamp	DC.	Net Ea.	\$40.65
No. 35A6081.	Model 1327T.	3 1/2 Inch	0-25 Microamp	DC.	Net Ea.	\$35.26
No. 35A6179.	Model 1327T.	3 1/2 Inch	0-50 Microamp	DC.	Net Ea.	\$27.00
No. 35A6180.	Model 1327T.	3 1/2 Inch	0-100 Microamp	DC.	Net Ea.	\$24.75

DC GALVANOMETERS—SELF SHIELDING 3 1/2 IN.						
Stk. No.	Mfg. No.	Size Ins.	Scale Range	Sensitivity Microamp	Net Each	
35A6181	1327	3 1/2	50-0-50	500-0-500	\$19.80	
35A6182	1327	3 1/2	50-0-50	75-0-75	22.20	

SIMPSON VOLUME LEVEL INDICATORS						
1 1/2 and 3 1/2" VU Meters. Self shielding meter movement, reference level 1 milliwatt, 600 ohm line. Both have "A" scale for monitoring wire lines.						
Model	Size	Scale	Net Ea.	Model	Size	Scale
Model 1214.	1 1/2" Size.	Illus. above.	Net Ea.	Model 1347.	3 1/2" Size.	Illus. above.
No. 35A6183.	Net Each	\$28.80		No. 35A6184.	Net Each	\$32.55

# TRIPLETT TESTERS AND JBT METERS



## WORLD'S MOST POPULAR MINIATURE MULTIMETERS

- Handsize.
- Weighs only 14 oz.
- One selector switch.
- Unbreakable plastic.
- Provision for clamp-on ammeter.



101



10 Clamp-on Adaptor

### 310 FET ALL SOLID STATE FET VOM

Field-effect-transistorized circuitry, 10 meg ohm input on all DC voltage ranges, sensitivity ten times greater than the conventional VTVM and ohms reading to 5000 ohms. Taut suspension movement, Accuracy  $\pm 3\%$  of full scale on DC, and  $\pm 4\%$  on AC. Battery check position. High sensitivity (1300 mV fs) allows transistor bias measurements. Zero center for null measurements. Six DC volt ranges: 0-.3, 1.2, 6, 30, 120, 600 at 10 megohms. Five AC volt ranges: 0-.3, 1.2, 6, 30, 600 at 5,000 ohms per volt. Four resistance ranges: 0-5K, 500K, 50 Megohms, 5,000 Megohms at 50 ohms center scale. Two DC current ranges: 0-.12, 1.2 milliampers at 300 mV.  $2\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ . With 42" leads and batteries. **\$70.00**

No. 35A3057. Wt, 14 oz. Each.....

### MODEL 310 POCKET SIZE V.O.M.

Only  $2\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ " Plastic face meter fits in shirt pocket or in leather case with belt clip (listed below). Complete miniature 20,000 ohm per volt meter, 5 DC volt ranges 0-1200, AC—5 ranges 0-1200 volts at 5 K ohms per volt. Microampers 0-600, DC mils 3 ranges 0-600, ohms 0 to 20 K, 200 K, Megohms 0-2 and 0-20. Accuracy 3% DC, 4% AC. Has 24" test leads and removable negative or common test prod at meter end. Complete with test leads and battery. Wt. 14 oz. **\$44.00**

No. 35A352. Net Each.....

No. 35A353. Model 369 Carrying Case for 310 Meter. Each..... \$4.20

### ACCESSORIES FOR 310 FET AND 310

Model 10 Clamp-on Adaptor. Adapts Model 310 or 310 FET for checking AC line loads up to 300 amps without breaking circuit or interrupting work. **\$20.00**  
 No. 35A100. Complete ready to use. Each.....  
 Model 101 provides line separation and increase sensitivity X10 and X20. **\$8.00**  
 No. 35A101. Complete with instructions. Each.....

### JBT ELAPSED TIME METERS

Indicates accumulated operating time of AC electrical and electronic equipment. Registers 1/10 hour steps. For 110-125 VAC, 60 cy. Shpg. wt.  $1\frac{1}{4}$  lbs.

① Model 31EGW-5. Rectangular modern design. Clear plastic front. 5 wide digits register to 9,999.9 hours. Resets automatically.  $3\frac{1}{2} \times 3"$  H. Mounts in  $2\frac{3}{4}"$  dia. hole. **\$21.50**

No. 35A6158. Each.....

Model 13A234. Half Bezel Adaptor for mounting meter behind panel. Black molded frame and hdwe. for picture window effect. Outlines  $3.83 \times 2.27"$  dial area of 31EGW-5 Meter. **\$1.70**

No. 35A6155. Each.....

② Model 31-EX. Registers to 9,999.9 hours total, then resets to zero automatically. In round  $3\frac{1}{2}"$  black molded case. Mounts in  $2\frac{3}{4}"$  hole. **\$17.80**

No. 35A6161. Net Each.....

### WIDE-NUMERAL ELAPSED TIME METERS

③ Model 31-EXW6 Digit. Easy to read wide numerals register to 99,999.9 hours. Tenths are red on white, units white on black. Resets to zero automatically. Black molded case  $3\frac{1}{2}"$ . Mounts in  $2\frac{3}{4}"$  hole. **\$18.00**

No. 35A6162. Net Each.....

### JBT FREQUENCY METERS

④ Model 34FC. 9 Reeds 56-64 cy. 100 to 130 Volts, Accuracy  $\pm .3\%$ . Rectangular modern design. Clear plastic front. Power Consumption .9 watts. Mounts in  $2\frac{3}{4}"$  Dia. hole  $3\frac{1}{2}" \times 3"$  H. **\$32.25**

No. 35A3058. Each.....

Model 13A234. Half bezel adaptor for mounting meter behind panel. Black molded frame and hardware for picture window effect. Outlines  $3.83 \times 2.27"$  dial area of 34FC meter. **\$1.70**

No. 35A6155. Each.....

⑤ Model 34FX. 9 Reeds 56-64 cy. Accuracy  $\pm .3\%$ . 100 to 130 volts. 140 ohms per volt, .9 watt power consumption.  $3\frac{1}{2}"$  molded case, mounts in  $2\frac{3}{4}"$  hole. **\$28.65**

No. 35A6163. Each.....

⑥ Model 31FX. 5 Reeds 58-62 cy. 100-130 volts. Accuracy  $\pm .3\%$  for measuring frequency of power source. Molded bakelite case  $3\frac{1}{2}"$ . Mounts in  $2\frac{3}{4}"$  hole. **\$24.85**

No. 35A6164. Each.....

### SHURITE BATTERY TESTERS

No. 4128 BATTERY TESTER. Has two scales, 0-50 volts and 0-2 volts.  $2\frac{1}{4}"$  diameter,  $\frac{5}{8}"$  thick, bright nickel finished. Shpg. wt. 8 oz. **\$4.30**

No. 35A3002. Net Each.....

No. 4123 FOR ALL RADIO AND HEARING AID BATTERIES from 1.5 to 45 volts. Scale has green zones to indicate satisfactory condition of batteries in these voltages 1.5, 15, 22.5, 30, 33, 45. Tests are made under normal operating load for each battery assuring a true indication of battery condition. Shpg. wt. 8 oz. **\$4.30**

No. 35A3003. Net Each.....

No. 4152 TRANSISTOR BATTERY TESTER. 0-2-10 voltage scale. For the new Mercury cells and transistor batteries. Indicates battery strength with a minimum consumption of power. Shpg. wt. 8 oz. **\$4.30**

No. 35A3004. Net Each.....

No. 5406LT AC LINE TESTER. Consists of 0-150 volt AC Meter with combination plug and receptacle connected to meter permanently by a cord. Reading may be taken with and without appliance plugged in. Wt.  $\frac{1}{2}$  lb. **\$4.85**

No. 35A3005. Net Each.....



## TRIPLETT PUSH-BUTTON BATTERY OPERATED SOLID STATE (FET) VOM's



Model 601



Model 600

Field effect transistorized circuitry provides 11 megohm input on all AC and DC volt ranges, low power ohms feature to prevent damage to integrated circuits. In-circuit resistance measurements can be made without usual diode or transistor loading. Push-button switches select: DC volts (+) ohms; DC volts (-) ohms; AC volts and low power ohms.

53 Test Ranges Include: DC Volts: 0 - .1 - .3 - 1 - 3 - 10 - 30 - 100 - 300 - 1000. 1000 at 11 megohms. AC Volts: 0 - .01 - .03 - .1 - .3 - 1 - 3 - 10 - 30 - 100 - 300. 1000 at 11 megohms.

Ohms: 0-1K-10K, 100K, 1 meg, 10 meg, 100 meg, 1000 meg with 10 ohm center scale. Both conventional and low power.

AC-DC Current Ranges: 0 - 10 - 100 - 1000 - 10,000 microampers. DB (Decibel): -40 db to +60 db.

Off and battery check. Accuracy  $\pm 2\%$  full scale on DC and  $\pm 3\%$  on AC. 5" meter. Uses 10 AA penlight cells (included). With slim shielded probe and instructions. Size  $3\frac{1}{2} \times 5\frac{1}{8} \times 6\frac{1}{2}"$ . Shpg. wt. 5 lbs. Use 639-OS Carrying Case listed at bottom of page. **\$150.00**

No. 35A3011 601 Solid State VOM. Net Each.....

No. 35A8026. T-79-270. Hi-Voltage Probe. Each..... \$25.20

No. 35A8027. T-79-271. RF Probe. Each..... \$ 9.00

### TRIPLETT MODEL 600 TRANSISTORIZED VOLT-OHMETER

Has Field-Effect-Transistor (FET) amplifier.  $\pm 3\%$  accuracy on all ranges. Internal battery powered (batteries included). Easy to read 5 inch meter. Input 11 megohms all DC ranges except 2.75 meg at 0.4 volts, 5.5 meg at 0.8 volts.

23 Ranges in All: DC volts, 0.4, 0.8, 1.6, 4, 8, 16, 40, 160, 400, 1600. AC volts, 4, 8, 16, 40, 160, 400, 800. Ohms, 1000, 10,000, 100,000, 1 Meg, 10 Meg, 100 Meg.

Case  $3\frac{1}{2} \times 5\frac{1}{8} \times 6\frac{1}{2}"$ . With probe, 48" leads. Shpg. wt. 3 lbs. Use 639-OS Carrying Case listed at bottom of page. **\$82.00**

No. 35A666. Model 600. Net Each.....

No. 35A8028. T-79-265. Hi-Voltage Probe. Each..... \$25.20

No. 35A8029. T-79-264. RF Probe. Each..... \$ 9.00

### TRIPLETT MULTIMETERS - TESTERS



630



630PL-630APL



631

### 630 ALL-TIME FAVORITE MULTIMETER

Proven dependability over a long period of time 20,000 ohm per volt sensitivity DC and 5000 ohms AC. Accuracy 2% DC and 3% AC voltage ranges 0 - 3 - 12 - 60 - 300 - 1200 - 6000. Ohms 0 - 1000 - 10,000. Megs 0 - 1 - 100. DC microamps 0 - 60. DC milliamps 0 - 1.2 - 12 - 120 at 250 millivolts. DC amperes 0 - 12. DB -20 to +77. Output volts 0 - 3 - 12 - 60 - 300 - 1200. Size  $3\frac{1}{2} \times 5\frac{1}{2} \times 7\frac{1}{2}"$ . Wt. 4 lbs. **\$61.00**

No. 35A170. Model 630. Complete with leads. Net Each.....

### FULL-VIEW MODEL 630PL V.O.M.A. TYPE 2

20,000 O.P.V. DC—5,000 O.P.V. AC. Features DC polarity reversing switch; instant vision, wider spread scales, with new streamlined plastic front meter; AC freq. response 5 to 500,000 cps. Single selector switch has 2  $\frac{1}{2}"$  recessed knob flush with panel. Precision resistors. DC Volts Ranges: 0 - 2.5 - 10 - 50 - 250 - 1000 - 5000. Ohms Ranges: 0 - 1000, 10,000 ohms; 0 - 1 - 100 megohms. AC Volts Ranges: 0 - 3 - 10 - 50 - 250 - 1000 - 5000. DC Current Ranges: Microamp: 0 - 100. Milliamp: 0 - 10 - 100 - 1000 MA. Output: Condenser in series with AC volt ranges. Decibels: -20 to +75 in 6 ranges. With 50" test leads, batteries, instructions.  $3\frac{1}{2} \times 5\frac{1}{2} \times 7\frac{1}{2}"$ . Wt. 4 lbs. **\$61.00**

No. 35B67. Model 630PL V.O.M.A. Net.....

### SUPER-PRECISION MODEL 630APL TYPE 3

Model 630APL is identical to 630PL above except has  $\frac{1}{2}\%$  resistors and mirrored scale. Accuracy  $\pm 1\frac{1}{2}\%$  DC,  $\pm 3\%$  AC. Has suspension type meter, overload protected. **\$71.00**

35A149. Model 630APL. Net.....

### BURNOUT PROOF 630PLK TYPE 3

No expensive repair and down-time because of accidental miss-use or overload. Transistorized electronic switching circuit guards against accidental burn-out. See 630 for other specs. Great for schools, labs and maintenance shops. **\$93.00**

No. 35B46. Model 630PLK. Net Each.....

### BLACK LEATHER CARRYING CASES

No. 639-OS for all 630 and 631 series Triplett testers. Permits use of instrument in case. Protects and cushions. Has built-in stand. **\$14.70**

No. 35B68. Net Each.....

### REPLACEMENT LEADS

Leads for Models 630, 630A, 630PL, 630APL, 630PLK, 630APLK, 631, 666-R, 620NA, 630M, 630NS, 800. Wt. 10 ozs. **\$3.20**

No. 35A8010. T99-127. Net Each.....

# Simpson AND RCA TEST EQUIPMENT



**QUALITY INSTRUMENTS**  
**NEW! TAUT BAND MOVEMENT**  
**WORLD FAMOUS 260, 261, 270 AC/DC MULTIMETERS**  
**CHOOSE NOW FROM THIS LATEST LISTING...**

## RUGGED AND DEPENDABLE MODEL 260-5

High sensitivity (20,000 o.p.v. DC volts; 5000 o.p.v. AC volts)

Varistor protects the movement from even 200,000% overloads. Self shielding and shockproof 50 microampere movement. DC volts ranges 0-25, 2.5, 10, 50, 250, 1000, 5000 volts; AC volts ranges 0-2.5, 10, 50, 250, 1000, 5000; DC current ranges 0-50 microamps, 0-1, 10, 100, 500 M.A.; 0-10 Amps; 4 DB ranges from -20 to +50 db; Resistance readings 1/5 ohm to 20 meg. 5" meter. .1 mfd capacitor in series with all AC voltage ranges through 250 volts. Accuracy 2% full scale, most DC ranges; 3% full scale AC. With test leads, manual and built in stand. 5 1/4 x 7 x 3 1/8". Wt. 5 lbs.

- No. 35A60. Simpson Model 260-5. Net Each..... **\$65.00**
- No. 35B61. Model 260-5M. With Mirrored Scale, knife edge pointer. Net \$67.00
- No. 35B51. Model 260-5RT. In Protective Roll Top Case. Wt. 9 lbs. Net \$71.00

## "GOOF-PROOF" PROTECTED MODEL 260-5P

All of the features of the 260-5M plus 260-5. Built-in meter protection makes this VOM "goof-proof." Ideal for students, apprentices, for exploring unfamiliar equipment. Combined protection includes: reset button pops out to indicate overload, cannot reset circuits while overload is present. Protective circuit does not require massive overloads, all ranges protected except 1000 and 5000 volts DC and AC, 10 amps DC.

- No. 35C24. Model 260-5P. Net Each..... **\$97.00**

## HIGH ACCURACY MODEL 261-2

All of the features of the 260-5M plus special calibration, mirror scale, knife edge pointer, burn-out protected, input protected by internal fuse. Accuracy 1.5% full scale, most DC ranges, 3% full scale AC. Wt. 5 lbs.

- No. 35B50. Model 261-2. Net Each..... **\$73.00**

## MODEL 270-3 MULTIMETER

NOW HAS TAUT BAND SELF SHIELDING ANNULAR MOVEMENT

The Extra Quality Laboratory Instrument featuring: ● Greater accuracy. ● special calibration circuit for greater accuracy, overload protected ● DC accuracy 1 1/4% full scale 20,000 ohms per volt. ● AC accuracy 2% full scale 5,000 ohms per volt.

- Mirrored scale. ● Knife-edge pointer. ● Ranges: 7 DC volts from 250 MV to 5000 volts. ● 6 AC volts from 2.5 to 5000 volts. ● AC volts (output) 4 ranges 2.5 to 250 volts. ● Decibels -20 to +50 in 4 ranges. ● DC current 50 ua to 10 amps in 6 ranges. ● DC resistance from 0-2000 (12 ohms center) to 20 megohms in 3 ranges.

Black molded case 5 1/4 x 7 x 3 1/8". Wt. 5 1/2 lbs.

- No. 35A41. Model 270-3. Net Each..... **\$78.00**

## CARRYING CASE FOR 260-270

- No. 35A165. Model 0805. Ever-redy vinyl. Wt. 1 lb. Net Each..... **\$13.00**

## AMP-CLAMP PLUG-IN ADAPTER FOR AC AMPERE MEASUREMENTS

Allows measurement to be made without breaking circuit being tested. Simply plugs into 260, 261, 270, 250 or 255 VOM. Ranges: 0-5, 10, 25, 50, 100, 250 AC Amperes. Readout is on VOM's 0-2.5 VAC scale. May be used with any VOM having 0-2.5, or 0-3 VAC range. (When used with 0-3 VAC adapter ranges are from 0-6 to 0-300 AC amperes). Rugged construction, and easy to use. Wt. 1 lb.

- No. 35A3019. Model 150. Net Each..... **\$30.00**
- Carrying Case for amp. clamp.....
- No. 35A8023. 0548..... **\$4.80**

## SIMPSON 160 HANDI-VOM FULL FEATURED, YET PALM SIZED

All the time saving conveniences and the sensitivity of a full-sized VOM, yet only 4 1/2" x 3 1/2" x 1 3/4" and weighs only 12 oz. Features self-shielding taut band movement, diode overload protection to prevent burnout. Accuracy ± 2% FS DC, ± 4% FS AC. Ranges DC volts: 0-0.25, 1.0, 2.5, 10, 50, 250, 500, 1000 at 20,000 ohms per volt. AC volts 0-2.5, 10, 50, 250, 500, 1000 at 5000 ohms per volt, DC microamps 0-50, DC MA 0-1, 10, 100, 500. Resistance RX1, RX10, RX100, RX1000, RX10K 30 ohm center scale. DB -20 to +50 in 4 ranges. Shpg. wt. 1 lb.

- No. 35A664. Model 160. Net Each..... **\$55.00**

2225 Leather Carrying Case

- No. 35A665. Shpg. wt. 1 lb. Net Each..... **\$10.00**

## SIMPSON 313 SOLID STATE VOM VTVM FEATURES... WITH VOM CONVENIENCE



Operates for over 300 hours on a single 9 volt battery. Battery condition checked instantly. Self-shielding movement is shockproof and overload protected. All voltage range inputs are fully protected, too. Even AC line voltage can be applied on ohms ranges without damage to the Field Effect Transistor input. 7" Scale.

Voltage Ranges: DC: 0-0.3, 1, 3, 10, 30, 100, 300, 1000 volts (11 meg input impedance); AC: 0-0.3, 1, 3, 10, 30, 100, 300, 1000 volts (10 meg input impedance); Current ranges: DC: 0-0.1, 1, 10, 1000 milliamperes; Resistance ranges: RX1 (10 ohm center), RX10, RX100, RX1K, RX10K, RX100K, RX1M. Frequency response: ±0.5 db from 20 Hz to 100K Hz on 0-0.3, 1, 3 volt ranges; ±0.5 db from 20 Hz to 20K Hz on 0-10, 30, 100 volt ranges. Accuracy: DC ±3% of full scale; AC: ±3% of full scale. Resistance: ±3% of arc.

Complete with test leads, isolating probe and operator's manual.

- No. 35A3020. Model 313. Net Each **\$125.00**

- No. 35A3021. 0577 Carrying Case for above. Vinyl with lead storage space. Net Each..... **\$16.00**
- No. 35A8024. 00191 RF PROBE..... **\$10.75**
- No. 35A8025. 00192 Hi Voltage Probe..... **\$18.00**

## SIMPSON 312 VTVM

16 Meg input. 40% less circuit loading than most VTVM's. Specially designed circuit protects meter against burnout. Large easy to read 7" scale. 1/2 volt range for solid state circuitry. Ranges: DC volts 0-0.5, 1.5, 5, 15, 50, 150, 500, 1500. AC volts (RMS 1 meg input) 0-1.5, 5, 15, 50, 150, 500, 1500. AC volts (peak-to-peak) 0-4, 14, 40, 140, 400, 1400, 4000. Resistance ranges RX1, RX10, RX100, RX1K, RX10K, RX100K, RX1M. Freq. resp. ±3% 15 Hz to 3 MHz on AC ranges through 150 volts. Accuracy: DC and AC ±3% full scale. resistance ±3% of arc. 105-125 V. 50/60 Hz. With 3 wire cord and plug. Size 7 3/4 x 6 3/4 x 3 3/4". Wt. 4 3/4 lbs.

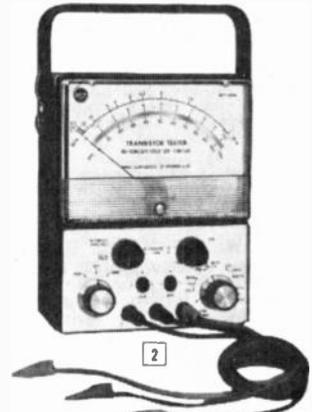
- No. 35C27. Model 312 VTVM. Net Each..... **\$95.00**

- No. 35A3021. 0577 Vinyl Carrying Case with Lead Storage..... **\$16.00**

- No. 35D34. RF Probe #0152. Net Each..... **\$10.75**

- No. 35B37. High Voltage Probe #0155. Net Each..... **\$16.00**

## RCA TEST EQUIPMENT



## ① RCA WV500B SOLID STATE VOLT OHM MYST

Stable, drift-free operation. Completely portable. Solid state design eliminates warm-up time and reduces zero-shift. Measures DC voltages from .01 to 1500 V in 8 ranges; AC rms voltages from .1 to 1500 volts in 7 ranges; AC P-P voltages from .5 to 4200 volts in 6 ranges; and resistances to 1000 megohms in 7 ranges. 11 meg. input on all DC ranges prevents overloading the circuit under test. Burn-out proof meter, ± 3% of full scale accuracy on DC and AC rms functions.

Size: 6 7/8 x 5 1/4 x 3 1/8". With batteries and AC/DC ohms probe. Wt. 5 lbs.

- No. 35A3006 WV500B..... **\$79.00**

- No. 35A3007 WC411A Hi-Volt Probe. Extends reading to 50KV. Each \$16.25

## ② RCA WT501A TRANSISTOR TESTER

Accurately tests transistors both in-circuit and out-of-circuit, both high and low power types. NPN and PNP sockets, three color coded leads for in-circuit testing. Tests transistors for DC beta from 1 to 1000, collector-to-base (ICBO) as low as two microamperes, collector-to-emitter leakage (ICEO) from 20 microamperes to one ampere. Collector current adjustable in 4 ranges Low impedance circuitry for reliable in-circuit testing. Mirrored scale. Size 6 7/8 x 5 1/4 x 3 1/8". With instructions, batteries and RCA transistor manual. Wt. 3 lbs.

- No. 35A3008 WT 501A. Net Each..... **\$66.75**

## RCA WC-506A TRANSISTOR DIODE CHECKER

Fast relative gain and leakage measurements of NPN and PNP transistors. Forward and reverse diode-current checks. Panel socket and test leads for out-of-circuit measurements. Panel switch for high-and-low leakage transistors. Quick-connect diode test terminals. Battery operated. Small, compact, inexpensive. Measures 3 3/4 x 6 1/2 x 2"

- No. 35A3054. Each..... **\$18.00**

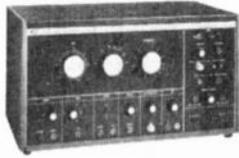
- No. 21A3. Penlight Battery (Requires 2) Each..... **13c**



# B&K AND RCA TEST EQUIPMENT

## B&W MODEL 1077 TELEVISION ANALYST

Service B&W and color, VHF and UHF, tube type and transistorized TV receivers. Supplies test signal for each separate stage, you watch results on T.V. set itself. No oscilloscope needed. By test pattern signal injection you can signal trace each stage from the antenna input to the last video amplifier grid. Also provides audio tone generator, sync and sweep circuit pulses, yoke and flyback tests. Supplied with standard test pattern, white dot and white line crosshatch and color bar pattern slide transparencies. Operates on 105-125 VAC. Size 17"x10 1/4"x10". Wt. 29 lbs.



**\$379.95**

No. 35A302. Model 1077. Each

## B & K MODEL 465 CRT REJUVENATOR & CHECKER TESTS AND REPAIRS COLOR AND BLACK & WHITE PICTURE TUBES WITHOUT REMOVING TUBE FROM THE TV SET

Recognized standard of the industry! Checks for leakage, shorts, open circuits and emission. Removes inter-element shorts and leakage with adjustable voltage and controlled time. Continuously variable element voltages provide obsolescence protection. Repairs open circuits. Restores emission and brightness. Life test checks condition of cathode emissive coating and predicts remaining useful life of picture tube.



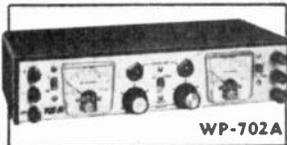
**\$94.95**

Neon bulb indicators and a large 4 1/2" meter provide quick, easy reading. Operates on 117 V. 60 cps. Vinyl covered carrying case. Size: 10 1/2" H. x 11 1/2" W. x 4 1/2" D. Shpg. wt. 8 lbs.

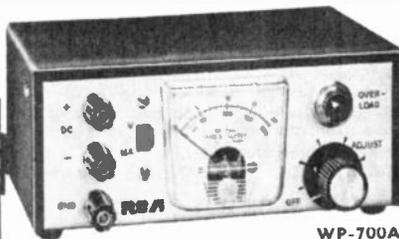
No. 35A229. Model 465. Net Each

## RCA POWER SUPPLIES

### SOLID STATE REGULATED



WP-702A



WP-700A

Output voltage continuously adjustable. Meter indicates output voltage or current level. Panel switch selects meter function, circuit automatically limits overload current to prevent damage to the supply. Maintains constant output voltage regardless of varying line voltage or load resistance. .0005 rms volt max. ripple. Electronic short circuit protection. Three output terminals, DC+ DC-, Gnd. to obtain positive or negative output. Three wire cord. Operate on 105-135 VAC, 50-60 Hz.

WP-700A Zero to 20 volts at current levels up to 200MA. Size 4x6 1/2 x 3". Shpg. Wt. 3 lbs.

No. 35A3039. **\$48.00** 5 or more **\$40.00**

Each **\$40.00**

WP-703A Zero to 20 volts at current levels up to 500 MA. Size 5 1/4 x 8 1/4 x 3 1/4". Front panel similar to WP-700A. Shpg. Wt. 5 lbs.

No. 35A3052. **\$58.50** 5 or more **\$49.00**

Each **\$49.00**

WP-704A Zero to 40 volts at current levels up to 250MA. Size 5 1/4 x 8 1/4 x 3 1/4". Front panel similar to WP-700A. Shpg. Wt. 5 lbs.

No. 35A3053. **\$58.50** 5 or more **\$49.00**

Each **\$49.00**

DUAL UNIT. Separate controls, output terminals and meters for each section. Sections isolated from each other otherwise identical to WP-700A above.

6" x 12" x 3". Shpg. wt. 5 lbs.

No. 35A3040. WP-702A. **\$87.00** 5 or more **\$73.00**

Net Each **\$73.00**

DUAL BANANA PLUG & LEADS Includes alligator clip connectors.

No. 35A8021. WG-413A. Net Each **\$3.75**

## RCA WV-120A POWER LINE MONITOR

Provides a continuous, accurate indication of AC line voltage. Expanded 2-color scale—from 100 to 140 volts for easy reading. Input 100 to 140 volts @ 25 to 400 cps. High accuracy  $\pm 2\%$  at 120 volts,  $\pm 3\%$  at 100 and 140 volts. Moving vane meter gives accurate RMS readings. Fast meter action reveals "bounces" and fluctuations in line voltage. Large numerals, large pointer, large scale for easy reading. With AC outlet. Holes for wall mtg. 3 1/4" High, 5" wide, 3 1/4" deep.



**\$18.50**

No. 35A3051. Shpg. Wt. 1 1/2 lbs.

## OTHER RCA TESTERS IN STOCK FOR OFF-SHELF DELIVERY

- No. 35A90. WV38A VOLT-OHM MILLIAMETER **\$38.00**
- No. 35A89. WV38A Factory Wired. Each **\$52.00**
- RCA WV77E VOLTOHMYSTS
- No. 35A289. WV77E Kit. Each **\$38.00**
- No. 35A71. WV77E Factory Wired. Each **\$52.00**
- RCA WV98C SENIOR VOLTOHMYST
- No. 35A355. WV98C Kit. Each **\$57.95**
- No. 35A367. WV98C Factory Wired. Each **\$88.50**
- No. 35A395. WG301A Crystal Probe. 30 cps to 250 MC. For WV98C. **\$8.25**
- Each **\$17.00**
- No. 35A263. WG289 Hi-Voltage (50K) Probe. For WV98C. Each **\$17.00**

## B&K MODEL 1450 DIAGNOSTIC OSCILLOSCOPE

ONLY SCOPE DESIGNED TO HELP LOCATE ELUSIVE INTERMITTENTS QUICKLY... EASILY

**\$279.95**

The sweep section and vertical amplifiers are designed especially to provide easy sync of the 3.58 mc. burst signal in color TV receivers. Double scale calibrated screen for easy voltage calibration.

Vectorscope inputs and controls on front panel. **SPECIFICATIONS: Intermittent Analyzer:** Sensitivity: Proportionate to amplitude of signal. Variable from  $\pm 10$  to 50% of signal. Analyzer bandwidth 5Hz to 5MHz. **Vertical Amplifier:** (3-Stage, Push-Pull). Sensitivity 25 Millivolts rms/inch. 70 millivolts peak-to-peak/inch. Undistorted Deflection: Greater than 6 inches. Positioning:  $\pm 2$  inches, minimum. Bandwidth: 5 Hz to 5MHz (Down 1 db at 4.5 MHz). Rise Time: 120 nanoseconds or better. Overshoot: Less than 10%. Input Impedance: 3 megohms shunted by 47 mmf maximum. **Vertical-Input Step Attenuator:** Frequency compensated, 7-step. **Horizontal Amplifier:** (Push-Pull). Sensitivity: 0.5 volts rms/inch or better. Bandwidth: Within 3 db, 2 Hz to 750 KHz. Input impedance: 5 megohms minimum shunted by 30 mmf. Inputs: Internal linear time base; Phased 60 Hz; and External. Trace Expansion: 2 times screen diameter. Positioning: Any portion of trace can be placed on screen. Frequency Range: 5 Hz to 500 KHz sawtooth in 5 overlapping ranges, TV-Vertical and TV-Horizontal positions have automatic sync separator. Synchronization: (Automatic in all modes). + Internal and - Internal; Phased 60 Hz; External. Dimensions: 17 1/4" D. x 13 3/8" H. x 8 3/4" W. Operates on 117 VAC 60 Hz. PR 14 Direct/Low Capacity 10 to 1 Probe Included.

No. 35A3033. **\$279.95**

Shpg. wt. 28 lbs. Each

No. 35A8019—Model PR-15 Crystal Demodulator Probe. **\$9.95**

For viewing RF and IF modulation waveforms. Each

## NEW B&K 415 SOLID STATE SWEEP/MARKER ALIGNMENT GENERATOR



Markers are clearly indicated by lights on the panel and by tilting markers on the serviceman's scope. The unit is so complete—all that is needed to complete the alignment job is a scope and an alignment tool. Even the instruction book is different—showing a simplified, new easy method to align all TV receivers.

**SPECIFICATIONS:** Completely solid state (with field effect transistors) 3 Bias supplies (low impedance), 2 ADJ to  $\pm 25$  VDC, and 1 ADJ to  $\pm 50$  VDC. Xtal controlled RF output on Channel 4 and 10. Xtal controlled IF markers. Sweep width up to 12 MHz. As many Xtal markers may be used together as needed. Post injection marker (Xtal controlled).

All cables supplied. 115 VAC 50/60 HZ (with 3 wire cord). **\$349.95**

No. 35A3050. Shpg. Wt. 20 lbs. Each

## B & K TEST INSTRUMENTS

HIGH SPEED MULTIPLE SOCKET TUBE TESTERS FOR FAST RELIABLE TESTING



### 1 MODEL 707 DYNA-QUICK TUBE TESTER

Dynamic mutual conductance tube tester. Set only two controls; push button to read GM. Switch section provides obsolescence protection. Tests all TV and radio tubes, nuvistors, new 10-pin tubes, 12-pin compactrons, European Hi-Fi tubes, voltage regulators and many industrial tube types.

It's fast, with professional accuracy. Tests each section for shorts, grid emission, and gas. Makes life test. 7, 9 and 10 pin straighteners. Black leatherette covered case 16 1/8 x 15 3/4 x 5 7/8". Wt. 15 1/2 lbs. Operates on 105-125 volts 50-60 cycle AC. **\$199.95**

No. 35B349. Net Each

### 2 MODEL 606 TUBE TESTER

Compact, portable, low cost tester. Fast—only 4 settings required. Tests the newest miniature and color T.V. tube types as well as the older types. Tests Nuvistors, 10 and 12 pin Compactrons, Novars, voltage regulators, European hi-fi and many industrial types.

Checks for all shorts, grid emission, leakage and gas. Highly dependable results obtained by testing tubes under actual operating conditions. For 105-125 volts 50-60 cycle AC. Tube reference charts clip in cover. Leatherette case 8 1/2 x 11 x 4 1/2". Wt. 8 lbs. **\$84.95**

No. 35B513. Net Each

### DYNA-FLEX ADJUSTABLE 3-POINT PROBE

Easy one hand way to check transistors, diodes, and other components in printed circuit boards. Spring loaded needle-point tips tilt or swivel to any spacing from 1/32" to 3/16". Use with in-circuit transistor testers, VTVM's, VOM's, and TVOM's. Three color coded leads with alligator clips.

B & K FP-3 Dyna-Flex Probe **\$12.95**

No. 35A8022. Each





**SENCORE  
SM152 SWEEP  
AND MARKER  
GENERATOR**

**\$395<sup>00</sup>**

All solid state. The SM152 can completely sweep align the UHF tuner, the complete VHF tuner, the IF, and the chroma bandpass. Each stage can be aligned individually, or the entire signal system can be aligned for a correct overall response. Sound, video, color, and all trap markers "pop" singly or simultaneously on the response waveform. Only 3 hook-up cables are required; one for RF signal in, one for detected signal out, and one for the scope.

RF Sweep Output is calibrated and variable from 10 microvolts to .1 volts. Ultra Linear Sweep Width is calibrated from 0.3 to 15 MHz. VHF and IF output is virtually flat ( $\pm 0.3$  db). 6 Bands cover all frequencies VHF, UHF, IF, including chroma for bandpass alignment. Crystal Controlled IF Markers at 39.75, 41.25, 41.67, 42.17, 42.67, 44.25, 45.75 and 47.25 MHz. True post-injection system used for all push-button markers. Two Preset Chroma Outputs Available: (1) A 3.58 MHz sweep chroma signal of 0 to 2 volts peak to peak at the chroma output jack; (2) A 3.58 MHz sweep signal at 1F frequencies for direct injection into the IF. Crystal Controlled Chroma Markers at 3.08, 3.58 and 4.08 MHz. RF Video Carrier Markers for channel 4, 5, 10 and 13. Also crystal reference markers for sound and color on these four VHF channels. Crystal Controlled FM IF Marker at 10.7 MHz plus 10.6 and 10.8 MHz bandwidth markers. External Marker input at 75 ohms for a 25 millivolt or greater signal input. Sweep direction and response curve polarity fully controlled so you can duplicate the response curve in any alignment procedure. 10" Tuning Dial — VHF and UHF channels and other special check points are indicated along with the frequency.

Unit is complete with all leads, matching pad and detector probes. 13 $\frac{1}{2}$  x 9 $\frac{1}{2}$  x 5 $\frac{3}{4}$ " Wt. 15 lbs.

No. 35A303 5. Each **\$395.00**



**PS148**



**FS134**

**PS148 DELUXE WIDE BAND SCOPE AND VECTORSCOPE**

Now, you can have both in one instrument: A conventional Wide Band Oscilloscope, and a professional 5-Inch Vectorscope!

Provides a vectorscope for complete simplified troubleshooting and alignment of color TV chroma circuits. View the vector patterns as recommended by Zenith or display the standard "S" pattern as recommended by RCA. Switch on rear panel converts from a professional wide band scope to a 5-inch vector scope. All vectorscope connections and controls are located on rear. Special vectorgraph screen shows exact degree of chroma demodulation. Use with any standard 10 bar color generator, such as all Sencore, RCA, etc. Vertical amplifier frequency response from 10HZ to 5.2 megahertz,  $\pm 1$  db. Vertical amplifier sensitivity of .017 volts rms per inch deflection. Horizontal sweep ranges 5 Hertz to 500K HZ in five overlapping ranges. Outstanding stability is due to precise control over sync signals. Minimum circuit loading is assured with input Z of 27 megohms. Built-in low capacity probe to view waveforms in TV horizontal and vertical output circuits. Horizontal frequency response (3 db, from 10 Hertz to 650K HZ) guarantees linear sweep and positive sync. Inputs for horizontal sweep and external sync on front. Provisions for intensity modulation on rear. Horizontal retrace is built-in and effective on all of the horizontal sweep ranges. Cuts to half power when unit is not in use and provides instant warm-up when needed. All steel case with brushed chrome front panel. 11" x 9" x 15 $\frac{1}{2}$ ". Wt. 22 lbs. 100 watts, 60 cy. AC, 47 watts on standby.

No. 35A3018. PS148. Net Each **\$229.50**  
No. 35A8009. 39G3. Demodulation Probe. Each **\$5.75**

**FS134 UHF-VHF-FM SOLID STATE FIELD STRENGTH METER**

Built-in attenuators of 0, 20, and 40 db (X1, X10, and X100) enable you to measure signal strength from the amplifier to the last tap-off in the system. Portable, requires no AC cord. Highly sensitive: 30 Microvolts  $\pm 3$  db on VHF-FM and 30 Microvolts  $\pm 6$  db UHF. Separate built-in UHF tuner for greater accuracy in critical antenna work and translator checking. 4" 2% meter calibrated in microvolts and db. Uses industrial standard for 0 db. Check db loss in cables, compare antennas and amplifiers for db gain, field intensity surveys, and show a customer why he needs new antenna. The audio amplifier and speaker let you monitor the TV or FM sound signal and aid in tracking down noise. Jerrold connector for 75 ohm cable, built-in balun to match 300 ohm twin-lead. Powered by 9 "C" cells. 10 x 9 x 5". Wt. 9 lbs.

No. 35A3013. FS134. Each **\$229.50**  
No. 21A2 "C" Battery (9 required) Each **17c**



**SENCORE  
TF151 IN OR OUT  
OF CIRCUIT  
TRANSISTOR  
AND FET TESTER**

**\$129<sup>50</sup>**

**NO DOWN PAYMENT WITH B-A's E-Z PAY REVOLVING CHARGE**

The TF151 checks them all! New black and white TV, color TV, and Hi-Fi are loaded with field effect transistors in front ends, IF's etc. Other testers are limited when a technician or engineer runs across a field effect transistor; but not if he owns a TF151. Just flip the large elaborate control knob to the right side of the unit and the tester is ready to test FET's. Check these added features and you'll see why the TF151 obsoletes others on the market.

- Checks transistors in or out of circuit for AC Beta and out of circuit for ICBO leakage.
- Increased current check for Hi power transistors makes test more accurate.
- Special test for critical RF transistors like GE9's that often slipped through before.
- True Gm mutual conductance test made on all field effect transistors; in or out of circuit. Truly revolutionary.
- IGSS leakage checked out of a circuit on FET's.
- Special Gate 2 check provided for FET's with two gates.
- Special IDSS (Zero bias) current checks provided for matching FET's or for industrial "culling."
- Special reference book clearly shows all information necessary for testing a transistor or FET, if it is a transistor or FET, and results to expect.

Vinyl covered steel case, 9 $\frac{1}{2}$  x 7 $\frac{1}{2}$  x 6". 6" meter. **\$129.50**  
No. 35A3036. Sencore TF151. Shpg. wt. 9 lbs. Each

**TF17 IN-OR-OUT OF CIRCUIT TRANSISTOR & FET TESTER**



Tests all transistors and FET's in or out of circuit. Makes field servicing of transistor and FET's a snap. Tests FET's and transistors in or out of circuit for Gm and Beta gains. Tests leakage of FET's and transistors in actual microamps. Separate test for Hi power transistors and for special RF transistors, current check for matching FET's. Reference book lists over 12,000 different transistors and FET's.

Vinyl covered steel case with removable lid. 9 $\frac{1}{2}$  x 7 $\frac{3}{4}$  x 3 $\frac{3}{4}$ ". Wt. 7 lbs.  
No. 35A3046. TF17. **\$109.50**  
Each

**BE124 BATTERY ELMINATOR**

Power supply replaces batteries during transistor radio repair. Tapped voltages at 1.5 volt DC intervals from 0 to 12 volts on front panel, connects simply for center tap and bias voltages as required. Function switch converts meter to trouble-shooting 0 to 50 MA current reading device to monitor transistor radio current drain. Charges nickel-cadmium batteries. Guaranteed accurate. 5 x 4 $\frac{1}{2}$  x 2 $\frac{1}{2}$ ". Wt. 3 lbs.

No. 35A3022 **\$29.95**  
Each

**RC144 HANDY "36" SUBSTITUTOR**

36 different, most often needed resistors and capacitors for experimenting, substituting and testing — 24- $\frac{1}{2}$  and 1 watt resistors from 10 ohms to 5.6 megohms, 10 capacitors from 100 mmfd. to .5 mfd. at 600 volts. 2 electrolytics at 10 mfd. and 40 mfd. at 450 volts DC. 4 x 3 x 2". Wt. 2 lbs. **\$17.95**  
No. 35A3015. Each

**BE113 DUAL TV BIAS SUPPLY**

Save time in AGC trouble shooting and TV alignment. A single or two separate 0 to 20 volts DC bias supplies—without interaction. Provides all recommended TV alignment biases. Well filtered; effectively pure DC with less than 1/10th of 1% ripple. 4 x 3 x 2". Wt. 1 lb.  
No. 35A3016. **\$14.95**  
BE113. Each





CG-18

**COLOR BAR GENERATORS**



CG-19



CG-153

**MODEL CG-18.** Has the 5 standard convergence patterns. All solid state design and battery operation for maximum portability. Zener regulated power supply for greatest stability. Snap tuning for channels 2 through 6—just like a standard TV tuner. Interlace control stops dot bounce and pairing of horizontal lines. Automatic shut-off—just shut the lid. Crystal controlled sound carriers—modulated 4.5 megahertz signal for adjusting fine tuning in accord with manufacturer's procedures. Color gun interrupters on front panel.

Vinyl covered steel case with plate glass mirror in removable lid. 9 1/2 x 7 3/4 x 3 3/4". Wt. 7 lbs. **\$129.95**

No. 35A3045. Each  
No. 21A2. "C" Cell Battery for above (requires 8). Each.....17c

**MODEL CG-19.** Compactness—its palm size portability makes the CG-19 an ideal service companion on every color TV call. All standard patterns—10-keyed color bars, vertical lines, horizontal lines, crosshatch and adjustable dots. Interlace control to stop dot bounce. Channels 2 through 6 are available with a simple external trimmer adjustment. Battery operated. 5 1/2 x 2 1/4 x 8 1/4". Wt. 2 1/2 lbs. **\$84.50**

No. 35A3043. Each  
No. 21A5035. TR164 Battery for above (requires 2). Each.....\$1.91

**MODEL CG-153.** Solid state circuitry. Temperature controlled circuits—absolute pattern stability in any weather with Sencore's exclusive "Temp-Control". Has all five standard patterns plus two movable patterns. A single dot and a single cross can be moved to any spot on the screen, simplifying both static and dynamic convergence. Interlace control to stop dot bounce found on some sets. Snap tune channels 2 through 6. Eliminates troublesome tuning between channels. Works like tuning on your TV. Crystal controlled circuits—color bars, 4.5 megahertz modulated sound carrier and timers all crystal controlled for added stability and solid patterns. Color gun interrupters with switches on front panel.

Vinyl covered steel case with plate glass mirror in lid. Operates on 115 V. AC 60 Hz. 10 x 9 x 3 1/2". Wt. 9 lbs. **\$169.95**

No. 35A3044. Each



**SENCORE**

**TUBE TESTERS**



**① MU150 THE CONTINENTAL TUBE CHECKER**

A "must" for modern servicing . . . production line testing . . . quality control . . . and laboratory. The Continental checks tubes accurately and from every possible angle. Tubes that don't perform are found fast. Full rated cathode current drawn from every tube. 100 Megohm grid leakage test to find the tough grid contamination defects that other testers miss. Stethoscopic shorts test that checks each element against all others for shorts. True Cm using 5000 Hertz square wave. Life test to find intermittents and temperature sensitive failures.

Plastic coated tube chart. New setups can be made from tube manual. Laboratory accuracy; meter readings for Cm are in actual micromhos. Checks over 3000 foreign and domestic tubes.

Vinyl clad steel attache case with all-chrome front panel. 17x11x4". Wt. 18 lbs. **\$229.50**

No. 35A3038. MU150. Each

**② TC154 SOLID STATE TUBE TESTER**

The first all solid state tube tester with FET circuitry for greater reliability, stability and instant-on action.

Solid State—no more waiting for your tube tester to warm up, the TC-154 is instant-on. Reliability—Accurately checks each tube at full rated cathode current for emission. Extra Sensitivity—Measures grid leakage with 100 megohm sensitivity. Push-Button Operation—With the push of a button you can check for emission, shorts and grid leakage. Checks latest tubes. Vinyl clad steel case with chrome panel. Removable lid. 10 x 9 x 3 1/2". Wt. 9 lbs. **\$89.50**

No. 35A3047. TC154. Each

**CR143 CRT CHAMPION TUBE TESTER**

Test CRT color guns for color tracking automatically. No more time-consuming logging of each color gun reading at every setting of the G2 control like other testers. Color tracking scale right on the meter. Important when claiming credit for a defective color CRT.

Has short test, emission test with pure DC, and life test. Easy to use. Rejuvenation and shorts removal is accomplished with the exclusive Automatic Controlled Rejuvenation circuit. Equipped with plug-in sockets for fast testing and easy updating. Controls, calibrated in actual DC volts. Chrome panel and steel vinyl case with lead compartment. 10 x 9 x 3 1/2". Wt. 11 lbs. **\$119.50**

No. 35A3048. CR143. Each

NOW—COMPARE CRT COLOR GUNS . . . AUTOMATICALLY



**SENCORE  
FE149 SENIOR  
FIELD EFFECT METER  
PUSH BUTTON  
99 RANGES**

**A NEW STANDARD OF THE  
INDUSTRY FAR SUPERIOR  
TO ANY VTVM OR VOM**

Just push 2 buttons for any test—top row selects function, bottom row selects range. Action is instant and automatic.

**\$149.50**



Faster, more accurate, more complete circuit testing simplified push-button operation. Large deluxe 7 inch meter with easy to read mirrored scale. Minimum circuit loading—15 megohm input resistance on both AC and DC. Surpasses any VTVM. Unmatched accuracy—1.5% on DC, 3% on AC. 3-way power—rechargeable batteries, AC or AC with batteries plugged in (batteries not supplied). Use it anywhere, anytime.

99 Ranges—16 DC voltage, 16 AC voltage, 8 resistance ranges, 18 DC current ranges, 9 AC current ranges, 8 decibel ranges, 6 hi-voltage ranges, 10 very high impedance ranges of 1500 megohms, 8 zero center scale ranges. 0.25v zero center scale permits transistor bias measurements to less than 0.10v, measures either polarity without switching ranges or interchanging leads. Special ohm scale of 6 ohms center scale for maximum linear accuracy on low ohm measurements. A special high ohms range for measurements to 6000 megohms.

Complete meter and circuit protection. Zero warm-up time—instant stability. it's all solid state. Completely portable—vinyl-clad steel case and chrome panel. Shpg. wt. 7 lbs. **\$149.50**

No. 35A3034. FE149. Each  
No. 35A8020. 39A21. High Voltage Probe. Extends ranges to 5KV, 15KV and 50KV. Increases DC input impedance to 1500 megohm on all DC ranges. Each.....\$14.95  
No. 21A1. 1.5 Volt "D" Cell Ohms Battery. Each.....17c  
No. 21A5055. 9.6 Volt Nickel Cadmium Rechargeable Battery. Each.....\$9.95

**SENCORE FIELD EFFECT MULTIMETER**

Has all the advantages of a VTVM with instant warm-up and stability. Portable, goof-proof design, provides greater accuracy. 15 megohm DC input, 10 megohm AC input. Loads circuit less than a VTVM, superior for checking low voltage ranges. Less than 2 MA battery drain with built-in battery check protection. DC Voltage Ranges: 0 to 1, 3, 10, 30, 100, 300 and 1000 full scale, ± .5, 1.5, 5, 15, 50, 150 and 500 zero center scales. AC Voltage Ranges (Rms): 0 to 1, 3, 10, 30, 100, 300 and 1000 full scale. (Peak to Peak) 0-28, 8.4, 28, 84, 280, 840 and 2800 full scale, frequency compensated. Frequency response: 10 Hz to 10M Hz. Ranges: 0 to 1000, 10K, 100K ohms, 100 megohms. DC current Ranges: 0 to 100 microamps, 1 MA, 10 MA, 100 MA, and 1 ampere. 5" W. x 7 3/8" H. x 3 1/8" D. Wt. 4 lbs. No. 35A3000. FE14 FET Meter. Accuracy DC 2.5%, AC 4.5%. **\$69.95**



Each  
No. 35A3049. FE16 Hi-Accuracy FET Meter. Accuracy DC 1.5%, AC 3%. **\$84.50**  
Each  
No. 35A8008. 39A19. High Voltage Probe. Extends 300 V. range to 30KV. **\$9.95**  
Each  
No. 21A2. 1.5 Volt "C" Cell Ohms Battery. Each.....17c

**SS137 COMPLETE  
SWEEP CIRCUIT  
ANALYZER  
\$94.50**

Everything you need to isolate ANY sweep circuit troubles in seconds. Universal horizontal and vertical oscillator signals for direct circuit injection. Dynamic in-circuit flyback checker. Direct horizontal yoke substitution for B/W and color. Vertical Yoke and Vertical output transformer test drive signals. Horizontal stabilization and Sync test provisions. External checks with built-in VTVM: DC volts from 0 to 1000, AC volts peak to peak from 0 to 1000, and 2nd anode voltage measurements of 10KV and 30KV. Current scale of 300 MA. Special 3 MA range for color TV. Steel case with shock mounted high quality plate glass mirror in detachable hinged cover. 10 x 9 x 3 1/2". Wt. 10 lbs. **\$94.50**



No. 35A3032. SS137. Each

# EICO AND EMC TEST INSTRUMENTS

## EICO 460 WIDEBAND DIRECT-COUPLED 5" SCOPE



For color and B&W TV servicing and production line testing, excellent for audio and industrial work. Push-pull (3 stages) and direct-coupled vertical amplifier. Internal calibration voltage and frequency-compensated decade attenuator, DC or peak-to-peak AC measurements from 25 MV to 500V. Drift-free positioning centers any part of an expanded trace. 60 Hz output jack, sawtooth (sweep) output jack, intensity modulation (Z axis) input jack, and external capacitor jack for very low frequency sweeps on the front panel. Automatic sync limiter and amplifier eliminates sync voltage adjustment. Full retrace blanking. Edge-lit calibration grid.

**Specifications:** Vertical Amplifier: Frequency response: DC to 4.5 MHz (useful to 10 MHz); sensitivity 5 MV; input impedance 3 M ohm/35pf. Horizontal Amplifier: Frequency response 1 Hz to 400 KHz, sensitivity 0.24 v rms/cm; input impedance 5 M ohm/35pf. Sweep Ranges: 10-100, 100-1K 1K-10K, 10K-100K Hz; plus EXT-CAP position for very low frequency sweeps with external capacitor, TV-V position (30 Hz) and TV-H position (7875 Hz). Synchronization: internal, external, or line frequency. Power Requirements: 117 VAC, approx. 95 watts. Size: 13" x 8 1/2" x 16". Weight: 25 lbs.

No. 35A335. Model 460K Build-It-Yourself Kit..... **\$99.95**

No. 35A336. Model 460  
Factory Wired and Tested. Net Each..... **\$149.95**

## SCOPE PROBE KITS



35A119. PSDK Demodulator probe use for signal tracing. Range: 250 MHz \$4.50  
35A287. PDK Direct tracing in low Z circuits eliminates stray pickup \$3.50  
35A288. PLCK Low capacity for waveform tracing in wide-band circuits \$4.50



**MODEL 147**

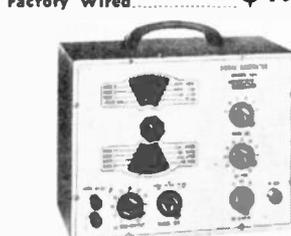
## DELUXE SIGNAL TRACER

- Has both visual and aural signal monitors.
- RF channel gain permits tracing up to receiver input.

For RF-IF and audio signal tracing in TV, RF and AM receivers. Visual (tuning eye tube), and aural (speaker), indication of the signal. High RF sensitivity. Noise locator detects noisy resistors, condensers, cold solder joints. Two probes and ground leads with individual panel receptacles for easy change-over from RF to audio. Size 8" x 10" x 4 3/4". Wt. 10 lbs.

35A275. Model 147K. **\$34.95**

Complete Kit  
No. 35A276. Model 147. **\$49.95**



## MODEL 324 RF SIGNAL GENERATOR

A low priced, high quality generator, with frequency range for servicing color and B&W TV, FM and AM radio. Covers 150 KC to 435 MHz in 7 bands, to 145 MHz on fundamentals, with  $\pm 1.5\%$  accuracy. Has 400 Hz internal modulation; 6 to 1 vernier dial; coarse and fine RF attenuators; external modulator amplifier; Gray wrinkle finished cabinet. 8 x 10 x 4 3/4". For 117 VAC. Wt. 8 lbs.

35A331. **\$32.95**

Model 324K. Kit.....

Model 324. Factory wired ready to use. **\$44.95**

35A330. Net Each.....



## MODEL 377 AUDIO GENERATOR

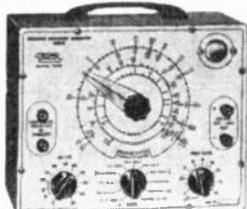
For servicing, testing and designing amplifiers, speakers, etc., used in Hi-Fi and public address systems. Uses Wien Bridge oscillator circuit. Ranges; sine wave 20-200,000 Hz, square wave 60-50,000 Hz. Accuracy 3% or 1 Hz, output 10 volts across 1000 ohms, constant output over wide frequency range. For use on 117 V. AC 50-60 Hz. Gray wrinkle steel case. 7 1/8 x 11 1/8 x 7 5/8". Wt. 14 lbs.

35A586. Model 377 Kit. **\$39.95**

Net Each.....

No. 35A587. Model 377. **\$54.95**

Factory Wired. Net Each.....



## 950 R-C BRIDGE & R-C-L COMPARATOR

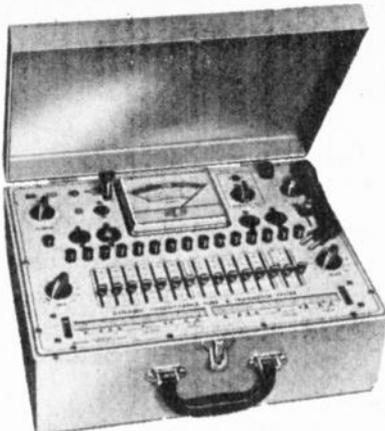
A professional quality instrument for all resistance 0.5 ohms to 500 meg, and all types of condensers from 10 uuf. to 5000 uf. Built-in variable DC voltage source of 0-500 volts tests condensers for leaks, power factor, polarity. All resistance-capacity ranges calibrated on panel! Precision comparator range—Bridge type circuit! Magic eye indicator tube. Size 10" x 8" x 4 3/4". Wt. 8 lbs.

35A142. Model 950K. **\$29.95**

Parts Kit. Net.....

Model 950. Factory Wired. **\$39.95**

35A144. Net Each.....



## EICO 667 DYNAMIC CONDUCTANCE TUBE & TRANSISTOR TESTER

Tests: 5 & 7-pin nuvistor, 7-pin miniature, 8-pin subminiature, octal, loctal, 9 and 10-pin miniature, novar and compactron. Tests many small transmitting and special purpose tubes and pnp transistors. Two-step test for both npn and pnp signal transistors.

**Dynamic conductance tube test** is a unique composite indication of mutual conductance, plate conductance, and peak emission capability.

**Leakage short test** is direct-reading of inter-element leakage—a up to 20M ohm. DC leakage test voltage is always applied in correct polarity to eliminate emission effects from readings. Multi-section tubes have each section individually tested by rapid selection from

12 push button transfer switches while all sections are simultaneously drawing full-rated current. Line-adjust rheostat. Gear-driven roll chart mechanism. 105-135 volts AC. Provided with pilot lamp and fuse. 12" x 15" x 4 1/2". Weight: 22 lbs.

No. 35B381. Model 667. Complete Kit..... **\$89.95**

No. 35B380. Model 667.

Factory Wired Ready to Use..... **\$139.95**

CRU ADAPTER for testing color and B & W picture tubes with either Model 628 or 667 tube tester.

No. 35B389. CRU Adapter..... **\$9.95**



## EICO 635 DELUXE PORTABLE TUBE TESTER

Fast check all standard tubes including the new decals, magnovals, 7 pin nuvistors and popular picture tubes. Tests for dynamic cathode emission, grid leakage, gas and shorts. 3 1/2" D'Arsonval meter protected against accidental overload or burnout. Long-lasting anti-corrosion phosphor bronze sockets, transformer isolation power supply. Pin straighteners on front panel. With tube manual.

Luggage carrying case, 4 x 12 1/2 x 9".

Wt. 4 1/2 lbs.

No. 35A703. 635K Kit..... **\$44.95**

No. 35A3055. 635

Wired Ready to Use. **\$69.95**

Each.....



## IN-CIRCUIT CAPACITOR TESTER

Eico 955. Accurate bridge type in-circuit or out-circuit capacitor tester. Function: tests capacitors for shorts or opens and measures capacity from .1 to 50 mfd.  $\pm 10\%$ . Has a two range RC balance dial range from .6 to 10.5, 7 to infinity. 60 Hz test voltage maximum 6.3 V. AC. Bar indicator provides sharp accurate readings. Operation 117 volt AC. Has line adjustment. Complete with leads, instructions. 8 1/2 x 5 3/4 x 6". Wt. 6 lbs.

No. 35B324. Model 955K Kit. Net..... **\$24.95**

No. 35B323. Model 955 Wired. Net..... **\$39.95**

## EICO 1140 RC NETWORK BOX

Switches permit selection of any resistance alone, any capacitance alone, or any combination of resistance and capacitance in series or parallel (1350 combinations). Open and short circuit positions are provided.

Provides a rapid selection of resistance values in decade multiples of 15, 22, 33, 47, 68 and 100 providing 15 ohms to 10 meg. variation with standard 1 watt 10% resistors. 18 capacitors from .0001 to .22 mfd. rated at 400 volts minimum.

35A582. Model 1140K. **\$15.95**

Complete Kit. Net Each.....

35A583. Model 1140. **\$24.95**

Factory wired & Tested, Net Each.....



## EICO MODEL 540 READI-TESTER

Designed expressly for "do-it-yourself" home appliance & auto repair—easily finds defects in irons, fans, heaters, TV & radio tubes, batteries, ignition coils, etc. It is an all-in-one Multi-Range AC/DC voltmeter, ammeter, ohmmeter, wattmeter, leakage checker.

Provides "Good-Bad" readings on 6 V and 12 V automobile storage batteries, and permits checking of individual cells.

**Specifications:** Voltage Ranges: 0-7.5, 15, 150, 300 volts (AC/DC). Current Range: 0-15 amps. Resistance Range: 0-1000 ohms (direct reading). Leakage Test: Neon lamp circuit. Wt. 3 lbs. 6 1/2" x 3 3/8" x 3 1/2". Includes leads.

No. 35A386. Model 540K. **\$15.95**

Complete Kit.....

No. 35A387. Model 540. **\$19.95**

Factory Wired. Net.....

# WIRED OR EASY TO ASSEMBLE KITS

## EMC 116 SOLID STATE VOLT-OHMMETER

Portable, battery operated, no warm up. With the features of a VTVM. Instant, accurate readings with up to 500 times the sensitivity of a 20,000 ohm per volt VOM. 4 1/2" 200 microamp meter. Zero center position. Meter and transistors protected against burnout, FET transistor, 4 silicon transistors and 2 diodes.

DC Voltage: 0 to 1.2, 12, 120, 1200 volts. Input resistance 11 megohms. AC voltage: 0 to 1.2, 12, 120, 1200 volts. Input resistance—1 megohm. Peak-to-peak AC Voltages: 0 to 3.3, 33, 330, 1200 volts. Resistance: 0-1K, 0-100K, 0-10 meg. 0-1000 meg. 4 DB ranges: —24 to +56 DB. With batteries and leads. Bakelite case with handle. Shpg. wt. 3 lbs.

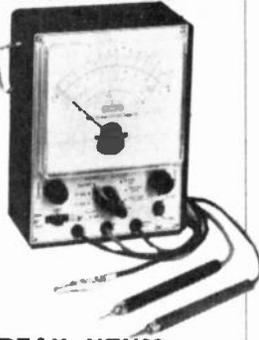
No. 35A704, Model 116

**\$29.95**

Easy To Build Kit

No. 35A3056, Model 116 Factory Wired.

Each **\$39.95**



## EICO MODEL 232 PEAK-TO-PEAK VTVM

For all TV/FM/AM electronic servicing with highest accuracy. High impedance input results in negligible circuit loading. 4 1/2" meter can't burn out—built-in protective circuit. Zero center for TV-FM discriminator alignment, one zero adjustment for all functions and ranges, 1 per cent precision ceramic multiplier resistors, uniform 3 to 1 range ratio for extreme wide range accuracy and a transformer for isolation and safety.

Peak-To-Peak AC Ranges: 0-4, 14, 42, 140, 420, 1400, 4200 volts. RMS Sine Voltage Ranges: 0-1.5, 5, 15, 50, 150, 500, 1500 volts. DC Voltage Ranges: 0-1.5, 5, 15, 50, 150, 500, 1500 volts. Frequency Response: 30 Hz to 3 MHz (up to 250 MHz with PR probe). Ohmmeter: 0.2 ohms to 1000 meg in 7 ranges. Tube Complement: 12AU7, 6AL5, selenium rectifier, Battery: 1.5 v. Power requirements: 117 VAC, 5 watts. Input Impedance: 11 megohms. Size: 8 1/2 x 5 x 5". Wt. 5 lbs.

No. 35A281, Model 232K.

**\$34.95**

Build It Yourself Kit

No. 35A282, Model 232.

Factory Wired and Tested **\$49.95**



## ACCESSORY PROBES FOR EICO 232 VTVM

Amphenol 75-MCIF Connector. Probes supplied less connector.

No. 12A311, Each **64c**

PRF11K RF Probe for Models 232 and 249 VTVM. 11 meg. input. **\$4.50**

No. 35B111, Kit. Accurate to 200 MHz. Each

UP Uni-Probe, Selector type replacement probe for AC or DC function. Same as used on all Eico 232, 249, etc. VTVM testers. **\$5.95**

No. 35C49, Kit. Each

HVP-2 High Voltage Probe with 1090 meg. resistor. Use with Models 232, 249. Extends range to 30,000 volts. Wt. 1 lb. **\$8.95**

No. 35A329, Factory Wired, ready to use. Each

## EICO MODEL 100A4 MILLIAMMETER

LABORATORY ACCURACY AND PROFESSIONAL VERSATILITY AT LOWEST COST.

DC sensitivity of 100,000 ohms/volt and AC sensitivity of 12,500 ohms/volt. Combines minimal circuit loading with wide functional utility in a battery-operated, portable volt-ohm-milliammeter. 2% D'Arsonval meter movement; 4-inch mirror-back two-color scale. Matched pair of silicon diodes prevents overload of meter movement. High-impact, custom-molded case; integral handle for convenient positioning and portability. Highest Quality Import.

DC Voltage: 0-500 mV, 2.5, 10, 50, 250, 500 and 1000

AC Voltage: 0-2.5, 10, 50, 250 and 1000

DC Current: 0-10 uA, 250 uA; 2.5 mA, 250 mA and 10 Amp.

Resistance: 0-20,000; 200 K; 2 meg; 20 meg

Db: —20 to +62 in 5 ranges

Size: 7 1/2 H x 5 1/4 W x 3 1/4 D. Complete with batteries and test leads. Wt. 5 lbs.

No. 35A3025, Eico 100A4.

**\$34.95**

Each

SLC-1 Simulated Leather Carrying Case For

No. 35A3030. Wt. 1 lb. Each **\$5.95**

## EICO MODEL 565 MULTIMETER

• 20,000 ohms per volt sensitivity

• 31 range, 50-uv movement

Specifications: DC Voltage: Ranges 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 20,000 ohms/volt.

AC/Output Voltage: Ranges 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 1000 ohms/volt.

DC Current: 0-100 ua, 10 ma, 100 ma, 500 ma, 10 amp.

Decibels: —12 to +55 db in 5 ranges.

Resistance: Ranges: 0-2000 ohms, 0.2 megohms, 20 megohms (2 ohms to 20 megohms). Meter:

4 1/2" size, 50 ua movement. Size: 6 3/4" x 5 1/4" x 3". Wt. 4 lbs.

No. 35A203, Model 565K.

**\$25.95**

Complete Kit

No. 35A204, Model 565.

**\$34.95**

Factory Wired

No. 37A3023, Test Leads for 565. Pair **\$1.05**



## EMC DELUXE TUBE TESTER KIT

COMPLETELY MODERN!  
COMPLETELY FLEXIBLE!  
EMC MODEL 213

FOR:  
• Hobbyists  
• Experimenters  
• Students  
• Servicemen

**\$24.90**  
KIT

FACTORY WIRED \$36.75



Up to date in every way. Checks all the new 12 prong (Compactron), Nu-vistor, Novar and 10 prong tubes in addition to octal, loctal, miniature and 9 prong tubes. Tests each tube for shorts, as well as for quality. Tube quality is indicated directly on a three color meter dial. Each section of a multi-purpose tube is checked separately.

Magic eye, voltage regulator and Hi-Fi tubes are also tested. Unique switching arrangement makes the checker obsolescence proof. Panel is etched for long wear. Complete with instructions and tube charts in ring bound manual.

Complete kit in gray leatherette covered wood carrying case. For 117VAC. Shpg. wt. 5 lbs.

No. 35B417, Model 213P Kit.

**\$24.90**

Net Each

No. 35B418, Model 213P Factory Wired. Net Each **36.75**

Kit as above but with high impact bakelite case instead of wood case.

No. 35B419, Net Each **\$21.90**

## EMC 212 TRANSISTOR ANALYZER

Tests all transistors in or out of circuit.

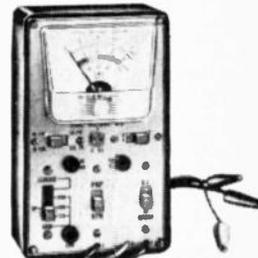
Measures DC current gain (Beta) in 3 ranges to 200. Checks leakage on 3-color scale; good, weak, poor. Tests all transistors as AC current amplifiers (oscillator check) without removing them from circuit. Can be used as a signal tracer. Measures battery voltage 0-12 volts, and current 0-80 MA, also tests diodes. Comes with instruction manual. Size 3 3/4 x 6 1/4 x 2". Wt. 1 1/2 lbs.

No. 35B521, Model 212.

**\$14.50**

Complete Kit

No. 35B522, Model 212 Wired, Ready to Use **\$21.50**



## EMC MODEL 801 COMPARATOR BRIDGE AND IN-CIRCUIT CAPACITY CHECKER

Measures capacity in four ranges 10 mmfd to 5000 mfd. Resistance in four ranges .5 ohm to 500 meg. Measures leakage at any voltage to 500 volts and power factor from 0 to 60%. Checks open or shorted condensers above 50 pf in circuit if not shunted by excessively low resistance. Size 10 x 7 x 4 1/4. Wt. 7 lbs.

No. 35A159, Model 801

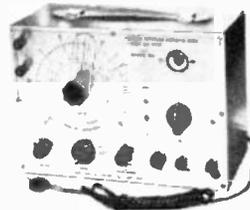
**\$28.45**

Complete Kit. Net Each

No. 35A158, Model 801

**\$45.95**

Factory Wired. Net Each



## EMC MODEL 502 RF SIGNAL GENERATOR

Covers frequency range for all tuning and aligning requirements of AM and FM radios, in 6 bands from 115 KHz to 108 MHz, second harmonic to 216 MHz. RF accuracy 1 1/2%. Includes 400 Hz internal modulation controlled with off-on switch and provision for external modulation. Uses individual slug tuned coils for each band. Colpitts oscillator and a cathode follower output. Planetary drive permits fine frequency adjustment. Size 6 3/8 x 6 3/8 x 4". Complete with output lead and instructions. For 105-130 VAC. Wt. 4 lbs.

No. 35B424, Model 502.

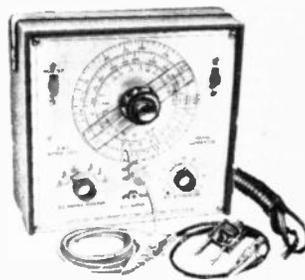
**\$19.95**

Complete Kit

No. 35B425, Model 502.

**\$28.95**

Factory Wired



## EMC MODEL 102A BURN-OUT PROOF MULTIMETERS

Has a built-in diode to prevent burn-outs caused by accidental overloads. No more expensive repairs and loss of time when accidentally misused. Has 3 1/2 inch 2% 800 microamp D'Arsonval type plastic front meter. 5 AC voltage ranges: 0 to 12, 120, 600, 1200, 3000 volts. 5 DC voltage ranges: 0 to 6, 60, 300, 600, 3000 volts. 3 AC current ranges: 0 to 30, 150, 600 MA. DC current ranges: 0 to 6, 30, 130 MA and 0 to 1.2 amps. Resistance ranges: 0 to 1000 ohms, 0 to 1 megohms. Size 3 3/4 x 6 1/4 x 2". Shpg. wt. 2 lbs.

No. 35B40, Model 102A. Complete Kit **\$14.40**

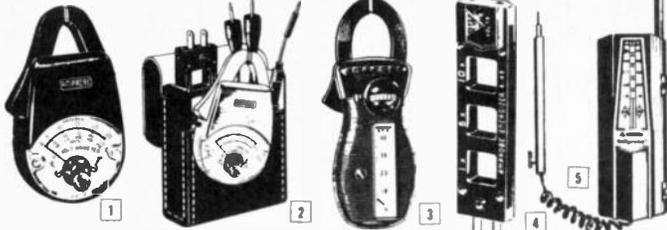
No. 35B43, Model 102A. Factory Wired **\$16.95**

No. 37A3023, Test Leads for 102A. Pair **\$1.05**



# AMPROBE LECTROTECH INSTRUMENTS

## AMPROBE INSTRUMENTS



Snap around type Volt-Ammeter. Close the probe jaws around conductor of the circuit under test and read current directly on meter scale. Voltage checks are made by the use of safety type leads. It is possible to safely and accurately determine load condition of equipment without shut down.

### ① POPULAR PRICED AMPROBE JUNIOR

Measures current and voltage, is small in size, convenient to carry and use. Size 2 1/2 x 4 3/4 x 1". Wt. 11 oz. Accuracy  $\pm 3\%$  full scale. Maximum conductor size for current measurements is 1/2 inch. With test leads.

35A3066. Model Y550. For 0-50 Amps AC, 0-150-600 volts AC.  
35A308. Model Y500. For 0-100 Amps AC, 0-150-600 volts AC. **\$24.50**  
**YOUR CHOICE EACH**

Two current ranges and two voltage ranges in one instrument. Change ranges by pressing a button.

No. 35A3023. Model YT1025. 0-10/25 Amps, 0-150/300 Volts AC.  
No. 35A3024. Model YT25100. 0-25/100 Amps, 0-100/300 Volts AC.  
**Your Choice, \$28.50**  
Each

### ② AMPROBE JR. TESTMASTER KIT IN LEATHER CASE

Measures 0-150/600 AC volts, 0-100 AC Amps, and resistance instantly within 3% accuracy. 25 ohm mid-scale. Ohmmeter measures resistance with plug-in battery attachment. Complete kit includes Amprobe Jr., Energizer (described below), Battery Attachment, safety Test Leads and Leather Case. Wt. 1 lb.

No. 35A346. TM-YO-500. 0-100 Amps. Net Each **\$39.85**

### ③ AMPROBES MOST POPULAR MODEL RS-3

Does 3 jobs, measures amperes, volts and ohms resistance. AC amp. ranges 0-6/15/40/100/300. AC volts 0-150/300/600. Ohms scale reads 25 ohms mid-scale, 2000 ohms full scale. Most complete tester available. With leather carrying case and test leads for voltage and resistance measurements.

No. 35A581. Wt. 12 Oz. **\$58.50**  
Net Each

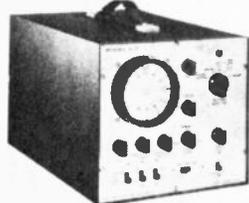
④ Model A45L Energizer divides Amprobe current reading by 5X and 10X for checking low current equipment. Also divides line cord so Amprobe may be used for current or voltage checks without having to split line cord. With weatherproof pouch. Wt. 3 oz.

35A310. Model A45L. Each **\$7.25**

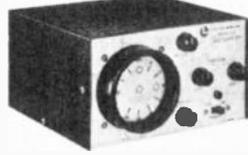
### ⑤ AMPROBE VOLTPROBE VOLTAGE TESTER

Indicates 115, 220, 277, 440 and 550 volts AC and 115, 220, 400, 600 and 750 volts DC. Sliding probe pushes up through body and a retractable probe with coil cord allows measurement of points over 3 feet apart. Light indicates voltage. Indicates grounded side of line or DC polarity. Frequency 25 to 800 cycle range. Buzzer indicates frequency. 6x2 1/4 x 3 3/4" with probes retracted. Wt. 5 ozs.

No. 35A8030. VT-100. Voltprobe, Each **\$9.50**  
No. 35A8031. VC Case. Each **\$2.50**



**ONE YEAR WARRANTY**  
Return Unit Prepaid to Factory in Chicago. Factory repairs and returns unit prepaid at no charge.



## LECTROTECH V7 VECTORSCOPE COLOR BAR GENERATOR

Provides a visual display for measurement of the 30 degree angles produced by the keyed rainbow color signal. Accurately measures color demodulation to check R-Y, B-Y and all 10 color bars for color phase angles and amplitude. You can check color amplifier gain, adjust color sync circuits and properly center range of hue control. Timing circuits can be immediately adjusted without the use of external test equipment. Adjust horizontal lines to any width desired, from 1 to 4 lines wide. Provides... All crosshatch, Dots, Vertical lines only, Horizontal lines only, and keyed rainbow patterns. Video output (pos. and neg. adjustable) for signal injection troubleshooting. Red-Blue-Green Gun Killer. Voltage-regulated transistor and timer circuits for operation under wide voltage ranges.

All this PLUS—Solid State Reliability. Only two tubes are used in combination with fully-transistorized diode-rectifier circuit. All cables permanently attached and stored in convenient, enclosed test lead compartment. Only 8 1/4 x 7 1/2 x 12 7/8". Includes Free book "Color TV Servicing Simplified with Vectorscope". Weight 13 lbs.

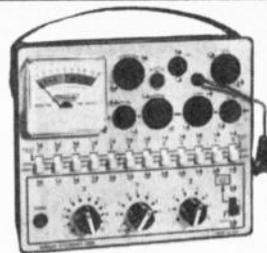
No. 35A3062. Each **\$199.50**

## LECTROTECH V5 VECTORSCOPE

Check and align bandpass-amplifier circuits. Check and align demodulators to any angle... 90°, 105°, 115°... accurately and quickly. Pinpoint troubles to a specific color circuit.

Provides visual display for measurement of the 30 degree angles produced by the keyed rainbow color signal. Accurately measures color demodulation to check R-Y, B-Y and all 10 color bars for color phase angles and amplitude. Check color amplifier gain, adjust color sync circuits and properly center range of hue control. Steel case with enamel finish. Size 7 3/8" W. x 4 1/4" H. x 7 3/8" D. With all leads for connection to color TV set and copy of Wayne Lemon's Book "Color TV Servicing with a Vectorscope." Weight 5 lbs.

No. 35A3063. Each **\$79.50**



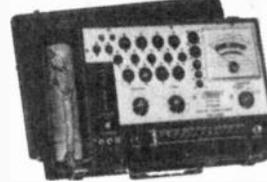
**MERCURY MODEL 990 TUBE TESTER**  
TESTS LATEST TYPES...  
OBSOLESCENCE PROOF  
ONE YEAR GUARANTEE

WIRED **\$34.95** **\$21.95** KIT

Full Cathode Conductance Test on all tubes. Complete complement of latest sockets: Magnoval, Novar, Decal, Compactron, Nuvistor, Octal, 9-10 pin, 7 pin. Special unique open-circuit slide switch Master Selection frees any and all multiple element terminations. Checks each section of multi-section tubes separately. Multi-selection of test voltages and loads. Tube set-up data shows latest tube releases.

Complete and comprehensive test instructions included. Important Cathode to C1 and Cathode to filament leakage and/or shorts is quickly indicated. Complete element-to-all other-elements short tests can be quickly and easily accomplished on all tubes by 12 circuit slide-button Master switching system. 115 V. 50/60 Hz. Molded case, 6 1/2 x 7 1/2 x 3 1/2". Weight 4 1/2 lbs.

No. 35A705. Model 990 **\$21.95**  
Kit With Complete Instructions  
No. 35A3029. Model 990 Factory Wired **\$34.95**



**MERCURY MUTUAL CONDUCTANCE TUBE TESTER**

ENGINEERED TO TEST ALL THE LATEST TUBE TYPES... PLUS TRANSISTORS

•ONE YEAR GUARANTEE

Tests all tube types, old and new, including the new Magnovals, new 7-pin Nuvistors, new 10-pin Decals, Compactrons, Novars, 10-pin types, foreign and hi-fi tubes, voltage regulators, thyratrons and industrial tube types. Tests transistors. Tests tubes for true dynamic mutual conductance (Gm). Tests for shorts, leakage and gas. Lever switch test principle overcomes obsolescence. Automatic line voltage regulation. Long lasting phosphor bronze tube sockets. Two tone aluminum panel. Size: 18 1/4" x 10 3/4" x 4 3/4". Shipping Wt. 12 1/2 lbs.

No. 35A3027. Model 2000, Wired. Each **\$129.95**  
No. 35A8015. MH3A Multi-Head CRT Adaptor for Testing Color and Black and White Picture Tubes. Each **\$29.95**



**MERCURY MODEL 1400 IN-CIRCUIT CAPACITOR TESTER**

KIT **\$2995**

WIRED **\$3995**

•ONE YEAR GUARANTEE

Exclusive—Special low test voltage of 2.9 volts provided to prevent damage to the new low voltage electrolytics used in transistorized equipment. Eliminates the time consuming method of unsoldering and resoldering when checking capacitors.

Shorts Test—Detects shorted capacitors of all types in-circuit with shunt resistance as low as 6 ohms. Opens Test—Detects open capacitors for all values in-circuit down to 7 mmfd, with shunt resistance as low as 15 ohms. Value Test—Indicates value of electrolytics in-circuit from 2 mfd to 450 mfd. Hi-Leak Test—Detects those hard-to-find leaky capacitors out-of-circuit: Sensitive to 150 megohms... Tests made at 300 volts DC.

New, modern rectangular tuning-eye indicator shows all tests results... extremely sensitive and accurate. Large easy-to-read dial. One cable used to make all tests. Line isolated power supply... no short-circuit hazards. Two-tone metal housing, 10" W. x 6 1/4" H. x 4 1/2" D. •One Year Guarantee.

No. 35A706. **\$29.95**  
Model 1400 Kit  
No. 35A3060. Model 1400 Factory Wired **\$39.95**

•ONE YEAR GUARANTEE on all Mercury Test Instruments. One year unconditional guarantee from date of purchase on parts and workmanship under normal usage. Defective units will be repaired on return to factory.



**LEADER MODEL LCG-388 COLOR BAR GENERATOR**  
15 PATTERNS

PERFECTLY STABLE THE INSTANT YOU TURN THE POWER ON!

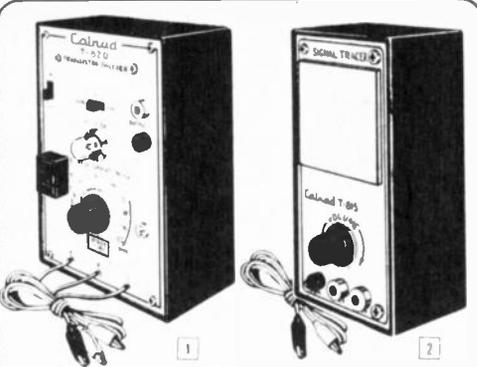
Flip the switch and you can select from 15 patterns including the single dot, single cross, single horizontal and single vertical. The magic is in Leader's binary counters and gates not available in any other generator. Only one input connection to the receiver, channel 5 or 6 selective. Return trace blanking applied to horizontal and vertical signals. Chroma level control.

Gun killers for convergence adjustments. Composite video signal for video circuit testing. Regulated DC supply. Operates on 105 to 125 volts, 50/60 Hz, 3 1/8 x 7 3/4 x 7 3/4" D. Wt. 4 1/2 lbs. Engineered to the highest standards of performance. From Japan.

No. 35A3061. Model LCG-388 **\$149.00**

# SPECTACULAR TEST INSTRUMENT VALUES

FACTORY WIRED, CALIBRATED...READY TO USE



## 1 TRANSISTOR TESTER

Checks transistors in circuit or out of circuit under operating conditions. Plug transistor into front panel socket or connect with alligator clip test leads provided. Safely identifies low, medium and high power PNP and NPN transistors. Checks electrode open circuits, short circuits and current gain. Makes it simple to match transistors for critical circuits. Neon indicator gives a visual indication of circuit output. Output jacks for use with an AC voltmeter or oscilloscope to measure signal output as low as 5 MA, make sensitive noise tests forming dynamic leakage distribution and wave form inspection. Adjustable base current control allows you to test transistors over a broad range of current conditions.

Black plastic case with aluminum panel. Size 6 1/4 x 2 x 3 3/4" W. Full instructions supplied. Shpg. wt. 2 lbs. Imported at Big Savings!  
No. 35A667 **\$10.95**  
Special Each

## 2 SIGNAL TRACER

Makes service problems easy to locate. Permits audible signal tracing of RF, IF and audio circuits. Easy to operate stage-by-stage tracing of signal from antenna through audio. Has solid state circuit with 4 transistors. Built-in 2" speaker with volume control. Comes with 9 V battery, test leads and instructions.

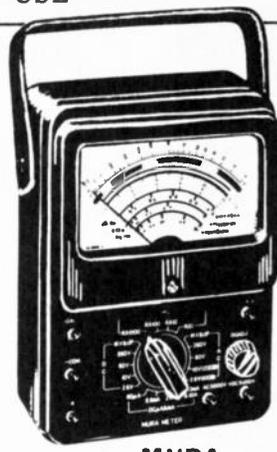
Black plastic case with aluminum panel. Size 5 x 2 5/8 x 1 1/2" D. Shpg. wt 1 lb.  
No. 35A668. Import Special **\$9.95**



## 100,000 OHMS PER VOLT MIRRORED SCALE MULTIMETER

Our lowest price ever for a Meter with these features, low current and voltage ranges necessary for solid state servicing.

Overload protected by dual silicon diodes. Double jewelled 2% meter 1% temperature-stabilized resistors. Easy to read mirrored scale, single control range selection. Twenty seven ranges for current, voltage and resistance at your fingertips. Full meter protection includes diode protection for meter movements.  
DC volt sensitivity 100,000 ohms per volt. AC volt sensitivity 12,500 ohms per volt. DC volts: .5, 2.5, 10, 50, 250, 500, 1000. AC volts: 2.5, 10, 50, 250, 1000. DC current: 10 uA, 250 uA, 2.5 MA, 25 MA, 250 MA, and 10 Amp. Resistance: 0-20K, 200K, 2 meg, 20 meg. Mid-Range resistance reading at mid-scale: 160, 1600, 16,000, 160,000. Decibels -20 to +62 in 5 ranges. With instructions. Quality crafted import.  
No. 35A3059 **\$34.95**  
Each



## MURA DELUXE GRAND MASTER 20,000 OHMS/VOLT LESS THAN 1/3 THE COST OF COMPARABLE AMERICAN MADE TESTERS

- Mirrored scale.
- Ultra-sensitive. 44 microamp D'Arsonval movement.
- 1% matched precision resistors throughout.
- Diode overload prevention device.
- 26 ranges, on "Easy-Read" 2-color scale.
- Accuracy ±3% full scale.

Test instrument of unusual quality, designed and built to precision standards. "Easy-read" multi-colored mirrored scale permits readings with hair-line accuracy. A network of safety diodes blocks off excess current, protects the movement from burning out.

Specifications: Sensitivity: 20,000 ohms/volt DC; DC volts: 2.5, 10, 50, 250, 1000, 5000 volts; AC volts: 2.5, 10, 50, 250, 1000, 5000 volts (8000 ohms/volt); DC Amps: 50 ua, 2.5-25-250 MA, 10 amps; Ohms: 0 to 10K, Rx10, Rx100, Rx1000 (10 megohm maximum). DB: -20 to +10; -10 to +22, x5, x25, x100.  
Dimensions: 7x5 1/4 x 3 1/2". Instruction folder and schematic included. Shipping wt. 5 lbs **\$29.95**  
No. 35A3026. Model 80-M. Each  
No. 35A3065. Carrying Case. Each **\$7.95**



**\$6.95**

## 1 MIDGET POCKET TESTER

1,000 ohms per volt. A complete multi-tester at less than the usual price of just the meter alone. Clearly readable and accurate. Reads AC or DC volts in 3 ranges of 0-15, 0-150 and 0-1,000 volts; DC current 0-150 MA; Resistance 0-100,000 ohms. Has convenient thumb-operated ohms zero adjust and pin jacks for all 5 ranges. 1% precision resistors assure accuracy. Bakelite case 4 1/2 x 1 3/4". Test leads, self-contained battery and instructions included. Shpg. wt. 1 lb.  
No. 35A573. Quality Import, Each **\$6.95**



**\$7.95**

## 2 POCKET-SIZE MULTIMETERS WITH LONG SCALE

4000 Ohms Per Volt DC Sensitivity. DC volts ranges 0-5-25-125-500-2500. AC volts ranges 0-10-50-250-1000 (2000 ohms per volt AC). DC current 0-250 ua. 0-250 MA. Resistance 0-10,000 and 0-1 meg. Decibel range -20 to +22 db. Uses 250 ua D'Arsonval meter movement. Molded black plastic case 4 1/2" H. x 3 1/4" W. x 1" deep. With test leads, instructions and battery.  
No. 35A515. Shpg. wt. 2 lbs. Special Each **\$7.95**

20,000 Ohms Per Volt DC Sensitivity. DC volts ranges 0-10-50-250-1000. AC volts ranges 0-10-50-250-1000. DC current 0-50 ua, 0-250 MA. Resistance 0-6000 and 0-6 meg Decibel -20 to +22. Features 50 microamp D'Arsonval meter movement and precision resistors throughout. Readability is superior on all low ranges making this an excellent instrument for servicing transistor equipment. Molded black case 4 1/2" H. x 3 1/4" W. x 1" deep. With test leads, instructions and battery. Shpg. wt 2 lbs.  
No. 35A618. Special Each **\$9.95**



**\$14.95**

## 3 POCKET-SIZE MULTIMETER Built-in overload protection circuit—Burnout Proof!

20,000 ohms per volt DC. Pocket multimeter designed for accuracy in the field or on the technician's bench. Easy-to-read heavy black numbers carefully scaled for quick exact reading. Crystal clear high impact plastic front takes rough treatment and gives full scale view. Popular swinging-lever range-selector allows easy selection of ranges. DC volts ranges: 0-5-25-100-500-1000. AC volts ranges: 0-5-25-100-500-1000. DC current ranges: 0-50 ua, 5 MA, 50 MA, 500 MA. Ohms: 0-6,000, 600,000; 6 Meg, 60 Meg. Expanded low end scale. Decibels: -20 db to +62 db (5 ranges). Size, 4 3/4" H. x 3" W. x 1 1/4" D. Heavy duty bakelite case, precision 250 ua D'Arsonval movement, pin jacks. With batteries, test leads, leather case, instruction manual.  
No. 35B569. Shpg. wt. 2 lbs. Giant Import Savings. Each **\$14.95**



**\$17.95**

## 4 SUPER SENSITIVE MULTIMETER

New eye-appealing design, compact size, full view type meter, clear uncomplicated scales, easy to read for greater accuracy. Compares with meters selling for more than double our low price.  
30,000 ohm per volt model. 22 Ranges: DC volts 0 to 3, 12, 60, 300, 600, 1200; AC volts 0 to 6, 30, 120, 1200 DC current 0-30 ua, 3 MA and 300 MA. Ohms up to 16 meg. in 4 ranges with expanded low end scale, 100 ohms at center. Decibels -20 db to +63 db in 5 ranges. Has knife-edge pointer, clear uncluttered scales, recessed flush type range selector, ohms adjust and four meter jacks. Overall size 5 1/2" H. x 3 1/2" maximum width and 1 3/4" D. Wt. 3 1/2 lbs. Complete with test leads and batteries.  
No. 35B568. Big Import Value, Each **\$17.95**

Any Of These Testers Can Be Purchased On B-A's E-Z Pay Revolving Charge Plan

# PAINT AND EPOXIES



NO BRUSHING,  
NO MIXING,  
NO MUSS OR  
WASTE!

GIANT 16 OZ.  
SIZE DISPENSER  
TOP QUALITY  
SPRAY ENAMEL PAINT

**\$139** ASST. COLORS **\$119**  
EACH 12 LOTS, EACH



Just press the button and spray . . . exclusive built-in governor regulates spray . . . prevents sagging, running or bubbling. Dries in just 5 minutes. Won't work off, peel off or chip off. Non-toxic. 16 oz. size can covers approx. 200 sq. ft. All colors with asterisk\* have new Rustcor rust preventive. Easy to follow directions on can. Wt. 1 lb.

- 17A4000—Appliance White\*
- 17A4001—Chrome Aluminum\*
- 17A4002—Battleship Grey\*
- 17A4003—Garden Green\*
- 17A4004—Medium Blue\*
- 17A4005—Chinese Red\*
- 17A4006—Dove Grey\*
- 17A4007—Gloss White\*
- 17A4008—Gloss Black Lacquer\*
- 17A4009—Gloss White Lacquer\*
- 17A4010—Flat Black Lacquer\*
- 17A4011—Flat Black\*
- 17A4012—Flat White\*
- 17A4013—Gloss Black\*
- 17A4014—Zinc Chromate Primer\*
- 17A4015—Grey All-Purpose Primer\*
- 17A4016—Mist Green\*
- 17A4017—Brite Gold\*
- 17A4018—Coppertone Metallic
- 17A4019—Antique Gold

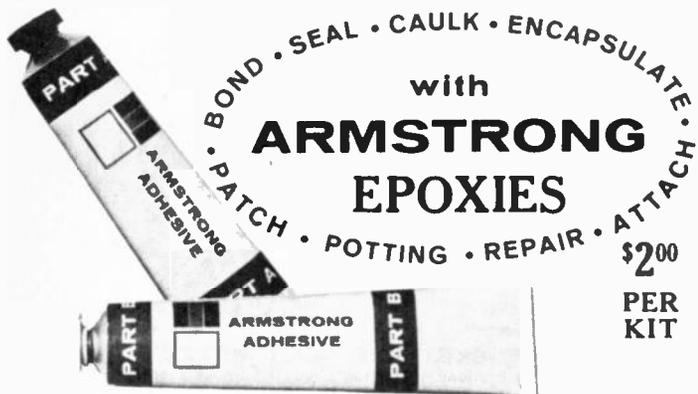
### WRINKLE FINISH SPRAY PAINT

Gives a rich, professional wrinkle finish to any surface. Air dries or can be baked. Perfect for office equipment, appliances, tools, test equipment, tackle boxes, etc. Easy to use—just spray on—it wrinkles as it dries. No. 17A4020. Specify Color—Forest Green, Silver, Tropical Tan, Opal Gray, Black or Blue. Shpg. wt. 1 lb.

### 16 OZ. HAMMERTONE SPRAY

For custom finishing or touch-up of chassis racks, panels, etc. Just spray it on—no brush streaks, or mess. Provides hammer finish found only on the finest electronic equipment. Made by Illinois Bronze. 16 Oz. size can. No. 17A4021. Specify Color—Silver-Grey, Gold, Copper, Green, Charcoal-Grey or Blue.

**YOUR CHOICE** **\$1.39** 12 Cans **\$1.19**  
EACH (Colors can be Assorted) Each



BOND • SEAL • CAULK • ENCAPSULATE • PATCH • POTTING • REPAIR • ATTACH

with  
**ARMSTRONG  
EPOXIES**

**\$200  
PER  
KIT**

Bond almost all rigid or semi-flexible materials. Use for potting electronic components. Non critical mixing ratios.

Each kit contains sufficient resin and activator to make 2 to 4 ounces of adhesive, mixing cups, mixing paddles and instruction sheet.

No. 17A1376. **A-34 EPOXY**. Most universal general purpose adhesive. White color. Thixotropic (paste) viscosity. Minimum working life 20 minutes. Develops handling strength overnight at room temperature or in 5 minutes at 300° F. Optimum cure, 3 days at room temperature or 30 minutes at 200° F. Bond strength 1500 psi.

No. 17A1375. **A-12 EPOXY**. Two color system (grey & brown) gives visual control of complete mixing. Medium viscosity material. Minimum working life 3 hours. Develops handling strength overnight at room temperature or in 5 minutes at 300° F. Optimum cure in 1 week at room temperature or in 30 minutes at 200° F. Bond strength 2500 psi.

No. 17A1377. **A-36 EPOXY**. Dark amber color. Thixotropic (paste) with easy workability system. Minimum working life 2 minutes. Develops handling strength in 5 minutes, optimum cure 18 hours at room temperature. Bond strength 2100 psi.

No. 17A1374. **CT/H-20 EPOXY**. Clear amber color. Low viscosity (pourable). Best for encapsulating. Minimum working life 45 minutes. Develops handling strength overnight at room temperature or in 5 minutes at 200° F. Optimum cure one week at room temperature or 2 hours at 165° F. Bond strength 1000 psi.



① **Krylon Clear Plastic Spray**. Seals . . . protects . . . resists rust and corrosion. Transparent plastic protective coating adheres to practically any surface. Seals out air, water, chemicals, oil, grease and acids. Protects automotive chrome, golf clubs, fishing rods, tools, leather goods, photos, blue-prints, etc. Seals TV antennas against corrosion. Fast drying. Shpg. wt. 1 lb. No. 17A1316. #1302-For Radio & TV 13 Oz. Can 12-47

② **Electric Motor Cleaner**. Just spray on . . . cleans without washing or wiping. Instantly penetrates, dissolves, cleans and removes grease, oil, dirt from motors, electrical-electronic equipment, etc. Evaporates completely—leaves no residue. Safe to use on insulation and painted surfaces. No. 17A1318. 16 Oz. Spray Can \$1.24

③ **Chalk Board Spray**. Just spray it on lumber, glass, hardboard, wallboard . . . virtually any smooth surface and it becomes a convenient useful chalk board. Also refinishes factory made boards. No. 17A1319. 15 Oz. Can \$1.65

④ **Glass Frosting Spray**. Insures privacy, when applied to windows, etc. Obscures vision, yet allows light to enter. Diffuses and eliminates glare from lamp reflectors, bulbs, shades and outside lights. Ideal for decorating glass doors and partitions. Non-toxic. Removable with lacquer thinner or may be scraped off with razor blade to return glass to original condition. No. 17A1320. 15 Oz. Spray Can \$1.47 No. 17A1356. 6 Oz. Spray Can \$0.89c

⑤ **Crystal Clear Glaze**. New triple thick, glossy, glass-like coating for hundreds of surfaces. Sprays instantly, evenly. Durable, never cracks or yellows. No. 17A1380. 16 Oz. Spray Can \$1.49



YOU MUST  
BE  
SATISFIED  
OR  
YOUR  
MONEY  
BACK

Just return container for full refund.

**MIRA KLEER  
ALL PURPOSE CLEANER**  
12 OZ. SPRAY  
CONTAINER **98c**

Greatest Cleaner And Protective Treatment For All Hard, Smooth Surfaces We've Ever Seen!

No common detergents can remove Mira-Kleer. Ideal for cleaning radio and TV chassis. Also tends to reduce dust accumulation. Contains no wax, will not build up. Big 12 oz. spray container. Shpg. wt. 1 lb. No. 17A1359. Each \$0.98c

### SPRAY ADHESIVE

Pressure sensitive for permanent or temporary bonding of paper, glass, cardboard, fabrics, styrofoam, plastic films, and metal. Precise pin-point gluing with snorkel attachment. Clear and colorless. Clog proof formula.

No. 17A1381. 16 oz. can. Each \$1.99

### "SCOTCHGUARD" FABRIC PROTECTOR STOPS STAINS BEFORE THEY HAPPEN

Handy spray-on protection for home furnishings and apparel, both washable and dry cleanable.

Easy to use . . . sprays on, dries in minutes needs no ironing or heat setting. Sets up an invisible barrier that prevents stains and resists soil, keeps fabrics clean, bright, new-looking. Perfect for upholstered furniture, fabric auto interior, clothing, suits, dresses, table linens. Makes outer wear rain repellent. In 20 oz. pressurized spray can. One can will treat an average upholstered chair. Mfg. suggested list. \$2.98

No. 17A1360. Net Each \$2.49

### GENERAL ELECTRIC SILICONE SEAL

Super Glue. 100% rubber. Bonds securely to glass, ceramics, metal, wood, fabrics, masonry, painted surfaces, most plastics, and rubber.

**Permanent Caulk**. Will not shrink, crack or dry out. Remains flexible and elastic and can stretch over 100%. Originally developed for sealing space vehicles. Guaranteed 10 years to perform as described on tube. Return tube to General Electric Co. for refund or replacement if not satisfied.

Stock No.	3 Ounce Tubes	Each	5 Each
17A1345	White Seal	\$1.59	\$1.49
17A1342	Transparent Seal	1.59	1.49
17A1344	Black Seal	1.59	1.49
17A1341	Aluminum Seal	1.59	1.49

12 ounce cartridges for use with standard caulking gun.  
17A1378 White Seal \$3.59 \$3.29  
17A1379 Transparent Seal 3.59 3.29



# ELECTRONIC CHEMICALS AND LUBRICANTS



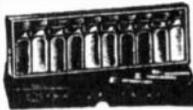
- ① **C-C Contact Burnishing Kit.** For servicing relays, switches, etc. Removes oxide and corrosion from contact points without removing precious metal. Contains 2 oz. bottle contact cleaner and burnishing tool. No. 17A1324. C-C 9339. Each.....97c
- ② **GC-Relay-Kleen.** Excellent for cleaning relays and all types of contacts. Does not have oily deposit. Non-flammable. No. 17A1312. CC8682. 6 Oz. Spray Can.....\$1.89
- ③ **Insl-X Red Insulating Tool-Dip.** Used by major utility companies for insulating power linemen's tools. Gives more than adequate protection against 110 to 220 volts exposure. Dielectric strength 1500 v/m. Resists acids, alkalis, and petroleum derivatives. No. 17A1368. 1 pint can. Each.....\$2.00
- ④ **Insl-X E-26 Clear Insulating Spray.** Quick dry—3 to 5 minutes. Insulate everything in TV except moving parts and tubes. Prevents corona, arcing—keeps out moisture. No. 17A1327. 12 Oz. Can.....\$1.79

## PRINTED CIRCUIT SERVICE AIDS

- Silver Print**—Contains pure silver powder as pigment. Used for making or repairing printed circuits. Ideal for applying conductive coating to non-conductive materials. Brush applicator attached to cap. ½ Troy oz. No. 17A1348. CC 21-1.....\$4.75
- Copper Print**—A highly conductive, fast drying compound for repair and touch-up of printed circuits. Complete with brush-cap bottle. 2 oz. No. 17A1349. CC 20-2.....\$1.95
- Print-Solvent**—Dissolves, removes silicon resin from printed circuits. No. 17A1372. CC 13-2. Each.....42c
- Print-Kote Soldering Flux.** Non-corrosive liquid flux for easy soldering and repairing of printed circuits. Brush applicator on cap. No. 17A1373. CC-12-2. Each.....60c
- Transistor Z5 Silicone Compound.** Maintains efficient heat transfer from transistor to chassis. No. 17A1308. CC 8101. 1 Oz. Tube.....\$2.39

## E.I.A. COLOR CODING KIT

Kit contains jar each of red, grey, white, black, brown, orange, purple, blue, green and yellow high quality fast drying lacquer enamel. Complete with brush and color code chart. No. 17A1347. Per Kit.....\$1.47



## KNOB-PLASTIC REPAIR KIT SETS ROCK-HARD IN 7 MINUTES

New fast-setting material repairs anything of plastic. Ideal for joining broken or new parts, creating new plastic to match or fill repairs as needed. Completely moldable in setting stage, conforms to any shape. Once set, it may be sanded, sawed, drilled, tapped or polished. Contains two mixing ingredients plus color kit. Shpg. wt. ½ lb. No. 17A1346. Each.....\$1.65



## GENERAL CEMENT "EPOX" CEMENT KIT

Bond anything to anything. Provides super strength. Bonds to metal, ceramics, etc. Resistant to water, solvent, heat, cold and fungus. Has very good dielectric properties. Contains two mixing ingredients in 1½ oz. tubes. No. 17A1343 GC346. Kit.....\$1.95



## SAVE ON CEMENTS AND CHEMICALS

- ① **CEMENTS**
- SERVICE CEMENT**—For replacing and repairing speaker cones; sealing adjustments, cementing loose tube bases, etc. Fast drying. 17A1337—2 oz. Bottle.....59c
- 17A1338—2 oz. Tube.....59c
- 17A1339—8 oz.....\$1.59
- 17A1340—1 Pt.....\$2.75

- SERVICE SOLVENT**—Loosens old cement. Also thinner for cement. GC31
- 17A1328—2 oz.....59c
- 17A1329—8 oz.....\$1.10
- 17A1330—1 Pt.....\$1.69

- LUCITE CEMENT**—For lucite and other acrylic materials. GC40-2
- 17A1331—2 oz. Jar. Each.....60c
- RUBBER TO METAL CEMENT.** GC35-2
- 17A1332—2 oz. Jar. Each.....60c

- Q-DOPE (COIL DOPE)**—Coats and seals coil windings, etc. Low RF loss. Ideal for Hi-Freq. use. GC37-2
- No. 17A1307—2 oz. Bottle. Each.....55c

- PLI-O-BOND CEMENT**—It bonds anything to anything—iron, steel, plastic, glass, aluminum, etc. A truly universal cement.
- 17A1333. G-C 43-2, 2 oz. bottle with brush.....60c
- 17A1334. G-C 43-8, 8 oz.....\$1.50

- ② **CEMENT LAB KIT**
- 14 different 2 oz. bottles cement. No. 17A1335. CC345. Per Kit.....\$9.05

- ANTI-CORONA LACQUER**—Has high dielectric strength to prevent corona in TV high voltage. GC 47-2.
- 17A1336—2 oz. Bottle. Each.....78c

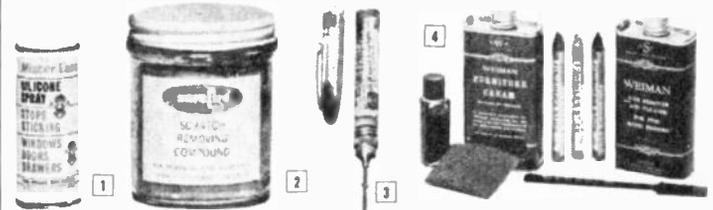
STOP RUST OUTDOORS 2 YEARS - - OR MORE!  
**Lubricates Penetrates Stops Rust**  
 DRY YOUR ELECTRICAL SYSTEMS  
 with LPS — the NON-GREASY ONE



**LPS #1**—A fine, non-sticky film that: Dries out electrical equipment in seconds! Stops rust on all metals—parts in manufacture-storage-shipment. Finest lubricant for precision mechanisms. Loosens rust frozen parts—fast!  
 No. 17A1305. 6 oz. LPS #1 Spray Can Each.....\$1.19 12 Each.....99c  
 No. 17A1306. 16 oz. LPS #1 Spray Can Each.....\$1.79 12 Each.....\$1.59

**LPS #2**—Protects metals outside up to 1 year. Dries out electrical equipment in seconds! Protects parts in storage for years. Proved to be an excellent fine lubricant and a fast penetrant.  
 No. 17A1370. 16 oz. LPS #2 Spray Can Each.....\$1.99 12 Each.....\$1.85

**LPS #3**—Stops rust outdoors for 2 years or more! Protects all metals against severe salt, acid, chemical corrosion conditions. Protects parts in storage 5 years or more. Lubricates and protects outdoor working equipment.  
 No. 17A1371. 16 oz. LPS #3 Spray Can Each.....\$1.99 12 Each.....\$1.85



① **"Mister Ease" Magic All-Purpose Silicone Lubricant.** Lubricates to easy operation bearing shafts, windows—where other lubricants fail to penetrate. Oilless, dripless, greaseless—will not gum, melt or freeze. No. 17A1313. 6 Oz. Can. Each.....99c

No. 17A1314. 16 Oz. Can. Each.....\$1.99

② **Scratch Removing Compound.** Removes scratches and mars from all plastic—radio and TV cabinets, TV screens, electronic instrument panels, dial covers on testing equipment or hi-fi components, aircraft, marine and sports car windshields, optical lens, showcases, mirrors—even removes cigarette burns. Contains a microscopically-thin wax which retards further development of scratches—also cleans and polishes. No. 17A1315. 5 Oz. Jar. Each.....\$1.10

③ **Walsco Oilette.** Filled with high grade lubricating oil. Telescoping spout permits accessibility to difficult places requiring lubrication. Clever system releases one drop at a time. Does not leak. No. 17A1354. Each.....89c

No. 17A1355. Oil Refill Cartridge.....36c

④ **Furniture Touch-Up Kit.** For light, medium and dark finishes. Restores furniture finishes, hides and repairs burns, nicks, scratches and blemishes. Contains wax remover and cleaner, stain remover pad, 3 finisher sticks fill in holes, furniture cream, stain and blender applicator. With instructions. No. 17A1369. Per Kit.....\$1.98

## GENT-L-KLEEN HAND CLEANER

BEST HAND CLEANER FOR HOME OR INDUSTRY

69c  
15 OZ. CAN



Removes grease, carbon, paints, lipstick, tar and graphite, shoe polish, ink, gum, rubber cement and other stubborn dirt. Contains lanolin and hexachlorophene, no abrasives or harsh chemicals to irritate the skin. No. 17A1364.

- 15 Oz. Can. Each.....69c
- No. 17A1365. 32 Oz. Can. Each.....\$1.29
- No. 17A1366. 7 lb. Can. Each.....\$3.89

## SPECIAL MONEY SAVING OFFER

Buy two 7 Lb. Cans at B-A's Regular Low Price of \$3.89 Each and get a high quality aluminum and steel dispenser for 97c. Dispenser costs \$4.95 when sold separately. No. 13A1367.

Two 7 Lb. Cans Gent-L-Kleen with Dispenser.....\$8.75

# SERVICE CHEMICALS AND ACCESSORIES



**B-A's TV SERVICE CHEMICALS**  
**FANTASTIC SAVINGS!**  
**TOP QUALITY**

- (1) **B-A Tuner & Control Cleaner & Lubricant.** Just spray tuner or control, leaves long-lasting protective coating against noise and oxidation. High quality ingredients will not harm plastic. Made for B-A by Chemtronics. An easy way to cure most tuner problems. Aerosol can.  
 No. 17A1300. 6 Oz. ....99c No. 17A1301. 16 Oz. ....\$1.94
- (2) **B-A Color Cleaner & Lubricant.** Non-drift tuner cleaner developed for sensitive color tuners. Cleans and lubricates. Will not detune tuner—will not harm plastics.  
 No. 17A1302. 6 Oz. Spray Can. ....\$1.29
- (3) **B-A Super Freeze Aid.** For Thermal Intermittent Components. Just spray on circuit, to locate intermittent component while circuit is in operation. Freezes immediately and leaves no liquid residue. Saves valuable time. May also be used to chill Martini glasses.  
 No. 17A1303. 6 Oz. Spray Can. ....\$1.29

## CHEMTRONIC TV CHEMICALS

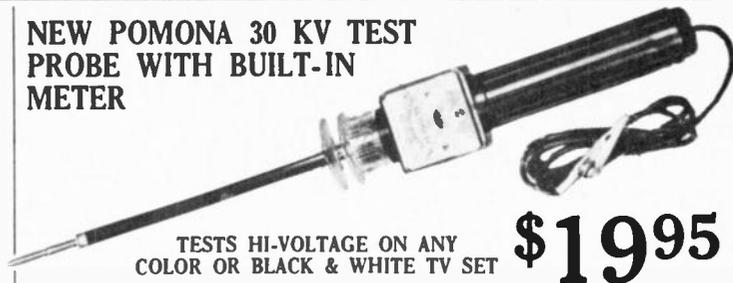


- (1) **Foaming Action Tun-O-Foam.** Doesn't dry out. Foams away dirt and corrosion. Long lasting lubricant withstands extremes of temperature and maintains lubricity over thousands of channel changes. Non-abrasive. Will not wear away contacts and cannot cause detuning.  
 No. 17A1362. 8 Oz. Can. ....\$2.39
- (2) **Tun-O-Wash Tuner DeGreaser.** Harmless to plastic. Will not detune. Fast drying, leaves no residue. For cleaning and degreasing the inside and outside of tuners... leaving tuner parts "Like-New". Powerful, highly concentrated spray penetrates and dissolves accumulated oil, grease, dirt and "built-up" oxidation in all types of tuners.  
 No. 17A1361. Giant 24 Oz. Can. ....\$3.25
- (3) **Tun-O-Lube Tuner Cleaner.** Just spray it on—cleans and lubricates all types of tuners. Leaves a long lasting protective coating against noise and oxidation. Non-flammable, non-toxic. Won't harm plastics.  
 No. 17A1351. 8 Oz. Spray Can. \$1.94 No. 17A1352. 16 Oz. ....\$2.73
- (4) **Color Tuner Cleaner.** Color lube, non drift color tuner cleaner. Contains TC-5 to clean and lubricate the most sensitive tuners.  
 No. 17A1311. 8 Oz. Spray Can. ....\$2.39
- (5) **No-Arc Spray Insulator.** 20,000 volts dielectric strength. Provides a tough insulating coating to prevent arcing and corona shorts. Spray on transformers, yokes, printed circuits, etc.  
 No. 17A1325. 8 Oz. Spray Can. ....\$2.79
- (6) **Trol-Aid** Spray. Cleans, lubricates, restores carbon controls, switches, relays... any electrical contact. Provides protection against noise and oxidation. Will not affect electrical properties or harm insulators.  
 No. 17A1350. 8 Oz. Spray Can. ....\$1.98



- (1) **G-C Sprakleen.** Just spray it on to clean and lubricate all electrical contacts, relay switches, controls and other moving parts.  
 No. 17A1321. 6 Oz. Spray Can. 99c No. 17A1323. 16 Oz. Spray Can \$1.95
- (2) **G-C Zero Mist.** Locates trouble instantly. Spray electronic components in operation, cools instantly pin-pointing faulty components, cold solder and oxidized junctions, due to temperature variances. Saves valuable time.  
 No. 17A1322. CC8667. 16 Oz. Can. ....\$2.42
- (3) **Audio-Video Magnetic Tape Head Cleaner.** "Safe for all types of Recording heads." Quickly removes dirt and oxide build-up; won't harm tape, tape coating or paint finish. Will not interfere with transmission and may be used on running tape. 6" spray extension is furnished with each can for pin-point spray.  
 No. 17A1363. CC10-620. 16 Oz. Aerosol Can. ....\$2.35
- (4) **"Quietrol".** Stops noisy operation of switches, volume and tone controls without removal from chassis. Makes all moving parts quiet.  
 No. 17A1353. 2 Oz. ....\$1.69
- (5) **Non-Slip.** For Record Changers and Tape Recorder drives. Will restore the gripping surface of old and hardened phono drives and belts. Prevents slippage to insure uniform speed. Fast drying, will not harm rubber. 2 oz. bottle with felt applicator.  
 No. 17A1304. Each .....98c

## NEW POMONA 30 KV TEST PROBE WITH BUILT-IN METER



TESTS HI-VOLTAGE ON ANY COLOR OR BLACK & WHITE TV SET

**\$19.95**

Easy to operate, just ground clip to chassis, contact test probe tip to high voltage being measured and read built-in meter. No warm-up or batteries required. Length 14 3/4".  
 Specifications: Range: 30,000 volts DC. Sensitivity: 20,000 ohms/volt (50 uA) movement. Accuracy: ± 3% full scale. Multiplier Resistance: 600 megohm ± 2%. Material: Handle—high impact thermo plastic. Probe—high impact polystyrene. Shpg. wt. 8 ozs.  
 No. 35A8013. Each. ....\$19.95

## MINI-VOLT VOLTMETER

Checks voltage AC or DC from 65 to 660 volts. Will indicate a 2 or 3 volt drop on 110 volt line. Use to identify AC or DC lines, check fuses, circuits, grounds, etc. Impedance 1/2 megohm draws negligible current. Glow lamp guaranteed 25,000 hours. Withstands tough abuse. 12" flexible leads with test prods. Wt. 3 oz.  
 No. 35A8000. ....\$2.98  
 Industrial Devices 400B. Each. ....\$2.98



## SAFE-T-KORD

### FOR FUSED POWER PROTECTION

Eliminates shorts and shocks—dangerous bare leads. Protect equipment from burnout. Apply line voltage to components not having line cords. Thread-on clear Lexan housing for visual inspection and quick replacement of fuse. Supplied complete with two 5 amp fuses (1/4" dia. x 1" long).  
 No. 35A8007. Industrial Devices 1480. ....\$2.39



## SAFE-T-KLIP

Nylon insulated, safe operation to 600 volts. Insulation covers outside of clip thoroughly protecting against accidental shorts or contact with power leads.  
 Packed in pairs—1 Red and 1 Black.

For lead wires. Provision for mechanical or solder joint with test wires. Strain relief built-in. 2 1/4" long.  
 No. 35A8003. Industrial Devices B1410A. Per Pair. ....\$1.39  
 For Banana Plugs. Positive electrical contact 2 1/4" long.  
 No. 35A8004. Industrial Devices B1410B. Per Pair. ....\$1.29  
 For Test Prods. Accepts standard .08 test prod. Positive electrical connection 2 1/4" long.  
 No. 35A8005. Industrial Devices B1410M. Per Pair. ....99c



## SCOTCH VINYL PLASTIC ELECTRICAL TAPE

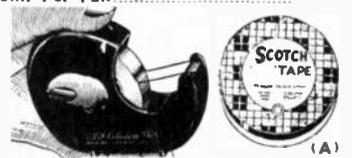
Super-tough and stretchy—this famous Minnesota-Mining Product carries full UL approval.  
 Scotch No. 33. Black vinyl plastic flexible to any surface, remains flexible at low temperature. Resistant to grease, acids, alcohols, water, gasoline, etc. Non-corrosive. Has high tensile strength, 7 mils thick. Dielectric strength 10,000 V. breakdown.  
 No. 17A7000. 66 Ft., 3/4" Wide Roll .....\$1.40  
 10 Rolls .....\$1.16  
 Each .....\$1.16  
 17A7001. 20 Ft. x 3/4" Wide Roll .....53c  
 17A7002. 20 Ft. x 3/4" Wide Roll .....33c

Scotch All-Weather Plastic Electrical Tape No. 88. Makes splice wrapping in cold weather easy, yet retains its excellent body, for smooth and easy application at normal temperatures. 8.5 mils thickness, super-tough—abrasion, oil, acid and flame resistant. Remains pliable at temperatures down to 0° F. 9350 volts electric strength.  
 No. 17A7003. 66 Ft., 3/4" Wide Roll .....\$1.64  
 10 Rolls .....\$1.36  
 Each .....\$1.36  
 No. 17A7004. 20 Ft., 3/4" Wide Roll, Each .....62c  
 10 @ Ea. ....45c

Scotch Cellophane Tape 1296 Inch Roll 1/2" Wide, fits the handy dispenser illustrated.  
 17A7034. 12 Lots, 59c  
 Per Roll .....65c  
 Each .....59c  
 Dispenser No. 17A7035. Each .....29c

2592 Inch Roll 1/2" Wide. 12 Lots, 81c  
 17A7036. 12 Lots, 81c  
 Each .....81c  
 2592 Inch Roll 3/4" Wide. 12 Lots, \$1.18  
 17A7037. 12 Lots, \$1.18  
 Each .....\$1.18

SCOTCH MASKING TAPE. Avg. wt. 10 oz.  
 No. 17A7005. 60 Yds, 3/4" Wide Roll, Each .....89c  
 12 Rolls, Ea. ....89c  
 No. 17A7006. 60 Yds, 1" Wide Roll, Each .....\$1.39  
 12 Rolls, Ea. ....\$1.25  
 No. 17A7007. 60 Yds, 1 1/2" Wide Roll, Each .....\$1.98  
 12 Rolls, Ea. ....\$1.78



## SCOTCH TAPE

Completely transparent. Invisible in use.

810. 1296" Roll 1/2" Wide. 12 Rolls .....85c  
 17A7041. 12 Rolls .....94c  
 Per Roll .....85c  
 810. 1296" Roll 3/4" Wide. 12 Rolls .....\$1.13  
 17A7042. 12 Rolls .....\$1.13  
 Per Roll .....\$1.13  
 Dispenser for 1296" Rolls No. 17A7035. Each .....29c  
 810. 2592" Roll 1/2" Wide. 12 Lots .....\$1.36  
 17A7043. 12 Lots .....\$1.36  
 Per Roll .....\$1.36  
 810. 2592" Roll 3/4" Wide. 12 Lots .....\$1.86  
 17A7044. 12 Lots .....\$1.86  
 Per Roll .....\$1.86

# TEST AND ALIGNMENT AIDS

## ① BUZIT TRANSISTORIZED SIGNAL TRACER

No clips or wires. Used for trouble-shooting AF circuits, IF circuits, RF circuits, continuity checks, speakers, etc. Excellent for transistor radios because Buzit uses only a 3 volt power supply. With 2 penlight batteries. Shpg. wt. 8 ozs.  
No. 35A3010. Workman BZ1. Each..... **\$9.57**

## ② CHEK-IT ELECTRICAL CIRCUIT TESTER

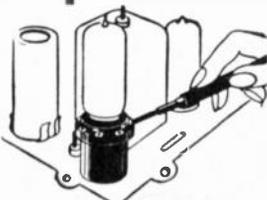
Battery operated. Tests with power off. Tests continuity, fuses, switches, buzzers, push-buttons, chimes, appliances, motors, auto ignition and voltage regulators, etc. Less battery. Wt. 8 ozs.  
No. 35A3031. Workman BZ5. Each..... **\$1.89**  
No. 21A3. Battery for above. Each..... 13c



## POMONA SOCKET SAVERS

Miniaturized, only .336" (7 & 9) and .68" (octal) high. Protects tube tester sockets from wear caused by repeated use. Assures positive contact to tube pins. Simple plug-in installation, no wiring. Shpg. wt. 3 oz.

12A5021. 1847. For 7-pin. 12A5023. 1849. For 9-pin.  
12A5022. 1848. For 8-pin. 12A5024. 1751. For 9-pin novar.  
**CHOICE EACH .....\$1.95**



## VOLTAGE TEST ADAPTERS

Handy for checking circuit voltages, etc. without removing chassis. All socket connections are topside... within easy reach of a test prod.  
No. 12A5118. 7-Pin Miniature. **\$1.65**  
4 oz. Each.....

No. 12A5119. 8-Pin Octal. **\$1.57**  
4 oz. Each.....

No. 12A5120. 9-Pin Miniature. **\$1.87**  
4 oz. Each.....

No. 12A5121. Kit of 3 (above) in convenient container. Kit..... **\$4.95**

No. 12A5121. Kit of 3 (above) in convenient container. Kit.....

## VECTOR CURRENT OR VOLTAGE TEST ADAPTERS

Vector current test adapters allows both voltage and current measurements to be made in operating tubes on any pin merely by inserting test adapter between tube and chassis and taking reading at meter to which test probe leads are connected. Special P-2 probe "breaks" circuit for current measurements when inserted in test adapter tabs. Average shpg. wt., Kits—8 Ozs.; Indiv. Adapters—4 Ozs.



Stk. No.	Mfg. Type	Description	Each 1-19
12A5111	T7MC	7-Pin Miniature Adapter	\$2.53
12A5112	T80C	8-Pin Octal Adapter	3.19
12A5113	T9NC	9-Pin Novar Adapter	2.70
12A5114	T789C	Set of above 3 Adapters with P-2 Probe in box	9.74
12A5115	T9RC	9-Pin Novar Adapter	3.65
12A5116	T12C	12-Pin Compactron Adapters	3.85
12A5117	T912C	Set of Novar, Compactron and P-2 in box	8.29
35A8014	P-2	Double-sided Probe required with above	.79

## REPLACEMENT TEST LEADS



Test Leads of Best Quality—Flexible, kinkless Wire 48 to 50 inches long.

① **Phono Needle Type.** Replaceable phono needles in chuck-type collar. Slim 4" red and black handles. With standard phone tips. Wt. 8 oz.  
No. 37A3023. Type 613. Pair..... **\$1.05**

② **All Purpose Type.** Sturdy, slim 6" plastic handles with sharp point tips. Equipped with banana plugs allowing for interchange of spade lugs, phone tips or alligator clips all supplied. Wt. 8 oz.  
No. 37A3024. Type 610. Complete Kit..... **\$1.90**

③ **Weston Type.** Well made for precision tests. Red and black 4" long pencil type plastic handles, 48" lead, molded finger grip phone tips.  
No. 37A3025. Type 625. Wt. 8 oz. Per Pair..... **\$1.50**

④ Same as above with banana plugs for Simpson, etc.  
No. 37A3186. Type 685. Wt. 8 ozs. Pair..... **\$1.70**

⑤ **Slim Line Type.** Long vinyl-insulated shafts. Red and black tennite handles. Phone tip plugs.  
No. 37A3192. Type 698. Per Pair..... **\$1.35**

## TEST PRODS AND WIRE



① **Phono Needle Type**—Tapped removable chuck holds standard phono needles. Red or Black Tenolite handle. No. 37A3026. Type 317. 5" L..... 33c

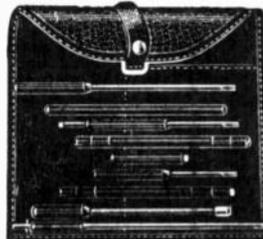
② **Solderless Type**—Tapped removable plug holds wire securely by means of knurled collar. Red or Black. No. 37A3027. Type 302. 5 1/2" L. 30c

③ **Hard Steel Phono Needles.** Standard straight shank type used in all phono needle test prods. No. 24B333. Pkg. of 25..... 25c

④ **Test Lead Wire**—Non-kink flexible wire with live rubber insulation. 5000 volt breakdown. No. 2A421. 7' Red and 7' Black 94c  
No. 2A64. 25' Red or Black..... \$1.29

## MURA THERMY THERMOTESTER INSTANT TEMPERATURE READINGS

Reads out in seconds upon physical contact. Accurate, durable. Use with VTVM or multimeter. Translating scale to convert meter reading to Fahrenheit or Centigrade degrees on thermometer and on carrying case which is included, 42" leads with phone tips. Temperature range —50° to 200°C or —60° F. to 400° F.  
No. 35A3064. **\$14.95**  
Each.....



## HANDY TV ALIGNMENT KITS

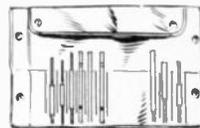
Low Cost Kit. Contains all the necessary tools for doing a complete TV servicing job, 9 tools in all—in a convenient pocket sized leatherette roll case.

Made to last and wear for hundreds of jobs—an absolute must for every service shop. Includes K-tran tool, channel tools, tool for RF and IF, core aligner, oscillator tool, long reach aligner, universal aligner, duplex aligner and flexible tuning wand. Wt. 1/2 lb.  
No. 37A3021. CC8455. Each..... **\$6.26**

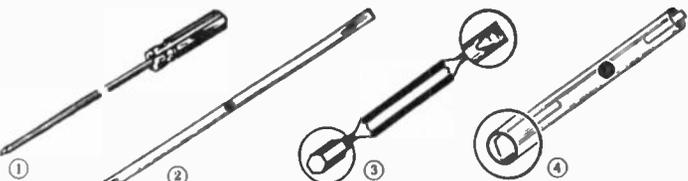
Deluxe Kit. Similar to above but with 16 tools in roll case. Handles alignment of most TV sets. All tools are of best quality available. Designed to give long service. Wt. 1 lb.  
No. 37A3022. CC8280. Each..... **\$10.30**

## "LUCKY 13" ALIGNMENT KIT

General purpose kit for AM-FM, TV, CB equipment. 13 piece set contains screwdriver, solder-aid, pocket oilette and most needed alignment tools. GC 582.  
No. 37A3273. Each..... **\$9.72**



## GC ALIGNMENT TOOLS FOR ELECTRONIC SERVICING



Average wt. 3 oz. each

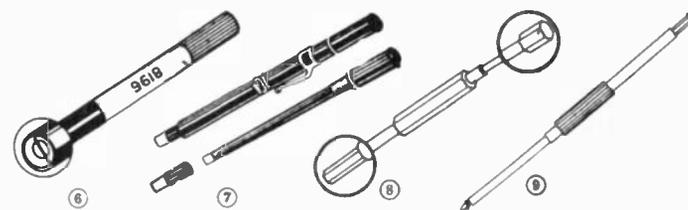
① **Narrow Blade "Fibreglas" screwdriver** completely insulated. Type 9291.  
37A3012. 7" L. x 3/8" dia. Each.....85c

② **Long Reach Alignment Screwdrivers.** Made of bone fibre, extra thin 1/8" dia. blades. Screwdriver tips both ends—can be re-ground.  
37A3013. Type 9293. 12" L. x 1/8" dia. Each.....48c

37A3014. Type 9294. 16" L. x 1/8" dia. Each.....72c

③ **Molded Double Ender.** Delvix plastic molded for Zenith TV's etc. Hex wrench 5 1/8" x .100" dia. one end, screwdriver tip other end. Type 8282.  
37A3015. Net Each.....37c

④ **Low Loss Plastic Tool.** 5" L. x 3/8" dia. Recessed blade one end, extended blade other. Type 8609  
37A3189. Net Each.....69c



⑥ **TV & FM Tuning Tool.** Molded plastic. Fine recessed screwdriver tip. 2 1/2" x 3/8" dia.  
37A3190. Type 8196. Each.....46c

⑦ **Alignment Tool Set.** Fountain pen size. Has 1/4" and 3/8" nut wrenches, small and full blade screwdrivers. Made of bone fibre.  
No. 37A3191. Type 5015. Set.....\$1.27

⑧ **Delvix Plastic Hex Wrench.** Hex wrenches both ends, one end undercut to reach bottom slugs in iron cores. 11" long.  
No. 37A3016. Type 8606L. Each.....63c

⑨ **Transistor IF Core Aligner.** Reaches bottom slugs in iron cores. 5" long.  
No. 37A3017. Type 2501. Each.....63c

## COLOR TV ALIGNMENT KIT

Contains 5 most needed aligners plus one extend-it to make long tools out of short ones.  
No. 37A3184. CC 8454. Each..... **\$2.49**

## NON-MAGNETIC ALIGNING TOOL

For hard turning slugs and long reach TV tuners. Made of heat treated Beryllium copper. Blade is 1/8"x10" long.  
No. 37A3211. C-C 9106. **\$1.05**  
Each.....

## TRIMMER & TUNER ADJUSTING TOOL

.05 hex one end and screwdriver tip on other. 5 1/8" long.  
No. 37A3185. CC 8605. **63c**  
Each.....

# SERVICE TOOLS, SOLDER

FOR VIEWING  
SCREEN WHILE  
SERVICING SET



## TV SERVICE MIRROR

Just the thing for viewing the TV screen while adjusting controls or servicing in rear of set. Good quality 12x10" glass mirror does not distort image. Telescoping stand adjusts to the necessary height—collapses for easy carrying when making service calls. Shpg. wt. 4 lbs. G-C 8390.

No. 37A3195  
NET EACH..... **\$6.95**

## MIRROR ONLY FOR BENCH USE

12x10" glass mirror in chrome frame and with upright bracket.  
No. 37A3196G-C 8391. Each. **\$3.47**

## WALSCO COLOR TV DEGAUSSING COIL AT LOWEST COST!

SAFE, EASY  
TO USE... **\$5.95**  
EVEN FOR  
SET OWNER



Improves  
& Sharpens  
Color By  
Removing  
Pix Tube  
Magnetism

Eliminates fuzzy, unwanted stray colors... in just minutes. An absolute necessity for the serviceman. Simple for anyone to use... allows set owner to save many dollars by demagnetizing his own color TV. High-impact plastic, with momentary push button switch. Convenient storage clip for back of set. With illustrated instructions.

No. 37A3001 Type 2592.  
Wt. 1 lb. Each **\$5.95**

## POPULAR SERVICE SHOP TOOLS



① Tube and Parts Extractor. Spring steel rubber cushioned prong.  
No. 37A3197, G-C 5092. Wt. 12 oz. Each..... **98c**



② G-C Illuminated Inspection Mirror. Gets into dark, hard-to-get-at places. Insulated, 7/8" dia. adjustable mirror, lucite rod. Lgth. 12 1/4". With bulb. 6 oz. No. 37A3198. (Less Batteries).  
G-C 8725. Each **\$2.02**  
No. 21A3. Batteries for above. Each.....13c



③ Bulb Remover. Removes pilot bulbs easily from awkward places.  
No. 37A3199. Dialco L-73. Wt. 3 oz. Each..... **29c**



④ Folding Pocket Magnifier. 1 3/4" diameter lens, 2 1/2" Power. Stiff leather case.  
No. 37A3200. Wt. 4 oz. Your Cost, Each..... **98c**



⑤ Flexible Screwholding and pickup tool. Handy flexible tool made of spring coiled wire with retractable spring steel jaws. Ideal for starting screws or nuts, and retrieving small parts in inaccessible places. 24" long.  
No. 37A3201. G-C 5089. Wt. 5 oz.  
Net Each..... **\$1.15**



⑥ 10 1/2-inch Magnetic Pick-Up Tool. Reaches what your hands can't grasp. Use for picking up small parts from hard to reach places. With permanent Alnico magnet. Wt. 4 oz.  
No. 37A3202. Each..... **49c**



⑦ Universal Fuse Puller. Accommodates all kinds and types of fuses including household screw-in plug types and cartridge fuses up to 3/4" or 100 amps. Made of molded nylon... non-conductive, non-inflammable, virtually unbreakable. Wt. 3 ozs.  
No. 37A3203. G-C 9356. Each..... **89c**



⑧ Ne-O-Lite Electric Trouble Shooter. Handy for radio men and electricians for testing AC lines, polarity of AC or DC, for blown fuses, tracing ground line in AC circuits, as an RF indicator, spark plug and cable tester, etc. Can be used on voltages of 60 AC to 550 volts AC or DC. Wt. 3 ozs.  
No. 37A3020. **50c**  
GC 5100. Each.....



⑨ Low Voltage Test Light. Tests any source from 5 to 50 volts AC or DC. Light brightens as voltage increases.  
No. 35A8011. GC 5105. With Tip Prods..... **99c**  
No. 35A8012. CC 5110. With Alligator Clips \$1.19

## GC SOLDER AIDS

Hex shaped Butyrate handles. Tools shed solder. Miniature size 5 3/4" long.

Fig.	Stk. No.	GC No.	Description	Each
①	37A3321	9069	Reamer & Scraper Tip	\$0.90
②	37A3322	9073	Brush & Forked Tip	.95
③	37A3323	9074	Brush & Scraper Tip	.95
④	37A3324	9076	Angle Reamer & Forked Tip	.90

STANDARD SIZE 7 1/2" LONG				
①	37A3325	9086	Straight Reamer & Forked Tip	1.03
②	37A3193	9094	Fine Brush & Scraper Tip	1.03
③	37A3019	9088	Stiff Brush and Forked Tip	1.03
④	37A3018	9093	Angle Reamer & Forked Tip	1.03



## KESTER "44" RESIN CORE SOLDER

Fast acting, instant wetting flux makes soldering faster and provides a stronger longer-lasting bond. 100% non-corrosive and electrically non-conductive. Immune to fungus growth and resists oxidation or organic decomposition.

Small Box for the occasional user. 40% Tin—60% Lead. 1/4" dia. No. 17A7009. 1 Oz. Net Wt. Ea. .30c

### 40% TIN—60% LEAD

Prices Per Spool					
Stock No.	3/32" (.093) Dia. 1 Lb. 5 Lbs.	Stock No.	1/16" (.062) Dia. 1 Lb. 5 Lbs.	Stock No.	1/32" (.031) Dia. 1 Lb. 5 Lbs.
17A7045	\$1.68	17A7047	\$1.73	17A7049	\$2.50
17A7046	\$8.18	17A7048	\$8.40	17A7050	\$9.75

### 50% TIN—50% LEAD

17A7051	\$2.03	17A7053	\$2.07	17A7055	\$2.82
17A7052	\$9.90	17A7054	\$10.05	17A7056	\$11.10

### 60% TIN—40% LEAD

17A7057	\$2.31	17A7059	\$2.36	17A7061	\$3.08
17A7058	\$11.33	17A7060	\$11.55	17A7062	\$12.50

## RESIN FIVE

Non-Corrosive Electrically Non-Conductive, Fungus Resistant

### 40% TIN—60% LEAD

3/32" (.093) Diameter		1/16" (.062) Diameter	
No. 17A7010.	1 Lb. Spool. Ea. \$1.68	No. 17A7012.	1 Lb. Spool. Ea. \$1.73
No. 17A7011.	5 Lb. Spool. Ea. 8.18	No. 17A7013.	5 Lb. Spool. Ea. 8.40

### 50% TIN—50% LEAD

No. 17A7014.	1 Lb. Spool. Ea. \$2.03	No. 17A7016.	1 Lb. Spool. Ea. \$2.07
No. 17A7015.	5 Lb. Spool. Ea. 9.90	No. 17A7017.	5 Lb. Spool. Ea. 10.05

### 60% TIN—40% LEAD

No. 17A7018.	1 Lb. Spool. Ea. \$2.31	No. 17A7021.	1 Lb. Spool. Ea. \$2.36
No. 17A7019.	5 Lb. Spool. Ea. 11.33	No. 17A7022.	5 Lb. Spool. Ea. 11.55
No. 17A7020.	Soldering Paste. Per 2 Oz. Can. 15c	10 Cans, Each.	1.3c
No. 17A7025.	60-40% Fine Gauge Solder. 1/2" (.031) O.D. 1 Lb.		\$3.08
No. 17A7024.	Liquid Solder Flux. 1 Pt.		\$2.25

## KESTER SILVER SOLDER FOR PRINTED CIRCUITS

Contains 3% silver, 61 1/2% tin, 35 1/2% lead with an .062 diameter.

No. 17A7023. 1 Lb. Spool. Net Each..... **\$4.95**

## ERSIN MULTICORE SOLDER



Extra active, non-corrosive, 5 core construction assures flux continuity... prevents "dry" joints. Conforms to Govt. specs. QQS-571.

### 60% TIN—40% LEAD

KIT-PAK. Two solder gauges for the occasional user.		25c
No. 17A7026.	Approx. 6". Each	69c
17A7066.	P.C. Pak. 21 Ft. of 22 Gauge.	69c
17A7027.	Easy Dispenser Pak. 14 Ft. of 18 Gauge.	Each..... 69c
17A7067.	Serviceman's Pak. 40 Ft. of 19 Gauge.	\$1.00

### ONE POUND SPOOLS

17A7028.	16 Ga.	\$3.34	28 Spools, Ea.	\$2.81
17A7029.	18 Ga.	\$3.40	28 Spools, Ea.	\$2.86
17A7063.	20 Ga. (.032")	\$3.67	28 Spools, Ea.	\$3.19
17A7064.	22 Ga. (.028")	\$3.95	28 Spools, Ea.	\$3.32
17A7065.	24 Ga. (.022")	\$5.64	28 Spools, Ea.	\$4.75

### "SAVBIT" COPPER-LOADED ALLOY SOLDER

Does not absorb metal from copper tips, reduces wear and prolongs tip life ten-fold.

17A7030.	16 Ga. 1 Lb. Spool.	\$3.22	28 Lbs. Ea.	\$2.71
17A7031.	18 Ga. 1 Lb. Spool.	\$3.34	28 Lbs. Ea.	\$2.81

## SENSATIONAL "SAL-MET" NON CORROSIVE FLUX

Makes a formerly impossible job easy. No special solder needed, no special preparation necessary. Just put a dab of "Sal-Met" on the spot to be soldered and proceed to solder in the usual manner using your favorite iron, gun, or torch. Results will be a positive electrical and mechanical connection.



SOLDER  
ALL  
METALS  
EASILY!

Used by Hughes Aircraft, Westinghouse, National Advisory Council for Aeronautics, Erie Resistor Corp. and many others. Handy one oz. tubes sufficient for hundreds of jobs.  
No. 17A7008. Net Each **\$1.19**

## POCKET BLOW TORCH & SOLDERING KIT

HANDY 2-IN-1 TOOL WORKS FROM BUTANE GAS CARTRIDGE



Handiest torch yet for doing those small repair jobs quickly and easily. Provides high heat (3500 degrees) pin point flame sufficient for soldering, brazing, softening paint and putty, fixing leaks plus numerous other uses. Pays for itself in no time at all! Uses economical "throw-away" gas cartridges similar to those used in cigarette lighters. Kit includes compact size 7" torch with soldering tip, all purpose solder and three butane gas cartridges. Soldering tip slips over torch head to provide portable iron for those outdoor or away from bench soldering jobs. In handy plastic carrying case. Shpg. wt. 1 lb.

No. 37A3233. Kit Each..... **\$3.75**  
No. 37A3234. Extra Cartridge. Box of 4..... **.98c**

# Weller® AND WEN SOLDER GUNS

## WELLER TEMPMATIC TEMPERATURE CONTROLLED SOLDERING TOOL



**\$8.65**  
MODEL GT-7A

Fast heating trigger control. The powerhead contains Weller's own proven temperature control system to protect delicate components. Stainless steel long reach barrel. Convenient ejector makes switching powerheads easy. Weighs only 7 ozs. 150 watt AC, 2 wire cord.

GT-7A Controlled Temperature Solder Tool with 3/16" chisel point 700° F powerhead. **\$8.65**

No. 37A3288. Each.....  
GT-6B Controlled Temperature Solder Tool with 1/8" conical point 600° F powerhead. **\$8.65**

No. 37A3289. Each.....  
No. 37A3290. 7A Powerhead, 3/8" chisel point 700° F. Each.....**\$6.95**

No. 37A3291. 6B Powerhead, 1/8" conical point 600° F. Each.....**\$6.95**



## WELLER DUAL HEAT SOLDERING KIT

**\$8.30**

INCLUDES: Gun, Brush, Soldering Aid, Solder, 3 Tips and Tip Wrench.

**MAKES SOLDERING FASTER—EASIER**

The hottest solder gun value ever offered! Here is true Weller professional performance and quality construction in a small, lightweight, exceptionally easy to handle solder gun. Perfect for hobbyist or serviceman—does a real man-sized soldering job. New improved gun, rated 100/140 watts furnishes soldering heat in just 5 seconds by a trigger control. Prefocused spotlight illuminates work as you solder. Dual heat feature provides reserve power for heavier soldering needs. Uses high efficiency long life tip. 120 volts 60 cy. AC Fully guaranteed Wt 3 lbs

37C257. 8200PK. Each **\$8.30**

3 Lots Each.....**\$7.45** 12 Lots Each.....**\$6.60**

No. 37A62. 8200 Gun Only. Each.....**\$6.60**



## WELLER HEAVY-DUTY DUAL HEAT SOLDERING GUN KIT

FOR SERVICEMAN, HOMECRAFTER, HOBBYIST, EVERYONE!

B-A's LOW PRICE  
**\$11.60**

- SOLDERS!
- MENDS!
- SEALS! CUTS!

Accomplishes scores of money-saving jobs. Handy to have for ready use in the shop, at home, out on the job, anywhere.

Comes complete with the very popular Weller heavy-duty dual heat 240/325 watt soldering gun that has such desirable features as: Instant heating—takes only 5 seconds to obtain solder heat; Extra long reach to get into the deep inaccessible places; Dual spotlights to focus on work; Rugged housing that stays cool. Dual heat feature provides reserve power for extra heavy jobs. Includes 3 handy tips; Long-life soldering tip; Smoothing tip for heat-sealing, and mending plastic articles; Cutting tip for cutting plastic tiles, removing hard putty from broken windows, etc.; tip changing wrench and all purpose solder. Instruction booklet gives helpful hints—tells how to do various jobs. Unbreakable plastic case is convenient for storage and has handle for easy carrying. Shpg. wt. 6 1/2 lbs. **\$11.60**

37C256. D-550PK. Net Each.....  
3 Lots Each.....**\$10.45** 12 Lots Each.....**\$9.30**

## WELLER DUAL HEAT GUNS

No.	Model	Watts	Shpg. Wt.	Each	3 Lots, Each	12 Lots, Each
37B4	D-550	240/325	4 Lbs.	\$9.95	\$8.95	\$7.95
37A237	D-440	145/210	3 Lbs.	9.15	8.25	7.30

REPLACEMENT SWITCH for all Weller Dual Heat Solder Guns  
No. 37A3286. Type 7324. Net Each.....**80c**

## WELLER SOLDERING TIPS

No.	Type	For Gun Models	Pkg. of 2	25 Pkgs. Each
37A3176	7250	WS-200, WD-250, S-500, D-550, 8250A	35c	33c
37A3177	7135	WD-135, S-400, D-440, 8100, 8200	35c	33c
37A3178	7300	S-107, D-207	35c	33c
37A3179	8125	8200, 8100B	35c	33c

## WELLER HOBBY & HOMECRAFTER TIPS

For cutting plastic tile; fixing home appliances and wiring; heat-sealing home-freezer packages; model railroads, regrooving tires, removing putty, etc. All are supplied with Tip nuts.

Smoothing Type	Cutting Type	For Gun Models	Each
37A3180	37A3182	WD-250, S-500, D-550, 8250A	35c
37A3181	37A3183	WD-135; 8200, D-440, Jr., 8100B	35c

**WEN**

## SOLDERING GUNS AND KITS

All have Wen's exclusive thermal regulation for efficient range of heat power. Instant heat. Change tips to change heat ranges. Beautifully balanced. Pre-focused spotlight. UL & CSA listed. All for 110-120 VAC.

450k4. 25 to 450 watt soldering kit. Includes 25-100 watt fine tip, 100-200 watt medium tip, 200-450 heavy duty tip and roll of solder. Shpt. Wt. 3 lbs. **\$11.88**

No. 37A3312. 450k4 Kit. Each.....**\$9.99**

No. 37A3313. 450 Gun only with 200 to 450 watt tip. Each.....**\$8.98**

222k5. 25 to 200 watt soldering kit. Includes 25-100 watt fine tip, 100-200 watt medium tip plus cutting tip, smoothing tips, and roll of solder. All in an attractive molded case. Shpg. wt. 3 lbs. **\$8.98**

No. 37A3314. 222k5. Solder Kit. Each.....**\$6.39**

No. 37A3315. 222 Gun only with 100-200 medium tip. Each.....**\$4.19**

75 Soldering Pistol. Space age metal makes 50 watts do the work of 100 watt units. Does work normally done by soldering pencils, long reach tip. Shpg. Wt. 3 lbs. **\$4.19**

No. 37B214. 75 Pistol with standard tip. Each.....**\$4.19**



ONLY  
**\$6.49**

## WEN 199 SOLDERING GUN 130 WATTS

Heats in just 2 1/2 seconds. Cools when trigger is released. Small — fits tool kit or pocket. Light—easy to handle, less tiresome to use. 3 1/4" extra long, narrow tip for tight spots. Built-in spotlight. Plastic handle and case are heat and shock resistant. 115 volts. 60 cy. AC. Wt. 2 1/2 lbs. **\$6.49**

No. 37A329. Each.....**\$6.49**

## WEN REPLACEMENT TIPS

Stk. No.	Description	Tip No.	For Gun Model	Each
37A3174	Standard	75A7	75	\$0.74
37A3175	Fine Point	75B7	75	.74
37A3316	Light Duty	45F7	222, 450	.98
37A3317	Medium Duty	45M7	222, 450	.98
37A3318	Heavy Duty	45A7	450	.98
37A3319	Smoothing	45P57	222, 450	.45
37A3320	Cutting	45S7	222, 450	.45
37A3168	Long Reach	19B4	199, 100	.38
37A3169	Standard	25A4	250	.20
37A3170	Long Life	25X20	250	.38
37A3171	Plastic Tile Cutting	19C1	199, 100	.46
37A3172	Standard	28C4	288	.46
37A3173	Flat Iron Tip	19F33	288, 199, 100	.46



# PRECISION SOLDERING IRONS

## UNGAR STANDARD SOLDERING PENCIL & TIPS



**① UNGAR MODEL 776 HANDLE**  
 "Insul-cool handle" ruggedized for production fine soldering. Features stainless steel deflector for low handle temperature, ceramic and glass insulation for longer life, tough phenolic for added durability and extra heavy, extra flexible 6 ft. 18 gauge polyvinyl cord. Cork finger-grip, red colored handle. Accommodates all elements and tips below.  
 37A3066. Type 776 (Less Element and Tip) Each.....\$1.65 10 Lots, Each.....\$1.36 50 Lots, Each.....\$1.24  
 ① New "Clean Room" Handle. Heat stabilized polypropylene grip with airflow cooling keeps handle cool to the touch all day long. Octagon shaped non-slip poly-grip won't collect dust or deteriorate. Efficient, perfectly balanced. Supplied in attractive easy-on-the-eye blue pastel color. Other features same as Type 776 above.  
 No. 37A3067. Type 777 (Less Element and Tip). Each.....\$1.87 10 Lots, Each.....\$1.53 50 Lots, Each.....\$1.40

## TIPS WITH SELF-CONTAINED ELEMENTS

### 500 STANDARD SERIES—23 1/2 WATTS

For instrument repair, and general use. Tellurium Copper Tip.

Stk. No.	Fig.	Type	Tip	Size	Temp. °F.	Each	10 Ea.	50 Ea.
37A3068	(13)	533	Chisel	1 5/8" Lx 3/8" W	700	\$1.52	\$1.25	\$1.14
37A3069	(2)	536	Pyramid	1 1/8" Lx 3/8" dia.	700	1.52	1.25	1.14
37A3070	(3)	539	Chisel	1 1/8" Lx 3/8" W	700	1.52	1.25	1.14

### 1200 HI-HEAT SERIES—37 1/2 WATTS

For general service and light to medium production line service. Tellurium Copper Tip.  
 37A3071 (13) 1233 Chisel 1 5/8" Lx 1/4" W 800 \$1.92 \$1.58 \$1.44  
 37A3072 (5) 1236\* Pyramid 1 1/8" Lx 3/8" dia. 800 1.92 1.58 1.44  
 37A3073 (6) 1239\* Chisel 1 1/8" Lx 3/8" W 800 1.92 1.58 1.44  
 \*Solid iron silver plated for heavy duty production line use.

### 4000 SUPER HI-HEAT SERIES—47 1/2 WATTS

For all operations formerly requiring a 150 watt iron. Tellurium Copper Tip, iron clad, silver plated.  
 37A3074 (13) 4033 Chisel 1 5/8" Lx 1/4" W 1000 \$3.17 \$2.60 \$2.38  
 37A3075 (5) 4036 Pyramid 1 1/8" Lx 3/8" dia. 1000 3.17 2.60 2.38  
 37A3076 (6) 4039 Hvy. Chl. 1 1/8" Lx 3/8" W 1000 3.17 2.60 2.38

## HEATING UNITS ONLY

**NEW THREAD ON HEATING UNITS** Use with thread on Mini-tips below.  

Stk. No.	Fig.	Type	Wattage	Temp. to Tip	Each	10 Ea.	50 Ea.
37A3077	(14)	4037	47 1/2	850°	\$3.17	\$2.60	\$2.38
37A3078	(14)	1237	37 1/2	750°	2.13	1.75	1.60

### THREAD-IN HEATING UNITS

Use with Series 300 Copper and Iron Clad Tiptets listed below.

Stk. No.	Fig.	Type	Wattage	Temp. to Tip	Each	10 Ea.	50 Ea.
37A3079	(4)	535	23 1/2	650°	\$1.52	\$1.25	\$1.14
37A3080	(7)	1235	37 1/2	750°	1.92	1.58	1.44
37A3081	(7)	4035	47 1/2	850°	3.17	2.60	2.38

Hi-heat thread-in unit for use with Series 800 Tiptets.

Stk. No.	Fig.	Type	Description	Each	10 Ea.	50 Ea.
37A3083	(16)	PL111*	3/4" Long 1/8" Pencil	\$0.80	\$0.66	\$0.60
37A3084	(16)	111	3/4" Long 1/8" Pencil	.40	.33	.30
37A3085	(15)	PL113*	3/4" Long 1/8" Chisel	.80	.66	.60
37A3086	(15)	113	3/4" Long 1/8" Chisel	.40	.33	.30

### NO. 300 TIPTETS FOR 535, 1235, 4035 HEATING UNITS

Stk. No.	Fig.	Type	Description	Each	10 Ea.	50 Ea.
37A3087	(11)	PL331*	1/8" Pencil Tiptet	\$0.60	\$0.49	\$0.45
37A3088	(11)	331	1/8" Pencil Tiptet	.25	.21	.19
37A3089	(9)	PL332*	1/8" Offset Pencil Tiptet	.60	.49	.45
37A3090	(9)	332	1/8" Pencil, 30° Offset	.25	.21	.19
37A3091	(10)	PL333*	1/8" Chisel Tiptet	.60	.49	.45
37A3092	(10)	333	1/8" Chisel Tiptet	.25	.21	.19
37A3093	(12)	PL338*	1/8" Tapered Needle	.60	.49	.45
37A3094	(8)	PL340*	Micro-Needle	.60	.49	.45

### EXTRA LONG TIPTETS

(Designed for use with 4045 heating unit only)

Stk. No.	Fig.	Type	Description	Each	10 Ea.	50 Ea.
37A3095	(11)	PL823*	3/8" Pyramid	\$0.70	\$0.58	\$0.53
37A3096	(11)	823	3/8" Pyramid	.30	.25	.23
37A3097	(10)	PL824*	3/8" Chisel	.70	.58	.53
37A3098	(10)	824	3/8" Chisel	.30	.25	.23
37A3099	(10)	PL833*	Straight 2" x 3/8" Chisel	1.00	.82	.75
37A3100	(9)	PL834*	45° Offset 2" x 3/8" Chisel	1.00	.82	.75

\*Indicates Iron Plated

## DE-SOLDERING TIPS FOR 4045 HEATING UNIT

Fig.	Stk. No.	Type	Description	Each	10 Each	50 Each
①	37A3060	856	5/8" Cup	\$0.83	\$0.68	\$0.62
②	37A3061	857	Slotted Tip	.83	.68	.62
③	37A3062	858	Bar 1 1/2" x 3/8"	.83	.68	.62

**#400 KLEEN-TIP**  
 Doubles life of soldering tips with new tip cleaner. Phenolic tray, specially processed sponge and bottom adhesive strips for firm mounting to work bench.  
 No. 37A3102. Ea.....\$1.13 10 Ea.....93c 50 Ea.....85c  
 No. 455 Refill Sponge for above.  
 No. 37A3103. Ea.....45c 10 Ea.....37c 50 Ea.....34c

## UNGAR IMPERIAL SOLDERING PENCIL AND TIPS



### COMPLETELY INTERCHANGEABLE HEAT CARTRIDGES & TIPS TO FIT ANY SOLDERING JOB

Satisfies every demand for a cool, lightweight, easy-handling soldering iron. Engineered to get jobs done faster, better, more economically. Built to provide years of dependable operation. Complete unit weighs less than 5 ounces. Handles and heat cartridges color keyed for instant identification.

### ① IMPERIAL "PERMA-COOL" HANDLE

Introduces a completely new heat sink principle... double cushion of air, combined with five heat transition surfaces evenly dissipates heat, keeps handle cool and comfortable all day long. Durably built of Lexan high strength polycarbonate resin with built-in die-cast aluminum heat sink. Length 4.7". Specify color: Turquoise, Beige, Ivory or Black. (Handle only, less Cord).  
 No. 37A3131. Type 6100. Ea.....\$1.52 10 @ Ea.....\$1.28 100 @ Ea.....\$1.20

## INTERCHANGEABLE PLUG & CORD SETS

Select the cord that fits your needs, plug on to Perma-Cool Handle, 6 ft. 18 gauge flexible stranded wire, polyvinyl chloride insulation on both wire and female connector. Specify color: Turquoise, Beige, Ivory or Black.

Stk. No.	Type	Description	Each	10 Ea.	100 Ea.
37A3132	6102	2-Wire cord W/Plug	\$2.22	\$1.86	\$1.71
37A3133	6103	3-Wire Nema Cord W/Plug	3.28	2.74	2.57

## ② INTERCHANGEABLE HEAT CARTRIDGES

New element winding principle provides reduced watt density, insures longer life. Heating element at tip end of cartridge results in less heat to handle, more heat to tip. Stainless steel, completely sealed—eliminates costly breakage. Threaded-end is engineered to resist oxidation, reduce heat waste, providing maximum heat transfer. Slim, tubular design offers easy access to hard-to-reach areas. Extends 2.5" beyond handle. 110-120 volts. AC-DC. Each cartridge (except 15-watt) has color-keyed band for instant wattage identification. 6200 has red band, 6201 blue band, 6202 green band, 6203 yellow band.

Stk. No.	Type	Wattage	Temp. To Tip	Each	10 Ea.	100 Ea.
37A3134	†6203	60	1150°	\$4.73	\$3.97	\$3.63
37A3135	6200	40	950°	4.12	3.46	3.17
37A3136	6201	30	850°	4.12	3.46	3.17
37A3137	6202	25	800°	4.12	3.46	3.17
37A3138	*6206	15	743°	4.12	3.46	3.17

\*For use only with Micro-Tips listed below. †Use only iron clad tips.

## "MICRO-TIPS" FOR 15-WATT CARTRIDGE

All are iron clad, 24K gold plated.

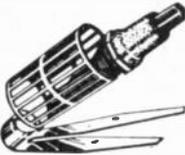
Stk. No.	Fig.	Type	Description	Each	10 Ea.	100 Ea.
37A3139	⑦	6550	Tapered Screwdriver	\$1.24	\$1.04	\$0.95
37A3141	⑧	6553	Stepped Chisel	1.24	1.04	.95
37A3142	⑨	6554	Stepped Pencil	1.24	1.04	.95

## INTERCHANGEABLE THREAD-ON "MINI-TIPS"

All are of Tellurium Copper except those marked \* which are iron clad, 24 K. gold plated. For use with 25, 30, 40 and 60 watt heat cartridges.

Stk. No.	Fig.	Type	Description	Each	10 Ea.	100 Ea.
37A3143	⑩	6312	3/4" long, 1/8" pencil	\$0.48	\$0.40	\$0.37
37A3144	⑪	6313*	3/4" long, 1/8" pencil	1.06	.89	.82
37A3145	⑫	6318	3/4" long, 1/8" taper-chisel	.48	.40	.37
37A3146	⑬	6319*	3/4" long, 1/8" taper chisel	1.06	.89	.82
37A3147	⑭	6324	3/4" long, 1/8" taper pyramid	.48	.40	.37
37A3148	⑮	6333*	3/4" long, 1/8" needle	1.06	.89	.82
37A3149	⑯	6304*	1/2" long, 3/4" micro-chisel	1.06	.89	.82
37A3150	⑰	6305*	1/2" long, 3/4" micro-spade	1.06	.89	.82
37A3151	⑱	6325*	3/4" long, 1/8" taper pyramid	1.06	.89	.82
37A3152	⑲	6331*	3/4" long, 1/8" screwdriver	1.06	.89	.82
37A3153	⑳	6481*	3/4" long, 3/32" taper screwdriver	1.06	.89	.82

## UNGAR SOLDERING IRON HOLDER



Safety guard design protects operator from accidental burns, protects iron against breakage. Keeps iron cradled safely and securely — ready for easy, instant use. Angle of cradle adjustable for operator's convenience. Attaches to top, side, or underside of workbench. Shpg. wt. 1 lb.  
 No. 37A3101. 8000 For Standard Ungar  
 Each.....\$1.95 10 Ea.....\$1.75 50 Ea.....\$1.59  
 No. 37A3302. 6800 for Imperial.  
 Each.....\$1.95 10 Ea.....\$1.75 50 Ea.....\$1.59

## UNGAR 6760 SOLID STATE SOLDER GUN

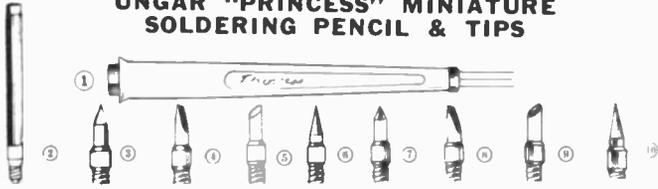


Dual heat, Hi-Lo switch in handle selects 500°F or 900°F Temperature. Lightweight... less than 5 oz. without cord set. Solid state components replace heavy transformer. Electrically isolated tip safe for soldering IC's and FET's. Solders in seconds. Complete with long chisel, short chisel and pyramid tip.

Stk. No.	Mfg. No.	Description	1-3 Ea.	4-11 Ea.	12 Up Ea.
37A3292	6760	Gun Complete	\$9.95	\$8.95	\$7.95
37A3293	6763	Handle and Cord Set	4.55	4.09	3.60
37A3294	6751	Heat Cartridge	4.20	3.78	3.36
37A3295	6755	Long Chisel Tip	.40	.36	.33
37A3296	6753	Short Chisel Tip	.40	.36	.33
37A3297	6754	Pyramid Tip	.40	.36	.33

# MINIATURE SOLDERING TOOLS

## UNGAR "PRINCESS" MINIATURE SOLDERING PENCIL & TIPS



Designed to meet the newest, most exacting requirements for precision hand soldering in Microelectronic circuitry, high density packaging and assembly. Combines sophisticated miniaturization with a thermo efficiency and work capacity never before achieved in small, high-heat, feather-weight irons.

### ① PRINCESS FEATHERWEIGHT HANDLE

Molded of heat resistant A.B.S. Has molded thread-in socket to accept heat capsules below. Weight without cord .05 oz., with cord 3 oz. 5" long x 3/16" dia. at front. Turquoise color. 120 V. AC DC.  
No. 37A3104. Type 6902. 2-Wire Cord. Ea. \$3.07 10 Ea. \$2.75 50 Ea. \$2.49  
No. 37A3105. Type 6903. 3-Wire Cord. Ea. \$4.08 10 Ea. \$3.66 50 Ea. \$3.32

### ② INTERCHANGEABLE HEAT CARTRIDGES

Thread into Princess handles with fingertip ease. Heating section is threaded to accept nibs below. You can also use Series 300 Tips on opposite page.  
Stk. No. Type Wattage Temp. to Tip Each 10 Each 50 Each  
37A3107 6910 10 550° to 650° \$3.75 \$3.37 \$3.05  
37A3108 6915 15 700° to 800° 3.75 3.37 3.05  
37A3109 6918 18 900° to 1000° 3.75 3.37 3.05

### INTERCHANGEABLE THREAD-IN NIBS (TIPS)

All are cadmium copper except those marked \* which are iron clad, 24 K gold plated. All above 1/8" dia. threads.

Stk. No.	Fig.	Type	Description	Each	10 Each	50 Each
37A3110	③	6950	.61" Long Pencil	\$.38	\$.34	\$.31
37A3111	④	6951	.68" Long Screwdriver	.38	.34	.31
37A3112	⑤	6952	.61" Long Spade	.38	.34	.31
37A3113	⑥	6953	.61" Long Point	.69	.62	.56
37A3114	⑦	6960*	.61" Long Pencil	.64	.57	.52
37A3115	⑧	6961*	.68" Long Screwdriver	.64	.57	.52
37A3116	⑨	6962*	.61" Long Spade	.64	.57	.52
37A3117	⑩	6963*	.61" Long Point	1.25	1.12	1.01

### PRINCESS 10 WATT SOLDERING IRON KIT

Complete 10 watt kit in handy attractive package. Consists of #6902 Handle and Cord, 6910 Heat Capsule and three tippers, 6950 Pencil, 6951 Screwdriver, and 6952 Spade. Ideal tool for P.C. boards and micro-circuits.

No. 37A3065. Model 6975. **\$7.52** 10 Each **\$6.75**  
10-Watt Kit, Each

### PRINCESS SOLDERING IRON HOLDER

Equipped with specially processed slit sponge for tip cleaning. Plastic base with swivel mounted metal cage. Wt. 3 oz.

No. 37A3118. Type 6990. Each **\$3.25**

10 Each **\$2.91** 50 Each **\$2.64**

Refill Sponge. Type 6991. **49c**

No. 37A3119. Each **44c** 50 Each **40c**



### PRINCESS DE-SOLDERING TIPS



### REMOVE SOLID STATE DEVICES FAST!

Fig.	Stk. No.	Type	Description	Each	10 Ea.	50 Ea.
①	37A3307	6940	Flat Pack IC Hook	\$2.05	\$1.84	\$1.67
②	37A3308	6941	Flat Pack IC-Bar	1.95	1.75	1.59
③	37A3305	6942	DIP IC	1.95	1.75	1.59
④	37A3310	6943	TO Package .600" Dia.	1.95	1.75	1.59
⑤	37A3306	6944	TO Package .500" Dia.	1.95	1.75	1.59
⑥	37A3303	6945	TO Package .375" Dia.	1.95	1.75	1.59
⑦	37A3311	6946	TO Package .280" Dia.	1.95	1.75	1.59
⑧	37A3304	6947	Slotted Lead Straightener	1.64	1.47	1.33

### PRINCESS 6939 DE-SOLDER KIT

FOR "IC's" & "TO" PACKAGES

Contains Princess handle, 3 wire cord, 15 watt heat capsule and 6945, 6947 and 6942 tips. Ideally suited for PC boards 1/2" and under.

No. 37A3309. **\$12.70** 4 Each **\$11.40** 12 Each **\$10.33**

### UNGAR DIP IC EXTRACTOR

Unique Spring-Loaded Action Locks On . . . Instantly Releases up to 16 Pin Dual In-Line IC's. Fast release prevents board damage. Eliminates damaged leads, circuit destruction, burned fingers. Push-button simplicity that works reliably . . . time after time. No. 37A3299. 6982. **\$1.77**

1-9 Ea. **\$1.56** 50 Each **\$1.41**



### UNGAR 8001 ANTI-SEIZE

Reduces tip thread seizure. Improves heat transfer.

No. 17A7040 **65c**  
1/2 Oz. Tube

## WELLER PENCIL SOLDERING IRON



Ideal for miniature type soldering, kit building and production line work. Small and lightweight—hold it like a pencil. High efficiency—rapid recovery, can do work of much higher wattage rated irons. Impact resistant plastic handle stays cool. Complete with 1/8" tip and cord. Rated 25 watts. Net wt. of iron and tip 1 1/4 oz. Shpg. wt. 1/2 lb.

No. 37C269. Model WPS. Each **\$4.35** 12 Lots Each **\$3.90**  
No. 37A3057. ST1. 1/8" Screwdriver Tip. Each **.75c**  
No. 37A3058. ST2. 3/16" Screwdriver Tip. Each **.75c**  
No. 37A3059. ST3. 1/4" Screwdriver Tip. Each **.75c**



### "AMERICAN BEAUTY" IRONS

Exceptionally dependable irons widely used by industrial and servicemen for continuous duty work with nickel plated tips. All are supplied with 6 ft. cord.

Stk. No.	Model	Heat	Lgth.	Tip	Wt.	Net Each
① 37A3123	3118SCP	30-Watt	8"	3/8"	6 Oz.	<b>\$6.35</b>
② 37A3124	3128	60-Watt	12 1/4"	1/4"	7 1/2 Oz.	<b>7.20</b>
③ 37A3125	3138	100-Watt	12 7/8"	3/8"	16 Oz.	<b>10.35</b>
④ 37A3126	3158	200-Watt	13 3/8"	5/8"	28 Oz.	<b>12.75</b>

### EXTRA NICKEL PLATED TIPS FOR ABOVE

37A3127. For 3118SCP. Each **25c** 37A3129. For 3138. Each **50c**  
37A3128. For 3128. Each **36c** 37A3130. For 3158. Each **\$1.25**

### SOLDERING AID AND SCRIBER



Perfect aids in repairing printed circuit boards, holding leads while soldering, stringing dial cords, removing parts from inaccessible places—1000 uses from one tool. Hardened steel scriber point for marking chassis, panels, etc.  
① 37A3008. Combination Scriber and Hook—8 1/2" long. Net Each **.75c**  
② 37A3009. Combination Scriber and Awl—8 1/2" long. Net Each **.75c**

### HEAT SINK & SOLDER AID

The perfect heat sink—"clamps on" and holds wires in position while soldering. Retrieves small items in hard to reach places. Lightweight aluminum. 5" long.

No. 37A3005. Each **\$1.29**



### UNIQUE "SOLDER SIPPER"

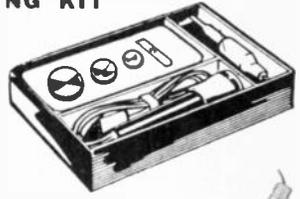
REMOVES SOLDER FROM ELECTRICAL TERMINALS

For Safe, Easy Removal of Components. Just heat soldered connection and amazing Solder Sipper "sucks-up" molten solder. Heat can be pin-pointed and solder removed one terminal at a time. Prevents overheating and subsequent damage to transistors, diodes and other heat sensitive components. Ideal for working with printed circuit boards, glass epoxy resin boards, any material that becomes soft and weak when heated. Rubber pressure bulb with Teflon Tube. Tube cleaning wire included. Wt. 8 oz. No. 37A3006. **\$1.49** 10 Lots **\$1.39**



### UNGAR No. 270 DE-SOLDERING KIT

Tedious printed circuit repairs now made easily and safely. Includes Ungar handle, super heat 47 1/2 watt unit, slotted tiplet, and rectangular de-soldering tiplet 1 1/2 x 3/8" for removing resistors and capacitors, or other components within this size. De-soldering tiplets 1", 3/4" and 5/8" diameter for removing 9, 7, and 5 pin tube socket. All in metal case. Wt. 1 lb. No. 37A3120. 1-5 Ea. **\$8.00**  
6-11 Ea. **\$7.40** 12 Up Ea. **\$6.87**



### "HOT-VAC" PRINTED CIRCUIT DE-SOLDERING & CLEANING TOOL

Provides fast, safe de-soldering for easy removal of components and parts. Just place heating tip to soldered connection, press-release bulb, and Hot-Vac "sucks-up" molten solder. Heat can be pin-pointed and solder removed one terminal at a time. Prevents overheating of transistors, diodes, etc. Special coating prevents solder from adhering to tip, or clogging orifice. Utilizes new #777 "Clean Room" handle. Shpg. Wt. 1 lb. No. 37A3121. Type 7800. **\$12.09** 6. **\$9.93**

Each **\$9.05** 12 Up Each **\$9.05**



Stk. No.	Type	Hole Dia.	1-9 Ea.	10-49 Ea.	50 Up
37A3122	7806	.057	\$0.78	\$0.64	\$0.58
37A3300	7812	.033	1.08	.89	.81
37A3301	7813	.069	.78	.64	.58

### PRINCESS SOLDERING CUP

Specifically designed for tinning micro-miniature leads and components . . . ideal for de-soldering too! Adjustable, thermostatically controlled temperatures—400° to 750° F. Uses standard Ungar No. 4037 long life heating unit. Corrosion-proof bronze melt cup. Built-in dross ring-machine finish. Minimal external heat radiation. Rugged die-cast construction. Solder capacity 1 oz. Cup depth 3/8". 3-wire cord, 120 volts AC-DC. Wt. 1 1/4 lbs. No. 37A3298. **\$21.23**

7000. 1-3 Each **\$19.04** 12 **\$17.27**

4-11 Each **\$19.04** 12 Each **\$17.27**

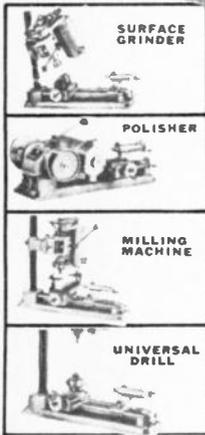
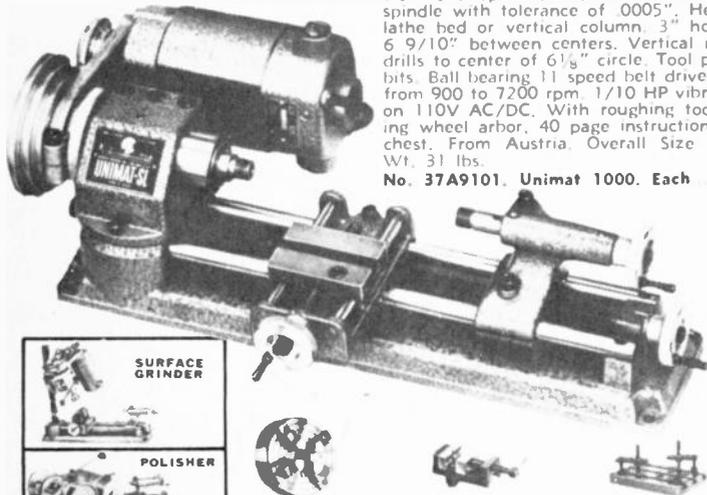


# METAL-WORKING SHOP TOOLS

## UNIMAT 5-IN-1 PRECISION TOOL SHOP

A lathe, drill press, tool grinder, milling machine and polisher all in one precision piece of equipment. Converts quickly from one operation to another. Headstock has ball bearing spindle with tolerance of .0005". Headstock rotates 360° on lathe bed or vertical column. 3" horizontal swing over bed, 6 9/10" between centers. Vertical nose to cross slide 6 1/4" drills to center of 6 1/8" circle. Tool post centers standard 1/4" bits. Ball bearing 11 speed belt driven spindle provides speeds from 900 to 7200 rpm. 1/10 HP vibration free motor operates on 110V AC/DC. With roughing tool bit, drill chuck, grinding wheel arbor, 40 page instruction book and wood storage chest. From Austria. Overall Size 14 1/2 x 4 x 5". Shpg. Wt. 31 lbs.

No. 37A9101. Unimat 1000. Each **\$139.50**



### POPULAR UNIMAT ACCESSORIES

- ① 1001. 3 Jaw Universal Lathe Chuck. 2 1/4" capacity No. 37A9550. Shpg. Wt. 1 lb. Each **\$24.95**
- 1002. 4 Jaw Independent Lathe Chuck. 2 1/4" capacity. Each jaw adjusts individually No. 37A9553. Shpg. Wt. 1 lb. Each **\$23.90**
- ② 1010. Machine vise mounts onto cross slide or milling table below. No. 37A9551. Shpg. Wt. 13 oz. Each **\$ 9.50**
- ③ 1210 Milling Table. 5 x 3". Mounts on cross slide in 8 different positions. No. 37A9552. Shpg. Wt. 2 lbs. Each **\$12.50**
- ④ 2820 Set of 6 Tool Bits. 1/4" square finished HSS cutters. Includes roughing, right-hand turning, left-hand turning, cut-off, boring and inside threading tools No. 37A9554. Shpg. Wt. 1/4 lb. Each **\$10.90**

**\$139.50**

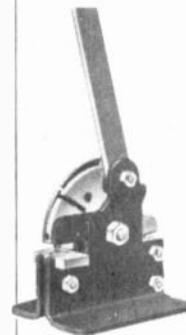
BUY ON B-A's E-Z CREDIT PLAN \$7.00 MONTHLY

## 4-IN-1 TOOL

- FORMS
- RIVETS

- SHEARS
- PUNCHES

**\$12.95**



Many uses in plant or shop will save the cost of the 4-in-1. Tools many times over. Forms smooth, sharp bends up to 90° in rod or flat stock up to 1" wide and 16 gauge thickness. Rivets easily with hollow or solid rivets up to 1" from edge and combined thickness of 3/8". Shears metal up to 1" wide and 16 gauge thickness. Punches clean, sharp, burr free holes in metals up to 16 gauge and 1" from edge of stock. 1/8", 3/16" and 1/4" round punches furnished. Made in U.S.A. Shpg. wt. 6 lbs. **\$9.95**

No. 37A3278. Each **\$9.95**  
**ADDITIONAL PUNCHES**  
 No. 37A3280. 1/8" Hex Punch  
 No. 37A3281. 1/4" Hex Punch  
 No. 37A3282. 1/8 x 1/4" Rectangular Punch  
 Your Choice Each **\$1.00**



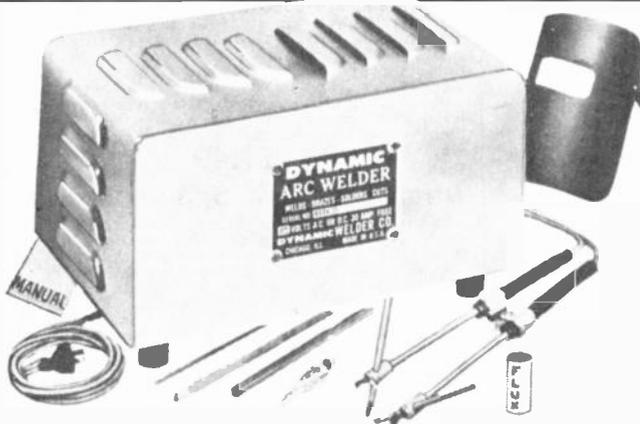
### BENDING AND FORMING BRAKE

**\$12.95**

Makes clean smooth bends and forms up to 90° in metals up to 16 gauge thickness, up to 18" wide. Provides flanged edges up to 1" in height. Adjusts easily for stock thickness and sharpness of bends. Made in U.S.A. Shpg. wt. 9 lbs. **\$12.95**

No. 37A3279. Each

START METAL WORKING FOR FUN OR PROFIT... NO EXPERIENCE NECESSARY



## PORTABLE ELECTRIC ARC WELDER \$20.95

COMPLETE READY TO USE...

**5-YEAR GUARANTEE!**

Factory repair or replacement if unit becomes inoperative due to defective materials or workmanship.

A really practical, dependable unit that produces professional welding you'd expect only from equipment costing much, much more. Simplified instructions explain how to do both metallic and carbon arc welding, brazing, soldering, pre-heating and metal cutting. Make on-the-spot repairs in almost any type of metal... even aluminum. Fix hard to replace or impossible to get parts on mowers, garden tools, pots and pans, washers, dryers, farm equipment, TV and radio chassis... 1001 items around the home, shop or farm.

Complete with input power cable and plug, combination twin carbon arc torch—single metallic arc welding electrode holder and ground cable, welding and brazing rods, full face shield, flux, solder, carbon, grounding clip and complete welding instructions. Operates from any properly wired 110 V. AC-DC 30 amp line. Power unit size 6" H x 10 1/2" W x 6" D. Shpg. wt. 6 lbs. No. 37A9022. Each **\$20.95**

1 LB. 3/4 INCH MILD STEEL ROD No. 37A9007 **\$1.22**  
 1 LB. 1/2 INCH MILD STEEL ROD No. 37A9008 **95c**

No. 37A9009. 10 CARBON RODS **\$2.54**

1 LB. 3/4" POWDERED IRON ROD No. 37A9011 **\$1.86**

1 LB. 1/2" POWDERED IRON ROD No. 37A9010 **\$2.22**

- WELD
- BRAZE
- CUT

IRON, STEEL, BRASS, BRONZE, COPPER, CAST IRON & OTHER METALS!



## HEAVY-DUTY INDUSTRIAL TRANSFORMER PROFESSIONAL ARC WELDER

PRICE CUT \$5.00 OVER 1969 REGULAR CATALOG PRICE **\$59.95**

Features a heavy-duty industrial type transformer as used in machines selling for several times the price. Anyone can weld, braze, cut, solder on the first try. Does both carbon arc and metallic arc welding with 4 heat settings... 20 amp, 40 amp, 60 amp and 80 amp. Operates from any properly wired 110 V. AC 50/60 cycle line. 28 amps input. 5-year guarantee (factory repair or replacement if unit becomes inoperative due to defective materials or workmanship). Complete with head shield, electrode holder, welding cables, ground cables and clamp, power cable, asst. welding and brazing rods, carbons, solder, flux and complete instructions. Shpg. wt. 34 lbs. No. 37A9021. Each **\$59.95**

1 LB. 1/2 INCH BRONZE FILLER No. 37A9012 **\$3.32**

No. 37A9013. 1/2 LB. BRAZING FLUX for use with Bronze Filler **\$1.22**



# MOTO-TOOLS, BVI MARKING TOOLS

## "MICROFLAME" GAS WELDING TORCH

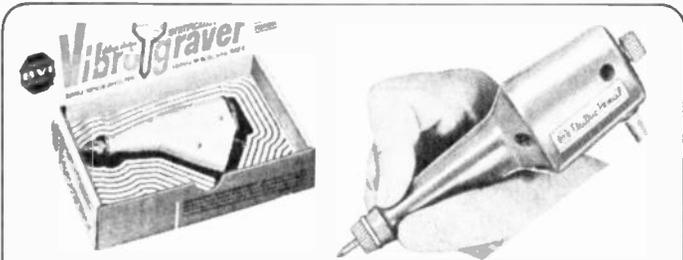
# \$17.95

WELDS, BRAZES, SOLDERS WITH 5000° PRECISION FLAME USES OXYGEN AND BUTANE THROW-AWAY CARTRIDGES



A completely self-contained gas welding torch that fits in the palm of your hand and produces 5000° F. pin-point accurate flame. Welds, brazes, solders—hundreds of uses in the shop, jewelry repair, dental labs, tool and model making... ideal for silver soldering and printed circuit repair—anywhere precision high heat is required. Easy to operate. Complete with torch, 3 tip sizes, 1 each compressed butane and oxygen cartridge. Shpg. wt. 1 lb.

- No. 37B25. Each **\$17.95**
- 37B33. Butane Cartridge. Ea. **45c** 37B26. Oxygen Cartridge. Ea. **70c**
- Soldering Tool Adaptor and Heat Sink Accessory with pencil size solder tip. Fits torch quickly and easily. No. 37A608. Each **\$3.95**



## BURGESS VIBROGRAFTER MARKING AND ENGRAVING TOOLS

### MARKS & ENGRAVES ANY MATERIAL

Heavy duty for continuous operation. Comfortable hand-rest design. Delivers 7200 strokes per minute for fast, clean work. Control wheel adjusts "impact" for fine, medium or coarse stroke. Unbreakable polypropylene housing. With hard tantalum point.

- Model V-73B. Wt. 1 lb. 37A9015. Each **\$9.49**
- 37A9016. 98003 Tantalum Point Each **\$1.33**
- 37A9017. 98080 Diamond Point Each **\$5.99**

### NEW BVI ELECTRIC PENCIL

Marks and engraves on wood, plastic, metal, leather... fast... easy. Pick it up and it turns on—put it down and it turns off... automatically. Control wheel adjusts point impact. Durable red plastic housing. With hard steel point. Net wt. 10 ozs.

- Model V-69 37A9018. Each **\$6.95**
- 37A9019. 12325 Steel Point Each **\$1.35**
- 37A9020. 12340 Carbide Point Each **\$2.49**

## EMERY WHEEL POINTS STEEL CARVING CUTTERS

Fig.	Stk. No.	Type	Dia.	Lgth.	Each
①	37A9023	953	1/4"	3/8"	\$0.50
②	37A9024	971	3/8"	3/8"	.50
③	37A9025	997	1/2"	3/8"	.50
④	37A9026	921	1/2"	1/2"	.50
⑤	37A9027	932	3/8"	1/2"	.50

Fig.	Stk. No.	Type	Net Each
①	37A9028	124	\$1.25
②	37A9029	134	1.25
③	37A9030	194	1.25
④	37A9031	116	1.25
⑤	37A9032	178	1.25
⑥	37A9033	198	1.25

## GRINDING POINTS

Fig.	Stk. No.	Type	Net Each
①	37A9037	83322	\$0.50
②	37A9038	83642	.50
③	37A9039	84382	.50
④	37A9040	84642	.50
⑤	37A9041	85562	.50
⑥	37A9042	85622	.50

## CARBIDE CUTTERS

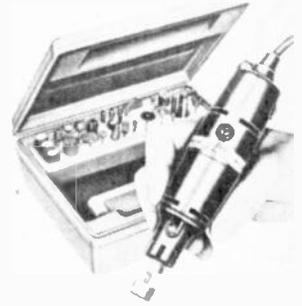
Fig.	Stk. No.	Type	Net Each
①	37A9057	94	\$3.60
②	37A9058	95	3.60
③	37A9059	96	3.60
④	37A9060	97	3.60
⑤	37A9061	98	3.60

## SANDING DISCS

37A9084. Type 411. Coarse Sanding Discs. Box 100....50c
37A9085. Type 412. Medium Sanding Discs. Box 100....50c
37A9086. Type 413. Fine Sanding Discs. Box 100....50c

## DREMEL MOTO-TOOLS SUPER POWERED COMPACT GRINDERS

Exciting new concept in space-age electronics. Rugged new industrial type grinder has permanent magnet motor with unique full wave rectifier circuit, produces 30,000 RPM. Has more than twice the power of previous models, will not stall under normal load. Electrically welded armature is dynamically balanced for vibration-free operation. All models use 1/8" collet. Models 261 and 271 are complete with 34 piece accessory kit, including brushes, wheels, cutters, 4 collets and case.



Model 260. Tool Only with 1/8" collet. Size 6 x 1 1/2". Net wt. 9 ozs. Shpg. wt. 1 lb. **\$19.95**

No. 37C160. Net Each..... **\$19.95**

Model 261. Complete Kit. 260 Tool and 34 piece accessory kit. No. 37C159. **\$27.95**

Model 270. Tool Only. More powerful industrial unit with 1/8" collet. Size 3 1/4 x 1 1/2". Tool wt. 11 ozs. Shpg. wt. 1 lb. **\$25.95**

No. 37C415. Net Each **\$25.95**

Model 271. Complete Kit. 270 Tool and 34 piece accessory kit. No. 37C357. Shpg. wt. 2 lbs. Net Each **\$33.95**

Model 280. Tool Only. Same as 270 but with ball-bearing construction for heavy duty. Tool wt. 11 ozs. Shpg. wt. 1 lb. **\$33.95**

No. 37A9006. Net Each **\$33.95**



### ROUTER ATTACHMENT

Attaches to 260, 270, 280 Moto-Tools. Produces smooth surfaces that need no sanding. Shape edges, cut rabbets, dados, mortises, tongues, and chamfers. Steel and delrin construction.

No. 37A9537. Oremel 229. Each **\$9.95**

Stock No.	Dremel No.	Description	Each
37A9538	650	1/8" Straight Cutter Bit	\$3.00
37A9539	652	1/8" Straight Cutter Bit	3.00
37A9540	654	1/8" Straight Cutter Bit	3.00
37A9541	610	Convex Edger for Beading	3.00
37A9542	632	Veining Bit for Line Work	3.00
37A9543	640	"V" Grooving Bit for Lettering, Chamfers Edges	3.00

### UNIVERSAL STAND

Leaves both hands free, adjustable to any angle. Has quick action clamp. Heavy cast iron base. Shpg. wt. 3 lbs.

No. 37A9087. Model 223. Net Each **\$7.15**

### DREMEL DRILL PRESS STAND

Fits all current models of Moto-Tools. Drill press height 12". base is 6 3/4 x 4". Table can be raised or lowered, locks in any position for accurate depth adjustment. Shpg. wt. 4 lbs.

No. 37A163. Model 225. Each **\$12.60**



### ROUTING CUTTERS

Used for routing, inlaying in all metals. 1/4" shank.

Stk. No.	Type	Dia.	Net Each
37A9062	101	1/8"	\$1.25
37A9063	103	1/8"	1.25
37A9064	104	3/8"	1.25

### CHUCK COLLETS

For Moto-Tools ①, ② and ③.

Stk. No.	Type	Fits	Net Each
37A9034	416	5/16"	\$0.50
37A9035	417	7/16"	.50
37A9036	418	1/2"	.50

For Moto-Tools 260, 270 and 280.

Stk. No.	Type	Fits	Net Each
37A9074	434	1/8"-3/8"	.50
37A9075	435	3/8"-1"	.50
37A9076	436	1"-3/4"	.50

### WIRE BRUSHES

Handy steel brushes for removing rust and corrosion, polishing metal.

Fig.	Stk. No.	Type	Net Each
①	37A9065	428	\$0.50
②	37A9066	442	.50
③	37A9067	443	.50

### DRUM SANDER

For smoothing, polishing. 1/8" shank. Replaceable bands.

Stk. No.	Type	Dia.	Net Each
37A9068	407	1/2"	\$1.00
37A9069	430	3/8"	1.00

Stk. No.	Type	Size	Per Pack
37A9070	408	1/2" Coarse	50c
37A9071	432	3/2" Fine	50c
37A9072	431	3/8" Coarse	50c
37A9073	433	3/8" Fine	50c

⑦ POLISHING WHEELS

Used for polishing metals and plastics. Fits 402 Mandrel below.

Stk. No.	Type	Dia.	Net
37A9077	414	1/2" Felt	12 50c
37A9078	429	1" Felt	Each 50c
37A9079	423	1" Cloth	Each 50c

MANDRELS FOR ABOVE  
⑧ 1/8" shank. For use with cutting wheels, sanding discs.  
No. 37A9080. Type 402. Each.....50c  
⑨ Threaded stud type for polishing wheels.  
No. 37A9081. Type 424. Each.....50c  
⑩ Screw type for polishing felts.  
No. 37A9082. Type 401. Each.....50c

# MANNING BOWMAN ELECTRIC POWER TOOLS



## VARIABLE SPEED ELECTRIC DRILLS BY MANNING BOWMAN

**1/4-INCH MODEL \$14.95**      **3/8-INCH MODEL \$16.95**

The exact speed for every drilling job. Ideal for use as an electric screwdriver (driver bits listed on page 168). Full 3 amp motor, precision ground ball-thrust and self-lubricating bronze bearings. Bright finish die-cast aluminum housing. 3-wire cord. Overall length 8" 115 V. 60 cy. AC. Shpg. wt. 4 lbs.

**1/4-INCH VARIABLE SPEED DRILL.** Speed continuously variable from 0 to 2000 RPM. Without side handle. **\$14.95**

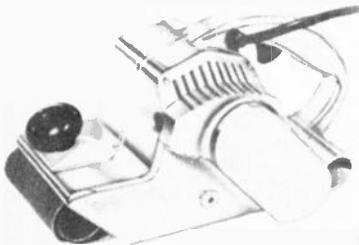
No. 37A561. Each

**3/8-INCH VARIABLE SPEED DRILL.** Has extra power for heavy duty drilling. Speed continuously variable from 0 to 1000 RPM. Double gear reduction. **\$16.95**

No. 37A562. Each

## POWERFUL 4-INCH BELT SANDER

**\$29.95**

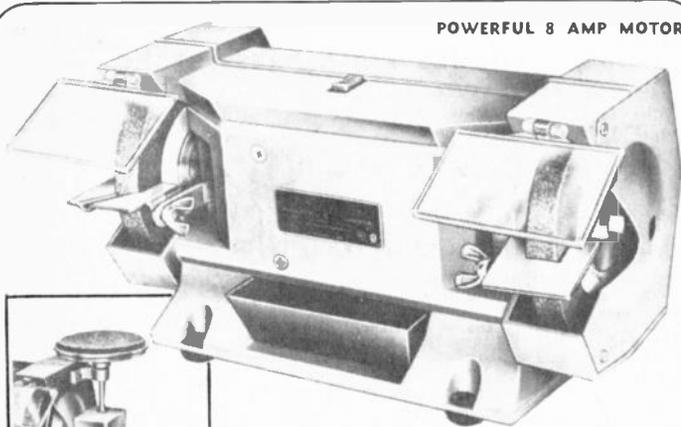


Rugged gear drive moves 1500 surface feet per minute for rough sanding to fine finishing sanding. Snap lock on front for easy changing of belts. 7.5 amp. industrial rated motor has lifetime lubricated bearings. Die-cast aluminum housing, lock trigger switch, 3 conductor cord. Wt. 12 1/2 lbs.

No. 37A9095. **\$29.95**

Each 4 x 21 3/4" belts for above.  
No. 37A9519. Coarse .....#40  
No. 37A9520. Medium .....#60  
No. 37A9521. Fine .....#80  
Choice Each .....79c

## POWERFUL 8 AMP MOTOR



## MANNING BOWMAN HEAVY DUTY GRINDER **\$29.95**

Rugged, dependable... a real power house grinder designed to handle the toughest grinding jobs with ease. Two 6-inch grinding wheels. Powerful 115 V. AC motor operates at 3450 RPM, has lifetime, self-lubricating bronze bearings. Adjustable tool rests with built-in drill sharpening guides. Shatter-proof, adjustable eye shields. Removable water tray. Die-cast aluminum housing with baked enamel finish. Drilled base for bench mounting. Size 15 1/4" W. x 8 1/4" H. x 8" D.

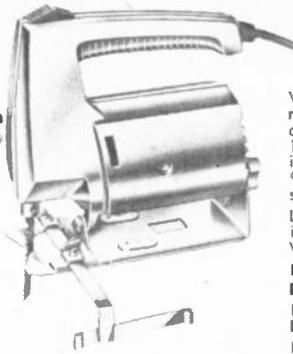
No. 37A9107. Shpg. wt. 25 lbs. Each **\$29.95**

No. 37A9564. 4 1/2" Honing Attachment. Fits on end of grinder. Revolves at 78 RPM. Each **\$7.95**

HONING ATTACHMENT

## MANNING BOWMAN DELUXE SABRE SAW

**\$14.95**



Well balanced. Crosscuts, rips, scrolls, notches its own starting hole. Clears cutting line with air stream. 3 amp 115 volt AC motor develops 3/8 HP industrial rating. Capacity 2 1/4" at 90° 1 1/8" at 45° 5/8" stroke. 300 strokes per minute.

Lifetime self-lubricated bronze bearings. 3 wire cord. Rip guide, 3 blades. With Allen wrench. Wt. 4 1/2 lbs.

No. 37A9106. **\$14.95**

Each

No. 37A9047. Fine Wood Cutting Blade. Each **49c**

No. 37A9048. Coarse Wood Cutting Blade. Each **49c**

No. 37A9049. Metal Cutting Blade. Each **59c**

## MANNING BOWMAN 7 1/4-IN. POWER SAW

**\$24.95**

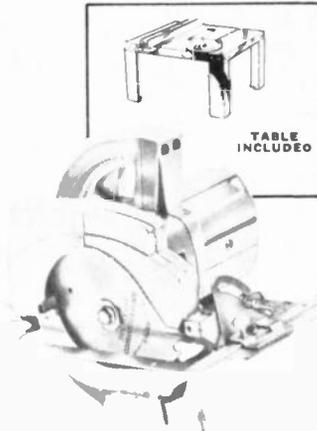
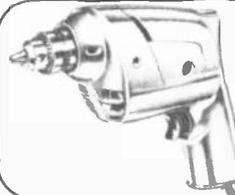


TABLE INCLUDED

Power packed, fully dependable. Built-in safety clutch. Precision built 8 amp 4900 RPM motor. Self-lubricating bronze bearings. Adjustments for depth of cut and bevels 0° to 45°. Maximum depth of cut 2 1/8", maximum cut at 45° 2 3/4". With calibrated rip fence, crosscut blade, 3-wire cord. Bright finish die-cast aluminum housing. Complete with **\$8.95 Value Table Saw**. Adjustable rip guide and mitre gauge. 115 V. 60 cycle AC. Shpg. wt. 21 lbs. No. 37A586. **\$24.95**

Special, Saw & Table **\$24.95**  
No. 37A9050. 7 1/4-Inch Combination Blade. Each **\$1.99**

## 1/4-INCH ELECTRIC DRILL



A really dependable all-around utility drill for the home craftsman and hobbyist. Husky 2.6 amp motor delivers plenty of power for drilling in wood, metal, etc. 2000 RPM no load speed. Precision ground ball-thrust bearings. Bright finish die-cast aluminum housing. Geared chuck with key. 3-wire cord. 115 V. AC.

No. 37A598. Shpg. wt. 4 lbs. Each **\$9.99**

## PRECISION ROUTER

**\$29.95**



Micrometer type depth adjustment of .004". Each full turn of adjusting ring equals .004". Adjusts from 0" to 1". Depth can be changed without removing from work. Uses standard 1/4" shank tool bits. Powerful 5 amp 115 Volt AC motor has lifetime lubricated bronze and ball bearings. 20,000 rpm free spindle speed. 3 conductor cord, die-cast aluminum housing. Shpg. wt. 6 3/4 lbs.

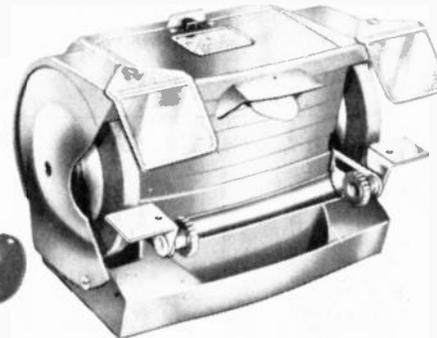
No. 37A9094. Each **\$29.95**

No. 37A9517. Router Guide for straight and circular cuts. Each **\$3.89**

No. 37A9518. 1/4" Straight Router Bit. Each **\$2.39**

## MANNING BOWMAN BENCH GRINDER

**\$15.95**



Ruggedly constructed grinder packed with features normally found only in higher priced units. Powerful industrially rated 3.2 amp 3450 RPM motor, has lifetime, self-lubricating bronze bearings throughout. Has 2-4 1/2" wheels, 1-coarse and 1-fine grit. Safety eye shields. Built-in water cooling tray and work light. Adjustable tool rests make angle grinding easy. Pressure die-cast aluminum housing with baked enamel finish. 9" W. x 6 1/2" H. x 7" D. Weighs only 9 1/2 lbs. for easy portability. 3-wire cord. 115 V 60 cycle. AC.

No. 37C50. Shpg. wt. **\$15.95**  
11 lbs. Each

**WEN***Thor***POWER TOOLS****WEN VARIABLE SPEED  
JIG SAW****\$26<sup>21</sup>**

Thumb switch controls speed from 0-2800 strokes per minute. Locks at full speed for continuous heavy duty operation.

Cuts wood up to 6" thick, metal up to 1/2" thick, pipe and conduit up to 2" thick. Cuts curves, scrolls or fine pattern work perfectly.

Moveable sole plate for flush cuts. Plunge cuts made easily without drilling starting hole.

Rugged 1/2 HP, 4 amp cool-running motor. With rip guide, 3 wire cord and adaptor, and 7 blades for any cutting job. Ball brite finish.

No. 37A9097 **\$26.21**  
Wen 521. Each

**AMAZING WEN  
ZIP SAW****\$34<sup>97</sup>**

2 Speed Model. Performs hundreds of cutting jobs! Cuts wood up to 6x6". Flush cuts to corners for wall, floor or ceiling cutouts. Makes its own starting hole. Cuts metals 1/2" thick. Beautifully balanced and lightweight has heavy duty roller and oilite bearings, heavy duty hardened gears. Cool running 115 V. AC motor delivers 3200 1" cutting strokes per minute. 4 1/2 amp. With 7 assorted blades, 3 wire cord. Size 9 x 7 1/4 x 7". Net Wt. 6 1/2 lbs. Shpg. wt. 8 1/4 lbs.

No. 37C18. **\$34.97**  
Model 920D. Net Each

**NEW THOR  
FAST-BACKS**

50% lighter . . . 30% more horsepower than conventional drills! Polycarbonate housing — virtually indestructible. Variable speed; all double-insulated. "Human engineered"—perfectly balanced for never before comfort in use! Gets into Hard-to-get-at corners no other drill can! Solid state magnetic motor; diode circuitry. Life-time lubricated spherical bearings. Double-reduction gears — like industrial drills. 7 7/8" long. Wt. 1 7/8 lbs. Variable Speed 0-1200 RPM. Thor D1-112-VSC. **\$32.95**

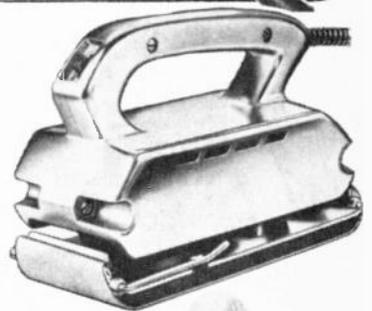
No. 37A9103. Each  
Reversible Variable Speed 0-1200 RPM. Thor D1-112R-VSC. **\$36.95**  
No. 37A9104. Each

**LIGHTEST,  
TOUGHEST,  
MOST  
POWERFUL  
DRILL  
EVER  
OFFERED!**

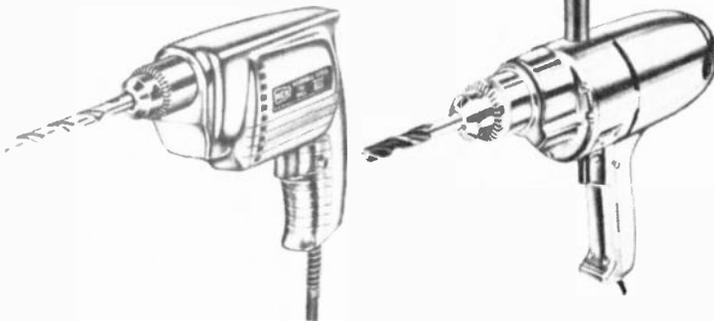
**WEN SANDER****\$12<sup>88</sup>**

Straight Line Action Quickly Sands to a Smooth, Scratch-Free Surface.

Superior to any sander we've seen at this amazing low price. . . extremely powerful, cannot be overloaded. Supplies 7200 3/8" strokes per minute for rough or fine finish sanding. Runs smooth and stays cool. Non-slip lever action sandpaper clamps. Uses 1/2 sheet standard 9x11" sandpaper. Ball brite finish die-cast aluminum housing. 110 V. 60 cy. AC. 6 ft. 3-wire cord. Shpg. wt. 5 lbs. Model 310. No. 37B29 **\$12.88**  
Each

**EXTRA BLADES FOR 521 AND 920**

37A9555. No. 91. Wood, 3 Teeth Per Inch. Package of 3	\$1.80
37A9556. No. 92. Wood, 5 Teeth Per Inch. Package of 3	\$1.50
37A9557. No. 93. Wood, Aluminum, 8 Teeth Per Inch. Package of 3	\$1.20
37A9558. No. 94. Wood, 14 Teeth Per Inch. Package of 3	\$1.20
37A9559. No. 95. Cardboard, Leather, Rubber, 4" Knife Blade. Pkg. of 3	\$1.20
37A9560. No. 96. Steel, 14 Teeth Per Inch. Package of 3	\$1.80
37A9561. No. 97. Sheet Metal, Bakelite, Formica, Tile, etc. 24 Teeth Per Inch. Package of 3	\$1.80
37A9522. No. 900. Package containing 1 Each of above. Package	\$2.95

**WEN 3/8" VARIABLE  
SPEED DRILL****\$26<sup>95</sup>**

Deluxe features. Speed variable from 0 to 1100 RPM with the touch of your finger. Perfect balance for ideal control.

Ball brite finish on die-cast aluminum housing. Burnout-proof armature. Needle bearing at heavy load point. Ball thrust spindle bearing. Double reduction gear train. 3.2 amp 115 V. 60 Hz AC high torque motor.

9 x 7 1/4 x 2 1/2". 3/8" Jacobs Chuck. Removable front handle. 3-wire cord and adaptor. UL and CSA listed. Shpg. wt. 5 lbs. No. 37A9102. **\$26.95**  
Each

**WEN 4-SPEED  
1/2" INCH "ALL DRILL"****\$36<sup>99</sup>**

Quick, easy two-level control of electronic and gear reduction speed ranges provides 630, 730, 2200, 2400 rpm no-load speeds. Just select the right combination of speed and torque to fit your particular job.

Full 1/2 HP 6-amp motor, double reduction gears. All speeds are reversible at the flick of a switch, eases bit out under its own power. Perfectly balanced, built to industrial standards for continuous heavy-duty operation. 1/2" geared chuck with key. Net wt. 6 1/2 lbs. Shpg. wt. 9 lbs. No. 37A9523. Model 950. **\$36.99**  
Each

**SHOP-VAC  
PORTABLE VACUUM****\$26<sup>95</sup>**

Handy for Home, Garage, shop! Unlimited uses for rough cleaning . . . big 2 1/2" dia. hose sucks up all kinds of debris. Heavy steel container withstands roughest use. Easy open clamps make emptying cleaner simple. Carrying handle attached. For 115 V. AC. With 6 ft. 2 1/2" hose, 6" utility nozzle and 2 1/2" to 1 1/4" hose adaptor.

5 GALLON CAPACITY. 3/4 HP. 18 x 12" dia. Shpg. wt. 17 lbs. **\$26.95**  
No. 37A613. Model 222. Net Each

10 GALLON CAPACITY. 1 HP. 19 x 15" dia. Shpg. wt. 25 lbs. **\$29.95**  
No. 37A614. Model 777. Net Each

**BEST BUY! MODEL 778 DELUXE 10 GALLON CAPACITY.** Includes 45" extension wand, right angle elbow adaptor, pkg. of 5 paper filters and two-way four wheel dolly. Shpg. wt. 30 lbs. **\$36.95**  
No. 37A9105. Complete—Cleaner and Accessories

**HANDY ACCESSORIES FOR SHOP-VAC**

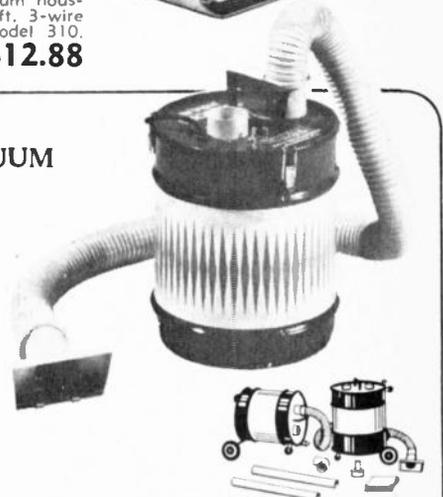
No. 37A9562. Two-Way Dolly for 5 Gallon Capacity. Each **\$5.95**

No. 37A9563. Two-Way Dolly for 10 Gallon Capacity. Each **\$5.95**

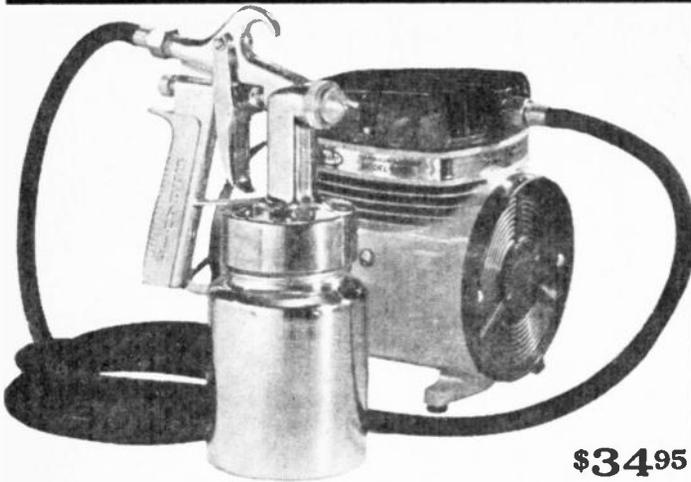
No. 37A617. Accessory Kit, 45" Extension Wand, 14" Floor Nozzle and large crevice tool. Kit, Each **\$9.95**

No. 37A9055. Paper Filter. Package of 5, Per Package **\$1.00**

No. 37A9056. Cloth Filter. Each **\$1.50**



# ELECTRIC POWER TOOLS AND ACCESSORIES



## SPRAYIT 600 HOME HANDYMAN SPRAYER

SPRAY PAINTS, SOLVENTS, INSECTICIDES, WEED KILLERS

Makes painting easy. Get finer, smoother finishes many times faster than brushing. Fully adjustable spray pattern. Oil-less diaphragm type compressor. Permanently lubricated bearings. Constant-air flow pressure-feed gun works with all sprayable materials, including garden and household liquids.

Includes easy to use lightweight spray gun with pint size aluminum cup with an internal mix spray nozzle, 6 foot cord, and 8 foot of rubber air hose. For 115 volts 60 Hz AC. Shpg. wt. 13 lbs.

**\$34.95**

No. 37A9099. Each.....



## NEW BVI ELECTRIC PAINT SPRAYER

**\$14.95**

A totally new airless paint sprayer to take the drudgery out of home painting jobs. Paints faster and easier than brush or roller. Will spray just about all types of paint, oil or latex. Also may be used to spray garden insecticides. Heavy 6 ft. cord, 24 oz. jar. 115 V. AC. Shpg. wt. 4 lbs.

No. 37A9096. Model 860 **\$14.95**  
Net Each

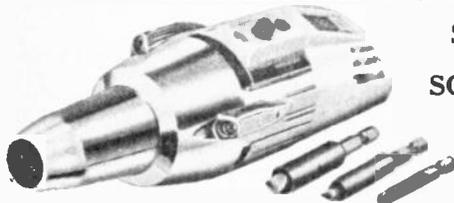
## SUPREME VERSAMATIC REVERSIBLE SCREWDRIVER & SPEED REDUCER FOR ELECTRIC DRILLS

**\$11.55**

Fits directly into chuck of any drill—boosts power 7 times—converts any light duty drill for heavy work. Runs in reverse with one easy twist. Drives and removes nuts—1/4" socket drive included; with the addition of 1/2" chuck similar to that listed below handles heavy duty jobs. Includes: Versamatic unit, standard screwdriver bit, No. 2 Phillips type bit, 1/4" square drive socket adapter. No. 37B123. Wt. 3 lbs.

Complete Set. **\$11.55**  
No. 37A9044. 1/2" Geared Key Chuck. For use with above. Each. **\$5.49**

HUNDREDS SOLD AT \$29.95



## SHOPCRAFT ELECTRIC SCREWDRIVER

NEW LOW PRICE

**\$24.95**

One of the handiest tools you can own! Ideal for assembly work, building and repairing cabinets, furniture, boats... countless jobs around the home and shop. 100 to 1 gear reduction assures high torque. Positive clutch action. Ball thrust and self-lubricating bronze bearings. No load speed 325 RPM. Instant release on-off switch, and reverse switch. Overall length 8 1/2". 6 ft. 3-wire cord. 115 V. 25-60 cycle AC. New wt. 2 3/4 lbs.

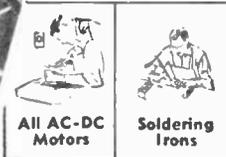
No. 37B5. Shpg. wt. 3 1/2 lbs. Each..... **\$24.95**



## MOTOR SPEED CONTROL

JUST PLUG IT IN AND ADJUST SPEED

**\$11.95**  
5 AMP

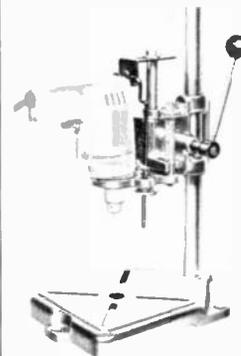


CONTINUOUSLY VARIES SPEED OF ANY AC-DC MOTOR FROM ZERO RPM TO FULL SPEED WITHOUT LOSS IN POWER

Electric tool operations are faster, surer, more precise with this amazing new device. Just "dial" the proper speed for the job, from 0 RPM to full speed. Allows slow speed to start holes when drilling or sawing. Easily saves its cost in drill bits and saw blades alone.

For use on Universal AC-DC or series DC motors. Unbreakable all metal housing size 2 1/4" D. x 2 5/8" W. x 3 7/8" H. Clip on back for use on belt or hanging on wall. On-off switch. 6 ft. 3-cond. cord. Operates from 120 volts AC. Shpg. wt. 2 lbs.

No. 37B28. For Up To 5 Amp Loads. Each..... **\$11.95**  
No. 37A9098. For Up To 10 Amp Loads. Each..... **\$19.88**

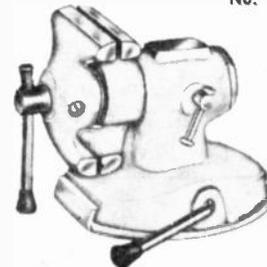


## PROFESSIONAL QUALITY THOR DRILL PRESS STAND

**\$12.95**

Converts all 1/4" and 3/8" drills—Spade or pistol grip—to drill press. Do tough and accuracy requiring jobs with ease. Ideal when using attachments. Indispensable for tapping and precision drilling. Drill securely locks into cradle mtg. — moves up, down or rotates on supporting column. Has professional rods and pinion gear feed with heavy duty clock spring return mechanism. Easy to read depth scale with threaded lock nut stop for repeated drilling to predetermined depth. Depth of throat 4". Sturdy 1" dia. column and heavy cast base with slots for bench mtg. Wt. 8 lbs.

No. 37B347. Each..... **\$12.95**



## PORTABLE VACUUM VISE

HANDY ADDITION TO ANY WORKSHOP!

**\$5.95**

Vacuum Power will hold vise firmly on any non-porous surface. Turn handle to hold vise, turn handle to release. 360° swivel head with both 1 1/2" and 2 1/2" jaws. Handy for holding material for shaping or sharpening. Precision crafted in Japan. Wt. 5 lbs.

No. 37A5549. Each..... **\$5.95**

## DRIVER ATTACHMENT KITS

FOR VARIABLE SPEED DRILLS, POWER SCREWDRIVERS



6 PIECE SCREWDRIVER BIT SET. Includes 3 slotted bits with finders for screws 6-8, 8-10 and 10-12 and 3 Phillips bits No's. 1, 2 and 3. Have 1/4" hex shanks. Shpg. wt. 5 ozs.

No. 37A9565. Set For..... **\$2.99**

7 PIECE SOCKET SET. Includes 6 1/4" drive sockets and 1/4" drive socket adaptor. Socket sizes: 1/4, 3/16, 1/8, 1/4, 3/8, 1/2". Drives nuts and bolts fast. Shpg. wt. 5 ozs.

No. 37A9566. Set For..... **\$1.59**



## ROTARY FILE SET WITH 1/4" SHANK TO FIT ANY ELECTRIC DRILL, DRILL PRESS, FLEXIBLE SHAFT

Ideal for shaping, finishing, routing, deburring, in metal, wood, plastic, leather, rubber, etc. Milled from solid tool steel, hardened and tempered. Shpg. wt. 1/2 lb.

No. 37A9001. Special, Set... **\$3.99**

# POWER TOOL ACCESSORIES, GREENLEE PUNCHES

## HANSON HIGH SPEED DRILL BITS

### INDIVIDUAL BITS

High speed steel.  $\frac{3}{8}$ " and larger have turned down shanks for  $\frac{1}{4}$ " chucks.

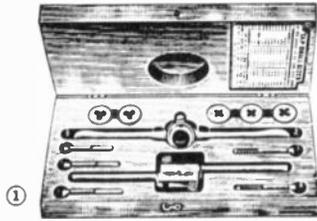
#### STANDARD SIZES

Size	No.	Each	Size	No.	Each
$\frac{1}{16}$ "	37A9501	\$ .33	$\frac{3}{16}$ "	37A9507	\$.68
$\frac{1}{8}$ "	37A9502	.33	$\frac{1}{2}$ "	37A9508	.79
$\frac{3}{16}$ "	37A9503	.35	$\frac{5}{8}$ "	37A9509	.99
$\frac{1}{4}$ "	37A9504	.36	$\frac{3}{4}$ "	37A9510	2.00
$\frac{5}{16}$ "	37A9505	.47	$\frac{7}{8}$ "	37A9511	2.80
$\frac{3}{8}$ "	37A9506	.48	1"	37A9512	3.52

#### WIRE GAUGE SIZES

Ga.	No.	Fits Screw	Each
43	37A9513	2-56	\$0.38
33	37A9514	4-36, 4-40	.42
28	37A9515	6-32	.50
18	37A9516	8-32	.65

## HANSON QUALITY TAP & DIE TOOLS



### NO. 21 TAP & DIE SET

Popular set for the radioman or hobbyist. Consists of excellent quality high carbon alloy steel taps and solid dies, sizes 6-32, 8-32, 10-24, 12-24 and  $\frac{1}{4}$ -20 plus Tap and Reamer Wrench with hardened jaws, and ruggedly constructed die stock. Comes in hinged wood box. Wt. 3 lbs.

No. 37A3212. PER SET **\$12.95**

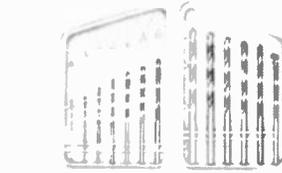
### TAP WRENCH

Sliding handle type. Knurled chuck holds No. 0 to No. 12 taps.

No. 37A3213. Each **80c**

### TAPS

No.	Size	O.D.	Each
37A3215	2-56	.086	\$0.80
37A3216	4-36	.112	.52
37A3217	6-32	.138	.52
37A3218	8-32	.164	.56
37A3219	10-24	.190	.60
37A3220	10-32	.190	.60
37A3221	$\frac{1}{4}$ -20	.250	.68

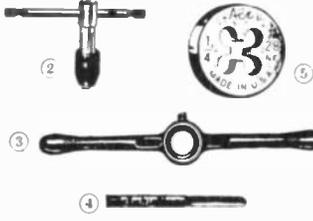


### 13 PIECE DRILL SET

Contains 13 full jobbers length finest quality high speed drills in sizes  $\frac{1}{16}$  to  $\frac{1}{4}$ " by 64ths in unbreakable plastic case. Most popular sizes for general use in metal or wood.

No. 37A9567. **\$6.49**

Hanson S-113, Each



### DIE STOCK

Holds 1" O.D. dies for accurate cutting. Rugged construction for long Service life.

No. 37A3214. Each **\$1.32**

### DIES

Stk. No.	Size	O.D. Thd.	Each
37A3222	4-36	.112	\$0.80
37A3223	6-32	.138	.80
37A3224	8-32	.164	.80
37A3225	10-24	.190	.80
37A3226	10-32	.190	.80
37A3227	$\frac{1}{4}$ -20	.250	.80

### TRIPLE-TAP TOOL

Designed to re-thread stripped holes or to tap new holes. Taps 6-32, 8-32, 10-32 holes.

No. 37A866. **\$2.20**

Vaco TT-31, Each



### HI-SPEED COPE-SAW DRILL BIT

WORKS WITH ANY ELECTRIC DRILL

Drill, Saw, Ream metal, wood, plastic, etc. Drills own starting hole. Abrasive resistant, high speed steel. Withstands severe continuous use  $\frac{1}{4}$ " dia. Overall length 3 1/2". Wt. 3 oz.

No. 37A9051 All Purpose Bit. Net Each **\$1.95**

No. 37A9052 Wood Bit. Net Each **\$1.95**

No. 37A9053 Heavy Metal Bit. Net Each **\$1.95**



### "SCREW-DRILL" SET DRILLS! COUNTERSINKS! AND COUNTERBORES!

ALL IN ONE EASY OPERATION  
4 SIZES—#6, #8, #10, #12

The quick, sure way for screw driving in wood, plastic, fiber, sheet aluminum, etc. Chrome-vanadium drill bit with nickel plated hardened steel holder drills pilot hole, countersinks and counterbores to desired depth with adjustable stop indicator, all in one simple operation. Set consists of 4 sizes for #6, #8, #10 and #12 screws.  $\frac{1}{4}$ " shank fits all hand and electric drills.

No. 37A9043. Set of 4 **\$2.99**

### TWIST DRILL AND TOOL SHARPENER

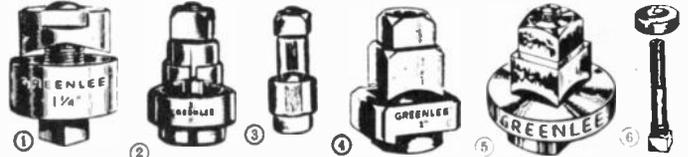
Fits any electric drill. Simple and easy to use. Accurately sharpens any drill bit up to  $\frac{1}{2}$ " dia. Also sharpens chisels, carving tools, knives, scissors, etc. Includes 3" grinding wheel with  $\frac{1}{4}$ " shank and guard, drill holder, adjustable tool rest. Shpg. wt. 1 1/2 lbs.

No. 37A9002. **\$1.99**

Net Each



## GREENLEE CHASSIS PUNCHES



Quickly cuts clean, accurate holes in chassis or panel to accommodate sockets, switches, controls, meters, etc. Cutting is done by 2-point punch driven by  $\frac{3}{8}$ " dia square head cap screw. Operates simply with an ordinary wrench.

### No. 730 ROUND HOLE

No.	Size	Wt.	Each	No.	Size	Wt.	Each
37A3032	$\frac{1}{8}$ "	2 oz.	\$2.85	37A3046	$\frac{1}{4}$ "	9 oz.	\$3.35
37A3033	$\frac{1}{4}$ "	2 oz.	2.85	37A3047	$\frac{3}{8}$ "	10 oz.	4.15
37A3034	$\frac{3}{8}$ "	3 oz.	2.85	37A3048	$\frac{1}{2}$ "	13 oz.	4.55
37A3035	$\frac{1}{2}$ "	3 oz.	2.85	37A3246	$\frac{1}{8}$ "	1 1/4 lb.	5.50
37A3036	$\frac{5}{8}$ "	3 oz.	2.85	37A3247	$\frac{3}{16}$ "	1 1/4 lb.	6.30
37A3037	$\frac{3}{4}$ "	3 oz.	2.85	37A3248	$\frac{1}{4}$ "	1 1/2 lb.	7.80
37A3038	$\frac{7}{8}$ "	3 oz.	2.85	37A3249	$\frac{1}{2}$ "	1 3/4 lb.	8.35
37A3039	1"	6 oz.	3.20	37A3250	$\frac{3}{4}$ "	2 lb.	9.00
37A3040	1 1/8"	6 oz.	3.20	37A3251	$\frac{1}{2}$ "	2 1/2 lb.	9.30
37A3041	1 1/4"	7 oz.	3.35	37A3252	$\frac{3}{4}$ "	2 lb.	15.10
37A3042	1 1/2"	8 oz.	3.35	37A3253	$\frac{1}{2}$ "	5 lb.	21.00
37A3043	1 3/4"	7 3/4 oz.	3.35	37A3254	$\frac{3}{4}$ "	3 1/2 lb.	13.75
37A3044	1 7/8"	8 oz.	3.35	37A3255	3"	6 lb.	29.00
37A3045	2"	9 oz.	5.75				

① No. 732 "KEYWAY PUNCH" Makes 1 1/2" hole with keyway for Amphenol "S" and similar sockets.

37A3259. Each **\$7.20**

### No. 731 SQUARE HOLE

No.	Size	Wt.	Each
37A3262	$\frac{1}{2}$ "	5 oz.	\$6.90
37A3263	$\frac{3}{4}$ "	5 oz.	6.80
37A3264	$\frac{1}{2}$ "	6 oz.	7.50
37A3265	$\frac{3}{4}$ "	10 oz.	8.80
37A3266	1"	10 oz.	9.10

② No. 731R RELAY SOCKET PUNCH. Makes clean, accurate finished holes for Potter & Brumfield Type KHP relay sockets, Wt. 10 oz.

37A3267. Each **\$15.00**

③ Same as above for PGB type KU and KUP, RBM type 93Q. Cuts hole  $\frac{1}{4}$ " x  $\frac{13}{16}$ ".

No. 37A3245. 731R, Net Each **\$20.50**

### BALL BEARING REPLACEMENT DRIVE SCREWS

Greenlee punches cut easier and faster than ever regardless of toughness of metal. Specially designed bearing assembly replaces present drive screw. Ball bearing soaks up friction allowing screw to be turned with ease.

Stk. No.	Type	For Punch Sizes	Each
37A3268	AV322BB	$\frac{1}{8}$ , $\frac{3}{16}$ , $\frac{1}{4}$ , $\frac{5}{16}$ "	\$1.25
37A3269	AV112BB	$\frac{1}{8}$ to $\frac{1}{2}$ "	1.35
37A3270	AV249BB	$\frac{1}{8}$ to $\frac{1}{4}$ "	3.25
37A3271	AV304BB	$\frac{1}{8}$ , 2, 2 1/8, 2 1/4, 2 1/2, 2 3/4"	3.40

### HAND OPERATED NIBBLING TOOL

CUTS ANY SHAPE OPENING IN SHEET METAL, COPPER, ALUMINUM, PLASTIC, ETC.

Cut those odd shape holes without distortion or strain in steel, aluminum, copper or plastic. Handles easily and smoothly, cuts rapidly with only one hand operation. Ideal for cutting transformer holes, socket holes, etc., in chassis. Capacity: steel, 18 gauge; aluminum, copper, plastic  $\frac{1}{16}$ ".

No. 37A3004 Shpg. wt. 8 oz. **\$4.15**

Net

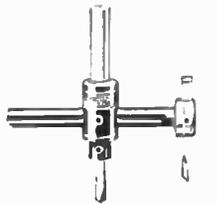
No. 37A3007 Replacement Punch. Net **\$2.12**



### CIRCLE CUTTER

For cutting round holes in metals, wood, plastics, etc. Round shank for slow speed drill press or square shank for hand brace. Cutting bits are of high speed steel. Shpg. wt. 1 1/2 lb.

Stk. No.	Shank	Hole Size	Each
37A3049	Square-Round Comb.	$\frac{3}{8}$ "-4"	\$2.20
37A3050	" Round	1"-5 1/2"	3.00
37A3051	Square	1"-5 1/2"	3.00
37A3052	" Round	1 3/4"-8"	5.80
37A3053	Extra Cutter		.60



### 29-PIECE DRILL SET

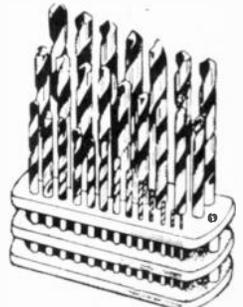
FOR USE WITH ALL HIGH-SPEED ELECTRIC DRILLS

BIG IMPORT VALUE TO SAVE YOU \$\$\$

SIZES  $\frac{1}{16}$ " TO  $\frac{1}{2}$ " BY 64THS **\$6.95**

Complete set of the most often needed drill bits at an unbelievable low price! Precision ground of quality chrome vanadium steel for fast, accurate drilling in wood, plastic, metal, etc. Standard jobber lengths, straight shank type. In hand indexed metal stand. Quality import.

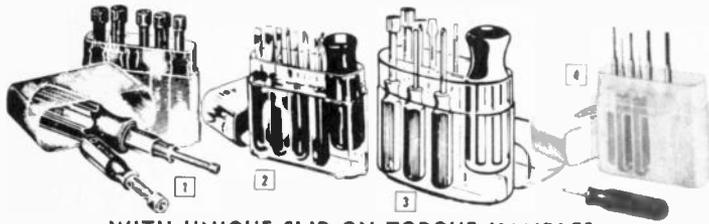
No. 37A9046. Shpg. wt. 2 lbs. Special Each **\$6.95**





# PROFESSIONAL HAND TOOLS

## XCELITE COMPACT NUTDRIVER AND SCREWDRIVER SETS



### WITH UNIQUE SLIP-ON TORQUE HANDLES

Handiest, most often needed precision tools "Piggyback" torque handle slips on over regular handles for tough jobs—provides the grip, reach and power of standard size drivers. Each set is in a see-thru plastic pocket size case with a flat base for use as bench stand.

### MINIATURE NUTDRIVER SET

A complete set of ten precision miniature size nutdrivers with shockproof, breakproof plastic handles—color coded for instant identification. Sizes: 1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8". Overall length of each 3 1/2". Supplied with torque handle and see-thru plastic case.

No. 37A701, Type PS120. Shpg. wt. 1 lb. Each **\$5.85**

### PRECISION SCREWDRIVER SET

All the screwdrivers needed for all servicing jobs in one compact see-thru plastic case. Includes 8 drivers—five standard slotted sizes 1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8". Phillips. Shockproof, breakproof plastic handles. Overall length of each 3 1/2". Complete with torque handle.

No. 37A700, Type PSS8. Shpg. wt. 1 lb. Each **\$4.20**

### NUTDRIVER AND SCREWDRIVER SET

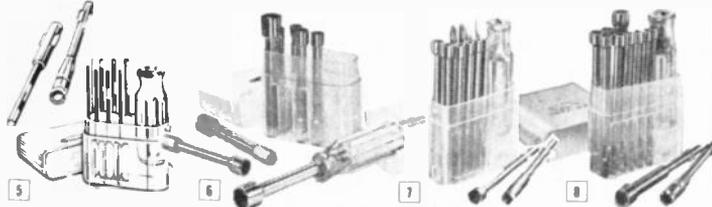
Includes the most popular sized tools from above kits. 2 nutdrivers 1/4", 1/2"; 2 standard slotted screwdrivers 3/8", 1/2"; 2 Phillips screwdrivers 3/8", 1/2". With torque handle. Shpg. wt. 1 lb.

No. 37A743, Type PS7. Each **\$4.13**

### ALLEN HEX TYPE SCREWDRIVERS

Contains 8 midsize Allen Hex type screwdrivers in sizes .028, .035, .05, 1/16", 3/32", 1/8" and 5/16". Greater speed and ease in turning than conventional keys. With torque handle and see-through plastic case.

No. 37A861, Type PS-89. Each **\$4.35**



### XCELITE ALLEN HEX SCREWDRIVER SET

Long alloy steel blades provide 4" working length. Contains: 9 interchangeable blade sizes: .05, 1/16", 3/32", 1/8", 5/16", 3/8", 1/2", 5/8", 3/4", 1"; 4" extension shaft, servicemaster amber colored handle. In pocket-size, see-through plastic case. Shpg. wt. 1 lb.

No. 37A767, Type 99PS-40. Each **\$7.13**

### HOLLOW SHAFT NUTDRIVER SET With Thru-Drilled Handle

Eight interchangeable hollow shafts permit installation and removal of nuts over protruding bolts. Drilled handle permits passing a screwdriver through handle and nutdriver shaft. For Combination locknut and slotted screw adjustments. Shafts snap in and out easily, held firmly. Contains 3/8", 1/2", 5/8", 3/4", 1" and 1 1/4" shafts and handle.

No. 37A862, Type HSC-1. In plastic see-through case. Each **\$8.85**

### SCREWDRIVER NUTDRIVER SET

Contains 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1" nutdriver blades, 3/8" and 1/2" screwdriver blades, No. 1 and No. 2 Phillips, extension blade, handle, and see-through plastic case.

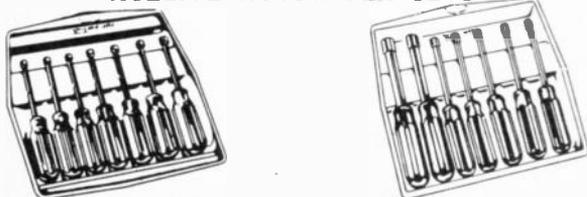
No. 37A863, Type 99PS-50. Each **\$8.93**

### METRIC NUTDRIVER SET

Contains 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11 millimeter nutdriver shafts, 4" extension and handle. Shafts snap in out of handle easily and are held firmly. In plastic see-through case.

No. 37A865, Type 99PS51 MM. Each **\$8.63**

### XCELITE NUTDRIVER SETS



No. 127TB. The 7 most popular size nutdrivers. Shockproof, breakproof plastic handles are color coded for easier selection of sizes. Fully polished 3" blades. Consists of sizes: 1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8". Molded plastic tray for bench, caddy or wall mounting. Wt. 2 lbs.

No. 37A744, Per Set **\$6.60**

No. 147TB. The 7 most popular hollow shaft nutdrivers. Shockproof, breakproof plastic handles are color coded for easier selection of sizes. Contains 1/4", 3/8", 1/2", 5/8", 3/4", 1", and 1 1/4" sizes. In molded plastic tray for bench, tool caddy or wall mtg. Shpg. wt. 2 lbs.

No. 37A745, Per Set **\$8.70**

## XCELITE SCREWDRIVERS

Forged from tough Chrome Vanadium Electric Furnace Steel. Xcelite Screwdriver blades withstand heaviest usage. Shockproof, breakproof amber plastic (UL) handles are shaped for perfect grip and balance. Blades are securely embedded in handles.



### POCKET CLIP STYLE SCREWDRIVER

Stk. No.	Xcelite No.	Blade	Overall	Each	10, Each
37A801	R3322	3/2 x 2"	4 1/4"	\$.41	\$0.36
37A802	R3323	3/2 x 3"	5 1/4"	.44	.39
37A803	R3324	3/2 x 4"	6 1/4"	.47	.42
37A804	R181	1/2 x 2"	4 1/4"	.41	.36

### ROUND BLADE SCREWDRIVERS

37A864	R182	1/2 x 2"	4 5/8"	.44	.39
37A787	R184	1/2 x 4"	6 5/8"	.51	.45
37A788	R186	1/2 x 6"	8 5/8"	.57	.51
37A789	R3163	3/16 x 3"	6 5/8"	.74	.66
37A790	R3164	3/16 x 4"	7 5/8"	.81	.74
37A791	R3166	3/16 x 6"	9 5/8"	.91	.81
37A792	R3168	3/16 x 8"	11 5/8"	1.01	.90
37A793	R144	1/4 x 4"	7 7/8"	1.05	.93
37A794	R146	1/4 x 6"	9 7/8"	1.15	1.02
37A795	R148	1/4 x 8"	11 7/8"	1.22	1.08

### STUBBY SQUARE BLADE SCREWDRIVER

37A805	S-141	1/2 x 1 1/4"	3 3/4"	.71	.63
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### PHILLIPS TYPE SCREWDRIVER

37A796	X-100	0-1/2 x 2"	4 1/2"	.57	.51
37A797	X-101	1-3/8 x 3"	6 5/8"	.88	.78
37A798	X-102	2-1/2 x 4"	7 7/8"	1.08	.96
37A799	X-103	3-3/8 x 6"	10 1/2"	1.52	1.35
37A800	X-104	4-3/8 x 8"	12 1/2"	1.86	1.65

## LEATHER TOOL POUCH

Fits belt. 5 compartments for pliers, screwdrivers, etc., snap for knife. 8x9". Finest pliable leather, stitched and riveted. Wt. 1 lb. Xcelite 150. 37B174. Net Each **\$4.80**



## XCELITE HOLLOW SHAFT NUTDRIVERS

Color coded, shockproof, plastic handles. Depth of hole 4 3/8" or longer. Wt. 7 oz.

## XCELITE 4-WAY TOOL

Includes: 1 1/4" and 1 1/2" nut drivers, No. 1 Phillips screwdriver, 1" slotted screwdriver, Type 600. No. 37A707. Each **\$1.86**  
10 Each **\$1.65**

## XCELITE NUTDRIVER AND SCREWDRIVER SETS



No. 99PR—Consists of amber plastic handle with 9 snap-in nutdrivers, sizes 3/16" to 1/2"; snap-in screwdriver bits with 3/8" and 1/2" blades; and snap-in screwdrivers with Phillips No. 1 and 2 blades. Tools fasten simply—are held securely in handle. Plastic roll case. Wt. 1 lb.

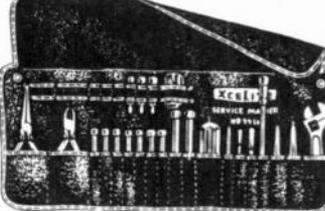
No. 37A754, Complete **\$9.42**

No. 99 Jr. Pocket version of the big "99". Has smaller handle.

37A755, Each **\$8.28**

## XCELITE SERVICE MASTER KIT

Handles 99% of All Service Calls Versatile set of high-quality tools meets almost any radio-TV servicing need.



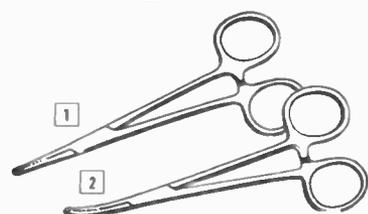
Set includes: 6" long nose pliers; 5" diagonal cutters; 6" adjustable wrench; 9 regular nutdrivers 3/16" through 1/2"; 3 stubby nutdrivers 1/4", 3/8" and 1/2"; 3 Phillips screwdrivers; 1/8" and 3/16" reamer; 1/2"-1/2" reamer; 8" extension; regular handle and stubby handle. All tools tough alloy steel with highly polished nickel chrome finish. In roll-up kit with separate compartment for each tool. Shpg. wt. 3 lbs.

37A756, Type 99SM, Each **\$26.85**

## XCELITE SEIZER TOOLS

Especially designed for working with miniature components. Clamps on to work and will outhold needle nose pliers. Ideal for use as a heat sink, holding leads while soldering, restringing dial cords, etc. All stainless steel with precise box joints. Length 6".

① No. 37A811, Model 42H. 6 5/8" Straight Nose. Net Each **\$4.65**  
6 Lots Each **\$4.13**  
② No. 37A812, Model 43H. Curved Nose. Net Each **\$4.80**  
6 Lots Each **\$4.27**



# TIME SAVING HAND TOOLS

**RATCHET IN OR RATCHET OUT WITH THE FLICK OF A FINGER... SPEEDS UP DRIVING, LESS FATIGUE**



## VACO RATCHET HANDLE SCREWDRIVER KIT

Contains ratchet handle, 1/8" x 4" blade, 3/8" x 4" blade, 1/4" x 5" blade, No. 1 Phillips blade, No. 2 Phillips blade, and 5" extension. Molded plastic box for convenient storage. Shpg. Wt. 2 lbs. No. 37A869. VACO 516101. **\$7.15**

## VACO RATCHET HANDLE NUTDRIVER KIT

Contains most popular hollow shaft nutdriver blades sizes 1/4, 3/8, 1/2, 3/4, 5/8, and 5" extension. All sockets are super hard. Molded plastic box for convenient storage. Shpg. Wt. 2 lbs. No. 37A870. VACO 516103. **\$8.40**

## VACO RATCHET SCREWDRIVERS

Speed up driving with less hand fatigue. 3 way ratchet control for forward, reverse or combination driving. Chrome vanadium steel blade, nickel chrome finish. Shpg. Wt. 8 oz.



Stk. No.	Vaco No.	Size	Each
37A872	111001	1/4" blade, 10" long.	\$2.40
37A873	111002	3/8" blade, 10 1/2" long.	2.60

# VACO® screwLauncher

holds · starts · drives

SAVES VALUABLE TIME

① Fast positive gripping power. Set or remove screws in tight quarters. Will not slip out. Tough durable spring steel blades. Large comfortable handles.



Stk. No.	VACO No.	Blade	Overall	Each
37A877	K-23	1/4 x 3	5 3/4	\$1.08
37A878	K-28	1/8 x 8	10 3/4	1.28
37A879	K-34	3/4 x 4	7 1/2	1.56
37A880	K-36	3/4 x 6	9 1/2	1.60
37A881	K-38	3/4 x 8	11 1/2	1.64
37A882	K-44	1/4 x 4	7 5/8	1.64
37A883	K-46	1/4 x 6	9 5/8	1.72
37A884	K-48	1/4 x 8	11 5/8	1.76

② Grips and starts any cross slot screw. Ideal for hard-to-reach places. Not for tightening screws all the way in.

Stk. No.	VACO No.	Length	Each
37A874	K-13	3"	\$1.48
37A875	K-15	5"	1.72
37A876	K-19	9"	1.88

## VACO NUTDRIVER KIT

Contains set of hollow shaft nutdrivers. Super hard sockets. Sizes 1/4, 3/8, 1/2, 3/4, 5/8, and 1" long. No. 37A871. VACO 70002. Each **\$8.15**



## VACO PLIERENCH

THE TOOL OF 1000 USES! CAN BE USED AS WRENCH OR PLIERS

JAWS OPEN TO 1 1/4 INCHES

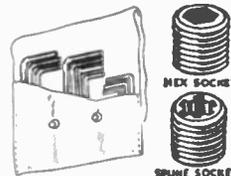


Parallel jaws give firm grip on round or flat objects. 10 to one gear ratio gives the user's hands the equivalent of 1 ton of gripping power. Extra long double-tapered jaws reach deeply into hard-to-get-at places. Extremely powerful, yet delicate enough to use on polished fittings without causing damage. Has wire cutter for large wire. Comfortable cushion grip handles, precision built, drop forged heat treated steel 8 1/2" long. No. 37A831. 86070. Plierench in pouch. Each **\$6.35**

8 1/2" Plierench Kit. As above with standard pipe, large pipe, and giant internal-external jaws and pouch. No. 37A834. 86071. Each **\$10.80**  
 No. 37A832. 86074. Large pipe jaw grips pipe up to 2" O.D. Each **1.40**  
 No. 37A833. 86073. Giant internal-external pipe jaw, to hold inside of tube or pipe, or use as speed wrench. Each **1.60**  
 7" Plierench for smaller jobs. 8 to 1 gear ratio. In self-closing pouch. No. 37A835. 86060. Each **5.00**

## HEX & SPLINE WRENCH KIT

Handy pocket size kit contains complete range of wrench sizes used in electronics. Includes Hex (Allen) wrenches that fit No. 4 to No. 10 set screws and No. 2 to 6 cap screws, and (Bristol) wrenches for set screws up to 1/4" and cap screws up to No. 8. In durable vinyl case. Shpg. wt. 8 oz. No. 37A766. SET **\$1.39**  
 10 Sets, Each **\$1.20**



## MOODY PRECISION TOOL SETS DESIGNED FOR MINIATURE WORK

Each kit is in plastic stand with clear plastic cover Shpg. wt. 8 ozs per kit

### SC-5 SCREWDRIVER KIT

Contains 4 hardened steel nickel plated blades, sizes: .100", .080", .070", .055", plus handy awl, 2 3/4" knurled steel handle with plastic swivel top. No. 37A708 Per Set **\$1.29**



### SH-2 SCREW HOLDING SCREWDRIVER SET

Interchangeable spring steel clip fits either the 1 3/4" or 2 1/2" blade supplied—holds tiny screws with a firm grip for driving or removing from hard-to-get-at places. No. 37A823. Per Set **\$1.29**

### BW-5 MAGNETIC SOCKET WRENCH SET

Contains 5 sizes: 1/16, 1/8, 1/4, 3/8, and 1/2" Magnetized to simplify the handling of tiny hex nuts. No. 37A824. Per Set **\$2.89**

### OE-5 OFFSET OPEN END WRENCH SET

Contains five heat treated steel interchangeable wrenches, sizes: 1/16, 1/8, 1/4, 3/8, and 1/2" knurled steel handle with chuck and swivel top. No. 37A825. Per Set **\$1.79**

### TS-5 HOBBYIST TAP SET

Contains 5 taps 0-80, 1-72, 2-56, 3-48 and 4-40 plus tap wrench. For tapping plastic, metal, etc. No. 37A826. Per Set **\$4.95**

### #71 PRECISION DIE SET

Hexagon threading dies. Use with any 3/8" wrench. Contains 0-80, 1-72, 2-56, 3-48 and 4-40. In plastic box. No. 37A885. Per Set **\$14.95**

## JEWELERS SCREWDRIVER SET

Perfect for working with jewelry, instruments, small electronic devices, hobbies, etc. Six hardened steel replaceable blades, sizes: .100", .080", .070", .055", .040", .025". Each unit has hexagon swivel head with thumb rest and knurled steel handle. Threaded chuck firmly holds blade in position. Overall length 3 3/4". Shpg. wt. 1/2 lb. No. 37A845. Moody JS-6. Set of 6 Each **\$2.89**



## NEW SELF-ADJUSTING SOCKET WRENCH

SIMPLY PRESS AND TURN—ADJUSTS AUTOMATICALLY TO FIT 4 BOLT OR NUT SIZES



RATCHET ACTION ILLUSTRATED

Unique self-adjusting action instantly and automatically selects the right socket to fit any of 4 different sizes of hex head bolts or nuts from 1/4" to 7/8". Eliminates the need for individual wrenches for each size. Tempered steel sockets of extra depth insure maximum strength and torque, permit use with bolt extensions up to 1 1/2" long. Internal mechanism corrosion proofed for long-life. Chrome plated steel housing. Shockproof insulated handle. Shpg. wt. 1/2 lb. No. 37A765. Each **\$3.45**

## NEW! RATCHET ACTION SELF-ADJUSTING SOCKET WRENCH

Ratchet action for added convenience. Continuous high speed action plus all features of standard model above. No. 37A886. Each **\$4.95**

## REVERSIBLE SCRIBER

Knurled steel handle with chuck that holds needle point and retracts into handle when not in use. No. 37A841. Complete, Each **99c**  
 No. 37A842. Extra Points **29c**

## RATCHET OFFSET SCREWDRIVER

With Std. 1/4" and 3/8" blades. \$1.19  
 No. 37A843. Net Each  
 With Phillips #1 & #2 blades. \$1.60  
 No. 37A844. Net Each

## MILLERS-FALLS HI-SPEED COUNTERSINK



Countersinks in metal, wood, plastic, etc., to admit heads of screws. Fine grade high-speed steel. 1/4" shank for use in electric drills. Lgth. 2 1/2". No. 37A9045. Wt. 2 oz. Net Each **\$1.79**

## AUTOMATIC CENTER PUNCH

For simple and accurate punch marking before drilling. Just push and automatic internal spring loaded mechanism does the rest. No. 37A769. Each **\$3.99**

## CAN'T-ROL CENTER PUNCH

No. 37A770. Each **49c**

## TWEEZERS

(A) 7" Long, curved smooth point Tweezers. Shpg. wt. 2 oz. **72c**  
 No. 37A3228. Each  
 (B) 4 3/4" Long Slide Lock, blunt smooth point tweezers, plated. **70c**  
 No. 37A3229. Each  
 (C) 5 1/2" Long Self-Closing blunt serrated points, plated. wt. 2 oz. **60c**  
 No. 37A3230. Each  
 (D) 4 3/4" Long common soldering tweezers, plain steel. **50c**  
 No. 37A3231. Each

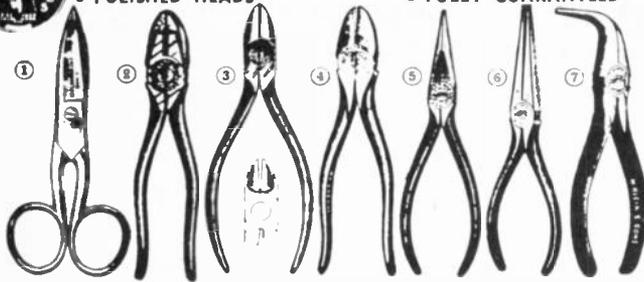
# PROFESSIONAL QUALITY HAND TOOLS



## KLEIN PLIERS

- HIGHEST QUALITY
- POLISHED HEADS

- TEMPERED BLUE HANDLES
- FULLY GUARANTEED



Stk. No.	Mfg. No.	Fig.	Wt.	Description	Each	6 Each
37A710	D2100-5	①	6 oz.	Xela "S" Scissors	\$3.20	\$2.67
37A711	D201-7NE	②	9 oz.	7" Side Cutting Pliers	4.21	3.50
37A712	D213-9NE	③	9 oz.	9 1/4" Side Cutters	5.76	4.79
37A713	D202-6	④	4 oz.	6" Oblique Cutting Pliers	3.49	2.90
37A714	D245-5W	⑤	4 oz.	5" Cutters w/wire strippers	3.97	3.30
37A771	D240-5	⑥	5 oz.	5" Cutters W/ .052" Skinning Hole	3.73	3.10
37A715	D220-7	⑦	9 oz.	7" Oblique Cutting Plier	4.08	3.39
37A716	D301-7	⑧	8 oz.	7" Long Nose Pliers	3.17	2.63
37A717	D203-6	⑨	6 oz.	Long Nose w/Cutters	3.33	2.77
37A718	D305-6	⑩	6 oz.	6" Long Flat Nose Plier	3.04	2.53
37A719	D302-6	⑪	5 oz.	6" Long Curved Nose Plier	3.63	3.02

All pliers have plastic cushion grip handles  
 †Cannot be assorted for quantity prices.

## SPECIAL KLEIN ELECTRONIC PLIERS



Stk. No.	Mfg. No.	Fig.	Wt.	Description	Each	6 Each
37A720	D207-5C*	①	4 oz.	5 1/2" Oblique w/Shear Cutters	\$4.32	\$3.59
37A721	D221-5 1/2 C*	②	4 oz.	Fine Needle Nose	3.68	3.06
37A722	D318-5 1/2	③	4 oz.	5 1/2" Long Needle Nose	3.12	2.59
37A723	D318-5 1/2 C*	④	5 oz.	As above w/Coil Spring	3.36	2.79
37A724	D209-4C*	⑤	2 oz.	4" Oblique Cutters	3.84	3.19

\*Supplied with coil spring to hold jaws open ready for use.  
 All have plastic cushion grip handles. Cannot assort for quantity prices.



## KLEIN SMALL SERIES PLIERS

Stk. No.	Mfg. No.	Fig.	Wt.	Description	Each	6 Each
37A725	D307-5 1/2	①	4 oz.	5 1/2" Long Nose Pliers	\$2.88	\$2.39
37A726	D209-5	②	5 oz.	5" Oblique Cutting Pliers	3.81	3.17
37A727	†D204-6C	③	6 oz.	Traverse 6" End Cutters	4.00	3.33

†With coil spring to hold jaws open ready for use. †Cannot be assorted.

## KLEIN "JEWELERS" SIZE PLIERS

Stk. No.	Mfg. No.	Fig.	Wt.	Description	Each	6 Each
37A728	D321-4 1/2	①	3 oz.	4 1/2" Long Nose Plier	\$2.56	\$2.13
37A729	D321-4 1/2 C	②	3 oz.	As Above w/Coil Spring	2.80	2.33
37A868	D224-4 1/2 C	③	3 oz.	4 1/2" End Cutters w/Coil Spring	3.60	2.99
37A731	D257-4	④	3 oz.	4" Diagonal Cutter	2.93	2.43
37A732	D257-4C	⑤	3 oz.	As Above w/Coil Spring	3.17	2.63

All with plastic cushion grip handles. Cannot assort for quantity prices.

## ADJUSTABLE KLEIN WRENCHES

Chrome plated drop forged alloy steel combines maximum strength, lighter weight with lasting beauty. Identical to Crescent.

Stk. No.	Mfg. No.	Wt.	Size	Cap.	Each
37A738	500-4	3 1/2 oz.	4"	1 1/2"	\$2.72
37A739	500-6	3 oz.	6"	1 1/2"	2.80
37A740	500-8	6 oz.	8"	1 3/4"	3.12
37A731	500-10	13 oz.	10"	1 7/8"	4.00
37A742	500-12	24 oz.	12"	1 7/8"	5.76

IN 5 POPULAR SIZES



CHROME PLATED

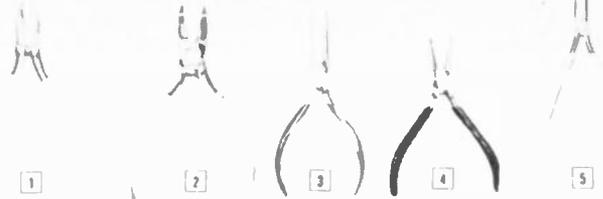
## CHANNEL LOCK PLIERS



The first choice of mechanics for years. Interlocking principle positively prevents slipping under any load... the heavier the job, the greater the interlocking action. Made of highest grade steel with polished heads and handles. 440-C and 460-C supplied with plastic cushion grips.

Stk. No.	Mfg. No.	Capacity	Wt.	Description	Each
① 37A733	426	7/8"	5 oz.	6 1/2" Pump Plier	\$2.32
① 37A734	420	1 1/2"	12 oz.	9 1/2" Pump Plier	3.04
① 37A735	430	7/8" to 2"	14 oz.	10" Big Champ Plier	3.20
① 37A736	440-C	2 1/4"	11 lb.	12" Gripmaster Plier	3.68
① 37A737	460-C	4 1/4"	3 lb.	16" Gripmaster Plier	4.80

## UTICA ELECTRONIC PLIERS



Best choice for today's dense circuitry and miniature components. Designed for use in close confined areas. All have coil spring to open jaws. Avg. Wt. 2 oz.

Fig.	Stk. No.	Utica No.	Description	Each	6 Each
①	37A855	347-4 CFJS	4" Snub Nose Diagonal Cutting Pliers	\$4.40	\$3.96
①	37A856	47-4 CFS	4" Flush Edge Diagonal Cutting Pliers	5.12	4.60
②	37A857	66-5 CFJS	5" Tip Cutting Pliers With Pin To Hold Jaws In Alignment	5.12	4.60
③	37A858	774-5 1/2 CFCRS	5 1/2" Pickup & Wiring Pliers With Pin To Hold Jaws In Alignment	4.70	4.23
④	37A859	25-5 CFCRS	5" 60° Angle Bent Chain Nose Pliers. Unscored Jaws	5.36	4.82
⑤	37A860	23-6 CFCRS	6" Short Chain Nose Pliers With Very Thin Nose	4.72	4.24

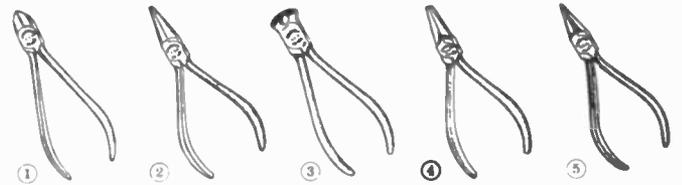
## UTICA ELECTRONIC SNIPS



Shear action cuts filament, fine wire and other electronic materials. Wt. 8 ozs. With spring and Plastisol dipped handles.

No. 37A705. 272. 7 1/2"	—Long blade snips.	Each....\$3.90	6 Each....\$3.51
No. 37A706. 273. 6 1/2"	—Short blade snips.	Each....\$4.70	6 Each....\$4.23

## KRAEUTER SMALL PRECISION PLIERS

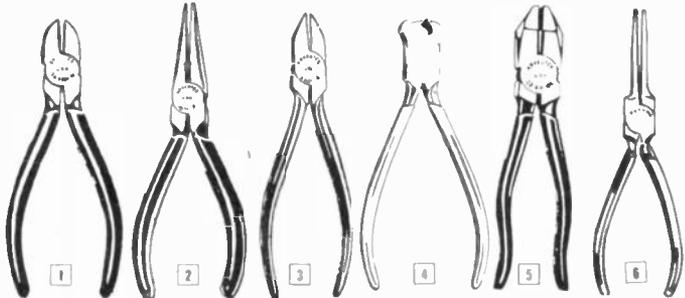


For accurate and exacting work. Precision crafted in every detail. Polished heads. Cushion grip handles. †Cannot be Assorted For Quantity Prices.

Stk. No.	Mfg. No.	Fig.	Description	Wt.	Each	6 Each
37A774	20101*	①	4 1/2" Needle Point Diagonal	3 oz.	\$3.75	\$3.38
37A775	20181	②	4 1/2" Diagonal Cutters	3 oz.	2.77	2.50
37A776	20183	③	4 1/2" Chain Nose	3 oz.	2.55	2.30
37A777	20182	④	4 1/2" End Nippers	3 oz.	3.09	2.78
37A778	20184	⑤	4 1/2" Flat Nose	3 oz.	2.55	2.30
37A779	20185	⑥	4 1/2" Round Nose-Round Jaw	3 oz.	2.69	2.42

\*Has Coil Spring to hold pliers open.

## KRAEUTER FINEST QUALITY PLIERS



Made of highest grade steel. All have polished heads and are supplied with comfortable cushion grip handles. †Cannot be assorted for quantity prices.

Stk. No.	Mfg. No.	Fig.	Wt.	Description	Each	6 Ea.
37A813	35016	①	6 oz.	6" Diagonal Cutting Pliers	\$3.12	\$2.81
37A814	36616	②	5 oz.	6" Long Chain Nose	3.23	2.91
37A815	36415	③	4 oz.	5" Chain Nose with Cutters	3.00	2.70
37A773	20140*	④	4 oz.	6" Long Nose	3.51	3.16
37A816	37015	⑤	4 oz.	5" Needle Point Diagonal	3.32	2.99
37A817	36107	⑥	8 oz.	7" Hvy.-duty Diag. Cutters	3.12	2.81
37A819	36216	⑦	5 oz.	6" Long Needle Nose	2.78	2.51
37A772	20160*	⑧	5 1/4 oz.	7" Extra Fine Long Nose	3.20	2.88

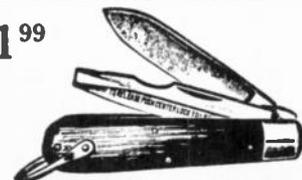
\*Has coil spring to hold jaws open.

## UTICA "KUTMASTER" ELECTRICIANS' KNIFE

Standard 2 3/4" knife blade and a special screwdriver blade with insulation cutter and wire scraper. Screwdriver blade locks in open position. 3 3/4" black plastic handle with shackle ring, polished bolsters, and brass linings. Made to government specs. Shpg. wt. 7 oz.

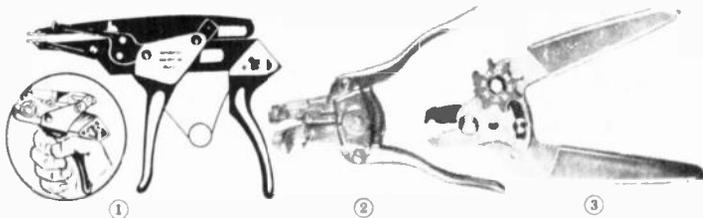
37A867. 12 Lots. \$1.99 Each  
 Each.....\$1.89

\$1.99



# VERSATILE HAND TOOLS

## POPULAR WIRE STRIPPERS



### ① UTICA "STRIPWRIGHT" WIRE STRIPPER

Slim nose design reaches into the most closely confined areas. Just insert wire in end jaws and squeeze handle—strips fast and clean. Calibrated cam action dial adjusts to strip from #12 to #26 wire gauge size. Handles Teflon as well as other insulations. Gripping jaws hold wires firmly, keeps insulation marking at an absolute minimum. Comfortable cushion-grip handles.  
No. 37A827. Shpg. wt. 1 lb. Each **\$16.50**

### ② G.C. SPEEDEX AUTOMATIC WIRE STRIPPERS

Strips insulation automatically from wire easily and cleanly without crushing it. Just squeeze the handles and the job is done. Fully automatic with delayed return action—prevents crushing of fine stranded wire. Jaws remain open until wire is removed. Shpg. wt. 1 1/4 lbs.

37A828. Type 766. For 12 to 20 wire. **\$5.93**  
37A829. Type 766A. For 14 to 30 wire. **CHOICE EACH**

**SPEEDEX WIRE STRIPPER KIT.** Deluxe type wire stripper and 7 different size blades in a special steel box. Strips solid or stranded wire #8 to #30, 18 POSJ, and 300 ohm twin lead. Shpg. wt. 2 1/4 lbs.  
No. 37A830. Type 766K Complete **\$13.16**

### ③ G.C. STRIP-ER-CLIP

Precision tool for stripping and clipping wires 12 to 26 gauge. 8-stop gauge adjusts instantly to prevent accidental nicking or cutting. Wt. 10 oz.  
No. 37A709. Type 760. Each **\$1.49**

## K. MILLER WIRE STRIPPERS



SPRING ACTION ILLUSTRATED

Strip or cut wire up to size 8 solid or stranded. Spring opens blades for easy use, locks when not in use.

① Model 101-S. Screw adjusts for different size wire. **\$1.29**

No. 37A888. Each **99c**

② Model 100. Without spring, otherwise same as 101-S.

No. 37A889. Each **\$1.49**

③ Model 103-S. Extruded cam stop makes adjustment immovable during use.

No. 37A890. **\$1.49**

Each

④ Model 102. Without spring, otherwise same as 103-S.

No. 37A891. Each **\$1.29**

## GC C-RING TOOL



Special tool removes and inserts "C" washers and retaining rings on volume controls, turntables, recorders, switches, radio and TV sets, etc. Made of high grade steel, nickel plated. Type 8872. Wt. 2 oz.  
No. 37A3208. Each **\$1.88**

## "JONARD" RELAY SERVICE TOOLS



Highest quality precision tools for repair and adjustment of all foreign and domestic relays.

① **SPRING ADJUSTER.** .023" slot each end. Made of carbon steel, plastic handle. **\$3.84**

② **SPRING ADJUSTER.** .031" slot each end. Made of carbon steel, plastic handle. **\$3.28**

③ **STOP BENDER** for adjusting armature back stops. Carbon steel nickel chrome plated. Slots .033" wide. **\$1.98**

No. 37A3207 Type SB-22. Overall length 5". Each

④ **POCKET CLEANER-BURNISHER.** Hard tempered blade cleans any type contact—leaves no grit or dust. Plastic cap with pocket clip. With 12 blades. **\$3.90**

No. 37A3010 Type P-4. Overall length 5 1/2". Net Each

No. 37A3011 Type RB-4. Pkg. of 25 Replacement Blades. **\$3.75**

## BURRING REAMERS

High grade chrome vanadium burring reamers rapidly remove burrs from chassis cutouts, antenna mast cutoffs, etc. Also handy for enlarging holes.

① T-Handle Type. Tapers 1/8" to 1/2". **\$2.25**

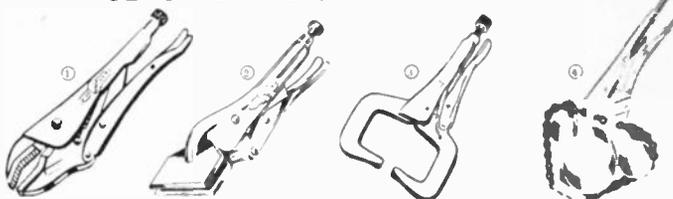
No. 37A821. Each

② Bit-Shank Type. Tapers 1/4" to 1 1/4". **\$2.95**

No. 37A822. Each



## GENUINE VISE-GRIP HAND TOOLS



① **VISE GRIP WIRE CUTTERS.** Tong-grip remains locked to work with hands removed. Adjusts to super-plier action, has powerful wire cutter.

Model 5WR-5". 1/2" thick jaws adjust to 1 1/4". Wt. 5 oz. **\$1.99**

No. 37A757. Net Each

Model 7WR-7". 1/4" thick jaws adjust to 1 5/8". Wt. 10 oz. **\$2.24**

No. 37A758. Net Each

Model 10WR-10". 3/8" thick jaws adjust to 1 7/8". Wt. 1 1/2 lbs. **\$2.60**

No. 37A759. Net Each

② **SHEET METAL TOOL.** Handy for forming chassis, making angle brackets, bending metal edges, etc. 8" long, 3 1/2" jaw width, 1 1/4" throat depth. Wt. 18 oz.

No. 37A760. Type 8R. Net Each **\$3.16**

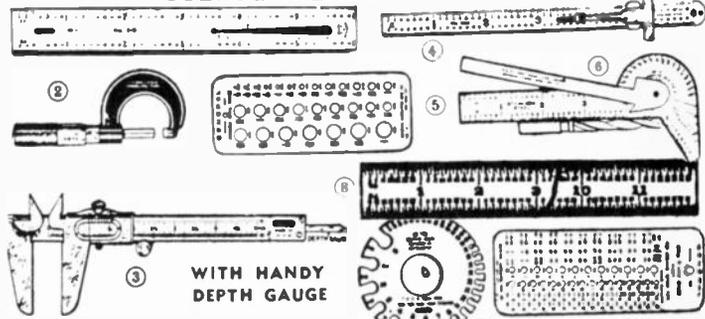
③ **C-CLAMP.** "Ice-Tong" jaws reach around any shape object. Adjust 0 to 3 3/4". Overall length 11". Wt. 28 oz.

No. 37A761. Type 11R. Net Each **\$3.16**

④ **VISE-GRIP CHAIN CLAMP & PIPE WRENCH.** Adjusts to any size work up to 19 inches in perimeter. Has tremendous gripping power. Holds and locks around anything, any size, any shape, anywhere that the 19" chain can be wrapped around. Shpg. wt. 2 lbs.

No. 37A762. Model 20R. Each **\$4.76**

## USEFUL MEASURING TOOLS



① **6" Rule & Wire Gauge**

Stainless steel with 1/32" and 1/64" graduations. Has American wire gauge and decimal equivalents. Shpg. wt. 2 oz.

No. 37A3236. **65c**

NET EACH

② **Precision Micrometer**

Measures 0" to 1". Guaranteed correct to .0005". Screw type anvil makes zero adjustment easy. Die cast special alloy frame. Shpg. wt. 11 oz.

No. 37A3237 Each **\$4.49**

③ **Vernier Caliper**

Graduations deeply etched of 1/16" and 1/32". Inside jaws offset and may be used for scribing circles or dividers. 5" capacity. Shpg. wt. 8 oz.

No. 37A3238 Your Cast, Ea. **\$1.99**

④ **Pocket Rule & Depth Ga.**

Tempered steel 6" rule with pocket clip. Quick reading 64th graduation.

No. 37A3239 Shpg. wt. 2 oz. **25c**

Each

⑤ **Jobbers Drill Gauge**

Gauges drills 1/8" to 1/2". Gives decimal equivalent. Heavy gauge. Shpg. wt. 5 oz.

No. 37A3240 Each **\$1.99**

⑥ **Multi-Use Rule & Gauge**

4" rule with 32nd and 64th scale, a drill point gauge, a square, a bevel protractor, a circle divider, center finder, and tap drill table. Stainless steel with leather-case.

No. 37A3241 Net Each **\$1.99**

⑦ **Handy Wire Gauge**

American Standard. Gauges wire and non-ferrous metals sizes 0 to 36 with decimal equivalent of each on reverse side. Tap quality tempered steel.

No. 37A3242 Shpg. wt. 7 oz. **\$5.49**

Each

⑧ **12" Steel Rule**

Stainless steel rule. 7/8" wide graduated in 8ths, 16ths, 32nds and 64ths one side, 32nds, 64ths, 16ths on the other. Shpg. wt. 5 oz. **\$1.19**

No. 37A3243 Each

⑨ **Drill & Tap Gauge**

Made of heavy gauge tempered steel. Gauges and gives decimal equivalent of numbered drills, sizes 1 to 60. Also handy drill index for machine screw taps. Shpg. wt. 5 oz. **\$1.99**

No. 37A3244 Each

## VACO 10 FOOT STEEL TAPE

Chrome case. White coated blade with two color printing. Graduated in sixteenths except first foot is in 32nds. Wt. 5 oz. **\$1.80**

No. 37A887. VACO 70120. Each

⑩ **8" Roman face characters for marking chassis, parts, etc. Simply hammer to produce clear sharp impressions. Shpg. wt. 2 lbs.**

Letter Set—Consists of 28 characters. (A to Z, "G" and "Period").

No. 37A846. **\$5.79**

Per Set

Figure Set—Consists of 9 characters. (0 to 8 with "6" being used also as "9").

No. 37A847. Per Set **\$2.29**

## Millers-Falls STEEL TOOL MARKING SETS



# TOOL SPECIALTIES

## ASTRO 3/8 INCH LABEL MAKER

MAKES  
PROFESSIONAL  
SELF-ADHESIVE  
LABELS

**\$3.99**



Simple to use and built to last. A single lever prints, spaces and cuts labels. Last letter printed appears instantly, reduces mistakes. Prints 12 symbols (period, comma, etc.) in addition to alphabet and numbers. Cuts tab for removing label backing. Order easy loading cartridge below. Shpg. Wt. 1 lb. No. 37A7509.

Label Maker. Each **\$3.99**  
No. 37A7708. Tape for above. 3/8" x 12 ft. **79c**  
Specify Color: Black, Red, Blue, Green or Gold. Per Roll.

## ZIPPIDO-DO ALL PURPOSE CUTTING AND SANDING DISC



**\$2.99**

A fantastic tool every electric drill owner will want! Fabricated of silicon carbide grains embedded in nylon mesh. Use to cut, sand, shape all metals, glass tile, paint rust, etc. Wears and wears, never clogs.

7 inch sanding and cutting disc with 5 inch molded disc for sanding and shaping, 1/4" arbor, 2 steel flanges. Shpg. wt. 1 lb. No. 37A9546. Each **\$2.99**

## CONTOUR GAGE



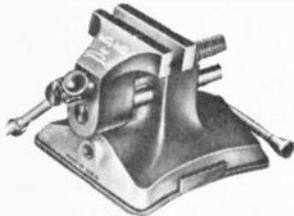
MEASURING PILLAR CONTOUR    DUPLICATING PATTERNS FOR WOOD MOULDINGS    CHECKING OVERALL DIMENSION SIZE

PERFECT CONTOUR  
GAUGE FOR EVERY  
CARPENTER AND  
AMATEUR MECHANIC

Outlines any shape . . . just press the Contour Gage's 175 steel teeth against any irregular surface. Holds shape perfectly for duplicating patterns, measuring moldings, measuring contours, etc. 6" lang.

No. 37A9549. Wt. 8 ozs. Each **\$1.99**

## PORTABLE "VACU-VISE"



SUPER SUCTION  
BASE HOLDS VISE  
IMMOVABLE  
ON SMOOTH  
SURFACES . . .  
EVEN  
VERTICALLY

**\$5.95**

WILL NOT MAR ANY FINISH

Most convenient, versatile vise ever made! It's like having a third hand . . . anywhere . . . on the job . . . right where you need it. Just a finger-tip turn of the Vacu-Vise holds vise firm and fast to workbench, table top—even vertically on the wall. Simply turn a lever to release. Ideal for hobby work, shop, home, school, etc. Large 2 1/2" jaws of hardened steel have work holding "V" grooves, open to 2 1/2". Shpg. wt. 3 lbs.

No. 37B375. Each **\$5.95**

Set of 2 Rubber jaws for above. Inserts between steel jaws for holding delicate pieces without marring. No. 37A5547. Net Per Pair **\$1.00**

## BINOCULAR MAGNIFIER



Large lens area for depth and clarity. Greatly magnifies work, gives natural 3 dimension vision. Greatly reduces eye strain, may be worn over regular glasses. Optical glass lenses ground and polished to precision standards. Dial adjustment continuous headband. Swivels up out of way when not in use. Net wt. 4 ozs. Shpg. wt. 1/2 lb. made in U.S.A.

37A5562-1 3/4 Power, 14" Focal Length  
37A5561-2 1/2 Power, 8" Focal Length  
CHOICE **\$14.95**

OPTILOUPE MAGNIFIER easily attaches to either eye of magnifier, adds 2 1/2 power for monocular use. No. 37A5563. Each **\$2.50**



**BENDS LIGHT,  
TWISTS LIGHT, PUTS IT  
WHERE IT'S NEEDED!**

## AMAZING NEW SPECK-O-LITE INSPECTION LIGHT

The Speck-O-Lite utilizes a 12 inch slender, flexible fiber-optic light guide to bend light around corners where no ordinary lighting can be placed. The Speck-O-Lite can go through holes as small as 1/8th inch, be twisted into a knot, and still deliver the light where it's needed.

No. 37A5542. Kurz-Kash Model SL-11. **\$3.29**  
Complete with Batteries Each  
No. 37A5543. Adaptor, fiber-optic tube and bulb. Kurz-Kash SLA-10. Each **\$1.49**  
No. 37A5544. Replacement Bulb. Kurz-Kash RBA-8. Each **49c**

## SAND-ALL FINE FINISH SANDER AND POLISHER



Use with electric drills. The Sand-All has a flexible joint, not a rigid spindle. Face of pad is always in contact, sands smooth . . . effortless. No center hole. Sanding discs hold with special activator material. Contains pad assembly, polishing bonnet, 3 sanding discs, tube of activator. Shpg. wt. 1 lb.

No. 37A9572. Each **\$3.95**  
No. 37A9573. Extra Fine 220 Grit Sanding Discs. Pkg. of 5 **39c**  
No. 37A9574. Fine 120 Grit Sanding Discs. Pkg. of 5 **39c**  
No. 37A9575. Medium 80 Grit Sanding Discs. Pkg. of 5 **39c**  
No. 37A9576. Tube of Activator. Each **79c**

JEWELERS TYPE  
WONDERFUL FOR  
ANY MINIATURE  
WORK  
**5.0 POWER  
EYE LOUPES**



Provides necessary magnification to aid in inspecting and repairing miniature parts and equipment. Carefully ground and polished optical glass lens of fine quality. No. 37A5507. Each **75c**

NEW, IMPROVED  
BRASS,  
NICKEL PLATED  
**DRAFTING  
SET**



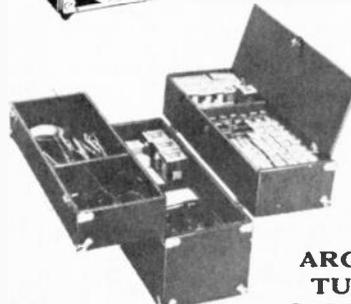
Engineers quality, made in Germany. Plastic case with magnetic lock. Contains 4 3/4" compass with pen, pencil and needle parts, 4 3/4" divider, one each 3 7/8" spring bow pencil, spring bow pen, divider, screwdriver, extra handle, parts, etc. No. 37B175 Per Set **\$5.95**

## PRECISION SPLIT IMAGE TRANSIT



EXTERNAL  
SIGHTS FOR  
FASTER,  
MORE  
ACCURATE  
OPERATION

One man can do leveling and incline measuring accurate to a fraction of an inch. Prism-like optical system. Simplified calibration system for patio and terracing, foundation work, irrigation, drainage, masonry, antenna installation, etc. Wt. 2 lbs. No. 37A5519. Each **\$6.95**  
No. 37A5520. Carrying Case **\$3.95**

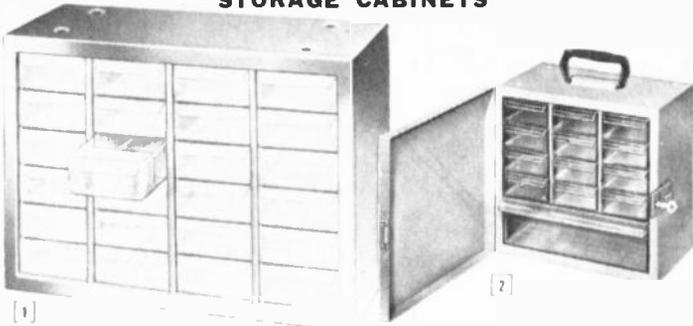


**ARGOS  
TUBE  
CADDIES**

① **CARRY-ALL TUBE CADDY**. Most popular Tube Caddy ever made. Break away design gives quick access to all sections. Holds up to 262 tubes . . . less with tools and meters. New "stop hinges" give fold out sections greater strength when open. New metal corners and knees. Durable, new grey vinyl covering. Size: 21" W. x 15" H. x 8" D. Shpg. Wt. 11 lbs. **\$18.95**  
No. 37A8047. Model TC-400. Each  
② **TUBE CADDY JUNIOR**. Smaller, easy-to-carry size. Holds up to 143 tubes . . . less with tools and meter. Durable, new, grey vinyl covering. Size: 15 3/4" W. x 12 1/2" H. x 8" D. Shpg. Wt. 7 1/4 lbs. **\$11.95**  
No. 37A8046. Model TC-200. Each

# STORAGE CABINETS FOR EVERY NEED

## AKRO MILLS QUALITY BUILT STORAGE CABINETS



### ① WELDED STEEL FRAME CABINETS

Provides visible, organized storage of small parts. Movable dividers and index labels included for complete flexibility of drawer space. Can be stacked or hung on wall. Silver grey finish.

**CABINET SIZE 10" W. x 9 1/4" H. x 6" DEEP**

No. 37A8008. Model 11-118. 18 Drawers size 5 3/4 x 2 3/4 x 1 1/4".

No. 37A8037. Model 11-262. 12 Deep Drawers size 5 3/4 x 2 3/4 x 2".

Wt. 6 lbs.

Choice Each

**CABINET SIZE 13 1/2" W. x 9 1/2" H. x 6" DEEP**

No. 37A8014. Model 11-124. 24 Drawers size 5 3/4 x 2 3/4 x 1 1/4".

No. 37A9571. Model 11-266. 16 Deep Drawers size 5 3/4 x 2 3/4 x 2".

Wt. 7 lbs.

Choice Each

**\$4.49**

**\$5.99**

### ② PORTABLE CABINET

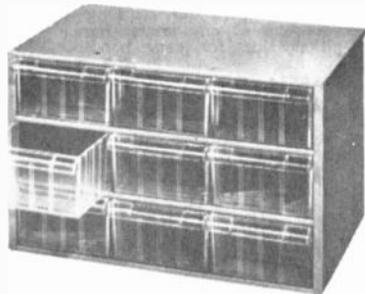
Lightweight . . . take it anywhere. Stores and protects small items from dust and moisture . . . locks to prevent theft. Convenient carrying handle. Hinged door, with lock clasp and key. 12 small plastic drawers 5 3/4" L. x 2 3/4" W. x 1 3/4" D. plus jumbo full width drawer 5 3/4" L. x 8 3/4" W. x 2 1/2" D. Overall size 9" high, 10" wide, 6" deep. With one removable divider per drawer. Shpg. wt. 6 lbs.

No. 37A8015. Model 11-463. Each

**\$5.63**

## DELUXE STORAGE CABINETS

Space conserving metal parts cabinet for workshop, home, store, etc. Sturdy, clear plastic molded drawers provide instant item selection. Full width pull handles, rear stop tab prevents accidental spillage. Labels and drawer dividers included. \*All cabinets 17 7/8" wide. Weight: 17-024 11 lbs., 17-136 13 lbs., all others 18 lbs.



Stk. No.	Model	Quantity	Drawers Size	*Cabinet Size	Each
37A8009	17-136	36	1 7/8" H. x 2 3/4" W. x 5 7/8" L.	6" D. x 11 1/8" H.	\$13.49
37A8042	17-024	24	2" H. x 2 3/4" W. x 5 3/4" L.	6" D. x 10 1/4" H.	13.49
37A8043	17-320	20	2" H. x 3" W. x 11" L.	11" D. x 10 1/4" H.	19.99
37A8012	17-416	16	2" H. x 4" W. x 11" L.	11" D. x 10 1/4" H.	19.99
37A8044	17-715	15	3 1/2" H. x 3 1/8" W. x 11" L.	11" D. x 10 1/2" H.	19.99
37A8045	17-909	9	3 1/2" H. x 5 1/4" W. x 11" L.	11" D. x 10 1/2" H.	19.99

## TOOL-MATE

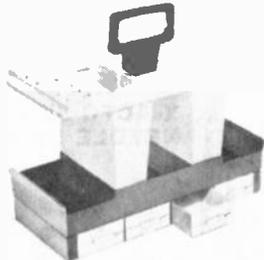
A Workshop at Your Fingertips!

Keeps both hand tools and small parts handy and organized . . . 39 different tool holding slots. Two jumbo storage wells for storing large items, hammers, flashlights, etc. Four dust-free drawers for storing small parts, nails, screws, nuts and bolts. Size 11 1/2" H. 14" L. 7" W. Shpg. Wt. 2 lbs.

No. 37A8035

Net Each

**\$3.97**



## A PERFECT SHOP ORGANIZER

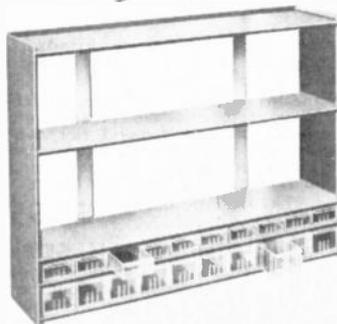
### BENCH MATE COMPACT "SUPPLY ROOM" FOR HOME OR SHOP

Bench-mate holds most every home or shop repair and fix-up items organized, orderly and within easy reach, 3 shelves (28 1/2" long x 7" deep). 20 dustfree drawers, durable baked-enamel finish. Stands on any flat surface or hangs on wall. Assembles in a few minutes with a screwdriver. Dimensions: (assembled) 22 1/2" H. x 30" L. x 7" W. Wt. 13 lbs. Mailable.

No. 37A8049.

Model 12-420. Each

**\$8.99**



## STACKMASTER CABINETS

Provides easy, visible, systematic storage. Heavy 24 gauge frames with rubber feet. Two coat charcoal gray finish. Fully painted inside. No sharp edges. Clear-vu plastic drawers withstand shock, resistant to acid, oil and grease. Full shelf supports and guides. Drawer size 5 3/4" x 2 1/2" x 1 3/4". Stack in any combination. Holes in back for hanging.

12 Drawer Cabinet. Size 5 1/4 x 12 x 5 3/4". Shpg. wt. 4 lbs.

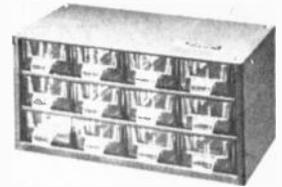
No. 37A9569. Union Steel U-12. Each

24 Drawer Cabinet. Size 11 1/8 x 12 x 5 3/4". Shpg. wt. 7 lbs.

No. 37A9570. Union Steel U-24. Each

**\$2.99**

**\$5.99**



## PROFESSIONAL QUALITY TOOL BOXES

### TWO DRAWER TOOL CHEST

**\$14.95**

Lightweight for carrying to a job. Drawers extend fully for easy access to contents. Spillproof safety stops on drawers. Drawer bottoms embossed to take heaviest loads. Heavy gauge cold rolled steel. Electronically welded seams. Full weather protection. Nickel-plated hardware, drawbolt can be padlocked. Full length welded hinge. Drawers automatically lock when cover is closed. Charcoal enamel, red drawers.

Size Overall: 20 1/2" long, 8 3/4" wide, 10 1/4" high; Till, 20 1/2" L. x 8 3/4" W. x 3 1/8" deep, exclusive of cover; 2 drawers, each 18 3/4" L. x 7 7/8" W. x 2 1/2" D. Shpg. wt. 16 lbs.

No. 37A9568. Union Steel MT-2. Each

**\$14.95**

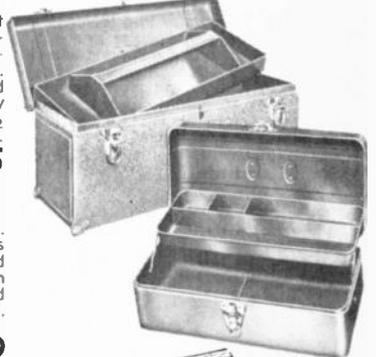


### TOOL BOX WITH REMOVABLE TRAY

Finest quality steel with two bolt catches; built-in padlock eye; rust-proof handle. Full lock-seamed construction, rounded reinforced corners. Continuous welded hinge with lid opening entirely back. Charcoal grey with red tray. Handy Tote Tray, 21 1/2 x 8 1/2 x 1 1/2". Overall size 22x9x8". Wt. 12 lbs. Union Steel 6122.

No. 37A8011. Each

**\$9.95**



### UTILITY BOX

Handy for carrying tools on the job. Automatic retracting tray. Seamless waterproof construction with rounded corners, embossed reinforcement on both cover and bottom. Hard baked enamel finish. Size 14 1/2" L. 7 1/4" W. 6" H. Shpg. wt. 4 lbs.

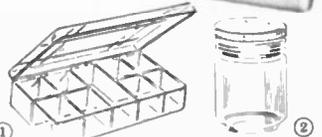
Union Steel 5314.

No. 37A231. Each

**\$3.19**

### HANDY STORAGE CONTAINERS

Keeps small items neatly arranged, always ready for instant use — no more lost or misplaced items.



### ① AKRO-MILS CLEAR POLYSTYRENE BOXES

1001 uses: Electronic parts, screws and nuts, nails, fish hooks and lures, office supplies, coins, stamps, jewelry, buttons, thread, any small parts. Strong, rigid and scratch-resistant . . . retain high polish. Last 2 digits of Mfg. No. Indicates total number of compartments. All have hinged lids. Avg. shpg. wt. 1 lb.

Stk. No.	Mfg. No.	Size of Compartments	Overall Size	Each	12 Ea.
37A8017	05-201	4 3/4 x 2 5/8 x 1 1/4"	4 3/4 x 2 5/8 x 1 1/4"	\$.28	\$.22
37A8018	05-301	6 7/8 x 3 3/8 x 1 1/8"	6 7/8 x 3 3/8 x 1 1/8"	.53	.42
37A8019	05-401	8 3/4 x 4 1/8 x 1 1/4"	8 3/4 x 4 1/8 x 1 1/4"	.63	.50
37A8021	05-204	4-2 3/4" x 1 1/2" x 1"	4 3/4 x 2 5/8 x 1"	.28	.22
37A8022	05-406	6-4 1/2" x 1 3/4" x 1 1/4"	8 3/4 x 4 1/8 x 1 1/4"	.63	.50
37A8025	05-412	6-1 1/2" x 1 3/4" x 1 1/4"	8 3/4 x 4 1/8 x 1 1/4"	.63	.50
37A8027	05-512	2-1 3/4" x 4 1/8 x 1 1/4"	10 3/4 x 5 1/8 x 2"	1.58	1.26
37A8029	05-518	6-1 1/4" x 1 3/8" x 2"	10 3/4 x 5 1/8 x 2"	1.58	1.26

### ② CLEAR POLY JARS WITH LINED METAL LIDS

Made of extra thick heavy gauge shatterproof polystyrene affording years of re-useable service. Each jar comes with a lined screw-on black metal lid. These jars are ideal for storage of miscellaneous hardware and parts. They may even be used for storing various types powdered chemicals.

Stk. No.	Size	Wt.	Each	10 For	50 For
37A8032	2.5 Oz. Jar	1 oz.	15c	\$0.99	\$4.45
37A8033	4.6 Oz. Jar	1 1/2 oz.	18c	1.38	6.12
37A8034	8 Oz. Jar	2 oz.	25c	1.83	8.15

### ② HANDY GLASS JARS WITH SCREW-ON LIDS

37A8030. 2-oz. 2 1/8" dia. x 1 3/4" H. 37A8031. 4-oz. 2" dia. x 4" H.  
Each . . . 17c Per Doz. . . \$1.69 Each . . . 18c Per Doz. . . \$1.79  
Carton of 48 . . . \$4.99 Carton of 48 . . . \$5.40

# VERSATILE WORK SAVING TOOLS



## TAPE WRITERS

Dymo, the leader in tape marking tools, have a built-in quality that only they can offer. Makes easy-to-read labels for practically anything in the home, office or business. All tools have pull tab tape cutoff.

Prints .150" letter on 3/8" tape. Horizontal and vertical wheel and roll of tape included.

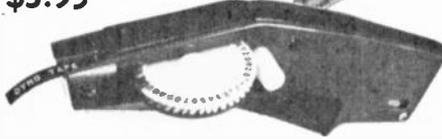
No. 37A7502.

Model 1700, Each

**\$3.95**

MODEL M-14

**\$11.95**



Model M-14 prints .18" letters on 1/4" or 3/8" tape. Selector for regular or wide spacing. Metal construction, baked enamel finish. One roll 3/8" tape included.

No. 37A7506. Each

**\$11.95**

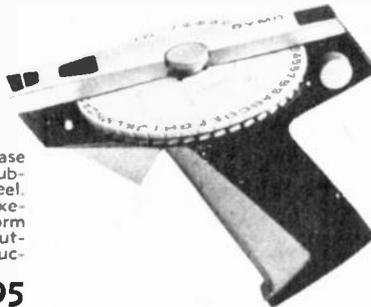
Model M-24 prints .25" letters on 3/8" or 1/2" wide tape. Selector for regular or wide spacing. Metal construction, baked enamel finish. One roll of 1/2" tape included.

No. 37A7507. Each

**\$23.95**

MODEL 1200

**\$69.95**



Prints both upper case and lower case (.205") letters plus regular and subscript numbers on one universal wheel. Uses 1/2" or 3/8" tape. Features "Executive" letter spacing for uniform type-set look. Automatic pull tab cutoff. Light weight all metal construction. Baked enamel finish.

No. 37A7503.

Model 1200, Each

**\$69.95**

MODEL M-11

**\$39.95**



Model M-11 prints .187" letters on metal tape—punches hole in the end of tape for brad mounting. Metal labels are ideal for use on labeling jobs which calls for exposure to extreme heat, chemicals and atmospheric corrosion or rough use. Also prints on vinyl tapes.

No. 37A7505. Each

**\$39.95**

MODEL 1207

**\$34.95**



Model 1207 prints .225" letters on 1/2" tape. Built for rugged factory and industrial use. Aluminum body, chrome finish. Has round cut-off. One roll of tape included.

No. 37A7504. Each

**\$34.95**

## DYMO VINYL TAPES

Specify color: Red, Orange, Green, Blue, Yellow, Black.

1/4" x 12' tape for M-14 and other tools using 1/4" magazine.

No. 37A7702. Each \$ .79 10 asst. Each \$ .68

3/8" x 12' tape for 1700, M-14, M-24 and other tools using 3/8" magazine.

No. 37A7703. Each \$ .98 10 asst. Each \$ .85

1/2" x 12' tape for M-24, M-33, and other tools using 1/2" magazine.

No. 37A7704. Each \$1.32 10 asst. Each \$1.12

3/4" x 200" Guide-Pak economy length tape for Model 1200.

Specify color: Red, Green, Blue, Black.

No. 37A7700. Each \$1.35 10 asst. Each \$1.23

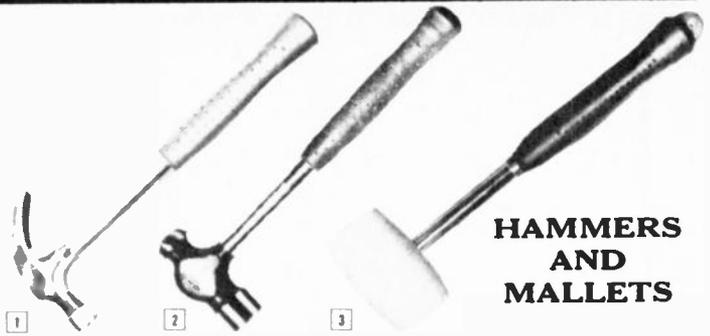
1/2" x 200" Guide-Pak economy length tape for 1200 and 1207 tools.

No. 37A7701. Each \$1.75 10 asst. Each \$1.58

## METAL TAPE FOR MODEL M-11

Stk. No.	Description	Size	Each	10 Each*
37A7705	Aluminum without adhesive	1/2" x 16'	\$0.68	\$0.58
37A7706	Aluminum with adhesive	1/2" x 12'	1.48	1.25
37A7707	Copper without adhesive	1/2" x 21'	1.48	1.25

\*Not assorted.



## HAMMERS AND MALLETS

- 16 OZ. CLAW HAMMER. Drop forged tubular steel. Fully polished head. Rubber grip handle. Quality import. No. 37A894. Each **\$2.49**
- 16 OZ. BALL-PEEN HAMMER. Drop forged tubular steel. Fully polished head. Rubber grip handle. Quality import. No. 37A895. Each **\$2.49**
- 8 OZ. WHITE RUBBER MALLET. Top quality solid white rubber will not mar surface. Rubber grip handle. Import. No. 37A896. Each **99c**



## TWO SPEED ANGLE DRIVE

Reduces speed to 1/2, or doubles speed of any electric drill. Reduces speed for buffing, drilling in masonry, steel — doubles speed for sanding, etc. Swivel angle drive for working in close quarters at any angle. Handle fits either side for easy handling. Wt. 1 1/2 lbs.

No. 37A9534. Each **\$3.75**

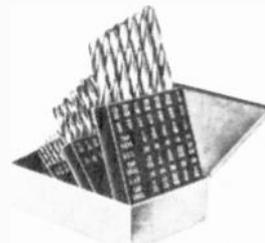


## HAND TALLY COUNTER

**\$2.95**

Dial advances one digit when actuated by thumb lever. Counts to 9,999. Knob resets to zero. Chrome case, 1 3/4" dia. x 1 1/8" thick. Quality import. No. 37A5567

Special Each **\$2.95**



## 29 PIECE DRILL SET

All sizes over 1/4" have 1/4" shank. Chrome vanadium. With drill index. 1/4" to 1/2" by 64th. Quality import. Wt. 3 3/4 lbs.

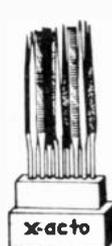
No. 37A9005. Each **\$9.95**



## 13 PIECE HIGH SPEED DRILL SET

Standard jobber lengths: 1/4" to 1/4" by 64th. Plastic index. Quality import. Wt. 1/2 lb.

No. 37A9004. Each **\$3.95**



## X-ACTO SWISS NEEDLE FILES

SET OF 12 FILES **\$5.95**

Extremely handy for hobby and shop work.

Same as used by jewelers, watchmakers, tool and die makers, etc. Includes round, half-round, flat, oval, knife, etc. files—one for every need. In compartmented storage stand. Quality made by Swiss craftsmen.

No. 37A703. Type 60S-ST Each **\$5.95**



## PIN PUNCH SET

Handy kit of 8 high quality forged steel pin punches in most popular sizes 1/8" to 3/4". In convenient wooden case for bench or tool box. Wt. 3 lbs. No. 37A820. Ea. **\$6.80**



## CHASSIS PUNCH SET

5 PUNCHES PLUS BURRING REAMER AT PRICE YOU NORMALLY PAY FOR 2 OR 3 PUNCHES ALONE!

Five most often needed round hole punches. Cuts clean accurate holes in chassis or panel to accommodate sockets, switches, controls, etc. Does the job quickly and easily—drive with any wrench or with T-handle included. Punch sizes are 5/8", 1", 1 1/8", 3/4", 1" and 1 1/2". Complete with punches, dies, T-handle, 1/8" to 1/2" tapered burring reamer, and handsome case. Quality import. Shpg. wt. 3 lbs. No. 37A3204. **\$7.95**

Special Per Set

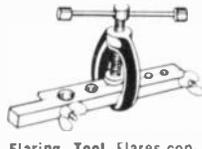
# HIGH QUALITY, LOW COST TOOLS



**Adjustable Circle Cutter.** Adjusts from 7/8" to 4". For cutting round holes in metal, wood, plastic. Import. 37A9545. Each **99c**



**Tubing Cutter.** For cutting copper, brass, aluminum tubing up to 1" dia. Quality import. Wt. 1 lb. 37A5550. Each **99c**



**Flaring Tool.** Flares copper, brass and aluminum tubing from 3/8" to 1 1/2". Quality import. Wt. 1 1/2 lbs. 37A5551. Ea. **\$1.89**



**Drum Rasp.** Hardened and tempered steel. Won't clog, remains sharp. 1/4" shaft, 3/4" dia. x 1 1/2" long. 37A9547 Each **99c**



**3 Piece Mounted Stone Assortment.** Top quality industrial quality stones. With 1/4" shanks. 37A9548 Special **99c**



**7 Blade Holesaw.** Blades made of tempered and hardened steel. Fits electric drill. Import. 37A9544. Each **99c**



**Miniature Screwdriver Kit.** 6 sizes from 1/32" blade. to 3/16" Swivel tops. Wt. 8 ozs. Finest import. 37A838. Each **99c**



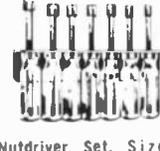
**Wire Bending Jig.** Forms wire sizes to 1/4" dia. Instructions and project diagrams included. Wt. 1/2 lb. 37A5540. Each **99c**



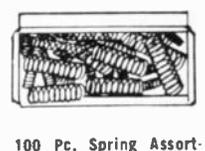
**Screw Extractor Set.** Easy removal of broken screws. Tempered steel. 5 sizes: 1/8 to 3/4" dia. Wt. 6 ozs. Import. 99c 37A3232. Each **99c**



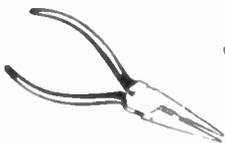
**8" Slip Joint Combination Pliers.** Hot drop forged, heavily chrome plated, mirror polished. Quality import. 99c 37A850. Each **99c**



**Nutdriver Set.** Sizes: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", and 1". With wall bracket. Wt. 1 lb. 37A704. Set **\$3.59**



**100 Pc. Spring Assortment.** Compression, tension and torque types. Many sizes. 12A1913. 100 Asst. **89c**



**6" Long Nose Pliers.** With side cutters. Polished head, milled jaws. Import. Shpg. wt. 5 ozs 37A838. Each **99c**



**5" Diagonal Cutters.** Tempered and hardened. Polished and ground heads. Import. Wt. 7 ozs. 37A839. Each **99c**



**6 Ft. Siphon Pump.** Check valves give smooth pumping action. Polyethylene. Import. Wt. 1/2 lb. 37A5541. Each **99c**



**"C" Clamp Set.** Contains one 2 1/2" and two 1" clamps. High quality malleable steel. Import. 37A3328. Set **99c**



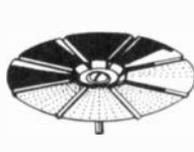
**Work Bench Magnifier.** 3 inch diameter with flexible shaft and metal base. Import. 37A3327. Each **99c**



**10-Inch Scissors.** Sharp edges permit precision cutting. Plated blades. Magnetic tips. Imported. 37A3333. Each **99c**



**2 Piece Magnifying Glasses.** Fine quality lenses. Black plastic handles. 2 sizes. Import. 37A3332. Set **99c**



**Disc-Rasp.** Fits electric drill. 5" bottom surface. Never clogs or needs sharpening. Wt. 6 ozs. 37A9524. Each **\$1.19**



**Wood Chisel Set.** Includes 1/2", 3/4" and 1". Hardened and tempered steel. Made in U.S.A. 37A3329. Pet Set **99c**



**8 Inch Adjustable Wrench.** Fully drop forged. Chrome plated. Finest quality import. 37A3334. Each **\$1.99**



**3/4 Inch Metal Cutter.** Heavy duty serrated cutting edges. Vinyl grip handles. Quality import. 37A3331. Each **\$1.95**



**Hacksaw Pistol Grip.** Adjustable frame. With 10" inch blade. From Japan. 37A3336. Each **99c**



**Electrician Knife.** Wire stripper and jack-knife blades. Safety catch. High carbon steel blades. Import. 99c 37A3338. Each **99c**



**Revolving Hole Punch.** Tempered steel. Six punching sizes. Quality import. 37A3330. Each **\$1.19**



**Tap Set.** Contains 6-32, 8-32, 10-32, 3/4 x 24, and 1/2-20 taps and tap wrench. 37A3335. Per Set **99c**



**6 Pc. Screwdriver Set.** 3 slotted, stubby slotted and 2 Phillips. Vinyl grip. Made in U.S.A. 37A897. Per Set **\$1.19**



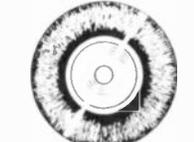
**36 Inch Flexible Shaft.** Operates off motor or electric drill. Quality import. Wt. 1 1/2 lbs. 37A9500. Each **\$2.69**



**8" Adjustable Ratchet Wrench.** One hand operation. Drop forged, polished and chromed. Import. 37A763. Each **\$1.99**



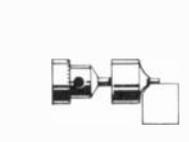
**1/4" Wheel Arbor.** 1/2" threaded shaft holds buffing wheels, wire brushes, grinding wheels. Wt. 6 ozs. 37A9528. Each **39c**



**4 Inch Wire Wheels.** 1/2" center hole. 37A9532—Coarse. 37A9533—Fine. Choice Each **99c**



**Drill Stand.** Holds electric drill securely. Fits 1/4 and 3/8" drills. Wt. 4 ozs. 37A9529. Each **89c**



**Radius Cutter.** Fast, clean, corner rounding on 3/4" radius with any drill. Tempered tool steel. 37A9527. Each **\$1.19**



**6-Piece Power Bit Set.** Contains 6 sizes: 3/8, 1/2, 5/8, 3/4, 7/8 and 1". Round 1/4" shanks. 37A9525. Set **88c**



**Knife and Scissors Sharpener.** Use with any electric drill or bench motor. 1/4" shank. 37A9530. Each **89c**



**Lawnmower Sharpener.** Fits any 1/4" drill. Will sharpen any rotary lawnmower blade. Wt. 8 ozs. 37A9014. Each **99c**



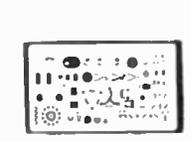
**Adjustable Wire Stripper.** For solid or stranded wire from #6 to smallest. Hardened ground steel blades. 37A702. Each **99c**



**Safety Eye Shield.** Lightweight, clear plastic. Ventilated. Fit over glasses. Wt. 1/2 lb. 37A3003. Each **99c**



**X-Acto Solder Aid Kit.** Knife, scraper, forked blade, angled tip, straight probe tip and brush. 37A3272. Set **\$2.29**



**Electronic Drafting Template.** Symbols of all kinds of components. 9 1/2 x 5 1/2". 37A5508. Ea. **\$2.95**



**Tool Kaddy.** Holds Tools of any shape and size. All metal, mounts on wall or workbench. Wt. 1/2 lb. 37A3002. Ea. **\$1.60**

# DO IT YOURSELF AND SAVE

## ELECTRIC GLUE GUN

ONE MINUTE FIXING AND FASTENING TOOL

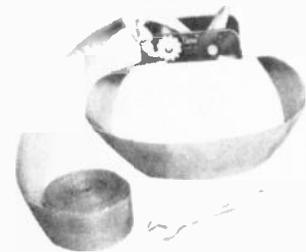
**\$4.99**

MAKES SUPER-STRENGTH WATERPROOF BONDS IN ALMOST ANY MATERIAL



Permanently bonds in just 60 seconds: wood, plastic, fabric, leather, metal and many other materials. Uses unique hot-melt solid glue and sealer sticks—never dries out, no bottles or tubes to leak. White sealer sticks provide instant-set, water-proof caulking around bathtubs, shower stalls, etc. With 4 glue sticks, 3 sealer sticks. Operates on 115 V. AC.

No. 37A5521. Shpg. wt. 1 1/2 lbs. Each ..... **\$4.99**  
 No. 37A5553. Thermogrip Glue Sticks. Package of 14 ..... 65c  
 No. 37A5548. Thermogrip Glue Sticks. Box of 60 ..... \$2.12  
 No. 37A5554. Thermogrip White Sealer Sticks. Package of 14 ..... 65c



## PONY BAND CLAMP

**\$3.66**

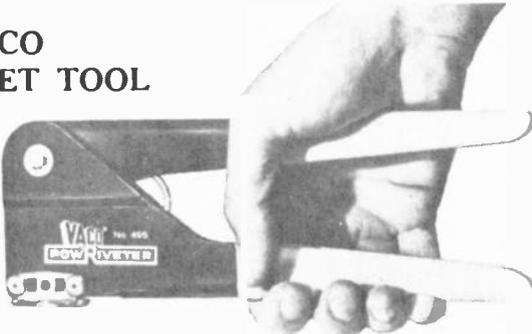
12 tooth ratchet provides easy adjustment. Instant release — no additional tightening and "backing off" required. 15 foot nylon band, 1000 lb. test, 1" wide. Furnished complete with steel wrench and 4 steel corners for use in clamping picture frames or similar mitered joints.

No. 37A849. Shpg. wt. 1 lb. Each ..... **\$3.66**

## VACO POW-RIVET TOOL

SETS 3 SIZES OF RIVETS

**\$4.95**

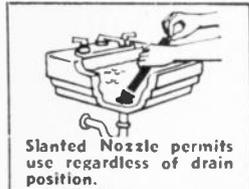


A simple squeeze will fasten anything up to 1/2" thick, from one size. Sets 3 sizes of rivets. Provides the fastest, most convenient means ever for fastening jobs in almost every type of work! They are ideal for "blind" holes. Use Rivets in place of nuts and bolts, in place of ordinary rivets, in place of soldering, brazing or adhesives. You'll do a neater, stronger job ... many times faster. Ruggedly constructed with easy grip insulated handles.

No. 37A5518. Vaco 495 Tool. Wt. 1 lb. Complete with Asst. of Rivets ..... **\$4.95**  
 Net Each .....

Length	For Work	1/8" Dia. Cadmium Plated Steel Rivets	3/8" Dia. Aluminum Rivets	Stk. No.	100 For
Short	1/8" thick	37A5524	15 for 49c	37A5527	\$1.19
Medium	1/4" thick	37A5525	20 for 49c	37A5528	1.49
Long	1/2" thick	37A5526	15 for 49c	37A5529	1.89
Short	1/4" thick	37A5530	15 for 49c	37A5533	\$1.29
Medium	1/2" thick	37A5531	12 for 49c	37A5534	1.49
Long	3/4" thick	37A5532	10 for 49c	37A5535	1.59

**BACK-UP PLATES** for use where holes are too large for Rivets. Reinforce both sides of hole when riveting soft materials.  
 37A5545. For 1/8" Dia. Rivets. Box of 40 ..... 44c  
 37A5546. For 1/4" Dia. Rivets. Box of 30 ..... 44c



Slanted Nozzle permits use regardless of drain position.

**GUARANTEED TO UNCLOG SINKS ... FAST AND EASY!**

## SINKMASTER

THE SURE AND SAFE PLUMBER'S HELPER

**\$4.98**

Unclogs sinks the fast, easy way ... without harmful chemicals. Also handy for wash tubs, laundry tubs, bath tubs ... carburetors or gas lines ... plus many, many other uses. New, modern hydraulic Sinkmaster gives instant up to 70 pound pressure with each stroke ... 70 pounds greater pressure than out-moded hand plunger. Sinkmaster will last a lifetime and out-do 1000 plungers! Specially treated to eliminate rusting and corrosion.

Shpg. wt 1 lb  
 No. 37A5564. Each ..... **\$4.98**



MODEL 72

**\$24.95**



If you need to lift—stretch—lower—or pull something, American Power-Pull cable hoist-puller can make your job easier. Completely portable, rust-resistant and light weight (under 7 1/2 lbs.) these tools come in handy for thousands of everyday jobs. With Plastisol handle. Model 72(P). One ton capacity, 6' lift. No. 37A5568. **\$24.95**  
 Each .....  
 No. 37A5569. Model 144(P). One ton capacity 12' lift. Each ..... \$27.95  
 No. 37A5570. Model 72-A(P). Two ton capacity 6' lift. Each ..... \$37.95

## NEW FLAME OUT CO2



## FIRE EXTINGUISHER IN AN AEROSOL CAN

Most effective home fire extinguisher! Put out fires at the touch of a button. Effective on all kinds of fires: oil, gas, cloth, paper, wood, etc. Works instantly without any residue. Non-toxic, non-irritating. 16 oz. can. No. 37A5571. **\$2.49**  
 Each .....



## 2000 LB. CAPACITY HOIST

**\$6.99**

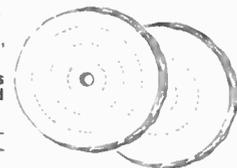
Completely assembled ready to use. 7 to 1 lift ratio. 65 feet of extra strong long lasting rope. Nylon rollers, cadmium plated housings, double grip safety hooks, locking device to eliminate slack. Wt. 2 lbs. Quality Import. No. 37A5573. **\$6.99**  
 Each .....

## FIRE EXTINGUISHER

FOR: • Auto, • Boat, • Home, • Truck  
 U.L. Listed. Meets ICC and Coast Guard Requirements.



Pressurized dry chemical extinguisher effective on gasoline, oil, grease, paint and electrical fires. 2 1/2 lb. capacity. Has indicator button to check pressure. Guaranteed to maintain operating pressure 5 years if unit has not been tampered with, has not been discharged and is intact. With mounting bracket. Made in U.S.A. Shpg. Wt. 4 lbs. No. 37A5572. **\$6.95**  
 Each .....



## THICK LUSTRE POLISHING WHEELS

High count muslin for a lustrous polish on metal, plastic, rubber, etc. 1/2" bores.  
 37A9578. 3" Polisher. Each ..... 39c  
 37A9531. 4" Polisher. Each ..... 49c  
 37A9579. 6" Polisher. Each ..... 99c  
 37A9528. 1/2" Arbor to use wheels in electric drill chuck. Each ..... 39c

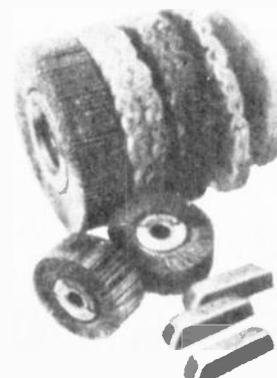
## POLISHING COMPOUND

17A1382. Jewelers Rouge. 2 Oz. Bar. Each ..... 30c  
 17A1383. Set of 4 Basic Polishing Compounds. Includes: Red Rouge, White Diamond, Brown Tripoli and Black Emery. Wt. 1 lb. Per Set. \$1.20

**DO IT YOURSELF—LIKE A PRO!  
 BUFF & POLISH METALS & PLASTICS  
 AS A HOBBY OR FOR PROFIT**

## Schaffner's COMPLETE METAL FINISHING KIT

**\$19.95**



Enables you to put a lustrous professional finish on all kinds of metal. With various grit sizes with both flap-wheels and buffs — including compound for perfect finishing on flat, curved or irregular surfaces. Wood, Plastic, Metal — Grinding, Blending, Polishing, Satin finishing — all in one outfit. Wheels have 3/8" arbor with adaptor to fit chuck of electric drill.

**Starter Kit—10 includes: 3 assorted flap-wheels, 2 satin finishing wheels, 2 buffing wheels and 4 bars of buffing compound.**  
 No. 37A9577. Each ..... **\$19.95**

# OUTSTANDING B-A VALUES

**ENGINEERED FOR THE REAL MECHANIC**

## 10 PIECE 3/8 INCH DRIVE SOCKET SET

**\$6<sup>99</sup>**

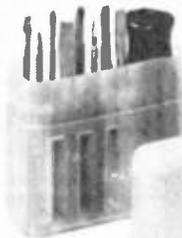


Deluxe quality heavily chrome plated. Heavy duty drop forged ratchet. Contains 7-12 point sockets: 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1-1/8, 1-1/4, 1-3/4, 2. Convenient molded plastic case. High quality import from Japan. **\$6.99**  
No. 37A892. Each.

## 9 PIECE SCREWDRIVER KIT

**SPECIAL B-A LOW PRICE \$1<sup>95</sup>**

Miniature tools lock in a master handle for extra driving power. Contains three sizes of slotted and three sizes of Phillips screwdrivers, an awl, a screw punch and master handle. With vinyl case. Shpg. Wt. 1/2 lb. No. 37A893. **\$1.95**  
Per Set



**ALL TOOLS HAVE SHOCKPROOF PLASTIC HANDLES**

## THOR SPEED SNIPS ELECTRIC SCISSORS

**\$5<sup>95</sup>**

**SAFE, EASIER FOR EVERY CUTTING JOB**

This improved version of the popular Speed-Snips electric scissors eliminates tiresome hand cutting. Perfect for hi-fi installers, service shops, tailors, housewives—anyone requiring professional quality scissors. Safe even for children, fully approved by UL and CSA. Lightweight and easy to handle. Precision ground chrome plated blades stay sharp longer. Durable Dupont Zytel case. Size 6 1/4" L. x 1 1/2" W. x 2 1/8" H. With 6 ft. cord. Wt. 9 ozs. **\$5.95**  
No. 37A314. Each



8" flexible neck beams light into inaccessible areas. 1000's of uses... ideal for inspecting and repairing radios, TV's, appliances, etc. Chrome plated goose-neck, durable plastic handle. Uses 2 standard "C" batteries (not supplied). Top quality import. Shpg. wt. 1 lb. **\$2.49**  
No. 37A3055. Each  
21A2. Battery (requires 2) Ea. 17c

## FLEXIBLE GOOSENECK FLASHLIGHT

## GULTON NICKEL CADMIUM BATTERIES & CHARGER BATTERIES GUARANTEED 5 YEARS\*

Nickel cadmium batteries recharge to full power over and over. Power output remains constant, will outlast most toys and appliances. \*Factory will replace batteries without charge due to any defect in materials or workmanship within 5 years from date of purchase.

Charger and 2 "D" Size Rechargeable Nickel Cadmium Batteries. Will also charge "C" size batteries. No. 13A8021. **\$9.95**  
Net

Box of 2 "D" Size Rechargeable Nickel Cadmium Batteries. No. 21A5050. Box of 2, Per Box. **\$5.98**

Box of 2 "C" Size Rechargeable Nickel Cadmium Batteries. No. 21A5051. Box of 2, Per Box. **\$4.98**



## RECHARGEABLE FLASHLIGHT

**\$3<sup>95</sup>**

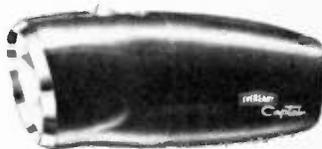
Powered by Nickel Cadmium battery pack. Never needs replacing. Burns brightly for hours, recharges again and again by removing cap and plugging into any 110 V. AC outlet. Magnifying lens provides a brilliant light. Handsome, contoured shock resistant plastic case. Small size fits in pocket or purse. 2-year written guarantee. Wt. 8 ozs. **\$3.95**  
No. 37A3054. Special Ea.



## EVEREADY RECHARGEABLE FLASHLIGHT

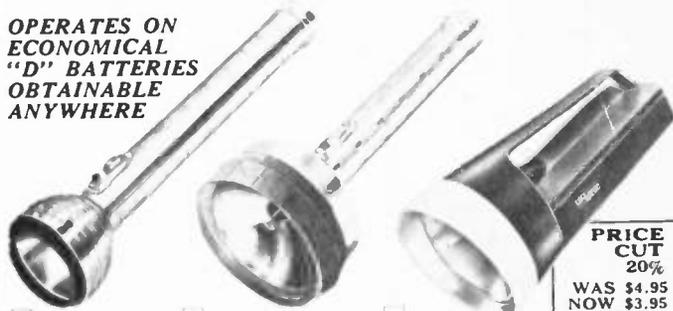
**\$10<sup>99</sup>**

Most Powerful Light of its size. Twice the light of a standard 2-cell flashlight. Sleek black case. Never needs batteries... contains powerful, long, lasting rechargeable nickel cadmium batteries. Holds a charge (when not in use) for over a year. Provides over an hour of continuous, strong, bright light per charge. Can be recharged for years from any 120 V. AC household outlet. One year warranty. **\$10.99**  
No. 37A3277. Eveready 3300. Special Each



## POWERFUL FLASHLIGHTS AND LANTERNS

**OPERATES ON ECONOMICAL "D" BATTERIES OBTAINABLE ANYWHERE**



**PRICE CUT 20% WAS \$4.95 NOW \$3.95**

① **HANDY 5-CELL FLASHLIGHT**  
Fine for home, cabin, car, searchlight head, long-range beam. Chrome finish. Red lens guard. Uses 5 "D" batteries. Import savings. **88c**  
No. 37A3000. Each

② **"SUPER POWER" SEALED BEAM 4-CELL FLASHLIGHT**  
Giant flashlight—has extra large sealed beam head for powerful, long-range auto headlight beam! Equipped with GE #4546 sealed beam unit. Gleaming chrome on seamless aluminum. Uses 4 regular "D" batteries. **\$3.95**  
No. 37A3326. Each

③ **HI-INTENSITY 9 V. LANTERN WITH BLINKER**  
It floats. Has long range beam. Unbreakable case and lens. 2 waterproof switches. Automatic blinker. Red case with white lens guard. Uses 6 "D" batteries (included). **\$3.95**  
No. 37B9. Was \$4.95. Now, Special Each

## DISCOVERER II CORDLESS FLUORESCENT LANTERN \$14<sup>95</sup>

Lightweight fluorescent lantern... portable, weather-proof. Push button—on-off switch. Transistorized circuitry allows for long battery life, as much as 8 hours of continuous operation with no intensity loss. Operates on 9 "D" cell batteries (not included). Throws strong, bright even light. Perfect for boats, camping, auto emergency, blackout emergency. Uses standard GE or Sylvania F4T5CW bulb. Wt. 3 lbs. **\$14.95**  
No. 41A6022. Each



**LONG LIFE "D" BATTERIES**  
No. 21A237. Fresh Imports. Package of 6...59c

## BURGESS FLUORESCENT SAFARI LITE

There is no light like it! Makes your tent or trailer come alive with fluorescent light—quietly, safely and economically. Safari Lite is outdoorsman's useful companion—made to hang or carry anywhere. No disappointing dimness. No spilly fuel or lingering fumes. No irritating smoke or noise. For your tent, trailer, patio, boat—and for home power blackout emergencies. Can be plugged into 110 volt AC outlet if desired. About 100 hours battery life on 2 Burgess Z46 batteries (included). Standard 6000 hour FAT5-CW 12" fluorescent bulb. 12 3/4 x 4 x 7 3/4". Wt. 10 lbs. **\$19.95**  
No. 41A6018. Each  
No. 21A332. Burgess Z46 Battery. Each...\$3.22



# LIGHTING SPECIALTIES

## Swing-O-Lite

PRECISION WORK  
AND INSPECTION  
LIGHTS



1  
DESK LAMP  
MODEL HB604  
FOR TWO  
15-Watt Lamps

2  
CLAMP-ON  
MODEL 604C  
FOR TWO  
15-Watt Lamps

3  
FOR TWO  
15-WATT  
LAMPS

4  
MODEL BBM-9  
Glare-Free  
Illuminated  
Magnifier

### FLUORESCENT DESK LAMPS

Feather-touch control allows adjustment of arms to ANY position, smoothly, noiselessly and without effort; 36" total length of arms with "universal joints" at base, center and shade. Shade with "on-off" switch on top, is 18" long, 4 1/2" wide, has high light output reflector. Smooth baked enamel finish. UL approved. With cord, less lamps.

#### ① DESK MODEL HB-604

Has heavy no-tip cast base with rubber bumpers on bottom. Wt. 20 lbs. Less Lamps.  
No. 41A8035—Gray Your Choice **\$27.78** 3 @ **\$24.95**  
No. 41A8036—Walnut Brown Each

#### ② CLAMP-ON MODEL 604C

Easily clamped to edge of any desk or table up to 2 1/4" thick. Wt. 10 lbs. Less Lamps.  
No. 41A8037—Royal Gray Your Choice **\$19.95** 3 @ **\$18.50**  
No. 41A8038—Walnut Brown Each

### PARALLEL ARM ACTION GIVES PERFECT CONTROL

Most convenient seeing aids made! Lamp head can be rotated and tilted to any position. Arm extends up to 45" in any direction. Unbreakable all-steel base has extra stable double clamps for edge of desk or bench.

#### ③ FOR TWO 15 WATT LAMPS

Finest light for close work of any kind, used by draftsmen, machine operators, offices, homes. Wt. 10 lbs. Less Lamps.  
No. 41A8000—Gray Your Choice **\$25.95** 3 @ **\$23.50**  
No. 41A8001—Brown Each

#### ④ INSPECTION LAMP-MAGNIFIER

Both hands free to manipulate work. Furnishes glare-free light from 22 watt circline lamp around 5" distortion free lens. Wt. 10 lbs. Less Lamp.  
No. 41A8039—Gray **\$28.75** 3 @ **\$25.59**  
Net Each



## Swing-O-Lite

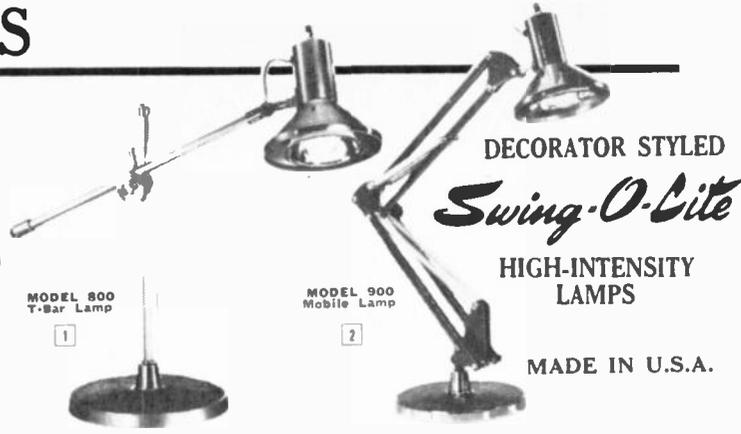
### CLAMP-ON INCANDESCENT LIGHT

# \$13.50

Has balanced parallel acting support arms. Moves with a "flick of the finger" and stays put! Glide arms extend 45" in any direction from base. Clamp fits edge of table or other flat surface. Shpg. wt. 7 lbs. Less bulb.  
No. 41A8034—Gray.  
Net **\$13.50** 3 @ **\$12.18**  
Each

### INCANDESCENT DESK LAMP

A lamp of a thousand uses! Fine for every room of the home, office, shop, lab. Fully adjustable to any position. Brass socket with push-button switch and 7-inch parabola shade take any size lamp to 75 watts. Shade removable for "poking" into small areas or for heat lamps. Has weighted base, 6 ft. cord and plug. Wt. 4 lbs. Less Lamp.  
No. 41A8014 **\$3.19** 6 @ **\$2.89**  
Net Each



DECORATOR STYLED

## Swing-O-Lite

HIGH-INTENSITY  
LAMPS

MADE IN U.S.A.

### PURE WHITE CONCENTRATED LIGHT EXACTLY WHERE YOU WANT IT!

Latest generation of the popular high intensity lamp. Needed in every room of the house, in the shop and office—wherever glare-free illumination is desired for work, hobbies, sewing, reading, studying, etc. Complete mobility in all directions puts light exactly where you need it. Oversize shade gives wide circle of illumination with more than 2 1/2 times the light area of other high intensity lamps. Bright reflecting surface and 115 V. 405-11 bulb are equal to 200 watts illumination. Specially constructed cool-aid shade does not retain heat. Since no transformer is needed there is no hum. Bulb life, up to 500 hours. All electrical parts U/L approved.

#### ① MODEL 800 T-BAR LAMP

For modern or traditional decor. Has 24" extension arm, easy action swivels. A fine desk or bedside table style that can even be wall mounted with optional wall bracket. C-clamp model fastens easily to back or side edge of desk top, head board, etc. Available from stock in brush silver or gold; available on factory order (allow 2 weeks) in red, black or blue satin. Specify Color when ordering. Shpg. wt. 3 lbs.

Stk. No.	Mfg. No.	Description	Net Each
41A8028	800B	With Weighted base	\$15.69
41A8029	800C	With C-Clamp	14.59
41A8032		Accessory Wall Mounting Bracket	2.09
41A8033		Replacement 405-11 Bulb	1.25

#### ② MODEL 900 ALL-ANGLE MOBILE LAMP

Parallel arm action with steel springs provides fastest possible adjustment for best light angle. Arm length 24". Use optional bracket for wall mounting. Available from stock in brush silver or gold; available on factory order (allow 2 weeks) in red, black, or blue satin. Specify Color when ordering. Shpg. wt. 5 lbs.

Stk. No.	Mfg. No.	Description	Net Each
41A8030	900B	With Weighted Base	\$16.59
41A8031	900C	With C-Clamp	15.50
41A8032		Accessory Wall Mounting Bracket	2.09
41A8033		Replacement 405-11 Bulb	1.25

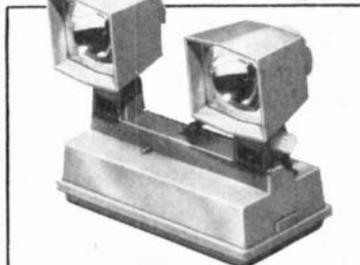


### PICTURE LAMPS

Beautiful brass plated lights to display all your prized pictures and portraits. Recommended by interior decorators. Use for maps, shelves, displays too. Adjustable brackets. Prefocused reflectors with switch. Made in U.S.A. Complete with bulb. U.L. approved. For 115 V. AC. Wt. 1 lb.

No. 41A6002. 7-Inch Brass Finished Light	<b>\$3.95</b>
No. 41A6003. 14 1/2-inch Brass Finished Light	<b>\$5.95</b>

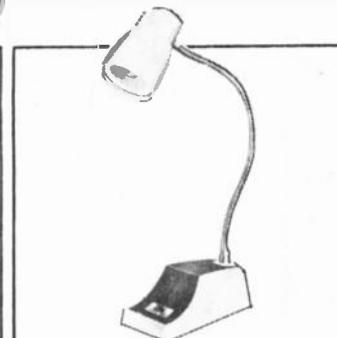
MAKES  
YOUR  
PAINTINGS  
COME TO LIFE!



### CORDLESS CLOSET LIGHT WITH AUTOMATIC SWITCH

Adjustable twin lights provide high intensity output. Attaches anywhere with tape or screws (included). Light goes on when door is opened. Also attaches for sliding door use. Uses standard PR2 flashlight bulbs (included) and 4 "D" flashlight cells (not included). Shpg. wt. 2 lbs.

No. 41A4018 Special Each	<b>\$4.95</b>
No. 21A1, "D" Cell Battery. Ea. 17c	



### HI-INTENSITY LAMP

Brighter, glare-free light. Deluxe Hi-Lo-Off switch. Balanced base with genuine walnut veneer inlaid. Double insulated shade. 12" brass plated steel gooseneck directs light where you want it. UL approved. For 115 v. AC. Beautiful beige and walnut finish. Top quality import, at a low price! Wt. 2 1/2 lbs.

No. 41A6001. Each	<b>\$6.25</b>
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# LIGHTING FIXTURES BELOW BUILDER'S PRICES!

BEAUTIFY YOUR HOME WITH THESE DELUXE QUALITY INCANDESCENT LIGHTS



## BEDROOM CEILING FIXTURE

B-A LOW PRICE **\$6.95**

**BELOW BUILDER'S PRICE!**

Finest way to up-grade the ceiling lighting in all your bedrooms. Styled like the very expensive fixtures found in upper price bracket homes. Round 15" white translucent glass with deluxe frosted shadow edging, brass finished ring and hanger. 3 light socket. No. 41A376. Shpg. wt. 8 lbs. **\$6.95**  
B-A Low Price Each.....



## BATHROOM WALL BRACKET

B-A LOW PRICE **\$7.95**

**BELOW BUILDER'S PRICE!**

Beautiful antique white with opal glass wrap around shade and rosette perforated aluminum metal backing. Complete with grounded convenience outlet. Very attractive.  
2-Light Bracket. 6 1/2" wide, 14" L. 41A377. Wt. 4 lbs. Each.....**\$7.95**  
4-Light Bracket. 6 1/2" wide, 24" L. 41A378. Wt. 6 lbs. Each.....**\$14.95**

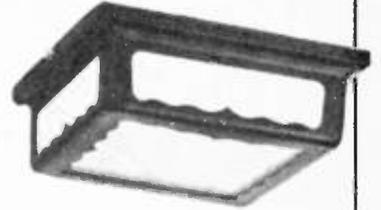


## KITCHEN OR HALL CEILING FIXTURE

B-A LOW PRICE **\$13.55**

**BELOW BUILDER'S PRICE!**

Beauty and excellent working light, too for kitchen, dining nook or rear hall. Round 12" dia. shade, flush ceiling hanger. Body length 7". Satin white glass and antique copper finish.  
2-Light—16 Inch Dia. Fixture. 41A8040. Wt. 6 lbs. Each.....**\$13.55**  
3-Light—16 Inch Dia. Fixture. 41A8041. Wt. 8 lbs. Each.....**\$19.50**

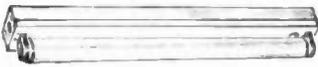


## FLUSH MOUNT CEILING FIXTURE

B-A LOW PRICE **\$5.95**

**BELOW BUILDER'S PRICE!**

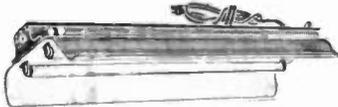
Universal choice for recreation areas, hallways, porches, wherever maximum ceiling light spread is required. Stamped aluminum, jet black finish. 3 1/4" deep. Shpg. wt. 4 lbs.  
1-Light Fixture. 7 1/2" Square. 41A8042. B-A Low Price. Each **\$5.95**  
2-Light Fixture. 9 1/2" Square. 41A8043. B-A Low Price. Each **\$7.95**



## COOL FLUORESCENT LIGHTING FOR BROAD AREAS

U/L approved components throughout, heavy steel bodies finished in baked white enamel and removable covers to permit easy installation. Rapid start. Please specify choice of lamp.

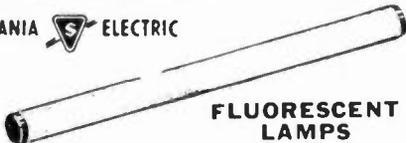
Stk. No.	For Lamp	Chunnel Size	Weight	Net Ea.	3 @ Ea.
41A8017	15-Watt, 18"	2 x 2 3/4" W.	4 lbs.	\$3.79	\$3.52
41A8018	20-Watt, 24"	2 x 2 3/4" W.	5 lbs.	3.95	3.65
41A8004	30-Watt, 36"	2 x 2 3/4" W.	8 lbs.	6.95	6.55
41A8005	40-Watt, 48"	2 x 2 3/4" W.	10 lbs.	7.49	6.89



## RAPID START DOUBLE-40 PLUG-IN UNIT

Top efficiency, portable illumination—quickly installed or moved. Two 40-watt lamps spaced 5" apart in full 13" wide reflector. U/L approved components. Hanging brackets on each end. Super-white reflecting surface. 48 1/2" L. x 13 1/4" W. x 6" D. Wt. 21 lbs. 6' cord and plug. Complete with your choice of 40-watt lamps.  
No. 41A8006. Each **\$13.49** 3 @ Each **\$12.39**

SYLVANIA ELECTRIC



## FLUORESCENT LAMPS



## CIRCLINE LAMP

Regular start (for fixtures with starters). Available in DAYLIGHT; COOL WHITE (4500° White); WARM WHITE.

Day-light	Cool		Warm		Net Wt.	Net Ea.	Lots of 6 Lamps Each	Lots of 24 Lamps Each
	White	White	White	White				
Stk. No.	Stk. No.	Stk. No.	Stk. No.	Stk. No.	Rated Lamp Watts			
41A8019	41A8021	41A8023	41A8024	41A8024	15	8 oz.	\$1.06	\$0.94
41A8020	41A8022	41A8024	41A8024	41A8024	20	8 oz.	.98	.86
41A8008	41A8007	41A8009	41A8010	41A8010	30	1 lb.	1.19	1.08
	41A8009	41A8010	41A8010	41A8010	40	1 lb.	1.06	.94

\*Rapid or regular start.

## CIRCLINE FLUORESCENT LAMPS

12" Dia.	8" Dia.	Stk. No.	Rated Lamp Watts	Net Wt.	Net Ea.	Lots of 6 Lamps Each	Lots of 24 Lamps Each
		41A8025	32	1 lb.	3.00	2.82	2.65
		41A8026	22	1 lb.	3.00	2.82	2.65

## SYLVANIA FLUORESCENT STARTER SWITCHES

No.	Type	For Lamp	Net Ea.	10 @ Ea.	50 @ Ea.
41A353	FS-2	14, 15, 20-watt	\$0.26	\$0.24	\$0.23
41A354	FS-4	13, 30, 40-watt	.26	.24	.23
41A355	FS-5	4, 6, 8, 22, 25-watt	.42	.38	.36
41A356	FS-12	32-Watt Circline	.28	.26	.25

## SIMULATED GAS LIGHT KIT GIVES ANY ELECTRIC LAMP AUTHENTIC GAS LIGHT CHARM

Long life replacement for regular light bulb... with convenience of electricity! **\$1.98**

Simple to install in outdoor lanterns, ornamental fixtures, hurricane lamps etc. . . . just screw into regular lamp socket and forget it!

Operates cheaply, for less than 1/10 the cost of gas. Fibre-glass mantle is burnout proof, never needs replacement. Produces light a-plenty for normal "gas light" installations. Complete with 3000 hour long life GE bulb. **\$1.98**

No. 41A349. Net Each.....



## DELUXE ALL-ELECTRIC POST LANTERN

DECORATIVE CHARM, CONVENIENCE AND SAFETY FOR YOUR HOME

Finest overall appearance for any home, large or small! Adds just the right decorative touch. Can be supplied with automatic control to turn on at dusk, off at dawn, or with weatherproof convenience power outlet. Heavy beveled glass panels, satin black finish with brass trim. Has frosted chimney to enclose bulb and add authentic lantern charm. Cage is 8" square, 9" high. Overall height 14". With 3" post fitter. Wt. 7 lbs. No. 41A8045. Lantern Only **\$17.95**  
B-A Low Price Each.....

**\$17.95**

LANTERN ONLY

Lantern with 6 Ft. Post. No. 41A8046. Wt. 15 lbs. Ea. \$24.90  
Lantern with Post and Weatherproof Outlet. Wt. 15 lbs. No. 41A8047. B-A Low Price...\$28.40  
Lantern with Post and Electric Eye Control. Wt. 15 lbs. No. 41A8048. B-A Low Price...\$32.75  
Lantern with Post, Outlet and Electric Eye Control. Wt. 15 lbs. No. 41A8049. B-A Low Price...\$36.25  
Optional accessories can be ordered only with complete post and lantern assemblies.

OPTIONAL ELECTRIC EYE CONTROL CONVENIENCE OUTLET AND POST AVAILABLE



## COLONIAL WALL BRACKET LANTERN

**\$12.95**

Carefully styled decorative fixture with beveled glass panels for accenting entrance or wall. Polished brass hood and central bracket, black lantern frame, bracket and drop. Overall length 12". Lantern is 5 1/2" square, extends 5 1/2" from wall. Wt. 3 lbs. For standard bulb. No. 41A8044. **\$12.95**  
B-A Low Price....

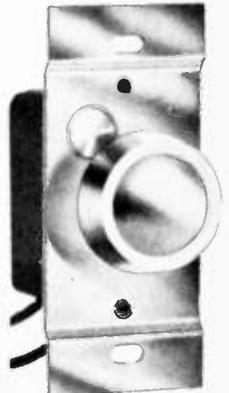


## FULL RANGE DIMMER CONTROL

JUST TURN DIAL FOR DESIRED LIGHT LEVEL BETWEEN FULL BRIGHTNESS TO OFF... PUSH DIAL FOR "ON-OFF" AT PREDIALED SETTING.

**\$6.95**

Have subdued lighting for glamour, TV, during sleeping or convenience in any room. Dependable solid state diodes smoothly control flow of power to incandescent light fixtures. Permits full brightness or dim as desired. Simple to install, wired in existing switch in standard wall box. For 115 V. 60 cy. AC. 600 W. capacity. Wt. 1 1/2 lb. **\$6.95**  
No. 41A4020. Each.....



# ELECTRICAL SPECIALTIES

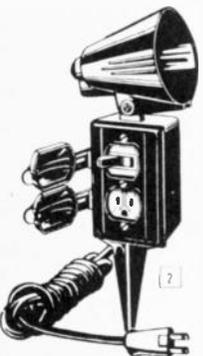
## HEAVY DUTY MULTIPLE OUTLET BOXES FOR 115 VOLT AC POWER DISTRIBUTION FOR SHOP, BUSINESS, HOME



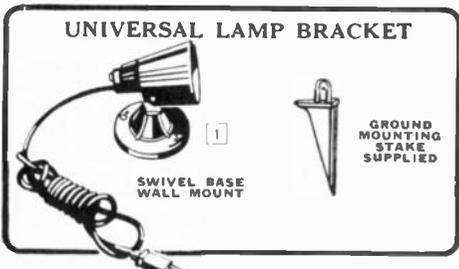
NOW AT LOWEST PRICES EVER!

Will safely and conveniently distribute power for appliances, test equipment, shop machinery, office and factory equipment, etc. . . . literally hundreds of uses around the home, office, farm and business. Heavy duty construction, all components U/L approved. Fused for 15 amps. 115 V. AC. Average shipping weight 3 lbs.

- ① 6 Standard Outlets with Pilot Light and Master Switch. No. 41A4000. Net Each **\$6.88**
- ② 4 Standard Outlets with 4 Separate Switches. No. 41A4017. Net Each **\$6.88**
- ③ 6 "U-Ground" Outlets with Pilot Light and Master Switch. No. 41A4001. Net Each **\$8.90**



## WEATHERPROOF OUTDOOR-INDOOR LAMP HOLDERS



① LAMP HOLDER FOR R40 & PAR38 REFLECTOR TYPE LAMPS WITH OUTLET BOX PLATE AND GROUND MOUNTING STAKE  
Perfect for floodlighting gardens, lawns, patios, Holiday lighting. Unbreakable housing, stake and mounting plate—fully adjustable. Decorator styled housing and plate in forest green. Comes with attached 6 ft. 18-2 cord set. Shpg. wt. 7 lbs. No. 41A6010. Net Each **\$1.95** 3 Lots Each **\$1.75**

② WEATHERPROOF OUTLET BOX AND LAMP HOLDER WITH SWITCH OPERATED LAMP HOLDER AND "U" GROUND OUTLET  
Portable, safe, eliminates special wiring. For garden and patio lighting using R40 and PAR38 type lamps. Supplies convenient outlets for electric barbecues or power tools. Comes with 20 ft. heavy duty 18-3 cord set and single "U" ground outlet. Lamp socket is switch controlled. No. 41A6011. Shpg. wt. 3 lbs. Net Each **\$6.95**



## OUTDOOR REFLECTOR LAMPS

Sylvania PAR-38. Weatherproof spot or floodlamp. Built-in silvered reflector, skirted standard screw base. 120 volt. Wt. 2 lbs  
No. 41A6004. 75 W. Spot Choice Each **\$1.83** 12 Each **\$1.67**  
No. 41A6005. 75 W. Flood Choice Each **\$1.83** 12 Each **\$1.67**  
No. 41A6006. 150 W. Spot Choice Each **\$1.83** 12 Each **\$1.67**  
No. 41A6007. 150 W. Flood Choice Each **\$1.83** 12 Each **\$1.67**

## RECOMMENDED NIGHT TIME PROTECTION



## AUTOMATIC OUTDOOR LIGHT CONTROL

Turns on at dusk . . . off at dawn

Heavy duty 300-Watt capacity — Can use PAR 38 Lamp. No wiring changes . . . screws into lamp socket. Insurance and law enforcement officials agree consistently well-lighted homes, business and industrial areas are better protected from burglary and accidents than poorly or occasionally lighted spots. This automatic control contains a cadmium sulphide cell and is sensitive to available light. Built-in automatic delay makes control insensitive to passing lights, lightning, etc. Less lamp. Wt. 2 lbs. Mfg. List \$12.95. No. 41A4037. Net Each **\$7.95**

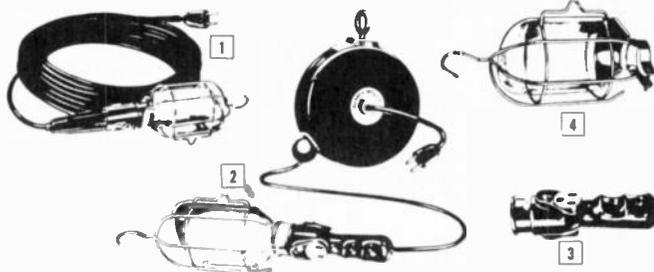
6 Each **\$6.95** 12 Each **\$6.69**



## 3/4" WIDE PLASTIC ELECTRICAL TAPE

Highest quality import value at far less than American made products. Specify Red or Black. Wt. 6 oz. No. 17A7032 **57c** 6 For **\$2.99**

## THE VERY BEST QUALITY COST NO MORE! BELDEN CORDLITES AND ACCESSORIES FINEST QUALITY UL TYPE CORDAGE — OIL AND OZONE RESISTANT



① 25 FT. VINYL CORDLITE  
Made of black 18-2 SJT vinyl cordage with high impact fiber reinforced phenolic handle, feed thru switch and 2 tool taps. Heavy swing open wire guard protects lamp. Wt. 2 lbs. No. 41A6012. Belden 17925. Net Each **\$3.47**

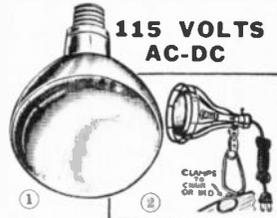
② 25 FT. 3-CONDUCTOR VINYL CORDLITE  
Safest type for use where grounding is desired through third conductor. Cordage is black 18-3 SJO neoprene. Parallel U-ground plug attached. Handle is high impact reinforced black phenolic with one U-ground tool tap and push thru switch. Swing-open guard. Wt. 3 lbs. No. 41A6013. Belden 17998. Net Each **\$8.15**

③ 20 FT. COMPACT CORDLITE REEL  
Cordage is 18-2 SV0 neoprene with best quality phenolic handle, swing-open guard, push-thru switch and one tool tap. Spring loaded mechanism pulls cord into reel, stops where desired. Reel and swivel hanger are metal. Dia. 6 1/2 x 1 3/4" wide. Shpg. wt. 5 lbs. No. 41A6014. Belden 17940. Net Each **\$16.75**

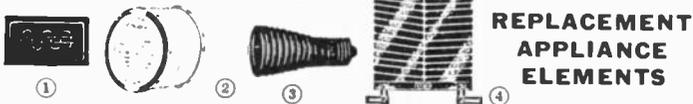
④ CORDLITE HANDLES ONLY  
Assemble with your cordage and save! Finest quality high impact fiber reinforced phenolic handles with protective barrier around switch buttons. One tool tap. Use guard below. Shpg. wt. 1 lb. No. 41A6015. For 2-Cond. Cordage. Belden 17932. Net Each **\$2.69**  
No. 41A6016. For 3-Cond. Cordage. Belden 17933. Net Each **\$3.75**

⑤ LAMP GUARD—FITS ABOVE HANDLES  
Heavy duty swing-open wire guard. Shpg. Wt. 1/2 lb. No. 41A6017. Belden 17923. Net Each **58c**

① SYLVANIA 250-WATT *Infra-red* HEAT LAMP  
Instant penetrating heat for treatment of aches and pains, drying paint, thawing, etc. No. 41A6019. R-40 Clear Glass. **\$1.20** Net Each **\$1.33** 12 @ Each  
No. 41A6020. R-40 Red Glass. **\$2.36** Net Each **\$2.69** 12 @ Each



② CLAMP-ON BRACKET FOR HEAT LAMPS  
Rubber covered clamp, double ball swivel, extra heavy wire guard. Push switch socket, 6 ft. cord and plug. No. 41A6021. Net Each **\$2.49**



③ 115 VOLT COILED NICHROME WIRE ELEMENTS  
Finest quality, for repair of Hot Plates, Toasters, Heaters. Shpg. wt. 2 oz. No. 41A341. 600 W. #3, 1/2" dia. coil. Net Each **31c** 10 @ Each **28c**  
No. 41A342. 1000 W. #7, 1/2" dia. size 20. Net Each **70c** 3 for **\$1.78**

④ NICHROME COILED ELEMENT WIRE  
Wattage length rating on each spool. Use #2 for repair of light duty appliances, #3 for hot plates. #4 for 1000 W. appliances. Shpg. wt. 6 oz.  
Stk. No. Description Net Ea. 3 @ Ea.  
41A343 12 Ft. #2—Size 22, 3/32" dia. coil **\$3.80** **\$3.17**  
41A344 10 Ft. #3—Size 22, 3/32" dia. coil **4.80** **3.95**  
41A345 10 Ft. #4—Size 20, 1/4" dia. coil **5.97** **5.25**

⑤ 1000 WATT CONE HEATER ELEMENT—Shpg. wt. 6 oz. No. 41A346. Standard 115 V. screw base. Net Each **\$1.40** 10 @ Each **\$1.29**

⑥ 550 WATT TOASTER ELEMENT  
Flat Nichrome wire wound on top grade mica. Shpg. wt. 2 oz. No. 41A348. With adjustable mounting. Net each **\$1.20** 10 @ Each **\$1.08**

## WALDOM PHENOLIC WIRE NUTS

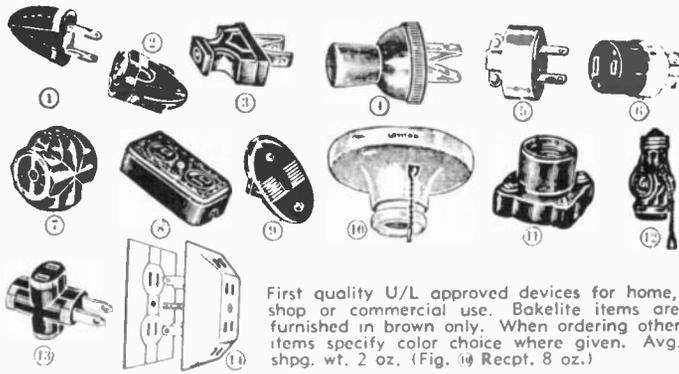
Solderless screw-on connectors for securely joining stripped ends of wire together. All are UL approved except (\*). Rated 300 volts except (†) 300-600 V. (1000 V. enclosed in fixtures).

Stock No.	Wire Combinations		25 For	100 For	1000 For
	Minimum	Maximum			
12A1853*	2-#24	2-#18	27c	\$0.85	\$7.30
12A1854†	2-#18	3-#16	50c	1.65	13.85
12A1855†	1-#18 & 1-#16	5-#16	51c	1.65	14.40
12A1856	1-#14 & 1-#18	2-#12 & 1-#18	55c	1.75	15.25
12A1857	1-#14 & 1-#16	3-#10	96c	3.20	27.70

KIT OF 169 WIRE NUTS above in compartmented plastic box. No. 12A1858. Waldom K210. Shpg. wt. 1 lb. Per Kit **\$2.74**

# ELECTRICAL WIRING DEVICES & CORDS

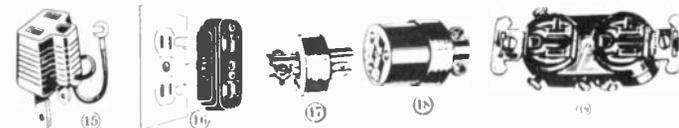
## U/L ATTACHMENT PLUGS AND CURRENT TAPS



First quality U/L approved devices for home, shop or commercial use. Bakelite items are furnished in brown only. When ordering other items specify color choice where given. Avg. shpg. wt. 2 oz. (Fig. 14 Recept. 8 oz.)

Stk. No.	Description	Each	10 For
① 41A300	Black, Brown or Ivory Vinyl Cap Sta-tite brass blades, screw terms.	\$0.17	\$1.53
② 41A301	Black, Brown or Ivory Vinyl Cord Receptacle Mates with Fig. ① or other std. AC plugs	.26	\$2.35
③ 41A302	Bakelite Flat Handle Cap	.16	1.46
④ 41A303	Rubber Handle Cap—.375" cord hole	.18	1.60
⑤ 41A304	Rubber Heavy Duty Power Tool Cap—.540" cord hole	.24	2.16
⑥ 41A305	Heavy Duty Armored Cap—.75" cord clamp	.47	4.23
⑦ 41A306	Heavy Duty Armored Receptacle. Mates with ⑥	.56	5.04
⑧ 41A307	Bakelite Extension Cord Trio-Top	.20	1.80
⑨ 41A308	Bakelite Duplex Top. Cord or surface mount	.26	2.34
⑩ 41A309	Bakelite In-Line Cord Switch	.48	4.32
⑪ 41A310	Porcelain Pull Chain Receptacle, 3/4 or 4"	.75	6.75
⑫ 41A311	Bakelite Cleat Receptacle. Std. screw base	.35	3.10
⑬ 41A312	Bakelite Pull Socket—2 live side taps	.46	4.14
⑭ 41A313	Vinyl Plug-In Trio-Top. Sta-tite blades	.24	2.16
⑮ 41A314	Bakelite 4-Top Adaptor for std. duplex recpt.	.98	8.82

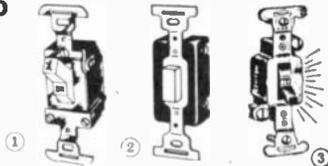
## 3-WIRE PARALLEL BLADE — U GROUND DEVICES



15 41A315	Vinyl 3-Prong Grounded Adaptor for single receptacle. Parallel Blades, U ground	.24	\$2.04
16 41A316	Bakelite 3-Prong Grounded Adaptor for duplex receptacle. Parallel blades, U ground.	.51	4.25
17 41A317	Armored 3-Prong Grnded. Cap. Mates 15, 16, 18, 19	.56	5.04
18 41A318	Armored 3-Prong Grounded Cord Receptacle	1.22	10.98
19 41A319	Brown or Ivory 20A. Receptacle	.87	7.83

## MODERN U/L APPROVED ELECTRICAL SWITCHES

- FAR MORE CONVENIENT THAN USUAL TYPES
  - FIT STANDARD OUTLET BOXES AND SWITCH PLATES
- Shpg. wt. 6 oz. each



### ① HANDY DELAYED ACTION LIGHT SWITCH

Brand new solution to an old problem! Turns off lights 35 to 60 seconds after switch is flipped to the "off" position. Allows you to reach your destination without groping in the dark. Fine for bedroom, hallway, etc. around home, farm, business. U/L rated, 10 A. 125 V. 5 A. 250 V.

No. 41A323. Specify Ivory or Brown  
Single Pole. Net Each..... \$2.49 3 For..... \$6.72

### ② MODERN "TOUCH" WALL SWITCH

Converts "old-fashioned" noisy toggle switch installations to quiet push-button control with no wiring changes! Just a touch or nudge and lights go "on"; another touch and they're "off". Very convenient, especially when arms are loaded. U/L rated, 15A. 120-240 V. AC. Specify Ivory or Brown.

No. 41A324. Single Pole 10 Lots, Net Each..... 99c Each..... 89c

### ③ SILENT MERCURY SWITCH WITH ILLUMINATED HANDLE

Makes no sound when switching lights on and off. Ivory switch handle glows gently in the dark, guides you directly to the switch. Glow light will last a lifetime! Platinum contacts in pools of mercury inside hermetically sealed capsule cannot arc. Large head 8-32 screw terminals. U/L rated, 10 A., 125 V. AC.

No. 41A325. Single Pole. Net Each..... \$1.70 10 Lots, Each..... \$1.45  
No. 41A326. 3-Way. Net Each..... \$2.62 10 Lots, Each..... \$2.23

## PLUG FUSES—FUSE ADAPTORS



① SHOCKPROOF GLASS PLUG FUSES—(Per ctn. 6 oz.)  
No. 41A320 15 Amp Ctn. 10  
No. 41A321 30 Amp 5 for. .45c Ctns.... \$4.05

### ② FUSED ADAPTOR PLUG

Plugs into wall receptacle ahead of power cord.  
No. 41A322. Less 3AG Fuses. Net Each..... 86c

## BELDEN TWO CONDUCTOR AC REPAIR CORDS



Finest quality. U/L listed. For lamps, radios, clocks, appliances, tools. Attached molded AC plugs stripped ends. Avg. wt. 8 oz. 6 Ft. 18-2 Parallel Lamp Cord. SPT-1 Vinyl. Specify Color: Brown, Gray, or Ivory.  
No. 41A332. Belden 17106. Each..... 35c 10 Ea..... 31c 100 Ea..... 29c  
9 Ft. 18-2 Parallel Lamp Cord. SPT-1 Vinyl. Brown only.  
No. 41A333. Belden 17109. Each 45c 10 Ea..... 40c 100 Ea..... 38c

## FLEXIBLE ASBESTOS 16-2 HEATER-IRON REPAIR CORD



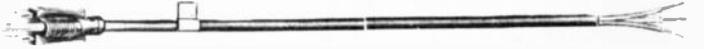
Abrasion resistant asbestos cotton braid covered. Use where flexibility of cord is extremely important. 7 Ft. with molded vinyl plug, cord holder and ring terms, for #8 screw.  
No. 41A331. Belden 17727. Black. Each..... 88c 10 Each..... 79c

## COILED 18-2 HEATER CORD FOR APPLIANCES, SOLDERING IRONS



U/L listed. HPN Neoprene. Extends to 6 Ft. Plug and ring terms.  
No. 41A334. Belden 17836. Black. Each..... \$1.04 10 Each..... 93c

## BELDEN THREE-CONDUCTOR AC CORDS



U/L listed. For all tools and equipment requiring grounding. Parallel prong U-ground plug. Stripped ends. Very highest quality.

Stk. No.	Belden No.	Description	Shpg. Wt.	Net Each	10 Each
41A357	17236	6 Ft. 18 SV Black Rubber	8 oz.	\$0.76	\$0.69
41A358	17237	6 Ft. 18 SVT Grey Vinyl	8 oz.	.69	.61
41A356	17239	8 Ft. 18 SVT Grey Vinyl	8 oz.	.78	.70
41A335	17238	8 Ft. 18 SV Black Rubber	8 oz.	.88	.79
41A359	17408	8 Ft. 18 SJ Black Rubber	8 oz.	.94	.84
41A360	17407	8 Ft. 18 SJT Grey Vinyl	8 oz.	.86	.77
41A361	17409	8 Ft. 18 SJO Black Neoprene	8 oz.	.86	.77
41A337	17419	9 Ft. 16 SJ Black Rubber	1 lb.	1.25	1.12
41A338	17425	15 Ft. 16 SJ Black Rubber	2 lbs.	1.95	1.77

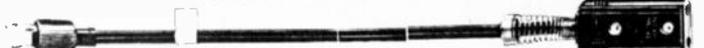
## BELDEN THREE-CONDUCTOR COILED CORDS



U/L listed. Ends dangling cord nuisance, allows free movement of appliance or tool. Black SJO neoprene. Attached parallel prong U-ground plug. Stripped ends.

Stk. No.	Belden No.	Description	Shpg. Wt.	Net Ea.
41A362	17447	18 Extends from 12 in. to 6 Ft.	1 lb.	\$1.62
41A339	17448	16 Extends from 12 in. to 6 Ft.	1 lb.	1.92
41A340	17449	16 Extends from 24 in. to 12 Ft.	2 lbs.	2.61

## BELDEN APPLIANCE CORD SETS—PLUGS BOTH ENDS

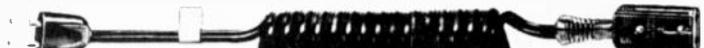


Standard miniature appliance plug has 1/2" pin spacing. Fits coffee makers. HPN neoprene. Avg. shpg. wt. 8 ozs.  
No. 41A327. 6 Ft. 18-2. Belden 17856. Each..... 61c 10 Each..... 54c

## HANDY SHORT NEOPRENE APPLIANCE CORD SET

Best for counter tops. Miniature 1/2" spaced appliance plug is slotted to fit fry pans as well as coffee makers.  
No. 41A328. 2 Ft. 17-2. Belden 17852. Each..... 46c 10 Each..... 41c

## 6 FT. COILED APPLIANCE CORD SETS—18-2 HPN NEOPRENE



No. 41A329. Belden 17886. With 1/2" spaced plug. Ea... \$1.17 10 Ea... \$1.04  
No. 41A330. Belden 17887. With 1/8" spaced plug. Ea... \$1.22 10 Ea... \$1.09

## BELDEN THREE-CONDUCTOR YELLOW EXTENSIONS U/L LISTED—SAFEST FOR OUTDOOR USE



Yellow cordage stands out against green or brown backgrounds, reduces hazards of accidental cutting. Molded vinyl parallel prong U-ground plug and socket attached. Finest quality vinyl insulated SJT round cord.

Stk. No.	Belden No.	Description	Shpg. Wt.	Net Each	5 Each
41A363	17491	25 Ft. 18-3 SJT	3 lbs.	\$2.32	\$2.07
41A364	17492	50 Ft. 18-3 SJT	5 lbs.	4.26	3.80
41A365	17494	25 Ft. 16-3 SJT	3 lbs.	2.72	2.43
41A366	17495	50 Ft. 16-3 SJT	5 lbs.	5.36	4.79
41A367	17497	100 Ft. 16-3 SJT	8 lbs.	9.60	8.58

## NON-METALLIC SHEATH BUILDING WIRE



Two copper conductors plus ground wire. For lighting and power circuits. Flexible, moisture resistant, thermoplastic insulated. PV (plastic) jacket overall. Does not require conduit. U/L listed.

Stk. No.	Weight	Description	250 Ft. Coil Ea.	4 Each
2A417	17 Lbs.	2 Conductor #14	\$13.25	\$12.58
2A418	21 Lbs.	2 Conductor #12	16.59	15.76

Contact Our Industrial Department For Quotations On Larger Quantities

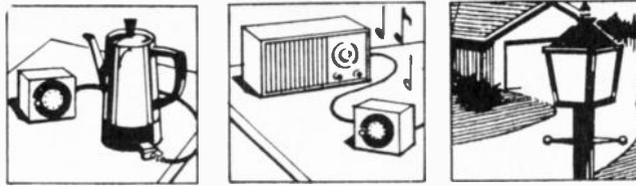
# ELECTRICAL SWITCHES AND TIMERS

AUTOMATICALLY CONTROLS ELECTRIC DEVICES

**INTERMATIC  
DELUXE  
"TIME ALL"  
PLUG-IN  
AUTOMATIC  
"ON-OFF" SWITCH**

**\$9.95**

Turns appliances, etc. "on" and "off" at any selected time from 1 hour to 23 hours. Automatically repeats same "on" and "off" operation daily without reset. Manual control switch allows temporary or permanent "on"-"off" independent of automatic switch if desired. Requires no installation—simply plug unit into wall socket and appliance cord into receptacle on the "Time-All." Handles up to 1875 Watts. Champagne white housing with walnut wood-grain panel. Wt. 2 lbs. No. 41A4021 **\$9.95**  
Model E911. Net Each



**INTERMATIC  
MODEL T-101  
UTILITY TIMER  
AUTOMATIC "ON-OFF"  
SWITCH FOR HOME  
OR BUSINESS**

**\$10.39**

Handles every time need around home or business. Dependable, automatic on-off electric control at appliances, lights, fans, etc. Repeats timing cycle each 24 hours—up to 12 on-off operations per day spaced minimum 1 hour. Manual when desired. Comes with 1 set of adjustable on-off trippers; others easily added without removing dial. Heavy duty 40 amp switch. Gray steel cabinet with hinged door and wiring knock-outs. 7 3/4" H, 5" W, 3" D. For 115 V. 60 cy. AC. Wt. 3 lbs **\$10.39**  
No. 41A4008. Each  
No. 41A4009. As above with DPST switch. Each **\$11.80**  
41A4010. Set of On-Off Trippers 50c



**INTERMATIC 7-DAY  
"SKIPPER" TIME SWITCHES**

Omit Saturday, Sunday or Other Days. Turns "On" and "Off", up to 12 operations, each 24 hours—plus allowing you to omit operation on Saturdays, Sundays or any other selected days of the week by adding skipping screws to day dial. Has time dial and day dial. Ratings and case same as T101 (right above). UL listed. Wt. 3 lbs. For 125 V. 60 Hz AC. 41A4023. T171. SPST. **\$13.59**  
Each  
41A4025. T175. SPDT. Each **\$15.20**  
41A4026. 79T8A. Skipping Screws. Package of 2. **20c**  
41A4024. Set of On-Off Trippers. Each **50c**



**INTERMATIC  
CLOCK-TIMER**

**12 HR. CLOCK—"ON-OFF" SWITCH**  
Not only tells time, but also is a dependable automatic timer for controlling electric fans and heaters, TV sets, lamps, radios, etc. Turns appliance on automatically for periods of 15 minutes to 5 1/2 hours... turns off automatically... won't let you forget. Capacity 15 amps, 1875 watts. No installation—just plug it in, set and forget. Dessert Sand Plaskon case, 4 3/4 x 4 1/2 x 2 1/4". 6 ft. heavy duty cord for 105-125 volts AC only. UL. Wt. 2 lbs. 41A4029. Model A401-4. **\$9.95**  
Net Each



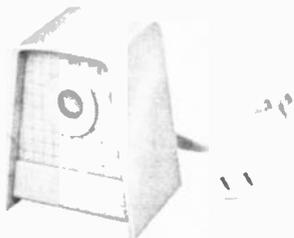
**INTERMATIC  
24 HOUR SUPERVISOR**

**Features Rapid Set-Up "ON & OFF"**  
Repeats 1 to 96 operations every 24 hours for precise automatic control of electrical systems. Used extensively for process equipment, music systems, fans, heaters, pumps, etc. 96 permanently attached trippers slide in and out of dial giving extremely fast and accurate settings in 15 minute timing increments. Powered by long-life synchronous motor. Drawn steel case, hinged lid, 7 3/4 x 5 x 3" deep. Gray hamerm-tone. Switch is SPDT, snap action rated 20 A. 120 V. AC. Mfg. List \$32.45. Shpg wt. 4 lbs  
No. 41A4046. **\$22.95**  
Type T-1905. Net Each



**INTERMATIC PORTABLE  
INTERVAL TIMERS**

Turns "Off" at end of selected time. Handy timer with many uses! Can be moved all around the home and simply plugged in where needed. For automatic "off" control of sun lamps, heating pads, vibrators, sterilizers, lights, hair dryers, fans, heaters, radio, TV, battery chargers, etc. Switch rating up to 15 amps, 1875 watts. Durable cyclocac case 5x4x3" deep. White with walnut trim. Has AC power cord with plug and power receptacle. For 120 V. 60 Hz AC. 41A4027. Model PT-301. **\$8.95**  
Range 0-60 Minutes. Each  
41A4028. Model PT-304. **\$8.95**  
Range 0-24 Hours. Each



**AUTOMATIC  
PHOTOELECTRIC SWITCH**

**Protects Your Home At Night!**  
Portable. Simply place "eye" in window or where outdoor light will strike cell in face of control. Automatically switches any plug-in room light you choose, turning "on" at dusk and "off" again in the morning. Discourages prowlers, prevents accidents in the dark by turning on the lights for you—automatically. Completely silent operation. Uses less power than an electric clock. Simply plug-in connection with U/L approved cord set. Handles lamp load up to 600 watts. Wt. 12 ozs. No. 41A4007. Net Each **\$5.95**



**AUTOMATIC TIMED  
EXTENSION CORD**

**Handy Plug-In Timer—Up to 4 Hours**  
Dependable household device that adds convenience in any home, kitchen, etc. Use in any way you like... as an extension cord with 3 outlets, a manual switch controlled power center or an automatic timer. Simple time-set adjusts up to 4 hours later. Also for continuous non-automatic operation. Ivory finish. Rating, up to 10 A. 125 V. AC. Factory guaranteed against defects in material and workmanship for one year. Shpg. wt. 2 lbs. No. 41A4016. Net Each **\$6.95**



**WIRELESS REMOTE  
CONTROL SWITCH**

**Turns "On or Off" Across The Room**  
Turns on and off up to 100 ft. away. Like having a magic wand! Modern up-to-the-minute device adds exceptional convenience around the home, bedroom, sick room, etc. wherever across the room control of lights, radios, TV, fans, etc. is desirable. Plugs into any AC outlet. Wireless Telewand control unit can be hand held or placed wherever convenient. Telewand operates on 9 V. battery. Handles up to 850 watts. Wt. 4 lbs. No. 41A4019. **\$20.65**  
Complete



**HANDY ELECTRICAL  
SWITCHES**

**Foot Control and Remote Switch**  
① **FOOT CONTROL.** For power tools, photographers darkrooms, hams, paging systems, etc. Snap action switch normally open 5 A. @ 125 V. AC. Has 9 ft. 18-2 cord, piggyback series plug. 2 3/4" sq. x 1" H. Wt. 2 lbs. Japan. No. 41A352. Net Each **\$3.29**  
② **REMOTE 15 FT. SWITCH EXTENSION.** Piggyback plug with 18-2 cord and switch adds extra convenience all around the home. Just plug into AC outlet ahead of device to be controlled. Japan. Wt. 1/2 lb. No. 41A351. Net Each **\$1.69**

# COMMUNICATION AND ELECTRONIC BOOKS



## POPULAR ARRL BOOKS

**RADIO AMATEUR'S HANDBOOK**  
Contains the latest in constructional data and design. Priceless information on all phases of amateur radio in an easy-to-understand manner. It's a text, data book, constructional manual, operating reference book—**16A58**. Buckram Bound ..... **\$4.00**  
**16A624**. Buckram Bound ..... **\$8.50**  
**"GATEWAY TO AMATEUR RADIO"**  
Study material most needed by the radio beginner for becoming a radio amateur. Consists of: How to Become a Radio Amateur; License Manual; Learning the Code, plus "Operating an Amateur Radio Station". **16B10**. ..... **\$2.50**  
**RADIO AMATEURS' LICENSE MANUAL**. Covers FCC regulations, probable questions for A, B, C and Novice Class exams. **16A60**. ..... **\$1.00**  
**LEARNING THE CODE**. Both sending and receiving. Data on high speed operation and typewriter copy. **16A63**. ..... **50c**  
**ANTENNA HANDBOOK**. Explains antenna designs, construction. **16A114**. ..... **\$2.50**  
**SINGLE SIDEBAND FOR THE RADIO AMATEUR**. Covers reception and transmission. **16B78**. ..... **\$2.50**  
**ARRL WORLD MAP**. Helps locate other stations. Shows time zones and call prefixes. **16A1100**. 30x40, 8 colors ..... **\$2.00**

**A COURSE IN RADIO FUNDAMENTALS**. A study guide examination book and laboratory manual with text taken from the handbooks. Study assignments with questions and answers. **16A59**. ..... **\$1.00**  
**HOW TO BECOME A RADIO AMATEUR**. Covers fundamentals, code, construction of transmitters, receivers, etc. **16A62**. ..... **\$1.00**  
**HINTS AND KINKS**. Vol. 6. Hundreds of ideas for combatting minor or major obstacles in construction and operation of equipment. **16B61**. ..... **\$1.00**  
**UNDERSTANDING AMATEUR RADIO**. 16 chapters of carefully selected material for best approach to technical fundamentals accenting the basic idea on which circuits and equipment are built. 320 pages, 6 1/2 x 9 1/2". **16B107**. ..... **\$2.50**  
**THE RADIO AMATEUR'S OPERATING MANUAL**. A comprehensive guide and ready reference on all phases of amateur radio operating. **16A251**. ..... **\$1.00**  
**VHF MANUAL**. Principles and practice for the world above 50 MC. 13 chapters of revealing information on VHF receivers, converters, amplifiers, transmitters, antennas, test equipment. 314 pages, 6 1/4 x 9 1/2". **16B34**. ..... **\$2.50**  
**16A115**. LOG BOOK ..... **50c**  
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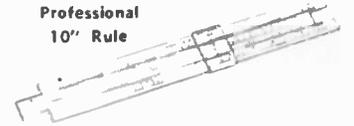
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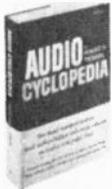


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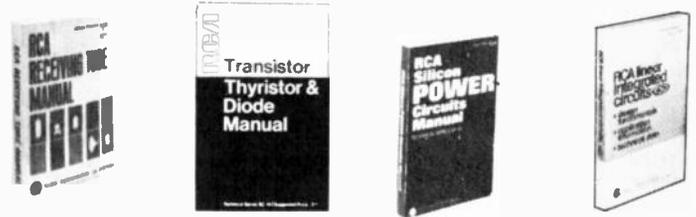
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TV-24—Late 1965 Sets. TV-18—1961 Sets. TV-10—Late 1955 Sets.  
TV-23—1965 Sets. TV-17—1960 Sets. TV-9—Early 1955 Sets.  
TV-22—1964 Sets. TV-16—Late 1959 Sets. TV-8—1954 Sets.  
TV-21—1963 Sets. TV-15—Early 1959 Sets. TV-5—1951 Sets.  
TV-20—Late 1962 Sets. TV-14—1958 Sets. TV-2—1948 Sets.

**YOUR CHOICE EACH \$3.00**

No. 16A1135. Index For Above. FREE

# COMMUNICATIONS & EDUCATIONAL HEADSETS

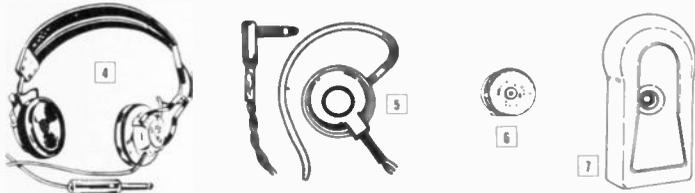
## TELEX MODERN HEADSETS



① **Metal Monoset.** Comfortable under-chin featherweight 1.1 oz. Anodized aluminum removable white plastic eartips. Shpg. wt. 5 ozs. Furnished with 5 ft. cord and 1/4" phone plug.  
 No. 9A3148. HMV-2. 125 Ohms, Magnetic Choice **\$7.95**  
 No. 9A3080. HMY-2. 2000 Ohms, Magnetic Each

② **Twinset.** Extremely lightweight, 1.6 oz. Magnetic receivers rest lightly at temples, adjustable tubular arms pipe sound to ears, blocks out background noise. FAA approved. Shpg. wt. 5 ozs. With 5 ft. cord, 1/4" phone plug.  
 No. 9A3081. HTW-2. 500 Ohm Choice **\$14.50**  
 No. 9A3143. HTX-2. 1000 Ohm Each

③ **Tele-Fi.** 30% better understanding from induced tone lag. Sound reaches one ear 1/1000 sec. after other, creating "depth" of sound. Magnetic receivers, response 60 to 6000 Hz. Ideal for hams, language students, secretaries, etc. All have 5 ft. cord, 1/4" phone plug. Wt. 4 ozs.  
 No. 9A3144. HFR-91. 15 Ohms No. 9A3147. HFX-91. 1000 Ohms  
 No. 9A3145. HFV-91. 125 Ohms No. 9A3082. HFY-91. 2000 Ohms  
 No. 9A3146. HTX-91. 500 Ohms  
 Your Choice Each **\$5.95**



④ **Teleset.** Extremely lightweight and rugged. Only 8 ozs. Ideal for communications work, language labs, hobbyist. Response 50 to 10,000 Hz. Shpg. wt. 1 lb. Furnished with 6 ft. cord and 1/4" phone plug.  
 No. 9A3149. HM-500. 500 Ohms, Magnetic Choice **\$14.50**  
 No. 9A3083. HM-100. 2000 Ohms, Magnetic Each

⑤ **Metal Earset.** Rugged magnetic unit with reversible loop slips over either ear resting lightly in place. All have 5 ft. detachable cord, 1/4" phone plug.  
 No. 9A3150. EMR-2. 15 Ohms No. 9A3084. EMX-2. 1000 Ohms  
 No. 9A3151. EMV-2. 125 Ohms No. 9A3153. EMY-2. 2000 Ohms  
 No. 9A3152. EMW-2. 500 Ohms  
 Your Choice Each **\$4.55**

⑥ **Telethin Magnetic Receiver Units Only.** Rugged high quality replacement units, same as supplied with complete ear loops and Tele-Fi headsets above. Snaps into optional acoustic earphone shell listed below.  
 No. 9A3135. RTR-04. 15 Ohms No. 9A3138. RTX-04. 1000 Ohms  
 No. 9A3136. RTV-04. 125 Ohms No. 9A3139. RTY-04. 2000 Ohms  
 No. 9A3137. RTW-04. 500 Ohms  
 Your Choice Each **\$2.25**

### ACCESSORIES FOR TELETHIN RECEIVERS

⑦ No. 9A3140. Acoustic Shell. Use on either ear. Net Each **\$1.48**  
 No. 9A3141. 5 Ft. Coil Cord with 1/4" Phone Plug. Net Each **2.95**  
 No. 9A3142. 5 Ft. Straight Cord with 1/4" Phone Plug. Net Each **2.25**

## TELEX UNBREAKABLE EDUCATIONAL HEADSETS SURPASS QUALITY REQUIREMENTS OF MOST USERS



Magnetic units of tough Cylolac molded basket, firmly anchored cords. Surpass quality and performance needs of language labs, communications and vocational users, yet priced lower than others of similar high quality.

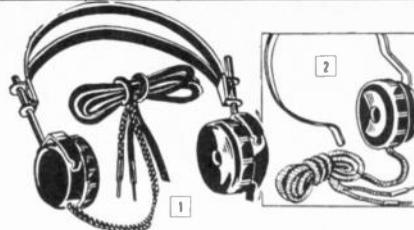
**610 Series.** With soft, comfortable ear cushions, 5 ft. flexible plastic cord, molded 1/4" phone plug.  
 No. 9A3123. Model 610-1. 600 Ohms Magnetic Choice **\$6.95**  
 No. 9A3124. Model 610-2. 2000 Ohms Magnetic Each

**310 Series.** Same as above, less ear cushions. With 5 ft. cord, molded 1/4" phone plug.  
 No. 9A3125. Model 310-1. 600 Ohms Magnetic Choice **\$5.95**  
 No. 9A3126. Model 310-2. 2000 Ohms Magnetic Each

**610 Series with Boom Microphone** With ear cushions, cord and dual 1/4" phone plug.  

Stk. No.	Model	Description	Net Each
9A3127	600-1	600 Ohm Phone, 300 Ohm Dynamic Mike	\$19.95
9A3128	600-2	2000 Ohm Phone, 300 Ohm Dynamic Mike	19.95
9A3129	600-3	600 Ohm Phone, Hi-Z Ceramic Mike	21.95
9A3130	600-4	2000 Ohm Phone, Hi-Z Ceramic Mike	21.95

**820 Series Educational Music Headphones.** With extra large ear cushions, 5 ft. cord and molded 1/4" plug.  
 No. 9A3131. Model 820-02. 4 Ohms Monaural. Each **\$ 9.95**  
 No. 9A3132. Model 820-04. 600 Ohms Monaural. Each **\$13.25**  
 No. 9A3133. Model 820-01. 8 Ohms Stereo. Each **\$ 9.95**  
 No. 9A3134. Model 820-03. 600 Ohms Stereo. Each **\$13.25**



**ALNICO V HEADSET**  
 For Radio Amateurs, SW Listening, Crystal Sets, etc. Popular small size, lightweight, extra sensitive. Powered by Alnico No. V magnets to assure high fidelity response and excellent volume. Sturdily constructed of durable black plastic. Adjustable spring steel headband. Complete with 4 1/2 ft. cord, 1 lb.

(1) **Double Headset, with Pin Tips.** 2000 ohms. No. 9A3061. Each **\$2.89**

(1) **Double Headset with 1/4" Phone Plug.** 2000 ohms. No. 9A3062. Each **\$3.39**

(2) **Single Headset, 1000 ohms.** With 4 1/2' cord and pin tips. No. 9A3063. Each **\$1.57**

(1) **Trimm Deluxe Headset.** Superior low cost headset for use with crystal sets code training, all radio communications. Double tubular headband, 4 1/2 ft. cord. Bakelite shell and cap. 4000 ohms. No. 9A3064. Each **\$2.79**

### (1) SUPEREX STEREO PHONES

For private listening, language labs, etc. Features Alnico V. magnets, dual coils, vinyl covered spring steel headband. Less phone plug.  
 No. 9A3065. Model ST48. 4-8 Ohm Imp. Choice **\$3.05**  
 No. 9A3066. Model ST2000. 2000 Ohm Imp. Each

## TRIMM HEADSET KITS

### FOR TELEVISION AND RADIO



For private radio and TV listening without disturbing others. Ideal for the hard of hearing. Consists of high quality, low impedance headphones, brown homertone control box complete with switch and volume control, 15 ft. of wire, and complete instructions for simple attachment to set. Additional headset listed below may be plugged into box so two persons may listen at once. Wt. 3 lbs. Mfg. list \$11.90.  
 No. 9A3067. Complete Kit. Net Each **\$7.59**  
 No. 9A3068. Extra 4 Ohm Headset for above. **\$3.09**

## "TELEX" HEADSET KIT FOR TV AND RADIO



Private listening, with volume control, 15' cord and simple instructions for attachment. Shpg. wt. 1 lb.  
 No. 9A3085. LCP-90 **\$9.95**  
 With Earset. Each  
 No. 9A3086. Extra Earset. ELV-98. Each **\$2.95**

## GROUP HEARING AID COMPONENTS



**"Telex" Persona-Phone.** Private listening device for church, library, museum, theatres, exhibits, etc. Small molded plastic housing contains matching transformer, 2 volume controls, 2 jacks for earphones. New sanitary acoustic shell phone units fit over either ear. Operates on 8 ohm, 70 volt or 25 volt program source. With 2 phones. Neutral tan color, gold front.  
 No. 9A3154. Net Each **\$34.00**

**Trimm Lorgnette Type Phone.** "Featherweight." Small, light. Hearing unit only 2 1/8" dia. x 3/4" thick. Weighs only 1 1/4 oz. but durably constructed of black plastic material. Hi-impedance 9000 ohms, DC resistance 2000 ohms. Ideal for large installations using 500 ohm lines. With 6 ft. cord. Shpg. wt. 10 ozs.  
 No. 9A3069. Net Each **\$6.30**

**Trimm Outlet Box with Volume Control.** Combines in a single unit volume control, phone jack and terminal strip for incoming circuit. Brown wrinkle finish, 3 3/4 x 2 1/8". Control is 10,000 ohms for use with above phones.  
 No. 9A3070. Net Each **\$3.60**

**Trimm 90° "Flat" Phone Plug.** Non protruding. Fits outlet box or other 1/4" phone jack. Set screws hold standard phone cord tips.  
 No. 9A3071. Net Each **66c**

## HEADPHONE CUSHIONS

① **Foam Rubber,** soft plastic encased. Perfect coupling to ear for best sound. Soft and comfortable. Muffles outside noises. Wt. 4 oz.  
 No. 9A3072 Per Pair **\$1.05**  
 ② **Soft Rubber.** Comfortable. No. 9A3073 Per Pair **\$1.50**

## HEADPHONE CORDS

Copper tinsel inner conductor covered with closely woven cotton braid. Single cord 4 feet, double 4 1/2 feet. Wt. 3 oz.  
 No. 9A3074 Single cord, pin tips one end, spade tips other **49c**  
 No. 9A3075 Double cord, tips on both ends **69c**  
 No. 9A3076 Double cord, tips on one end, spade lugs other **69c**

# VHF BROADCAST MONITOR

USED BY RADIO-TV NEWS SERVICES, MUNICIPAL AGENCIES, BUSINESS

# RECEIVERS

FIRMS AND INDIVIDUALS

## ELECTRA BEARCAT \$139<sup>95</sup>

NEW! 8 CHANNEL FM MONITOR WITH AUTOMATIC SCAN TUNING

MODEL BCH LESS CRYSTALS

Receives Police, Fire, Sheriff, Utility Two-Way Services 12 V. DC MOBILE OR 117 V. AC FIXED OPERATION

Highly sensitive, all solid-state receiver with adjustable squelch and unique automatic tuning. Electronically scans up to 8 crystal controlled channels within a 10MHz band spread, searching continuously (at approximately 12 channels per second) until it locks in on the first active channel. Scanning resumes when that channel clears. Has manual channel selection also. Red indicator lamps display channel in operation.

Advanced circuitry uses FET's in RF section, six IC's in switching and limiter-discriminator. Sensitivity 1 microvolt for 20 db quieting. Built-in speaker 2 W. power output, telescoping antenna and Motorola type jack for auto or external 50 ohm antenna. Metal case 4x9x6" with under-dash auto bracket. Power required, 12 V. DC @ .15-.37 amps, neg. ground or 117 V. AC @ 6-9 watts. Order crystal card below for each station frequency. Shpg. wt. 5 lbs.

No. 9A434. Model BCH 150-174 MHz **\$139.95**  
Less Crystals. Net Each

No. 9A438. Model BCL 30-50 MHz. Less Crystals. Net Each.....**\$139.95**

No. 9A437. Model BCU 450-470 MHz. Less Crystals. Net Each.....**\$149.95**

**CRYSTAL CERTIFICATE CARD.** Order one card for each frequency. Fill out card, mail to crystal manufacturer. Crystal sent prepaid within 2 weeks. Important Note: Models BCH and BCU will accommodate up to 8 crystals within a 10 MHz spread, Model BCL will accommodate 8 crystals within 7 MHz spread.

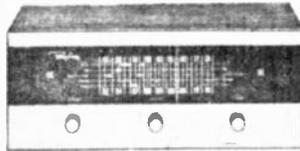
No. 9A3156. Crystal Card for BCH and BCL. Net Each.....**\$4.95**

No. 9A3157. Crystal Card for BCU. Net Each.....**\$5.95**

**REGENCY MONITOR RADIOS FOR POLICE, FIRE AND AIRCRAFT**



PR35BR, PR155BR



MR10D, MR33D

MODELS FOR 30-50 MC FM, 152-174 MC FM, 108-135 MC AM

### LOWEST COST MONITOR RADIOS

Model PR-35BR. Tunes in police, fire and other vital or highly interesting broadcasts. Has transistorized adjustable squelch for quieting between calls. Sensitivity 10 microvolts, selectivity 100 Kc. Built-in 4" speaker 1.1 watts audio. 5 tubes plus rectifier. Requires 30 watts. 117 V. AC or DC. Black plastic cabinet 9 1/2 x 6 x 5 1/2". Wt. 5 lbs.

No. 9A405. Tunes 30-50 MC FM. Net Each.....**\$59.95**

Model PR-155B. Same as above, but tunes 152-174 MC FM. **\$59.95**

No. 9A406. Net Each

### HIGHLY SENSITIVE MONITOR RADIOS

MR Series. For police, fire, commercial broadcasts Sensitivity 4 microvolts or better, more selective than PR models. Very stable tuned RF stage, all-electronic adjustable squelch for perfect quieting, illuminated dial, built-in 5 inch speaker, provision for external speaker. 7 tubes plus rectifier. Vinyl laminated steel cabinet, 12x6 1/2x6". For 117 V. 60 cv. AC only. Wt. 11 lbs.

No. 9A407. Model MR10D. 152-174 MC-FM. Your Choice **\$84.95**

No. 9A408. Model MR33D. 30-50 MC-FM. Net Each

### OUTDOOR ANTENNAS FOR MONITOR RADIOS

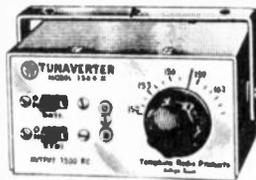
Ground plane, all-direction, highly effective. Mount on any 1 1/4" dia. support. Less RG58U lead. Shpg. wt 4 lbs.

No. 9A175. Model GP-50 for 30-50 MC. Net Each **\$14.95**

No. 9B176. Model SGP-2 for 108-174 MC. Net Each **\$7.95**

**TUNAVERTER X-LINE VHF BAND CONVERTERS FOR YOUR AUTO RADIO**

RECEIVE POLICE — FIRE — AIRCRAFT — AMATEURS



Installs in minutes, uses regular car antenna, requires no modification of your radio. Consists of a tunable and crystal controlled all transistor converter with new FET oscillator powered by internal 9 v. battery. Converter dial ratio, 6:1. Tunes VHF band when broadcast radio dial is set at 1500 Kc. Entire car radio becomes powerful IF amplifier and audio system. Typical sensitivity, .5 to .9 microvolts. Front panel switch reactivates car radio instantly. In aluminum cabinet 2 1/2 x 3 1/2 x 4 1/2", with 24" coaxial cable and plug to fit radio. Less battery. Has panel socket for crystal control.

No. 9A421. Model 1564X. **\$32.95**

Police, Fire and VHF weather—150-164 MHz. Net Each.....**\$32.95**

No. 9A422. Model 348X. Police, Industrial—33-48 MHz. Net Each.....**\$32.95**

No. 9A423. Model 1828X. Aircraft—118-128 MHz. Net Each.....**\$32.95**

No. 9A424. Model 273X. CB & 10 MTR. Amateur—26.9-30 MHz. Net Each.....**\$32.95**

No. 9A425. Model 504X. Net Each.....**\$32.95**

No. 9A426. Model 1450X. Net Each.....**\$32.95**

### OPTIONAL ACCESSORIES FOR INVERTERS

Coupling loop and external antenna for use with home and transistor radios.

No. 9A3097. Net Each.....**\$3.95**

Crystal for one receiving frequency. When ordering state exact receiving frequency. Allow two weeks delivery. No returns.

No. 9A3098. Net Each.....**\$5.10**

### NEW S-LINE TUNAVERTERS WITH SQUELCH

Same as X-Line above plus built-in squelch. Also 12 V. powered and Zener voltage regulated.

No. 9A3163. Model 1564S. Police, Fire and VHF Weather 150-164 MHz. Each.....**\$44.95**

No. 9A3164. Model 348S. Police, Industrial 33-48 MHz. Each.....**\$44.95**



**SONAR FM MONITOR RECEIVERS**  
PROFESSIONAL HIGH QUALITY ALL SOLID STATE



FOR 12 VOLT VEHICLES OR 120 V. AC OPERATION UP TO SIX CRYSTAL CONTROLLED CHANNELS

Quality engineered and designed for years of service. Used by police, fire and other municipal, civilian and federal departments. Ideal for mobile and fixed utility services, commercial and industrial applications, news bureaus and for private listening.

Features Foster Seely discriminator and dual limiter, quadruple tuned RF stage, drift-free temperature compensation and noise-free squelch for best possible reception of narrow band  $\pm 5$  KHz FM broadcasts. Assembled on military quality epoxy glass circuit board. Has built-in heavy duty 2 x 6" speaker, 1 1/2 W. audio power, provision for external speaker and built-in 120V. AC power supply. Interchangeable power cords supplied for both AC and 12 VDC operation. Sensitivity, FR-104 0.3db. FR-155 0.8db. In heavy gauge aluminum cabinet, size 6 7/8 x 2 3/8 x 8 1/2" deep. With swing mount mobile bracket.

Model FR-104 25-50 MHz. Will accommodate up to six crystals within 1 MHz spread. Less crystals. **\$140.00**

No. 9A416. Each

Model FR-105 150-175 MHz. Will accommodate up to six crystals within 2 MHz spread. Less crystals. **\$140.00**

No. 9A417. Each

**CRYSTAL CERTIFICATE CARD.** Order one card for each frequency. Fill out card, mail to crystal manufacturer. Crystal sent prepaid within 2 weeks.

Important Note: Maximum frequency spread of all six crystals for FR-104 is 1 MHz, for FR-105 2 MHz. Greater separation will require use of 2 or more receivers.

No. 9A3158. Crystal Card for FR-104. Net Each.....**\$4.95**

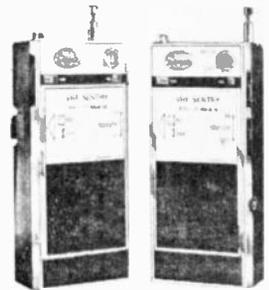
No. 9A3159. Crystal Card for FR-105. Net Each.....**\$4.95**

**SONAR SENTRY PORTABLE VHF MONITORS**

RECEIVE ON THE SPOT POLICE, FIRE, AND WEATHER REPORTS

Ideal for Boatmen to Receive Weather Broadcasts and for Industrial In-Plant Radio Paging.

**\$49.95**



Lightweight, pocket-portable and dependable! All solid-state circuit has adjustable squelch to quiet background noise. Receives 1 or 2 crystal controlled FM or AM VHF channels as well as regular AM entertainment broadcast band. Size 5 7/8 x 2 1/2 x 1 3/4". Delivers strong clear audio from speaker or ear phone (included). Has battery condition meter, telescoping antenna. Wt. 11 ounces.

No. 9A439. Model FR-103S 150-175 MHz. **\$49.95**

Less Crystals. Net Each

No. 9A440. Model FR-106S 30-50 MHz. Less Crystals. Net Each.....**\$49.95**

**CRYSTAL CERTIFICATE CARD.** Order one card for each frequency. Fill out card, mail to crystal manufacturer. Crystal sent prepaid within 2 weeks.

Important Note: Maximum frequency spread of crystals for FR-103S is 3 MHz, for FR-106S 1 MHz.

No. 9A3161. Crystal Card for FR-103S. Net Each.....**\$4.95**

No. 9A3162. Crystal Card for FR-106S. Net Each.....**\$4.95**

### AC BASE-PAK FOR FR-103S OR FR-106S

Conserves battery power for portable use when you need it. Snap tight clamps hold Sentry upright. **\$9.95**

No. 9A3160. For 115 V. AC. Wt. 3 lbs. Net Each.....**\$9.95**

# hallicrafters SHORTWAVE RECEIVERS

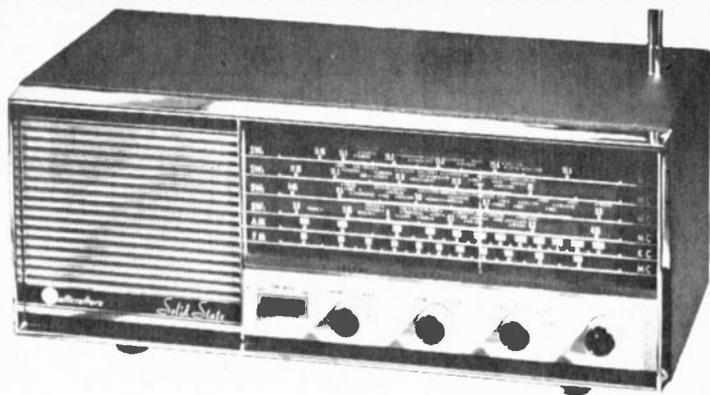


S-120A  
\$59.95

hallicrafters  
NEW S-120A

## "STAR QUEST" ALL-TRANSISTOR 4 BAND RECEIVER

Range .54 - 31 MHz For Worldwide Shortwave and Standard AM Broadcasts. For the shortwave enthusiast, hobbyist, student, Boy Scout, experimenter, language learners . . . anyone who will enjoy the excitement and fun of "listening in on the world". Shortwave Band I covers weather, marine, amateur . . . 2-5 MHz, Shortwave Band II afternoon and evening shortwave reception . . . 4.8-11.5 MHz, Shortwave Band III all day shortwave monitoring . . . 11-30 MHz. Has main tuning and electrical bandspread and large slide rule dial. High sensitivity superhet circuit, beat frequency oscillator for code and single sideband, automatic gain control, internal speaker, 1 watt push-pull audio, provision for external speaker or headphone. With dual antennas and provision for external antenna. Light grey color cabinet has black, white and silver trim. Size 12 x 5 1/2 x 5" deep. **\$59.95**  
No. 9A435. For 115 V. AC. Wt. 8 lbs. Net Each



ALL SOLID STATE MODEL S-214

## INTERNATIONAL SHORTWAVE AND FM/AM BROADCAST RECEIVER

AN EXCITING SHORTWAVE SET . . . A FINE STANDARD BROADCAST RECEIVER, TOO!

**\$89.95**

TUNES IN EVERYTHING ON THE AIR IN THESE SIX BANDS  
FM Broadcasts 88-108 MHz, AM Broadcasts 550-1600 KHZ and the 49, 31, 25 and 19 Meter International Shortwave Broadcasts. Features exclusive dial spread on shortwave that allows tuning overseas broadcasts almost as easily as local AM stations. Fully transistorized for instant operation and long life. Has 11 transistors, 6 diodes . . . for the kind of superior performance, sensitivity, selectivity, response and circuit features that have made Hallicrafters an outstanding leader in shortwave receivers. Circuit includes automatic gain control on AM, automatic frequency control on FM, variable tone control, tuner output jack for use with any high fidelity system, push-pull 1 watt audio system, internal PM speaker and jack for headphone. Antennas: ferrite rod for AM, line cord for FM, whip for shortwave, provision for external connections. Cabinet is styled in walnut vinyl-covered metal with die cast front and an attractive multi-color scale slide rule dial. Size 13 7/8" W, 5 7/8" H, 8" D. Wt. 10 lbs. For 115 V. 60 cy. AC. **\$89.95**  
No. 9A401. Net Each



R-50

hallicrafters

NEW SX-133

## GENERAL COVERAGE RECEIVER

Tunes 535 KHz to 31.5 MHz—Calibrated Bandspread Amateur 80, 40, 20, 15, 10 Meters, 11 Meters Citizens Band, 49, 31, 25, 19 Meter SW Bands — AM-SSB-CW. For the more advanced, serious shortwave listener and amateur operator. Precision made, hot-performing 7 tube receiver with crystal filter, S meter, bandspread tuning. General coverage slide rule tuning dial is calibrated in megacycles and has 0-100 logging scale. Bandspread dial at left includes amateur and CB coverage. Phasing control for crystal filter gives pin-point selectivity. Stable, modern circuit tunes and holds side band, CW, SSB and AM signals more easily. Has antenna trimmer, RF amplifier, 2-IF stages, automatic noise limiter, stable product detector for upper and lower side band reception, 2 watts audio output for external 3-4 ohm speaker. Front panel phone jack disables speaker. New styled, in professional steel cabinet, gray and silver trimmed. 18 7/8 x 9 3/4 x 8" high. For 115 V. 60 cy. AC. Wt. 25 lbs. **\$249.50**  
No. 9A450. Less Speaker.  
Net Each  
R-50 Matching Speaker. High efficiency 4 x 6" PM type. **\$22.50**  
No. 9A413. Wt. 4 lbs. Net Each  
No. 9A3155. HA19, 100KHz Plug-In Crystal Calibrator, Net Each . . . \$19.95



NEW!  
hallicrafters  
SOLID STATE  
FM/AM  
GENERAL  
COVERAGE  
SHORTWAVE RECEIVER

## SENSITIVE, STABLE AND REMARKABLY RICH SOUNDING

Every moment of every day and night, this receiver can entertain, instruct and inform . . . keep you in tune with world-wide happenings. Features complete receiver tuning range from 2-30 MHz plus standard AM and entertainment FM. FM sensitivity better than many large-size stereo consoles. Wide band IF and automatic frequency control make tuning easy and gives driftless control. Enables reception of International Shortwave Broadcasts, planes, ship-to-shore, amateurs, military, time signals and more! Has, in addition to all the features of the S-214 above, the expanded 2-30 MHz tuning range, a signal strength meter, fine tuning control, and a beat frequency oscillator for code and single sideband reception. 11 transistors, 6 diodes provide instant, long life operation. For 115 V. 60 cy. AC. Size 13 7/8" W, 5 7/8" H, 8" D. Wt. 10 1/2 lbs. **\$119.95**  
No. 9A402. Model S-240. Net Each

## NEW FROM hallicrafters



R-50

## MODEL SX-122A DUAL CONVERSION RECEIVER

Continuous Coverage—538-34 MHz Electrical Bandspread 80 thru 10 Meters. New "Top-of-the-Line" receiver for advanced AM broadcast, superb shortwave listening and professional applications including electronic laboratories, amateur operators and other serious hobbyists. In addition to regular 538 to 1580 KHz broadcast, the shortwave bands are 1720 KHz to 4.9 MHz, 4.6-13 MHz, 12-34 MHz. Features temperature compensated stabilized HF oscillator circuits, 50 KHz highly selective IF system with 3 selectivity ranges 0.5, 2.5 and 5 KHz at 6 db down, series noise limiter and AVC, product detector for upper and lower SSB/CW, envelope detector for AM, antenna trimmer, S meter and dual conversion on all bands. Output, 3.2 ohms for external speaker. Professional metal cabinet in black, grey, white and silver trim. 18 3/4 x 8 x 9 3/4" deep. For 110/220 V. 50/60 Hz AC. Wt. 29 lbs. **\$395.00**  
No. 9A436. Less speaker. Net Each  
No. 9A3155. HA19, 100KHz Plug-In Crystal Calibrator, Net Each . . . \$19.95  
No. 9A413. R-50 Matching Speaker. Net Each . . . \$22.50

## DRAKE SW4-A SW BROADCAST RECEIVER

FOR THE SHORTWAVE LISTENER



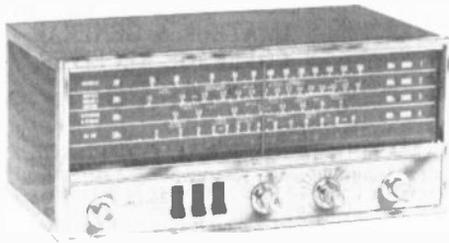
- Ultra precision tuning dial accuracy.
- Crystal lattice filter.
- Dual conversion.
- Preselector

**\$299.00**  
EASY TERMS

Features direct frequency dialing with calibration accuracy ±2 KHz. Tunes longwave, standard broadcast and shortwave broadcast 49M, 41M, 31M, 25M, 19M, 16M, 13M, 11M, with exceptional sensitivity, selectivity, and stability needed for finest shortwave listening. Has solid state VFO, crystal oscillator and AVC, solid state audio system, 2 watts output to 4 or 8 ohm speaker, 6 tubes plus 15 solid state devices. Size 5 1/2" H, 10 3/4" W, 11 1/8" D. For 120/240 VAC, 50-60 Mz. Wt. 16 lbs. **\$299.00**  
No. 9A415. Net Each  
No. 9A3119. MS-4 Matching Speaker. Wt. 6 lbs. Net Each . . . \$19.95

# MIDLAND HOME SHORTWAVE RECEIVERS

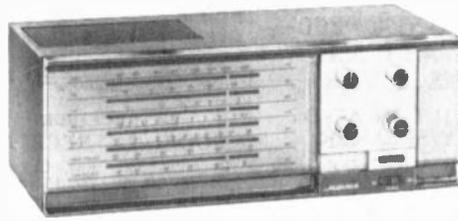
INTERNATIONAL NEW SOLID STATE HIGH PERFORMANCE SETS FOR THE CRITICAL LISTENER



**SHORTWAVE**  
+ AM IN  
4 BANDS **\$44<sup>95</sup>**

**MODEL 11-500 FEATURES:**

Monitors standard AM plus three popular shortwave bands, 2-5 MHz, 4.8-11.5 MHz, 11-30 MHz. Illuminated slide-rule dial with main tuning and electrical fine tuning. BFO switch for listening to code or zeroing in on distant stations. Large front mounted speaker, push pull audio system, automatic volume control. Connections on rear for external speaker or headphone and for external antenna. 9 transistors, 4 diodes, 3 IF's. In black and sparkling chrome metal cabinet with silver color trim. 12 x 5 3/8 x 4 3/4". Shpg. Wt. 5 lbs. No. 9A451. For 117 V. Ac. Each..... **\$44.95**



**SHORTWAVE**  
+ POLICE + FM **\$89<sup>95</sup>**  
+ AM IN 7 BANDS

**MODEL 11-530 FEATURES:**

Extremely wide band coverage — all the standard AM and FM stations, marine 1.6-4 MHz; shortwave 4-12 MHz, low police band 30-45 MHz, air 108-135 MHz, and high police band 144-174 MHz.

Has slide rule dial tuning, large tuning meter, fine tuning control. 5" speaker. 15 transistors, 9 IF's, rF stage on FM, Police and Air. Black with silver-color and black chrome trim. 13 x 5 x 8". Shpg. Wt. 13 lbs. No. 9A452. For 117 V. AC. Each..... **\$89.95**



**SHORTWAVE**  
+ FM + AM **\$89<sup>95</sup>**  
IN 5 BANDS

**MODEL 11-520 FEATURES:**

Keeps you abreast of today's happenings! A fine addition for any home entertainment center. Tunes standard AM-FM broadcasts and three shortwave bands 2-5 MHz, 4.8-11.5 MHz, 11-30 MHz. Has large back-lighted smoked glass slide-rule dial, main and fine tuning, tuning meter, BFO for code reception, AFC for drift free FM, output jack for use on tuner through your music system. Also has its own audio system and speaker. 11 transistors. Black with die cast chrome front, avocado grille cloth. 14" x 5 1/4" x 6 1/8". Shpg. wt. 15 lbs. No. 9A453. For 117 V. AC. Net Each..... **\$89.95**

**SOLID STATE AMECO R5A RECEIVER FOR AMATEURS, POLICE, FIRE, SHORTWAVE**



An exceptionally fine receiver for the shortwave listener and beginning amateur operator. Covers .54 MC through 54.0 MC in 5 continuous bands. Includes standard AM broadcast band, all foreign shortwave, broadcast bands, all amateur bands from 160 through 6 meters, all the 27 MC CB channels, all 2-way radio frequencies from 30 to 50 MC including many police and fire departments. Has built-in power supply for AC operation and may be used with batteries for portable operation anywhere there is no AC power. Controls include beat frequency oscillator, noise limiter, bandspread. Fully transistorized. In gray steel cabinet size 11 5/8 x 9 x 6 1/4" H. Shpg. wt. 12 lbs. No. 9A410. Net Each..... **\$99.95**



**SHORTWAVE LISTENER ANTENNAS**

DX receiving ability of any receiver depends on antenna efficiency. These antennas are designed for all SWL type receivers, matching high impedance input. Especially easy to install.  
**Window Mount Vertical.** Especially for limited space installation. Works at home, in apartments, or on vacations. Simple to install. Includes 12 ft. aluminum element, 30 ft. lead-in, universal bracket, 20 ft. grounding kit and instructions. Wt. 4 lbs. No. 9A198. HyGain SW-9. Net Each..... **\$9.95**  
**Long Wire Inverted "L".** 50 ft. antenna flat-tap, 50 ft. lead-in, 25 ft. poly plastic rope, molded insulators and instructions. Wt. 4 lbs. No. 9A197. HyGain SW-6 Kit. Net Each..... **\$6.95**

**CODE INSTRUCTION KIT**

Everything needed to learn code. Complete kit includes headphone, instructions and 12" 33 1/3 RPM Code record that contains 10 lessons up to 15 WPM on 2 sides. Also includes instructions on how to use the code records for best results. Code oscillator is housed in a sturdy black plastic case with gold front panel. Requires 9 V battery. Ideal and most complete package for any individual desiring to learn code. Shpg. wt. 2 lbs. No. 9A3103 Kit Each..... **\$13.95**  
No. 21B141 9V Battery for above. Each..... **48c**

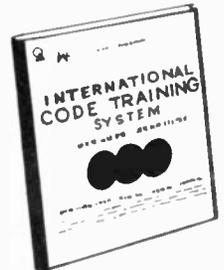


**LEARN CODE THIS QUICK, EASY WAY!**

**NEW 33 1/3 RPM CODE LESSON RECORDS**



**LEARN CODE THIS QUICK, EASY WAY**  
**Novice Code Course.** 12-inch record, recorded on both sides. Progresses in ten lessons from 1 to 15 words per minute. With 20 page instruction booklet. International Morse Code printed on record jacket. No. 9A3077 Each..... **\$4.80**  
**Advanced Code Course.** 12-inch record, both sides. Twelve lessons at 16 to 25 words per minute. With 20 page Advanced Code Instruction Booklet. No. 9A3078 Each..... **\$4.80**  
Save on Complete Novice and Advanced Code Course. No. 9A3079..... **\$9.00**  
Both 12-Inch Records as above. For

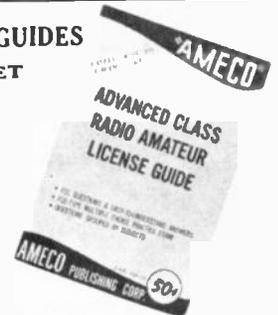


**SAMS INTERNATIONAL CODE TRAINING SYSTEM**

Specially programmed charts and 33 1/3 RPM recordings teach receiving and sending speeds up to 22 WPM. Enables transcribing code messages at 2-3 WPM in just a few minutes, without memorizing code characters. 96 pages, 7 x 7", plus 3 LP records. Wt. 1 lb. No. 9A3090. Net..... **\$7.50**

**AMECO RADIO AMATEUR LICENSE GUIDES FASTEST WAY TO A HAM TICKET**

Brand new up-to-date study guides containing FCC questions and easy-to-understand answers, FCC-type multiple choice practice exam and questions grouped by subject. By Martin Schwartz. 48 pages, each guide.  
**For Novice thru General Class Licenses.** No. 16A202. Ameco 5-01. Each..... **50c**  
**Advanced Class License Guide** No. 16A1107. Ameco 16-01. Each..... **50c**  
**Extra Class License Guide** No. 16A1108. Ameco 17-01. Each..... **75c**



**NEW AMECO CODE LESSONS**

**NOVICE TO EXTRA CLASS ON 12" 33 1/3 RPM LP RECORDS**  
All lessons on both sides of 1 record, except General Class on 2 records.  
No. 9A3175. Up to 8 WPM Novice and Technician. Net Each..... **\$3.95**  
No. 9A3176. Up to 18 WPM Through General Class. Net Each..... **\$7.50**  
No. 9A3177. 12 to 15 WPM General Class Supplement. Net Each..... **\$3.95**  
No. 9A3178. 13 to 22 WPM Extra Class. Net Each..... **\$3.95**  
No. 9A3179. 19 to 24 WPM Extra Class Supplement. Net Each..... **\$3.95**



# AMATEUR STATION EQUIPMENT



**NEW CYGNET "260"  
260 WATT SSB  
TRANSCIVER  
WITH BUILT-IN AC/DC  
SUPPLY/SPEAKER**

Complete with internal 117 V. AC and 12 V. DC power supplies, speaker and push-to-talk microphone. Full coverage, 10, 15, 20 and 80 M. Bands. 260 W. SSB, 180 W. CW input. Crystal lattice filter, grid block CW keying. Ideal mobile companion. Size 5 1/2" x 13" x 11" deep. Wt. 24 lbs. **\$435.00**

No. 9A445. Model 260. Net Each **\$12.00**  
No. 9A3165. Mobile Under Dash or Hump Mount. Net Each **\$12.00**

**500C Transceiver.** 520 W. 80 through 10 M SSB-AM-CW. Home, Mobile, Portable. SSB input actually exceeds 570 W. Plug-in VOX accessory provides CW break-in as well as voice control. 5 1/2 x 13 x 11" deep. Wt. 15 lbs. No. 9A427. Model 500C. **\$520.00**  
Less Power Supply. Net Each

**350C Transceiver.** Essentially same as 500C except transmits on commonly used sideband of each band and does not have CW sidetone, ANL, ALC or crystal calibration. Same size as 500C. Wt. 15 lbs. **\$420.00**

No. 9A403. Model 350C. Less Power Supply. Net Each

**250 6 Meter SSB Transceiver.** 240 W. SSB, 180 W. CW, 75 W. AM input. Complete coverage 50-54 MC, upper sideband. Two 6146B tubes in power amp. Receiver noise figure better than 3 db. 5 1/2 x 13 x 11" deep. Wt. 17 lbs. No. 9A404. **\$420.00**  
Less Power Supply. Net Each

## ACCESSORIES FOR SWAN 500C, 350C AND 250

No. 9A3053. Model 117XC. AC Supply/Speaker (illus.) Net Each **\$105.00**  
No. 9A3054. Model 14-117. 12 V. DC Supply. Net Each **\$130.00**  
No. 9A3055. Model VX-11. Plug-In VOX Control. Net Each **\$35.00**  
No. 9A3058. 100 KC Crystal Calibrator (350 only). Net Each **\$19.50**  
No. 9A3112. 500 KC Crystal Calibrator For 250C. Net Each **\$19.50**



**SSB-CW-RTTY  
AT ITS BEST!**

**KWM-2 TRANSCIVER**  
(illus.) 175 W. PEP SSB,  
160 W. CW, 80 thru 10  
meters, selectable sideband.  
6 1/2 x 14 3/4 x 13" deep.  
Wt. 18 lbs.  
9A449. Net Each **\$1150.00**

## KWM-2 ACCESSORIES

No. 9A3166. 516F-2 AC Supply. 28 lbs. Net Each **\$153.00**  
No. 9A3167. 312B-5 PTO, Wattmeter, Patch, Speaker. Net Ea. **\$350.00**  
No. 9A3168. MP-1 12 V. DC Supply. 13 lbs. Net Each **\$235.00**  
No. 9A3169. 351-D-2 Mobile Mount. Wt. 18 lbs. Net Each **\$255.00**

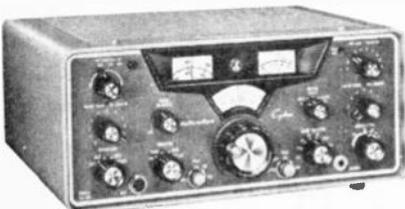
**755-3B RECEIVER.** Tunes amateur bands 3.5 MC to 29.7 MC with coverage of any frequency in the 3.5 to 30 MC range (except 5.0 to 6.5 MC) by substituting crystals. Operates on 117 V. 60 cy. AC. Size 6 7/8" H., 14 1/2" W., 11 5/8" D. Wt. 20 lbs.  
No. 9A446. With 2.1 KC Mechanical Filter. Net Each **\$795.00**

## OPTIONAL ACCESSORIES FOR 755-3B

No. 9A3170. X455KO-200 200 Cycle Mechanical Filter. Each **\$107.00**  
No. 9A3171. 500, 800 or 1500 Cycle Mechanical Filter. Specify. Ea. **\$61.00**  
No. 9A3172. 3, 1, 4 or 6 KC Mechanical Filter. Specify. Each **\$50.00**  
No. 9A3173. 312B-3 Matching Speaker. Net Each **\$32.00**  
No. 9A3174. 312B-4 Speaker, Console, power meter, patch. Net Each **\$195.00**

**325-3 TRANSMITTER.** The finest transmitter of its kind. 175 W. PEP input on SSB, 160 W. CW. Range 3.5-29.7 MC except 5.0 to 6.5 MC. Mechanical filter sideband generation, permeability-tuned VFO automatic load control for higher average talk power. Internal switching permits transceiver operation when used with 755-3 receiver. Same size cabinet as receiver. Requires 516-F2 AC power supply above. Wt. 16 lbs.  
No. 9A447. Net Each **\$865.00**

**30L-1 LINEAR AMPLIFIER.** 1000 W. PEP. 38 lbs. Same size as KWM-2. Covers 80 through 10 meters. 115/230 V. AC.  
No. 9A448. Net Each **\$520.00**



**hallicrafters**

**SR-400A "CYCLONE"  
400 W. SSB-300 W. CW  
FIXED/MOBILE  
TRANSCIVER**

**5 BANDS-80  
THRU 10 METERS**

Compact and powerful and loaded with deluxe features. Velvet smooth gear driven tuning with 1 KHz readout, crystal lattice filter, noise blanker, 200 cycle CW selectivity, notch filter, amplified automatic level control, built-in VOX or PTT transmit control, receiver incremental tuning and provision for Dual-Receive VFO. 19 tubes, 22 diodes. Size 7 3/4 x 16 1/2 x 15". Wt. 26 lbs. No. 9A442. SR-400A. **\$895.00**  
Less Power Supply. Net Each

No. 9A443. P-500AC. 110/220 V. 60 Hz Power Supply. Wt. 29 lbs. Net Each **\$129.95**

No. 9A444. HA20. Dual Receiver VFO Console. Wt. 11 lbs. Net Each **\$199.95**

**FREE FACTORY LITERATURE—Ask For It!** Write for brochure on any Swan, Collins, Hallicrafter or Drake Amateur equipment . . . and ask for B-A's liberal allowance on your trade in. See B-A's E-Z pay plan.



**R. L. DRAKE**

**AMATEUR & GENERAL  
COVERAGE RECEIVER  
\$149.00**

**2-C RECEIVER 2-NT TRANSMITTER**

**MODEL 2-C RECEIVER AMATEUR & GENERAL COVERAGE**

Receives SSB, AM, CW and RTTY with excellent sensitivity and stability. Covers 80, 40, 20, 15 meters completely and 28.5 to 29.0 MHz of 10 meters with crystals furnished, or tunes any 500 KHz range between 3.0 and 30 MHz with an accessory crystal. Bandspread dial calibrated in 1 KHz divisions. Sensitivity less than 5 microvolt for 10 db. signal to noise, selectivity .4 KHz, 2.4 KHz and 4.8 KHz. Has product detector and diode AM detector, solid state AVC and solid state audio, 1.8 w. output. Requires 4 ohm speaker. Has internal sockets for crystal calibrator, and noise blanker. Operates on 120 VAC 50/60 Hz. Size 11 3/4 x 6 3/4 x 9 3/4" deep. Wt. 13 1/2 lbs. **\$229.00**

No. 9A428. Net Each **\$16.95**  
No. 9A3116. 2AC Crystal Calibrator. Net Each **\$19.95**  
No. 9A3114. 2CS Matching Speaker. Net Each **\$39.95**  
No. 9A3115. 2CQ Q-Multiplier-Speaker. Net Each **\$39.95**

## MODEL 2-NT NOVICE CW TRANSMITTER

Ideal companion transmitter for the 2-C receiver above. Frequency coverage 3.5 to 3.8 MHz, 7 to 7.2 MHz, 14 to 14.25 MHz, 21 to 21.25 MHz and 28 to 28.5 MHz. Front panel sockets for 2 crystals. Provisions for external VFO. Input power variable to 100 Watts. Plate meter red-lined for novice power. Provides simplified tune up, automatic transmit on-the-air by closing key, antenna change over relay, automatic receiver mute, built-in CW sidetone for better code keying, low pass filter for reducing harmonics and TVI. 120 V. AC power supply built-in. Size 9 7/8 x 6 3/4 x 9 3/4" deep. **\$149.00**  
No. 9A441. Less Crystals. Wt. 13 lbs. Net Each



**R. L. DRAKE**

**TR-4 TRANSCEIVER (illus.)** 300 W. PEP SSB, 260 W. CW, 260 W. PEP (50 W. out) AM, 80 through 10 meters in seven 600 KC ranges. Solid state VFO. Selectable sideband. 5 1/2 x 10 3/4 x 14 3/8" deep. Wt. 16 lbs. No. 9A433. Net Each **\$599.95**

## TR-4 ACCESSORIES

No. 9A3117. AC-4 AC Supply. Wt. 19 lbs. Net Each **\$99.95**  
No. 9A3118. RV-4. Console VFO/Speaker. Wt. 7 lbs. Net Each **\$99.95**  
No. 9A3119. MS-4 Matching Speaker. Wt. 6 lbs. Net Each **\$19.95**  
No. 9A3120. DC-4 12 V. DC Supply. Wt. 10 lbs. Net Each **\$125.00**  
No. 9A3121. MMK-3 Mobile Mounting Kit. Wt. 3 lbs. Net Each **\$6.95**

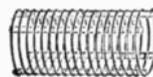
**R-4B RECEIVER.** SSB, AM, CW, RTTY. Covers ham bands 80, 40, 20, 15 meters and 28.5 to 29.0 MC with crystals furnished. Can tune 160 meters. MARS, CB, WWV, marine, SW broadcasts, 1.5 MC to 30 MC in 500 KC ranges with accessory crystals. Linear permeability tuned VFO, 1 KC calibration. Size 5 1/2 x 10 3/4 x 11 5/8" deep. Wt. 16 lbs.  
No. 9A429. Net Each **\$430.00**

**T-4XB TRANSMITTER.** Will transceive with R-4B receiver. Has its own VFO. 200 W. PEP SSB and AM, 200 W. CW. Requires AC-4 power supply above. Size 5 1/2 x 10 3/4 x 11 5/8" deep. Wt. 14 lbs.  
No. 9A430. Net Each **\$449.00**

## DRAKE W-4 DIRECTIONAL RF WATTMETER

Monitors forward and reflected RF power on 52 ohm, coax line. Two scales 0-200 and 0-2000 W. ±5% accuracy, 1.8-54 MHz. 6" H, 3 1/4" W, 4" deep. Wt. 4 lbs.  
No. 9A3091. With Removable Coupler. Net Each **\$49.50**  
No. 9A3113. Model WV-4 as above, for 20-200 MHz. Net Each **\$73.50**

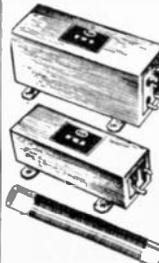
## B & W MINDUCTORS



"Air-Wound" construction for very efficient operation as tank coils, RF chokes, etc. Easily cut to required length. 1/2" and 3/8" dia. coils are 2" long; 3/4" and 1" are 3" long; 1 1/4" and 1 3/4" are 4" long. Wt. 4 oz.

Stock No.	Mfg. No.	Turns Per Inch	Coil Dia.	Price	Stock No.	Mfg. No.	Turns Per Inch	Coil Dia.	Price
9A3004	3001	4	1/2"	\$0.60	9A3015	3014	8	1"	\$0.90
9A3005	3002	8	1/2"	.66	9A3016	3015	16	1"	1.02
9A3006	3003	16	1/2"	.78	9A3017	3016	32	1"	1.14
9A3007	3004	32	1/2"	.84	9A3018	3017	4	1 1/4"	.90
9A3008	3006	8	5/8"	.66	9A3019	3018	8	1 1/4"	1.14
9A3009	3007	16	5/8"	.78	9A3020	3019	16	1 1/4"	1.44
9A3010	3008	32	5/8"	.84	9A3021	3020	32	1 1/4"	1.56
9A3011	3010	8	3/4"	.86	9A3022	3021	4	1 3/4"	1.14
9A3012	3011	16	3/4"	1.14	9A3023	3022	8	1 3/4"	1.20
9A3013	3012	32	3/4"	1.14	9A3024	3023	16	1 3/4"	1.50
9A3014	3013	4	1"	.78	9A3025	3024	32	1 3/4"	1.62

## BARKER & WILLIAMSON CHOKES



**B & W FILAMENT CHOKES FOR Grounded Grid Amplifiers.** Broadband characteristics from 80 through 10 meters, no tuning. Use with regular filament transformers. Sturdy steel case with mounting brackets.

No. FC-15A for total of 15 amp current to one or two tubes. Size 2 x 2 1/2 x 5". Wt. 2 lbs.  
No. 9A3026. Net Each **\$21.70**

No. FC-30A improved model for one or two tubes requiring total of 30 amps filament current. Size 2 x 2 1/2 x 5". Wt. 2 lbs.  
No. 9A3027. Net Each **\$26.80**

No. 800 B & W RF Plate Choke. Ideal for transmitter parallel or series fed circuits, 80 through 10 meters. Maximum rating 2500 V. DC at 500 milliamps. 6 x 3/4" steatite core, threaded for mounting with 1/4-20 screws. Wt. 6 oz.  
No. 9A3028. Net Each **\$6.10**

# AMATEUR RADIO EQUIPMENT

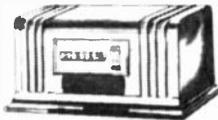
## 24-HOUR WORLD CLOCK WITH UNIQUE SOUTH POLAR PROJECTION MAP

• 8" Diameter—Self Starting Electric  
 • Highest Quality—UL Approved  
 Reliable split second, round the world time at a glance. For Hams, Short-wave listeners, commercial radio stations, home or office. Beautifully chrome plated all metal construction with contrasting black face and white numerals. Has sweep second hand. Unique feature is inner dial with south polar projection map to show world time. Quiet operating self-starting synchronous motor. For 115 V. 60 cy. AC. UL approved. Wt. 1 1/2 lb.  
 No. 9A3036.  
**Net Each \$8.47**



## 24 HOUR NUMERCHRON DESK CLOCK DIRECT READING

Exact split second time can be read at a glance. Has separate 1/4" number wheels for hour, minute and second. Fine for home, desk; ideal for radio stations. Quiet operating. Ebony plastic case 7 3/4 x 4 x 4". Self-starting, 115 V. 60 cy. AC. Wt. 4 lbs.  
 No. 9A3035. **Net Each \$15.00**



## OMEGA-T ANTENNA BRIDGE

New, small instrument for checking both resonant frequency and impedance over the entire HF and lower VHF region of antenna systems, beams, whips, dipoles, etc. Internal battery powered noise diode furnishes test signal. Used with calibrated receiver. Wt. 1 lb.  
 No. 9A3033. Model TET-01. **Net Each \$24.95**



## STANDING WAVE-RF INDICATING INSTRUMENTS



### BENDIX-JONES AND AMECO RF BRIDGE-POWER METERS

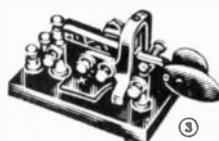
- 1 Micromatch VSWR and RF Power Indicator. Use with Fig. 2 coupler. No. 9A3037. Reads forward or reflected power. 2 lbs. **Net Each \$14.50**
- 2 Type 261 Micromatch Coupler. For continuous use in 52 ohm line. No. 9A3038. Rated up to 1KW to 225 MC. 1 lb. **Each \$22.50**
- 3 Ameco SWR Bridge-Power Meter. Read in SWR, percentage power and voltage. Panel switch for use with 1 or 2 Fig. 4 Couplers. No. 9A3039. Model BIU. 2 3/4 x 5 x 3". 1 lb. **Net Each \$17.95**
- 4 Ameco SWR Bridge Coupler. 52 ohms, continuous duty. No. 9A3040. Up to 1 KW 1.8 MC to 225 MC. 1 lb. **Net Each \$11.95**

### VEICO GRID DIP METERS

- 5 Model 710. Compact, versatile and rugged. Easy to hold and thumb-tune with one hand. Covers 400 KC to 250 MC in 7 overlapping ranges. Plug-in coils have protected "internal" windings. Exceptionally stable, pre-calibrated for accuracy. Has sensitivity control, 500 microamp meter, built-in absorption wave meter circuits and 110 V. AC transformer power supply. 2 1/4 x 2 3/8 x 6 7/8". Wt. 3 lbs.  
 No. 9A3041. Kit with Tubes and Instructions. **Net Each \$34.95**  
 No. 9A3042. Factory Wired and Tested. **Net Each \$59.95**

## POPULAR AUTOMATIC KEYS

- 1 GENUINE VIBROPLEX. For all types of communications work where speed and perfect Morse are essential. Single lever. Two pairs of contact points; one for dots, the other for dashes. Easy to adjust. Wt. 3 1/2 lbs.  
**ORIGINAL DELUXE FINISH**—Polished chromium top parts and base, red knobs, with jeweled movement.  
 No. 9A3101. **Each \$32.95**
  - 2 VIBROPLEX "CHAMPION." A low price key for the amateur or professional radio operator. Has exceptional sending qualities—clarity, speed, sending ease. Gray crystal finish, metal base with bright finished parts. Wt. 3 1/2 lbs.  
 No. 9A3087. **Each \$21.95**
  - 3 VIBROPLEX VIBRO-KEYER. Keying mechanism for electronic keyers. Made on frame like other Vibroplex keys. Switching action SPDT. 3 1/2 x 4 1/2". Wt. 3 lbs.  
**\$20.95**  
 No. 9A3088. **Net Each \$20.95**
- CARRYING CASE For Vibroplex and other speed keys.** Plus lined case, in black morocco. Reinforced covers. Flexible leather handle. Lock and key. Inside dimensions 6 3/4" L., 3 3/4" W., 4 1/4" high.  
 No. 9A3089. **EACH \$8.00**



## HIGH-POWERED C-D-R HAM-M ROTATOR

Hondles Full Size Amateur Antennas

**\$129.95**

- Heavy Duty Brake Built-In
- Mast, Tower or Platform Mounting

Clamps take up to 2" diameter masts. Lower clamp removable for flat bolt-on mounting. Housing dia. 8" maximum. Delivers approx. 360 inch pounds torque. Gear train is made of precision machined stainless steel. Rotates 365° at 1 RPM. Lower portion of unit contains the automatic solenoid operated brake capable of withstanding 3600 inch pounds torque.

Meter Type Direction Indicator is continuous indicating type. Gives accurate headings. Requires 8 wire cable (2 #18, 6 #22, Belden type 8448). Shpg. wt. 20 lbs.  
 No. 9A3031. Model HAM-M. **Net Each \$129.95**

## MODEL TR44A ROTATOR

USES SAME ACCURATE INDICATOR AS THE HAM-M

**\$69.95**

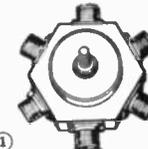
Designed specifically for intermediate loads, CB antennas, large VHF arrays and small HF antennas—not quite as rugged as the HAM-M but will handle most antennas. Has magnetically released mechanical brake. Requires 7 wire #18 cable. Shpg. wt. 20 lbs.  
 Belden 8467.  
 No. 9A3032. **Net Each \$69.95**

## LOW PASS TRANSMITTER TVI FILTERS

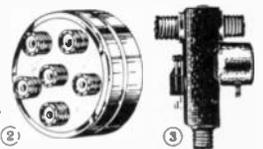


All are rated 1 KW RF power, have very low insertion loss and provide excellent attenuation of transmitter harmonics falling in TV bands. All have SO-239 fittings, except Drake TV-100-LP. Factory adjusted for maximum attenuation. Average shipping weight 2 lbs.  
 ① 9A3043. Barker-Williamson Model 425. For 52 Ohm Coax. Ea. \$22.50  
 ② 9A3044. Johnson Model 250-20. For 52 Ohm Coax. Each \$14.95  
 ③ **DRAKE 52 OHM FILTERS.** Cut off between 6 meters and channel 2. No. 9A3045. Model TV-1000-LP. 1000 Watts except 6 meters, 200 watts. **Each \$16.95**  
 No. 9A3046. Model TV-100-LP. 100 Watts except 6 meters, 20 watts. **Each \$5.95**

## RF COAX SWITCHES AND RELAYS



WITH RADIAL OR AXIAL MOUNTED CONNECTORS



B & W COAX SWITCHES. 1 KW, 52-75 ohms to 50 MC. For receiver/transmitter switching to antennas. Type 551A and 590 are for switching any device into coax line, or cutting in linear amplifier. Dia. 4 x 2 1/4". 1/4" x 1" shaft. Wt. 2 lbs. All have SO-239 coaxial connectors.

Stk. No.	Type	Description	Net Each
(1) 9A3047.	550A	S.P. 5-Position, Radial Connectors	\$11.15
(1) 9A3048.	550A2	S.P. 2-Position, Radial Connectors	10.20
(2) 9A3049.	590	S.P. 5-Position, Axial Connectors	11.55

**DOW 1KW 52 OHM COAX RELAYS** With SO239 connectors and internal receive shunting device.

- (3) 9A3050. Type DK60-C. 115 V. 60 cy. AC. **Net Each \$19.80**
- As above with extra DPDT external contacts.
- (3) 9A3051. Type DK60-G2C. 115 V. 60 cy. AC. **Net Each \$21.80**
- (3) 9A3052. Type DK60-G2C. 12 V. DC. **Net Each \$20.80**

## PETERSEN HIGH QUALITY CRYSTALS



Supplied within the following bands, calibrated integral kilocycles only at oscillator load capacity of 32mmfd. Pin spacing standard .487". Pin diameters, Z-9C .093", Z-6A and Z-9A .050". Orders must be paid in full and are non-cancellable. Allow 2 weeks for factory processing.

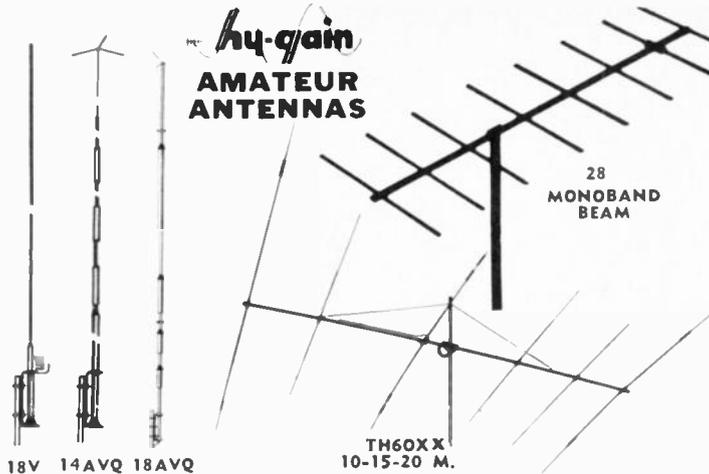
Freq. Range	Type	Calibration	Net Each
1,750 to 2,000 KC	Z-9C Fundamental	± 250 Cycles	\$2.95
3,500 to 4,000 KC	Z-9C Fundamental	± 500 Cycles	2.95
7,000 to 7,425 KC	Z-9C Fundamental	± 500 Cycles	2.95
8,000 to 8,222 KC	Z-9C Fundamental	± 500 Cycles	2.95
8,334 to 9,000 KC	Z-9C Fundamental	± 500 Cycles	2.95
24,000 to 24,666 KC	Z-9A 3rd Overtone	± 3 KC	3.95
25,000 to 27,000 KC	Z-9A 3rd Overtone	± 3 KC	3.95
28,000 to 29,700 KC	Z-9A 3rd Overtone	± 3 KC	3.95
50,000 to 54,000 KC	Z-9A 5th Overtone	± 15 KC	4.95

No. 9A3100. Z-6A 100 KC Freq. Standard. **Net Each \$6.95**

### CRYSTAL SOCKETS

Stk. No.	Mfg. Type	Description	Net Ea.
① 12B299	Millen 33302	.05" D. Pins, 1/2" Spacing, Ceramic	24c
② 12A5123	Millen 33102	.095" D. Pins, .487" Space, Ceramic	38c
③ 12A5124	Cinch 2KM	.095" D. Pins, .487" Space, Bakelite	25c

# AMATEUR ANTENNAS AND ACCESSORIES



## MULTI-BAND VERTICALS—52 OHM COAX FEED

Stk. No.	Model	Description	Wt. Lbs.	Net Each
9A153	18V	Coil Loaded, 10 thru 80 M., 18' high	5	\$19.95
9A160	14AVQ	10 thru 40 M., 20' high—Trap design	10	35.95
9A202	18AVQ	10 thru 80 M., 32' high—Trap design	18	67.50
9A127	14RMQ	Roof Mount Kit for 14AVQ	8	16.95
9A203	LC80Q	Coil, Adapts 14AVQ for 80 M. Operation		12.95

## MONOBAND VHF BEAMS

New Total Performance Beams. Seamless aluminum tubing, machine formed heavy brackets MIL spec. iridized, F/B ratio 20-30 db. VSWR 1.5:1 at resonance. Max. wind survival 100 MPH.

Stk. No.	Model	Description	Gain	Element	Lgth.	Boom	Wt.	Each
9A61	23	2 M., 3 El.	9 db.	3 Ft.-6 In.	3 Ft.	5 Lbs.	\$ 9.95	
9A62	28	2 M., 8 El.	14.5 db.	3 Ft.-6 In.	14 Ft.	9 Lbs.	19.95	
9A170	64B	6 M., 4 El.	12.7 db.	9 Ft.-11 In.	12 Ft.	10 Lbs.	26.50	

## DUO-BAND 6 AND 2 METER LOG-PERIODIC BEAM

The ultimate duo-band antenna. Gain, uniform 8 db on 6 meters, 15 db on 2 meters, F/B ratio 25 db. 1 KW power. Boom 24 ft. Longest element 9 ft. Wt. 20 lbs.

No. 9A7009. Model LP62. Net Each **\$62.50**

## THUNDERBIRD 10, 15, 20 METER BEAMS

Feature the new frequency stabilized Hy-Q Traps, offering better performance and mechanical reliability. Beta matched 52 ohm coax feed. Handles maximum legal power, F/B ratio 20-25 db.

Stk. No.	Model	Description	Gain	Lgth.	Boom	Wt.	Net Each
9A162	TH3MK3	3 Elements	8 db.	28 Ft.	14 Ft.	36 Lbs.	\$132.95
9A163	TH6DX	6 Elements	9.2 db.	31 Ft.	24 Ft.	60 Lbs.	164.95

FERRITE BALUN MATCH for 10-80 Meters.  
No. 9A23. Model BN86. Wt. 1 lb. Net Each **\$14.95**

## 2 AND 6 METER HALO ANTENNAS

For base or mobile operation. Horizontal polarized, omni-directional. Balanced center mount design. Beta matched for low SWR, 52 ohm coax feed.

Stk. No.	Model	Description	Wt. Lbs.	Net Each
9A199	HH6BA	6 Meters, 34" Dia.	4	\$14.95
9A200	HH2BA	2 Meters, 14" Dia.	1	7.95
9A201	HMBA	50" Mast, fits 3/8"-24 Mts.	2	7.95



**hy-gain**  
**TRI-BAND HY-QUAD ANTENNA**  
10-15-20 METERS, 2 ELEMENTS  
ONE FEED LINE HANDLES MAXIMUM LEGAL POWER—GAIN 8.5 DB  
FRONT TO BACK RATIO 25-35 DB  
Extra heavy duty design—wind survival 100 MPH!

All the parts are included, boom, wire, hardware. Spreaders are aluminum broken at strategic electrical points by cycloc insulators. Individually tuned Gamma match on each band, VSWR 1.2:1 or better at resonance, with 52 ohm coaxial feed line. Boom, 8 ft. x 2" dia., has boom-to-mast bracket that tilts and mounts on any mast 1 1/4 x 2 1/2" dia. Length of spreaders 305". Turning radius 13'6". Wt. 42 lbs.  
No. 9A7002. Net Each **\$99.95**

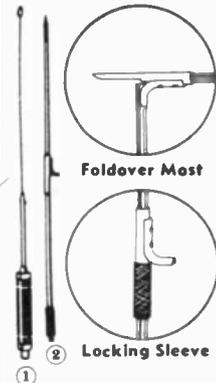
## INSULATORS FOR LONG WIRE AND DOUBLET ANTENNAS



Fig. ① and ② are molded high strength Cylolac. Fig. ③ and ④ are glazed porcelain. Fine for receiving antennas.  
① No. 9A173. HyGain C1 heavy duty center insulator. Each **\$4.95**  
② No. 9A174. HyGain E1 heavy duty end insulator. Pair for **2.95**  
③ 9A3029. Birnbach 668 4 1/2" porcelain end insulator. Each **.40**  
④ 9A3030. Birnbach 468 4 1/2" porcelain center insulator. Each **.76**

# HUSTLER MOBILE HAM ANTENNAS

Power Rating To Handle All Popular Amateur Transceivers  
• 52 Ohm Feed • Any Length Line



## STANDARD HUSTLER RESONATORS

With Adjustable Top Whip Section  
For Use With FOLD-OVER MAST Below

Stk. No.	Type	Band	Coil Size	Total Lgth.	Each
9A117	RM-10	10M	5/8x3 3/4"	21-26"	\$ 7.95
9A42	RM-11	11M	5/8x4 5/8"	21-26"	6.95
9A116	RM-15	15M	5/8x4 5/8"	22-27"	8.95
9A107	RM-20	20M	5/8x6 3/4"	24-29"	9.95
9A106	RM-40	40M	1 x 6 1/4"	33-38"	11.95
9A105	RM-75	75M	1 3/8x8 1/4"	37-43"	13.95

## SUPER HUSTLER RESONATORS

High power type. Will handle legal power limit on SSB. With adjustable top whip section. For use with fold over mast below.

Stock No.	Type	Band	Total Length	Net Each
9A235	RM10S	10 M.	21-26"	\$11.50
9A236	RM15S	15 M.	22-27"	13.50
9A221	RM20S	20 M.	29-24"	15.50
9A222	RM40S	40 M.	38-33"	19.50
9A223	RM75S	75 M.	43-37"	24.50

## FOLD OVER MASTS ONLY

Designed for rapid coil changing or garaging. For use with resonators above. Tempered 1/2" aluminum, 3/8"-24" base. Use MO-1 for rear deck or fender mounting, MO-2 for bumper mount. Wt. 4 lbs.  
No. 9A103. MO-1, Length 54", folds 15" from base. Net Each **\$10.75**  
No. 9A104. MO-2, Length 54", folds 27" from base. Net Each **\$10.95**

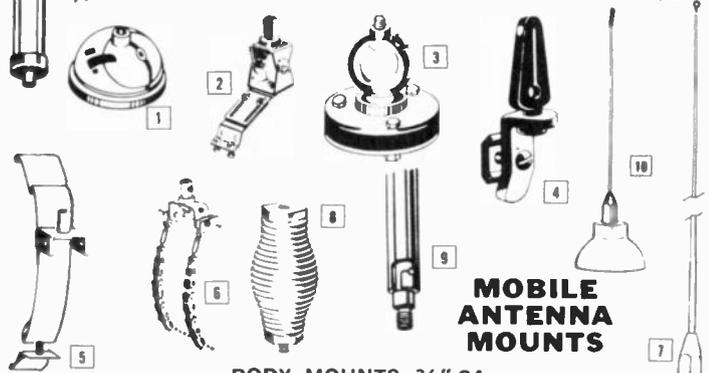
## NEW "HAMCAT" MOBILE ANTENNAS

New, almost indestructible high power precision wound coils on epoxy fiberglass sleeve. Exhibit high "Q" and wide bandwidth with very low heat loss. Distinctive white fibre glass jacket with heavily chromed brass fittings. 52 ohms impedance, very low VSWR.

Stk. No.	Type	Band	Shpg. Wt.	Net Each
9A7008	255	10 M.	3 Lbs.	\$ 8.95
9A7007	254	15 M.	3 Lbs.	9.95
9A7006	255	20 M.	3 Lbs.	10.95
9A7005	256	40 M.	4 Lbs.	12.95
9A7004	252	75 M.	4 Lbs.	14.95

## MOBILE FOLD-OVER MAST

Turn-over mast is hefty 3/8" solid heat-treated aluminum. Folds, swivels, mounts on trunk or deck. Shakeproof sleeve clutch releases fold-over hinge. Stainless steel swivel base, 5/8"-24 thread. Wt. 6 lbs.  
No. 9A7003. Takes coils above. 3/8"-24 base. Net Each **\$12.95**  
No. 9A27. Type 492 Spring. Mounts below coil. Net Each **\$2.80**



## BODY MOUNTS 3/8"-24

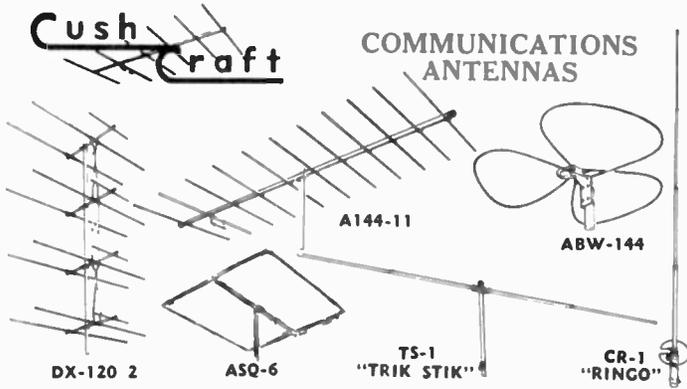
- ① 9A29. Chrome swivel body mount. Hy Gain BDFY. Net Ea. **\$5.85**
- ② 9A38. Jiffy Mount. Fits under deck lid. Hy Gain JMS. Net Each **\$4.95**
- ③ 9A237. Deluxe Swivel Body Mount. Chrome Plated. Coax adaptor. Ant. Spec. M13. Net Each **\$7.10**
- ④ 9A238. Aluminum Swivel Body Mount. Ant. Spec. M3. Net Each **\$3.98**
- ⑤ 9A3095. Insulated gutter clip. Hy Gain 573. Net Each **\$1.00**
- ⑥ 9A64. Stainless Steel Strap Bumper Mount. Hy Gain BPR. Net Each **\$7.95**
- ⑦ 9A161. Double Chain Bumper Mount. Ant. Spec. ASP-143. Net Each **\$9.20**
- ⑧ 9A239. Cadmium Plated Spring. Will support 102" whip. Ant. Spec. M3A. Net Each **\$2.98**
- ⑨ 9A240. Chrome plated spring. Deluxe version of above. Ant. Spec. M3AD. Net Each **\$3.98**
- ⑩ 9A46. Deluxe Chrome Spring. Hy Gain SPC. Net Each **\$5.95**
- ⑪ 9A26. Heavy Duty Chrome Spring. Hy Gain SPCH. Net Each **\$8.95**
- ⑫ 9A27. Miniature Stainless Steel Spring. Hy Gain SPCM. Net Each **\$2.80**
- ⑬ 9A3096. Chrome quick-disconnect. 3/8"-24. Hy Gain 531. Each **\$2.89**
- ⑭ Mobile Roof-Top Whip for 108-470 MC. Cutable stainless steel whip Molded base, 3/8" hole mount. Solderless connector for RG58 coaxial cable. No. 9A7010. HyGain MW150. Wt. 2 lbs. Net Each **\$3.35**

## Amateur and Commercial Whips, 3/8"-24 Mounting

Highest quality stainless taper ground, cutable to freq.:

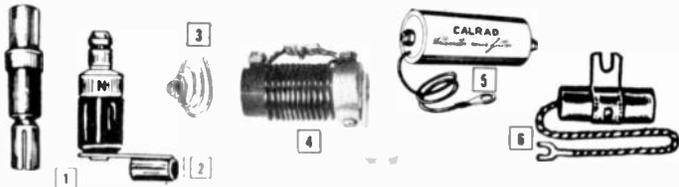
- ① 9A101. Commercial 60" Steel. 48 MC or higher. Each **\$4.75**
- ② 9A48. Commercial 96" Steel. 29 MC or higher. Each **\$6.50**
- ③ 9A49. CB and Amateur 102" Stainless Steel. 27 MC or higher. Each **\$5.00**

# AMATEUR AND CITIZENS BAND ANTENNAS



- DX-120 2 METER AMATEUR 20 ELEMENT ARRAY**  
Combines best yagi and colinear features for 14.2 db forward gain, 20 db F/B ratio, low radiation angle, optimum front lobe, broadband coverage, greater capture area and direct 52 ohm feed. Size installed 118" H., 75" W., 30" D. Wt. 8 lbs. **\$29.50**  
No. 9A7011. Model DX-120. Net Each.....
- A144-11 2 METER 11 ELEMENT YAGI BEAM**  
The standard of comparison in VHF beams! Gives 13 db forward gain. Has 52 ohm coax feed. Boom 12 ft. Wt. 5 lbs. **\$16.95**  
No. 9A7012. Model A144-11. Net Each.....
- ABW-144 2 METER "BIG WHEEL"—360° GAIN**  
Horizontally polarized, omnidirectional gain antenna. Bandwidth 4 MHz. 52 ohm feed. Wt. 2 lbs. **\$13.95**  
No. 9A7013. Model ABW-144. Net Each.....
- ASQ-6 6 METER "SQUALO"—MOBILE/BASE ANTENNA**  
Half-wave, horizontally polarized, omni-directional. Broad band coverage. Has rubber suction cups for car top and mast mount boom. 30 inches square. Wt. 2 lbs. **\$15.95**  
No. 9A7014. Model ASQ-6. Net Each.....
- CR-1 "RINGO" CITIZENS BAND BASE ANTENNA**  
Highly acclaimed by users because of outstanding performance. Requires no radials. Full length capture area gives amazing 3.75 db gain, full circle, with low angle radiations. Power ring gives perfect 52 ohm feed line match. Height 17 ft. 10 in. Ring dia. 10". Wt. 2 lbs. **\$18.95**  
No. 10A7035. Model CR-1. Net Each.....
- TS-1 "TRIK STIK" ALL-PURPOSE ANTENNA**  
The answer to literally hundreds of antenna problems. Adjustable length elements tune to CB, Hi-Lo Band Police, Aircraft, Business Radio, SWL, Amateur, TV or FM. Comes with dimension chart for each service. Use either 52 or 72 ohm feed line. Wt. 2 lbs. **\$6.95**  
No. 10A7036. Model TS-1. Net Each.....

## AUTO RADIO NOISE SUPPRESSORS



- ① Master Distributor Suppressor. Sure cure for most all ignition noises. For use separately, or in severe cases, with individual suppressors. **\$9c**  
No. 38A8009. Net Each..... 10 Lots, Each.....
- ② High Efficiency Spark Plug Suppressor. **\$3.50**  
No. 38A8010. 2 For..... 8 For.....
- ③ Wheel Static Eliminators. Button makes noise free contact. **\$9c**  
No. 38A8011. One required for each front wheel. Net Each.....

## AUTO RADIO IGNITION NOISE ELIMINATOR KITS

- In handy kits, the needed suppressors, condensers, etc., for a complete installation. Easy to install by anyone. **\$3.49**  
No. 38A8012. For 8 and 6 Cyl. Cars. Per Kit.....
- ④ Generator Noise Filter. Adjustable. Stops noise in mobile gear caused by generator brushes. For CB, amateur, industrial mobile and aircraft use. For 6, 12, 24 or 32 volt systems. 30 A. rating. **\$2.75**  
No. 9A33. New-Tronics 3-30. Range 3-30 MC. Net Each.....
- ⑤ Alternator Noise Filter. Cures interference in your CB or ham receiver or stereo player caused by the alternator. Encapsulated, long life design. Easy to install. Size 2 1/2 x 1 1/8". Shpg. wt. 1/4 lb. **\$2.50**  
No. 38A8000. Imported. Net Each.....
- ⑥ Generator Filter .5 Mfd. @ 250 Volts for auto radios. Metal encased with insulated lead. Wt. 2 oz. **\$23c**  
No. 15A5165. Spec. Each..... 10 Lots, Each.....

## SPRAGUE "HYPASS" FILTERS



**TWO-TERMINAL SERIES FEED THRU—CASE GROUNDING**  
Popular for quieting ignition, generator and regulator noises in mobile radio installations and for by-passing AC input to transmitting equipment. Type 80P3 has flanged bulkhead mtg., illustrated at far left; 48P18 has bracket mtg. Average wt. 2 oz.

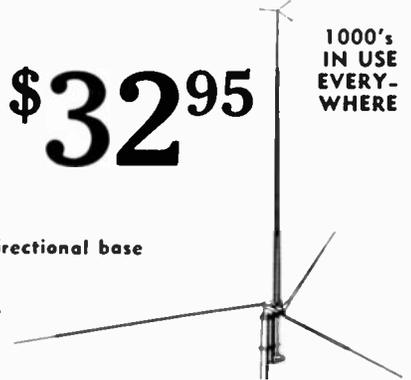
Stk. No.	Type	Mfd.	Amps.	Voltage	Dia.	Length	Each
15B988	48P18	.5	40	50 V. DC	1	1 1/2	\$3.03
15B987	80P3	.1	20	600 V. DC	1 1/8	1 1/2	2.16

## BASE STATION ANTENNAS FOR CB FABULOUS

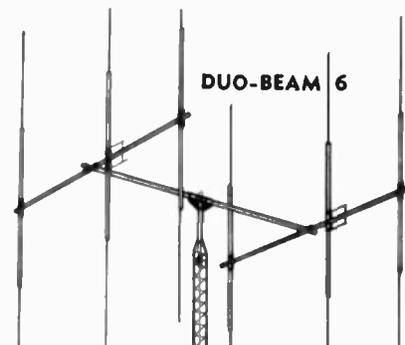
Hy-gain \$32.95  
**CLR II**

1000's  
IN USE  
EVERY-  
WHERE

- Outperforms other omni-directional base station antennas.
- 8 db gain in all directions.
- High strength aluminum construction.



- CLR-11 COLINEAR.** Embodies every significant electrical and mechanical innovation. Maximum legal radiator height of 19 ft. 10 in. lowers the angle of radiation directing a maximum distance-reaching signal along the horizon. Radiator and 9 ft. radials are all high strength seamless aluminum. Has tough styron insulators and iridited weatherproof double grip mast support. DC grounded for lower noise, from 6-20 db gain in improved signal-to-noise ratio. **\$32.95**  
10A7003. Model CLR-11. Wt. 10 lbs. less coax and mast. Net Ea.....
- GCLR-11 GOLDEN COLINEAR.** Operationally same as CLR-11. Entire antenna of heavy wall aluminum and massive heavy gauge steel grid iridited to Mil. specs. for lifetime maintenance free service. Withstands winds to 100 MPH. Perfect 50 ohm impedance match. Less coax and mast. **\$44.50**  
10A7004. HyGain Model GCLR-11. Wt. 15 lb. Net Each.....



Hy-gain

ROTATABLE  
CB BASE  
ANTENNAS

\$84.50

HY-GAIN 4, 6 AND 10  
ELEMENT DUO-BEAMS  
DELIVER MORE TALK  
POWER THAN  
ANY OTHER

Antenna arrays that tremendously increase effective range and power of CB signals by concentrating them into a narrow "ray-like" pattern. Assembly consists of one boom holding two vertically oriented beams, electrically coupled for a single 52 ohm feed line. Rugged all-aluminum construction to withstand heavy weather. Mount on CDR Type TR2C or similar rotor; CDR TR44 or HAM-M heavy duty rotor recommended on 2 larger arrays in high wind areas. Less rotor, mast, 52 ohm lead. \*Power advantage is in comparison to ground-plane or vertical antenna with 5 watt transmitter input. Example: Duo-Beam 10 makes a 5 watt signal sound like 120 watts!

Stock No.	HyGain Model	No. Elements	Power Advantage	Boom Length	Wt. Lbs.	Net Each
10A7005	SDB4	4	42 Watts	3'1"	16	\$57.50
10A7006	SDB6	6	93 Watts	12'2"	30	84.50
10A7007	SDB10	10	120 Watts	18"	59	154.95

## CB BALUN MATCH FOR IMPROVED BEAM OPERATION

Installs at the antenna. Improves front-to-back ratio of beams, helps eliminate TVI and improves radiation pattern of antenna. Recommended for the HyGain beams above as well as other makes. **\$12.95**  
No. 10A3000. HyGain Model BN-27A. Net Each.....



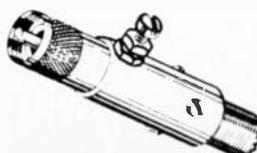
AS LOW AS  
\$2.25

## NEW! AMPHENOL COAXIAL CABLE ASSEMBLIES

FOR CB—AMATEUR—MONITOR RECEIVER ANTENNA CIRCUITS  
Finest low-loss polyfoam coax, attached PL259 plugs, factory assembled to save time and money.

Stk. No.	Description	Wt.	Net Each
2A4000	3 ft. RG 58/U, PL-259 Both Ends	3 oz.	\$2.25
2A4001	20 ft. RG 58/U, PL-259 Both Ends	1 lb.	3.25
2A4002	20 ft. RG 58/U, PL-259 One End, Spade Lugs on Other End	1 lb.	2.85
2A4003	50 ft. RG 8/U, PL-259. Both Ends	6 lbs.	9.25
2A4004	100 ft. RG 8/U, PL-259. Both Ends	11 lbs.	15.90

## "BLITZ BUG" COAX CABLE LIGHTNING ARRESTOR

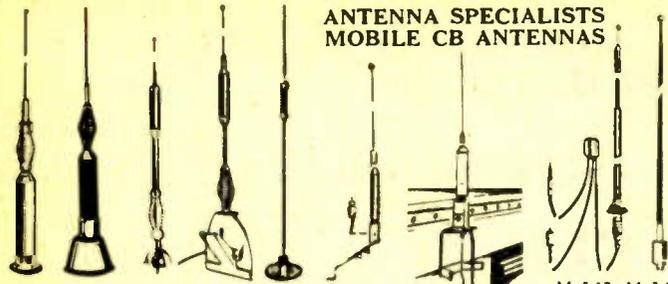


Added lightning protection for receiving and transmitting equipment, ham gear, citizens band transceivers etc. using 52 ohm or 72 ohm coaxial antenna lead.

Threaded for standard PL259 and SO239 fittings. Shpg. wt. 1 lb. **\$3.95**  
No. 10A3001. Cush Craft LAC-1. Net Each.....

# CITIZENS BAND ANTENNAS

## ANTENNA SPECIALISTS MOBILE CB ANTENNAS



M-125 M-176 M-130 M-131 M-168 M-127 M-189 M-143 M-141 M-103 MR-53

### MODEL M125 FOR AUTO ROOFTOP

The standard of comparison among CB users. Features exceptional performance, excellent omni-directional signal pattern and high strength. Made for fast, snap-in mounting from the outside through a single 3/8" hole. Chrome plated brass fittings, stainless steel rod and spring. 46" overall height. With 20 ft. RG58U coax and PL259 connector. Shpg. wt. 2 lbs.

10A7011. Model M-125 with Spring. Net Each **\$16.95**  
10A7012. Model M-123. Same as M125, less spring. Net Each **\$13.95**

### MODEL M176 TRUNK ANTENNA

Antenna is like M125 with spring. New mount installs on trunk deck without holes in car. 16 ft. RG58U coax.

10A7013. Shpg. wt. 2 lbs. Net Each **\$21.95**

### MODEL M-130 "MIGHTY-MITE"—ONLY 18" OVERALL

Handsome, smallest of all CB antennas, yet a very good performer. Beautifully constructed. Snap-in mounting like M-125 above. Center loaded coil design. With 20 ft. RG58U coax and PL259 connector. Shpg. wt. 2 lbs.

10A7014. Model M-130. Net Each **\$13.95**

### MODEL M-131 CLIP-ON GUTTER ANTENNA

Antenna is like M130, with spring clamp mount.

10A7015. Shpg. wt. 2 lbs. Net Each **\$16.95**

### MODEL M-168 "GRIP-STICK" ANTENNA

Magnetic mount just sets on roof, trunk or other flat steel surface of auto. Easy to install, no holes to drill. Center loaded coil design, stainless steel whip. With RG58U coax and PL259 connector.

No. 10A7002. Shpg. wt. 2 lbs. Net Each **\$16.95**

### MODEL M-127 FOR TRUNK GROOVE MOUNT

Installs in seconds with no visible mounting holes in car. Requires only 2 tiny holes in trunk groove, adjusts to all cars, holds securely. Stainless steel rod. Height 46". With 20 ft. RG58U coax and PL259 connector. Shpg. wt. 2 lbs.

No. 10A7021. Model M-127. With Spring. Net Each **\$19.95**

No. 10A7016. Model M-73. Less Spring. Net Each **\$16.25**

### MODEL M-103 CB/AM COMBINATION

Gleaming chrome cowl mount type for replacing existing auto antennas. Fits 7/8 to 1 1/4" mounting holes. Extends 31 to 46". Cable set with automatic coupler includes 5 ft. lead with PL259 connector for antenna, 1 ft. lead with plug for AM radio and 2 ft. lead with PL259 connector for CB radio. Has Grey center loaded coil. Shpg. wt. 2 lbs.

10A7017. Model M-103. Net Each **\$16.95**

### MODEL M-189 CAMPER/TRAILER ANTENNA

Rugged universal bracket holds high performance base loaded antenna with tapered whip, on side or top. 20 ft. cable. Wt. 2 lbs.

No. 10A7037. Model M-189. Net Each **\$21.00**

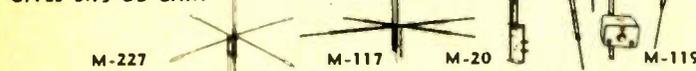
### 48" FIBREGLASS WHIPS ONLY—WITH 3/8"-24 STUD

10A7019. Model MR-53. Black. Shpg. wt. 1 lb. Net Each **\$6.45**

10A7020. Model M-141. Orange. Shpg. wt. 1 lb. Net Each **\$6.45**

## A/S BASE STATION CB ANTENNAS

### MODEL M-117 SUPER MAGNUM OMNI-GAIN GROUND PLANE GIVES 3.75 DB GAIN



M-227 M-117 M-20 M-119

### NEW! MIGHTY MAGNUM III MODEL M-227

More ruggedly constructed than ever! Has new and completely waterproof transformer, stainless steel set screws, graceful appearance enhanced by "power-tip" radials. Height 16 ft. 7 in. Electrically shortened radials only 60" long permit easy installation and lower wind loading. Omnidirectional gain 4 db. Half-wave height provides low angle of radiation. For most or side mount. Precise 50 ohm match. Wt. 10 lbs.

No. 10A7034. Model M-227. Net Each **\$36.95**

### MODEL M-117 SUPER MAGNUM OMNI-GAIN GROUND PLANE

One of the most popular and best-performing antennas made! Gives 3.75 db gain. Features low angle of radiation. Has rigid aluminum radiator, 4 1/4"-wave-length radials. Exceptional mechanical strength. Dual clamp fits pipe masts or side of building. 50 ohm match on all channels. Shpg. wt. 10 lbs.

No. 10A7008. Model M-117. Each **\$32.95**

### MODEL M-20 WINDOW MOUNTING ANTENNA

For buildings where a permanent roof-top antenna installation cannot be made. Has 9 ft. jointed aluminum radiator, heavy cadmium plated adjustable mount. Accepts PL259 coaxial connector. Shpg. wt. 2 lbs.

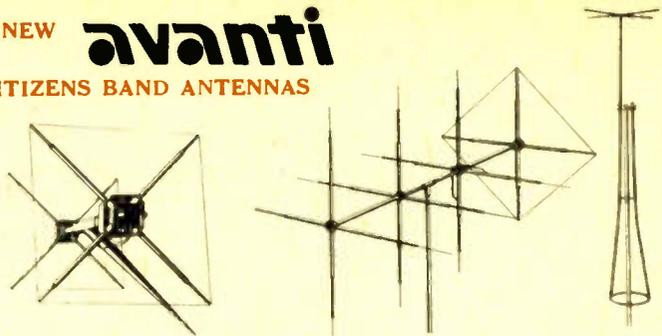
No. 10A7009. Model M-20. Less RG58U Lead. Net Each **\$9.60**

### MODEL M-119 A/S SCANNER DIRECTIONAL DB ANTENNA

Rotates the signal—Not the antenna! 7.75 db forward gain — 23 db rear attenuation. Electronic beam scan control unit showing beam position is a simple switch box, with indicator lights. Vertical elements are 17 1/2' long mounted at 120° points on 3' radius circle. Built for rugged weather. Requires 4 wire TV rotor type cable for scan control and 52 ohm coax lead for antenna. Shpg. wt. 17 lbs.

No. 10A7010. Model M-119. Net Each **\$74.95**

## NEW **avanti** CITIZENS BAND ANTENNAS



**AVANTI PDL-27A DUAL DIVERSITY LOOP.** Power gain 11 db. The one that started it all! Outstanding performance pinpoint signal directivity, ability to transmit or receive on either horizontal or vertical signal directivity. Provides as much as 25 db additional reduction of interference when switched to other mode. Provides a stronger signal than stacked 3 element beams. Rugged aluminum and fiberglass construction. Height 11.9 ft. Perfect 50 ohm match for coaxial feed line. Max. power rating 1,000 watts. Wt. 13 lbs. **\$79.95**  
No. 10A7038. Model PDL-27A. Net Each

**NOW THE MOONRAKER!** Power gain 14.5 db! Combines 1/2 wave cross dipole elements with the famous PDL design reflector. Switch box included permits horizontal or vertical mode transmit or receive. Front to back ratio 38 db., vertical to horizontal separation 25 db. Maximum power 1,000 watts. Feed impedance 50 ohms. Boom length 15 ft. Wt. 24 lbs. **\$129.95**  
No. 10A7039. Net Each

**FAMOUS AVANTI ASTROPLANE.** Power gain 4.46 db. Compact omni-directional design without radials or coils. 50 ohm coax feed. Max. power 1,000 watts All aircraft quality seamless aluminum construction. Wt. 3 1/2 lbs. **\$29.95**  
No. 10A7040. Net Each

## NEW **avanti** **RACER** MOBILE CB ANTENNAS



### TUNABLE TIP FOR LOWEST POSSIBLE SWR

### TUNABLE FIBREGLASS TOP LOADED WHIPS

Beautifully made of tough military grade white tapered fiberglass—almost indestructible. Top loading coil and set screw adjustable end tip provide utmost efficiency and perfect match to 50 ohm line. Standard 3/8"-24 threaded base. Deluxe chrome brass hardware.

No. 10A7041. 48" Maximum Length. **\$10.25**

Net Each

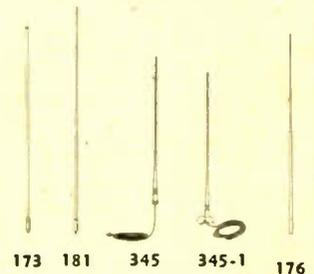
No. 10A7042. 72" Maximum Length. Net Each **\$11.25**

### LOW PROFILE SNAP MOUNT BASE

Mounts from one side of 1/2" hole. Heavy duty low loss molded ABS shell.

No. 10A7043. Net Each **\$9.95**

## SHAKESPEARE WONDERSHAFT FIBREGLASS CB ANTENNAS



173 181 345 345-1 176

Extremely high quality and outstanding top performance have made Shakespeare Antennas famous. Wondershaft process provides strongest possible white fibreglass shafts, no chip, no peel, fully insulated against moisture and static induced background noise. All antennas below are designed for 50 ohm coaxial feed.

173 (VIP). Popular 4 ft. mobile. Perfect cowl mount. Wt. 1 lb. **\$6.95**  
No. 10A7044. 3/8"-24 Threaded Base. Net Each

181 (Thunderstick). Full 108". Electrically nearly 3/8 wavelength. Molded-in matching system in base for super performance. Wt. 2 lbs. **\$10.45**

No. 10A7045. 3/8"-24 Threaded Base. Net Each

345 (Perfect 36). Roof antenna. Tapered throughout entire 36" length. Never gets out of tune. Mounts thru 3/4" hole. 15' cable. Wt. 3 lb. **\$15.95**

No. 10A7046. Net Each

345-1 (Perfect 36 with Trunk Mount.) No holes to drill. Base secures to forward edge of trunk deck without marring. 15' cable. Wt. 5 lb. **\$21.95**

No. 10A7047. Net Each

176 (Big Stick). Height 18 1/2 ft. Mounts without radials. Extreme low angle radiation. Fittings for 1 1/4-1 1/2" pipe. Exceptional base and marine performance. Wt. 10 lbs. **\$32.95**

No. 10A7048. Net Each

# JOHNSON MESSENGER CB TRANSCEIVERS

## NEW MESSENGER "125"

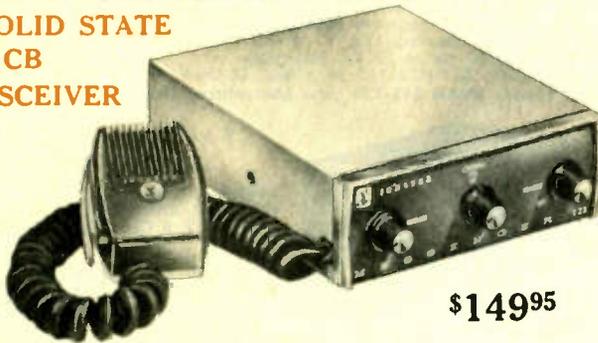
**SOLID STATE  
5 WATT MOBILE  
TWO-WAY  
RADIO**



**\$99<sup>95</sup>**

World's smallest 5 watt radio for 27 MHz CB radio service. Famous Johnson high performance with excellent sensitivity and exceptional noise rejection. Can be installed in virtually every automobile including 1970 models. Designed to harmonize with auto interior. Five crystal controlled channels plus on/off controlled by push-buttons. Volume and squelch knobs are slide-lever type completely eliminating protruding knobs; channel 5 crystals supplied. Size 1 1/4" H. x 4 1/2" W. x 7" deep. With high quality push-to-talk ceramic mike. For 12 V. DC. operation. **\$99.95**  
No. 10A34. Johnson 242-125. Each.....

## DELUXE MESSENGER III 5 WATT ALL SOLID STATE CB TRANSCEIVER



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

Features finest engineering and performance. Now 12 channels. 18 transistors, 9 diodes, double conversion superheterodyne, 0.4 microvolts sensitivity, 7 KC bandwidth, 2-stage self-compensating squelch, automatic noise limiter. Transmitter is high level modulated, has speech clipping and filter for high intelligibility. Internal speaker, also provisions for external speaker and for 3 W. PA. Wired for optional tone alert. Size 2 7/8" x 6 7/8" x 8 3/4" deep. For 12 V. DC. With channel 9 crystals. Wt. 8 lbs. **\$149.95**  
No. 10A6. Johnson 242-143. Net Each.....



## JOHNSON MESSENGER 320 DELUXE SOLID STATE 23 CHANNEL CB TRANSCEIVER



**FOR BASE, MOBILE  
OR PORTABLE OPERATION**

Ruggedly constructed. Super sensitive double conversion superheterodyne receiver lets you hear more stations... more clearly. Built-in speech compression provides more audio for greater range. Has combination "5" meter/power meter, built-in PA system. Sensitivity 0.5 uv. Selectivity 6K HZ bandwidth at -6 db. Features series type automatic noise limiter, adjustable squelch, very effective AVC. 23 transistors. Size: 2 1/2" H., 8" W., 9 1/2" deep. Operates on 12 VDC. Wt. 5 lbs. **\$199.50**  
No. 10A20. Model 242-320. Net Each.....

## MESSENGER 323 WITH CRYSTAL FILTER

Crystal filter for exceptional adjacent channel rejection and image rejection. Particularly desirable in areas of high CB radio activity. Other features like Model 320 above. For 12 V. DC negative ground. Size 2 1/2" x 8" x 9 1/2". Mobile bracket supplied. **\$239.95**  
No. 10A12. Johnson 242-153-2. Each.....

**OPTIONAL 117 V. AC POWER SUPPLY. Wt. 6 lbs. \$32.95**  
No. 10A3017. Model 239-122-1. Net Each.....  
**12 V. OC NI-CAD PORTABLE POWER.** Rechargeable battery pack for hand carried operation. Wt. 4 lbs. **\$79.95**  
No. 10A3032. Model 250-855-2. Net Each.....

## MESSENGER "110" 5-WATT SOLID STATE CB TRANSCEIVER



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

Use it base, mobile or portable. Features speech compression for greater range, built-in noise limiter to effectively reduce ignition and other types of noise, sensitivity to bring in weak stations with greater readability... plus all the famous Johnson reliability. 5 channel crystal transmit-receive. 12 V. DC operation. Size 2 1/2" x 6 3/16" x 8 3/4" deep. With channel 9 crystals, and push-to-talk ceramic microphone. Wt. 5 lbs. **\$109.95**  
No. 10A4. Johnson 242-110. Net Each.....



## MESSENGER "100" 5-WATT SOLID-STATE CB TRANSCEIVER

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

All transistor—Now with new extra features. Very small size 2 1/2" x 6 7/8" x 8 3/4" deep. Has six channel crystal receive-transmit, narrow bandwidth, adjustable squelch, exceptional sensitivity, transmitter speech compression, full 3.5 watts RF output, 3 W. audio power to internal speaker. Also has jack and switch for use as 3 W. PA amplifier. Wired for optional tone alert. For 12 V. DC. With crystals for channel 9. Shpg. wt. 8 lbs. **\$129.95**  
No. 10A5. Johnson 242-156. Net Each.....



## NEW JOHNSON MESSENGER 123 SOLID STATE 23 CHANNEL TRANSCEIVER

**\$179<sup>95</sup>**

Full 23 channel operation at new low prices. No additional crystals to buy! Equipped with a compression circuit that puts maximum voice intelligence into the radiated signal. The super sensitive receiver has 0.4 microvolt sensitivity with sharp filtered 7 KHz selectivity to pull in distant stations while rejecting interference from adjacent channel users. A high efficiency noise limiter effectively reduces ignition and other forms of radiated noise interference. Solid-state circuitry has low current drain and is fully temperature compensated to operate from -22° F. to +140° F. Easy-to-read meter monitors both incoming signal strength and transmitter output power. For 12 V. DC operation. 2 1/2" H. x 6 3/4" W. x 8 3/4" D. Shpg. wt. 5 lbs. **\$179.95**  
No. 10A32. 242-123. Each.....

### BASE STATION POWER SUPPLY

For all Messengers above except Model 125. 117 V. 60 cy. Wt. 3 lbs. **\$32.95**  
No. 10A3007. Johnson 239-125-1. Net Each.....

### TRANSISTORIZED TONE ALERT

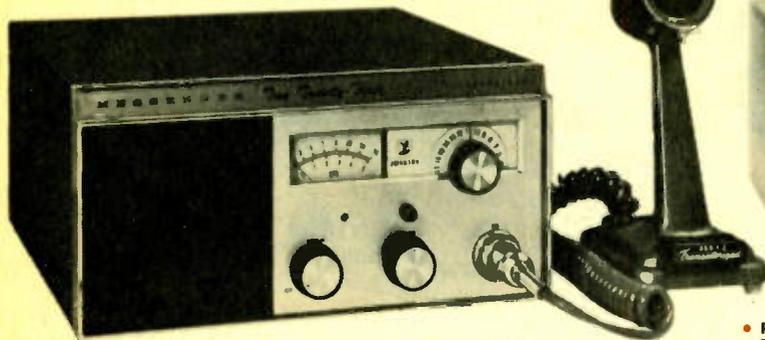
Plugs into all Messengers above except Models "110" and "125". Completely mutes the speaker until one of your units calls. Automatically sounds audio signal note. Eliminates unwanted signals on standby. Wt. 3 lbs. **\$69.00**  
No. 10A3008. Johnson 250-861. Net Each.....

### EXTRA CRYSTALS FOR MESSENGERS ABOVE

No. 10A3009. Specify Messenger Model and Channel Number. Pair **\$4.95**

# FINE CITIZENS BAND EQUIPMENT

FOR UNMATCHED PERFORMANCE



## JOHNSON MESSENGER 223 23 CHANNEL BASE STATION

**\$224<sup>95</sup>** WITH MIKE

Designed for uncompromising base station use, the 223 is built to deliver reliable day-in, day-out performance, punching out a penetrating signal that will stand out compared to others. Has at least 15 db more audio gain and more talk power than the almost unbeatable famous Messenger I and Two! Combines proven tube circuitry with the industry's most accurate and reliable frequency synthesizer to give unmatched 23 channel frequency control at a reasonable price.

Receiver has 4 double tuned IF's for excellent adjacent channel rejection, 0.5 microvolts sensitivity for 11 db signal to noise ratio, series type automatic noise limiter, adjustable squelch, ACC, superior audio, built-in speaker and provision for external 3.2 ohm speaker. Has combined illuminated "S" meter/power output meter. Transmitter RF output 4 watts. Microphone input, high impedance.

Cabinet size 5 3/8" H. 11" W. 9 1/8" D. Has cast and chrome plated front panel, perforated steel enclosure. For 117 V. AC 50-60 Hz only. Wt. 12 lbs. No. 10A36. With press-to-talk ceramic mike. **\$224.95**  
Model 242-223-2. Net Each.....

NEW JOHNSON MESSENGER 124  
MOST ADVANCED BASE STATION



DELUXE DUAL CONVERSION CIRCUIT  
ALL SOLID STATE—23 CHANNELS

**\$289<sup>95</sup>** LESS MIKE

- Personal Communications.
- Business Industrial Applications.
- Emergency Communications Nets.
- Public Service Utility Systems.

All the accumulated knowledge of the world's largest, most experienced manufacturer of citizens and industrial 2-way radio was focused in the design of this, the most sophisticated of all 27 MHz base stations.

Features generally not found on other transceivers: Advanced dual conversion superheterodyne receiver circuitry. Delta fine tuning  $\pm 3$  KHz. Adjustable microphone gain with modulation adjustment to 100%. 2 1/2" four-way professional meter, measures SWR, output, % modulation and receive signal strength. Crystal filter, 4.3 MHz selectivity. Built-in speech compression. Panel controlled, series-type automatic threshold noise limiter. Built-in tone control.

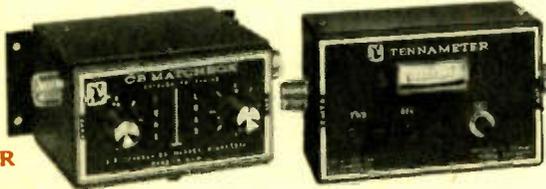
Produces 4 watts RF output power, 3 watts audio output to internal speaker. Wired for high impedance, push to talk ceramic microphone.

Power source required 13.8 V. at 0.53 A. on standby, 1.3 A. transmit or 117 V. AC 60 Hz at 53 W. maximum.

Cabinet size 5 3/8" H. x 11" W. x 9 3/8" D. Shpg. wt. 14 lbs. **\$289.95**  
No. 10A33. Model 242-124. Less Microphone. Net Each.....

SPECIALLY ENGINEERED FOR OPTIMUM PERFORMANCE

GET MAXIMUM RANGE FROM YOUR TRANSCEIVER



**NEW JOHNSON CB MATCHBOX.** Connects between transceiver and coax feed line to antenna. Corrects impedance mis-match, eliminates standing waves, improves performance of equipment. Handles up to 15 watts power. 4 x 2 3/4 x 2 3/8". No. 10A3004. Wt. 3 lbs. Johnson 250-049. Net Each. **\$15.95**

**NEW JOHNSON TENNAMETER.** Small metered device that actually reads the standing wave ratio on 52 ohm coax feed line. Shows instantly when antenna system is not correct and allows tune-up to maximum power. 4 1/2 x 2 3/4 x 2 1/8". No. 10A3005. Shpg. wt. 3 lbs. Johnson 250-849-1. Net Each. **\$14.95**

## TRANSISTORIZED PERMA-VIBE

Permanently replaces vibrator in Messenger I and Messenger II. For 12 V. DC operation only. Quiet operating. Shpg. wt. 1 lb. No. 10A3016 Johnson 239-050-1. Net Each. **\$8.95**

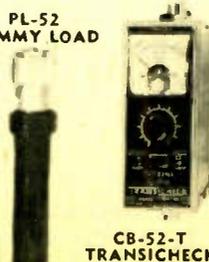
## VOLTAGE CONVERTER

For Powering 12 Volt Transistorized CB Sets on 6 or 32 Volt DC New In-Converter, a versatile, compact unit that provides 12 V. DC at 14 watts, 1 amp. max. and inverts polarity, if necessary, to allow CB installations on tractors, lift trucks, boats, etc. that have other than 12 V. DC power. Size 5 3/4 x 3 3/4 x 2 1/2". Shpg. wt. 3 lbs. No. 10A3006. Johnson 239-120-1. Each. **\$22.95**

## POPULAR NEW-TRONICS CB ACCESSORIES

**MODEL CB-52-T TRANSICHECK**  
Easy-to-use instrument for checking CB transmitter operation. Installs in 52 ohm coax line to antenna. Measures power output, indicates transmitter resonance, indicates proper adjustment of antenna loading capacitor, measures SWR on feed line. Has SO239 connectors, sensitive microammeter. Made in USA. Wt. 1 lb. No. 10A3002. Net Each. **\$19.95**

PL-52 DUMMY LOAD



CB-52-T TRANSICHECK

**MODEL PL-52 DUMMY LOAD**  
Attaches to CB transceiver in place of antenna. Needed for making transmitter adjustments. High impact plastic with standard PL259 connector. No. 10A3003. Shpg. wt. 1 lb. Net Each. **\$2.50**

## FAMOUS JOHNSON MESSENGER I

FINEST LOW COST BASE/MOBILE CRYSTAL CONTROLLED TRANSMIT/RECEIVE 5 CHANNEL CAPABILITY



WITH CH. 11 CRYSTALS **\$124<sup>95</sup>**

The original 5 watt 10-tube transceiver popularly known as "Messenger I". Notionally famous for its penetrating signal and faithful performance. All components operate at only half their capability providing tremendous reserve power and dependability. Has squelch, automatic noise limiter, AVC. Size 5 5/8 x 7 x 11 3/8" deep. Sturdy steel cabinet, chrome front panel. With channel 9 transmit and receive crystals. Shpg. wt. 17 lbs.

No. 10A9. Johnson 242-128. For 12 V. DC-115 V. AC. Net Each. **\$124.95**  
No. 10A3012. Pair Crystals for Messenger I. Specify Channel. Pair. \$4.95  
No. 10A3014. Johnson 251-828 Dash Bracket. Net Each. \$2.50

FOR DEPENDABLE HAND-HELD COMMUNICATIONS

NEW! JOHNSON MESSENGER 109  
CB TRANSCEIVER

3 WATTS  
2 CHANNELS



SIZE: 8 1/2" H. 3 1/8" W. 1 1/2" D. Wt. 30 oss.

FAMOUS JOHNSON CRAFTSMANSHIP THROUGHOUT

Lightweight and rugged. Utilizes 14 transistors, 9 diodes and a thermistor to give excellent performance in both transmit and receive modes.

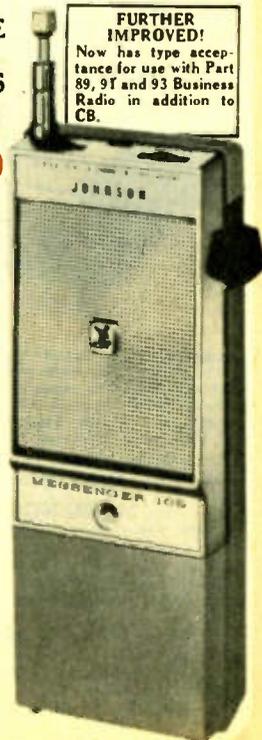
Receiver sensitivity 10 db S+N/N ratio with 0.5 microvolts (30% modulation at 1000 HZ). 6K HZ bandwidth at -6 db. Squelch is highly immune to impulse type noise. Noise limiting is series type with automatic threshold adjustment and IF clipping.

Comes with nickel cadmium battery pack and built-in charger. Gives 8 hours service on a single charge. Squelch control silences receiver on "standby", prolongs battery life.

Transmitter power input 3.7 watts at 13.8 VDC. RF power output 2.1 watts. High level class B modulation with speech compression, clipping and audio filtering.

With channel 11 crystals. **\$149.95**  
No. 10A19. Shpg. wt. 2 lbs. Net Each

FURTHER IMPROVED!  
Now has type acceptance for use with Part 89, 91 and 93 Business Radio in addition to CB.





**MIDLAND**  
INTERNATIONAL

**NEW INTEGRATED CIRCUIT 5-WATT,  
6 CHANNEL BASE/MOBILE TRANSCEIVER**

- Push-Button Channel Selector.
- Integrated Circuitry.
- With Push-to-Talk Mike, Functions As Speaker As Well.

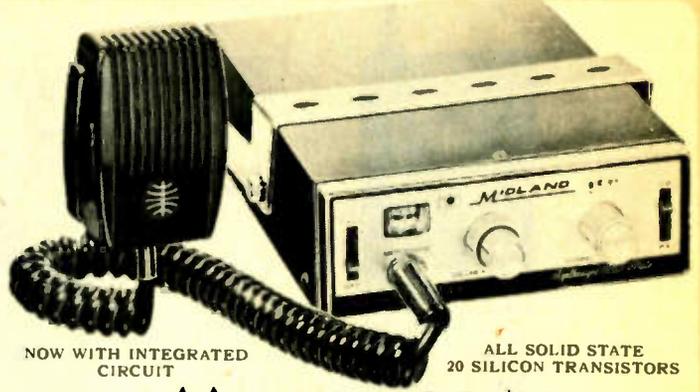
**\$69<sup>95</sup>**

Most feature packed base/mobile CB transceiver we've seen at this low, low price. This compact unit offers a full 5 watts power, with 6 channel versatility. Supplied with transmit and receive crystals for channel 9 (27.065 MHz). Five channels open for any other of the 23 CB channels. Sensitive superhet receiver features a tuned RF stage and 3 IF stages. Sensitivity .5 uv or better. AGC circuit prevents overdriving and fading, variable squelch control silences receiver between calls. Controls also include volume and push-button selectors. Accessories included are push-to-talk speaker/mike with 4 ft. coiled cord, mobile mounting bracket, and 12-volt DC auto cable. Cabinet is metal covered with deeply padded leather-grained black vinyl. Size 4 3/4" W, 6 1/2" D, 2" H. Wt. 2.9 lbs.

No. 10A38. Model 13-855. Each **\$69.95**

Base Station power supply converts above unit for 110-130 volt AC operation.

No. 10A3033. Model 18-805. Net Each **\$17.95**



NOW WITH INTEGRATED  
CIRCUIT

ALL SOLID STATE  
20 SILICON TRANSISTORS

**MIDLAND**  
INTERNATIONAL

**5 WATTS - 23-CHANNEL CITIZENS RADIO TRANSCEIVER**

Synthesized crystal controlled transmit and receive  
... No extra crystals to buy. Ceramic filter, adjustable squelch, automatic noise limiter.

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

Dual conversion superhet circuit plus mechanical filter reduces adjacent channel interference, clears reception on all 23 channels. Receiver sensitivity less than 1 microvolt for 10 db S/N ratio; selectivity ± 15 KHz at 6 db down. Call signal saves time and even extends calling range compared to regular voice transmission. PA switch lets you use transceiver as a PA amplifier. Has jack for 8 ohm speaker or horn. Dual purpose meter automatically reads relative RF power output and signal strength. Full variable squelch, automatic noise limiting and built-in A-line filter provide quiet operation. Transmitter power, full 5 watts, high level class B modulated. Supplied with dynamic push-to-talk mike and mobile mounting bracket. Case size: 6" W. x 2 1/8" H. x 8 1/2" D. For 12 - 16 VDC. Quality Import.

No. 10A24. Model 13-870C. Wt. 5 lbs. **\$129.95**

Net Each  
BASE STATION POWER SUPPLY. Custom designed to power and support the transceiver. Furnished regulated 12 V. DC 1.5 amps. Operates on 120 V. 60 Hz line. Wt. 3 lbs.

No. 10A3033. Model 18-805. Net Each **\$17.95**



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

**MIDLAND**  
INTERNATIONAL

**23 CHANNEL 5 WATT BASE TRANSCEIVER**

- 10 Vacuum Tubes Operate As 17.
- Recessed Illuminated S/RF Meter.
- Ready-To-Operate On All 23 Channels.
- Dual-Conversion Receiver.

The finest value we've seen in a 23 channel base station. Full 5 watts of transmitter power with sensitive microphone and automatic high level modulation. Dual conversion receiver has .75 uv sensitivity. Features delta fine tuning, fully variable squelch control, automatic noise limiter with on/off switch, jacks for headphone and external antenna. Cabinet size 11 3/4" x 4 1/2" x 8 3/4". Comes with plug-in push-to-talk CB microphone with coiled cord, microphone holder. Operates from 110-120 volt AC.

No. 10A39. Model 13-890. Shpg. wt. 18 1/2 lbs. Net Each **\$129.95**

**MIDLAND**  
INTERNATIONAL

**CHOICE HIGH POWER  
CB TRANSCEIVER**

5 WATT HAND HELD 23 CHANNEL  
TRANSCEIVER WITH REVOLUTIONARY  
NEW INTEGRATED CIRCUITS

5 watts! All the features of a deluxe base/mobile unit in a striking hand held unit. Comes complete ready to operate on all 23 channels (no extra crystals to buy). Deluxe receiver is dual conversion with tuned RF stage and 6 IF's provide .5 uv sensitivity. Front panel meter provides continuous visual monitoring of battery condition, output power and incoming signal strength. Jacks are provided for AC adaptor/battery charger, external antenna, external mike, PA speaker and earphone/external speaker. Has fully variable squelch. Hand-some rugged cabinet has die cast chrome grille. Built-in 12-section antenna telescopes to 6 1/2" for excellent reception. Operates on 8 penlight cells, 10 nicad rechargeable cells, 12 volt AC adaptor, base station power supply or 12 volt auto cable (all optional). Comes with full leather carrying case plus security strap. Size 9 3/4" H, 3 1/4" W, 2 1/4" D. Wt. 3 lbs. 12 ozs. Shpg. wt. 7 lbs.

No. 10A37. Model 13-790. Each **\$149.95**

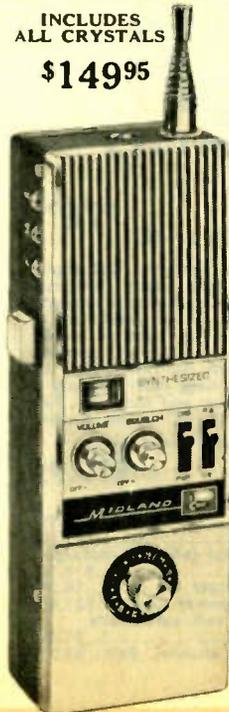
OPTIONAL ACCESSORIES  
No. 10A3024. 18-137. Leather Pouch for 8 "D" Cells **\$7.95**

No. 10A3025. 18-141. 12 V. Auto Power Cable **\$1.50**

No. 10A3027. 117 V. AC Base Station Power Supply. Each **\$21.95**

INCLUDES  
ALL CRYSTALS

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



**MIDLAND**  
INTERNATIONAL

**DELUXE 23-CHANNEL, 5 WATT  
BASE/MOBILE CB TRANSCEIVER**

**\$189<sup>95</sup>**

- Operates directly on 12 V. DC or 115 V. AC.
- Digital electric clock can be preset to turn Transceiver on.
- Built-in 3 1/2" front mounted speaker.
- Dual meters for "S"/RF output and SWR sensitivity.
- Send and Receive on all 23 Channels... no extra crystals needed!
- FET front end RF amp.
- 4 IC's in IF system.
- Dual-conversion Receiver with filter.
- Public address provision.

For those who want the finest. Features built-in digital clock for down to the second timing plus 24 hour automatic turn-on. Advanced delta tuning permits ±2 KHz receiver adjustment—gives sharp, clear reception of stations operating off frequency. Receiver sensitivity .25 uv for 10 db S/N ratio. Other features include Pi-type Network, low pass filter, ANL, illuminated channel selector, plug-in jacks for mike and headset. Exclusive "hide-away" bracket tilts for easier operation. Comes complete with plug-in mike, AC-DC power cords, mobile mounting bracket. Size 13 1/4" x 5 1/4" x 7". Shpg. wt. 15 lbs.

No. 10A40. Net Each **\$189.95**

# MIDLAND INTERNATIONAL CITIZENS BAND WALKIE-TALKIES



## MIDLAND INTERNATIONAL 3 CHANNEL-9 TRANSISTOR 100 MILLIWATT WITH CALL SIGNAL

- No license or permit required.
- Range up to 2 miles.
- Plug-in crystals.
- Optional AC Adaptor.
- With carrying case.
- Small size—only 5 3/4" high.

**\$16.95**

Tremendous talk power and sensitivity. Call signal increases range over ordinary voice calling, is more easily identified on crowded channels. Operates on three of the 23 CB channels. Channel 11 crystals, factory installed. Grey case with chrome trim. Vinyl carrying case, earphone and 9 volt battery supplied. 5 3/4 x 2 5/8 x 1 3/8". Shpg. wt. 1 1/2 lbs.

- No. 10A41. Model 13-428. Each... **\$16.95**
- No. 10A3021. 18-112B 12 V AC adaptor. Each... **\$4.95**
- No. 10A3020. Crystals per channel. Pair... **\$4.95**

## MIDLAND INTERNATIONAL BEST VALUE! 100 MILLIWATT RUGGED 9 TRANSISTOR LAST YEARS PRICE CUT \$2.00

- No License or Permit required.
- Rugged all metal case.
- Range up to 2 miles.
- Plug-in crystals.
- Optional AC power adaptor.
- Size 7 1/8 x 2 3/8 x 2 inches.

**\$19.95**

Has tremendous talk power and sensitivity packed into its precision engineered superheterodyne chassis. Far exceeds the usual 100 MW unit in both performance and construction. Comes with 46 1/2" 11-section telescoping antenna, leather case, crystals for ch. 11. Requires 8 standard penceil batteries. Finest Import.

- No. 10A16. Model 13-113. Each... **\$19.95**
- No. 21A3. Pencil Battery. Each... **13c**
- No. 10A3021. Optional 117 V. AC Adaptor... **\$4.95**
- No. 10A3020. Crystals, Per Channel... **\$4.95**

## MIDLAND INTERNATIONAL 12 TRANSISTOR-3 CHANNEL 100 MILLIWATT WITH CALL SIGNAL

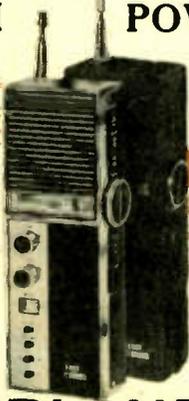
- Variable squelch control.
- Tuned RF.
- Separate speaker and mike.
- No license or permit required.

**\$29.95**

Really punches out the signals! Sensitive super-heterodyne receiver with tuned RF for greater receiving range. Operates on any 3 of the 23 channels with crystals for channel 11 installed. Rugged, attractive metal case with 13 section telescoping antenna. With leather carrying case and strap. 7 1/2 x 2 3/4 x 2 1/8". Operates on 8 penceils or AC adaptor.

- No. 10A42. Model 13-124C. Each... **\$29.95**
- No. 21A3. Pencil. Each... **13c**
- No. 10A3021. 18-112B AC adaptor. Each... **\$4.95**
- No. 10A3020. Crystals per channel. Pair... **\$4.95**

## DELUXE HIGH POWER WALKIE-TALKIES



## MIDLAND INTERNATIONAL 2 WATT-3 CHANNEL CALL CHANNEL TRANSCIVER

**\$44.95**

Rugged and powerful! Handles the big jobs with ease. Full 2 watts input power. Tuned RF for longer receiving range. Fully variable squelch control. Call signal transmits a long range tone to other units. Send and receive on any 3 channels. Channel 11 crystals supplied.

10 transistors, 1 diode, and two squelch transistors, plus an integrated circuit that does the job of several solid state devices. All metal cabinet with die cast grille. Deluxe Texon carrying case and shoulder strap. Earphone included. 5 foot, 13 section antenna. Battery condition meter. Operates on 8 penceils or AC power supply. FCC license required to operate. Shpg. wt. 2 lbs.

- No. 10A43. Model 13-724. Each... **\$44.95**
- No. 21A3. Pencil. Each... **13c**
- No. 10A3034. 18-140 AC power supply... **\$18.95**
- No. 10A3022. 20-112 Nickel cadmium rechargeable battery pack. Each... **\$16.50**
- No. 10A3023. 20-212. Charger for above... **\$6.50**
- No. 10A3020. Crystals per channel. Pair... **\$4.95**

## MIDLAND INTERNATIONAL 5 WATT HIGH POWER TRANSCIVERS 12 CHANNEL MODEL 13-772

**\$79.95**

Loaded with performance features. Call-signal tone alert carries farther than voice. Combination battery level/power output/signal strength meter. Hi-lo battery saver allows monitoring at reduced battery level. Can be used as public address amplifier with an external speaker. Rugged metal cabinet with die-cast front. 13 section 60" antenna. Complete with channel 7 crystals, leather carrying case and earphone. Requires 8 penceils or 12 V. DC power supply.

- Model 13-772. 12 channel 5 watt trans No. 10A44. Each... **\$79.95**
- Model 13-770. 6 channel 5 watt transceiver. No. 10A45. Each... **\$69.95**
- No. 21A3. Pencil... **13c**
- No. 10A3022. 20-112. Nickel cadmium rechargeable battery pack... **\$16.50**
- No. 10A3023. 20-212. Charger for above... **\$6.50**
- No. 10A3027. 18-143. AC power supply... **\$21.95**
- No. 10A3025. 18-141. 12 volt automobile cable... **\$1.50**
- No. 10A3020. Crystals per channel. Pair... **\$4.95**

## MIDLAND INTERNATIONAL 5 WATT HAND HELD TRANSCIVER WITH CHANNEL 7 CRYSTALS

**\$89.95**

Five watts, 6 channels! Ch. 7 crystals supplied. Extra sensitive receiver—highly efficient transmitter. Better than 1.2 micro-volt sensitivity. Has tuned RF and 4 IF stages, more pickup than other hand held units. Fine extra features. Fully adjustable squelch, accessory jack for external 12 V. DC powercharger, jacks for earphone, external mike and external antenna. Jack for 8 ohm external speaker converts unit into a portable P. A. All metal case. die-cast chrome grill, 9 3/4 x 3 1/4 x 2 1/2" deep. 60" telescoping antenna. With leather case, strap. Requires 8 penceil batteries or other 12 V. DC. Shpg. wt. 3 lbs.

- No. 10A30. Model 13-775B. Each... **\$89.95**
- No. 21A3. Pencil. Each... **13c**
- No. 10A3027. 18-143. AC power supply... **\$21.95**
- No. 10A3025. 18-141. 12 volt automobile cable. Each... **\$1.50**
- No. 10A3022. 20-112. Nickel cadmium rechargeable battery pack. Each... **\$16.50**
- No. 10A3023. 20-212. Charger for above... **\$6.50**
- No. 10A3020. Crystals per channel. Pair... **\$4.95**
- No. 10A3029. 21-250. Earphone... **\$1.19**

# THE ANTENNA THAT DOESN'T BELIEVE IN GHOSTS!

NEW FROM  **Winegard**

COLOR-CEPTOR CR-200—THE FINEST INDOOR ANTENNA MADE!

BEST FOR COLOR AS WELL AS BLACK & WHITE

**\$14.95** EACH

BEST FOR ALL-CHANNEL RECEPTION  
2 TO 83 VHF AND UHF

At last—an indoor antenna that "shuts out" ghosts, eliminates interference from cars, planes, appliances . . . lets you really enjoy all TV broadcasts.

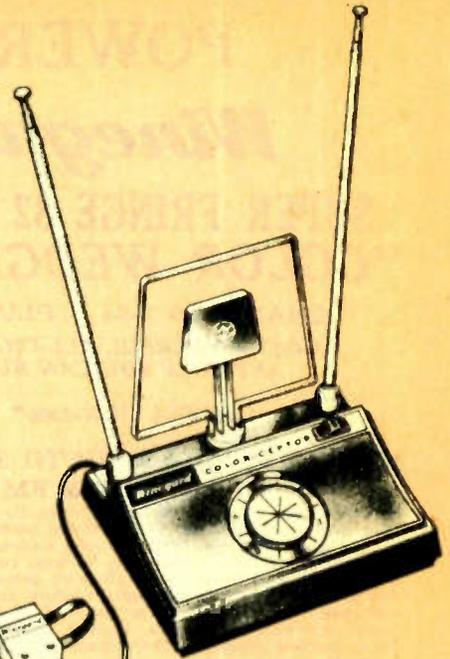
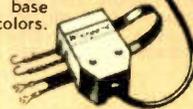
Has exclusive signal filter and signal splitter for back of set. Uses coaxial cable instead of usual 300 ohm line to shield out ghost pickup. Fine tuning control touches up performance on all channels.

Made of finest materials throughout, with 4-section elements that telescope smoothly from 45" to 12", and a molded decorator styled 7¾ x 6½" base that won't tip or mar furniture. Comes in choice of 3 smart decorator colors. Shpg. wt. 3 lbs.

No. 7A4507. Avocado Green.  
No. 7A4508. Flame Orange.  
No. 7A4509. Walnut Brown.

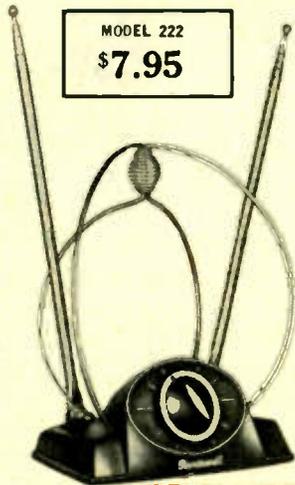
YOUR CHOICE EACH

**\$14.95**

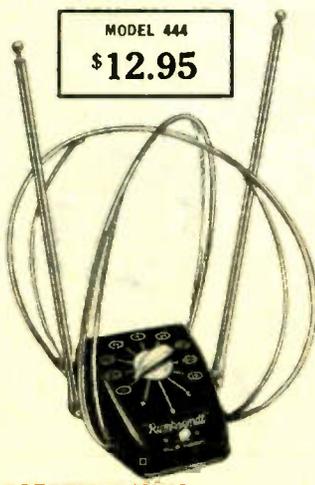


## "REMBRANDT" SUPER-POWERED INDOOR TV ANTENNAS

82 CHANNEL COLOR, BLACK & WHITE TV, FM/STEREO



MODEL 222  
**\$7.95**



MODEL 444  
**\$12.95**

### "REMBRANDT" RECEPTION KING

Clearer, sharper pictures on all VHF/UHF channels due to the combined action of the extra long 46" five section telescoping arms and the electronically tuned crossed loops. Has 12-position picture correction control, slim-line styling, walnut toned base. Built to outlast and outperform ordinary antennas.

No. 7A4505. Model 222. Each

**\$7.95**

### "REMBRANDT" COLOR KING

Developed especially for color. Excellent for black and white TV on all 82 channels and FM/Stereo. Has color phasing loops and 12 position picture correction control to clear up annoying ghosts in the most difficult areas. Modern eye-appealing design, finest materials and construction, walnut toned base . . . no better choice anywhere for long-lasting top performance.

No. 7A4506.

**\$12.95**

### REPLACEMENT ANTENNA RODS

FOR ALL PORTABLE SETS 4 SECTION

Quick and easy "do-it-yourself" repairs for most portable TV set antennas. Ends problem of damaged erratic antennas at small cost. Has threaded insert in bottom section for secure attachment to original mounting on set.

Wt. 4 oz.

No. 7A4510. 4 Sections, 38" extended.

**\$1.19**

Net Each

No. 7A4511. 5 Sections, 38" extended. Net Each

**\$1.29**

No. 7A4512. 6 Sections, 40" extended. Net Each

**\$1.49**

## FM INDOOR ANTENNA



Concealable local FM antenna that can be tacked to the back of furniture, layed along carpet, etc. Picks up FM signals far better than most built-ins. Wt. 4 ozs.

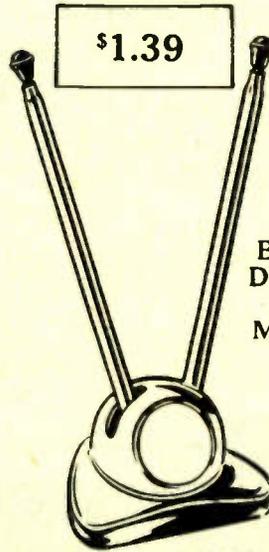
No. 7A4504. Net Each

**\$1.49**

## SAVE ON B-A's TOP QUALITY INDOOR TV ANTENNAS

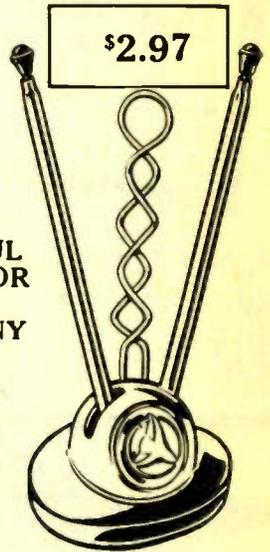
VHF "RABBIT EARS"

SWITCH TYPE UHF-VHF



**\$1.39**

BEAUTIFUL DECORATOR STYLED MAHOGANY BASES



**\$2.97**

### ① STANDARD 4-SECTION RABBIT EARS

VHF Channels 2 to 13. Only 13" high . . . but extends to full 38" to capture maximum signal. Ratchet-swivel design permits quick, easy and positive positioning of dipoles. Decor-styled mahogany base has fine appearance. Weighted to prevent accidental tipping. Complete with 300 ohm lead. Wt. 2 lbs. Standard Channel 2-13 "Rabbit Ear".

No. 7A4501.

**\$1.39**

Net Each

10 Lots  
Each

**\$1.25**

### ② POPULAR SWITCH TYPE VHF-UHF ANTENNA

With brass finished 39" "4 section" dipoles. Has functional 6-position electronic phasing switch to match set impedance and electrically adjust antenna for maximum signal. Helps tune out ghosts. Covers VHF and UHF channels 2 to 83. Wt. 3 lbs.

No. 7A4502.

**\$2.97**

Net Each

10 Lots  
Each

**\$2.67**

## NEW LOW PRICE

### BEHIND THE SET ANTENNA

**\$2.95**

FITS MOST PORTABLES . . . OTHER SETS TOO!  
MFG. LIST \$4.95

Installs easily on back of set. Telescoping 5-section 38" dipoles pivot on ball socket in all directions, disappear into antenna housing when not in use. Length closed 7¾". Wt. 2 lbs. Mfg. List \$4.95.

No. 7A4503. Net Each

**\$2.95**



# POWERFUL NEW TV ANTENNAS

## Winegard

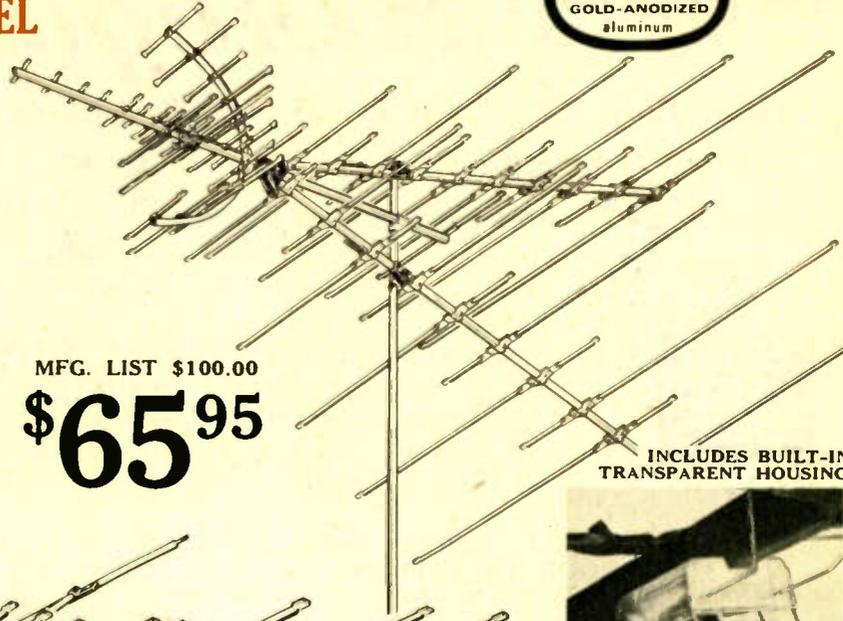
### SUPER FRINGE 82 CHANNEL "COLOR-WEDGE"

CHANNELS 2-83... PLUS FM  
MOST POWERFUL ALL-CHANNEL  
ANTENNA YOU CAN BUY!

MODEL "CW-1000"

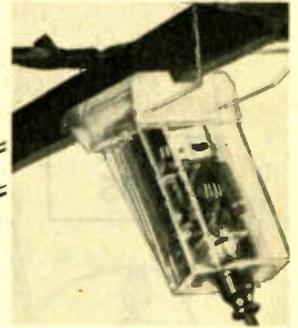
UP TO 150 MILES UP TO 325 MILES  
UHF VHF & FM

Revolutionary "wedge" design provides by far the highest gain of any combination VHF-UHF-FM antenna. 54 working elements provide unprecedented long distance reception, yet antenna is surprisingly compact. Vertical beam phasing and extra sharp directivity on all channels prevents interference and ghosting. Much larger signal capture area and exclusive electronic design features produce more signal gathering power per inch of antenna. Built-in weather-proof housing for protecting downlead connections and optional amplifier. See bottom of page.



MFG. LIST \$100.00  
**\$65<sup>95</sup>**

INCLUDES BUILT-IN  
TRANSPARENT HOUSING



**FREE**  
WITH EACH 82  
CHANNEL ANTENNA

Model  
CS-285  
"Back-of-set" VHF-UHF  
band separator.

CHOOSE FROM  
7 POWERFUL  
82-CHANNEL  
MODELS

Stock No.	Model No.	No. Elements	Boom Lgth.	Range VHF	Range FM	Miles	Wt. Lbs.	Mfg. List	Net Each
7A6550	CW-1000	56	104	325	325	150	28	\$100.00	\$65.95
7A6551	CW-98	38	114	275	250	135	19	72.50	47.85
7A6552	CW-96	27	77	225	175	125	15	55.50	36.63
7A6507	SC-81	23	81	175	125	80	9	39.95	26.37
7A6553	CW-94	19	51	150	125	80	9	37.95	25.08
7A6554	SC-80U	22	69	125	100	100	9	34.95	23.07
7A6509	SC-79	13	44	100	75	50	6	22.95	15.13

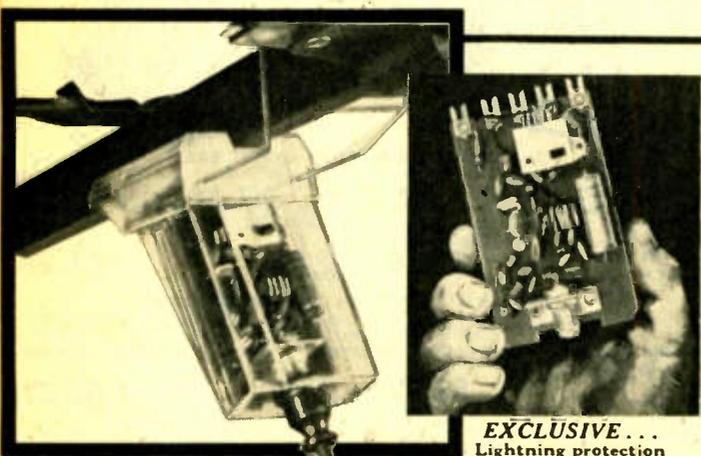
ADVERTISED IN  
**LIFE**

SUPER COLORTRON  
MODEL SC80U

**\$23<sup>07</sup>**

**DELUXE QUALITY**

All Winegard antennas shown here are built of finest quality materials that lock-in peak performance for many extra years. 7 patents and patents pending indicate the unique engineering design advancements in these antennas.



**EXCLUSIVE...**  
Lightning protection  
diode circuit!

#### RECOMMENDATIONS... IF YOU HAVE:

Weak VHF and UHF, use models below.  
No. 7A2559, Model AC-823B. **\$28.05**  
(for 300 ohm line). Each  
No. 7A2560, Model AC895B. **\$29.68**  
(for 75 ohm cable). Each

Weak VHF, Strong UHF, use models below.  
No. 7A2561, Model AC223B. **\$23.06**  
(for 300 ohm line). Each  
No. 7A2562, Model AC295B. **\$23.06**  
(for 75 ohm cable). Each

Weak UHF, Strong VHF, use models below.  
No. 7A2563, Model AC-423B. **\$23.06**  
(for 300 ohm line). Each  
No. 7A2564, Model AC-495B. **\$23.06**  
(for 75 ohm cable). Each  
Weak FM (Fm antenna only) use models below.  
No. 7A2565, Model AC623B. **\$23.06**  
(for 300 ohm line). Each  
No. 7A2566, Model AC695B. **\$26.38**  
(for 75 ohm cable). Each

Above Left: Weatherproof downlead and amplifier housing built into each Super Colortron antenna.  
Above Right: Super Colortron solid-state antenna amplifier.

**UNIVERSAL AMPLIFIER HOUSING** Attaches to any TV or FM antenna with U-bolt provided. Accepts any of solid-state amplifiers listed at left. Shpg. wt. 1 lb. Mfg. List \$3.95.  
Model ACH-1B. **\$2.60**  
No. 7A2567, Each



## Winegard

### SUPER COLORTRON 82-CHANNEL ANTENNA MOUNTED AMPLIFIERS

BOOST UHF-VHF OR FM ACCORDING TO YOUR LOCAL NEED—UP TO 7 TIMES MORE SIGNAL POWER

NEW SOLID STATE SIGNAL BOOSTERS EXTEND RECEPTION RANGE... STRENGTHEN WEAK CHANNELS AND LET YOU OPERATE SEVERAL SETS AT SAME TIME

There's a high gain, transistorized amplifier for every reception area. Precision printed circuitry with long-life silicon overlay transistors boost TV signals on antenna right at point of interception. Perfect for color and black and white. Amplifier boards slide easily into the built-in housing on each Super Colortron antenna. (For other antenna models, order housing Model ACH-1B shown below.) Includes connector and power supply. 117 V. AC. Shpg. wt. 2 lbs.

# FOR IMPROVED RECEPTION EVERYWHERE

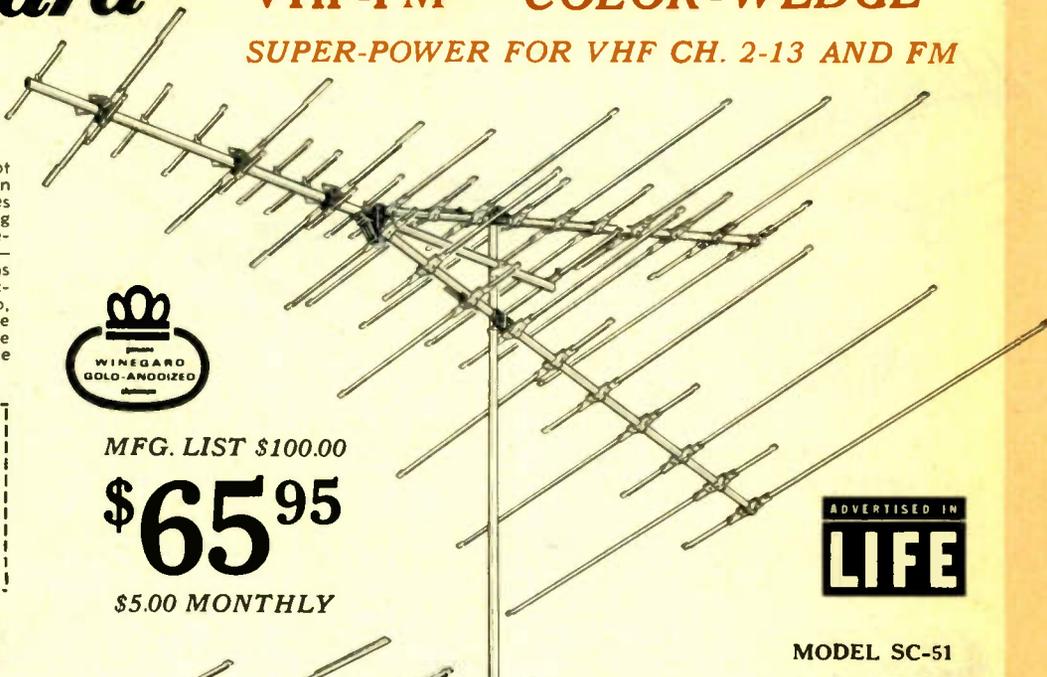


## Winegard

MODEL "CW-2000"

### VHF-FM "COLOR-WEDGE"

SUPER-POWER FOR VHF CH. 2-13 AND FM



MFG. LIST \$100.00

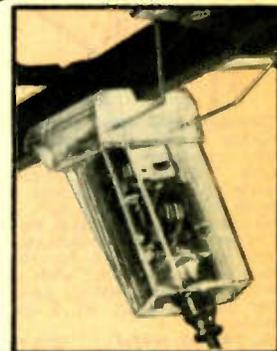
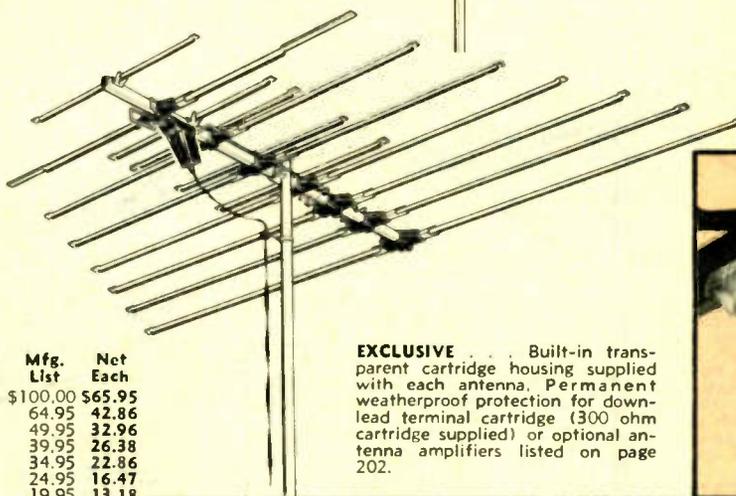
**\$65<sup>95</sup>**

\$5.00 MONTHLY



MODEL SC-51

**\$16<sup>47</sup>**



**EXCLUSIVE** Built-in transparent cartridge housing supplied with each antenna. Permanent weatherproof protection for downlead terminal cartridge (300 ohm cartridge supplied) or optional antenna amplifiers listed on page 202.

Designed like the famous CW-1000 at left except that ALL the performance is concentrated on channels 2-13 VHF and FM. This antenna does not receive UHF—but what it does for long range VHF is next to unbelievable. Under Winegard's new Total Performance Rating system—which takes into consideration such factors as voltage gain, horizontal directivity, vertical directivity, front-to-back ratio, front-to-side ratio, and impedance match—this antenna is at the very top with a rating of "300". There is none better. FM rating is 265, making it an extreme distance performer on FM, too.

#### DELUXE QUALITY THROUGHOUT

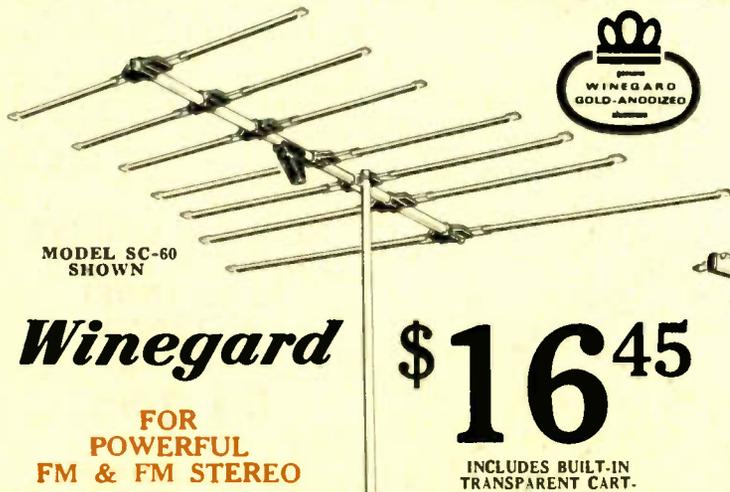
All Winegard antennas shown here are built of finest quality materials that lock-in peak performance for many extra years. 7 patents and patents pending indicate the unique engineering design advancements in these antennas.

#### CLEAR UP TV RECEPTION KNOCKS TV SNOW, GHOSTS WIND-TESTED TO 100 MPH

Winegard unique wedge design provides increased signal capture area in a much shorter and more compact antenna. Has VHF vertical beam phasing elements to help reject interferences such as auto ignition noise. Has built-in ferrite impedance stabilizer for up to 10% increase in gain as well as automatic 200 ohm match to lead-in. Elimination of insulators makes the wedge stronger and automatically grounds static charge build up for lightning protection.

#### CHOOSE FROM 7 POWERFUL MODELS

Stock No.	Model No.	No. Elements	Boom Lgth.	Range in Miles VHF	Range in Miles FM	Wt. Lbs.	Mfg. List	Net Each
7A6555	CW-2000	44	130	350	350	30	\$100.00	\$65.95
7A6556	CW-48	25	115	250	250	16	64.95	42.86
7A6557	CW-46	17	78	225	225	14	49.95	32.96
7A6558	CW-44	13	52	200	200	10	39.95	26.38
7A6503	SC-52	15	71	175	175	8	34.95	22.86
7A6504	SC-51	12	54	150	150	7	24.95	16.47
7A6559	SC-50	10	44	125	125	7	19.95	13.18



MODEL SC-60 SHOWN

## Winegard

FOR  
POWERFUL  
FM & FM STEREO

**\$16<sup>45</sup>**

INCLUDES BUILT-IN  
TRANSPARENT CART-  
RIDGE HOUSING

Enjoy the ultimate in FM sound by using one of these high gain, highly directional Super Colortrons. Rejects unwanted signals from back and sides. Near perfect 300 ohm impedance match. Includes built-in weatherproof downlead and amplifier housing.

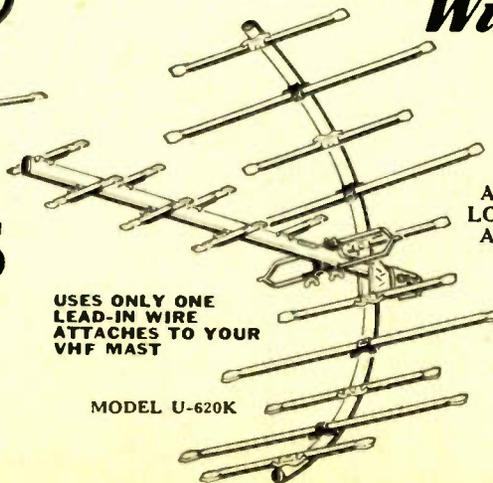
Stock No.	Model No.	No. Elements	Range in Miles	Wt. Lbs.	Mfg. List	Net Each	Stk. No.	Model	Elements	Shpg. Wt.	Mfg. List	Net Each
7A6511	SC-65	11	350	10	\$36.95	\$24.42	7A6547	U-610K	12	6 lbs.	\$14.95	\$9.85
7A6512	SC-60	7	275	6	24.95	16.45	7A6548	U-620K	20	9 lbs.	19.95	12.58

#### ADD POWERFUL UHF TO ANY TV ANTENNA!

## Winegard

UHF "COLOR TRACKER" KIT

AS LOW AS **\$9<sup>85</sup>**



MODEL U-620K

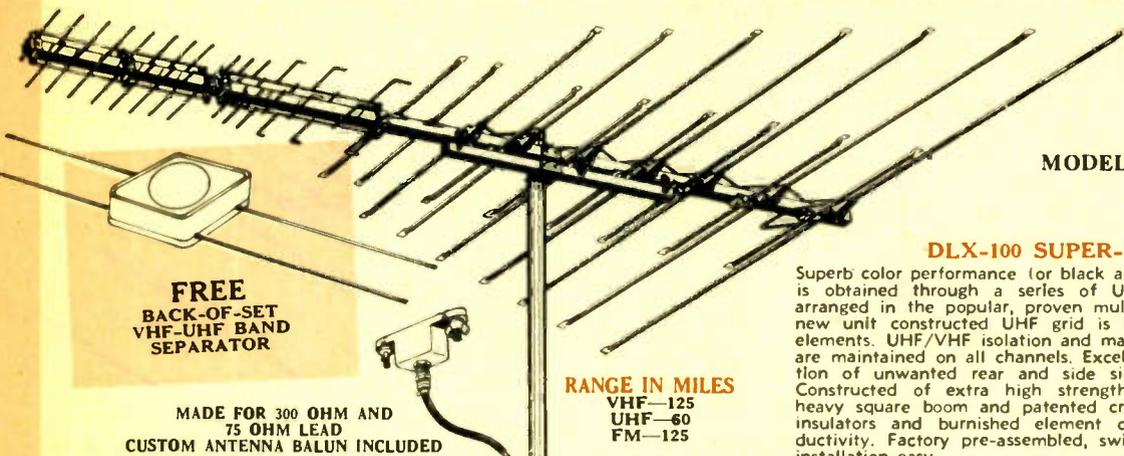
USES ONLY ONE  
LEAD-IN WIRE  
ATTACHES TO YOUR  
VHF MAST

Features parabolic reflector and staggered yagi-type directors for unprecedented UHF performance. Rugged, lightweight and compact. All gold anodized aluminum. Comes complete, easy to install—includes back of set VHF-UHF band separator and phasing wire with connectors for quick installation to your VHF antenna.



# DELUXE TELEVISION ANTENNAS

FOR UTMOST COLOR OR BLACK AND WHITE VIEWING PLEASURE EVERYWHERE!  
CAREFUL DESIGN USING BEST MATERIALS AVAILABLE ASSURES EXCELLENT APPEARANCE  
AND LONG SERVICE LIFE



**SUPER FRINGE  
82 CHANNELS**

MODEL DLX-125

**\$3995**

### DLX-100 SUPER-FRINGE FEATURES

Superb color performance (or black and white) on all VHF and UHF channels is obtained through a series of UHF-VHF high and low band elements arranged in the popular, proven multi-driven element yagi design. Exclusive new unit constructed UHF grid is more efficient than older style riveted elements. UHF/VHF isolation and maximum signal transfer to the down lead are maintained on all channels. Excellent directivity coupled with high rejection of unwanted rear and side signals provides "clean" picture quality. Constructed of extra high strength gleaming gold vinyl clad aluminum, heavy square boom and patented cradle mount. Uses high impact low loss insulators and burnished element contact points for best electrical conductivity. Factory pre-assembled, swing open, snap lock construction makes installation easy. Made for 300 ohm lead, custom-fit antenna balun furnished for 75 ohm coax lead. Less mast and lead. Shpg. wt. 12 lbs. Not available. **\$39.95**  
No. 7A6560. Model DLX-125. B-A Low Price.....

**FREE  
BACK-OF-SET  
VHF-UHF BAND  
SEPARATOR**

MADE FOR 300 OHM AND  
75 OHM LEAD  
CUSTOM ANTENNA BALUN INCLUDED

**RANGE IN MILES**

VHF—125  
UHF—60  
FM—125

FILLS THE MAJORITY OF ANTENNA NEEDS AT SURPRISINGLY  
LOW COST... PROVIDES COLOR (OR BLACK & WHITE)  
UHF/VHF AND FM



**B-A  
82 CHANNEL  
NEAR FRINGE  
ANTENNA**

**\$1795**

MODEL  
DLX-75

Gleaming gold vinyl clad! All-aluminum reinforced construction, factory pre-assembled to save you time. Engineered for performance using proven multi-element design. Boom length, installed, 60". Powerful compact design makes the DLX-75 ideal for attic installations. UHF-VHF splitter included. For 300 ohm lead or 75 ohm lead with custom antenna balun supplied. Less mast and lead in. Shpg. wt. 8 lbs. Not available. No. 7A6562. Model **\$17.95**  
DLX-75. BA Low Price..

**GLEAMING  
GOLD VINYL CLAD**

RANGE IN MILES: VHF-75,  
UHF-40, FM-75

FOR 300 OHM AND 75 OHM LEAD  
CUSTOM ANTENNA BALUN INCLUDED

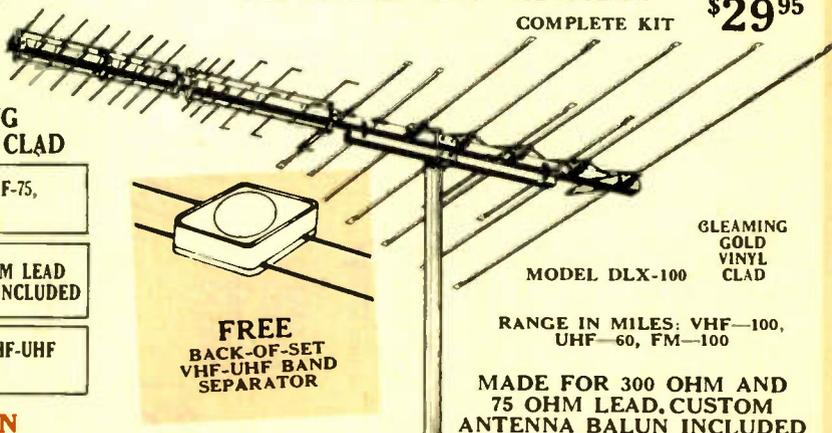
FREE... BACK-OF-SET VHF-UHF  
BAND SEPARATOR

EXTRA POWERFUL PERFORMANCE! PRICED TO  
DARE COMPARISON! THIS IS THE ANTENNA FOR  
TROUBLESOME RECEPTION AREAS

**NEW B-A 82 CHANNEL FRINGE ANTENNA**

COMPLETE KIT

**\$2995**



GLEAMING  
GOLD  
VINYL  
CLAD

MODEL DLX-100

RANGE IN MILES: VHF—100,  
UHF—60, FM—100

MADE FOR 300 OHM AND  
75 OHM LEAD. CUSTOM  
ANTENNA BALUN INCLUDED

**FREE  
BACK-OF-SET  
VHF-UHF BAND  
SEPARATOR**

Features finest color (or black and white) 82 channel performance and extra power through coordinated engineered addition of more elements. 300 or 75 ohm single down lead with UHF-VHF separator furnished. Antenna balun is supplied for 75 ohm coax installation. Factory pre-assembled for fast, easy installation. Complete instructions included. (Gold Vinyl Finish). Boom length 100". Shpg. wt. 10 lbs. **\$29.95**  
No. 7A6561. Model DLX-100. BA Low Price.....

**UNBEATABLE VALUE! TOTAL RECEPTION  
ALL 82 CHANNELS — COLOR / B&W /  
FM / STEREO**



**B-A DELUXE  
CITY SUBURBAN  
ANTENNA OUTFIT**

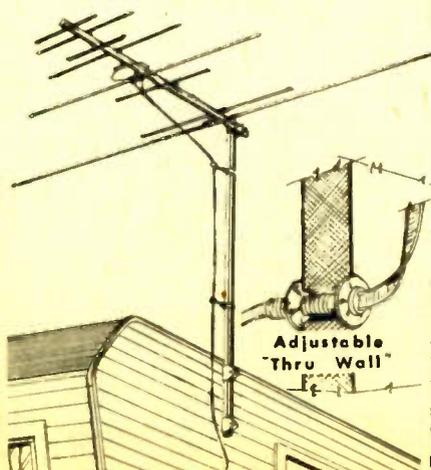
**\$888**

MODEL  
DLX-9K  
COMPLETE KIT

Includes 4 ft. tripod mount, 50' lead-in, stand-offs and all necessary hardware for a fine roof-top installation. Range VHF 50 miles, UHF 40 miles, FM 50 miles. Of finest materials, riveted and reinforced, and designed for quick installation. Gleaming gold vinyl clad for permanent high performance. Shpg. wt. 5 lbs. Mailable.

No. 7A6563. Net Complete..... **\$8.88**

INCLUDES  
TRIPOD MOUNT,  
50' LEAD-IN  
AND  
ACCESSORIES



**NEW B-A DELUXE  
MOBILE HOME  
82 CHANNEL  
ANTENNA  
OUTFIT**

**\$1195**

COMPLETE KIT

Includes the popular city-suburban antenna at left with special installation hardware and 6 ft. mast for wall mount. Easily oriented for strongest signal. Designed to be lowered for traveling without folding. Kit includes 25 ft. 300 ohm lead, wall-thru bushing and back of set VHF-UHF band separator. Shpg. wt. 6 lbs. Not available.

No. 7A6564. Model  
DLX-9MHK. Net Each..... **\$11.95**

Adjustable  
"Thru Wall"

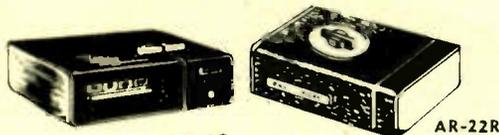
# ANTENNA ROTORS FOR IMPROVED TV RECEPTION



## ANTENNA ROTORS

FOR TV AND AMATEUR BEAMS

CHOICE OF THREE TYPES OF CONTROLS



**\$29.95**  
MODEL  
AR-22R



**HEAVY DUTY ROTOR UNIT.** First choice of thousands! Rotates full 375 degrees at approximately 1 RPM with positive, automatic stop in either direction. Instant reversing. Built-in 6 1/2" diameter ball thrust bearing will handle heavy antenna... no additional bearing support needed. Clamps take 7/8" to 2" dia. Mounts also on flat surface when lower mast support is removed. Mechanism has oilite and ball bearings, lifetime lubrication. Shpg. wt. 15 lbs.

With Manual Control TR-2C. Newly designed. Convenient switch operation. Use 8-wire cable. Mfg. List \$47.95. **\$30.95**  
No. 7A2537. Net Each  
With Automatic Control AR-22R. Antenna turns and stops as dialed. Use 4-wire cable. Mfg. List \$54.95. **\$34.95**  
No. 7A2538. Net Each

### PUSH-BUTTON AUTOROTOR MODEL AR33

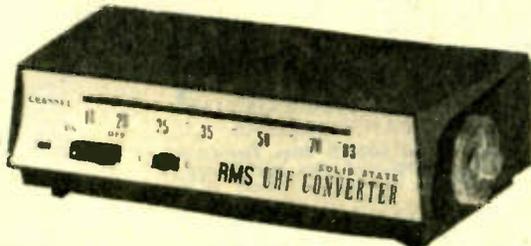
Brand new! Only push-button controlled rotor made. Set antenna direction once for each of 5 channels... then return to that direction automatically by push-button selector. Also has dial controlled selector for any compass point. Completely silent, all solid state. Use standard 5-wire cable. With same heavy duty rotor unit, as other models above. Wt. 15 lbs. **\$49.95**  
No. 7A2545. Model AR33. Push-Button Rotor. Each

### BELDEN ANTENNA ROTATOR CABLE



Vinyl plastic weatherproof insulation. Flexible stranded.

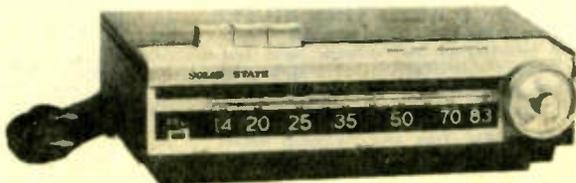
Stk. No.	Belden Type	Description	Ft.	100 Ft.
2B20	8464	4-Cond. #20 Flat	5c	\$3.72
2A232	8463	5-Cond. #20 Flat	6c	4.65
2B21	8485	5-Cond. #20 Round	6c	4.85
2B22	8488	8-Cond. #22 Round	6 1/2c	5.70



### RMS ALL TRANSISTOR UHF CONVERTER

DELIVERS UHF PICTURES WITH EXTRA BRILLIANCE

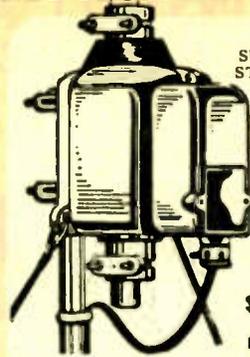
Adds Channel 14 to 83 Color or B & W to your TV Set. Size only 9 3/8 x 4 1/4 x 2 1/2" H. Fully transistorized, gives tremendous performance and reliability. Features continuous channel tuning. Converts UHF stations to channel 5 or 6. Switches in and out of use instantly. Powered from 115 V. 60 cy. AC. Shpg. wt. 2 lbs. Mfg. List \$39.95. **\$19.95**  
No. 7A2544. Model CR-300. Net Each



### SOLID-STATE DELUXE UHF CONVERTER

RMS MODEL CR-800 WITH POWERFUL AMPLIFIER

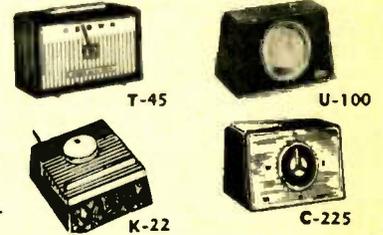
Advanced circuit provides 30 db. gain for clearest possible UHF reception. Even out-performs "front-end" of TV sets already equipped for UHF, bringing in clear, sharp pictures. Push-button controls for OFF-ON and UHF/VHF selection add extra convenience. Attractive charcoal gray decorator-styled cabinet 10"x4 1/2"x2 1/2" H. Shpg. wt. 2 lbs. For 115 V. AC. **\$29.95**  
No. 7A2558. Model CR-800. Mfg. List \$49.95. Net Each



SUPERB  
STYLING

## alliance TENNA · ROTOR

CHOICE OF 4 CONTROL TYPES



**\$19.37**  
MODEL  
K-22

**Rotator.** Swings antenna either direction through a full 360° in 1 minute. Stops where desired. Magnetic brake prevents drifting. Has automatic stop at end of rotation, permanent lubrication and strong, weather-tight die-cast metal housing. Masts up to 1 3/4" dia. slip through rotor; are held by clamps. Optional TBB bearing takes stress off rotor where needed. Size 7 3/4" x 5 1/2" x 8" H. Control boxes operate on 115 V, 60 cycle AC. Shpg. wt. 12 lbs.

**Model K22 with switch bar and light indicator to show end of rotation.** No. 7A2539. Mfg. List \$29.95. Use 4-wire cable. **\$19.37**  
Net Each

**Model T45 with switch and meter indicator to show antenna direction.** No. 7A2540. Mfg. List \$39.95. Use 5-wire cable. **\$24.03**  
Net Each

**Model U-100 with automatic control.** Antenna turns and stops as dialed. Uses 4-wire cable. **\$28.78**  
No. 7A2568. Mfg. List \$49.95. Net Each

**Model C225 with silent automatic control.** Rotator stops at direction dialed on the control. Use 5-Wire No. 20 cable. **\$35.97**  
No. 7A2541. Mfg. List \$59.95. Net Each

**Model TBB thrust bearing.** Takes stress of rotor where needed for extra heavy or high antenna installations. Mounts on mast supporting rotor. **\$2.97**  
No. 7A2569. Mfg. List \$4.95. Net Each

### PERMA POWER



C400 Series

C200 Series

C500 Series

### PICTURE TUBE BRIGHTENERS

### BRINGS BACK PICTURE QUALITY AND CONTRAST FOR BLACK AND WHITE TUBES

6.3 V. Filaments—Boost to 7.8 V. (Wt. 8 oz.)  
Model C401 — Parallel 0.3, 0.45 or 0.6 A. Filaments. **89c**  
No. 13A8016. Net Each  
Model C402 — Series 0.6 A. Filaments only. **89c**  
No. 13A8017. Net Each

### "IF THE BASE IS RIGHT, THE BOOST IS RIGHT"

Completely universal series or parallel, regardless of heater rating. No charts to check. Has slide switch for series or parallel. Will not endanger delicate filaments through too much voltage boost. Shpg. wt. 8 ozs.  
No. 13A8018. Model C-202. Duodecal Base. **Your Choice**  
No. 13A8019. Model C-212. 110° Button Base. **Each \$2.25**  
No. 13A8020. Model C-222. 110° Shell Base.

### "HUE-BRITE" FOR COLOR TUBES

Uses type 501 and 511 where filament boost only is required; 502 and 512 for isolation to overcome picture tube filament-to-cathode short.  
For most 70" base 21" round color tubes wt. 2 lbs. **\$5.85**  
No. 13A8032. C-501. Boost only. Net Each  
No. 13A8033. C-502. Isolate only. Net Each **\$7.25**  
For 90" base 19", 23" and 25" rectangular color tubes. Wt. 2 lbs. **\$5.85**  
No. 13A8034. C-511. Boost only. Net Each  
No. 13A8035. C-512. Isolate only. Net Each **\$7.25**



### TUBE GUARD

Eliminates voltage surge, main cause of TV and radio failure. Feeds current slowly while tubes and parts warm-up. Minimizes replacement costs. For TV, radios, Hi-Fi, recorders, CB—all types of electronic equipment. Shpg. wt. 8 ozs. **\$1.32**  
No. 7A2543. Special Each

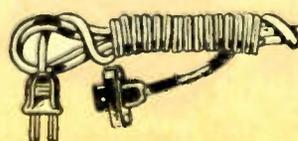
### STANCOR COLOR TV DEGAUSSING COIL

SHARPENS COLOR BY REMOVING  
PIX TUBE MAGNETISM

A service tool "must" for every shop. Ruggedly constructed to withstand years of abuse. Has in-line cord switch. Complete instructions included. Very easy to use. **\$20.07**  
No. 13A340. Model DGC-100. Net Ea



### TV CHEATER CORD



Top quality No. 18 POSJ UL approved 6 ft. cord. Enables plugging in set while back panel is detached or chassis out of cabinet. Shpg. wt. 4 oz. No. 41A371. **35c**  
Each

# IT'S EASY TO INSTALL A WINEGARD TV SYSTEM

## NEW COAXIAL CABLE HOME TV-FM OUTFIT

- Delivers VHF-UHF-FM signals from a single antenna to 4 wall outlets.
- Lets you operate 1 to 4 sets at the same time in different locations.
- Allows you to move a portable TV from outlet to outlet without dragging excess TV wire around.
- Highly reliable solid-state circuitry improves both color and black and white . . . costs only pennies a year to operate.
- Booster-Coupler accepts either 300 ohm or 75 ohm antenna downlead.
- Outlets match standard ivory AC wall plates, can be installed either flush or on wall surface with special boxes provided.
- Installs easily with common home tools. No connectors to apply, no electrical wiring to do.
- Shielded 75 ohm coaxial cable shuts out interfering signals, lasts indefinitely.

INCLUDES EVERYTHING YOU NEED FOR A 4-OUTLET SYSTEM AND EASY-TO-FOLLOW INSTRUCTIONS



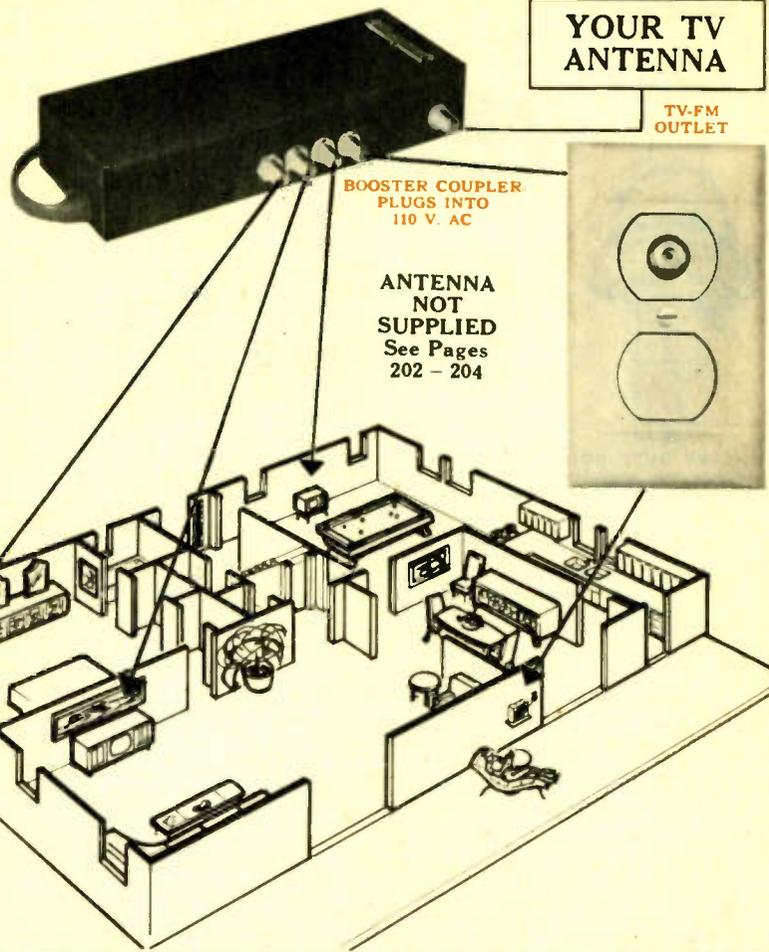
**\$64<sup>95</sup>**

Model H50-782. Includes 4-outlet booster-coupler, 4 25-ft. lengths coaxial cable with connectors attached, 4 wall outlets, 4 surface mounting boxes, 4 plaster straps, 4 outlet-to-set cables with VHF-UHF band separator, 12 cable clips, 1 75-ohm input adaptor and detailed instruction booklet. Shpg. wt. 9 lbs. No. 7A2579.

**\$64.95**

Each  
Model CX-15 15-Ft. Extension Cable with Connectors. No. 2A425. Shpg. wt. 1 lb.

**\$3.46**



### NEW SOLID-STATE ANTENNA AMPLIFIERS

For use on any antenna that doesn't have a built-in cartridge amplifier housing.

- Boosts Signals for Sharper, Clearer Color & B&W.
- Supplies Enough Signal to Operate 2 or More Sets in Weak Signal Areas.

AS LOW AS

**\$13.15**

Model RD-300 for VHF-FM Antennas in fringe signal areas. High gain, low noise. Lightning protected. 300 ohm input and output. Shpg. wt. 2 lbs.

No. 7A2587. Each **\$13.15**

Model RD-830 for VHF-UHF Antenna. High gain, low noise. Twin transistors. Built-in fixed FM trap. Lightning protected. 300 ohm input and output. Shpg. wt. 2 lbs.

No. 7A2588. Each **\$19.75**

Model RD-870 for VHF-UHF Antenna. Same as above but has 75 ohm output for coaxial cable downlead. Connector included Shpg. wt. 2 lbs.

No. 7A2589. Each **\$19.75**

Model RD-2-83 Twin Transistor Pre-amplifier. High gain, low noise. Separate 300 ohm inputs for a VHF and a UHF antenna. Single 300 ohm output. Built-in FM trap. Lightning protected. Shpg. wt. 2 lbs.

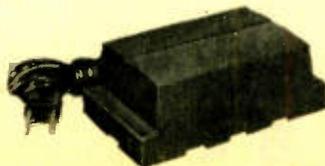
No. 7A2590. Each **\$21.45**

Model RD-2-87. Same as above, but has two 75 ohm inputs and one 75 ohm output for coaxial cable. Shpg. wt. 2 lbs.

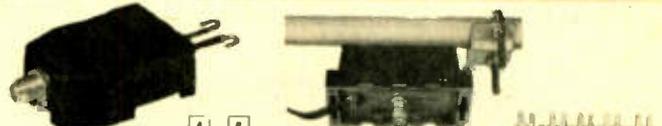
No. 7A2591. Each **\$21.45**



MOUNTS ON TV MAST OR ANTENNA



110 V. POWER SUPPLY



### WINEGARD 75 OHM COAXIAL LINE TRANSFORMERS

① Cartridge Model 300/75 Ohm Transformer for 82 channel VHF-UHF. Fits into Winegard antenna cartridge housing or Model ACH-1 housing.

No. 7A2581. Model CF-87B. Net Each **\$2.16**

② Cartridge Model as above except for VHF-FM antenna.

No. 7A2582. Model CF-27B. Net Each **\$1.42**

③ Antenna Mounted 300/75 Ohm Transformer for 82 channel VHF-UHF. Weatherproof.

No. 7A2506. Model T-283FM. Net Each **\$3.25**

④ Back-Of-Set 75/300 Ohm Transformer. UHF-VHF 300 ohm input to TV is combined.

No. 7A2507. Model T-283. Net Each **\$2.15**

### INTERFERENCE REJECTION FILTER

⑤ Back-Of-Set 300 Ohm Input for VHF. Eliminates FM interference and citizens band and amateur radio transmissions.

No. 7A2583. Model T-223F. Net Each **\$2.62**

### FM SIGNAL TRAPS

⑥ Back-Of-Set FM Trap and matching transformer. 300 ohm input to VHF-TV terminals is combined. Attenuates FM band —20 db.

No. 7A2584. Model T-283FM. Net Each **\$3.28**

⑦ Indoor FM Trap with 75 ohm input and output. Attenuates FM band —25 db. Includes 2 F59 connectors.

No. 7A2585. Model T-FM7. Net Each **\$4.42**

⑧ Antenna Mounted FM Trap with 300 ohm input and output. Attenuates FM band —25 db.

No. 7A2586. Model T-FM3. Net Each **\$3.80**

YOUR TV ANTENNA

TV-FM OUTLET

BOOSTER COUPLER PLUGS INTO 110 V. AC

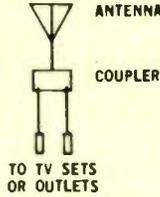
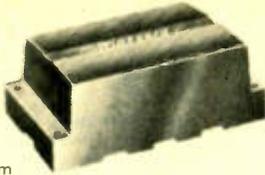
ANTENNA NOT SUPPLIED See Pages 202 - 204

# TV-FM WALL PLATES, COUPLERS & AMPLIFIERS

## WINEGARD MULTIPLE SET COUPLERS

### FOR UHF-VHF TV AND FM COLOR OR BLACK & WHITE

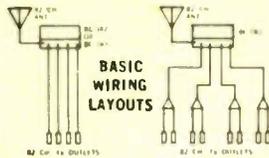
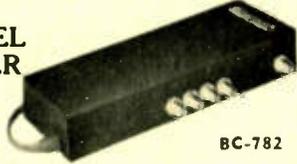
Used in home TV-FM systems. Divides signal from antenna or booster 300 ohm lead for 2 or more sets or for wiring 2 or more outlets where one set is to be moved about. Prevents ghosts caused by poor match. High isolation between sets prevents interaction. Use with regular 300 ohm twin lead for VHF, UHF or FM. Excellent for color as well as black and white TV. 300 ohm input and outputs. Shpg. wt. 1 lb.  
**Model CC-282 for 2 Sets. \$3.14**  
**No. 7A2519. Mfg. List \$4.50. Each**  
**Model CC-482 for 3-4 Sets. \$3.80**  
**No. 7A2520. Mfg. List \$5.50. Each**



## SOLID STATE 82 CHANNEL TV-FM BOOSTER/COUPLER

- 4 outputs.
- Perfect Ch. 2-83 and FM system.
- Excellent for color—uniform gain.
- Fine commercial quality.

Highly efficient TV-FM signal amplifier with newest overlay silicon transistors and printed circuitry. Delivers full gain on all 82 channels, enough to operate 1, 2, 3 or 4 directly. High isolation between sets to prevent interaction. Baked enamel steel cabinet. 117 V. AC. Includes connectors. Shpg. wt. 3 lbs.  
**BC-382 (300 Ohm in and out) \$26.35**  
**No. 7A2526. Net Each**  
**BC-782 (75 Ohm in and out) \$29.65**  
**No. 7A2527. Net Each**



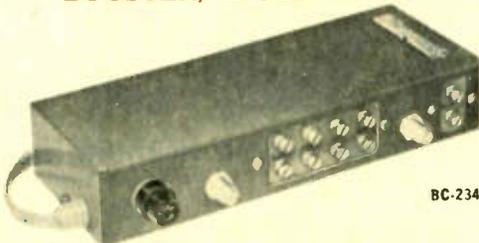
## 25 DB 82-CHANNEL COLOR SYSTEM AMPLIFIER



Extremely flat +25 db gain on all channels 2-83. System can't become obsolete when new channels come on the air. Ultra-low noise figure insures clear, snow-free color and black and white. Can be used with 82 channel antenna or separate VHF and UHF antennas. Long life, low cost operation. 117 V. AC. (VTF-73 or VTS-73 line tapoffs recommended). Shpg. wt. 3 lbs. Mfg. List \$59.95.  
**No. 7A2528. Model DA-825 A. Each \$39.55**  
**Model DA-815. Similar to DA-825A but has +15 db gain. Has single 75 ohm input for 82 channel antenna and does not have preamplifier power jack. Shpg. wt. 3 lbs. Mfg. List \$39.95. \$25.25**  
**No. 7A2570. Each**

- Solid state, printed circuits.
- Separate 75 ohm inputs for VHF and UHF antennas.
- 75 ohm output.
- Power for VHF and UHF pre-amplifiers.

## SOLID STATE VHF-FM 4-SET COUPLER BOOSTER/AMPLIFIER

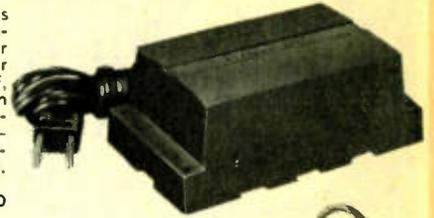


Makes a sensational (ch. 2-13 and FM) home TV system amplifier or a great amplified 4-set coupler. Produces up to 3-million microvolts of signal output, takes up to 500,000 microvolts input. Uses temperature stable overlay silicon transistors. Long life, low cost operation. Flat response makes it perfect for color. No interaction between sets. All metal housing. 117 V. AC. Shpg. wt. 3 lbs.  
**No. 7A2533. Model BC-234 \$23.05**  
**No. 7A2534. Model BC-274 \$26.37**  
**4-300 ohm outputs. Each**  
**1-75 ohm Output. Each**

- 75 and 300 ohm inputs.
- +15 db gain.
- Power for preamplifier.

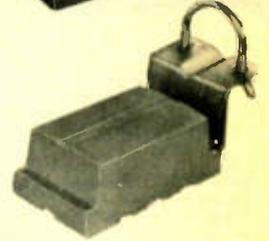
## SOLID STATE, 82 CHANNEL 2-SET BOOSTER/COUPLER

Divides and amplifies signals from a single antenna installation to operate two TV sets or wall outlets. Perfect for color or black and white on VHF, UHF and FM. High isolation between sets to prevent interaction. High impact polystyrene cabinet. 117 V. AC. Includes connectors. Shpg. wt. 1 1/2 lbs.  
**No. 7A2571. Model BC-830 (300 ohm in and out). \$13.15**  
**Each**  
**No. 7A2572. Model BC-870 (75 ohm in and out). \$14.20**  
**Each**



## WINEGARD MULTIPLE ANTENNA COUPLERS

### MOUNTS ON ANTENNA JOINS 2 ANTENNAS TO SINGLE 300 OHM LEAD



**SIGNAL DOUBLER.** Combines signals of any two identical antennas pointed in the same direction and doubles the power output. Also couples any two antennas to single download regardless of direction antennas are pointed. Provides trouble-free, rotorless installation. (If VHF and UHF antennas are combined, use CS-285 band separator shown below.) 300 ohm input and output. Weatherproof housing with mast clamp. Wt. 1 lb. Mfg. List \$5.95.  
**No. 7A2503. Model SD-33. \$4.23**  
**Each**  
**No. 7A2578. Model SD-37 (300 Ohm In, 75 Ohm out). Each \$4.60**

**TV-FM ANTENNA COUPLER.** Couples the signals from one TV antenna and one FM antenna together into a single 300 ohm download. Same unit is used inside to divide TV and FM signals into separate lines for connection to receivers. 300 ohms in or out. Weatherproof housing with universal mounting bracket. AC passive. Wt. 1 lb. Mfg. List \$4.50  
**No. 7A2518. Model CA-FMB. Each \$3.92**  
**No. 7A2573. Model CA7-FMB (75 Ohm in and out, connectors included). \$7.26**  
**Each**

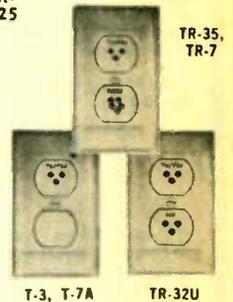
## WINEGARD 300 OHM VHF-UHF BAND SEPARATOR

Use with any antenna download carrying both VHF and UHF signals to divide signals to separate input terminals on TV set. 300 ohm input and outputs. Wt. 1 lb. Mfg. list \$2.95.  
**No. 7A2504. Model CS-285. Each \$1.98**  
**No. 7A2508. Model CS-175. (75 ohm in, 300 ohm out). Each \$3.28**  
**No. 7A2574. Model CS-775 (Separate 75 ohm inputs for VHF and UHF antennas and single 75 ohm output). Each \$5.25**



## 82-CHANNEL TV/FM FLUSH WALL OUTLETS

Finest molded construction for long-lasting service. Flush Wall Plate Types, for hidden wiring, use the modern Despard electrical outlet plates matching perfectly the design, appearance and color of AC outlets and switches being installed in modern homes. All flush wall plates can be installed with or without standard electrical boxes. All types are complete with matching "no-strip" molded plugs. Outlet to set is 300 ohms for all types. Necessary matching circuits are built into each outlet. Average shpg. wt. 6 ozs.

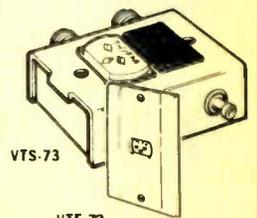


**STANDARD FLUSH WALL PLATE ANTENNA OUTLETS**  
 Use only one on the lead direct from the antenna or booster, or one on each lead from a multiple set coupler. Outlet to set is 300 ohms. Ivory color.

Stk. No.	Winegard No.	Designed For	Input Wiring	Each
7A2529	T-3	One TV-FM Set	300 Ohm Lead	\$1.62
7A2521	T-7A	One TV-FM Set	75 Ohm Cable	2.60
7A2522	TR-35	One TV-FM & 5-Wire Rotor	300 Ohm Lead	2.60
7A2530	TR-7	One TV-FM & 5-Wire Rotor	75 Ohm Cable	2.77
7A2523	TR-32U	5-Wire Rotor	300 Ohm Lead	3.50
No. 7A2575.	T-77.	One TV-FM Set.	(75 ohm in and out).	Each \$2.60
No. 7A2576.	TP-10.	Replacement Plug.	(300 ohm lead).	Each \$2.7c

## 82-CHANNEL COAX LINE TAPOFFS WITH VARIABLE ISOLATION

For use with any 75 ohm coax line system. "Feed thru" type 75 ohm coaxial cable runs from tap-off to tap-off. A "wiper" arm adjustment at front of tap-off allows isolation to be varied from 10 to 25 db to balance amount of signal received at each set. No interaction between sets. Terminator should be used on last tap-off on feeder line. Outlet to set is 300 ohms, plug provided. Ivory color. Shpg. wt. 8 ozs.



Stk. No.	Winegard No.	Designer For	Input Wiring	Net Each
7A2524	VTF-73	One TV-FM Set, Flush Mt.	75 Ohm	\$3.28
7A2525	VTS-73	One TV-FM Set, Surface Mt.	75 Ohm	3.28
7A202	P-59TB	Terminator for last tapoff		.78
No. 7A2577.	F-59TB.	Terminator for last tapoff.		Each \$78c

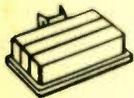
**TV DISTRIBUTION SYSTEMS INSTALLERS**  
**LET B-A AND WINEGARD HELP YOU SPECIFY EQUIPMENT**  
**REQUIRED. WRITE TO B-A's INDUSTRIAL DEPARTMENT.**

# GIANT SAVINGS!

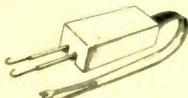


## TV-FM COUPLERS WALL PLATES AND NOISE FILTERS

**DON'T MISS THESE FINE IMPORT SAVINGS!**



**UHF-VHF Antenna Coupler.** Joins separate antennas for single 300 ohm lead. Weatherproof mast mtg.  
7A2546. **99c**  
Each Only



**UHF-VHF TV Splitter.** Divides TV signal from single 300 ohm lead. Connects to UHF and VHF set terminals.  
7A2547. **\$1.39**  
Special Ea.



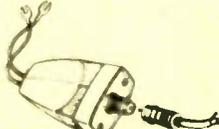
**VHF-TV-FM Signal Splitter.** Separates TV and FM from single 300 ohm lead. Improves TV performance by cutting out FM.  
7A2500. Ea. **\$1.29**



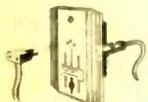
**VHF-TV-FM 2-Set Coupler.** For 300 ohm lead. Efficient balun coil type. Very easy to connect.  
7A2502. **\$1.49**  
Special Ea.



**UHF-VHF TV-FM 4-Set Coupler.** For color or black and white, all 82 channels. Self-piercing terms. For 300 ohm lead.  
7A2548. **\$2.49**  
Special Ea.



**VHF-FM 75/300 Ohm Trans.** Couples coaxial lead to 300 ohm. For use at input of set.  
7A2553. **\$1.69**  
Special Ea.



**VHF-FM 75/300 Ohm Outlet.** Ivory plate and coupling transformer in single unit. Surface or recessed mtg.  
7A2554. **\$2.42**  
Special Ea.



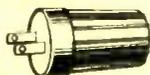
**300 Ohm Line Connectors.** With set screws for securing flat line. Plugs together, easy to disconnect.  
7A229. **99c**  
3 Sets For



**2-Cond. Socket and Plug.** Handy for 300 ohm lead, speakers, intercom, etc. Mounts on surface with screws.  
7A2555. **99c**  
Per Set



**TV Wall Plates.** Ivory with one plug. Has 2-300 ohm outlets.  
7A2556. **99c**  
Each  
For 2-Ants. and 5-wire rotor.  
7A2557. Ea. **\$1.19**



**AC Line Noise Filter.** Plug-in, easily installed. Stops static caused by most electrical devices.  
7A2594. **99c**  
Special Each



**TV Interference Filter.** Eliminates or reduces interference from ignition, radio transmitters, etc. induced through antenna lead.  
7A2593. Ea. **\$1.69**

### FAMOUS DRAKE "HIGH PASS" TV FILTER



**CLEAR UP MOST PROBLEMS CAUSED BY UNWANTED SIGNALS**

To stop interference entering TV Set through 300 ohm antenna lead. Eliminates amateur or other signals on 6 thru 160 meters. 60 db attenuation from zero to 52 mc. Does not decrease TV signal itself.  
7A2535 Type TV-300-HP. Wt. 8 oz. Net Ea. **\$4.41**



### NEW COLOR GHOST ELIMINATOR

**INSTALLS IN ANTENNA LEAD AT SET**

HERE'S HOW IT WORKS . . .

**\$3.99**

All color TV sets are sensitive to signal overload and produce pictures of poor quality often full of ghosts and other problems. **REDUCING** the signal is the cure! Color ghost eliminator has knob to adjust antenna input for best possible results. Every set needs one! Size 3 7/8" x 2 5/8" x 1 3/4" H. Shpg. wt. 8 oz.

No. 7A2592. Special Each **\$3.99**

### UHF-VHF TELEVISION TWIN LEADS



① **ESSEX-AMPHENOL FLAT 300 OHM TWIN LEAD, 214-056.** Highest quality! 60 mil brown polyethylene, 7/28 copper conductors. 18 lbs. per M'.  
No. 2A157. 25 Ft. .76c 100 Ft. For \$1.73 1000 Ft. For \$15.60

② **BELDEN WELDOHM FLAT 300 OHM TWIN LEAD, 8230.** Has 1 1/2 times the strength of pure copper, yet retains all the electrical characteristics. 72 mil brown poly. 20 gauge copper copper coated steel wire. 18 lbs. per M'.  
Stk. No. 25 Ft. 50 Ft. 75 Ft. 100 Ft. 1000 Ft.  
2B143 89c \$1.34 \$1.77 \$2.22 \$20.35

③ **BELDEN CELLULINE 300 OHM LEAD, 8275.** Ideal for color or black and white. Highly efficient, VHF or UHF. Absolutely water-proof cellular foam construction. Brown poly. jacket. .356 O.D., 7/28 copper over steel conductors. 36 lbs. per 1000 ft.

Stock No. Per Ft. 100 Ft. 500 Ft. 1000 Ft.  
2B156 6c \$4.65 \$22.00 \$43.20

④ **NEW BELDEN "PERMOHM" 300 OHM LINE, 8285.** Ideal for color or black and white. Lower loss, more constant impedance, compared to regular line. Not affected by extremes of salt spray, industrial contamination, rain or snow. Encapsulated in low-loss cellular polyethylene. Copperweld 7X30 conductors. Oval .255" x .468". Wt. 16 lbs. per 1000 ft. For VHF or UHF.

Stk. No. 50 Ft. 75 Ft. 100 Ft. 500 Ft. 1000 Ft.  
2A141 \$2.85 \$3.85 \$4.90 \$22.50 \$45.00

⑤ **BELDEN 8290 SHIELDED PERMOHM.** The long awaited perfect lead-in for all 82 channels color or black and white. Eliminates interference caused by line pick-up. Easy to install. No standoffs, tape it to the mast, run through gutters, conduit, even underground. No matching transformer needed. Stranded copperweld, 2 conductors, cellular polyethylene oval insulation, Beldfoil shield, polyethylene 1/2 x 5/16" oval jacket overall. In coils or priced.

No. 2B180 75 Ft. 100 Ft. 500 Ft.  
50 Ft. For \$5.95 For \$8.05 For \$10.15 For \$47.90

### ⑥ 1-INCH LOW LOSS OPEN LEAD—450 OHMS

Size 18 solid conductor copperweld with 1/4" polystyrene insulators spaced every 6". Recommended for weak signal areas or where extremely long lines are needed. Matches 300 ohm antennas and receivers. Wt. 2 1/2 lbs. 100 ft.

No. 2A419. 100 Ft. Coil. \$2.79 No. 2A420. 500 Ft. Reel. \$11.95



### 75 OHM COAXIAL CABLE KITS

**FOR PERMANENT INTERFERENCE-FREE TV-FM ANTENNA DOWN LEAD INSTALLATIONS WITH ATTACHED F-59 TYPE CONNECTORS.**

### FOR UHF-VHF, COLOR OR BLACK AND WHITE

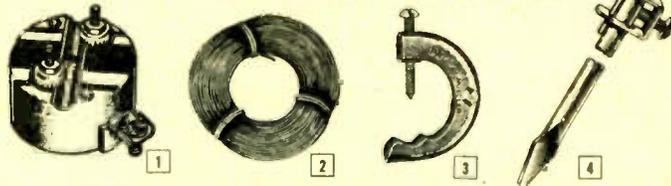
Made of highest quality, low-loss coax having 82 channel color capability. Strong and flexible. Has copperweld center conductor, polyethylene foam dielectric, two-layer aluminum foil plus polyester film 100% shielding and black PVC weather and abrasion resistant jacket. Can be taped to masts, run close to metal without affecting signal.

### CABLES WITH F-59 CONNECTORS BOTH ENDS

No. 2A428. 100 Ft. wt. 2 lbs. Net Each \$8.87  
No. 2A427. 75 Ft. wt. 1.5 lb. Net Each \$6.93  
No. 2A426. 50 Ft. wt. 1 lb. Net Each \$5.67  
No. 2A425. 15 Ft. wt. 8 oz. Net Each \$3.46

FOR OTHER COAXIAL CABLE SEE PAGE 142.

### ANTENNA GROUNDING ACCESSORIES



### ① UNIVERSAL UHF-VHF LIGHTNING ARRESTOR

Will handle all TV or FM Arrestor problems.

Works with open, flat, or tubular lead-in on both UHF and VHF. Toothed washers pierce lead insulation—requires no lead stripping. Installs easily inside or out. Made of sturdy, molded plastic with brass weather-resistant hardware. Shpg. wt. 12 oz.

No. 7A224. Net Each 69c 10 Lots, Each 59c

### ② NO. 8 ALUMINUM GROUND WIRE

Soft drawn. Recommended by National Electrical Code. Wt. 2 lbs. 100 ft.  
No. 2B29. 50 Ft. Coil \$1.23 100 Ft. \$2.30

### ③ GROUND CLAMP

For attaching ground wire to masts, pipes, etc., up to 1 3/8" dia. Rigid channeled construction gives five point contact. Case hardened screw.  
No. 7A225. Mueller Type 58. Each \$22c; 10 Lots, Each 15c

### ④ GROUND ROD

Efficient, easy-to-install, copper plated steel. One end pointed for driving. Other end has screw-clamp to hold No. 4 to No. 14 gauge wire. Shpg. wt. 3 lbs.  
No. 7A8509. 3/8" x 4 Ft. Each 99c 10 Lots Each 89c

# ANTENNA INSTALLATION ACCESSORIES

## LEAD-IN INSULATORS

### ① WOOD SCREW TYPE

Stk. No.	Type Insert	Length	Each	5 For	100 For
7A214	For Flat Line	3 1/2"	5c	20c	\$3.02
7A215	Flat or Tubular	3 1/2"	5c	20c	3.02

### ② STRAP-ON MAST TYPE

Stk. No.	Type Insert	Length	Each	5 For	100 For
7A216	For Flat Line	3 1/2"	20c	\$0.75	\$12.09
7A217	Flat or Tubular	7 1/2"	30c	\$1.09	\$16.54

## SOLID POLYETHYLENE INSULATORS

VERY LOW LOSS—NO METAL SURROUNDS THE WIRE

Made specially for Belden 8290 shielded Permah lead and other heavy duty oval or tubular types; works with any type flat, oval or round lead. Insulator locks on.

### ① WOOD SCREW TYPE

Stk. No.	Length	Each	5 For
7A218	3 1/2"	15c	69c
7A219	7 1/2"	18c	70c

### ② STRAP-ON MAST TYPE

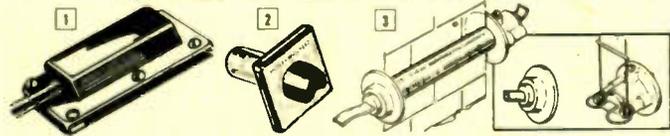
Stk. No.	Length	Each	5 For
7A235	3 1/2"	19c	72c
7A236	7 1/2"	23c	85c

## SPRING TYPE ROTATOR STANDOFF INSULATOR

Prevents premature line failure. Pipe strap mounting. Overall Length 13".

No. 7A220. Net Each..... 88c

## MOSLEY TV LEAD-IN INSULATORS



① UNIVERSAL ROOF-THRU/WALL-THRU. Versatile antenna and rotor lead-in entrance accepts all types of cable; coax, shielded, heavy and regular 300 ohm line. Absolutely weatherproof when properly installed on sloped roof or wall of any structure. Molded polystyrene with gasket and hardware. No. 7A230. Type M-60. Net Each..... \$1.12

② WEATHER-PROOF "WALL-FEED" LEAD ENTRANCE. For entrance into attic, trailer wall, etc. Has molded weather hood and 2" polystyrene tube adaptable to thickness of most types of exterior wall. Ivory color. No. 7A231. Type 626. For all types of lead. Net Each..... \$1.06

③ WEATHER-PROOF "WALL-THRU" BUSHING. For all types TV transmission line and small coax cables. Has anchor points for open wire line. Installs through 1/2" dia. round hole in walls up to 1 1/2" thick. End plates are molded polystyrene, tube is extruded polystyrene. No. 7A232. Type 625. Ivory color. Net Each..... \$1.16

## FLAT 300 OHM LINE CONNECTORS



Stock No.	Mosley No.	Description	Net Ea.	10 For
7A221	301	Line Plug—Mates with Fig. 2 Socket	\$31	\$2.79
7A222	311	Line Socket—Mates with Fig. 1 Plug	.25	2.25
7A223	304	Terminal Adapter—Mates with Fig. 2	.30	2.70
7A233	275	Joins 300 ohm lead. Solderless	.17	1.53
7A234	295	Joins tubular to flat 300 ohm lead	.21	1.89

## 3-WAY ANTENNA OR SPEAKER SWITCH

Double pole, 3 positions. For 300 ohm antenna leads, speakers, etc. Screw terminals.

No. 7A2549. Mosly F-20. Ivory. Net Each..... \$4.67

## TV ANTENNA COUPLING TRANSFORMERS

Improves TV reception by permitting use of 72 ohm or 52 ohm coaxial lead from antenna to TV set. Greatly reduces ghost and noise pickup. System requires two transformers, one at antenna, other at set.

No. 13A5041	Type 6161.	52/300 or 300/52 Ohms.	Each.. \$2.04
No. 13A5042	Type 6162.	72/300 or 300/72 Ohms.	Each.. \$2.04

## HANDY TV ANTENNA CONNECTORS

Mighty handy. Makes connecting and disconnecting 300 ohm lead from TV set quick and easy. Snaps onto antenna terminals of set. Shpg. wt. 1 oz.

No. 7A242. 19c 10 Lots, 15c Each, 10 Lots

## STRANDED GALVANIZED STEEL GUY WIRE

Highest quality, full gauge steel wire, heavily galvanized to prevent rust and corrosion. Specially coiled to minimize kinking and tangling. Approximate breaking strength: 4 strand No. 20, 240 lbs.; 6 strand No. 20, 350 lbs.; 6 strand No. 18, 640 lbs. Approx. shpg. wts. from 13 to 33 lbs. per 1000 ft.

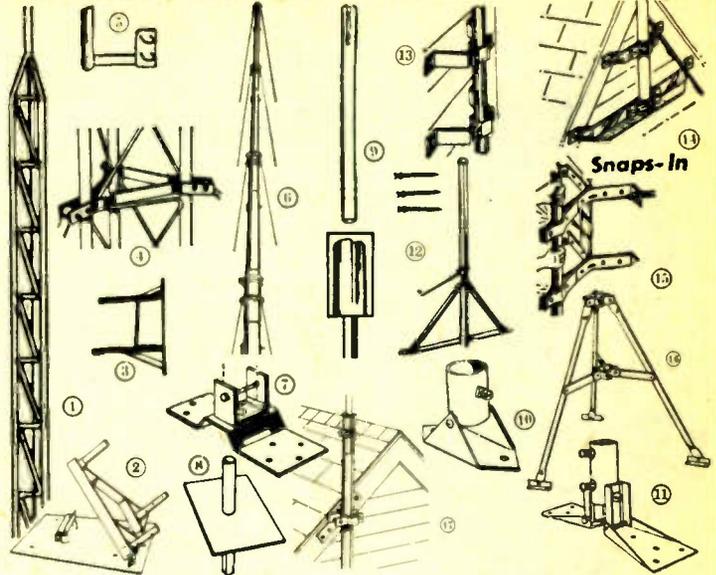
Stk. No.	Description	Length	Spool	Stk. No.	Description	Coil	10 Coils
2B148	6 strands No. 20	1000'	\$7.38	2A6022	4 strands No. 20	33c	\$3.00
2B149	6 strands No. 18	500'	5.70	2A6030	6 strands No. 20	45c	4.10
				2A6023	6 strands No. 18	60c	5.20

## GALVANIZED HEAVY DUTY GUY CABLE

3/8" high strength 7 wire pre-formed stranded steel. Rated 2,850 lbs. breaking. Wt. 68 lbs. per 1000 ft.

No. 2A6031. 100 Ft. For.....\$5.70 1000 Ft. For.....\$40.00

## HIGHEST QUALITY ANTENNA MOUNTS



① ROHN 25G GALVANIZED 12 1/2" TRIANGULAR TOWER SECTIONS. Will stand 35 feet above house bracket without guys, 200 ft. max. when guyed. Hot-dipped galvanized seamless 1 1/4" heavy wall uprights, 8 precision welded zig-zag braces per 10 ft. section, double bolted section joints.

No. 7A8511. 10 Ft. Straight Section. Rohn 25G. 40 lbs. Net Each..... \$19.00

No. 7A8512. 9 Ft. Top Section for 1 1/4" Mast. 31 lbs. Net Each..... \$20.00

No. 7A8513. 8 Ft. Amateur Top Section. 11" dia, flat top plate, 2 1/4" center hole. Rohn 25A-4. Net Each..... \$24.00

7A9500. Ground Base & 3-4 Ft. Drive Rods. 18 lbs. Per Set..... \$11.10

7A9501. Hinged Base. BPH-25G. 15 lbs. Net Each..... \$21.50

7A9502. House Bracket, 15" to 24". Rohn HB25BG. 10 lbs. Net Ea..... \$5.75

7A9503. Guy Bracket with 3 Torque Bars. 9 lbs. Set..... \$10.35

7A9504. Rotor Post. Mounts inside tower. 3 lbs. Net Each..... \$2.80

7A9505. Rotor Plate. AS-25G. For Ham "M" Inside tower. 5 lbs. Ea..... \$9.50

② ROHN GALVANIZED TELESCOPING MASTS. Heavy 17 gauge. Has mast brake for simpler installations. Sections 10' long hot-dipped galvanized inside and out. With guy rings.

Stk. No.	Height	Tubing Size	Wt. Lbs.	Net Ea.	6 Lots. Ea.
7A8501	20 Ft.	1 1/2" to 1 1/4"	15	\$8.35	\$7.93
7A8502	30 Ft.	1 3/4" to 1 1/4"	24	12.75	12.11
7A8503	40 Ft.	2" to 1 1/4"	34	17.75	16.86
7A8504	50 Ft.	2 1/4" to 1 1/4"	48	23.60	22.42

③ STEEL MASTS—self coupling, stacking.

7A203. Universal Base. All-angle, rotatable. 2 lbs. Net Each..... \$1.10

7A204. Ground Mount. Handy drive-in type. 3 1/2 lbs. Net Each..... \$1.95

7A205. Side Mount Clamp 1 1/4" thru 2 1/2" O.D. Net Each..... \$1.95

7A8505. 10 ft. x 1 1/4". Hot-dip galv. steel. 7 lbs. Ea. \$2.35 10 @ Ea..... \$22.33

7A8516. 5 ft. x 1 1/4". 18 Ga. Galv. Steel. 3 lbs. Each..... \$1.20 10, Ea..... \$11.14

7A206. All-Angle Base. Galv. steel. 1 1/2 lbs. Ea..... .75 12 @ Ea..... 7.11

7A207. Univ. Roof Mount. Galv. steel. 1 1/2 lbs. Ea. 1.55 12 @ Ea..... 1.47

④ NO. GUY ROOF MOUNT. With 4 Ft. Galvanized Steel 1 1/4" Mast..... \$3.30

7A8510. Hot-dip galvanized steel. Wt. 3 lbs. Ea.

⑤ CLOSED WALL MOUNT. 4" clearance. Mounts masts to 1 3/4" dia. 89c 10 Pr. Ea..... 85c

7A228. Zinc plated steel. 1 lb. Per Pr. \$4.61 10 Pr. Ea..... \$4.38

⑥ HOUSE PEAK MOUNT. 30" long. For masts to 1 3/4" dia.

7A226. Zinc plated steel. 4 lbs. Per Pr. \$4.61 10 Pr. Ea..... \$4.38

⑦ STAINLESS STEEL STRAP CHIMNEY MOUNT. 12" long straps.

7A227. 4 lbs. Per Pr. \$4.46 10 Pr. Ea..... \$4.24

⑧ RDHN TRIANGULAR ROOF MOUNTS. Hot dipped galvanized tubular steel. Takes masts to 1 1/4".

No. 7A9506. 3 Ft. Type TRT36. Wt. 8 lbs. Net Each..... \$5.75

No. 7A9507. 5 Ft. Type TRT60. Wt. 11 lbs. Net Each..... \$9.00

## GUYING ACCESSORIES



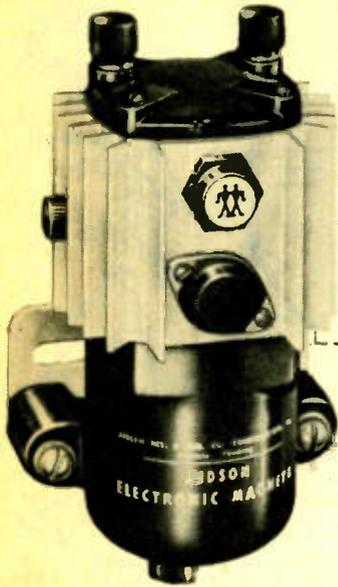
① No. 7A210.	1/8" GUY WIRE CLAMP.	Each..... 22c	10 For \$1.99
② No. 7A237.	3/8" GUY WIRE CLAMP.	Each..... 22c	10 For 1.99
③ No. 7A238.	4"x3/8" TURNBUCKLE.	Each..... 20c	10 For 1.79
④ No. 7A211.	5 1/2"x1 1/4" TURNBUCKLE.	Each..... 22c	10 For 1.99
⑤ No. 7A239.	7 1/2"x3/8" TURNBUCKLE.	Each..... 74c	10 For 6.99
⑥ No. 7A208.	GUY WIRE THIMBLE.	Each..... 6c	10 For .40
⑦ No. 7A240.	1 1/4" MAST GUY CLAMP.	Each..... 35c	10 For 3.20
⑧ No. 7A212.	Leak-Proof Guy Anchor.	Each..... 35c	10 For 3.20
⑨ No. 7A213.	Screw Eye Guy Anchor.	Each..... 9c	10 For .81
⑩ No. 7A209.	1 1/2" Strain Insulator.	Each..... 12c	10 For 1.10
⑪ No. 7A241.	Heavy Strain Insulator.	Each..... 25c	10 For 2.09

## SCREW-IN EARTH ANCHOR FOR GUYS

Very easy to install. Literally screws into ground at an angle to conform with pull of the guy. Pounds of pull rating is for average soil. Rods are 48" long, have 1 1/2" eye.

Stk. No.	Withstands Pull	Description	Wt.	Each	6 @ Ea.
7A8514	1500 lbs.	4" Plate, 1 1/2" Dia. Rod	8 lbs.	\$2.95	\$2.65
7A8515	2500 lbs.	6" Plate, 3/4" Dia. Rod	8 lbs.	3.95	3.55

# HIGH PERFORMANCE AUTO ACCESSORIES



EASY TO  
INSTALL

### 3-YEAR WARRANTY

In the event of electrical failure just return to factory for prompt no-charge replacement

THE ULTIMATE IN  
ELECTRONIC IGNITION

JUDSON ELECTRONIC

MAGNETO

**\$39.88**

- Doubles plug and point life.
- Instant starting everytime.
- Like a permanent tune-up.
- Higher top speeds.

- Provides positive ignition under any condition.
- Reduces fuel consumption two to six more miles per gallon.

Obsoletes every conventional ignition system on the market. For car, truck, bus, boat, tractors and industrial engines. The Judson electronic magneto is a complete and integrated system that assures dependable and positive ignition on any engine under all conditions. The Judson ignition system gives increased output as engine speed increases, produces fire-power at the plug to match the ignition requirements of the engine. Because the transistor takes load off of the points, it makes the engine easier to start even in sub zero weather. Easy to install, transfer three wires from the present ignition coil to Judson Electronic Magneto and connect one additional wire to ground. Size 7 1/2 x 3 1/2", completely sealed, waterproof, corrosion-proof. Provides maximum of 30,000 volts with .5 microsecond rise time. For 6 or 12 volt systems negative ground.

No. 47A5510. Shpg. wt. 3 1/2 lbs. Net Each **\$39.88**



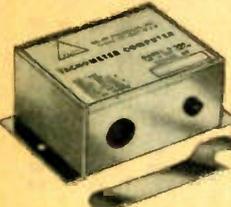
THE FABULOUS  
MARK-10  
CAPACITIVE  
DISCHARGE  
IGNITION  
SYSTEM

OPERATE CAR,  
BOAT, OR TRUCK,  
MORE EFFICIENTLY

**\$29.95**  
KIT

Increases acceleration and general performance. Incorporates advantages of capacitive discharge with those of solid state electronics. Spark plugs last 3 to 10 times longer. Instant starts in all weather. Installs in less than 10 minutes directly to a standard ignition system with no rewiring. Shpg. Wt. 4 lbs.

No. 47A5511. Mark 10 Kit, Each **\$29.95**  
No. 47A5512. Mark 10 Factory Assembled, Each **\$39.95**



DELTA C-500  
COMPUTACH

AN EXCLUSIVE COMPUTER-  
TACHOMETER FOR PRECISE  
RPM MEASUREMENT

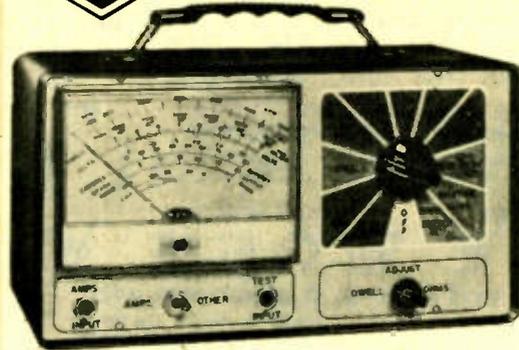
0-8000 RPM RANGE

Works with any Ignition system on all 2, 3, 4 and 6 cylinder 2 cycle—All 4, 6, 8 cylinder 4 cycle 12 volt engines. Designed to be the finest engine speed indicator available at any price. Accuracy limits  $\pm 2\%$  of full scale over 30° F to 110° F and 12 V. DC to 15 V. DC range. Uses wide angle sweep aircraft quality instrument in chrome plated die-cast housing with all-angle ball and socket mounting. Size 3 1/8" dia., 3 1/2" long. Assembles in extruded aluminum case 3 5/8" x 2 3/4" x 1 3/4" H. Wt. 3 lbs. With easy-to-build instructions.

No. 47A5522. Net Each **\$29.95**



NEW SOLID STATE UNIVERSAL  
ENGINE ANALYZER



IDI MODEL 657  
LARGE 6" D'ARSONVAL  
DOUBLE JEWELLED METER

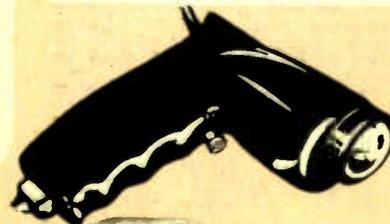
FOR ALL 6, 12,  
24, 32 VOLT—  
REGULAR,  
TRANSISTORIZED  
OR MAGNETO  
IGNITION  
8, 6 OR 4  
CYLINDER,  
4 OR 2 CYCLE  
ENGINES

FACTORY  
WIRED

**\$49.95**

Performs 15 authoritative tests under actual operating conditions: Measure dwell or cam angle. Measure engine speed. Adjust carburetor. Adjust points. Check condensers. Check coil resistance. Measure carbon spark plug cables. Check batteries. Test alternator, generator and regulator. Check diodes. Check shorts and opens in wiring. Check all lamps, fuses, relays and switches. Meter ranges 0-3.2, 0-16, 0-32 volts DC. Setting of distributor points and test of centrifugal advance mechanism on three scales 0-45°, 0-60° and 0-90°. Setting of air/fuel mixture and engine RPM on four scales 0-1200, 0-2400, 0-6000 and 0-12000 RPM. Measures amps from -5 to +90. Resistance from 0-100000 ohms. High voltage coil and spark test from 0-30,000 volts. Operates on single "D" cell battery. In rugged baked enamel steel case with rear storage compartment to hold 5 1/2' leads, clamps and connectors. Size 12" x 6 1/2" x 6". With detailed information on auto makes and models. Shpg. wt. 6 lbs.

No. 47A5537. Each **\$49.95**



MODEL 9  
POWER TIMING LIGHT

Delivers brilliant white light, powered from 110 AC outlet. Permits perfect alignment of timing mark and pointer. No vibrator or moving parts to wear out. Works on all 6-12 or 24 volt system. Handsome plastic case, pistol grip design with trigger switch.

No. 47A5525. Net Each **\$15.95**

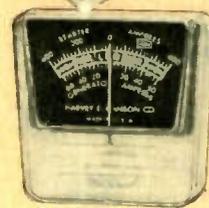


2 INCH TACHOMETER

BEST TACHOMETER  
VALUE WE'VE SEEN!  
**\$19.95**

Deluxe features to equal or surpass factory installed equipment. 270° scale, electric, transistorized and illuminated. Zener regulated. Guaranteed accuracy  $\pm 3\%$ . For 4, 6 or 8 cylinder engines negative or positive ground. Black and chrome housing. Precision import. Shpg. wt. 3 lbs.

No. 47A5508. Each **\$19.95**



1 CLAMP-ON STARTER-GENERATOR CURRENT INDICATOR  
NEWLY STYLED TESTER WITH BUILT-ON CLAMP CONNECTOR

Simple to use, no need to disconnect wires! You get accurate ampere readings by simply clamping meter over the cable. Color coded scale reads 400-0-400 amps for starters, 60-0-60 amperes for generators. With instructions. Wt. 1/2 lb.

No. 47A5515. Model 61. Net Each **\$2.95**

2 COMPRESSION TESTER

Testing for compression is considered the first step in engine tune-up. Model 5 pin-points trouble in valves, pistons, rings, gaskets and cylinders. Reads up to 300 lbs. pressure on dial marked to show correct operating range for engine. 2 1/2" meter dial is easy to read. Has off-set stem to reach hard to service rear cylinders. Universal rubber cone fits into spark plug hole. 6 1/2" overall. Wt. 1 lb.

No. 47A5524. Model 5. Complete **\$3.95**

3 MOTOR GUIDE-VACUUM FUEL PUMP TESTER

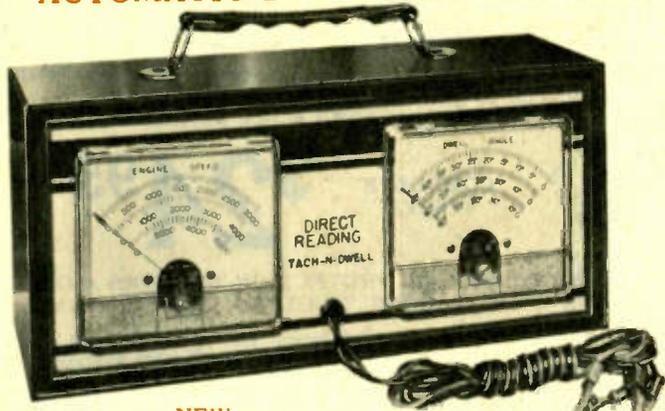
Tests the engine fuel pump and vacuum system. Determines condition of valve springs, shows a choked muffler or leaky manifold. Also tests all other vacuum operated devices on car. 2 1/2" dial has 4 color zones for easy reading. Reads 0-30 vacuum, with mtg. bracket and instructions. Wt. 1 lb.

No. 47A5523. Model 47. Each **\$3.95**

# AUTOMOBILE TUNE-UP TESTERS



## DUAL METER TACH-N-DWELL AUTOMATIC DWELL TACHOMETER



NEW  
MODEL 477

FOR 6-12 OR 24 VOLT  
IGNITION SYSTEMS

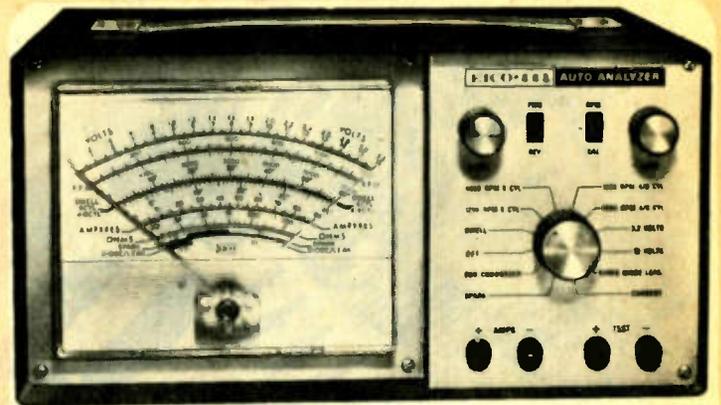
- ALL SOLID STATE
- ABSOLUTELY BURN-OUT PROOF
- LARGE 4½" DOUBLE JEWEL METERS

The answer to fast engine tune-up! One large 4½" double jeweled D'Arsonval meter is a direct reading tachometer, covering engine speeds up to 3000 RPM for 8 cylinder, 4,000 RPM for 6 cylinder and up to 6,000 RPM for 4 cylinder engines. The other meter reads cam dwell angle directly for all engines, 0-45° for all 8 cylinder, 0-60° for all 6 cylinder and 0-90° for 4 cylinder engines. All scales are individually colored to guard against reading errors. Meters are expensive moving coil type, shielded against external magnetism and absolutely protected against burn-out. Contains no batteries or other components that can change balance or cause measuring errors. In rugged steel case with baked on epoxy finish. Size 12½" x 6½" x 5". With carrying handle and complete instructions. Shpg. wt. 4 lbs. **\$39.95**

No. 47A5538. Each

**\$39.95**

COMPLETELY  
WIRED



TUNES UP AND TROUBLESHOOTS ANY CAR OR  
BOAT WITH PROFESSIONAL PRECISION

## NEW EICO 888 SOLID STATE UNIVERSAL ENGINE ANALYZER

PERFORMS MORE  
THAN 30  
SEPARATE TESTS

**\$49.95**  
KIT

**\$69.95**  
WIRED

Tunes any 6 or 12 volt 4, 6 or 8 cylinder engines, negative or positive ground. Make exact checks of your total ignition/electrical system including: storage battery; generator; alternator; voltage regulator; alternator diodes; starter; starter solenoid; distributor; points; condensers; ignition coil, spark plugs, dwell angle; carburetor; fuses; bulbs, switches, accessories; all electrical wiring. Simplified operation for fast easy, dependable results. Large 6 inch D'Arsonval wide-view 2-color meter with 10 large, clear, easy-to-read scales (volts, engine RPM, dwell angle, amperes, ohms, spark output, diode leakage).

Self-powered by 4 "D" cells (not incl.) Exclusive manual provides comprehensive instructions for tune-ups and trouble shooting jobs, covering over 40 different brands of American and foreign cars

Sturdy metal cabinet with handle for easy portability. Size 5¾" H, 11½" W, 5" D. Shpg. wt. 6 lbs.

No. 47A5505 Completely Wired, Ready to Use..... **\$69.95**

No. 47A5506 **\$49.95**

As above in simple-to-build Kit..... **\$49.95**



NEW! A COMPLETE  
LOW COST

## DWELL TACHOMETER TUNE-UP METER

NO CAR  
OWNER  
CAN  
AFFORD  
TO BE  
WITHOUT  
IT!

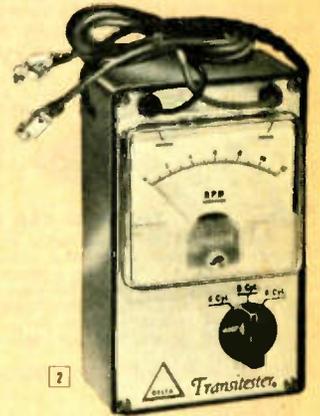
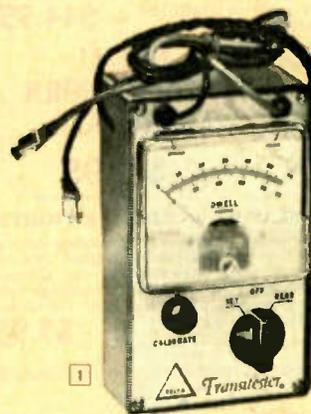
FOR ONLY  
**\$21.95**

FACTORY WIRED

**TROUBLE SHOOT 8 OR 6 CYLINDER ENGINES LIKE THE PROFESSIONALS**  
Drivers waste hundreds of dollars per year operating their engines way below peak efficiency. With this well designed direct reading instrument you can do your own engine tune-up easily. Operates on 6, 12 or 24 volt systems regular, transistor or magneto ignition on both 2 and 4 cycle engines. Large burn-out proof 3½" double jeweled D'Arsonval meter is directly calibrated in degrees dwell angle and RPM. In hard bakelite case. Size: 6¼" x 3¾" x 2". Wt. 2 lbs. **\$21.95**

No. 47A5528. Net Each

## BE YOUR OWN MECHANIC WITH DELTA'S TRANSITESTERS



### 1 TUNE-UP DWELL METER

- Portable, high-impact case for rugged work.
- Large, easy-to-read 3½" precision jeweled meter.
- Wide scale—reads dwell angles in degrees.
- All solid state.

A universal precision instrument for use in tuning all vehicles, regardless of number of cylinders or battery polarity. Gives correct point dwell readings on vehicles equipped with capacitive discharge, transistor or conventional ignition. Precision accuracy at low cost. Shpg. wt. 3 lbs. **\$12.95**

No. 47A5503. Model D-1000. Each

### 2 TUNE-UP TACHOMETER

- Large, easy-to-read 3½" precision jeweled meter.
- Portable, high-impact case for rugged work.
- Range: 0 to 1200 RPM.
- All solid state.

A universal precision instrument for making carburetor adjustments on all vehicles, regardless of the number of cylinders or battery polarity. Gives precise RPM readings on vehicles equipped with capacitive discharge, transistor or conventional ignition. Gives you better gas mileage, fuel savings and peak engine operation. Shpg. wt. 3 lbs. **\$14.95**

No. 47A5504. Model T-1000. Each

### ENGINE TUNE-UP KIT

IT'S EASY TO KEEP  
ENGINE IN TOP  
CONDITION WITH  
THIS TUNE-UP KIT

**\$10.95**

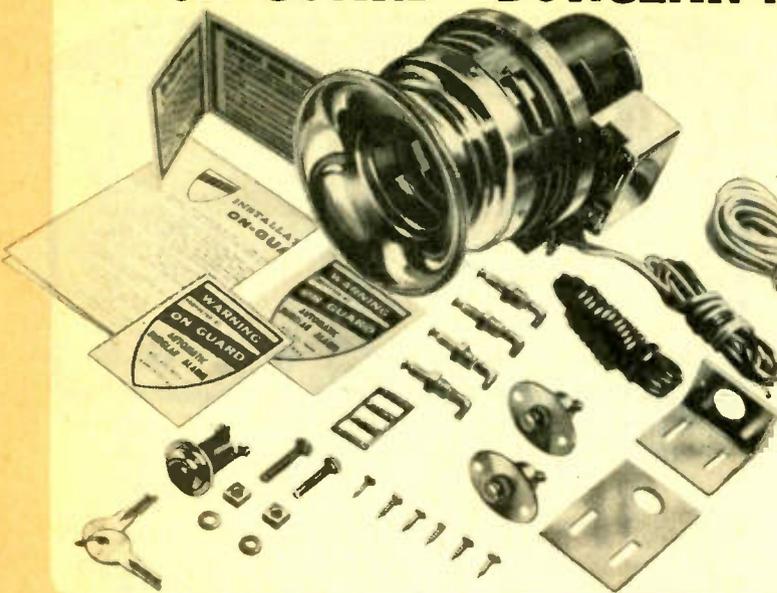
Anyone can easily do a tune-up with these instruments. Contains pistol grip timing light for bright, sharp, easy-to-see image, 3 color coded 2" dial vacuum and fuel pump tester, compression tester with 2" dial and remote starter switch. Makes tune-up of 6, 12 and 24 volt ignition systems quick and accurate. Precision Import. No. 47A5507. **\$10.95**

Complete Kit, Each



# "ON GUARD" BURGLAR ALARM KIT FOR AUTOS

## STOP THIEF!



DOORS



HOODS



TRUNKS



REAR OPENINGS

**SIMPLE TO INSTALL—EASY DO-IT-YOURSELF KIT  
PROFESSIONAL SIREN ALARM SYSTEM**

COMPLETE SYSTEM

# \$24<sup>95</sup>

**GIVES FOOLPROOF PROTECTION 24 HOURS A DAY...  
FOR CARS, WAGONS, TRAILERS, TRUCKS & VANS**

Loud, piercing siren instantly blasts when door is opened, hood lifted, or trunk door raised. Siren can be wired even to go off when emergency brake is released! Stays on till reset by the switch of the pick-proof lock. Siren is made of highly polished die-cast metal and spun aluminum. Size 6 3/4" high, 5" dia. Comes with relay switch unit, six alarm switches, flat key switch, wire, fuse. Full instructions for do-it-yourself installation. For 12 V. DC only. Mfg. List \$44.95.

No. 47A5518. Shpg. wt. 6 lbs. Net Each..... **\$24.95**

## TOP PERFORMING RADAR DETECTOR



**MAKES YOU  
A SAFE  
DRIVER...  
HELPS  
GUARD  
AGAINST  
UNINTENTIONAL  
SPEEDING**

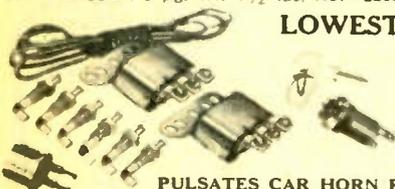


### THE NEW MUTRONIC RADAR DETECTOR

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

A professional high quality transistorized unit that clips on the visor of your car and emits a "beep" signal when you approach a radar checked speed zone. Sounds warning signal as much as two miles ahead, depending on terrain, even before car speed can be radar measured. Emits no sound outside radar zone. Designed for standard x-band 10,525 MHz police radar signals. In handsome black finished extruded aluminum case. 3 1/2" W. x 3 3/4" D. x 1 1/2" H. Two penlight batteries supply power unit for thousands of driving miles. Use may be controlled by local or state law.

No. 47A5529. Shpg. wt. 1 1/2 lbs. Net Each **\$44.95**



### LOWEST PRICE EVER! FLASHING HORN ALARM KIT

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

Complete

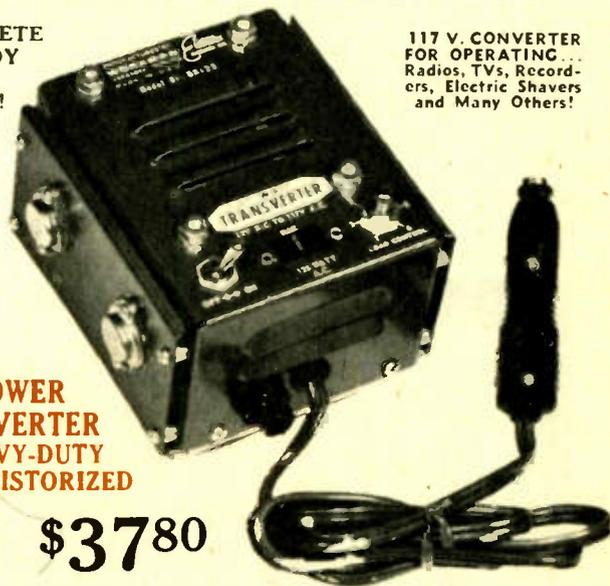
**PULSATES CAR HORN FLASHES INSIDE CAR LIGHTS**

The car sounds the alarm with its own howling horn—a big money-saving feature! Otherwise offers the same protection as the siren system above. When horn sounds, flashing interior car lights direct attention to car. Comes with everything you need for easy installation in any vehicle including two relay switch units, horn/light flasher, six alarm activator switches, flat tumbler key lock and wire. Shpg. wt. 2 lbs. Mfg. List \$25.00.

No. 47A5519. Model HX-33F. Net Each **\$7.95**

## 117 V. AC POWER IN YOUR CAR!

COMPLETE  
READY  
TO  
USE!



**117 V. CONVERTER  
FOR OPERATING  
Radios, TVs, Record-  
ers, Electric Shavers  
and Many Others!**

### POWER CONVERTER HEAVY-DUTY TRANSISTORIZED

PLUGS  
INTO  
LIGHTER  
OUTLET **\$37<sup>80</sup>**

Highly efficient, fully transistorized. Plugs into cigarette lighter receptacle, supplies 117 volts AC power at 125 watts continuous duty (up to 150 watts intermittent), from 12 V. battery. Operate equipment requiring 10 to 125 watts including dictating machines, transceivers, small motors, test instruments, soldering irons and lights. Size 5 1/4 x 5 x 3 1/4" H.

No. 13A8010. Each **\$37.80**



### AUTO ELECTRONIC ALARM ACCESSORY SWITCH

Tampering with protected accessory sounds auto horn continuously... also can be connected to sound existing alarm system.

Easy to install device protects tape player, radio, tachometer and other costly optional equipment. Small sensor unit closes electrical alarm circuit when accessory is disturbed. Provided with hidden disabling switch to prevent unwanted operation. Shpg. wt. 4 oz.

No. 47A5540. Net Each **\$3.95**



### BUSS TIME-DELAY AUTO PROTECTOR STOPS CAR THIEF

Fools thief — lets him drive away — then stops motor cold! Motor cannot be restarted until hidden switch is operated by owner of car. Wt. 4 ozs. Mfg. List \$4.98.

No. 47A5521. **\$3.50**

Net Each

Spare Fuse Refills For Auto Protector.

No. 12A8081. Box of 5. MDL 16/10

Bus Fusetron. **\$1.15**

5 For



### 6 AMPERE BATTERY CHARGER

**\$22<sup>87</sup>**

Efficient, 2-transistor design. Charges at full 6 amp rate. Ammeter shows charging rate and condition of battery. Automatic reset circuit breaker. Taper type charge, automatically reduces charging rate. Switch for 6, 8 or 12 volts. 3 1/2 x 4 1/2 x 5". For 115-120 V. AC. 5-year guarantee (return to factory for repair, only \$1.00 for handling). Wt. 6 lbs.

13A8011. Model BC2. **\$22.87**

Ready to use.



### CIGARETTE LIGHTER PLUG **69<sup>c</sup>**

Fits 6 or 12 V. auto lighter, 32 inch leads and lugs.

Use for emergency lights, CB equipment, recorders, TV, 100's of other uses.

Quality Import. Wt. 2 ozs.

No. 47A5517. Each **69c**

# LIFTMASTER\* ELECTRONIC GARAGE DOOR OPERATOR

**OPEN - CLOSE - LIGHT - LOCK  
YOUR GARAGE DOOR**

JUST PUSH THE BUTTON AND DRIVE RIGHT IN!



Now the ultimate in automatic door operation. As you approach your driveway, you press the button on the Perma-Power Signal-Sender (small transistor radio transmitter). This sends a private electronic command to the "Liftmaster" receiver in your garage. It opens the door turning on the light at the same time, so you can drive right into your garage in illuminated safety. You then can close and lock the door by push-button, too. Light stays on for 2 minutes to allow you safe entry into your home.

Features new exclusive "Velvet-Glide" electronic clutch system with "Instant stop" control. Door stops instantly if it encounters an obstacle. Easy to install fits any garage door single or double, sections or one piece, metal, fiberglass or wood. Easily attaches to regular household electrical circuit. All parts of operator are concealed for protection from dirt and moisture. Requires only 1 1/2" headroom. Pushes or pulls over 175 lbs. with ease. Pocket size signal sender can be clipped to sunvisor or carried in purse. Works for year on 9 volt transistor radio battery. Quick disconnect on door mechanism permits manual operation in the event of power failure. System comes complete with door opener, mechanisms, receiver which wall mounts and has built-in push-button to control opening and closing of door from inside garage and one remote control transmitter for use in car. Shpg. wt. 55 lbs.

No. 41A4032. Model G6121.

Net Each **\$119.95**

No. 41A4033. Extra Portable Transistor Transmitter. Wt. 1 lb.

Net Each **\$22.95**

**\$119.95**

MFG. LIST  
\$169.95

COMPARE  
AT \$150.00



PORTABLE  
TRANSISTOR  
TRANSMITTER

Solid State Receiver  
actuated only by  
pulse tone modulation  
transmitter.

HIGH QUALITY \*PRODUCT  
OF PERMA-POWER

## GENUINE FIAMM AIR HORNS

WITH 12 V. DC ELECTRO COMPRESSOR  
ADDS EXTRA SAFETY TO EVERY  
TYPE VEHICLE . . . AUTOS,  
TRUCKS, BUSES AND BOATS

Italian made, very highest quality. All brass chromed trumpets produce a powerful, yet pleasing tone. Overcomes surrounding noises and makes your presence known. Trumpets are 6 1/4 and 8 1/4" long overall. Easily mounted under hood. Comes with compressor, relay and instructions. Wt. 5 lbs.

No. 47A5532. Special Each **\$19.95**



INSTALL YOURSELF IN MINUTES ON ANY CAR!



FENDER-FLARE SIDE MARKER  
LIGHTS SET  
OF 4 **\$4.95**

Enhance your car with marker lights. Safety devices like required by law on 1969 models. Easily installed. Requires 1" mounting hole. Heavily chrome plated impact-resistant body. Waterproof. Projects only 1/2", 3 3/4 x 2 1/4" size overall. Includes 2 red and 2 amber. For 12 V. DC. Wt. 1 1/2 lbs. No. 47A5534. Made in U.S.A. **\$4.95**

Set of 4

## NEW LOW PRICES!



REG. WAS \$8.79

AIRGUIDE  
"SEBRING"  
ILLUMINATED  
AUTO  
COMPASS

NOW  
**\$6.95**

Precision compass movement. Push-button self-contained lighting. Powerful Alnico V. directional magnets with aircraft type Cunife compensators. Versatile quick-sticking self-adhesive mount. Height 3 3/8", width 2 1/2". Wt. 8 oz. Mfg. List \$10.00. No. 47A5530. Model 1601. **\$6.95**



REG. WAS \$11.88

AIRGUIDE  
"SEBRING"  
ALTIMETER

NOW  
**\$9.50**

Fast accurate readings of height above sea level to 15,000 feet. Versatile quick sticking self-adhesive bracket, remove bracket for hiking. Gray plastic case, black dial with white detail. Case diameter 3 3/8". Wt. 12 oz. Mfg. list \$13.50. No. 47A5531. **\$9.50**

Model 1608. Each

BE SEEN! BE SAFE! PREVENT SIDE COLLISIONS

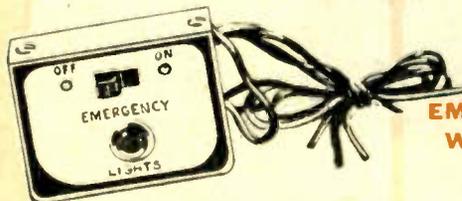


SIDE MARKER  
REFLECTORS

SET OF 4 **\$1.95**

Beautiful chrome plated reflectors install in seconds by peeling the backing from 3M's super adhesive and pressing in place. No screws or drilling required. About 2 1/8" diameter. Includes 2 red and 2 amber. No. 47A5535. Shpg. wt. 8 ozs. **\$1.95**

Set of 4



4-WAY EMERGENCY  
BLINKER SWITCH

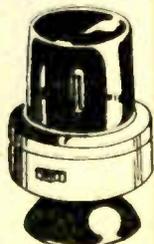
FLASHES PARKING LIGHTS AND  
TAIL LIGHTS SIMULTANEOUSLY

No need for flares or flashlight when car is stalled or parked at roadside. Warns on-coming motorists of your position. Off-on slide switch, red indicator light mounted on 1 3/4 x 2 1/4" aluminum panel. With wire and instructions. Import. No. 47A5513. Each **\$1.39**

EMERGENCY  
WARNING  
LIGHT  
QUALITY  
IMPORT

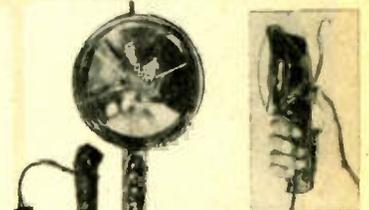
SEE FLASHING RED SIGNAL  
FOR SEVERAL 100 YARDS

Fastens any place on car by large 3" rubber suction cup, works in any position. 2 1/2" dia. x 2 1/4" high red dome. On-off switch. Operates on 2 "D" flashlight cells (not included). wt. 1 lb. Use controlled by local or state law. No. 47A5514. Each **\$2.49**  
No. 21A1. "D" Cell. Each **17c**



REVOLVING AMBER  
SAFETY LIGHT

Operates from lighter outlet of 12 V. auto. Rubber suction cup adheres to any smooth surface. 6" high. 16 ft. cord. With spare bulb. Wt. 2 lbs. No. 47A5520. **\$5.95**  
Import Value



SEALED BEAM  
HAND SPOTLIGHT

35,000 CANDLE  
POWER-12 VOLT

Portable, Lightweight and Powerful! Compact size fits glove compartment. Deluxe all chrome aluminum die-cast housing has swing-away hanger, off-on switch, 12 ft. power cord and adaptor plug for lighter. Exceptionally well made. Shpg. wt. 3 lbs. No. 47A5539. **\$5.95**  
B-A Low Price



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

**INDOOR-OUTDOOR THERMOMETER AND HUMIDITY METER**

Three precise instruments accurately report outdoor as well as indoor weather conditions. Richly wood grained frame, enhanced by beautiful, deep lustre of hand-rubbed finish. Metal scale and dial are executed with micrometer precision. 14" L. with 48" cable for outdoor temperature. Wt. 3 lbs. No. 47A2001.

**\$9.95**



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

**HANDSOME WEATHER INSTRUMENT TRIO**

1000's already sold to BA's satisfied customers! Fine quality American made Thermometer, Barometer and Humidity Meter on woodgrained panel 15 1/2" x 5 3/4". Calibration adjustment on back of each instrument allows for greater accuracy than most others. Mounts vertically or horizontally. Brass metallized instruments retain lustre. Wt. 2 lbs. No. 47A2002.

**\$9.95**



**\$14<sup>95</sup>**

**DECORATOR STYLED WEATHER STATION**

Three fine instruments... Thermometer, Barometer and Humidity Meter constructed with the skill of experienced craftsmen. Instruments have the warm glow of polished brass. Richly wood grained panel is enhanced by hand-rubbed finish. Mount vertically or horizontally. 20" long. Wt. 6 lbs. No. 47A2000.

**\$14.95**



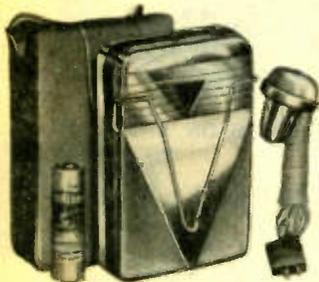
**\$27<sup>95</sup>**

**NEW MEDITERRANEAN CLOCK WEATHER STATION**

Combination cordless battery clock, thermometer, humidity meter and barometer.

All four movements mounted in richly grained case accentuated by beautiful lustre of hand rubbed finish. 20" tall. Wt. 6 lbs. No. 47A2003. Each

**\$27.95**



**4-TRANSISTOR HEARING AID**

Fine quality instrument puts good hearing within reach of everyone! Lightweight, only 3x2x3/4". Operates on one penlight battery included. Skin-toned earpiece with 3 sizes of ear inserts included. Provides wide range, clear sound. Instantly adjustable to user's special needs. Has telephone switch. Satisfaction guaranteed or money back if returned within 15 days of purchase, with Battery. \$29.95

47A301. Wt. 1 lb. Each

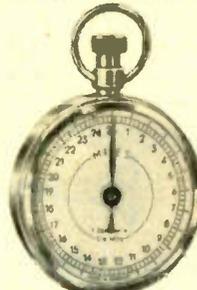


**ANTIMAGNETIC 17 JEWEL WRISTWATCH**

Stainless steel! 3-yr. warranty against band breakage. 100% waterproof if case, crown, crystal intact. 17 jewel Incabloc shockproof movement in dust-free, moisture-free case. B-A guaranteed for life of original purchaser subject to specified preventative maintenance and excluding accident or negligence. Wt. 8 ozs.

No. 47A302 Each

**\$19.95**

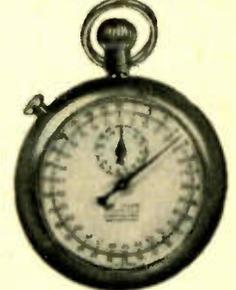


**MEASURE MILES YOU WALK WITH THIS PEDOMETER**

Golfers, Joggers, Hikers... Here's a precision German made instrument that records every step you take and registers the accumulated distance in miles. Small pocket-watch size case is suspended from the belt or side pocket near the hip. Adjustable for steps of 1 to 3 feet length. Dial is calibrated in 1/4 mile divisions up to 25 miles. Can be reset to zero anytime. Bright nickel plated brass case 1 7/8" dia. Wt. 4 ozs.

No. 47A3500. Special Each

**\$5.95**



**DeJur 1/10 SECOND STOP WATCH**

Precision 7-jewel movement. "Time-out" allows stop-start w/o reset. 2 RPM sweep second hand. Black outer numerals read 0-30 sec, red inner numerals 0-60 sec. Small recorder dial totals to 15 min. Start-stop crown button. Lifetime unbreakable mainspring. 1-year guarantee on materials and workmanship.

47A303. Wt. 8 ozs. Each

**\$14.95**

**SEE YOUR FAVORITE MUSIC IN CHANGING COLORS**



EASY TO ASSEMBLE KIT

**\$39<sup>95</sup>**

WIRED READY TO INSTALL

**\$49<sup>95</sup>**

Solid state color viewer for high fidelity... to "View" your music while you listen! Beautiful colors and intensity change with the frequency and volume of music. Connects quickly to speaker output of any radio, hi-fi, recorder or guitar amplifier. Three color sensitivity controls to adjust for maximum performance with any amplifier output wattage. Does not affect sound quality.

Solid state circuit uses silicon controlled rectifiers to trigger color intensity. Off-on switch. 18 x 12 x 9" oiled walnut cabinet with beaded translucent front. For 115 VAC. Made in U.S.A.

No. 33A2063. Easy To Assemble Kit **\$39.95**  
No. 33A2062. Wired - Ready To Install **\$49.95**



**B-A's EXCLUSIVE SPECIAL PURCHASE BOOKSHELF SPEAKER**



SAVE \$6.00 OFF GE's REG. PRICE OF \$14.98

**\$8<sup>98</sup>**

**2 FOR \$16.95 SUPPLY LIMITED**

- Beautiful walnut cabinet.
- Big 9" oval dynamic speaker.
- Burnt Orange/Brown grille cloth.
- 8 1/2" plug-in extension cable.
- Plugs into most cassette recorders to give big bass sound.
- Perfect as extension speaker for stereo systems.

A fantastic speaker in one of the most beautiful walnut cabinets we have seen. Made to give big sound to cassette recorders but ideal as extension speaker to stereo systems or even as main speakers for system in recreation room, den, etc. You must see it and hear it to believe the quality craftsmanship and fine sound reproduction. Buy now while limited supply lasts. Matches any 4-8 ohm output. Size 11 1/4" W. x 7 3/4" H. x 4 1/2" D. Shpg. wt. 4 lbs.

No. 33A2076. **\$8.98** Pair For **\$16.95**  
B-A Special Each

**SELF-WINDING . . . COMPLETELY AUTOMATIC!  
NO BATTERIES TO REPLACE EVER!**

**TECH-QUANAUT  
TIMEPIECE**

**FEATURES  
COMPARE WITH  
OTHERS SELLING  
FOR OVER \$100!**

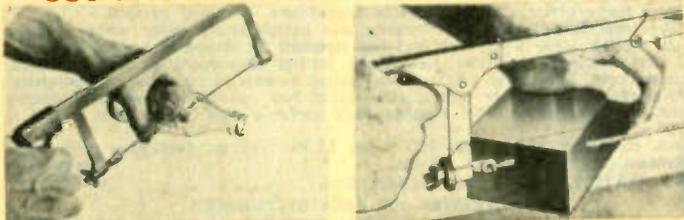
**\$49<sup>50</sup>**

- Calendar Gives Date Changes Automatically Each Day.
- Shock Resistant — Water Proof to 600 Foot Depth.
- Has Sweep Second Hand.

An outstanding time piece for the scientist, electronic technician, sportsman, etc. This watch is especially constructed with all stainless steel case. Crown is protected from bumps and scrapes. This special crown screws down and locks insuring complete and long lasting protection. Waterproof (guaranteed as long as crystal, crown, button, and case remain intact in their original conditions) to 600 feet of depth. The movement is a fine 17-jewel Swiss unit, giant easy-to-read dial glows in total darkness. Moveable top dial enables simple recording of time lapse for a multiple of timing situations. Permits you to calculate time anywhere in the world. Special crystal has built-in magnifier for the calendar date window. Watch band is molded waterproof extra heavy vinyl. Exceptional guarantee is spelled out and included with watch. Shpg. wt. 1 lb.

No. 47A304. Special Net. **\$49.50**

**CUT ANY MATERIAL WITH SUPER-HACK**



In less than two minutes you can rip thru the hardest piece of metal (such as a FILE!). This amazing tungsten — carbide saw will make curves, notches, straight cuts in materials formerly considered to be unsawable! You can cut glass, glazed tile, bricks, tool steel, marble, and with very little effort. Famous cousin of diamond, the furnace-made tungsten carbide now joins the saw blade (a DuPont development) and you have this miracle blade. Fits any hacksaw.

No. 37A898. **\$1.95** 12 Lots **\$1.50**  
Net Each Each

**NAVAL JELLY**

**MAKES RUST  
DISAPPEAR**

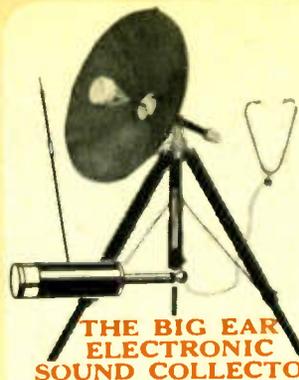
- No More Scraping!
- No More Sandblasting!
- No More Wirebrushing!
- Consumes 47 Times Its Weight In Rust.
- Dissolves Rust From Iron & Steel.
- Removes Rust Stains From Concrete.
- Not An Acid.



Naval jelly eliminates the time and drudgery of rust removal and does the job far more effectively than old hard chemical and mechanical methods. Easy-to-use tacky gel adheres even to ceilings. Just brush it on, let stand a few minutes or several hours depending upon the depth of the rust. Hose off with fresh water and rust is gone, the dry surface will contain a rust inhibitor, a thin clean film. This will prevent further rusting and may be painted over.

Use on TV towers, pipes, fences, tools, tanks, cranes, trucks, all machinery. Removes gun blue and is ideal for rust removal from all weapons. Coverage: Naval jelly will remove rust at the rate of 80 to 200 square feet per gallon, depending upon thickness and condition of the rust.

No. 17A1384. 8 oz. Introductory Bottle. Each **\$1.49**  
No. 17A1385. 2 lbs. Net Each **\$3.95**  
No. 17A1386. 4 lbs. Net Each **\$7.95**  
No. 17A1388. 40 lbs. Net Each **\$26.00**  
No. 17A1389. 55 gal. drum. Net Each **\$176.00**



**THE BIG EAR  
ELECTRONIC  
SOUND COLLECTOR**

An ultra-sensitive audio-detection unit designed to pick up and amplify even the most remote sound as far away as 200 ft. clearly and distinctly. Reflector size, 18" dia. Height on tripod 42". Comes with mike amp, and stethoscope earphones. Requires 9 V. battery. Wt. 10 lbs. Imported.

No. 49A214. **\$14.95**

Each No. 21B141. Battery for above. Ea. 48c

**WIRELESS FM BROADCASTER**

Plugs Into Phone Jack on "Big Ear". Broadcasts Big Ear sound up to 50 ft. using FM radio for listening. Requires battery below. Import.

No. 20A1212. **\$12.95**

Each No. 21A5009. Battery for above. 43c

**CLIPS INSTANTLY  
TO YOUR GLASSES . . .  
TUNES ANY AM  
STATION IN YOUR  
AREA**



**\$12<sup>95</sup>**

**TINY EYEGLASS RADIO**

Now . . . a fine quality miniature personal radio that weighs just one ounce! Only 2 3/4" long! Unique design clips securely to eyeglass or sunglasses frame. Wear it wherever you go, whatever you do . . . while fishing, bicycling, sun bathing, watching the games, or just relaxing. Earplug guarantees privacy. Tiny electronics uses 5 silicon transistors in a high gain regenerative circuit. Has super conductive magnetic ferrite antenna. Tunes standard broadcasts 550 to 1600 KHz. Less batteries.

No. 20A1214. Imported. **\$12.95**

Special Each

No. 21A5008. Battery for above (requires 2). Each **.38c**

**NOW ENJOY FM RADIO IN YOUR CAR**

**ALL  
TRANSISTOR**



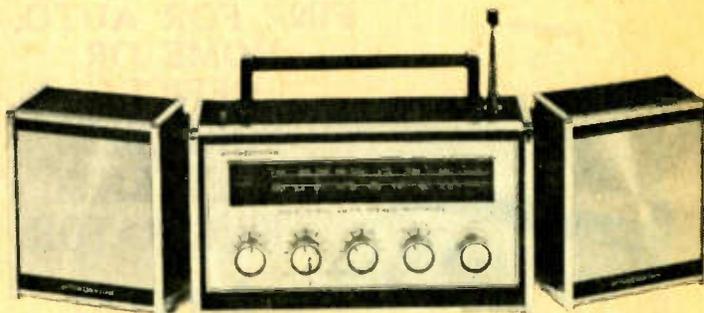
**MICROMINIATURE SIZE . . .  
ONLY 1 3/4" H. x 4 1/4" D. x 5 1/2" W.**

- Play Through Your Present AM Radio
- Has Local-Distance Switch
- Slide Rule Tuning
- Full Time AFC For Drift-Free Reception

**\$29<sup>95</sup>**

Beautifully styled. Easily installed under dash, on top of dash or console. Requires no alteration of AM car radio. Splitter box included with converter. Permits use of AM auto antenna for both AM and FM reception. Unit is switchable so it may be used with 12 V. positive or negative ground systems. Conforms to auto safety regulations. Simply tune AM radio to 1580 KC. FM tuner then tunes from 88 to 108 mc. Complete with mounting bracket. Special fastener pad for top-of-dash or console mounting, antenna and battery patch cords. Weighs only 3/4 lbs. Shpg. wt. 2 lbs.

No. 38A217. **\$29.95**  
Each

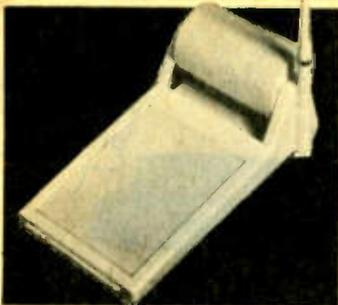


**PORTABLE AM/FM STEREO  
MULTIPLEX SYSTEM**

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

Now you can have true stereo sound wherever you go. Unit closes up to easy to carry portable only 8 1/4" x 10 1/2" x 5 3/4". Open it up, detach the big sound 3 1/2" speakers and you have a full multiplexed stereo radio. Operates on 4 self-contained "D" cells or plugs into any 115 V. AC. outlet. Has separate controls for tone, volume, and stereo balance. Features horizontal slide rule tuning. Stereo indicator light. Built-in ferrite AM antenna plus telescoping swivel FM antenna. Built-in automatic gain control. Beautiful black and chrome. Shpg. wt. 8 lbs.

No. 36A3518. BA's Special Price. **\$59.95**  
No. 21A38. "D" Cells for above. Net Each **.19c**



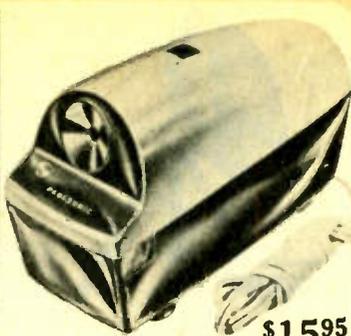
**B-A's ROLLAMATIC MEMO PAD**

Best home and office memo pad ever devised! Molded white plastic frame holds 3 3/4" wide x 75 ft. long memo roll. Provides flat, smooth writing surface and a handy, ever-present ball point pen for jotting down important messages. Ball pen uses standard replaceable writing element. Has letter opener edge and inch/millimeter markings. Wt. 1 lb.

No. 47A7507. With 3-In-One Pen, Letter Opener/Ruler and 75 ft. Paper Roll.

**\$1.98**

Each  
No. 47A7508. Rollamatic Paper Refills. 3 For 99c



**PANASONIC CUTLASS AUTOMATIC ELECTRIC PENCIL SHARPENER**

**\$15.95**

Completely automatic . . . simply insert pencil and sharpener starts, exclusive "electronic light" flashes when point is sharp. Tungsten high-speed steel cutter. Slide-out tray for shavings, non-slip suction cup feet.

Precision engineered for home or office. Size 5x3 1/4 x 7 3/4". 115 volt AC. Wt. 3 lbs.  
No. 47A7509. Each. **\$15.95**



**brother**

**ELECTRIC ADDING MACHINE**

**STEPS UP SPEEDS OF ALL OPERATIONS**

**DIE-CAST CONSTRUCTION**

**\$69.95**

**B-A's LOW PRICE . . .**

An ultra-modern compact electric adding machine. Precision built, using all-metal die cast construction. Lists to 7 columns, totals 8 (99, 999, 999). Full 10-key keyboard allows you to add, subtract, and multiply, gives you total and sub-total. Additional features include repeat key, correction lever, column indicator and transparent tear-off bar. Comes with triple purpose carrying case with sound absorbent pad, dust cover and detachable cord. Uses standard adding machine tape. Size 4 1/2" H, 8 3/4" W, 12 1/2" D. Shpg. wt. 16 lbs.  
No. 47A7511. **\$69.95**  
Each

**BEST TYPEWRITER VALUES WE'VE SEEN!**



**\$39.95**

**INTERNATIONALLY FAMOUS**

**brother**  
**PORTABLE TYPEWRITER**

**FREE! 900 PAGE WEBSTER DICTIONARY WITH PURCHASE OF EITHER TYPEWRITER**



**\$49.95**

**(1) BANTAM WEIGHT MODEL**

• **STANDARD KEYBOARD** • **PICA STYLE TYPE**  
B-A Buyers were much impressed with the fine quality and performance of these home/office/student portable typewriters. You will be too! Gives real heavyweight performance and extraordinary dollar value. Weighs just 12 lbs., only 5 1/2" high and has standard 84 character keyboard. 1, 1/2, 2 line spacing line finder, half space ratchet convenient to type formulas, paper bale, automatic and manual ribbon release. Line drawing aperture. All-metal body. Comes with black ribbon, has control for two-color ribbon plus stencil position, and luggage style carrying case. Dimensions 14 1/2" x 15" x 5 1/2".

B-A customers get a free 900 page, \$2.95 Webster Dictionary with each Bantam-weight. Shpg. wt. 15 lbs.  
No. 47A7502. Giant Savings Import. Each. **\$39.95**

**WEBSTER 900 PAGE DICTIONARY**

Over 52,000 entries. Provides complete vocabulary of concise definitions. A must for every home, office, student. Shpg. wt. 2 lbs.  
No. 16A1014. Special Each. **\$2.95**

**TOUCH TYPING MADE SIMPLE**

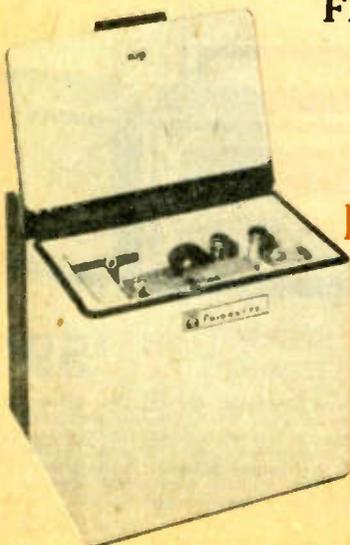
Typewriter Instruction Course on LP record. Teaches anyone to type properly. Includes exercises and drills. Shpg. wt. 1 lb.  
No. 23A154. Special Each. **\$2.95**

**(2) DELUXE COMPACT MODEL**

• **44 KEY STANDARD KEYBOARD** • **PICA STYLE TYPE**  
• **WITH TABULATOR** • **PICA STYLE TYPE**  
Ultra-modern design, with tabulator. Full 44 key, pica style type, including exclamation point, number 1, plus and equal signs. Ideal for students. Numerous other features include two-color ribbon, stencil position, touch control, anti-jam key release, retractable paper support arm. Comes with luggage style carrying case. Size 6 3/4 x 14 1/2 x 15" Shpg. wt. 15 lbs. Extra Value Import.  
No. 47A7510. **\$49.95**  
With Carrying Case, Only

**FINE FOR AUTO, HOME OR OFFICE!  
PORTABLE ELECTRIC REFRIGERATOR**

**\$49.95**



World's most compact, only 14 3/8 x 12 1/2 x 13". No moving parts, nothing to break. Easy to carry . . . weighs only 16 lbs. Operates on 110 V. AC or plugs into car lighter outlet. Shpg. wt. 23 lbs. With AC and DC cords and ice tray with cover. Imported.  
No. 61A227. **\$49.95**  
Special Each



**TAKES THE WORK OUT OF INFLATING AND DEFLATING AIR MATTRESSES, TOYS, SWIMMING POOLS, ETC.**

**AIR PUMP AND EXHAUSTER**

**12 VOLT DC ELECTRIC**

**\$6.95**

**INFLATING:** No need for huffing and puffing—this handy air pump inflates an air mattress effortlessly in seconds.  
**DEFLATING:** No more folding, pushing, or squeezing to get out the air—this exhauster does the job thoroughly.  
Durably constructed of rugged Teflon and polystyrene. Attractively display boxed complete with two nozzle attachments, flexible plastic extension, 10-ft. cord, built-in on/off switch, lighter plug-in.  
Specification: Air pressure, 2.7 lbs./sq. inch; Air volume, 50 gallons/minute; Voltage requirements 12 volts DC. Dimensions: 4 1/4" high, 2" dia. Wt. 1 1/4 lbs.  
No. 37A9100. Each. **\$6.95**

# PANASONIC QUALITY ELECTRICAL APPLIANCES



\$23<sup>88</sup>

## PANASONIC

### MODEL MX-280 BLENDER

Features 7 push-button operation for precise selection of the perfect blending action for all your blending requirements. Has powerful 750 watt motor. Solid state engineering assures highest quality performance and durability. Stainless steel blades stay sharp, never rust. Full size 5 cup (40 oz.) container is impact and heat resistant, opens at either end for easy cleaning. Handy 2 oz. measuring cap is built into lid. Size 3 $\frac{3}{8}$ " x 8 $\frac{1}{4}$ " x 15". Complete instruction and recipe book included. Shpg. wt. 9 lbs. No. 61A229. Model MX-280. Each.....

\$23.88



\$34<sup>95</sup>

## PANASONIC

### MODEL MX-260 BLENDER

8 push-button operation for perfect pinpoint blending action. Powerful 850 watt motor for heavy duty use. With the automatic dial timer you can instantly select from 1 to 60 seconds of blending time with automatic shut-off. Blades are made of sharp stainless-steel for unsurpassed durability. Never a worry about rust or dull edges. Full size 5 cup (40 oz.) glass container is impact and heat resistant. Opens at either end for easy cleaning. 2 oz. measuring cap built into cover. Complete with full color recipe and instruction book. Size 6 $\frac{1}{2}$ " x 9 $\frac{3}{32}$ " x 15". Shpg. Wt. 11 lbs. No. 61A230. Model MX260. Each.....

\$34.95



\$49<sup>95</sup>

## PANASONIC

### MX-250 DELUXE BLENDER

A truly deluxe blender offering full range of speeds . . . from gentlest to highest . . . PLUS fully automatic electronic push-button timer which allows precision selection of length of time for blending from 5 to 75 seconds at 5 sec intervals. Powerful 1000 watt motor handles real heavy duty blending, with selection of speeds as low as 3,000 RPM for gentlest whipping and stirring. High quality stainless steel blades. Full size 5 cup (40 oz.) glass container is impact and heat resistant, opens at either end for easy cleaning. 2 oz. measuring cap included. 6 $\frac{1}{2}$ " x 9 $\frac{3}{32}$ " x 15". Shpg. Wt. 11 $\frac{1}{2}$  lbs. No. 61A231. Model MX-250. Each.....

\$49.95

## THE FINEST IN HOME APPLIANCES



\$9<sup>95</sup>

## PANASONIC

### ICE CRUSHER FOR ALL PANASONIC BLENDERS

This optional Panasonic ice crusher is available for easy attachment to all Panasonic blenders. Attractively styled in two-tone color combination of decorator Ivory and Mist Grey. It can add true convenience and pleasure to party-time preparation. Makes crushed ice in just minutes for delicious frosty beverages. Durably constructed of high impact plastic with rugged stainless steel cutting blades. The perfectly crushed ice is ejected from its contoured design spout. Shpg. Wt. 2 lbs. No. 61A232. Model MX-20. Each.....

\$9.95



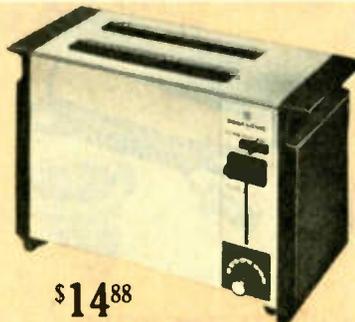
\$19<sup>95</sup>

## PANASONIC

### HEAVY DUTY ICE CRUSHER

Panasonic brings a touch of professionalism to your home with its advanced design, heavy duty ice crusher. Features 5 settings from coarse to fine so you get the exact texture of ice you require every time. Unsurpassed performance and durability are assured by the fine stainless-steel blades. Never a worry about rust or dull edges. Powerful 150 watt motor for real heavy duty performance. Crushes a full tray of ice every 20 seconds. Water catch tray takes the mess out of ice crushing. Insures that water will never leak on table or counter. Size: 4 $\frac{3}{8}$ " x 7 $\frac{3}{8}$ " x 10 $\frac{3}{4}$ ". Shpg. Wt. 8 lbs. No. 61A233. Model MK285. Each.....

\$19.95



\$14<sup>88</sup>

## PANASONIC

### 2-SLICE AUTOMATIC TOASTER

Panasonic's new NT-108 toaster pays special attention to that second slice of toast. It features the ingenious, exclusive "keep warm" switch which keeps your second slice inside the toaster warm without darkening it any further. The second slice of toast is always as warm as the first without a shade of difference. Modern style, in gleaming chrome with midnight black trim, complements any home. Comes equipped with a full-range shade selector dial and automatic bi-metal timer so that your toast is always done exactly as you like it. Hinged crumb tray flips open for instant, thorough cleaning. Shpg. Wt. 5 lbs. No. 61A234. Model NT-108. Each.....

\$14.88



\$29<sup>95</sup>

## PANASONIC

### 4-SLICE AUTOMATIC TOASTER

A new dimension in automatic toasting! Place 1 to 4 slices of bread in the toasting slots and let Panasonic advanced engineering do the rest. The bread will magically self-lower into toasting position. And for toast that's always done the way you like it, the dual shade selector dials let you pre-select the shade of your preference for both pair of slices. Special built-in thermostats read the toast's surface temperature and activate the automatic pop-up mechanism when toast is done to desired shade. It's easy to keep clean . . . simply flip open the hinged bottom tray for instant, thorough crumb removal. Shpg. wt. 10 lbs. No. 61A212. Model NT-4000. Each.....

\$29.95



\$19<sup>95</sup>

## PANASONIC

### COFFEEMAKER

Graceful and striking in polished chrome, this elegant Panasonic coffee maker is designed with the flair of tomorrow, featuring new tapered styling with a uniquely fashioned pedestal base, sweep line pouring spout, and contoured handle. Automatically brews perfect coffee every time. Signal light comes on when coffee is ready to serve. Coffee warmer takes over. Convenient slide rule strength selector for setting the exact strength of brew, from "mild" to "strong." Full 12-cup capacity, with level indicator built into handle. Stainless steel inside and out. 750 watts, 115 V. AC 60 cps. Shpg. wt. 3 lbs. No. 61A215. Model NC-3100. Each.....

\$19.95

**Pollenex®**

**NEW  
DEEP HEAT  
BACK  
MASSAGER**



GIVES INFRA RED HEAT IN SECONDS



PORTABLE . . . USE AT HOME OR OFFICE



KING-SIZED! 420 SQ. INCHES



COMFORTABLE AIRLINE-SEAT STYLING

**420 SQUARE INCHES OF SOOTHING ALL OVER COMFORT**

**\$32.88**

Brings penetrating Infra-Red heat or soothing massage, or BOTH to your whole back.

King-size comfort for your entire back, shoulders and neck. Relax while sitting or lying down — let soothing Infra-red heat and comforting massage ease the strain and tension of tired muscles — all over — all at once! Touch a button on 3-way control for heat, massage . . . or combine heat with massage.

Foam padded and covered with luxurious wipe-clean expanded vinyl. White with tan contoured headrest. 15" x 28" long, 2" thick. 70 watts. Shpg. wt. 8 lbs. No. 61A246. Net Each **\$32.88**



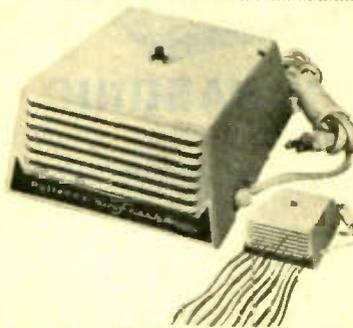
**NEW  
Pollenex**

**"HEALTHCLUB" SWEDISH STYLE MASSAGER**

WITH POWERFUL HEAVY DUTY UNIVERSAL MOTOR

**\$24.88**

Improved Swedish-type professional body massager . . . better balance . . . lighter weight . . . feels better, fits better on the hand. Made of Lexon virtually indestructible. Has sharp clean lines with gleaming chrome-like finish. Powerful new heavy-duty Universal "floating" motor delivers thousands of motor powered pulsations each minute. Lets fingers deliver classic skin and muscle massage on the body — gives a patting—rotating—kneading feel of the professional massager. Your hand controls the intensity of the massage. Size 6" x 4 1/8" x 3 1/4". Operates on 115 V. 60 cycles AC. Shpg. wt. 2 1/2 lbs. No. 61A245. Net Each **\$24.88**

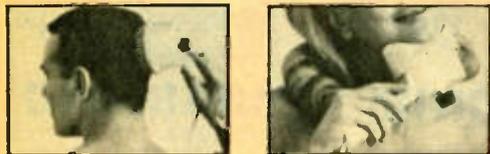


**NEW POLLENEX ROOM AIR FRESHENER \$12.95**

Kills indoor odors electronically . . . banishes stale smoke odors, removes cooking odors from kitchen, keeps bathroom smelling fresh and clean. This new electronic air freshener keeps home free of offensive odors . . . for just a penny a day. Keeps your home "mountain-air" fresh. Hi-impact plastic cabinet only 3 3/4 x 6 3/4 x 7" . . . is compact and portable. Beige color. Convenient off-on switch mounted on top. Wt. 8 lbs.

No. 61A222. Net Each **\$12.95**

**NOW WITH 2 FREE ATTACHMENTS . . . ALL FOR THE PRICE OF MASSAGER ALONE!**



**POLLENEX DEEP INFRA-RED HEAT MASSAGER \$7.95**

Pollenex goes to work where it hurts. Exclusive design for maximum body contact. Light and compact, provides penetrating infra-red heat and massage for quick, temporary relief of minor aches and pains often associated with Arthritis, Rheumatism, Neuralgia, Backache, Tired Feet, Muscular Strains, Muscular Aches, and Pains due to over-exertion and fatigue. Bursitis, Sinusitis, Muscular discomfort due to tension, muscular spasm, headaches, tension, traumatic pain, Lumbago. Used by Physical Therapists . . . Used in Hospitals. Penetrating Infra-Red heat reaches painful areas . . . Warms, soothes irritated nerve ends, helps ease pain, helps relax muscles. No. 61A208. Wt. 1 lb. Each **\$7.95**

**ALL METAL CONSTRUCTION**

**PORTABLE LIGHTWEIGHT HAND VACUUM**

**TWO MODELS—115 V. AC AND 12 VOLT MODEL WHICH PLUGS INTO CIGARETTE LIGHTER \$9.95**

The perfect vacuum for home, office, boat, auto, garage, workshop. This handy little unit packs plenty of power yet is extremely lightweight . . . weighs only 4 lbs. No dust bags to empty . . . it uses throw-away paper bags. De-moths and deodorizes. Has finger-tip push-button switch. Sturdy all-metal construction. Universal AC-DC air-cooled motor. 110-120 Volts AC 275 watts rating. Includes power unit, upholstery nozzle, 2 throw-away bags, and fiberglass filter. Shpg. wt. 5 lbs. No. 61A219. 110 V. AC Model. Net Each **\$9.95**  
12-VOLT MODEL. Same unit as above, only has 12 V. DC motor for use with auto, boat, or trucks. Has extra-long heavy-duty cord with cigarette lighter plug attached. Shpg. wt. 5 lbs. No. 61A220. 12 V. Model. Net Each **\$9.95**

**MANNING BOWMAN BELT MASSAGER**

**\$29.95**



Professional type belt massager for the home at a fantastic low price. A real must for those individuals who like to stay healthy the easy way! Helps keep you firm and fit! Stimulates circulation . . . relieves minor aches and pains often caused by over-work or too vigorous exercise along the back and legs. Has adjustable belt stroke for mild or vigorous action. Just a few minutes a day workout gives that refreshed feeling. Sturdy light blue housing and base with non-slip base surface. Motor rating is 150 watts, 115 V. AC only, 60 cycles 1000 RPM. Shpg. wt. 26 lbs. No. 61A216. Net Each **\$29.95**



# PROCTOR APPLIANCES NEVER, NEVER, NEVER NEED IN-SHOP REPAIR SERVICE!

*Coffee tastes Better When made in glass!*

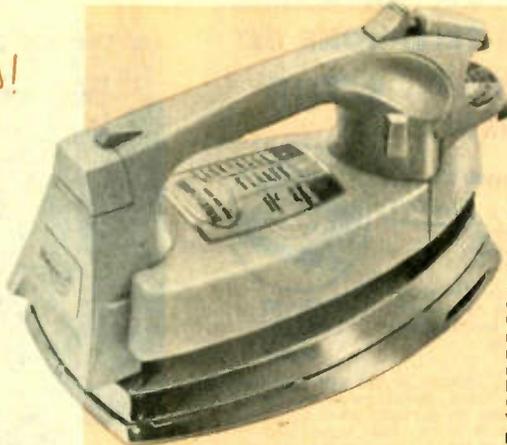


## FULLY AUTOMATIC ELECTRO PERCOLATOR

**\$17.95**

See-thru clear glass fully automatic electric percolator with "lift-out" bowl easy cleaning. You can actually watch the coffee brewing through the crystal-clear glass. See as you serve. Special lights in the base create a warm candle-light glow to give your coffee new taste tempting radiance. 2-10 cup capacity. Adjustable flavor control. Keeps coffee piping hot automatically. All parts readily replaceable when needed. No serviceman necessary. Just order replacement part needed by the number. Shpg. wt. 4 lbs.

No. 61A241. Each **\$17.95**

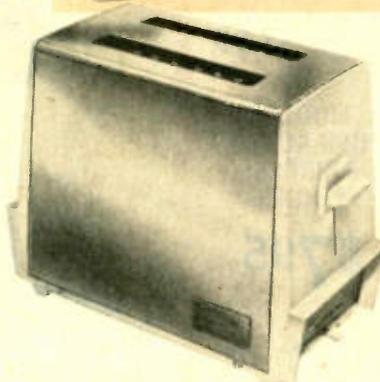


## SPRAY-STEAM AND DRY IRON WITH NEW "SPRAY CONTROL" ACTION

WITH TEFLON COATED SOLE PLATE **\$17.95**

Old fashioned sprinkling is gone forever! A quick push of the thumb on the new "spray control" button . . . a smooth glide of the iron . . . out comes stubborn wrinkles. No water spots . . . no excess moisture. Just a crisp clean finish on all your ironing. Steam or dry iron at the flick of a switch! Temp-O-Guide sets temperature accurately for all fabrics. Only 5 units to replace . . . you never need to send iron in for service. If you ever need a replacement part just order it by number and slip it in place yourself. Operates on 115 V. AC. 1200 Watts. Shpg. Wt. 4 lbs.

No. 61A242. Net Each **\$17.95**

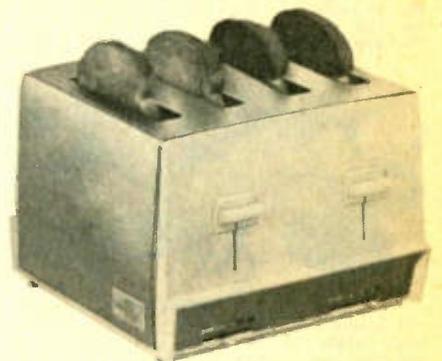


## PROCTOR-SILEX LONG LIFE TWO SLICE TOASTER

**\$12.95**

The ultimate in versatility and styling! Richly mirrored chrome body with high-style white handles, contrasting gold design. Fully automatic with Select-ronic color control assuring desired shade of toast every time. Toasts any bread . . . reheats cold toast without burning. Never, never needs service . . . only 5 units make up toaster, easily replaced at home. Should unit ever need repair no need to send to a service station! Easy to clean. 1050 watts, 110-120 volts AC only. Underwriters Laboratories, Inc. Listed. Shpg. wt. 5 1/2 lbs.

No. 61A243. Each **\$12.95**



## PROCTOR-SILEX LONG LIFE FOUR SLICE TOASTER

**\$21.95**

An exciting new design adds extra convenience for the whole family! A FOUR slice toaster with TWO individual Select-Ronic Color Controls that now truly meet the toasting demand of everyone. You can make dark toast and light toast at the same time. Superbly styled in gleaming chrome with white trim. Has the same features as all Proctor-Silex Long Life appliances. Never needs servicing . . . simply replace any part at home. No technical knowledge required. 110-120 volts AC, only, 1650 watts. Underwriters Laboratories, Inc. Listed. Shpg. wt. 8 1/2 lbs.

No. 61A244. Each **\$21.95**



## NEW DOMINION CONSOLE HAIR DRYER

MFG. LIST PRICE \$34.95 **\$26.88**

B-A's LOW PRICE

Now, a beautiful, efficient hair dryer that's designed for complete comfort and convenience. Professional type for in-home use. Easy to set-up, carry, or store. 5-position temperature control, greater air delivery to dry hair evenly, thoroughly . . . up to 25% faster. Has fully adjustable extra large hood, counter-balanced non-tip base. Smartly styled in blue and white. Shpg. wt. 15 lbs.

No. 61A240. **\$26.88**

B-A's Low Price

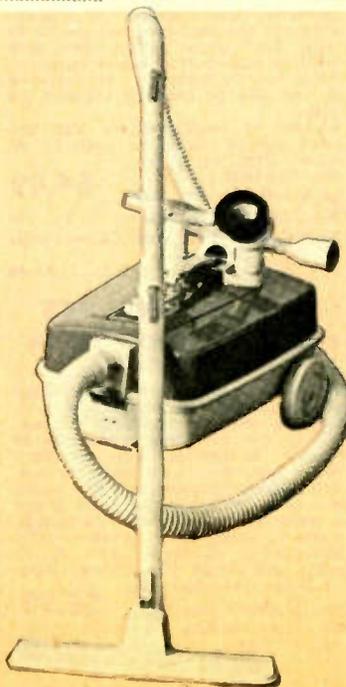
## NEW IMPROVED SHETLAND LEWYT VACUUM CLEANER

**\$34.99**

Powerful motor assures flawless dirt pickup on both carpets and bare floors. Over 1 H.P. motor, 6 amps. UL approved. Power dial control has 3-position, easy suction adjustment for floor to ceiling deep down cleaning or daily tidy up. Easy rolling unit has automatic coil rewind . . . touch of toe and cord disappears. Riding tool caddy. Numerous desirable features: Easy open lid (for removing dust bags), foot toggle switch, new clamp-lock wand connections, multiple filter system, reverse air stream for blowing, spraying, demoting, and wide vinyl bumper for protecting furniture and woodwork. Complete with 7 Piece Accessories: Dust Brush, Upholstery Nozzle, Crevice Tool, Rug and Floor Nozzle, Vinyl Hose and Wands. Wt. 15 lbs.

No. 61A225. Special Each **\$34.99**

No. 61A223. Box of 5 Dust Bags. 99c



## SCM SHETLAND SWEEPER VACUUM

**\$19.99**

Top rated sweeper vac. Compact, Lightweight . . . gets under beds, places where no other vac can reach. Features swivel nozzle, triple position brush, giant disposable bags. Powerful 2/3 H. P. motor. Weighs just 7 1/2 lbs. Shpg. wt. 10 lbs.

No. 61A239. Ea. **\$19.99**



# TELEPHONES AND WALKIE-TALKIES

## BATTERY OPERATED TELEPHONES

3 POPULAR STYLES FOR DEPENDABLE 2-WAY COMMUNICATIONS

### MODERN TELEPHONE SET

**DIAL NUMBER.. \$795**  
**PHONE RINGS!**



LICENSED BY  
**Western Electric**



• Famous "Princess Styling as developed by Western Electric

Pick Up Phone—Dial Lights

Talk and hear—loud and clear—anywhere . . . indoors or out with this exciting new phone set. Provides exceptional voice transmission for hundreds of uses—perfect for room to room, house to garage, farm use, etc. Unique dial automatically lights when receiver is lifted. Dial, signal bell at other end rings until phone is answered. Made of tough high-impact styrene. Complete with 25 ft. cable and simple instructions. Shpg. wt. 3 lbs.

No. 32A4007. Less Batteries. **\$7.95**  
Per Pair.....  
No. 21A1. Battery for above (requires 4). Each.....17c



### MODERN PUSH-BUTTON PRINCESS PHONES

**\$795**

Lift handle and buttons light up. Push any button on dial and other phone rings. When the other phone is answered, carry on a conversation just like real telephones. Set of 2 phones, 25 ft. of wire. Less batteries.

No. 32A4012. Per Pair **\$7.95**  
No. 21A1. Battery for above (requires 4). Each.....17c

## BELDEN COILED CORDS FOR TELEPHONES



Spade terminals and metal cord clamp attached, vinyl insulated.

Stk. No.	Beld No.	Cond.	Length	Net Each
2A401	8495	3	10" to 4 1/2"	\$1.48
2A402	8494	4	10" to 4 1/2"	\$1.89

BLACK VINYL CORDS

## HAND PHONE SET WITH SIGNAL BUZZERS



Includes 25 Ft. of 2 Conductor Telephone Wire.

Powered by self-contained flashlight batteries (935 Eveready or equivalent) and operated over two-conductor wire. Each phone is equipped with built-in push-button signal buzzer. Ideal for TV installers. In operation it can also be used by children for play.

Molded of break-resistant high impact styrene. Complete with 25 ft. cable. Shpg. wt. 2 lbs.

No. 32A4008. **\$4.49**  
Less Batteries. Per Pair.....  
No. 21A2. Batt. (Requires 2). Ea...17c  
No. 2C33. 2-Cond. Vinyl Covered Wire for either phone set.  
100 Ft. For.....\$1.49

## DIAL PHONE SET BELL RINGS WHEN PHONE IS DIALED!



Nationally advertised Brumberger phones of high-impact black styrene. Provides amazing results for the surprising low cost. Has appearance of regular telephones with excellent voice reception. Convenient to use. Just pick up receiver, dial and signal bell rings at other end until phone is answered. Fine for house to garage, house to house, room to room—1001 applications. Complete with 25 ft. cable and simple instructions. Shpg. wt. 4 lbs. Less Batteries.

No. 32A4009. Per Pair... **\$6.95**  
No. 21A1. Battery for above (4 required). Each.....17c

## MIDLAND INTERNATIONAL

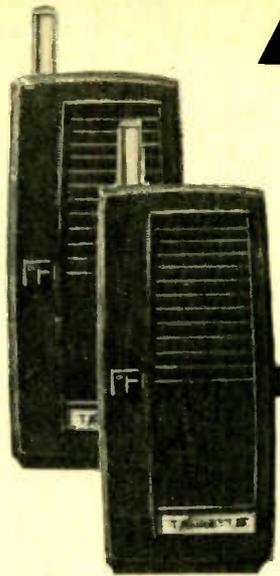
MODEL 13-027

### SPACE RANGER WALKIE-TALKIES

- Tough Molded Polystyrene Cabinet.
- Built-In 36" Telescoping Antenna.
- Space-Age Solid State Circuitry.

**NO AGE LIMIT!  
NO LICENSE REQUIRED**

**PAIR \$995**



Here's low-cost 2-way communications fun that will thrill the kids! New pocket-size, 3-transistor walkie-talkie with sensitive super-regenerative receiver. An exciting and convenient companion for camping, the beach, hiking or for talking around the neighborhood.

Features include: Push-to-talk button, on/off switch, PM dynamic speaker, 36" telescoping antenna, charcoal with chrome high-impact polystyrene cabinet. Complete with 9-volt battery and Channel 14 (27.125 MHz) crystal. Size 5 1/8" high x 2 1/8" wide x 1 1/2" deep. No license required. Wt. 2 lbs.

No. 10A35. Per Pair..... **\$9.95**

## MIDLAND INTERNATIONAL

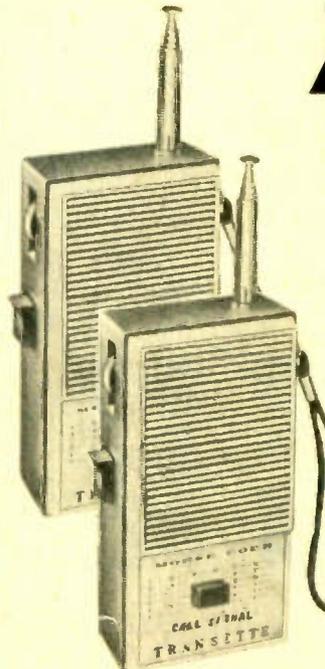
MODEL 13-042

### MORSE CODE WALKIE-TALKIES

**3-WAY FUN! NO LICENSE REQUIRED**

1. Solid State Transceiver: Press-to-talk switch for voice messages.
2. Morse Code Transmitter: Transmits International Morse Code.
3. Code Practice Key: Turn the unit on and use the code key to practice Code.

**PAIR \$1495**

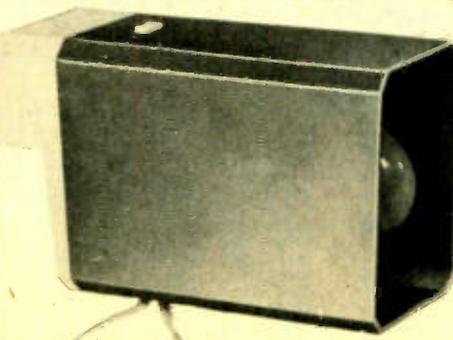


Features include: 4 transistor super regenerative receiver with volume control, crystal controlled transmitter with channel 14 (27.125 MHz) crystal, 42" 9-section telescoping antenna and standard 9 V. transistor battery. In addition to regular voice communication the unit can transmit a code signal by "keying" the code button. Has Morse Code alphabet printed on front of unit.

In high impact polystyrene cabinet with carrying strap. Size 5 1/2" high, 2 3/8" wide, 1 3/4" deep. No license required. Shpg. wt. 2 lbs.

No. 10A28 **\$14.95**  
Per Pair.....

## HAND-SIZED TRANSISTORIZED MEGAPHONE



**COMPACT  
SIZE**

**\$1495**

**150 YARD RANGE  
TRANSISTORIZED  
PUSH-PULL AMPLIFIER**

Durable high-impact plastic case with built-in microphone, transistorized push-pull amplifier. Exceptional range over 150 yards. Small compact size, only 4" H. x 7" L. x 2 1/2" W. Weighs only 1 1/2 lbs. Has handy wrist strap and press-to-talk switch with locking feature for continuous talking. High quality magnetic microphone provides clear distinct voice quality.

No. 49A211 Shpg. wt. 3 lbs. Net Each **\$14.95**  
No. 21A3. Penlight Cells for above (requires 8). Each.....13c

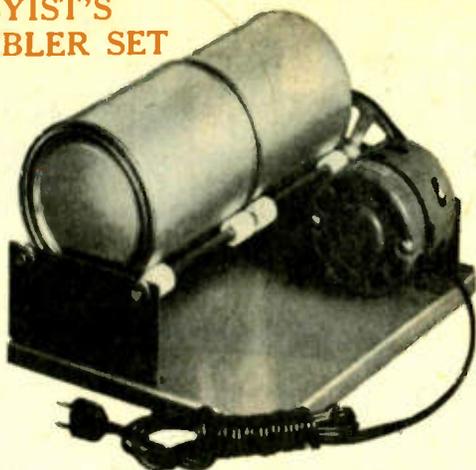
# VALUES IN GEM & LAPIDARY EQUIPMENT

## B-A HOBBYIST'S ROCK TUMBLER SET

SMOOTHES AND POLISHES: Rocks, Glass & Stones, Coins, Shell Casings, Fishing Spoons & Many Other Items

DOES THE WORK OF HIGH COST MACHINES

ONLY  
**\$19<sup>95</sup>**



B-A has sold thousands of rock tumblers to collectors all over the U.S.A. Now, we have the finest unit at the lowest possible cost! Powered by an industrial quality continuous duty motor, which readily handles 6 lb. capacity. Tumbler barrels are easy to replace paint cans. Unit accommodates 2 quart or gallon size paint can. Heavy duty nylon bearings have lifetime guarantee, all other parts, except belts and cans, have 1 Year Guarantee. Requires no skill and minimum of attention. Uses 4 oz. grit for each can.

No. 47A8502. Shpg. wt. 9 lbs. Net Each..... **\$19.95**

**BEGINNERS GRIT PACK.** Contains 1 can liner, 1—4 oz. coarse grit, 1—4 oz. fine grit, 1—4 oz. prepolish, 1—2 oz. polish. **\$1.95**

No. 47A8503. Net Each..... **\$1.95**

No. 47A8504. Tumbling Manual. Gives all necessary information on polishing all types of material. Each..... **\$2.00**

No. 47A8505. 1 Lb. Crushed Polishing Rock. Each..... **\$1.00**

No. 47A8506. 1 Lb. Oregon Beach Agate and Jasper, Each..... **\$1.50**

No. 47A8507. 1 Lb. Crushed Gem Mix. Each..... **\$2.95**

No. 47A8508. 15 Oz. Brass Polishing Media. Enough for 1 quart can. This media is re-useable indefinitely. Each..... **\$1.95**

No. 47A8509. 2 Oz. Brass Polishing Reactivating Cream. To renew life of brass polishing media. Each..... **98c**

### ACCESSORIES & EXTRA ABRASIVES FOR ABOVE

No. 47A8510. 1 Lb. Coarse Grit..... **\$1.30** No. 47A8514. Extra Quart Cans..... **30c**

No. 47A8511. 1 Lb. Fine Grit..... **\$1.30** No. 47A8515. Extra Belts..... **49c**

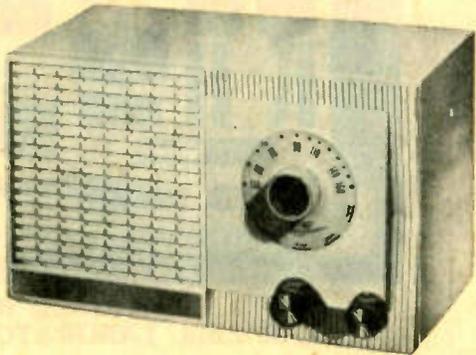
No. 47A8512. 1 Lb. Prepolish Grit..... **\$1.30** No. 47A8516. Rubber Can Liners, Pr..... **89c**

No. 47A8513. 1/2 Lb. Polish Grit..... **\$1.30**

## NEW 5 TUBE AC-DC 2-BAND RADIO KIT

EASY TO BUILD... FUN TO USE!

**\$16<sup>95</sup>**



Kit includes everything you need... pre-punched chassis, factory fresh tubes, handsome cabinet and all the parts. The 24 page instruction manual is a simplified step-by-step method assuring easy and enjoyable construction. The manual contains detailed explanations on the various circuits of the radio, how they operate, a section explaining resistor and condenser coding, wiring and soldering techniques and many more features. You can learn trouble-shooting of sets as well. The set is a highly efficient super-sensitive two band, five tube superhet standard broadcast and shortwave radio. Covers frequencies from 540 KC to 1700 KC and 5.8 to 18 megacycles... the most popular shortwave band for Foreign countries. Shpg. wt. 5 lbs. **\$16.95**

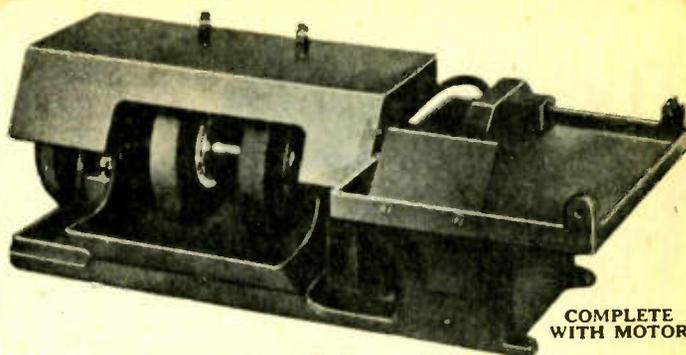
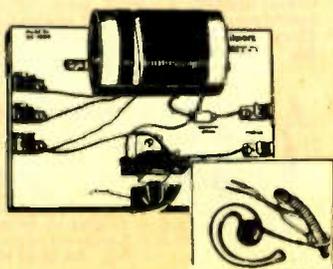
No. 47A8534. Each..... **\$16.95**

## TOP VALUE! PHILMORE GERMANIUM SELECTIVE CRYSTAL RADIO KIT

WITH 1000 OHM EARSET

Easy to build. Features new midget tuning condenser, Germanium fixed crystal diode for better sensitivity and selectivity than regular type crystal sets. Parts all mount on a 3/8" thick plywood baseboard included. Coil comes already wound. Simplified construction with gummed label pictorial diagram which fits baseboard as a template showing location of parts and connections. Wt. 1 lb. **\$3.95**

47A8521. With Headset..... **\$3.95**



COMPLETE WITH MOTOR

## CRAFTOOL-STAR 6 INCH GEM MAKING LAPIDARY COMBINATION \$137<sup>90</sup>

Model C-6-D #2020. A complete lapidary unit with sawing, grinding, sanding and polishing capabilities. Includes two 6" x 1" grinding wheels 100 and 220 grit, 6" convex head with 2 sanding discs, 3 dop sticks, one 6" felt polishing disc, Allen wrench and disc cement. Rugged cast aluminum housings and precision ground polished and plated steel shaft mounted in double sealed ball-bearings assure a lifetime of quiet, smooth running operation. Less motor and blade. (Recommended blade 6" x .032" x 5/8"). Size 26" W. x 9" H. x 11" D. Shpg. wt. 42 lbs. **\$84.95**

No. 47A8529. Each..... **\$84.95**

Model C-6-D #2020M Mounted Complete with Motor. 6" Gem Making/Lapidary combination mounted on a 20 1/2" x 31 1/2" Formica board with a 1/2 HP, 115 Volt motor with cord and switch, 2"-3"-4" step pulley, motor mount and 29" V-belt ready to plug in and operate (less blade). Shpg. wt. 73 lbs. **\$137.90**

No. 47A8530. Each..... **\$137.90**

## CRAFTOOL-STAR QUALITY BLADES

Highest quality, "man-made" diamond blades. Full rated diameter, tensioned 3100 to 4200 SF PM operation. Shpg. wt. 1 lb.

Srk. No.	Dia.	Hole	Thickness	Price
47A8531	6"	3/8"	.012	\$13.50
47A8532	6"	3/8"	.032	\$13.95



## GEM STONE TUMBLING AND JEWELRY MAKING KIT

COMPLETE... NOTHING ELSE TO BUY!

**\$23<sup>95</sup>**



Here is your opportunity to enjoy the fascinating craft of gem polishing. Kit includes Mini-Tumbler, 2 1/2 lb. load capacity drum and liner, 3 grades of abrasive grits plus polishing medium, assorted jewelry mountings (tie clasp, earrings, etc.) jewelry glue and assortment of rough exotic and aztec stones. Motor is 115 Volt, AC with built-in circuit protection, One Year Guarantee, UL listed. Everything you need to go from "rocks" to "jewelry." Shpg. Wt. 12 lbs. **\$23.95**

No. 47A8528. Model 2374-AZ. Each..... **\$23.95**

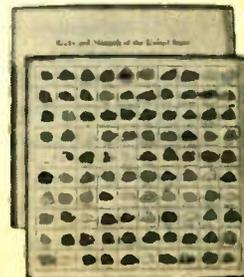
## FINEST COLLECTION OF ROCKS AND MINERALS 100 ALL MOUNTED AND IDENTIFIED

- Complete 67 page book "Introduction to The Study of Rocks and Minerals" with their locations, uses and descriptions.
- 100 rocks in 12 x 12" box.

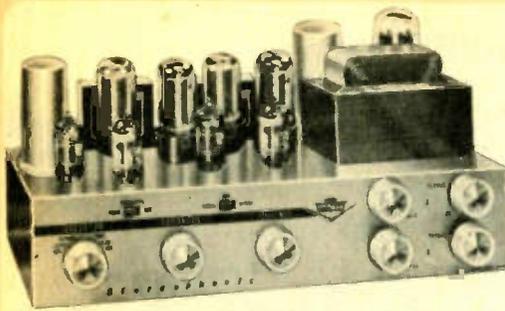
**\$9.95**

This collection is designed for classroom and individual student use. The specimens are individually identified by numbers with identification in the lid of the box. Shpg. wt. 5 lbs. **\$9.95**

No. 47A8533. Each..... **\$9.95**



# FASCINATING ELECTRONIC BUILDER'S KITS



## 30-WATT STEREO AMPLIFIER KIT

FREQ. RESP.  
20-20,000 HZ.

**\$38<sup>95</sup>**

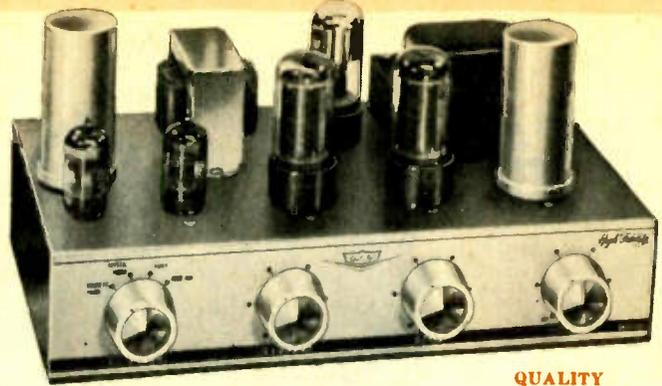
All the costly features at the lowest price we've seen! Features the famous Williamson-type circuit with quality components in an easy to build design. New exclusive "Balance-Blend" control balances and blends both channel signals together to eliminate the hole-in-the-middle effect. Separate bass and treble controls for each channel permit complete flexibility of adjustment for desired listening quality. Hermetically sealed "packs" for tone control and phase inverter circuits for simplified wiring and reliability. Kits include all necessary parts with step-by-step instructions.

Specifications: 15 watts each channel output. Harmonic distortion: less than 1%. Hum: 80 db below rated output. 8 inputs (4 dual); tape/low impedance phono, high impedance phono (ceramic, crystal), tuner, high impedance tape/auxiliary. Outputs: dual tape, 4, 8, 16 ohm speaker.

Tape equalization: NARTB. Record equalization: RIAA. Front Panel controls: (9) function selector, balance-blend, dual ganged loudness, separate bass, treble, treble/power, mode, equalization. Selector Switch: tape/lo phono, hi phono, tuner, hi tape/aux. Mode Switch: stereo reverse, stereo normal.

Equalization Switch: phono, tape. Size 14" W. x 8 1/2" D. x 6" H. Finished in baked brown Hammertone. Luxury multi-color front panel. Tube complement: 2-12AX7's, 2-12AT7's, 4-6V6's, 1-solid state rectifier.

For 115V. 50-60 cps. Shpg. wt. 18 lbs. **\$38.95**  
No. 33A300. Kit. Net



## WILLIAMSON TYPE 15-WATT HIGH FIDELITY AMPLIFIER KIT

QUALITY PARTS

**\$19<sup>97</sup>**

- Easy to build step-by-step instructions.
- Special design output transformer.

Never before has B-A been able to offer a complete 15-watt amplifier kit with built-in preamplifier for magnetic phonos for tape inputs at this low price. The advanced circuitry incorporates the latest miniature tubes for low noise and hum, and features a special design Williamson type output transformer multi-tapped at 4, 8 and 16 ohms to match the speaker system of your choice.

Four front panel controls include Loudness, Selector switch for instant selection of four (4) inputs; Magnetic phono or tape, crystal phono, tuner/radio and auxiliary. Separate full range Bass and Treble controls for adjustment of highs and lows to suit the listener. Features latest high fidelity type output tubes plus hermetically sealed "packs" for tone control and phase inverter circuits for simplified wiring and reliability.

Specifications: Power output 15 watts. Frequency response 30-20,000 cycles  $\pm$  1 db. Distortion: 1% at rated output. Tube Complement: 1-12AT7, 2-6V6's, 1-solid state rectifier. Convenience outlet on rear of chassis controlled by power switch. Power consumption 55 watts. 117 volts AC; 50-60 cycles. Size 13 1/4" W. x 7" D. x 5" H. Wt. 10 lbs. **\$19.97**  
No. 33A301. Kit, Net Each



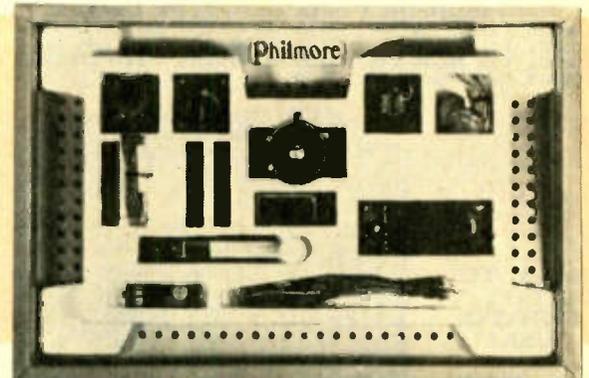
## PHILMORE EDUCATIONAL ELECTRONICS TRANSISTORIZED 20-IN-ONE KIT

ALL NEW WITH 20 EXPERIMENTS INCLUDING SOLAR CELL **\$17<sup>95</sup>**

- Constructive and entertaining.
  - Completely safe.
  - Practical, useful.
- Con experiment 20 different circuits.
  - Assembly Instructions included.
  - Easy to assemble, disassemble and reassemble.
  - No soldering required.
- A completely self-contained series of twenty practical and educational projects, each progressively more detailed. Begins with the assembly of a germanium diode radio, gradually building up to a short wave radio, and finishing off with an intercom, audio amplifier and signal tracer. Each part is prenumbered for easy identification with corresponding number in assembly instructions. Does not require the use of any tools or soldering. After each project has been completed on the breadboard, it can be dismantled, making room for the next experiment. Kits are supplied complete with all parts, nothing else to buy, not even batteries.

- |  |  |
|--|--|
| Project #1 & 2—Germanium Diode Radios.                 | Project #11—Transformer Coupled 2-Transistor Radio.  |
| Project #3—1 Transistor Radio.                         | Project #12—Shortwave Radio.                         |
| Project #4 & 5—Germanium Diode, 1-Transistor Radios.   | Project #13—Radio Freq. Oscillator.                  |
| Project #6—Grounded Base Detector, 1-Transistor Radio. | Project #14—Morse Code Practicing Set.               |
| Project #7—Grounded Collector Amplifier.               | Project #15—2-Transistor Audio Frequency Oscillator. |
| Project #8—Grounded Emitter Amplifier.                 | Project #16—A2 Telegraph Transmitter.                |
| Project #9—Resistance Coupled 2-Transistor Radio.      | Project #17—Wireless Microphone.                     |
| Project #10—Germanium Detector, 2-Transistor Radio.    | Project #18—2-Transistor Intercom.                   |
|  | Project #19—2-Transistor Audio Frequency Amplifier.  |
|  | Project #20—Signal Tracer.                           |

High Quality Import Value. Shpg. wt. 5 lbs. **\$17.95**  
No. 47A8520. 20-In-1 Kit with Solar Cell. Net Each



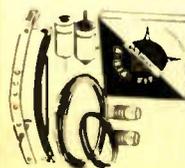
## 10-IN-1 TRANSISTOR RADIO SOLAR CELL LABORATORY KIT

BUILD ALL OF THESE: Sun Powered Transistor Radio, Wireless Microphone, Code Practice Oscillator, and Many, Many Others. **\$9<sup>95</sup>**

Now a complete radio Laboratory Kit that gives the latest theory as well as practical experience while working with the newest of electronic components, Transistor, Germanium Diode and the sensational Solar Cell.

### YOU CAN BUILD

A Transistor Sun Battery Powered Radio (obtains power from sunlight); a Germanium Diode Receiver; a Transistor Radio with Germanium Diode detector; Wireless Code Practice Key (Morse Code can be sent through any radio in the house); a Wireless Home Broadcaster (broadcast through any radio in the house); Code Practice Oscillator; Audio Preamplifier; a Sine Wave Clipper, a useful piece of test equipment for learning more about electronics. Kit includes all necessary parts including Sun Battery, Germanium Diode, Transistor, Iron Core Stand, Instruction Book. Wt. 3 lbs. **\$9.95**  
No. 47A8518. Net Each



## PHILMORE OUTDOOR AERIAL KIT GREATLY IMPROVES SIGNAL STRENGTH OF ANY RADIO

Can be installed on roof, between trees, in attic or garage, etc. Consists of 50' coil stranded copper aerial wire, 25' rubber covered lead-in wire, 1 ground clamp, 1 lead-in strip, 2 porcelain insulators, 2 nail-it knobs. Complete with instructions. Shpg. wt. 1 lb. **\$1.49**  
No. 9A3102 Net Each

# EXCITING EDUCATIONAL PROJECTS

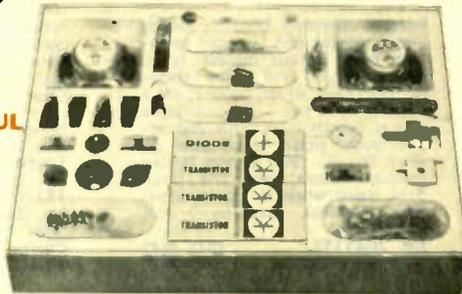
## Norelco

ALL  
TRANSISTOR  
ELECTRONIC  
EDUCATIONAL  
KIT

### \$19<sup>95</sup>

BUILD UP TO 23  
DIFFERENT, USEFUL  
OPERATING  
PROJECTS!

- No Soldering.
- No Tools Required.



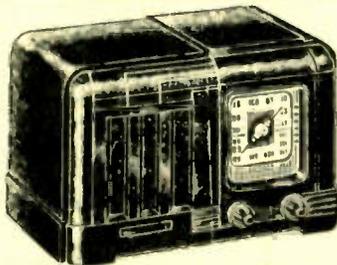
Teaches the how and why of electronics. How each circuit works, clearly shown and readily understood by anyone who places the component in position on the pictorial layout templates. Why each circuit works is masterfully explained in the 96-page instruction manual which is included with each kit. Using simple language the manual takes the builder, one step at a time, along the way to full theoretical comprehension of the circuit you are building. Absolutely safe, powered by one inexpensive 9 volt battery. Every part mounts with pressure springs . . . easily taken apart for building of other projects. You can build an electronic organ, sound amplifier, push-pull sound amplifier, bi-amplifier, intercom, Morse code trainer with loudspeaker, public address and telephone amplifier, 3-transistor radio, burglar alarm, acoustic relay, pilfering alarm, time switch, automatic night light, universal measuring equipment and light meter. Each kit handsomely packed in styrofoam box with individually nested parts. Shpg. wt. 5 lbs.

No. 47A8524. Net Each **\$19.95**  
No. 21A30. Battery For Above. Net Each **\$1.36**

LOW COST 5-TUBE  
SUPERHET  
RADIO KIT

- Ideal kit for getting started in electronics.
- For individual or group instruction.
- A quality set when built.

EASY TO BUILD **\$17<sup>96</sup>**



Latest superhet circuit designed for the ultimate in sensitive reception and tonal quality. Covers standard AM broadcast band (550 to 1600 KC) using all-American tube series consisting of 125A7, 12SK7, 12SQ7, 50L6 and 35Z5 rectifier. With built-in loop antenna. Small in size, 9x5x5" yet gives big set performance. Instruction manual using new sensational 3-D Eye-O-Gram simplifies wiring so that even the newest of newcomers may achieve professional results. The 3-D Eye-O-Gram consists of 3 translucent sheets each in a different color and showing one phase of wiring. Each sheet is placed in its turn on the chassis for a pictorial wiring guide. In addition there are 16 fully illustrated pages showing voltage and resistance charts, photographs of each component as well as completed set, basic receiver theory, everything needed from a check list when starting to a very simple means of aligning completed set without use of a signal generator. Kit comes complete with cabinet, tubes and all parts necessary. Wt. 5 lbs.

No. 47A8522. Net Each **\$17.96**

CARBON MICROPHONE  
BROADCASTS OVER ANY HOME RADIO

Push-button switch cuts off radio programs and brings in home broadcaster's voice very clearly. Sensitive, with excellent volume, shock-proof. Easily attached to any set without rewiring, can remain attached without interfering with regular broadcasting. Wt. 10 oz.

No. 29A606. Net Each **\$1.95**



CRYSTAL  
DETECTORS  
and ACCESSORIES

- ① OPEN TYPE CRYSTAL DETECTOR. Universal joint on swivel arm provides quick accurate adjustment on any point of crystal. (Less Crystal) **35c**  
No. 12A1802. Net Each
- ② SUPER SENSITIVE CRYSTALS. Made from finest galena ore. **\$1.99**  
No. 12A1401. NET EACH. 25c 10 For
- ③ SPRING CAT WHISKERS. Univ. for all crystal sets. Best Quality. **\$1.99**  
No. 12A1803. Per Pkg. of 2. 25c 10 Pkgs. for.

## Norelco

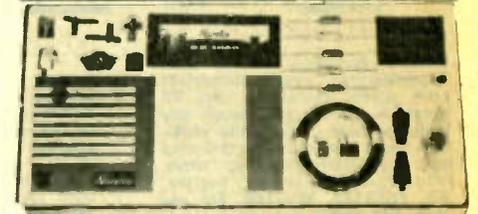
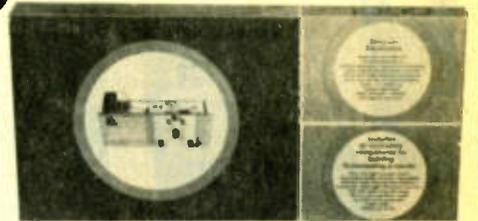
ELECTRONIC  
EDUCATIONAL KIT

BUILD 12  
INTERESTING  
PROJECTS

PROMOTES  
CONCENTRATION

ENCOURAGES  
CREATIVITY

### \$12<sup>95</sup>



Build useful electronic equipment, learn how and why each project works. Basic electronics course and simplified instruction manual included. Peg-board assembly, spring clips, nothing to solder, no tools needed. Build sound operated relay, burglar alarms, light dependent frequency generator, light-meter, phonograph amplifier with earphones, automatic nightlight, wetness indicator, code oscillator and many other projects. Uses 6 flashlight batteries. Safe to use. Wt. 3 lbs.

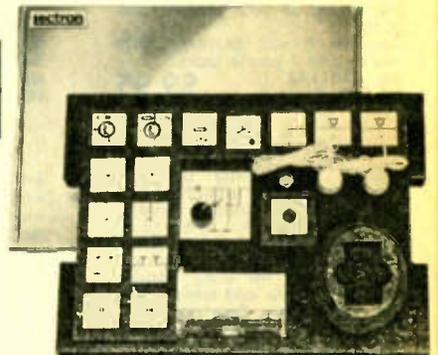
No. 47A8523. Net Each **\$12.95**

TRANSISTORIZED ELECTRONIC  
MODULES

RAYTHEON

NO WIRING . . .  
MODULES HELD  
TOGETHER BY  
MAGNETIC FORCE

### \$17<sup>95</sup>



- No Soldering.
- No Tools.
- No Wiring
- Fun
- Educational
- Supplied with 60-page illustrated instruction manual.
- Easy
- Creative

A system of self-contained, "SEE-THRU" electronic circuit building blocks that join magnetically . . . lets you build a . . . Transistor Radio Receiver. • Rain/Moisture Indicator. • Morse Code Trainer. • Sound Amplifier. • Intercom System.

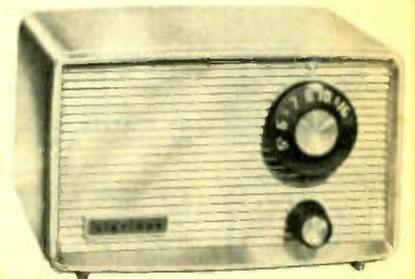
More than 20 educational experiments that offer creative fun and learning for all ages. Each "domino" is a working electronic component made of high-impact plastic. The bottom of each domino is a clear plastic so you can see the actual contents of that complete component. The top of the "domino" is opaque white with a circuit symbol of its contents printed in black. When a circuit is assembled, the entire schematic can be read from above—ideal for learning. Individual carton size: 8 3/8 x 11 1/2 x 2 1/2". Supplied complete less battery. Requires standard 9 volt transistor radio battery for operation. Wt. 2 1/2 lbs.

No. 47A8501. Model 800. Net Each **17.95**  
No. 21B141. 9 Volt Battery for above. Each. **48c**

COMPACT  
AC-DC  
RADIO KIT

### \$11<sup>95</sup>

COMPLETE  
Powerful 5-Tube  
Superhet, Covers  
530 KC to 1600 KC



A compact, high quality table radio. Easily assembled with schematic, pictorial and step-by-step instructions. Extremely sensitive and selective. Complete with all parts: powerful Alnico V PM speaker, built-in Hi-Q ferrite loop antenna coil, IF transformers, shockproof chassis, all tubes and beautiful ivory cabinet. 7x4 1/2 x 3 3/4". For 117 V. AC-DC.

No. 47A8525. Shpg. wt. 4 lbs. Complete Kit **\$11.95**

# Easy to build **EICOCRAFT** solid-state



## WIRELESS MIKE

Battery-operated, pocket size. Transistorized circuit comprises both audio modulator and RF oscillator. Broadcast through any home or auto radio while walking about freely, unencumbered by any interconnecting wires. With case. Requires 9V. battery. No. 20A1128. EC-1100. For use with FM radios. No. 20A1129. EC-1200. For use with AM radios.

Choice ..... \$9.95  
Each .....



## ELECTRONIC BONGOS

Battery-operated 3-transistor bongos circuit electrically produces the exciting percussive sounds of high-pitched and low-pitched bongos, tom-toms, bass drum, marimba, gongs and claves, when used in conjunction with an amplifier and speaker. May be mounted directly on or near the instrument itself. Requires 9 volt battery.

No. 20A1133. \$7.95  
EC-1600. Each .....



## TREASURE FINDER

Battery-operated beat-frequency metal locator can be used to locate both ferrous metals (iron, steel, etc.) and non-ferrous metals (gold, silver, copper, etc.) consists of two RF oscillators and a search loop. This distinctive audio signal pitch goes up when the EC-1900 locates buried ferrous metals, and the pitch goes down when it locates non-ferrous metal. Requires 9 volt battery.

No. 20A1155. \$9.95  
EC-1900. Each .....

## VHF CONVERTERS

FOR POLICE, FIRE, AIRCRAFT

\$795

Tune the exciting VHF bands used by police, fire, civil defense, emergency services and aircraft. Place the converter near your AM radio, no interconnecting wires necessary. Changes VHF band to lower frequencies that your radio can handle.

No. 20A1252. EC-2700 Lo-Bond 30-50 MHz police, fire, etc. No. 20A1253. EC-2800. Hi-Bond 152-74 MHz police, fire, etc. No. 20A1254. EC-2900. Aircraft 108-136 MHz. Choice ..... \$7.95  
Each .....

## TREMOLO

Reliable 3-transistor battery-operated electronic tremolo for guitar and other musical instruments. Gives your musical instrument a professional sound. It can be set to desired speed and intensity without disturbing the wiring of your present amplifier.

Requires 6 volt battery, 3PDT switch and 2 phone jacks. No. 20A1140. \$9.95  
EC-500. Each .....

## LIGHT FLASHER

Battery-operated 2-transistor "multivibrator" or "flip-flop" circuit. Each of the two light-bulbs lights up alternately, providing valuable signaling for: traffic warning light, house marker, position marker for hikers, boaters, parked cars, etc. Requires 6 volt battery.

No. 20A1141. \$3.95  
EC-600. Each .....

## ELECTRONIC ORGAN

One-octave electronic organ. Supplied with a built-in pre-amplifier. The organ can be fed to any audio amplifier. Two or more of these organs can be played in harmony to produce the graceful chord structures. Ideal multitone audio generator for general purpose audio frequency testing. Requires 9 volt battery.

No. 20A1156. \$9.95  
EC-2000 Each .....

## 'NITE LITE'

Sensitive, battery-operated photocell with a high-gain 2-transistor amplifier/switch for adjustable sensitivity. It can automatically turn its light on at dusk.

Can be adapted to a burglar alarm or home/store entry signal. Requires 9 volt battery. No. 20A1255. \$4.95  
EC-800. Each .....

## INTERCOM

Rugged 2-transistor battery-operated master intercom station. Becomes multiple channel 2-way (talk-back) inter-communication system with addition of speakers as remote stations. Can be used for baby sitting, room-to-room and front-door communications. Requires 6 V. battery. 4PDT switch and speakers.

No. 20A1137. \$5.95  
EC-200. Each .....

## AUDIO AMPLIFIER

3-transistor battery-operated 2-watt audio amplifier. Accepts a wide variety of input sources, such as microphone, phono cartridge, tape recorder, radio, etc. It can handle speakers for intercom, paging/public address and long distance hailing. Requires 6 volt battery speaker & 2000 ohm volume control.

No. 20A1138. \$5.95  
EC-300. Each .....

## METRONOME

Precision 2-transistor battery-operated electronic metronome. Incorporates a 2-transistor "relaxation oscillator" circuit which produces accurate adjustable impulses through a loudspeaker—from approximately 10 to 250 impulses per minute.

Requires 6 volt battery and speaker. No. 20A1139. \$3.95  
EC-400. Each .....

## POWER SUPPLY

Converts 110-125 AC volts to 6 volts DC. Reliable, transformer-operated, high-current, transistor-regulated, 6 volt DC output Power Supply with full-wave bridge rectifier using silicon diodes, and high capacity filtering. It powers most EICOCRAFT kits. Requires line cord and SPST switch.

No. 20A1142. \$8.95  
EC-900. Each .....

## BOWMAN SOLID STATE

# MOD-U-KITS

EASY TO FOLLOW INSTRUCTIONS AND DIAGRAMS  
EACH KIT SUPPLIED WITH ENCLOSURE

### AIRCRAFT RECEIVER KIT

Picks up strong signals in the 100 to 200 MHz aircraft frequency range. 3 stage super high gain amplifier, telescoping antenna. Earphone included. Requires 9 V. battery.

No. 20A1232. AIR-3. Each ..... \$5.95  
No. 21B141. 9 V. Battery. Each ..... 48c

### SUPER-SLEUTH AUDIO SNOOPER KIT

Listening device with specially designed circuit with three super-sensitive transistors. Will amplify up to 100,000 times. Earphone and crystal pickup is provided. Requires AAA battery.

No. 20A1231. AS-3. Each ..... \$4.95  
No. 21C60 AAA Battery. Each ..... 13c

### PROXIMITY SWITCH KIT

Uses capacity bridge network, silicon controlled rectifier, and transistor. Switches on when someone comes near unit, stays on until AC power is removed. Use to trigger lights, alarms, etc. or devices using universal motors up to 5 amps.

No. 20A1234. PRS-100. Each ..... \$6.95

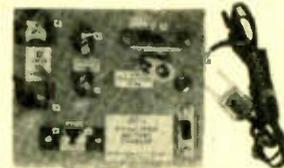
### MOBILE POWER AMPLIFIER KIT

Three transistor circuit will produce up to 5 watts power. Has volume and tone control. Cigarette lighter plug for use in auto or use other 12 VDC source. Requires mike and speaker.

No. 20A1233 MPA-5. Each ..... \$8.95



**AM Receiver Kit.** Two transistor audio reflex circuit. Tunes 550 to 1600 KC AM broadcast band. Earphone supplied. Easy to build. Requires 9 V. battery. 20A1262. Each.....\$4.95



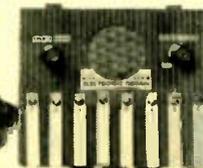
**Adjustable Battery Charger Kit.** Produces DC voltages to charge any battery from 1.5 to 12 volts. Will charge a car battery over night. Housed in plastic case. 20A1258. Each.....\$9.95



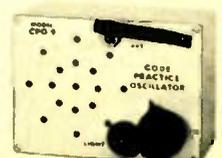
**Photo Cell Music Maker.** Uses audio oscillator circuit. Waving your hand over photo cell produces varying audio tones. Great for science fairs and school projects. 20A1264. Each.....\$5.95



**Wireless Intercom Kit.** Feeds AM modulated signal into ground side of AC line. Sound can be picked up on any AC operated radio in house. 20A1263. Each.....\$7.95  
21B141. 9 V. Battery ..... 48c



**Electronic Organ Kit.** Keys pressed individually or together will produce different tones. Mounts in plastic case. Supplied with speaker. 20A1260. Each.....\$6.95  
21B141. 9 V. Battery ..... 48c



**Code Practice Kit.** Tone control, spring key provided. Speaker supplied so that tone is easily heard. Plastic case with aluminum cover. 20A1259. Each.....\$3.95  
21B141. 9 V. Battery ..... 48c

# electronic project kits!

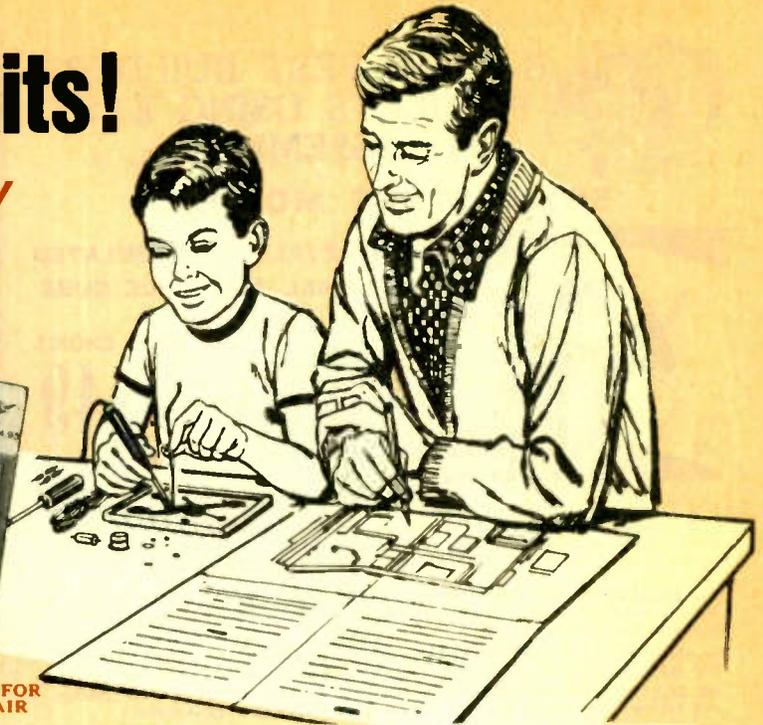
*Now everybody can enjoy building electronic kits.*

**No Technical Knowledge or Experience Necessary**

Everybody can enjoy building electronic kits. No technical knowledge or experience necessary. Simple step by step instructions. Professional quality and performance like the famous EICO Hi-Fi and test instrument kits. Enjoy the creative fun of building with your own hands. Pre-drilled copper plated etched printed circuit boards. Finest quality parts. You can build an Eicocraft kit in about 1½ to 2 hours.



EXCELLENT FOR SCIENCE FAIR



## PERSONAL RADIO

Battery operated Tuneable transistorized radio. Receives standard broadcast band. Earphone supplied. Requires 9 V. battery.

No. 20A1131. EC-1400. FM  
Radio 88-108 MC. **\$9.95**  
Each.....  
No. 20A1132. EC-1500. AM  
Radio 550-1600 KC. **\$8.95**  
Each.....

## ELECTRONIC VOX

Transistorized audio-activated relay amplifier, and sensitive electromagnetic relay. It provides a variable time delay (adjustable) and audio control of remotely operated devices. Makes an ideal voice control for tape recorder, TV or radio set (as a commercial killer), etc. Requires 6 volt battery.

20A1130. **\$8.95**  
EC-1300. Each.....

## HAM/CB VOX

Solid State Ham/CB voice operated switch (VOX) with variable time delay and Anti-Vox input circuitry. This circuit may be used with a CB or ham transmitter or transceiver which will actuate the transmitter when speaking into a microphone and return to receive operation when you stop speaking. Requires 6 volt battery.

20A1153. **\$8.95**  
EC-1700. Each.....

## ELECTRONIC 'TOX'

Touch-operated relay switch. Consists of a sensitive RF oscillator associated with a relay amplifier. When the "touch plate" connected to the RF oscillator is touched, the relay closes (or opens). You can make it respond to an intruder's touch of your yard gate and sound an alarm bell. Requires 6 V. battery.

20A1154. **\$8.95**  
EC-1800. Each.....

## 'MAGIC SWITCH'

Sensitive 2-transistor amplifier and latching flip-flop relay control circuit. When the touch plate connected to the amplifier is touched, the relay closes (or opens), thus providing a signal of the event. Turn on or off any appliance with this "magic" or hidden switch. Requires 9 volt battery.

No. 20A1256. **\$9.95**  
EC-2100. Each.....

## ELECTRONIC 'EYE'

Sensitive light dependent resistor (LDR) which detects the presence of light falling upon it. Solid-State amplifier triggers 2-transistor flip-flop circuit which controls a sensitive relay. The relay which latches on or off, can be used to control a device such as a bell, siren, appliance, etc. Requires 9 V. battery.

20A1257. **\$9.95**  
EC-2200. Each.....

## SIREN

Powerful 3-transistor battery-operated alarm. Excellent for all attention-getting and signaling purposes, such as alarms for burglary, fire, automobile, bicycle, boat, personal attack, etc., sound effects for model railroads, slot car racers, tape recording, etc. Requires 6 volt battery. Speaker and switch.

20A1134. **\$4.95**  
EC-100. Each.....

## BURGLAR ALARM

Powerful 3-transistor battery-operated alarm. Excellent warning device against uninvited or illegal intruders. When its enclosed switch assembly is placed in a window or door, any intrusion will at once close the switch to produce a loud penetrating attention-calling wail. Requires 6 volt battery and speaker.

20A1135. **\$6.95**  
EC-101. Each.....

## 3 CHANNEL PSYCHEDELIC LIGHT CONTROL CENTER

Use with spotlights or any group of incandescent lights up to 500 watts per color or a total of 1500 watts. Great for musical groups, window displays or anywhere a big attention getting display is wanted.

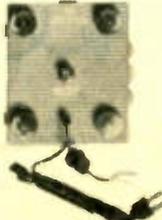
Operates from speaker output of amplifier, 3 separate color sensitivity controls. Each control has an indicator light for adjusting light operation. With aluminum case, all parts and complete instructions. Operates on 115 V. AC. Complete Kit. **\$12.95**  
No. 20A1261. Each.....



## PSYCHEDELIC KITS CONVERT SOUND TO LIGHT

With Enclosure and Easy To Follow Instructions. Converts sound to changes of colored lights. Lights blink in unison with the beat of the music. Each kit has 4 colored lights for a fascinating lighting effect. Uses silicon controlled rectifiers to trigger light action. Easy to build. Responds to voice and music. Built-in sensitivity control. Model PSA-1. Connects to speaker of hi-fi, radio or phone. For 115 VAC operation. **\$5.95**

No. 20A1235. Each.....  
No. 20A1236. Model PSW-1. Sounds are picked up by mike (supplied). For 115 VAC operation. Each.....**\$9.95**



## ELECTRONIC STROBE KIT FOR INCANDESCENT LAMPS

A simple easy to put together kit to convert an ordinary lamp (up to 100w) to a Pulsing Strobe. Contains all parts. Custom plastic case and silk screened brushed gold plate. 3 semi conductor circuit. Variable control to control strobe rate. **\$9.95**

No. 20A1265. Each.....  
No. 21B141. 9 Volt Battery. Each.....**48c**



**5 Watt Amplifier Kit.** Use with tuner, phono, guitar, microphone, hi-power intercom, etc. With volume control. Operates any 3 to 16 ohm speaker. **UA-5. \$5.95**  
20A1237. Each.....  
21B89. Battery. Ea. **92c**

**Fuzz Sound Maker Kit.** Gives sound effects to any musical instrument. Use with your instrument amplifier. With brushed gold cover. **20A1267. Ea. \$12.95**  
21B141. 9 V. Battery. Each **48c**

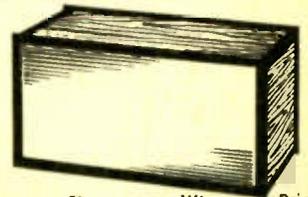
**Electronic Stethoscope Kit.** Uses special 3 transistor high gain amplifier. Complete with sensitivity control. Stethoscope shuts out background noises. **20A1266. Each \$9.95**  
21B141. 9 V. Battery. Each **48c**

## FLEXI-CAB DO-IT-YOURSELF CABINETS

**FAST, EASY, PUSH-TOGETHER. STAY-TOGETHER ASSEMBLY**

Vinyl-clad, self assembly, steel cabinets add the professional touch to any project. Cabinets joined together using links of mar-resistant plastic with pre-cut mitered corners. Pressure sensitive labels supplied to identify over 40 functions plus a black adhesive-backed strip to decorate control panels.

Stock No.	Color	Size	Wt.	Price
5A3044	walnut with chrome panel	3 x 4 x 4	10.5 oz.	\$2.98
5A3045	black leather with chrome panel	3 x 4 x 4	10.5 oz.	3.79
5A3046	walnut with chrome panel	3 x 4 x 6	10.5 oz.	3.79
5A3047	black leather with chrome panel	3 x 4 x 6	10.5 oz.	4.49
5A3048	walnut with chrome panel	3 x 6 x 9	24 oz.	4.49
5A3049	black leather with chrome panel	3 x 6 x 9	24 oz.	4.49





# B-A's NEWEST BUILDER'S PROJECTS USING EASY TO ASSEMBLE . . .

## SOLID STATE MODULES



COMPLETELY ENCAPSULATED AS SMALL AS AN ICE CUBE

FULL INSTRUCTIONS & DIAGRAMS INCLUDED FOR BUILDING THE USEFUL DEVICES LISTED BELOW

YOUR CHOICE

**\$349**

Each module is a small ready to use molded capsule containing a completely wired circuit of transistors, resistors, capacitors, and other parts. Most modules require only 2 or 3 items (battery, mike, speaker, etc.) to complete each device.

**No. 20A1160. PUBLIC ADDRESS AMPLIFIER MODULE.** High gain for use with high or low impedance, crystal or dynamic mike. Drives any size PM speaker or trumpet. Operates on 6 volt battery.

**No. 20A1161. INTERCOM MODULE.** Ready for instant use . . . just connect to two speakers, battery and switch. Provides a complete system.

**No. 20A1162. PHONO AMPLIFIER MODULE.** Connect to an 8 ohm speaker, 6 volt battery and phono pickup. Provides far above average volume.

**No. 20A1163. POLICE SIREN MODULE.** Produces high level upward scream and downward wail. Drive any 8 ohm speaker. For use with 6 volt battery. Complete instructions.

**No. 20A1251. STEREO AMPLIFIER MODULE.** For crystal or ceramic stereo cartridge. Good fidelity and volume. Requires 2 8-ohm speakers, 2 1-meg. potentiometers and 6 volt lantern battery.

**No. 20A1164. TELEPHONE AMPLIFIER MODULE.** Simply connect to any PM speaker, 6 volt battery and telephone pickup coil. Amplifies telephone conversation for group listening.

**No. 20A1165. GUITAR AMPLIFIER MODULE.** Combine with contact microphone, any PM speaker and 6 volt battery for concert quality, auditorium volume guitar amplification.

**No. 20A1222. GUITAR TREMOLO MODULE.** Connects between guitar pickup and amplifier. Tremolo frequency adjustable from about 4 to 15 cycles per second. Requires 9 V. battery and 25,000 ohm volume control.

**No. 20A1166. CB MICROPHONE PREAMP MODULE.** Ready to use preamp. Increases modulation to optimum for dependable transmissions. Use any 1 1/2 volt battery.

**No. 20A1167. BURGLAR ALARM MODULE.** Automatically sounds a siren alarm when window or door is opened. For use with 6 volt battery and 8 ohm speaker. Complete instructions.

**No. 20A1226. C.W. MONITOR MODULE.** Operates from RF energy surrounding your transmitter. Keying transmitter in normal way produces CW note in any 8 ohm speaker. Requires 1 1/2 V. battery.

**No. 20A1227. SIGNAL INJECTION MODULE.** Detects AF and RF signals using a simple probe for quick and easy pin-pointing of defective stages in electronic equipment. Fine for servicing your own radios, phonos, amplifiers

### WIRELESS MICROPHONE TRANSMITTER MODULE

Connects to any high impedance microphone and 9 volt transistor battery. Will transmit voice into nearby radio. In accordance with the regulations of the Federal Communications Commission these wireless modules are warranted by the manufacturer to have a power input of less than 100 milliwatts and may be used by anyone without licensing or registration of any kind.

**No. 20A1169. For AM Radios**      **No. 20A1172. For FM Radios**

**No. 20A1170. For FM Radios** as above except for low impedance mike.

YOUR CHOICE ANY OF ABOVE, EACH **\$3.49**

### DUAL FLASHER (FLIP-FLOP) MODULE

Build auto road warning lights, window display attention getters, model train grade crossing flasher, bicycle rear wheel safety flasher, etc.

**No. 20A1174. Wt. 4 oz. Special Each. \$1.99**

### METRONOME MODULE

Makes a dependable metronome at fraction of usual price. Adjusts 40 to 208 beats. Requires 2 Meg. Pot., 6 V. battery and speaker.

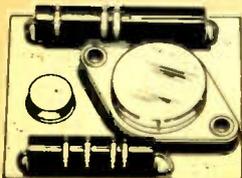
**No. 20A1175. Wt. 4 oz. Special Each. \$1.99**

### BATTERY CHARGER MODULE

Charges flashlight and transistor batteries from 1 1/2 to 22 1/2 volts. Trickle charges at 3 mil rate. Makes batteries last several times longer. Requires a line cord and wire and clips to connect to batteries. Wt. 4 oz.

**No. 20A1176. Special Each. 99c**

### CODE PRACTICE OSCILLATOR MODULE



Operates from any 1 1/2 to 6 volt battery and any PM speaker. Only three connections to make. Requires no adjustment. Wt. 4 oz

**No. 20A1177. Each 98c**

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## EXCITING NEW RECEIVER CONVERTER MODULES

### SEPARATE CONVERTER MODULES TO RECEIVE . . .



- INTERNATIONAL SHORTWAVE
- VHF POLICE & FIRE
- VHF AIRCRAFT

**\$495**

Efficient means of receiving Shortwave and VHF broadcasts. For use with your standard broadcast band AM radio. No actual connection to radio is required. Small radiation loop connected to module couples converter signal for reception on a quiet spot on the AM dial. Tuning is by small knob on module. Requires standard 9 V. transistor battery and 25' or more antenna for SW, or a short wire for VHF. Very easy-to-follow instructions supplied. Wt. each 4 ozs.

**International Shortwave Converter Module**  
No. 20A1157. Tunes 25, 31, 41 Meter Bands (7-12 MHz)

**VHF Aircraft Converter Module**

No. 20A1158. Tunes 118-128 MHz

**VHF Police And Fire Converter Module**

No. 20A1159. Tunes 30-50 MHz

YOUR CHOICE,

EACH

**\$4.95**



### ELECTRONIC LATCHING RELAY MODULES

YOUR CHOICE . . . **\$349**

Tamper-proof "Lock-On" switch. Ideal for burglar and emergency alarms. Contains complete solid state electronic circuitry, ready for immediate use as an efficient latching relay for controlled switching of a 6 volt DC power source into any secondary circuit drawing up to 1/2 ampere. Requires 6 volt battery and switches.

**No. 20A1229. For Momentary Make Contact To Operate**      **Choice \$3.49**

**No. 20A1230. For Momentary Break Contact To Operate**      **Each**



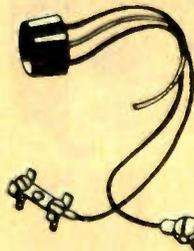
### METAL LOCATOR MODULE

Detects and locates larger metal objects at distances up to several feet away and smaller metal objects (such as coins) at distances up to several inches away. Use with AM radio (no connections required). Requires 9 volt battery, 5000 ohm pot, 30 feet of #22 insulated wire, and 2 pieces of wood.

**No. 20A1238. Each \$5.00**

### NEW CONFERENCE TELEPHONE BROADCASTER

FOR USE WITH ANY FM RADIO **\$895**



A complete self-powered miniature transmitter requiring no batteries, induction coils or other accessories. Broadcasts both sides of a telephone conversation to your nearby FM radio. Will not interfere with normal operation of telephone. (Limitations in use may be regulated by state law.) Wt. 4 ozs.

**No. 20A1215 Net Each \$8.95**

### B-A's WIRELESS BROADCASTER KIT BROADCASTS OVER NEARBY RADIO

Wireless transmitter is a complete radio station. Broadcasts from any place in the house into any AM broadcast band radio. A terrific kit, fun to build, provides hours of excitement when completed. New module makes construction easy and compact. Module, lapel mike all necessary parts and instructions supplied. Wt. 1 lb.

**No. 47A8517. Each \$5.95**

**No. 21B141. Bottery Each . . . 48c**

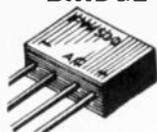
### COMPLETE

**\$595**

BUILDS A COMPLETE RADIO STATION



**MALLORY FULL WAVE BRIDGE RECTIFIER**



REG. WAS \$1.39

**\$1.27**

200 Volts PIV (a 1.5 A. Molded case .688 L. x .469 H. x .25 T. with 1/2" leads. For transistor power supplies, bias and relay supplies.

No. 20A7511 Special Each ..... **\$1.27**

**BRIDGE RECTIFIER BARGAIN!**

Stud mounted. 1500 V. PIV, 5A amps, full wave bridge. Size 1/2" hexagonal. 10-32 X 1/2" stud.

No. 18A1347. Special Each.....

**\$1.95**

ACTUAL SIZE



**MALLORY UNIVERSAL RECTIFIER**

2 1/2 AMP 1000 PIV

**59c**

Replaces all axial lead rectifiers rated 600 mA, 750 mA, 1000 mA, 2000 mA, and 2500 mA units, with voltages ranging up to 1000 PIV.

Mallory M2.5A. Each..... **59c**

10 Lots Each..... **49c**

**LIGHT SENSITIVE PHOTO CELL**

ONLY **99c**



Tiny glass enclosed cell, 1/8 x 1/2" dia. Cell resistance changes with light. Operates sensitive AC relay without amplifier. Interesting and practical circuits included.

Shpg. wt. 3 oz. No. 20A22. Spec. Ea..... **99c**



**Bargains!**

**MINIATURE COMPONENTS**

**BRAND NEW FULLY GUARANTEED**

**BIG EXPERIMENTER SEMICONDUCTOR ASSORTMENT**

Super value! A selection of most popular semiconductors. Experimenters and hobbyists will find hundreds of uses for this assortment. Contains: 4 PNP, 4 NPN and 2 power transistors, 4 - 2 amp, 200 PIV silicon rectifiers, 20 general purpose diodes and 4 3/4 watt zener diodes with marked voltages.

No. 20A1210. Per Assmt.

**\$2.99**



**100 PIECE EXPERIMENTER SEMICONDUCTOR ASSORTMENT**

Large selection of popular semiconductors. Items with similar appearance marked for easy identification.

Contains 2 - 15 watt PNP-AF germanium TO-3, 2 - 15 watt NPN silicon mesa gen. purpose TO-3, 2 - 15 watt PNP germanium gen. purpose TO-3, 4 - .4 watt PNP germanium gen. purpose TO-9, 4 - .4 watt NPN germanium gen. purpose TO-5, 15 - .2 watt PNP germanium MADT TO-24, 2 - 2 watt PNP germanium DAT TO-5, 5 - .2 watt germanium diodes, 2 - .2 AMP silicon SCR TO-18, 22 gen. purpose germanium diodes, 27 gen. purpose silicon diodes, 4 - 2 AMP 200 volt silicon stud rectifier, 9 assorted zeners with marked voltages.

No. 20A1248. Per Assortment

**\$5.99**

**SEMICONDUCTOR KITS**



**ALL BRAND NEW AMERICAN MADE**

EACH PIECE HAS BEEN TESTED. NO CUT-OFF LEADS. MARKED WHERE NECESSARY FOR EASY IDENTIFICATION

25 Piece Rectifier Assortment. All have 50PIV rating or higher. All have axial leads. Contains 7 - .5 AMP case cathode, 3 - .75 AMP case cathode, 3 - .75 AMP case anode, 6 - 1 AMP case cathode, 6 - 1.5 AMP case cathode.

No. 20A1244. Per Assortment

**\$2.99**

25 Piece General Purpose Transistor Assortment. Contains 3 - 15 watt PNP AF germanium TO-3 case, 3 - 1 MHz. PNP RF germanium, 3 - 15 watt NPN silicon mesa AF TO-3 case, 3 - 1 MHz. NPN silicon mesa RF TO-3 case, 2 - 2 watt PNP germanium AF TO-5 with heat sink, 6 - 30 MHz. PNP germanium AF TO-9 case, and 2 - .2 watt NPN silicon AF TO-18 case.

No. 20A1245. Per Assortment

**\$2.99**

25 Piece RF-AF Power Transistor Assortment. Contains 5 - 15 watt PNP germanium AF TO-3 case, 5 - 1 MHz. PNP germanium RF TO-3 case, 5 - 15 watt NPN silicon mesa AF TO-3 - 3 watt PNP germanium AF TO-5 with heat sink, 2 - 2 MHz. PNP germanium RF TO-5 with heat sink.

No. 20A1246. Per Assortment

**\$2.99**

25 Piece Audio Amplifier Transistor Assortment. Contains 4 - 15 watt PNP germanium TO-3, 4 - 15 watt NPN silicon mesa TO-3, 2 - 10 watt PNP germanium TO-13, 4 - 2 watt PNP germanium DAP TO-5, 4 - .4 watt PNP germanium TO-9, 2 - .2 watt NPN silicon TO-18 and 5 - .2 watt PNP germanium MALT TO-24.

No. 20A1247. Per Assortment

**\$2.99**

**FAIRCHILD INTEGRATED CIRCUITS**

FAIRCHILD 703 RF AMPLIFIER. Contains 3 transistors, 2 diodes, 2 resistors, 14 circuit drawings and data to build RF amplifiers, IF strips, oscillators, color TV IF amplifier.

No. 20A1197. Special Each

**\$1.49**

No. 12A5052. 6 Pin Socket for above. Each..... **.65c**

FAIRCHILD 716 AUDIO AMPLIFIER. Contains 11 transistors, 6 diodes, 18 resistors, 10 circuit drawings and data to build voltage amplifiers, audio amplifiers, headset amplifiers and power supply.

No. 20A1198. Special Each

**\$4.99**

No. 12A5025. 8 Pin Socket for above..... **73c**



**RCA INTEGRATED CIRCUIT PACKAGE**

CONTAINS 5 IC'S AND 12 CIRCUITS

**\$4.40**

UNLIMITED APPLICATIONS

Contains 5 linear integrated circuits, two each of two different transistor arrays, and one audio amplifier. These IC's have been designed into 12 basic circuits. Features, applications, schematic diagrams, and parts list are included. TO-5 package. 3 are 12 lead, 2 are 10 lead.

RCA KD2117. Each.....

**\$4.40**



**10 AMP GENERAL ELECTRIC TRIACS**

B-A SPECIAL PURCHASE—SAVE OVER 50%!

Popular triacs specified in many builders projects now available at tremendous savings. Use in motor speed controls, light dimmers, relay controls, heating controls, etc. 10 Amp max RMS load current. Gate firing requirements 3 volts, 50 MA. 1/2" dia. x 3/4" long overall. Limited quantity. Buy plenty while they last.

No. 18A1442. 200 Volts Off State Voltage Rating (120 Volt Line Operation). Special Each..... **\$1.69** 10 Each..... **\$1.49**

No. 18A1443. 400 Volts Off State Voltage Rating (240 Volt Line Operation). Special Each..... **\$1.99** 10 Each..... **\$1.79**



**BIG SAVINGS ON AMERICAN MADE SILICON POWER RECTIFIERS EVERY ONE TESTED AND GRADED FOR QUALITY**

Now you can afford to stock up and save! These fine power silicones ordinarily sell for several times our price. Needed for DC power supplies, chargers, experimental and builders projects, etc. Hex metal case, stud mounted, individually packaged. Positive polarity types have cathode connected to stud mounting; negative types have anode stud.

6 AMP—7/8" Hex. Stud Mounting				30 AMP—1 1/4" Hex. Stud Mounting			
Stk. No.	PIV	Stud Polarity	Net Ea.	Stk. No.	PIV	Stud Polarity	Net Ea.
20A1178	100	Positive	\$0.49	20A1186	100	Positive	\$0.69
20A1179	100	Negative	.49	20A1187	100	Negative	.69
20A1180	200	Positive	.74	20A1188	200	Positive	.99
20A1181	200	Negative	.74	20A1189	200	Negative	.99
20A1182	400	Positive	.99	20A1190	400	Positive	1.39
20A1183	400	Negative	.99	20A1191	400	Negative	1.39
20A1184	800	Positive	1.49	20A1192	750	Positive	1.99
20A1185	800	Negative	1.49	20A1193	750	Negative	1.99

**HIGH CURRENT TOP HAT SILICON RECTIFIERS**

PRICES SLASHED AS MUCH AS 37%!

**35c**

1 AMP 700 V.



Guaranteed first quality, made by General Instrument. Just the ticket for high voltage power supplies in ham gear, TV sets, etc. 1/2" axial wire leads. Buy plenty while they last at B-A's special purchase prices. Wt. 8 oz. per 10.

1 Amp 700 PIV..... **35c** 10 Lots..... **29c**

No. 18B133. Special Each.....

1 Amp 1000 PIV..... **49c** 10 Lots..... **44c**

No. 18B134. Special Each.....

**SUB-MINIATURE IN34A DIODE**

Latest sub-miniature glass type. Shown actual size. Has 1 3/4 axial leads.

No. 18A15. 100 Special Each..... **19c** 15c

**INSULATORS FOR TO-3 TRANSISTORS**

Nylon Screw Insulators. Pkg. of 16. No. 12A2490. Per Package..... **59c**

Mica Collector Insulators. Pkg. of 8. No. 12A2491. Per Package..... **59c**



**NEEDED TRANSISTOR MOUNTING KITS**

Includes all necessary hardware and insulators for making professional style installations. Wt. 2 oz.

① "Diamond Shape" TO-3 Type..... **30c**

No. 12A2400 Special Each..... **30c**

② "Door Knob" TO-36 Type..... **30c**

No. 12A2401. Special Each..... **30c**

**RECTIFIER MOUNTING KITS**

Each set contains 6 pieces: insulating washers, solder lug lock washer and nut.

For 1/2 Hex Rectifier type DO-4, TO-64, R2 and R6. Wt. 1 oz.

No. 12A2402. Per Set for One Rectifier..... **20c**

For 1/2 Hex Rectifier type DO-5, TO-48 and R3..... **20c**

No. 12A2403. Per Set for One Rectifier..... **30c**

No. 12A2403. Per Set for One Rectifier..... **30c**



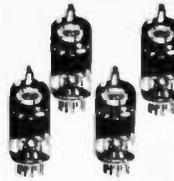
**BARGAIN BONUS!**

**99c**  
YOUR CHOICE EACH

**SAVE**  
ON AMERICAN MADE  
**SEMI-CONDUCTORS**

ALL TESTED—TOP QUALITY  
MANUFACTURERS! AT LOWEST  
BARGAIN PRICES! ALL  
GUARANTEED OPERATIVE!  
Average shpg. weight 3 ounces.

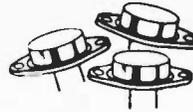
**BAKERS DOZEN BONUS!**  
GET 1 FREE WITH  
EVERY 12 PURCHASED!



4 Ruggedized 12AU7 Tubes, Type 6211. Exact replacement for 12AU7. Outlasts regular 12AU7 tubes. 18A1323. 4 For ..... 99c



10 MAOT High Frequency Transistors. Similar to 2N501 PNP. 30-180 Mc. Used in RF, hi-speed switching. 20A1106. 10 For ..... 99c



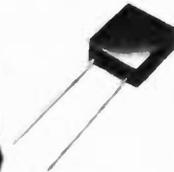
3 PNP High Power Transistors. Assorted cases. 10-40 W. Similar to 2N155, 2N255 and 2N158. 20A1107. 3 For ..... 99c



4 RF Silicon Transistors. NPN type. Similar to 2N914, 2N834, 2N708, 2N2501, etc. 20A1108. 4 For ..... 99c



5U4 Silicon Rectifier Tube. Replaces 5U4GB, 5V4GA, 5W4, 5Y3, 1 1/8 x 1 3/8" H. 20A1250. Each ..... 99c



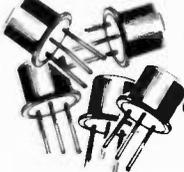
Color TV Rectifier, 2000 PIV, 1 Amp. For TV replacement, experimenting, etc. Encapsulated 1/4 x 1/2 x 7/8", with wire leads. 20A1126. Each ..... 99c



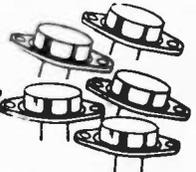
16 Amp SCR, 200 PIV. Use for switching, light dimmers, speed control, etc. 20A1196. Each ..... 99c



4 - 2 Amp Silicon Rectifier. Rugged stud mount. 50 PIV. rugged construction. DO-4 case. Positive polarity. 20A1120. 4 For ..... 99c



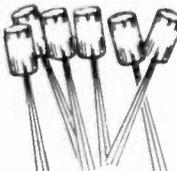
5 Transistors similar to 2N35 NPN general purpose germanium. Rated 150 MW. Vcb 25. Gain to 125. TO-5 case. 20A1100. 5 for 99c



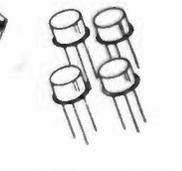
5 - 10-Watt PNP Power Transistors. Similar to 2N155, 2N554, 2N176. TO-3 case. For auto radio, phono, power supply, etc. 20A1109. 5 For 99c



25 Germanium Diodes. Similar to 1N34, 1N60, 1N64. Use for crystal sets, radios, etc. Terrific low B-A price! 20A1111. 25 For ..... 99c



6 Assorted NPN and PNP Micro Transistors U-8. Used in mid-audio output. Smallest transistor made. 20A1103. 6 Assorted ..... 99c



4 PNP General Purpose Audio Transistors. Similar to 2N107-CK722 for pre-amps, mike and phono circuits, code oscillators. 20A1211. 4 For 99c



3 200 MC Silicon Epitaxial Transistors. Similar to 2N706. TO-18 case. Vcb 25, Hfe 20, 10 MA. 20A1105. 3 For ..... 99c



8 PNP Germanium Switching Transistors. TO-5 case. Freq. 8 MC, 150 MW, Hfe 40 typical. Similar to 2N1305, 2N394, 2N404. 20A1125. 8 For 99c

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**HIGH POWER SILICON RECTIFIER**

100 V. PIV. 25 AMP

**69c**

Needed for DC power supplies, chargers, etc. Standard 1/4-20 stud mounting. Hex case 1 1/2" diameter. Wt. 5 oz. No. 20A1208—Negative Stud Base No. 20A1209—Positive Stud Base Choice Each ..... 69c



**POPULAR 3-CONTACT TRANSISTOR SOCKET**

**12c**  
SPECIAL IMPORT VALUE Each, 10 Lots

Popular bakelite 4-prong type for triangular base or in-line style transistor. Special import value. Wt. 1 oz.

No. 12A5053 10 Lots, 12c  
Special Ea... 14c Each ... 12c



**POPULAR MOTOROLA HEP INTEGRATED CIRCUIT KIT**

KIT CONTAINS 5 IC DEVICES and Introduction to IC's through 8 Builders Projects.

Includes 2-HEP580 Dual 2-Input Gates, and 1 each of HEP581 4-Input Gate, HEP582 Dual Buffer and HEP-583 J-K Flip Flop. Contains data for constructing a Precision Tachometer, Audio Signal Generator, Electronic Siren, Frequency Standard, RF Signal Injector, 4-Input Audio Mixer, Ultra Hi-Gain Amplifier and Sine to Square Wave Converter. Instructions are prepared for the novice experimenter with tips on wiring, soldering and cross reference to other brands of IC's allowing building many other published projects. Each IC device in kit is housed in a TO-99 Case with 8 leads. Wt. 4 ozs.

Motorola Hek-1 IC Experimenters Kit, Net Each ..... \$3.95  
No. 12A5052, 8-Pin Integrated Circuit Socket, Net Each ..... 65c

**SELENIUM SOLAR CELL**

Extra high output—generates 2 MA at .5 volts in sunlight. Highest quality, long life, practically indestructible. Will operate sun powered radios (circuit enclosed), light meters, sensitive relays for turning on and off lights, opening doors, counting, etc.—any application where light variations can be utilized. Size only 1 1/8 x 7/8" with wire leads. Includes suggested circuits. Wt. 3 oz.

No. 20A39 79c 3 For... \$2.00  
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12 For... \$6.99

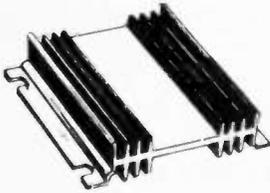
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PERFECT FOR SCIENCE CLASS PROJECTS.

**SEMI-CONDUCTOR HEAT SINKS**



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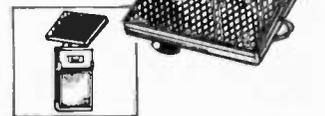
**79c**

Aluminum unpunched. All 4 1/2" W. x 1" H. Wt. 8 oz.  
No. 12A2406-3" Plain, Each ..... 79c  
No. 12A2407-3" Anodized, Ea. \$1.09  
No. 12A2408-6" Plain, Each... \$1.19  
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Works just like solar panels that power most U.S. satellites. Only 3 3/4 x 2 1/2 x 1/4" thick, yet converts required amount of sunlight into electric current for operating 9 volt transistor radios. Simple to connect with 8 1/2" leads and battery snap-on connector included... no wiring changes necessary. Comes complete with mounting adaptor for attaching to back or top of radio. Shpg. wt. 4 oz. \$7.99  
No. 20A1194. Special Each.....

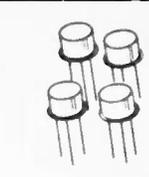
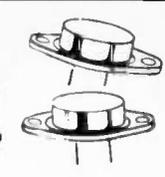
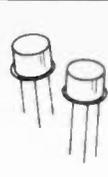
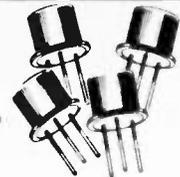
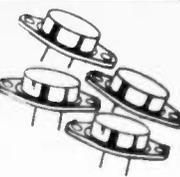
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Bundle of 10 always needed flexible plastic insulated 15 inch jumper cords with spring alligator clip and insulator on each end. Ready to use in 5 assorted colors. Wt. 8 oz.  
No. 12A1996. Bundle of 10 ..... \$1.39



**7 Silicon Power Rectifiers.** 2 to 6 amp ratings, 50-400 PIV. Stud mount, DO-4 case. Positive polarity. **20A1123.**  
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**4 - PNP 100 MC Germanium Mesa Transistors.** Similar to 2N705, 2N711, 2N974. 360 MW. Vcb 60, Hfe 25, 10 MA, TO-18 case. **20A1101.** 4 For.....99c

**4 - 10-Watt NPN Power Transistors.** For building or replacement. TO-3 case. 15 volt min., Beta min. 25. **20A1110.**  
4 For .....99c

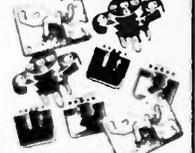
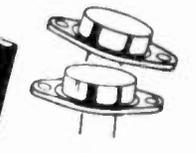
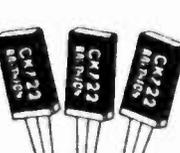
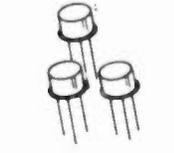
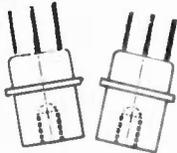
**8 Transistors similar to 2N404.** Short leads for printed circuit. One of the most popular switching transistors ever made. **20A1112.** 8 for 99c

**Two 1 Amp SCR's.** 100 V. TO-5 pkg. Use for switching, light dimmers, speed control, etc. **20A1249.**  
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**4 Silicon 1 Amp 600 V. Rectifiers.** Top hat style. Top quality. For power supplies, radio, TV replacement, etc. **20A1104.** 4 for 99c

**2 10-Watt Power Transistors.** PNP type. TO-3 case. Similar to 2N155, 2N176 and 2N235. **20A1118.**  
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**8 NPN Silicon Switching Transistors.** TO-5 case. Similar to 2N333, 2N336. Freq. 8 MC, 150 MW, Vcb 10, Hfe 70, 10 MA. **20A1124.** 8 For .99c



**4 15-Watt Power Transistors.** TO-13 case. PNP type. Similar to 2N158. For audio and switching applications. **20A1119.** 4 For 99c

**3 NPN 100 MC Silicon 2-Watt Transistors.** Similar to 2N696, 2N697, 2N1613. Vcb 60 V, Hfe 40, 150 MA. TO-5 case. **20A1102.** 3 For 99c

**40 Watt Power Transistor.** Stud mtg. equivalent to type 2N173. Just it for power supplies regulators. **20A1195** .....99c

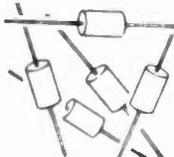
**2 Amp 800 PIV Silicon Rectifiers.** Compares at 5 times our price. **18A1445.**  
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**3 Raytheon CK722 Transistors.** General purpose type. Base amp factor 22. Freq. cutoff .6 MC. **18A1446.** 3 for 99c

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**Two 1 Amp 1000 PIV Rectifiers.** Made by General Instrument. Small size, top hat style. 1 1/2" leads. **18A1332.** 2 for 99c

**Transistor Socket Assortment.** 10 bakelite sockets. Asst. styles for power, triangular or in-line types. **12A5000.**  
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**YOUR CHOICE PER ASST.. 6 PIECES** .....99c

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**SPECIAL ANTI-FRICTION BEARING TYPE**

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Int. Rect. EP50 Each

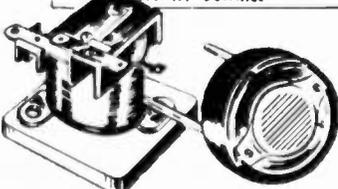
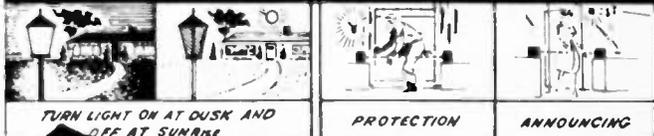


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A highly interesting Germanium Photo Power Transistor, which requires only a 6 V. battery to operate relays, motors, etc. Regular two cell flashlight will "trigger" this device. Mounts 1/4" centers overall dia. 1". Includes building diagrams for use. Wt. 4 ozs. **No. 20A1199.** Each .....**\$1.98**

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**LIGHT SENSITIVE PHOTO CELL AND RELAY**

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**RELAY SIZE 1/4 x 1/4 x 1" H.**

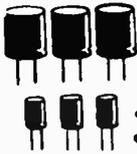
The two basic components, a high quality extra sensitive relay and a light sensitive cell . . . plus circuit diagrams for building useful and interesting devices . . . day-night control of lights or other electrical equipment, light actuated burglar alarm and remote control TV "Commercial Killer." Many other uses will suggest themselves to the experimenter and engineer. Fine for production or traffic counters, door openers, etc. Tiny glass enclosed light cell is only 1/2" x 1/2" with 2 wire leads. Relay, size 1/2 x 1/2 x 1 1/8" H., has SPDT 1 ampere contacts. Completed control Operates on 115 V. AC. **No. 41A4022.** Wt. 1 lb. **\$3.97**  
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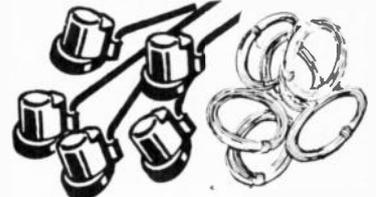
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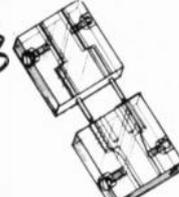


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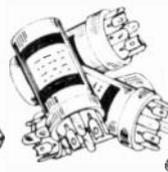
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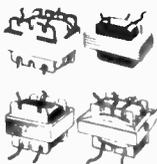
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Transistor Audio Transformers. Crystal mike (20K); Input (2K); Driver (1K); Output (500 to 3.2 ohms). 18B728.4 For \$1.99



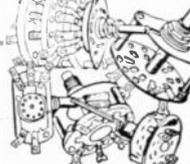
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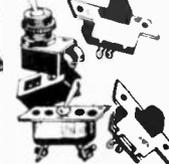
25 Molded Tubular Condensers. Super high quality. Reg. 15c to 55c each. 12-600 V; 9-400 V; 4-200 V. 18B401. Wt. 1 lb. 25 Asst. 99c



50 Molded Tubular Condensers in wide range of capacities-200, 400 and 600 V. \$9.00 value. 18A232. 50 Asst. \$1.99



10 Rotary Switches. One switch worth price of entire kit! Experimenters, builders will find use for all! 18A436. 1 1/2 lbs. 10 Asst. 99c



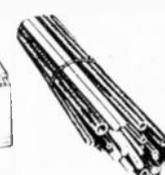
10 Assorted Switches. Toggles, push - buttons, slides, even micros. 1 or 2 pays for entire lot. 18A935. Wt. 1 lb. 10 Asst. \$1.59



Foot Bumper Kit of 16. 4 sets matched bumpers. Recessed, tack, screw type - large and small. Mighty handy! Wt. 6 oz. 12A2466. Kit...69c



2 Lbs. Often Needed Self-Tapping Screws. Big variety of sizes and lengths - Hex, Phillips, Round. 12A2356 2 Lb. Asst. 99c



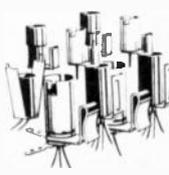
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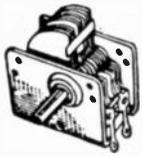
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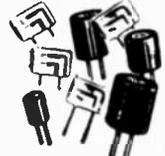
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2 Variable 2-Gang Capacitors. 1 with 280-10 mmfd RF, 100-6 mmfd osc. section; 1 with 135-10 mmfd RF, 90-6 mmfd. osc. section.  
12A1801. 2 For...99c



8 Tubular Electrolytics. Range 5 mfd. to 100 mfd. Assorted voltages. For builder, serviceman for transistor equip. Quality import.  
15A5000. 8 for 99c



8 Tubular Subminiature Electrolytics. Range 5 mfd. to 100 mfd. Assorted voltages. For transistor equip. Imported.  
15A5001. 8 for 99c



1 Lb. Cut Hook-Up Wire. Assorted colors, gauges, and lengths. Stripped and tinned for quick, easy use.  
2A424. Each .....99c



Roller Leaf Switch. Unimax AW6. Use as normally open or closed. Rated 15 A. 125 V. 2 1/2 x 3/8 x 1 5/8" H.  
18A1448. Special 2 For .....\$1.79



1/2 Meg. Volume Control with Switch. Quality Import. Universal 3" flatted shaft.  
18A225. Each .....59c



3 Pole, 3 Position Slide Switch. Control to 9 different circuits. 5/8" W. x 1 1/8" L. 3 amp, 125 V. AC. By Stack-pole.  
18A1311. 2 For .....49c



RH Machine Screws & Nuts. 100 each 4-40x1/2, 6-32x1/4 screws, 4-40, 6-32, 8-32 nuts; 50 each 6-32x3/4, 8-32x1/2 screws and 75 #6 x 1/2 metal screws.  
12A2001. ....\$3.29



Transistor Sockets. Printed circuit or chassis mtg type. Fits in-line and triangular base 3-pin. Imported.  
12A5127. Pkg. of 10 .....99c



15 Amp. Toggle Switch. Top quality USA made. Rated 10 amp, 250 VAC, 15 amp 125 VAC, UL approved. Bat handle.  
18A1426. Each .....69c



"D" Size Flashlight Batteries. High quality, fresh stock for long life. Imported at big savings!  
21A237. 6 For .....59c



9 Volt Transistor Radio Batteries. Top quality import replaces Burgess 2U6, RCA VS-312, Eveready 216, etc.  
21A185. 3 For .....49c

# B-A BARGAINS!

## POPULAR ASSORTMENTS

### BRAND NEW FULLY GUARANTEED

#### COMPUTER BOARDS LOADED WITH PARTS

WORTH AT LEAST \$15.00

99c FOR 3



3 printed circuit boards, each loaded with brand new, high quality American made parts. Contains over 60 components in all. You get at least 10 transistors, miniature metal encased electrolytic capacitors and resistors, including 1% and 5% tolerance.

Can be easily desoldered and punched board used for dozens of projects. Wiring easily removed or jumpered. Boards alone worth more than our unbelievable low price! Wt. 1 lb.

No. 18D377. White Quantities Last, 3 For .....99c

#### MAGNETIC REED SWITCHES



5 For \$1.99

Hermetically sealed glass tube with a pair of magnetic overlapping reeds. Switches may be actuated with permanent or electro magnets. High sensitivity. Rapid cycling. Mount in any position. Ideal for counting instruments, limiting switches, alarm systems, etc. Size 2 3/8" x 3/8" Dia. Would normally cost over \$1.00 each.  
No. 18A1433. 5 For .....\$1.99

#### DC POWER SUPPLY

99c



EXCLUSIVE BARGAIN VALUE AVAILABLE ONLY AT B-A

Output 14 V. DC up to 1.4 A. Has screw terminals, 6 ft. AC cord and plug. Top quality priced way low because of a lucky buy. Operates on 115 V. AC.

Hefty 24 volt center tapped transformer can be removed for other uses. The transformer alone is worth much more than our low, low price. Hurry! Buy several while they're available.  
No. 18C767. 99c Each .....99c



Big 2 Lb. Assortment of Standard Machine Screws & Nuts. Popular Radio-TV sizes.  
12A2006. Per Asst. ....\$1.19



50 Rubber Grommets. High quality tough, black rubber in sizes to fit holes 1/4 to 3/8" dia. in metal panel. Wt. 8 ozs.  
18A509. Approx. 50 .....69c



Bundle of Spagetti. 24 pcs., each 9" L. varnished high grade tubing in assorted colors and sizes. Wt. 3 oz.  
2A8000. 24 Pc. Asst. 49c



10 Sets Pin Plugs & Jacks. RCA type so popular for phono, recorders, hi-fi, etc. Wt. 8 ozs.  
12A6037. 10 Sets .....95c



8 Heavy Duty Rubber Foot Bumpers. Tough, non-marring molded rubber. Internal washer. 3/2" D. x 3/8" H. Screw mt.  
12A2000. 8 for 49c



100 Assorted Solderless Terminals. Most popular types and sizes. Includes ring tongues, slotted tongues, splice connectors, etc.  
12A2468. Per Asst. ....\$1.99



3000 Mfd. 30 V. Capacitor. Vinyl insulating sleeve. 3 1/2 x 1" dia. Solder lug terminals. Reg. net over \$2.00.  
18A1423. Spec. Each .....69c



Triple Section Electrolytic. 100-100-40 Mfd. @ 250 volts. 4 1/2 x 1 1/4". Made in USA. Special Purchase Saving.  
18A1304. Each .....79c



40 Mfd. @ 200 Volt Tubular Electrolytic. 1 1/4 x 1 1/4" D. Top quality American made.  
18A1299. Each .....39c



Miniature 50 Mfd. @ 15 Volt Electrolytic Capacitor. Fine for crowded printed circuits. 1/4 x 3/8" dia. Import.  
18B812. Each .....19c



25 Hi-Voltage Mylar & Paper Mylar Tubular Capacitors. Assorted range of capacities in 1000 and 1600 V. ratings. Made in USA.  
18A1450. 25 Asst. ....99c



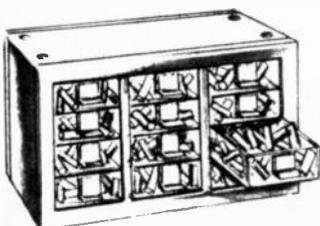
PL259 Coax Connector plus a handy Right Angle Connector. For R8BU and RG11U. Reg. net value \$2.27.  
18A1449. Per Set .....99c

#### CHEST FULL OF CAPACITORS

155 CONDENSERS PLUS METAL STORAGE CABINET. Just look at what you get: 20 Tubular Electrolytics, both single and duals, 50 Molded Tubulars, 200, 400 and 600 volts in most popular capacities; 50 Disc Ceramics; and 35 Midget Micas. 155 pieces total, all very usable values. Your average cost is less than 7c and the cabinet is free. Heavy gauge steel storage unit with "see-thru" clear plastic drawers measures 12" wide, 5 3/4" high, 5 1/4" deep. Regular net value cabinet alone \$2.99. Shpg. wt. 7 1/2 lbs.  
No. 18A233. COMPLETE KIT SPECIAL EACH .....\$9.99

#### CHEST FULL OF RESISTORS

250 RESISTORS PLUS METAL STORAGE CABINET. Here's what you get: 200-1/2 Watt and 50-1 Watt Insulated Resistors in most popular resistance values. All latest, small types by IRC, Stackpole, etc. Average cost per resistor less than 4c and the cabinet is free. Includes Metal Storage Cabinet, as with above. Shpg. wt. 6 lbs.  
No. 18A235. COMPLETE KIT SPECIAL EACH .....\$9.99  
No. 37A8013. 12 Drawer Cabinets. Wt. 3 lbs. Each .....\$2.99



LIST VALUE OVER \$60.00 \$9.99



# Bargains!

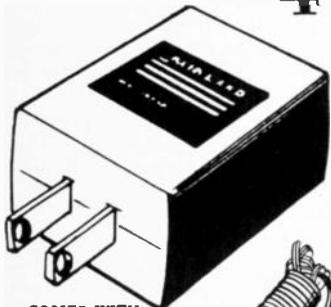
## POWER SUPPLIES, BATTERY-CHARGERS

### BRAND NEW FULLY GUARANTEED

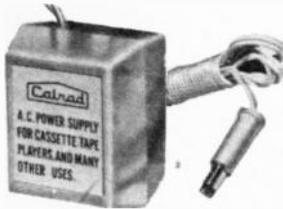
## SAVE ON BATTERY COST WITH AC ADAPTORS

LOW CURRENT DRAIN . . . REQUIRES ONLY PENNIES TO OPERATE

CHOICE EACH **\$4.95**



COMES WITH  
CONNECTOR FOR  
VARIETY OF  
EQUIPMENT



**B-A  
BARGAIN  
SPECIAL!**

**\$4.95**

7 1/2 V. MINIATURE AC POWER SUPPLY for Cassette Tape Players. Plugs directly into many Cassette players for 115 V. 60 cy. AC operation. Saves batteries. Also has many other uses powering transistor devices of all kinds. Plugs directly into AC outlet. Has flexible lead and attached 3/4" dia. coaxial type power plug. Easily removable for installing any other type plug to fit equipment. Wt. 1 lb. 7 1/2 V. DC output.  
No. 13A8008. **\$4.95**  
Special

## MINIATURE VARIABLE VOLTAGE POWER SUPPLY KIT



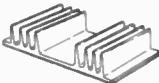
**\$3.95**

0-12 V. DC  
@ 6 MA

Operates Transistor devices such as pocket radios from 110 V. AC—saves battery cost.

Continuously variable 0-12 V. DC. Excellent for hand-wired or printed circuits. Provides 0-12 V. DC @ 6 MA, 0-9 V. DC @ 10 MA. Kit Contains: transformer—size only 1 3/8 x 7/8 x 1 1/8" H., miniature full wave bridge rectifier, 2 miniature condensers, miniature pot and diagram.  
18A1378. Wt. 1 1/2 lbs. **\$3.95**  
Special

## BATTERY CHARGER KIT



**\$2.00**



FOR 6 OR  
12 VOLTS

Amazing low price! Top quality parts to build a compact, dependable charger for 6 or 12 volt batteries. For full wave rectification using filament or similar transformers of your choice. Kit Contains 4-2 amp stud mtg. rectifiers, hdwe. kits for rectifiers, 3x 3 1/2" heat sink and instruction sheet.  
No. 20A1200 **\$2.00**  
Special Each

## CONVERT:

RADIOS, TAPE RECORDERS,  
WALKIE-TALKIES, PHONOS AND  
OTHER LOW POWER 6, 7 1/2, 9  
or 12 VOLT BATTERY OPERATED  
DEVICES!

FOR 6, 7 1/2, 9 OR 12 V. RADIOS, ETC.  
SIMPLY PLUG-IN IN PLACE OF BATTERIES  
OPERATES ON 117 VOLT AC

Operates transistor radios, walkie-talkies, tape recorders and other devices from 115 V. AC. Regulated exact output voltages. Reliable noise-free operation. Simple to use—just plug adaptor into wall outlet and equipment. Requires no change in your equipment—unplug adaptor for portable use. Complete with adaptor clips for use on a variety of equipment. Wt. 3/4 lb.  
No. 13A8007—6 V. Output **Each**  
No. 13A8008—7 1/2 V. Output **Your Choice**  
No. 10A3030—9 V. Output **\$4.95**  
No. 10A3021—12 V. Output.

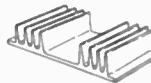
## AC CHARGER FOR NI-CAD BATTERY

**\$1.99**



Tiny self-contained unit operates from 115 V. AC providing proper float charging rate for a 1.2 V. Ni-Cad battery cell. Made for continuous duty use. Provides utmost economy of operation for all kinds of battery powered devices, flashlights, electric toothbrushes, radios, recorders, hobby equipment, etc. Charging current 100 MA. for 1 ampere hour battery. Charger size 2x1 3/8x1 3/8". Wt. 4 ozs.  
No. 18A1336. **\$1.99**  
Special Each  
CHARGER FOR 4 NI-CAD BATTERIES. Requires series connection of batteries. Size 1 3/4" sq. x 2" long. Charging current 200 MA. For 2 ampere hour or larger battery. Wt. 4 oz.  
18B343. Limited quantity. **\$2.49**  
Each

## BATTERY CHARGER KIT WITH DC AMMETER



**\$3.95**



FOR 6 OR  
12 VOLTS

Amazing low price! Top quality parts to build a compact, dependable charger for 6 or 12 volt batteries. For full wave rectification using filament or similar transformers of your choice. Kit Contains 4-2 amp stud mtg. rectifiers, hdwe. kits for rectifiers, 3x 3 1/2" heat sink, 2 1/4" dia. D'Arsonval movement 0-8 DC amp meter and instruction sheet.  
No. 18A1343. Wt. 1 lb. **\$3.95**  
Special Each

# NEW LOW PRICES!

TRANSISTORIZED 6-9-12 V. DC @ 1 AMP

## UNIVERSAL POWER SUPPLY

100's SOLD  
AT \$19.95



NOW... **\$14.95**

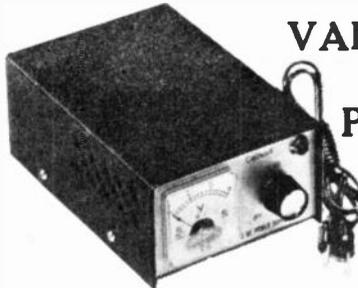
Provides well-filtered DC power from 115 V. AC line. For use with all kinds of battery powered transistor equipment, radios, intercoms, tape recorders, record-players, amplifiers, tuners, transceivers, experiments, etc. Input 115 V. AC 60 cps. Metered output . . . switches to 6-9-12 volts. Heavy duty metal case 6 x 3 1/2 x 2 1/2". Wt. 3 lbs.  
No. 13A8009. Top Import Value! Special Each **\$14.95**

## VARIABLE VOLTAGE SOLID STATE POWER SUPPLY

0-15 V. DC @ 1.5 AMPS.

PRICE REDUCED  
FROM \$29.95

NOW **\$24.95**  
ONLY



Highly reliable power for every conceivable type of solid state device. Output voltage selected by front control. Meter indicator output voltage. Has pilot light, fused output with binding posts which accept phone tips or banana plugs. Housed in attractive black metal case with aluminum front panel. Top quality components and workmanship throughout. Size 2 1/2 x 4 x 7" D. Shpg. wt. 3 lbs. **\$24.95**  
No. 13A8000. Top Import Value. Each

## SAVE ON BATTERY COSTS WITH THESE HANDY DRY CELL BATTERY CHARGERS!

### EVERY HOUSEHOLD SHOULD HAVE ONE . . . RECHARGE BATTERIES FOR

- FLASHLIGHTS • RADIOS • RECORDERS • CAMERAS • TOYS

### FAMOUS "DYNAMIC" PLUG-N-CHARGE HOME BATTERY CHARGER

Operates from any AC outlet. Recharges "weak" batteries. 4 batteries at one time, size D, C, AA or 9 V. transistor; carbon-zinc, alkaline, nickel-cadmium or mercury types. Safe operation on 115 V. AC with interlock lid. Wt. 2 lbs. **\$5.95**  
No. 13A8013. Each  
No. 13A8014. Adaptor for Recharging Hearing-Aid Type Batteries. **\$3.95**



**\$5.95**

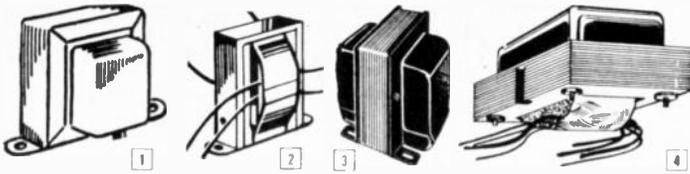
### NOW USE YOUR BATTERIES LONGER— RECHARGES 1 TO 14 AT ONE TIME!

New "Comet" charger plugs into AC socket. Has built-in battery test light to find dead cells. Molded recesses handle up to 4 D cells, 4 C cells, 6 pen cells and 1 9V transistor battery. Will "fresh up" most batteries in 1 to 2 hours, charge them fully in 12-16 hours, providing batteries are not dead and inactive. Completely dead cells cannot be rejuvenated. Very well made, molded plastic. Size 7 3/8 x 4 1/2 x 2 3/4". For 115 V. AC operation. Wt. 2 lbs. **\$5.95**  
No. 13A8012. Net Each



**\$5.95**

**ENORMOUS SAVINGS!**  
**MIDGET POWER TRANSFORMERS**



**ALL HAVE 115 V. AC PRIMARY**

① 115 V. @ 80 MA. Separate filament 6.3 V. CT @ 1 A.  $1\frac{1}{2}'' \times 2\frac{1}{4}'' \times 1\frac{7}{8}''$  H. Mtg. Centers  $2\frac{1}{8}''$ . Wt. 1 lb. No. 18A1393 Special Each **\$1.99**

② 115 V. @ 80 MA. Separate filament 6.3 V. @ 29 A. 115 V. primary. Size  $2\frac{1}{2}'' \times 2\frac{1}{2}'' \times 3''$  H.  $2\frac{1}{2}''$  lbs. No. 18A1410 Special Ea. **\$2.39** 10 Lots Each **\$2.19**

③ 115 V. @ 100 MA. Separate filament 6.3 V. CT @ 3.5 A.  $2\frac{3}{8}'' \times 3\frac{1}{8}'' \times 2\frac{3}{8}''$  H. Mtg. centers  $3\frac{5}{8}''$ . 18A1386 Wt.  $2\frac{1}{2}''$  lbs. Special Each **\$2.99**

④ 120 V. @ 70 MA Sec. Isolated center tapped filament 6.3 V. @ 2 amp. Size  $2\frac{1}{8}'' \times 2\frac{1}{2}'' \times 2\frac{1}{4}''$  H. Mtg. ctrs.  $3\frac{1}{8}''$ . Shpg. wt. 2 lbs. 13B476 **\$2.99** 10 Lots **\$2.75** Special Ea. **\$2.75** Each...

⑤ Secondaries-130 V @ 120 MA. 6.3 V. CT @ 3.5 A. An exceptional transformer for modern silicon diode circuits. High power in small size.  $2\frac{3}{8}'' \times 3\frac{1}{8}'' \times 2\frac{3}{8}''$  H. Shpg. wt. 4 lbs. No. 18A1389. Special Each **\$2.49**

⑥ HIGH VOLTAGE TRANSFORMER FOR CATHODE RAY TUBES Primary 115 V. max. Secondary 1150 V. @ 2.5 MA. Has 10-1 ratio. Use for high voltage anode supply for scope, etc. Great for experimenters. No. 18B154. Shpg. wt.  $1\frac{1}{2}''$  lbs. Special Each **\$1.69**

⑦ 3 Secondaries-135 V @ 110 MA 125 V. @ 40 MA, 6.3 V. @ 2 A. Popular upright mounting, fully shielded. Primary 117 V. AC. Mode for GE to power a high quality tuner and amplifier; finest ever for all sorts of devices, receivers, bias supplies, etc.  $2\frac{1}{2}'' \times 2\frac{7}{8}'' \times 3''$  H. Wt. 4 lbs. No. 18A1388. Special Each **\$1.99**

⑧ 150 V. @ 50 MA Sec. Topped for filament 6.3 V. @ 1 amp. Size  $1\frac{5}{8}'' \times 1\frac{3}{4}'' \times 2''$  H. Mtg. ctrs. 2''. Shpg. wt.  $\frac{1}{2}''$  lb. 18A1385. **\$1.59** 10 Lots, **\$1.49** Special Ea. Each...

⑨ 300 V. CT @ 50 MA Sec. Separate filament 6.3 V. @ 2 amp. Size  $2\frac{1}{8}'' \times 2'' \times 2''$  H. Mtg. ctrs.  $2\frac{1}{8}''$ . Shpg. wt.  $1\frac{1}{2}''$  lbs. 13A548. **\$3.19** 10 Lot **\$2.99** Special Ea. Each.

⑩ 470 V. CT @ 60 MA. Separate 6.3 V. @ 2 A. filament. Extra flat construction.  $3\frac{3}{8}'' \times 2\frac{1}{8}'' \times 1\frac{5}{8}''$  above chassis. Wt. 2 lbs. Regular net at least \$5.00 No. 18A1391 Extra Special **\$1.99**

**FILAMENT TRANSFORMERS AT BIG SAVINGS**



AS LOW AS **\$1.39**



AS LOW AS **\$1.99**

**ALL HAVE 117 V. 60 CY. AC PRIMARIES**

① 6.3 V. @ 1.5 AMPS Size  $2 \times 2\frac{3}{8}''$  with 3" mtg. ctrs. Wt.  $1\frac{1}{4}''$  lbs. No. 13A967. Japan Each **\$1.39**

② 6.3 V. @ 3 AMPS Size  $1\frac{7}{8}'' \times 1\frac{3}{4}''$  with  $2\frac{7}{8}''$  mtg. ctrs. solder lugs. Wt. 1 lb. No. 13A968. Special Each **\$1.99**

③ 12.6 V. @ 1 AMP Topped @ 6.3 V. Size  $1\frac{1}{8}'' \times 1\frac{1}{2}'' \times 1\frac{5}{8}''$  H. with  $2\frac{1}{2}''$  mtg. ctrs. No. 13A969. Wt.  $1\frac{1}{2}''$  lbs. Import Special **\$1.99**

④ 12.6 V. @ 2 AMP. Size  $2\frac{3}{4}'' \times 1\frac{3}{4}'' \times 1\frac{3}{4}''$  with  $2\frac{1}{8}''$  mtg. ctrs. Wt. 2 lbs. No. 13A243. Special Each **\$2.49**

⑤ 24 V. @ 1 AMP Size  $2\frac{3}{8}'' \times 2\frac{3}{8}'' \times 2''$  H. with  $2\frac{7}{8}''$  mtg. ctrs. Wt. 2 lbs. No. 13A970. Japan Each **\$2.49**

⑥ 24 V. @ 2 AMP. Size  $2\frac{5}{8}'' \times 2\frac{1}{4}'' \times 2\frac{1}{4}''$  H. with  $3\frac{1}{8}''$  mtg. ctrs. Wt.  $2\frac{1}{2}''$  lbs. No. 13C501. Special Each **\$3.39**



**MIDGET FILAMENT**  
6.3 V. @ .75 A

6.3 V. @ .75 Amp. 117 V. 60 cy. AC primary. Fine for equipment using 1 or 2 tubes. Only  $1\frac{3}{8}'' \times 1\frac{1}{8}'' \times 1\frac{3}{8}''$  with 2" mtg. ctrs. Wt. 6 ozs. 13A971. 10 Lots **\$1.19** Each **\$1.09** Spec. Ea.



**30 VOLT C.T. 1 AMP.**

Great for transistor power supplies and other uses. 115 VAC primary. Fully enclosed. Continuous duty. Size 2" H. x  $2\frac{3}{8}''$  W. x 2" D. Mtg. centers  $2\frac{1}{4}''$ . Wt. 8 ozs. No. 13A987. Each **\$3.99** 10 Each **\$3.69**

**FILTER CHOKES AT BIG SAVINGS!**

A rare find, bargain priced. Perfect match for use with transformers as above rated to 30 MA. DC resistance 100 ohms. Only  $1 \times \frac{3}{4}'' \times \frac{3}{4}''$  with  $1\frac{1}{8}''$  mtg. ctrs. Shpg. wt. 8 oz.

No. 18A959 **39c** 10 Lots **33c** Spec. Each. Each...

① 5.5 HY., 50 MA. DC resistance 300 ohms. Strap mtg. base. Size  $1\frac{1}{8}'' \times 1\frac{3}{8}''$  H. with 2" mtg. ctrs. Wt. 1 lb. Reg. net value \$1.50 No. 13A460. Special Each **\$1.69**

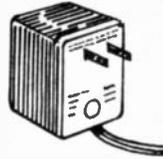
② 7 HY., 150 MA. DC resistance 200 ohms. Strap mtg. type. Size  $4 \times 2\frac{1}{4}'' \times 2\frac{5}{8}''$  H. with  $3\frac{3}{8}''$  mtg. ctrs. Reg. net value over \$4.00 No. 13A239. Wt. 2 lbs. Special Each **\$2.49**

**MIDGET FILTER CHOKES**

**39c**



**24 V. PLUG-IN POWER TRANSFORMER**



24 VOLT  
200 MA  
WHILE  
SUPPLY  
LASTS!

**\$1.29**

Plugs into 115 VAC socket. Enclosed in plastic case. 6 ft. two-conductor cord makes it easy to power solid state circuits without bulky transformers.

No. 18A1421. Each **\$1.29**

**BA**  
BURSTEIN APPLIANCE  
**Bargains!**  
**TRANSFORMERS AND CHOKES**  
**BRAND NEW FULLY GUARANTEED**

**TRANSISTOR POWER TRANSFORMERS**  
SAVE \$\$\$ ON THESE B-A SPECIALS!



① 30 V. CT @ 150 MA. Sec. 115 V. 60 cy. pri. Size  $1\frac{3}{8}''$  H. x  $1\frac{1}{8}''$  W. x 2" mt. ctrs. No. 18A1364. Special Each **\$1.29**

② For 9 V. DC supply. Add rectifier and 500 mfd. or larger filter. Will power transistor radios, small amplifiers, etc. from 115 V. AC. 7 V. AC @ 100 MA sec. Size  $1\frac{3}{8}''$  H. x  $1\frac{1}{8}''$  W. x  $1\frac{3}{4}''$  mtg. ctrs. No. 18A1365. Special Each **99c**

③ 30 V. CT @ 1 Amp. 2" H. x  $2\frac{3}{8}''$  W.  $2\frac{1}{8}''$  mtg. centers. Wt. 8 ozs. No. 13A987. **\$3.99** 10 Lots **\$3.69** Each

④ 30 V. CT. @ 2 Amp.  $2\frac{1}{4}''$  H. x  $2\frac{3}{4}''$  W.  $3\frac{1}{8}''$  mtg. ctrs. Wt. 10 ozs. No. 13A986. **\$4.99** 10 Lots **\$4.49** Each

⑤ 12 V. @ 10 MA Sec. Size  $1\frac{3}{8}'' \times \frac{7}{8}'' \times 1\frac{1}{8}''$  H. Shpg. Wt. 3 ozs. No. 18A1387. **69c** 10 Lots **59c** Special Each

⑥ 43 V. CT @ 165 MA. Dual 115 V. or 230 V. primary allows choice of input voltage or reduction of output to 21 1/2 V. CT when operated on 115 V. with primaries in series. Size  $2\frac{3}{8}'' \times 2\frac{1}{4}'' \times 2\frac{1}{4}''$  H. Wt. 2 lbs. No. 18A1412. **\$2.99** 10 Lots **\$2.69** Special Each

**24 VOLT .3 AMP TRANSFORMERS**

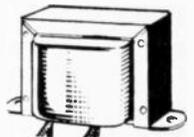
B-A's best selling transistor power transformer. Top quality. These are made to B-A's rigid specifications by a leading American manufacturer.

Fully enclosed, continuous duty type. Rated .3 amps with fully isolated 115 V. 60 cy. AC primary. Size  $1\frac{3}{8}''$  H. x  $1\frac{1}{2}''$  W. 2" mtg. ctrs. Wt. 6 ozs.

No. 13A903. **\$1.69** 10 Lots **\$1.49** 100 Lots **\$1.29** Special Each

Same as above except has center tap on secondary.

No. 13A861. **\$1.89** 10 Lots **\$1.79** 100 Lots **\$1.59** Special Each

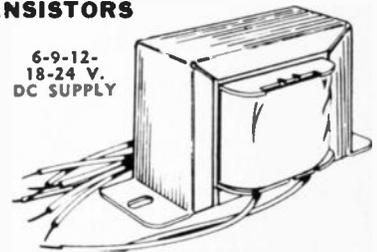


B-A Special

**MULTIPLE VOLTAGE TRANSFORMER FOR TRANSISTORS**

Husky 1 amp. transistor power supply transformer. Will furnish 6, 9 or 12 V. DC after full-wave rectification; 12, 18 or 24 V. DC after half-wave rectification. Secondary has center tap. Primary 115 V. AC. Exceptionally well made, nylon bobbin construction. Best transistor supply transformer we've seen! 3" mounting centers. Size  $2\frac{1}{2}'' \times 2\frac{1}{2}'' \times 2\frac{1}{2}''$  W. x 2" D. Shpg. Wt. 2 lbs. No. 13A902. Terrific Import Value **\$3.89**

6-9-12-18-24 V. DC SUPPLY



**BA BARGAIN BONUS!**

**24 VOLT HONEYWELL TRANSFORMER 79c**

Costs more to make than our low price! Extra high quality. Limited Quantity—special purchase. 1/2 amp continuous duty. Varnish impregnated. Just right for making solid state power supplies, signal devices, etc.  $2\frac{1}{4}'' \times 1\frac{1}{8}'' \times 1\frac{3}{8}''$ . 117 V. Primary. Wt.  $\frac{3}{4}''$  lb. No. 18A1326 **79c** 10 @ **75c** Special Each



**BUY PLENTY WHILE THEY LAST!**



# Bargains!

## BIG SAVINGS ON SWITCHES

### BRAND NEW FULLY GUARANTEED



#### EXTRA TINY PUSH-BUTTON SWITCH

LESS THAN HALF USUAL COST

# 36c

SPST normally open, momentary contact. For all sorts of miniature AC or battery powered DC devices. Molded in insulated housing and red button. Solder terminals. Really small, only 3/8" dia. x 1" long overall. Mounts in 1/4" hole. Top quality import of less than 1/2 usual cost. Wt. 2 oz.

No. 19A7210 **36c** 10 Lots, **29c**  
Net Each

# BAT HANDLE TOGGLE SWITCHES BARGAIN PRICED!



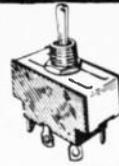
# 54c

Each, 10 Lots



# 91c

Each, 10 Lots



# 62c

Each, 10 Lots



# 36c

Each, 10 Lots

BIG IMPORT SAVINGS

### MOST POPULAR CARLING AT BIG SAVINGS!

U.L. Approved. Bakelite enclosed with 1/8" L. bat handle, 3/8" dia. x 3/8" L. shank, solder lugs. \*\*Center off. Average shpg. wt. 3 oz.

Stk. No.	Action	Fig.	125 V.	250 V.	Net Each	10, Ea.	100, Ea.
19A7196	SPST	1	6	3	<b>\$0.80</b>	<b>\$0.54</b>	<b>\$0.41</b>
19A7197	SPDT	1	3	1	<b>.76</b>	<b>.86</b>	<b>.52</b>
19A7198	DPST	1	3	1	<b>1.04</b>	<b>.94</b>	<b>.72</b>
19A7199	DPDT	1	3	1	<b>1.13</b>	<b>1.02</b>	<b>.76</b>
19A7200	SPST	2	20	10	<b>1.01</b>	<b>.91</b>	<b>.69</b>
19A7201	SPDT	3	15	10	<b>.69</b>	<b>.82</b>	<b>.48</b>
19A7202	DPST	3	15	10	<b>.95</b>	<b>.86</b>	<b>.65</b>
19A7203	DPDT**	3	15	10	<b>1.13</b>	<b>1.02</b>	<b>.78</b>

### POPULAR BAT HANDLE DPDT TOGGLE SWITCH

Bakelite enclosed. Chrome on-off plate. Rated 3 amp @ 125 V. 3/8" dia. x 3/8" L. shank. Wt. 4 oz.  
No. 19A7192 **45c** 10 Lots, **36c**  
Each

TOGGLE SWITCH PLATES. Nickel plated steel with on-off markings. Use with standard 3/8" dia. mounting shafts.  
19A7195 **5c** 10 For. **30c**



### SPST TOGGLE WITH LEADS

Compact, bakelite enclosed with two 2" wire leads. UL approved. 6 amp @ 125 volts. 1 1/2" dia. x 1/4" long mtg. shank. Wt. 3 oz.

No. 19A7204 **72c** 10 Lots, **65c**  
Net Each

### SUB-MINIATURE 10-AMP TOGGLE SWITCHES

Perfect for miniature equipment. 10 amps @ 125 V. AC. Mtg. shank 3/2" x 3/8" long. Hardware included. 1 oz.

19A7188-SPDT. Each **\$1.19**  
10 Lots Each **\$1.08**  
19A7189-DPDT. **\$1.49** 10 Ea. **\$1.35**  
19A7220, SPDT. Center off. Each **\$1.89** 10 Ea. **1.55**

ONLY 1/2" x 7/8" x 1/2" WITH 3/8" LONG HANDLE

# \$1.19

QUALITY IMPORT



### DPDT TOGGLE SWITCH CENTER OFF



# 55c

Each 10 Lots

Bat handle, bakelite case, red and black on-off plate. Screw terminals. Rated 3 amp @ 250 V., 6 amp @ 125 V. Quality import. Wt. 4 oz.  
No. 19A7191 **68c** 10 Lots, **55c**  
Each

## TREMENDOUS SAVINGS! MICRO AND ACRO SNAP-ACTION SWITCHES



(1) Miniature Micro V-3. SPDT 10 amps @ 125 or 250 V. 1 3/8" x 7/8" x 1 3/8". Insulated plunger travels .047". O.T. .031". Wt. 2 ozs.  
No. 18C256 **59c** 10 @ **49c**  
Special Each

(2) Plunger Type for Door Switches, Etc. SPST, normally closed, 15 amps @ 125V. Installs on any door or window frame for burglar alarms, etc. 1 1/8" x 5/8" x 3/8". UL approved. Wt. 2 ozs.  
No. 18B770 **99c** 25 for **\$3.95**  
5 For  
As above SPDT **99c**  
No. 18C193. Special 3 For

(3) Micro Lever Type. SPDT 15 amp @ 125 V. Curved arm actuator functions same as roller type. Wt. 2 ozs.  
No. 18C360 **99c** 10 @ **90c**  
Special Each

(4) Unimax Leaf Type. SPST, normally open, 15 amp @ 125 V. 2" long leaf for maximum overtravel for greater versatility. Wt. 2 ozs.  
No. 18B569 **49c** 10 @ **44c**  
Special Each

(5) Micro Roller Leaf. SPDT 15 amps @ 125 V. 1 3/8" x 1 1/8" x 1/2" H. Long life roller actuator with extended overtravel. Wt. 2 ozs.  
No. 18C539 **99c** 10 @ **94c**  
Special Each

### SLIDE SWITCHES



# 15c

SPST  
Each, 10 Lots

Small with black bakelite slide handle. Solder lugs. 1 amp @ 125 V. AC. Wt. 1 oz.

Stock	Action	Each	10 @ 100 @
19A7213	SPST	22c	17c 12c
19A7214	SPDT	23c	18c 13c
19A7215	DPST	24c	19c 14c
19A7216	DPDT	25c	20c 15c

### DPDT SUB-MINIATURE MICRO-SWITCH

\$3.34 VALUE! WAS \$1.39

# 99c



### SUB-MINIATURE SLIDE SWITCHES



# 25c

ONLY 3/4" LONG

Durable little switches for audio or low current circuits. Positive snap action. Rated 1/2 amp @ 125 V. Size 3/4" x 3/8" x 1/4" H. Quality import. Wt. 1 oz.  
19A7211-SPDT **25c** 10 @ **21c**  
Each  
19A7212-DPDT **29c** 10 @ **25c**  
Each

REG. NET AT LEAST \$1.90

# 39c

Each 10 Lots

### 3 POL. 3 POS. CERAMIC

Wide 60° indexing and ceramic insulation minimizes RF losses. Non-shorting. 2" dia. x 1" depth. Standard 1/4" shaft extends 1/4". Wt. 4 oz.  
No. 18A531. **49c** 10 Lots, **39c**  
Special Each

### H&H LOCK SWITCH



URNS ON WITH REMOVABLE KEY

# \$1.49

Prevents unauthorized operation of any electrical equipment. Fine for alarm systems, door openers, fixed and mobile transmitting equipment, etc. SPST. 3 amp @ 250 V., 6 amp @ 125 V. 1 1/8" dia. x 1 1/8" L. mtg. shank. U.L. approved. With key. Wt. 3 oz.  
No. 19A7217 **\$1.49**  
Special Each  
No. 19A7218. Extra Key. Each **16c**

### POPULAR MODERN ROCKER SWITCHES



(1) Fine Quality Stackpole. Compact and rugged, 6 amps @ 125 V. AC. Flush mounts to panel with actuated portions of molded black knob recessed. 1 5/8" mtg. ctrs. Extends 1 1/4" behind panel. Solder lugs. Wt. 2 ozs.  
Stk. No. Action Each 10 @ Ea.  
19A7205 SPST 39c 33c  
19A7206 SPDT 41c 35c  
19A7207 DPDT 49c 45c  
19A7208 DPDT\* 59c 54c  
\* 3 Position

(2) Double Rocker Cutler-Hammer. Versatile, one side SPST, other SPDT. Center terminals can be cut apart for individual switching. 1 3/4" mtg. ctrs. Overall 1 1/4 x 1 1/4 x 1 1/2" D. 6 amp @ 125 V. Wt. 4 ozs.  
No. 18A581 **39c** 10 @ **35c**  
Special Each

(3) 3PDT Center Off, Cutler-Hammer. 6 amp @ 125 V. 1 5/8" mtg. ctrs. Overall 2 x 1 1/2 x 1 3/8". Wt. 4 ozs.  
No. 18B883 **69c** 10 @ **59c**  
Special Each

### MOMENTARY SPRING RETURN SWITCH



FINE AS A DOOR SWITCH

# 39c

U/L approved. 3A @ 125 V. SPST normally closed circuit. Turns on light or other signal when door is opened. Fully insulated. Convenient Snap-in mtg. in 3/4" hole. 1 3/8" D. Wt. 2 oz.

No. 19A7209 **39c** 10 Lots, **35c**  
Special Ea.

### MOMENTARY SPRING RETURN SWITCH



SPST normally closed. Rated 3/4 amp. at 125 volts. Popular panel mount bakelite push type. Well insulated. Mounts in 1 1/2" hole in panels up to 3/8" thick. Wt. 3 oz.  
No. 18A1376. Each **19c**  
10 Lots **17c**  
Each

### 4PDT LEVER SWITCH



# 99c

BIG IMPORT SAVINGS!

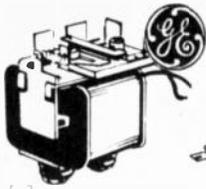
Positive acting for audio switching, speakers, telephones, model railroads, etc. Rated 3 amp @ 120 V. 2 screws on front for mounting. 2 1/8 x 1 1/4 x 5/8" behind panel space. Shpg. wt. 8 oz.  
No. 19A7190. Import Special **99c**

### QUIET ACTION 3-WAY PUSH BUTTON WALL SWITCHES

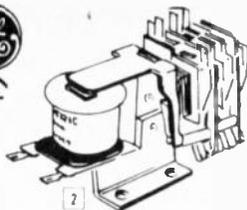


Convert toggle switch installations to convenient push-button. Fits standard outlet boxes and switch plates. Operates as SPST or SPDT for 3-way application.  
No. 18A1377 **99c** 10 For. **\$3.99**

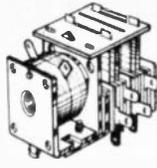
# SAVE 50% AND MORE ON 115 V. AC RELAYS!



69c



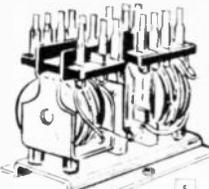
Price Slashed!  
\$1.95



REG. NET \$5.35  
Each, 10 Lots  
\$2.69



\$2.99



Price Slashed Was \$4.95!  
\$3.95

(1) G.E. MINIATURE SPST N.O. RELAY  
Red hot buy! Rated 3 amps @ 115 V. AC. May also be used as sensitive 10,000 ohm DC relay for remote control applications, etc. Only 1 1/8" x 1 x 1 3/8". Wt. 6 ozs.  
No. 18B270  
Special Each ..... 69c

(2) COMAR 4PDT RELAY  
At least a \$6.00 value! Rated 2 amps @ 115 V. AC. Unusually fine construction. Especially well suited for control circuits. 2 1/2" x 1 1/4" x 1 3/4" H. Wt. 8 ozs.  
No. 18C200  
Special Each ..... \$1.95

(3) P & B 4PDT 5 AMP POWER RELAY  
Highest quality continuous duty type, open frame. Has 115 V. 60 cy. AC coil, quick connect or solder terminals, single hole 8-32 threaded mounting. Size overall 1 7/8" x 1 1/2" x 2" H. Made by PGB. Shpg. Wt. 6 oz.  
No. 18A1373  
Special Each ..... \$2.95

(4) P & B ENCLOSED PLUG-IN RELAYS  
5 amp contacts. Fit octal tube socket. Continuous duty. Silent operation. In clear plastic case. 1 1/2" sq. x 2" high. Shpg. wt. 8 ozs.  
No. 18B884  
Special Each ..... \$2.99

(5) P & B 6PDT LATCHING RELAY  
Operates by momentary pulse at 115 V. AC power to either coil. Armature latches mechanically; is released by pulsing other coil. Has almost unlimited applications for remote control. Contacts easily paralleled. 2-hole channel mounting 2 x 2 3/4 x 2 3/8" H. Wt. 6 ozs. P & B series PKB23AY. \*Easily disassembled for use as pair of SPDT 115 V. AC relays.  
No. 18C951. Price Slashed, Special Each ..... \$3.95

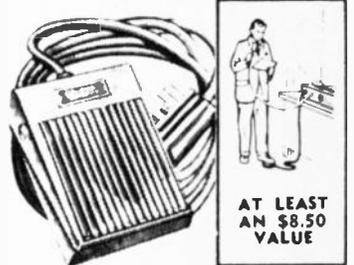
## EVERY ONE BRAND NEW! HIGHEST QUALITY!



# Bargains!

## RELAYS AND SWITCHES BRAND NEW FULLY GUARANTEED

### TOP QUALITY FOOT CONTROL SWITCH



AT LEAST AN \$8.50 VALUE

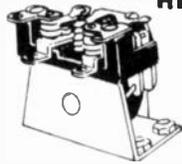
For remote control of tape recorders, ham gear, photo devices, etc. Two SPDT 10 A. @ 125 V. AC micro switches operate in a 2-step sequence as pedal is depressed. Grey finished steel case, rubber tread, 6 ft. cable. Made for comptometer. Wt. 1 lb.  
No. 18A976. Special Each ..... \$3.69

### MINIATURE SPDT SENSITIVE DC RELAY



Only 3/4 x 1 x 7/8" H. 1 amp, 2.9 MA sensitivity. For electronic light controls, etc. Wt. 1 oz.  
No. 18B199-5500 Ohms. Special Each ..... \$1.39  
No. 18A1368-10,000 Ohms. Special Each ..... \$1.69

### HEAVY DUTY 10 AMP 12 V. DC POWER RELAY



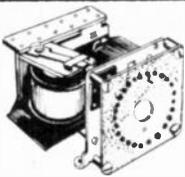
Reg. Net At Least Double Our Price  
Single pole, double-break, 10 amp. contacts. Heavy duty construction, very compact size. Excellent for ignition by-pass relay, DC mobile power supplies, automotive accessories. Coil resistance 85 ohms. Allied control style B011. 1 5/8 x 1 1/2 x 1 1/8" H.  
18B807. Wt. 6 oz. Spec. Ea. .... \$1.69

### MERCURY WETTED VERY HIGH SPEED RELAY

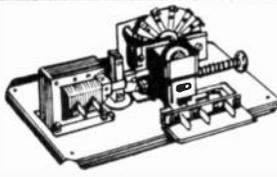


AT LEAST \$10.00 VALUE! \$4.95  
Features billions of operations without contact wear or bounce. Used for telegraph keyers, teletype, etc. at up to 60 operations per second with utmost dependability. Coil 4000 ohms, 7.2 MA pull-in, 6.2 MA release. SPDT contacts 5 amps. 2 3/8" H. x 1 1/4" dia. Hermetically sealed. Octal base. C.P. Clare = HG1077. At a fraction of regular cost!  
18C912 3 For ..... \$4.95 \$10.00  
Each ..... \$4.95 For ..... \$10.00

## 115 V. AC STEPPER RELAY SWITCHES



### SPECIAL PURCHASE BARGAIN!



17 POINT GUARDIAN IMPULSE STEPPER SWITCH. Each application of 115 V AC to relay coil moves rotary SP switch one point forward. Resets to No. 1 point instantly with 115 V AC. impulse to second coil. All circuits isolated. Contacts rated 1 amp. Size 2 3/8 x 2 3/8 x 3 1/4". Removed from new equipment.  
No. 18A1436. Wt. 1 lb. Special Each ..... \$6.95

6 POINT SOLENOID IMPULSE STEPPER SWITCH. Comes with SP 6 point wafer. Also easily modified to turn any combination of standard switch wafers.  
Advances one step by 115 V AC. impulse to solenoid coil. On base 5 3/4 x 3 1/4 x 2" high. Wt. 1 lb. New.  
No. 18A1374. Special Each ..... \$1.95

## HARD-TO-FIND MERCURY SWITCH BARGAINS



2 AMP SPDT MERCURY SWITCH  
99c



HI-CURRENT HONEYWELL MERCURY SWITCH  
\$1.69

Slight tip sends mercury to other end for silent operation. Pin terminals. 3/8" dia. x 1 5/8" L. Removed from equipment. Wt. 3 ozs.  
18A1425. Ea. .... 99c

Rated conservatively 10 amps 115 V. AC. 5/8" dia. x 2 1/2" L., 6" wire leads. SPST for timers, relays, flashers, etc. Wt. 5 ozs.  
No. 18A1418. Special Each ..... \$1.69

## NEW MAGNETIC PROXIMITY SWITCH CIRCUIT CLOSING WHEN MAGNET APPROACHES SWITCH ACTUATES FROM MAGNETIC FIELD NO MECHANICAL CONTACT REQUIRED



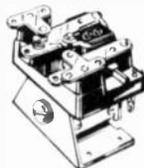
\$1.95

SMALL SIZE

DEPENDABLE FAST OPERATING

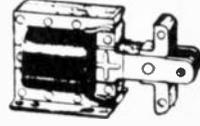
An exciting new concept of proximity switching at a tremendous saving.  
USED FOR:  
• Alarm Systems. • Limit switch. • Rotational counting. • Liquid level. • High speed communicator. • Door or window switch and many other industrial and hobby applications. — suggested applications with diagrams supplied.  
Hermetically sealed glass tube contains precious metal contacts rated 15 watts. Max. 1 amp or 250 volts AC. Measures 2" long, 3/8" diameter with 5/8" leads. Magnet 1 1/2" x 2" square. Both easy to mount because of small size and light weight. Shpg. wt. 6 oz.  
No. 19A7193. Net Each ..... \$1.95  
MINIATURE PROXIMITY SWITCH. Only 3/4" long, 1/2" dia. with 3/4" wire leads. Glass tube with 10 watt contacts. Maximum of 1/2 A. or 50 V. Miniature magnet included. Shpg. wt. 6 oz.  
No. 19A7194. Net Each ..... \$1.95

### ADVANCE HI-CURRENT 24 VOLT DC RELAY



Reg. Net \$6.90  
\$1.88  
• SMALL SIZE • STURDY CONSTRUCTION  
Features small size, sturdy construction. A natural for control circuits up to 15 amps. DPST. Size 1 7/8" high, 1 1/2" wide, 1 1/2" long. 6-32 topped holes in base. Wt. 4 1/2 ozs.  
No. 18B793. Special Each ..... \$1.88

### 115 V. AC SOLENOIDS



VALUES TO \$6.00 AS LOW AS 99c  
POPULAR SMALL SIZE  
Max. 55 oz. lift, 5/8" stroke. Intermittent operation. Frame size 2 x 1 1/4 x 1 1/2" H. Laminated armature positively positioned in frame. Mtg. flange removable. Wt. 1 lb. \$3.50 value.  
No. 18B308  
Special Each ..... 99c

### MINIATURE 120 V. 60 CY SOLENOID



While Limited Quantity Lasts 99c  
Very highest quality C-frame construction with molded coil and quick-connect terminals. Continuous duty design, 5 W. 7 VA. Maximum recommended stroke 1/2". Typical plunger force at 1/4" stroke is 5 oz. Frame size 3/4" sq. x 1 1/8" long. Series 860-205-3. Made by Controls Co. Priced near factory cost. Wt. 2 oz. Limited Quality Special.  
No. 18A1357. 99c  
Each ..... 99c

EXTRA POWERFUL  
Most powerful, most useful we've ever offered! Exerts 20 to 30 lb. pull with 1" stroke. Armature positively positioned in core. Intermittent duty. Also operates on 12 V. DC. Has .250" quick disconnect tab terminals. Size 2 3/4" L. x 2 3/8" W. x 2 1/8" H. Wt. 1 1/4 lbs. \$6.00 value.  
No. 18C739 10 @ \$1.79  
Spec. Each ..... \$1.95 Each

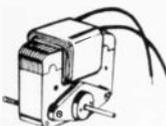
POWERFUL CONTINUOUS DUTY  
Heavy duty solenoid made by Controls Corp. 10 to 20 lb. pull, 1" stroke. Armature positively positioned in core. Has .250" quick disconnect tab terminals. Size 2 3/4 x 2 3/8 x 2 1/8" H. Wt. 1 1/4 lbs. Price Slashed!  
No. 18A1327 10 @ \$1.95  
Each ..... \$2.19 Each



# Bargains!

## MOTORS AND COUNTERS

### BRAND NEW FULLY GUARANTEED



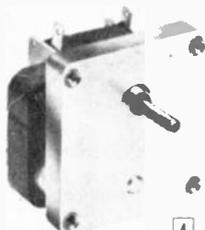
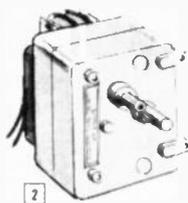
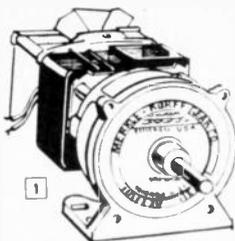
**117 V. AC MOTOR DAYTON 4K930**

Very high quality shaded pole.  $\frac{3}{16}$ " x  $\frac{1}{8}$ " long shaft. 3000 RPM. CW rotation. Frame size  $2\frac{3}{4}$  x  $2$  x  $2\frac{3}{4}$ " H. No. 18A1432. **\$1.95**

Special

## SPECIAL PURCHASE SAVINGS ON GEAR DRIVE MOTORS

### EXTRA RUGGED GEAR MOTORS



**① MERKLE-KORFF GEAR MOTORS.** Very high quality. Fully enclosed die-cast gear case, shaded pole motor. Removed from equipment, in excellent condition. 115 V. 60 Hz AC. Frame size approx.  $3\frac{1}{2}$ " dia., 4" long. Wt. 3 lbs. Supply limited.  
No. 18A1428. 3 RPM. CCW Rotation.  $\frac{3}{8}$ x $\frac{1}{2}$ " long shaft.  
No. 18A1429. 6 RPM. CCW Rotation.  $\frac{3}{8}$ x $\frac{1}{2}$ " long shaft.  
No. 18A1430. 12 RPM. CW Rotation.  $\frac{3}{8}$ x $\frac{1}{2}$ " long shaft.  
**YOUR CHOICE EACH \$4.95**

### COMPACT SLOW SPEED GEAR MOTORS

115 V. 60 cy. fractional horsepower shaded pole motors with permanently lubricated enclosed gear trains. Great for rock tumblers, barbecue spits, displays, models and hobby work. All priced below factory cost.

**② POWERFUL 2-SPEED, 2 RPM and 100 RPM with two  $\frac{3}{8}$ " dia. output shafts.** Develops over 100 in.-oz. torque.  $3\frac{3}{8}$ x $2\frac{1}{8}$  x 3" D. Wt. 3 lbs. No. 18B93. **\$4.95**

**③ CONTINUOUS DUTY 18 RPM.**  $\frac{1}{4}$ " shaft will accept pulleys, clamps, etc.  $2\frac{3}{8}$  x 3 x 4". No. 18C355. Wt. 2 1/2 lbs. Special Each **\$4.95**

**④ VERY HIGH TORQUE 35 RPM.** Small size for its terrific power, only  $2\frac{3}{4}$  x  $2\frac{1}{4}$  x 3" H.  $\frac{1}{4}$ " dia. x 1" long shaft. Beautiful design and construction. Wt. 2 1/2 lbs. No. 18A1321. New. While Limited Supply Lasts, Ea. **\$4.95**

**350 RPM. CW Rotation.**  $\frac{1}{4}$  x  $\frac{5}{8}$ " long shaft. Extra heavy motor. Size same as 18A1321 above. Wt. 3 lbs. No. 18A1431. **\$5.50**

New. While Limited Supply Lasts, Each

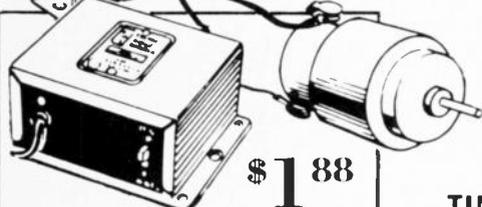
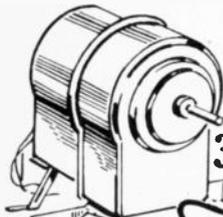
### MIDGET REVERSIBLE DC MOTOR

**POWERS MODEL CARS, BOATS, TOYS, Etc**

Operates from 1 1/2 to 6 V. dry cell batteries. High torque, PM type.  $1\frac{1}{2}$ x $1\frac{1}{2}$  x  $1\frac{3}{8}$ " H. Shaft  $\frac{5}{16}$ " dia. x  $\frac{1}{16}$ ". Wt. 10 oz. No. 18B379. Special 3 For..... **99c**

For..... **\$3.49**

**3 FOR 99c**



**\$1.88**

**TINY HIGH POWER MOTOR WITH POWER SUPPLY**

**A FANTASTIC BUY FOR MODEL BUILDERS!**

1 x  $1\frac{1}{2}$ " long motor develops high torque, revs up fast on 14 V. DC @ 1.5 A. power pack. Perfect money-saving combination for model racing hobbyist, etc. Made in U.S.A. No. 18C117. **\$1.88**

Special Motor & Power Pack



**TIMING MOTORS \$1.95**

Precision type as used in clocks, timers, etc. Overall size  $2\frac{3}{8}$ x $2\frac{1}{8}$ x $1\frac{1}{2}$ " D. behind shaft. Operates on 120 V. 60 cy. AC. Shpg. wt.  $\frac{1}{2}$  lb.

No. 18A1296. Haydon  $\frac{1}{2}$  RPM. No. 18A1424. Ingraham 1 RPM. No. 18A227. Sessions 20 RPM.

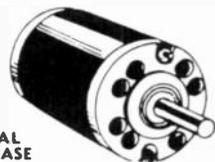
Choice **\$1.95** 10 Lots, **\$1.75**  
Each.....

### NEVER PRICED LOWER!

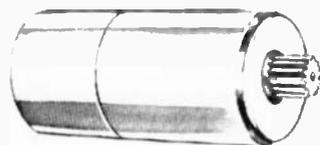
### G.I. 4-POLE CHANGER & RECORDER MOTOR



Shaded pole induction type, for 115 V. 60 cy. AC. 1/70 HP cont. duty 1740 RPM. Has plenty power for all sorts of devices... quiet fans, tape recorder-player mechanisms, record turntables, displays, etc. Double  $\frac{1}{2}$ " x  $\frac{7}{8}$ " shaft with 2 step pulley attached suitable for round or small V belts. Size 3" below shaft x  $2\frac{7}{8}$ " square. Wt. 3 lbs. No. 18A1356. Special Purchase Value... **\$2.95**



**SPECIAL PURCHASE**



**PRICE REDUCED FROM \$4.95 PRECISION MINIATURE DC MOTOR**

**FACTORY COST WAS SEVERAL TIMES OUR LOW PRICE!**  
Perfect Power for Slot Racers

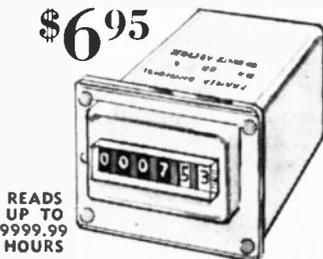
Permanent magnet field. For race car models and other motor powered devices. 12 to 16 V. DC, developing higher power and speed as voltage is increased. Ball race bearings. Output gear approx.  $\frac{1}{8}$ " dia. with 12 teeth mates perfectly with hobby type crown drive gears. Case 1  $\frac{1}{2}$ " dia.,  $1\frac{3}{4}$ " long. American made. No. 18C803. Special Each..... **\$3.95**

### REDMOND 5-6 V. DC MOTOR PERMAG FIELD

Was made for NiCod battery powered appliance. Excellent for experimental or other DC operated devices. Rotation reversible by changing polarity of DC power source. Change speed by varying voltage applied. Makes excellent drive for servo control systems. Bronze bearings. Double  $\frac{1}{4}$ " shaft, extends  $\frac{3}{4}$ ". Frame size  $2\frac{1}{2}$ " dia., approx.  $3\frac{1}{4}$ " long. Shpg. wt. 2 lbs. No. 18B344. Special Each... **\$1.95**

### CRAMER RUNNING TIME METER

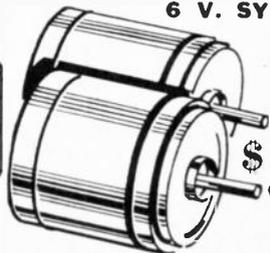
**\$6.95**



**READS UP TO 9999.99 HOURS**

Digital readout in hours, tenths and one hundredths. For measuring elapsed time or total running time. Commonly used on electronic equipment, transmitters, receivers, industrial machines, etc. Accurate clock motor runs on 40 V. 60 cy. AC. Resistor supplied for 115 V. AC. Body is  $2\frac{1}{4}$ " sq.,  $3\frac{1}{2}$ " behind panel. Readout dials are behind  $1\frac{7}{8}$ x $1\frac{1}{2}$ " plastic face. Made by Cramer, Model BH, for an expensive computer. Being offered elsewhere for over \$30. 18B29. Wt. 1 lb. Spec. Ea... **\$6.95**

### MINIATURE 6 V. SYNCHROS



**LOWEST PRICE EVER!**

**\$3.95**

**PER PAIR**

Miniature size for antenna direction indicators, for home-made weather instruments, experimenting, etc. Units are used in pairs, one at the source, the other at the remote indicating position. 5 wire interconnecting cable required. The shafts will remain precisely in step when external rotation force is applied to the shaft of the source unit. Made by Bendix for aircraft equipment. Designed for 26 V. AC @ 400 cy. use. Works efficiently from 6 V. AC @ 60 cy. Wiring diagram included. Size 1  $\frac{1}{2}$ " x  $1\frac{1}{2}$ " shaft  $\frac{1}{8}$ x $\frac{1}{4}$ " long. 18B348. Shpg. wt. 1 lb. Per Pr... **\$3.95**  
13A971. 6.3 V. AC Transformer. **\$1.19**

## SPECIAL PURCHASE BARGAINS!

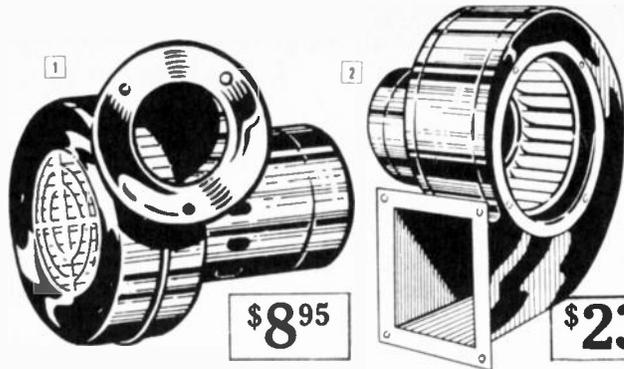
### VEEDER-ROOT ELECTRIC COUNTER

High quality industrial type unit with digital readout dials. Counts up to 999,999, non-resetting. Single electrical pulse moves counter 1 digit. Has 110 V. DC coil, 5000 ohms. Use on 115 V. AC by adding small power rectifier.  $1\frac{1}{2}$ " x  $1$  x  $\frac{3}{8}$ " H. Ideal for use with an electric eye for counting people or objects. Original cost several times our price. Shpg. wt. 10 oz. No. 18B973. Special Purchase Price..... **\$5.95**

### HIGH SPEED 115 V. AC ELECTRIC COUNTER

Six digit readout. Counts up to 999,999 and repeats. Very high quality industrial type, made for surface or behind panel mounting. Operates quietly in any position. Single, 25 Millisec. or longer electrical pulse moves counter 1 digit. Body size  $3\frac{1}{4}$  x  $1\frac{3}{8}$  x  $2\frac{1}{2}$ " high. Cover removable for resetting, inspection, etc. Made by Durant. Model 6Y13RMFS. Shpg. wt. 1 lb. No. 18A1307. While Limited Quantity Lasts..... **\$8.95**

Special



# WHOPPING SCOOP VALUES!

## 115 VOLT AC BLOWERS

FOR COOLING, DRYING, VENTILATING, EXHAUSTING, ETC.

\$8<sup>95</sup>

\$23<sup>50</sup>

High quality, dependable, efficient, quiet-operating blowers. Have shaded pole induction type motors; smooth-running Torrington wheels; well designed glossy black enamel housings.

Fine for photo dark-rooms, forced ventilation of appar-

atus, forced draft to furnaces, exhausting bad odors or harmful vapors in kitchen, lab, etc., cooling of tubes and equipment plus hundreds of other useful home, shop, or industrial applications. All are 115 V. 60 cy. AC.

\*Pancake style with internal motor for mounting inside chassis, etc.

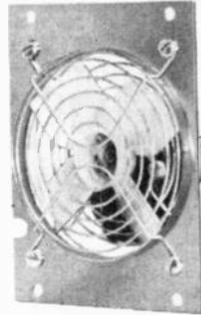
Stock No.	Illus.	Air Cap. CFM	Free Air RPM	Full Load Amps.	Wheel Diam.	Intake Diam.	Outlet	Flange	Overall Size (Less Flange)			Lead Length	Wt. Lbs.	Spec. Each
									H.	W.	D.			
41A4002	(1)	15	3160	0.21	2"	1 7/8"	1 1/4" Rnd.	2 1/8" Rnd.	3 3/8"	4 3/8"	3 3/8"	12"	2 1/2	\$8.95
41A4003	(1)	100	2870	0.71	3"	3 1/8"	2 1/8" Rnd.	4 3/8" Rnd.	5 3/8"	6 3/8"	6 3/8"	12"	4 1/4	11.45
41A4004	(1)	140	3020	1.02	3 1/2"	3 1/2"	2 1/2" Sq.	5 1/2" x 1"	7 1/2"	6 3/8"	6 1/4"	6"	5 1/4	11.95
41A4005	(2)	525	1570	3.25	6 1/2"	5 1/2"	5 3/8" x 4 1/4"	6 3/8" x 5 1/2"	11 1/4"	9 3/8"	10 3/8"	12"	11	23.50

# Bargains!

## FANS AND BLOWERS

### BRAND NEW FULLY GUARANTEED

SPECIAL PURCHASE BARGAIN!



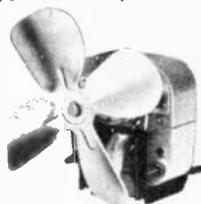
**DELUXE 4-INCH PANEL MOUNTED FAN**

PRICE REDUCED!  
**\$4.95**

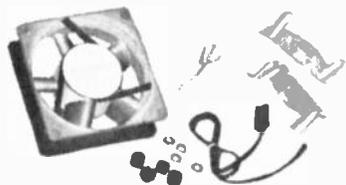
115 VOLT AC CONTINUOUS DUTY

Quiet, efficient air circulator for cooling tubes, transformers, amplifiers, etc. Small size fits inside most equipment. Four bladed nylon impeller with lifetime lubricated Howard motor moves approx. 100 cu. ft. of air per minute. Formed wire grille completely encloses blade. Panel size 4 1/8" x 6 1/8". Shpg. wt. 2 lbs.  
No. 18A1286 Special Each **\$4.95**

**4-INCH FAN**  
**\$2.49**



Quiet operating, compact balanced assembly especially well suited for cooling tubes and equipment. Can be mounted right on the chassis with other parts. Powered by high quality continuous duty shaded pole motor equipped with bronze oilite bearings. 1/4" shaft. With four blade Torrington impeller. Size 2 1/2" W. 3" H. 3" deep. For 115 V. 60 cy. AC.  
No. 18A1353  
Special Each **\$2.49**  
10 ea **\$2.19**  
Each



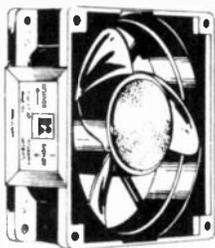
### NOISELESS 4-INCH HI-FI "BOXER" FAN

Genuine "Boxer", made by IMC Magnetics Corp. Engineered specifically to cool and ventilate enclosures for amplifiers, tuners, etc. Operates with a minimum of noise. Comes with mounting kit, vibration damping grommets, new self-adhesive easy mount and AC cord for wiring into equipment power switch. Can be installed to pull in or expell air or simply blow across components. Frame size: 4 1/8" sq. x 1 1/2" deep.

No. 41A4047. Wt. 3 lbs. **\$14.95**  
Net Each

### BARGAIN PRICED!

**4-INCH "MUFFIN" FAN**  
**\$9.88**



RATED 100 CFM  
115 V.  
60 CY.

Highly efficient, quiet operating, continuous duty. Made especially for circulating cooling air through electronic equipment, music systems, transmitters, etc. Very highest quality. Noiseless induction motor. Removed from new equipment—guaranteed perfect. Made by Rotron. 4 1/8" sq. x 1 1/2" deep. Wt. 3 lbs.

No. 18A1354  
Special Each **\$9.88**

### MIDGET BLOWER



HIGHEST INDUSTRIAL QUALITY

REC. NET AT LEAST DOUBLE **\$6.95**

Small size, high output approx. 50 CFM. Has molded nylon blower wheel 2" dia., 1" wide. Molded housing has 1 1/2" dia. air inlet, 1 1/4" x 1 3/8" outlet. Powered by Howard Ind. motor rated 16 W. .003 HP, 115 V. 60 Hz AC. Overall size 4 3/4" max. dia., 3" deep.  
No. 18A1440.  
White Supply Lasts **\$6.95**

### 6-INCH VENTILATING FAN

**\$3.95**



Circulates 400 CFM. Powered by Fosco type 21 motor designed especially for ventilation and exhaust fans. Precision, open frame shaded pole, 1800 RPM motor with bronze bushings.

One piece Torrington stamped aluminum blades with Allen hex screw. Motor 3 1/4" dia. Overall length 4". For 115 V. AC. Shpg. wt. 2 lbs.  
No. 18A1293. Special Each **\$3.95**

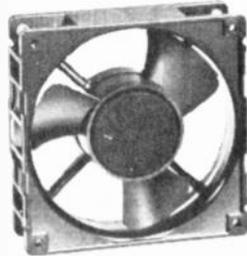
### A B-A SPECIAL PURCHASE BARGAIN!

### 4-INCH ROTRON "SENTINEL" FAN

**\$10.95**

B-A Buyers found a small lot of these precision balanced ball bearing rotor fans. They're made for continuous duty air movement in transmitters, amplifiers, etc., where heat and long duty cycle might disable fans with ordinary bearings. None better for that new linear amplifier! Size 4 1/8" sq. x 1 1/2" deep. Shpg. wt. 3 lbs.  
No. 18A1340.  
While They Last **\$10.95**

Rated 100 CFM  
115 V.  
50 60 Cy.

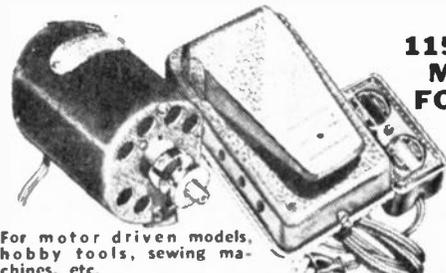


### 115 VOLT AC-DC MOTOR WITH FOOT CONTROL

AT LEAST A \$12.95 VALUE!

ALL FOR ONLY...

**\$8.88**



For motor driven models, hobby tools, sewing machines, etc.

1/15 HP Motor. Powerful series-wound brush type. Rotates counter clockwise. With 115 V. AC or DC applied direct to motor, no-load speed is approx. 10,000 RPM. With foot control rheostat, speed can be varied smoothly from slow to fast. Motor shaft is 1/4" dia., extends 13/16". Overall size: 2 1/4" H. 2 5/8" W. 4 3/8" L. Black finish, with 23" lead. Name plate rating 1.5 ampere.

Foot Control. Top quality speed control for above motor. 3 3/8" W. 5 3/8" L. 2 1/2" H. Supplied with 10' AC cord and plug-in junction block to accommodate motor and light outlet.

Combination Deal — Motor, Pulley, 6" Round Bel't, Foot Control and Cord Assembly. Shpg. wt. 4 lbs.  
No. 41A4006. While They Last **\$8.88**

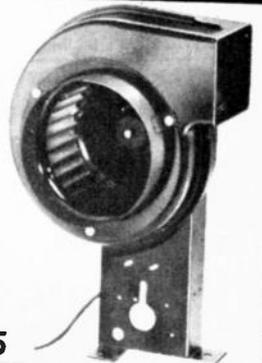
## B-A SUPER BARGAIN VALUE

### FASCO HIGH POWER BLOWER

MOVES OVER 250 CFM

Big volume air mover for cooling and ventilating. Has 5" diameter intake with removable flange and 3 x 3 3/8" rectangular outlet. Equipped with continuous duty Fasco shaded pole motor rated 1.1 A. and a smoothly balanced Torrington wheel 5 1/2" dia. x 2 3/4" D. Overall size 8 1/2" x 7 1/2" x 8 1/2". Channel bracket illustrated provides optional elevated support. Shipped knocked down; is easily assembled with just 2 nuts, 3 screws. Operates on 115 V. 60 cy. AC. Shpg. wt. 9 lbs. Limited Quantity

No. 18A1349. Special Ea. **\$14.95**





# Bargains!

## EXPERIMENTERS & BUILDERS

### BRAND NEW FULLY GUARANTEED

### RECORDING LEVEL METER



### RECORDING LEVEL METER

Can be added to most recorders. Far better than usual neon type indicator for showing proper signal to make good recordings. Meter has basic movement of 0-1 MA. In plastic case, size 3/8"x1 3/8"x1 3/8" deep. Supplied with meter rectifier. Wt. 6 oz. **\$2.45**  
No. 18A1396. Special Each.

## EXCITING METER VALUES!



### MINIATURE PANEL METERS

# \$3.95

**ONLY 1 5/8" SQUARE LATEST MODERN DESIGNED CLEAR PLASTIC CASES**

Standard D'Arsonval moving coil type with zero set. Mounts in front or behind panel in 1 1/2" diameter hole. Silvered dial and black numerals. Precision quality import. At least a 50% savings. Wt. 1/2 lb.

Stk. No.	Type	Each	Stk. No.	Type	Each
35A6168	0-1 DC Milliamps	\$3.95	35A6170	0-100 DC Microamps	\$4.95
35A6169	0-50 DC Microamps	4.95	35A6171	"S" Meter Cal. 0-9	3.95

**VOLUME LEVEL (VU) METER.** Calibrated in db. and percentage. **\$4.95**  
No. 35A6172 Net Each.

### POPULAR 2-IN. EDGEWISE TYPE

# \$3.99

Precision moving coil instruments with zero set. Beautifully constructed, top quality throughout. Excellently shielded against magnetic fields. Scales calibrated black on bright metal with red pointer. Body molded plastic with clear plastic front. Mounts in 3/8" x 1 3/8" rectangular hole. Wt. 2 oz.



35A6173. 0-1 DC Milliampere. Ea. **\$3.99**

## SPECIAL PURCHASE BARGAINS!

### DUAL MOVEMENT 200 MICROAMP METER

# \$5.95



Ideal for Stereo Balance, Recording Levels, Forward and Reflected Power. Has Many Experimental Applications

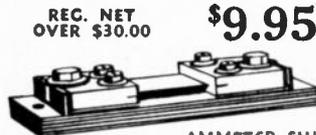
Square 3" clear plastic case, 1 black pointer for "left" scale, 1 red pointer for "right" scale. Finest D'Arsonval movements. By matching pointers stereo levels are easily and perfectly adjusted. Full scale sensitivity 0.5 volts DC. Mounts in 2 3/4" hole. No. 18A1366 **\$5.95** Special Each

### PAIR OF METERS FOR BATTERY CHARGERS OR DC POWER SUPPLY



VOLTMETER

AMMETER



AMMETER SHUNT

2 meters and shunt. Highest industrial quality meters worth over three times our price. Meter ranges 0-50 DC volts and 0-80 DC amps. Ammeter is supplied with accurate 50 MV shunt allowing remote indication of high current circuits. Round 3" case style, hermetically sealed construction. By Marion and Roller Smith, Shpg. Wt. 3 lbs. **\$9.95**  
No. 18A1420. While limited supply lasts, All For.

## SAVE ON POPULAR 115 V. AC POWER RELAYS!



**10 AMP DPDT OPEN STYLE**  
REC. NET OVER \$3.70 **\$2.99**



**5 AMP 3PDT ENCLOSED PLUG-IN**  
REC. NET OVER \$7.00 **\$3.99**

Fast acting, high quality. Operates on 115 V. 60 Hz AC. Built to U/L specs. Continuous duty for industrial applications. Frame size 1" x 29/32" x 1 1/2" H.

Bargain buy! Fits 11 pin standard socket. Continuous duty silent operation. In see-thru plastic case 1 1/2" sq. x 2" high. Shpg. wt. 8 oz. No. 18A1444. **\$3.99** Special Each  
No. 12A1441. 11 Pin Socket for above. Each .29c

No. 19A1842. Special Each. **\$2.99**  
238

## BEST CB TESTER VALUES!

### IMPORT SPECIAL

# \$6.88

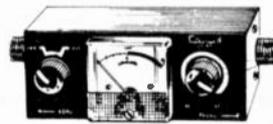


### R. F. Field Strength Meter

Makes transmitter or antenna tuning quick and easy. Gives positive indication of radiated signal on sensitive microammeter. Has sensitivity adjustment, collapsible antenna. Includes crystal earphone for monitoring transmitter speech quality. Requires no battery. In gray enameled case 2 3/8"x1 3/8"x3 1/8" H. Magnet in bottom holds tight to any steel surface. No. 10A3019. **\$6.88** Special Import Value.

### SWR-RF POWER METER

# \$9.95



### Forwarded/Reflected

Uses the same perfected design principles found in expensive instruments. Exceptionally well constructed. Measures relative power output and % reflected power on 52 ohm coax line. Transmitter output can be monitored continuously by leaving in circuit. Simple to use. Scale calibrated in SWR. Size 4 3/4"x2 1/4"x2" H. No. 10A3018. **\$9.95** Special Import Value.

## NEW! AMPHENOL COAXIAL CABLE ASSEMBLIES



AS LOW AS **\$2.25**

FOR CB-AMATEUR-MONITOR RECEIVER ANTENNA CIRCUITS  
Finest low-loss polyfoam coax, attached PL259 plugs, factory assembled to save time and money.

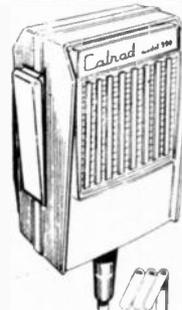
Stk. No.	Description	Wt.	Net Each
2A4000	3 ft. RG 58/U, PL-259 Both Ends	3 oz.	\$2.25
2A4001	20 ft. RG 58/U, PL-259 Both Ends	1 lb.	3.25
2A4002	20 ft. RG 58/U, PL-259 One End, Spade Lugs on Other End	1 lb.	2.85
2A4003	50 ft. RG 8/U, PL-259. Both Ends	6 lbs.	9.25
2A4004	100 ft. RG 8/U, PL-259. Both Ends	11 lbs.	15.90

## SAVE! COAX CABLE CONNECTORS



Stk. No.	Type	Each	10 Ea.
① 12A2459	PL-259	\$0.49	\$0.45
② 12A2460	SO-239	.45	.42
③ 18A1382	M-359	1.39	1.19
④ 12A2461	PL-258	.95	.85

## PRICED FOR LESS!



### NEW CERAMIC MOBILE MIKES WITH TRANSISTOR AMPLIFIER AND VOLUME CONTROL

Up to 15 db. more gain compared to other communications mikes. Provides exceptional speech clarity and higher average percentage of modulation for the utmost communications range. Rear mounted gain control allows convenient single hand operation. Has press-to-talk three-pole double throw switch to operate all CB equipment. Silicon transistors and ceramic element provide temperature and humidity protection. In tough molded case with 5 ft. retractable cable and mounting clip. Wt. 1 lb. No. 29A628. **\$15.95** Top Quality Import. Special Each.

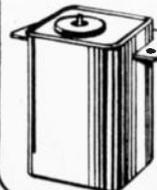
2 FOR **\$29.95**

CERAMIC MOBILE MIKE Less Transistor Amplifier and Volume Control. Top quality voice response, 300 to 3000 Hz range. Has high impedance ceramic cartridge, push-to-talk switch and 3 conductor shielded 5 ft. retractable cord with mtg. clip. In same style case as transistorized mike above. Wt. 1 lb. No. 29A629. Imported. Special. **\$8.95**

2 FOR **\$16.50**

## B-A SUPER BARGAIN VALUE!

### 3.6 MFD. 5000 VOLT FILTER CONDENSER HIGH CAPACITY—SMALL SIZE



SIMILAR RATED CONDENSERS COST OVER \$35.00

# \$6.95

New production surplus from modern space age projects. Very small size for voltage and capacity rating. Ideal high capacity filter for HV supply on linear RF power amplifiers. Case only 2 1/4"x2 7/8"x4 1/8" H., with handy mtg. brackets attached to sides. Shpg. wt. 2 lbs. No. 18A1441. **\$6.95** Special Each

# SAVE ON THESE POPULAR CODE SETS!

## TRANSISTOR CODE PRACTICE OSCILLATOR



**\$9.95**

KEY INCLUDED

Top import value compares with other oscillators selling for twice this price. Perfect for the learning beginner or the professional who wants to keep in practice. Variable pitch control. Switch selects tone, light or combination operation. Built-in speaker has sub-miniature headphone jack. Oscillator size 6 1/8 x 3 1/2 x 2 5/8". Miniature earset, key, batteries and instructions supplied.

No. 9A3105. Wt. 2 lbs. **\$9.95**  
Complete Unit

## CODE PRACTICE SET



**\$1.95**

NEVER BEFORE SUCH A LOW PRICE

FINE QUALITY

Beautifully made import. Gives clear steady "code note" at ample listening level, or will operate one or several pairs of headphones wired in parallel. Two sets, each with headphones and hooked together with wire will transmit code messages 100 ft. apart. Uses standard flashlight battery.

No. 9A3106. Less Battery. Wt. 1 lb. Net Each **\$1.95**  
2 For **\$3.59**  
No. 21A1. Battery for above... 17c

## B-A BARGAIN SPECIAL TELEGRAPH KEY



**69c**

WORTH MUCH MORE!

Finest key we've seen at anywhere near this low price. Neat, import made with heavy 1/8" contacts, bright plated sturdy steel lever arm, fully adjustable spring and spacing, brass hardware, molded bakelite base. Wonderful for code practice or ham station operating. Wt. 10 oz.

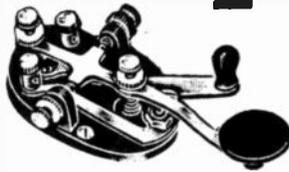
No. 9A3093. Special Each **69c**  
LEARNING THE CODE  
ARRL Book provides basic instruction for sending and receiving. Wt. 6 oz. No. 16A63. Each... **50c**

## DELUXE BRASS FAST-ACTION SPEED KEY

We thought we had seen 'em all... but this one is different, even better than the famous J-38. Quadruple ball bearing pivots give key fast action... ideal for novice, perfect for high speed operator. Base is bright polished solid brass, silver contacts. Fully adjustable for the right "feel". Nicked, knurled hardware, shorting lever switch and standard black knob. Believe us, this import is an unusual value and would ordinarily cost several times more. Shpg. wt. 1 1/2 lbs.

No. 9A3107. Special Each **\$2.95**

IT'S EVEN BETTER THAN THE POPULAR J-38 SIGNAL CORPS KEY **\$2.95**



## PROFESSIONAL STYLE EQUIPMENT KNOBS

**39c**



BIG IMPORT SAVINGS

Beautifully made, will really dress up equipment. Skirted, 1 1/4" D. with white filled 0 to 10 marking, and brass insert. Specify Black or Grey. Wt. 2 oz.

No. 12A2007. 10 Lots, **39c** Each  
No. 12A2008. Black or Gray... **39c**  
10 Lots, Each... **35c**

## VELVET SMOOTH VERNIER DIALS

**\$1.45**



IMPORT COMPARE WITH DIALS SELLING FOR OVER \$4.00

Planetary drive ratio 8 to 1 in 180° counter clockwise. Brushed silver dial with deep-etched black-filled markings reads 0 to 100. Knob and housing molded black phenolic. Surface mounting for 1/4" shaft. Shpg. wt. 8 oz.

No. 12A2458. 1 1/2" Dia. Each... **\$1.45**  
No. 12A2306. 2" Dia. Each... **\$1.59**  
No. 12A2009. 3" Dia. with vernier to 1/10th division. Each... **\$2.39**

## HI-FREQUENCY BUZZER

FOR CODE PRACTICE **89c**



Fine companion for key above. Gives clear, steady "code" note. Fully adjustable. Operates on single 1 1/2 V. battery. In molded bakelite case 2" dia. Imported, at lowest cost ever. Wt. 4 oz. No. 9A3104. Special Each **89c**  
21A1, ER950 Battery. Net Ea... 17c  
No. 12A2021. Clip-In Battery Holder Net Each... **30c**

## HIGH QUALITY CRYSTAL HEADPHONES



**\$4.95**

Meets professional lab standards. Flat response from 100-10,000 cps. Hi-impedance 85,000 ohms for monitoring without appreciable effect on equipment. Adjustable soft cushioned headband. Cord with standard tips. Lightweight, only 8 ozs. Shpg. wt. 1 lb. No. 32A9008. Import Special, Each... **\$4.95**

## STETHOSCOPE TYPE

### CRYSTAL EARSET

BIG IMPORT SAVINGS **99c**



Modern, lightweight, under-chin design. Fully adjustable. High impedance, wide range. 3 ft. cord. No. 32A9004. Wt. 8 oz. Each **99c**

## SUB-MINIATURE PLUGS & JACKS

Solder terminals. Plug 1" long x 3/8" dia. Jack mounts in 1/4" hole. Wt. 1 oz. No. 12A6080. Red Plug. Each... **29c**  
No. 12A6081. Black Plug. Each... **29c**  
No. 12A6082. Metal Plug. Each... **33c**  
No. 12A6072. Jack. Each... **15c**

# Bargains!

## EXPERIMENTERS & BUILDERS

### BRAND NEW FULLY GUARANTEED

## POCKET RADIO EARPHONES



**2 FOR 99c**  
Used with most transistor radios. Sub-miniature plug attached. High quality import. No. 32A9005. Special, 2 For... **99c**

## MAGNETIC HEADPHONE

**69c**



Real big savings on a rugged headphone. Polished bakelite case. Excellent for code practice, shortwave listening, etc., 1000 ohms. Durable 4 ft. cord attached. Wt. 8 oz. No. 18A302. Special Each... **69c**

## Communications Quality IMPORTED HEADPHONES



**\$1.69**  
Rugged, lightweight, polished black and white bakelite headsets. Offers extra sensitivity and fidelity, at big extra savings. For the novice ham — or general use. Hi-Flux magnet, adjustable headband, flexible 42" cord with tips. Shpg. wt. 1 lb. No. 32A9006. 2000 Ohm. Net Each... **\$1.69**

## CRYSTAL EARPHONE

Extra sensitive high - power high impedance. 3 ft. cord. Import **59c**  
No. 32A9000. 59c Wt. 4 oz.

## DYNAMIC EARSET



MIN. PLUG AND JACK **\$1.19**  
Lightweight, high quality. Imported. 3 ft. cord, plug, jack. Wt. 4 oz. 32A9002 - 2000 Ohm 32A9001 - 15 Ohm CHOICE, EACH... **\$1.19**

DYNAMIC EARSET with ultra miniature .097" dia. plug (no jack) for most Japanese radios. 15 ohms. No. 32A9003. Wt. 3 oz. Each... **99c**

## CHROME PLATED BRASS TELESCOPING ANTENNAS

FOR WALKIE-TALKIES, TRANSISTOR RADIOS, ETC. Precision machined for perfect fit and action. Tapped at bottom for 4-40 screws and supplied with 6-32 and 8-32 adaptor for mounting in CB Walkie-Talkies, miniature radios, etc. No better quality anywhere! Imported. Average shpg. wt. 8 ozs.

Stock No.	No. Sections	Dia.	Length Collapsed	Length Extended	Net Each
10A3035	7	3/8"	8"	46 1/2"	\$1.95
10A3036	8	3/8"	7 1/2"	48"	1.95
10A3037	9	3/8"	7 3/8"	51"	1.95
10A7032	11	3/8"	6 1/2"	50"	1.95

① Telescoping Folding Monopole Antennas. Disappears completely. Swivels or folds 90° in any direction when extended. Finely made, heavily chrome plated brass. 8 sections extend to 23" overall. Shpg. wt. 1 1/2 lbs.

No. 10A7033. Top Quality Import. Special Each **\$1.95**

② 32 Inch 7-Section Antenna. 90° swivel joint. Has 4 inch section with adaptors at bottom to extend down into set. Brass, chrome plated.

No. 10A7031. Special Each **\$1.95**

③ 3-Section Telescoping Antenna with Suction Cup Base. Handiest we have seen! Fastens to top of TV, radio, table or auto. Fine for broadcast and shortwave, too. Extends from 11 to 26". Brass nickel plated. 7 ft. lead attached.

No. 18B92. Special Each **99c**

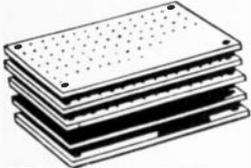




# Bargains!

## EXPERIMENTERS AND BUILDERS

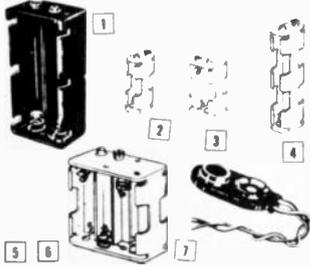
### BRAND NEW FULLY GUARANTEED



### KIT OF 5 PANELS

Handy boards for modern solid state projects. Ideal for pancake stacked construction using spacers at corners. (See picture.) All 6"x3 1/2"—one each brushed aluminum, black phenolic and 3 tan phenolic. Tan boards are punched with 1/8" holes on 3/8" center. Great for modular construction. Shpg. Wt. 6 oz.

No. 5A5577. Net Each ..... **\$1.49**



### BATTERY HOLDERS

Same as used in most transistor portables. Has standard snap-on battery connectors. Sturdy plastic construction. Aver. Shpg. Wt. 3 oz.

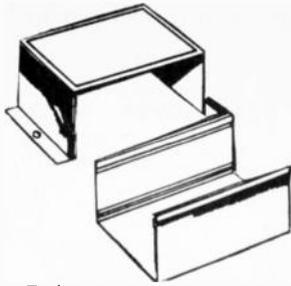
- ① Holds 2 "D" Cells. No. 12A2453. Each ..... 92c
- ① Holds 4 "D" Cells. No. 12A2449. Each ..... **\$1.49**
- ② Holds 2 "AA" Cells. No. 12A2450. Each ..... 49c
- ③ Holds 4 "AA" Cells. No. 12A2451. Each ..... 59c
- ④ Holds 4 "AA" Cells. No. 12A2452. Each ..... 59c
- ⑤ Holds 6 "AA" Cells. No. 12A2454. Each ..... 76c
- ⑥ Holds 8 "AA" Cells. No. 12A2455. Each ..... 83c
- ⑥ Holds 10 "AA" Cells. No. 12A2456. Each ..... 96c
- ⑦ Double-Snap Fastener for 9V battery and battery holders above. No. 12A2012. Each ..... 16c



### COAXIAL TYPE POWER PLUGS

Standard for many walkie-talkies, recorders, radios. Consists of 1 large and 1 small size plug. Top quality construction. Safe non-shorting design. Easily attached to power supply leads. Wt. 3 oz.

- No. 12A6064 ..... **79c**
- Special, Pair
- Power Plug Adaptor. One end like above, other end has jack for sub-miniature plug. No. 12A2492. Each ..... **49c**



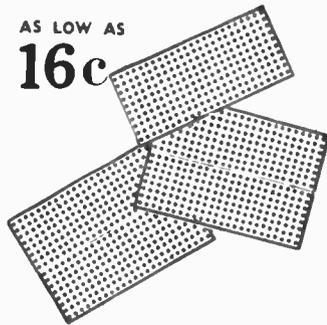
B-A EXCLUSIVE PURCHASE  
**ALL ALUMINUM 2-PIECE BOX** **\$1.69**

Best enclosure we have seen for builders' projects—very professional appearance. Heavy extruded aluminum. Lid snaps into place, no screws showing. Has "U" channel that printed circuit board slides into. Case may be drilled or punched for transistor mounting. Thick aluminum makes excellent heat sink. Size 3 5/8"x2 3/4"x1 3/4" H. Shpg. Wt. 4 oz.

B-A Exclusive Purchase No. 5A3043. Each ..... **\$1.69**

AS LOW AS

**16c**



### PERFORATED BOARDS

Quick, convenient way for assembling transistor circuits. 1/8" thick, 1/8" dia. holes set 3/8" between centers. Average wt. 4 ozs.

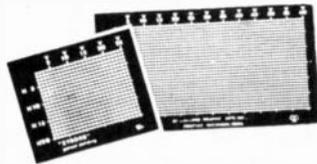
No. 12A9626. 2 7/8"x3 3/8". Each ..... **16c**

No. 12A9628. 3 1/2"x6 3/4". Each ..... 45c

No. 12A9630. 7 1/8"x6 3/4". Each ..... 75c

No. 12A9631. 10 1/2"x7 3/8". Each ..... **\$1.20**

12A2309. 1/8" dia Clips. 100 For **\$1.75**

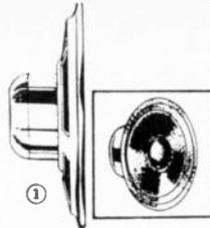


### NEW "ZYBORD" UNIVERSAL PRINTED CIRCUIT BOARDS

Requires No Special Tools — Only a Size 46 Drill, Knife and Soldering Iron. A totally new design concept. Boards come with copper "circuits" etched in uniform 18 lines per inch pattern, horizontally on one side, vertically on other. By drilling through board at marked crossover points for interconnecting top and bottom circuits, then cutting foil at appropriate points for isolation or for inserting series components, any circuit can be created. Allows usage of all component parts, transistors, IC packs, resistors, condensers, etc. Comes with simple instructions for converting conventional schematic to Zybord layout. All boards have one ounce copper (.0014) both sides and solder plated with 63% tin and 37% lead to a thickness of .001 inch; or antenna thickness, .062. Phenolic is standard military grade paper phenolic NEMA XXXP. Glass is military grade glass epoxy NEMA G-10.

Stock No.	Fact No.	Description	Net Each
12A9695	7681P	3x3 1/4" Phenolic	\$1.00
12A9696	7681G	3x3 1/4" Glass	1.30
12A9697	7682P	3 1/2"x7" Phenolic	1.90
12A9698	7682G	3 1/2"x7" Glass	2.60
12A9699	7683P	7 x9" Phenolic	3.70
12A9700	7683G	7 x9" Glass	5.55

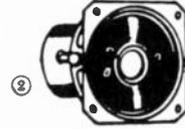
### MINIATURE SPEAKERS FOR TRANSISTOR POCKET PORTABLES



### PERFECT FOR REPLACEMENT BUILDERS AND EXPERIMENTERS TOO!

① Exact replacement for most pocket size portables. Also fine for all sorts of other miniature devices. Only 1 inch deep overall—frame and cone takes less than 1/4" behind panel. Mount by space saving clips. 8 ohm V.C. Top quality imports. Wt. 8 oz.

No. 34A405-2" Round. No. 34A411-2 1/2" Round  
No. 34A407-2 1/4" Round. No. 34A406-2 3/4" Round  
Choice ..... **99c** 10 Lots ..... **89c**  
Each ..... Each .....



### REALLY TINY PM SPEAKER

Measures only 1 1/2" dia. x 1" deep. Features amazing quality for its extreme small size. 3-8 ohm V.C. Precision import. Wt. 6 oz.

No. 34A410. Special Each ..... **\$1.49**



**\$1.29**  
**TERRIFIC VALUE!**

### MINIATURE CRYSTAL MIKES

Only 1" dia. x 3/8" deep—perfect for concealed location uses. Also fine as replacement cartridge for regular crystal mikes. Extremely sensitive with good output. High impedance. Import made. Wt. 3 oz.

No. 29A3031. Special Each ..... **\$1.29**  
As above 2" diameter. No. 29A3032. Special Each ..... **\$1.99**

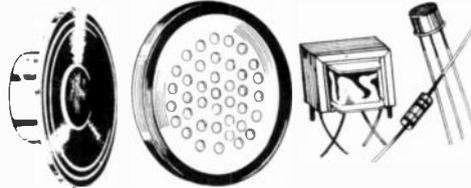


**SENSITIVE DYNAMIC MICROPHONE**  
**88c**  
**TINY SIZE 1 1/4" DIA. ONLY 1 3/4"**

B-A Buyers are constantly on the alert for unusual "finds" priced right for the electronic hobbyist. Such an item is this dandy little microphone/speaker with coupling transformer. Has many uses as a mike replacement cartridge, as an extra sensitive sound pickup device. Tiny transformer supplied for high impedance 100,000 ohm amplifier input. Wt. 4 oz.

No. 18C609. Special ..... **88c**

### B-A SPECIAL VALUE!

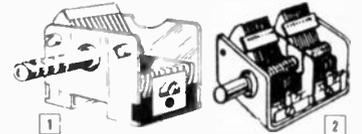


**MINIATURE PA KIT**  
**TRANSISTOR PARTS BARGAIN WORTH AT LEAST \$3.95**  
**\$1.39**

Terrific bargain priced kit originally built for transistorized loudspeaker. One or two parts alone worth our low price. Build a low power transistor public address system, intercom, listening and monitoring devices, etc. Contains 2 1/4" speaker, carbon mike, audio amplifier transistor, matching transformer, resistor and diagram. Operates from 6 to 12 volt battery.

No. 18A1315. Per Kit, Each ..... **\$1.39** 10 Kits Each ..... **\$1.19**

### POPULAR MIDGET VARIABLE CONDENSERS



(1) SEMI-MIDGET 365 MMF. All brass and aluminum construction with smooth action ball bearings. 1/4" x 1 1/2" long shaft. Panel or base mount. 1 3/8" W. x 1 3/8" H. x 1 3/8" D. Import. **79c** 10 Lots ..... **71c**  
No. 12A2462. Each ..... Each .....

(2) DUAL 365 MMF. Beautifully made with ball-bearing rotor and built-in trimmers. Size only 1 1/8 x 1 1/2 x 2 3/8" L. 1/4" brass shaft extends 3/4". For tuned radio frequency, crystal, transistor and experimental circuits. Shpg. wt. 1/2 lb. **\$1.29** 10 Lots ..... **\$1.19**  
No. 12A2463. Each ..... Each .....

### HARD-TO-FIND MIDGET APC VARIABLES

AS LOW AS **19c**



Finest quality, U.S.A. made. Actually priced far below manufacturers cost. Limited quantities available. Avg. shpg. wt. 4 oz. With screwdriver slotted shaft.

Stk. No.	Max. Mmf.	Min. Mmf.	Each
18A82	17	2	19c
18B101	30	5	19c
18A1447	100	8	39c

### MINIATURE 365 MMFD. VARIABLE WITH DIAL



**69c**

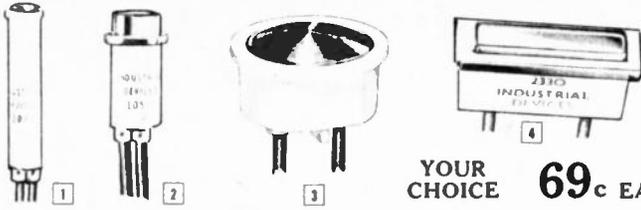
Condenser 1-in. Square

Only 1" square x 1/2" deep. Close fitting clear plastic 1 1/4" dia. dial with gold trim and numerals. Knurled edge for easy tuning. Wt. 4 oz.

No. 12A2404. Special Net Each ..... **69c**

**NEW LOW PRICES — AMERICAN MADE  
PERMANENT NEON SNAP-IN  
PANEL LIGHTS**

COMPLETELY ASSEMBLED WITH LONG-LIFE NEON BULBS



**YOUR CHOICE 69c EA.**

Popular new style panel lights give hi-fi, ham, commercial, etc. equipment a brand new modern look. Just snaps in—much simpler, much faster, better looking than older type assemblies. Contains 10,000 hour life high brightness neon lamp with built-in resistor. Has 4 1/2" leads. Unaffected by vibration or shock. For 105-125 V. AC. Specify color: Red, Amber or White. Avg. wt. 1 oz.

- ① No. 12A4124. Small flush mount. Almost a dot of light. Requires only a 3/8" dia. mounting hole in thin or thick panels.
- ② No. 12A4125. Medium, 1/2" dia. Extends slightly from surface for good side visibility. Mtg. hole 1/2" in thin or thick panels.
- ③ No. 12A4126. Large, 7/8" dia. Mounts in 7/8" hole. With retainer for thin panels. Can be press-fit into thick wood or composition panels.
- ④ No. 12A4127. Rectangular, 3/8" x .400" mtg. Snap-fits into panels .055 to 0.70" thick. Mounts with speed nut in thicker panels.

Choice Each **69c** 10 Lots Each **59c** 100 Lots Each **49c**

**SAVE ON GE NE2A NEON LAMPS**



10 FOR **79c**  
REG. NET 10c EACH

Popular 1/25 watt bulb as used for pilot light assemblies, volume level indicators. Unbused, with 2 wire leads 1/4" dia., 1 1/8" long. Requires 200,000 ohm series resistor for 105-125 V. operation. Wt. 4 oz.

12A4129 **79c** 50 For **\$3.59**

**GE NE2E NEON LAMPS WITH RESISTORS ATTACHED**

Ready for 110 V. operation. Resistor attached to each lead, bulb 3/4" long, 1/4" dia. otherwise identical to lamp above. Wt. 4 oz.  
No. 18B14. 10 For **99c**

**MINIATURE TRANSISTOR AUDIO TRANSFORMERS**



Tiny Size. Measures 3/4 x 3/4 x 3/8". For amplifier and radio circuits using the standard types of transistors such as listed on opposite page. Highest quality import. Wt. 6 oz.

No. 13A950. Input. Pri. 20,000 ohms; sec. 1000 ohms.

No. 13A951. Driver. Pri. 10,000 ohms; sec. 2000 ohms C.T.

No. 13A952. Output. Pri. 500 ohms C.T.; sec. 3.2 ohms.

No. 13A949. Crystal Mike Input. Pri. 200,000 ohms; sec. 1000 ohms.

Your Choice Each **89c**



**15-SECTION TELESCOPIC PORTABLE ANTENNA**  
46 3/4" collapses to 5 3/4". Use on AM, FM radios, walkie-talkies, etc. Sturdy, all-brass, heavily chrome plated. Bottom section 3/8" dia. 6-32" hole in bottom.  
No. 18C794. Wt. 8 ozs. Each **99c**

**BIG SAVINGS TYPE 47 PANEL LAMPS**



10 FOR **59c** REG. NET 12c EACH  
Standard min. bayonet base type.

Fine quality import. Box 10, 6 oz.  
No. 12A4128 **59c** 10 Bxs. **45c**  
Box of 10 **59c** Each **45c**

**SUPER-SENSITIVE "VARI-LOOPSTICK" MINIATURE ANTENNA**



Powerful high-Q type tapped for transistor circuits. Tunes with 365 mmfd. condenser. Size only 1 1/2" dia. x 2" long. Mounts in 1/8" hole. Wt. 2 ozs.  
No. 13A5060 **39c** 10 For **36c**  
Each **39c** Each **36c**

**FERRITE BAR ANTENNA COILS**



FITS MOST TRANSISTOR RADIOS  
Set of 3 **49c**

Replaces coils in most transistor radios. Sizes 2 3/8", 2 1/8" and 1 3/4".  
No. 13A5156. Set of 3 **49c**

**BARE COPPERWELD ANTENNA WIRE**



Has many times the strength of ordinary copper wire—does not stretch or sag. Ideal where long lines are needed. Electrical properties same as copper at high frequency. Wt. 3 lbs.  
No. 2B24. Size 18  
500 Ft. Coil **\$3.30**

**CHASSIS MOUNTING AC SOCKETS**



**10c** EACH, 10 LOTS  
REG. NET 15c

Fits standard AC plugs. Fine for repairs or new construction. Mounts in 1/8" x 3/4" hole. Mtg. ctrs. 1/8". Wt. 1 oz.

No. 18B26. **12c** 10 Lots, **10c**  
Spec. Each **10c** Each **10c**

**2-WIRE Midget AC LINE CONNECTOR SET**



5 SETS **99c**

Handy for extending AC cords, speaker leads, etc. Small brown bakelite. Makes sturdy, positive connection. Import savings. Wt. 3 oz.

No. 12A6083 **24c** 5 Sets. **99c**  
Per Set **24c** Sets **99c**

**BARRIER-TYPE TERMINAL BLOCKS**



20-Terminals. Finest Kulka, same as Jones 141. 9 1/2" L. x 1 1/8" W. x 1/2" H. 3/4" centers. Shpg. wt. 12 ozs. Regular value \$1.41.  
No. 18C928 **99c** 10 Lots **79c**  
Each **99c** Each **79c**

**LOOK AT THIS SAVING! RF CHOKE**



SAVE NOW!  
RATED 2 1/2 MH 125 MA **54c**  
Each, 10 Lots

**LOW LOSS CERAMIC SOCKETS WITH SNAP-ON SHIELDS**



Low loss isolantite ceramic with shield base and snap-on plated metal shield with hold-down spring. 7-pin shield 1 3/8" long; 9-pin 1 1/4". Wt. 2 oz. 7-Pin Socket & Shield. Reg. Net 60c  
No. 12A5125 **49c** 10 Lots **45c**  
Net Each **49c** Each **45c**  
9-pin Socket & Shield. Reg. Net 55c  
No. 12A5126 Ea...**49c** 10, Ea...**45c**



(1) Octal fits 1 11/64" mtg. hole with 1 3/8" mounting centers.  
No. 18B677 **18c** 10 Lots **15c**  
Each **18c** Each **15c**  
(2) Octal fits 1 1/8" mounting hole with 1 1/2" mounting centers.  
No. 18C210 **14c** 10 Lots **12c**  
Each **14c** Each **12c**  
(3) 7 Pin Miniature fits 1/8" mounting hole with 7/8" mounting centers.  
No. 18C893 **10c** 10 Lots **9c**  
Each **10c** Each **9c**  
(3) 9 Pin Miniature fits 3/4" mounting hole with 1 1/8" mounting centers.  
No. 18C894 **11c** 10 Lots **10c**  
Each **11c** Each **10c**

**BA**  
BARGAINS!  
**EXPERIMENTERS AND BUILDERS**  
BRAND NEW FULLY GUARANTEED

**HEAVY DUTY TYPE "5-WAY" BINDING POST**



39c VALUE!  
IMPORTED TO SAVE MONEY **24c** Each 10 Lots  
NOW AT A PRICE EVERYONE CAN AFFORD

Takes up to No. 12 buss wire or pin tip through cross hole, spade lug or wire loop under the cap or banana plug in the top. Brass 10-32 hardware, heavy shank for high current, low resistance contact. Hex cap and mounting collar are insulated. Mounts 7/8" above panel, 3/8" dia.  
Specify choice, Red or Black. Wt. 2 oz.  
No. 12A2405 **27c** 10 @ **24c**  
Special Each **27c** Each **24c**  
100 Lots, Each **21c**

**TWO-WIRE JIFFY CONNECTOR**



**23c**

**OCTAL PLUG AND SOCKET SET**



Handy for quickly attaching and removing speaker leads, 115 V. AC leads to turntable motor, for electrical and electronic devices around the auto, shop, etc. Consists of top quality black bakelite 2 conductor male and female polarized plugs each with 15" stranded size 18 leads. Wt. 1 oz.  
No. 18A109. **23c** 10 Pr. **19c**  
Spec. Per Pr. **23c** Each **19c**

**MOST POPULAR BAKELITE TUBE SOCKETS**

(1) Octal fits 1 11/64" mtg. hole with 1 3/8" mounting centers.  
No. 18B677 **18c** 10 Lots **15c**  
Each **18c** Each **15c**  
(2) Octal fits 1 1/8" mounting hole with 1 1/2" mounting centers.  
No. 18C210 **14c** 10 Lots **12c**  
Each **14c** Each **12c**  
(3) 7 Pin Miniature fits 1/8" mounting hole with 7/8" mounting centers.  
No. 18C893 **10c** 10 Lots **9c**  
Each **10c** Each **9c**  
(3) 9 Pin Miniature fits 3/4" mounting hole with 1 1/8" mounting centers.  
No. 18C894 **11c** 10 Lots **10c**  
Each **11c** Each **10c**

# BA

BARGAINS!

SAVE ON CAPACITORS

BRAND NEW FULLY GUARANTEED

**PRINTED CIRCUIT ELECTROLYTICS**

Miniature size capacitors for small solid state circuits. Top quality imports. Metal Case with epoxy end fill. Vinyl insulating sleeve around sides. \*Have 1/4" L. leads, others have 1" leads.

**6 VOLTS**

Stock No.	MFD.	Dia.	Lgth.	1-9 Each	10-99 Each
15A5097	25	1/4	3/8	\$0.24	\$0.21
15A5098	50	3/8	3/8	.28	.24
15A5099	100	3/8	3/8	.32	.28
15A5100	250	3/8	3/8	.36	.32
15A5101	500	3/8	3/8	.47	.42
15A5102	1000	3/8	3/8	.58	.49

**15 VOLTS**

Stock No.	MFD.	Dia.	Lgth.	1-9 Each	10-99 Each
15A5103	10	1/4	3/8	.24	.21
15A5104	25	3/8	3/8	.28	.24
15A5105	100	3/8	3/8	.36	.29
15A5106	250	3/8	3/8	.52	.46
15A5107	500	3/8	3/8	.60	.52
15A5108	1000	3/8	3/8	.96	.85

**25 VOLTS**

Stock No.	MFD.	Dia.	Lgth.	1-9 Each	10-99 Each
15A5109	10	3/8	3/8	.26	.23
15A5110	25	3/8	3/8	.32	.28
15A5111	50	1/2	3/8	.36	.32
15A5112	100	1/2	3/8	.44	.37
15A5113	250	1/2	3/8	.60	.53
15A5114	500	1/2	3/8	.90	.80

**50 VOLTS**

Stock No.	MFD.	Dia.	Lgth.	1-9 Each	10-99 Each
15A5115	5	3/8	3/8	.26	.23
15A5116	10	3/8	3/8	.36	.32
15A5117	50	1/2	3/8	.45	.38
15A5118	100	1/2	3/8	.52	.46
15A5119	250	1/2	3/8	.96	.85

**MINIATURE CERAMIC DISCS**

10 FOR **59c**

Reg. Value 10c Each

**600 WORKING VOLTS DC**

Finest quality general purpose ceramic capacitors featuring excellent high frequency characteristics, extreme small size, and rugged construction. All are fresh stock—Fully Guaranteed.

Stock No.	Cap. Mfd.	*10 For	*100 For
15A1210	.00001	59c	\$4.95
15A1219	.00002	59c	4.95
15A1211	.000047	59c	4.95
15A1212	.0001	59c	4.95
15A1213	.00047	59c	4.95
15A1214	.001	59c	4.95
15A1215	.002	59c	4.95
15A1218	.005	59c	4.95
15A1217	.01	59c	4.95
15A1218	.02	79c	6.95

\*Minimum 10 per Cpty. Wt. 10, 2 oz.

**KIT OF 50 OF ABOVE:** 4 each .00001, .00002, .000047, .0001, .002 and .005; 8 each .00047 and .001; 6 each .01; 4 each .02 all 600 V. or higher.

No. 15A2239. Wt. 10 oz.

Special Per Asst. **\$2.79**

**MINIATURE CONTROL**

With SPST switch. Dia. 5/8", depth 1/2".

14A1143—5K Ohms

14A1142—10K Ohms

Choice **89c**

**BIG SAVINGS ON HIGH CAPACITY TUBULARS**

SAVE AT LEAST 1/2!

For Solid State Circuitry

Precision made—very high quality. Hermetically sealed in aluminum, vinyl insulated. B-A special purchase makes prices lowest we've seen for electrolytics like these. Have 1 1/2" tinned leads. Imported.

**15 WORKING VOLTS**

Mfd.	Size	Stock No.	Each	10 Each	50 or Over Each
1000	1/4x1 1/8"	18A1407	49c	44c	
2000	7/8x1 1/8"	18A1408	69c	63c	

**25 WORKING VOLTS**

Mfd.	Size	Stock No.	Each	10 Each	50 or Over Each
250	3/4x1 3/8"	18A1405	39c	35c	
500	3/4x1 3/8"	18A1406	49c	44c	

**SUB-MINIATURE ELECTROLYTICS**

**5 for \$1.39**

FOR TRANSISTOR AND OTHER MINIATURE CIRCUITRY

Best quality American made by top producer. Fully insulated tubular plastic case. Axial leads. All 50 working volts DC. Wt. 1 oz.

Stk. No.	Mfd.	5 For	25 For
15A5161	5	<b>\$1.39</b>	<b>\$6.25</b>
15A5162	10	<b>1.39</b>	<b>6.25</b>
15A5163	25	<b>1.49</b>	<b>6.50</b>
15A5164	50	<b>1.49</b>	<b>6.50</b>
15A2145	80	<b>1.89</b>	<b>7.95</b>

**MOLDED TUBULAR CAPACITORS**

High temperature rated, moisture resistant, non-inductive. Every one brand new and perfect. Buy now at less than usual price of ordinary paper tubulars. Average wt. 2 ozs.

**400 W.V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
.01	3/8x1"	15A2240	14c	12c	10c
.022	3/8x1 1/8"	18A468	14c	12c	10c
.05	3/8x1 1/2"	18A469	16c	14c	10c
.1	1/2x1 1/2"	15A2241	17c	15c	11c
.22	3/8x1 3/8"	18A478	24c	20c	17c
.25	3/8x1 3/8"	18A479	27c	24c	20c
.47	3/4x2 1/4"	18A482	38c	33c	28c
.50	3/4x2 1/4"	18A485	41c	35c	30c
1.00	1x2 1/8"	15A2242	69c	59c	49c

**600 W.V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
.0001	3/8x1"	18B399	12c	10c	9c
.00025	3/8x1"	18A589	12c	10c	9c
.0005	3/8x1"	18A591	12c	10c	9c
.001	3/8x1"	18A592	16c	14c	10c
.002	3/8x1"	18A594	12c	10c	9c
.0022	3/8x1"	18A595	16c	14c	10c
.0047	3/8x1"	18A605	16c	14c	10c
.01	3/8x1 1/4"	15A2243	18c	14c	10c
.022	3/8x1 1/4"	18A621	16c	14c	10c
.05	1/2x1 1/4"	15A2244	21c	18c	11c
.10	3/8x1 1/2"	18A706	22c	20c	15c
.22	3/8x1 1/2"	18A713	30c	25c	22c
.25	1/4x1 1/8"	18A714	32c	27c	24c
.50	3/4x2 1/4"	18A726	49c	45c	40c

**TUBULAR ELECTROLYTICS**

AS LOW AS **30c**

EACH, 10 LOTS

Finest quality compact tubular capacitors hermetically sealed in aluminum container with insulating sleeve and tinned copper leads. Dual types shown are metal-cased, have cardboard sleeves, vinyl insulated leads and common negative. Average Shpg. wt. 5 oz.

**25 W. V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
10	1/2x1 1/8"	15A5122	.39	.35	.32
25	1/2x1 3/8"	15A418	.44	.39	.35
50	5/8x1 3/8"	15A5123	.39	.35	.32
100	1/2x1 3/8"	15A5124	.49	.44	.40
250	7/8x1 1/2"	18A771	.79	.71	.64
500	1x2"	18A772	.99	.90	.81
1000	1x2 3/4"	15A5125	1.16	1.05	.95
2000	1 3/8x3"	15A5126	1.26	1.13	1.02

**50 W. V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
1	5/8x2"	18B608	.30	.27	.24
4	3/8x1 1/8"	18B462	.33	.30	.27
10	1/2x1 1/8"	15A419	.36	.33	.30
25	1/2x1 3/8"	15A5127	.38	.34	.31
50	5/8x1 3/8"	15A5128	.42	.38	.34
100	3/4x1 3/8"	12A5129	.58	.52	.47
150	7/8x2"	12A5130	.62	.56	.51
250	1x2"	15A5131	.74	.68	.61
500	1x2 1/4"	15A5132	1.19	1.07	.96
1000	1x3"	15A5133	1.26	1.13	1.02
2000	1 3/8x3"	15A5134	1.38	1.24	1.12

**150 W. V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
8	1/2x1 1/8"	18A792	.35	.32	.29
12	1 1/4x1 1/2"	15A5135	.38	.34	.31
20	5/8x2 1/8"	15A5136	.42	.40	.38
30	3/4x1 3/8"	15A5137	.44	.40	.36
40	3/4x2 1/8"	15A413	.49	.44	.40

**150 W. V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each	
50	3/4x2 1/4"	15A5138	49c	44c	40c	
80	1x2 3/4"	15A5139	56c	51c	46c	
100	1x2 1/2"	15A5140	72c	65c	59c	
200	1x3"	15A5141	89c	81c	73c	
20-20	3/4x1 5/8"	15A5142	54c	49c	44c	
40-40	7/8x2 1/8"	15A418	64c	58c	52c	
50-30	7/8x2 1/4"	15A5143	55c	50c	45c	
80-20	1x3"	18B786	49c	42c	39c	
40-30-	20	1x3"	15A941	79c	72c	65c
50-30-	20	1x3"	15A5144	79c	72c	65c
80-40-	20	1x3 3/8"	15A5145	89c	81c	73c

**300 W. V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
140	1 3/8x3 1/2"	18C719	\$1.49	\$1.35	\$1.22

**450 W. V. DC**

Mfd.	Size	Stock No.	Each	10-49 Each	50 or Over Each
1	5/8x1 1/8"	15A5146	39c	35c	32c
2	5/8x1 1/8"	15A5147	43c	39c	35c
4	5/8x2"	18A1358	44c	40c	36c
8	3/4x1 3/8"	15A5148	54c	49c	44c
10	3/4x1 3/8"	15A5149	49c	44c	39c
16	7/8x2 1/8"	15A5150	54c	49c	44c
20	1x2 1/4"	15A5151	59c	53c	48c
30	1x2 3/8"	15A5152	64c	58c	52c
40	1x2 1/2"	15A5153	72c	65c	59c
60	1x3"	15A5154	99c	90c	81c
80	1 3/8x2 3/4"	15A5155	\$1.10	99c	90c
100	1x4 1/2"	15A5156	\$1.49	\$1.35	\$1.22
8-8	1x2 3/4"	15A5157	68c	61c	55c
20-20	1x2 1/8"	15A5158	89c	80c	81c

**TUBULAR ELECTROLYTICS FOR PRINTED CIRCUITS**

Finest American made. Just the ticket for printed circuits in TV etc.

50-30 Mfd. @ 150 V. Size 1 x 2 1/4". Wt. 4 oz. No. 15A5159 **69c** 5 For **\$2.99**

50-50 Mfd. @ 150 V. Size 1 x 2 1/4". Wt. 4 oz. No. 15A5160 **75c** 5 For **\$3.29**

120 Mfd. @ 150 V. Aluminum can 1 x 2 1/2". No. 18B690. Ea. **79c** 5 For **\$3.49**

50 Mfd. @ 150 V. Aluminum can 1 x 1 1/8". Plastic insulated. Japan. No. 18A1348 **49c** 5 For **\$2.19**

**TWIST PRONG ELECTROLYTICS AT FANTASTIC GIVE-AWAY PRICES!**

High capacity types for modern solid state circuitry. Avg. Shpg. wt. 8 ozs.

Stk. No.	Mfd.	Volts	Size	Stk. No.	Mfd.	Volts	Size	
18C857	850-400	16	1 3/8x1 3/4" H.	18A1302	50-200-			
18B689	80/4-4/200				50	100	1 3/8x3" H.	
					475/450/25	16	1x1 1/2" H.	
					18C858	400-100	16	1x1 1/2" H.

CHOICE EACH **49c** 10 Each **39c** Asst. **29c**

**BIG SAVINGS ON MOST POPULAR VOLUME CONTROLS**

**SUB-MINIATURE VOLUME CONTROLS**

Just right for transistor and other sub-miniature circuits. 1/8x1" long shaft. Linear taper for volume and tone. Avg. wt 4 oz

Ohms Resistance	Stk. No.	Less Switch Each	10 Lots Each	WITH SPST SWITCH Each	10 Lots Each
5000	14C300	59c	49c	14C334	99c 89c
10,000	14C301	59c	49c	14C335	99c 89c
50,000	14C302	59c	49c		

No. 12B1205. KNOB for all above controls. Each **10c**

**VELVET-SMOOTH VOLUME CONTROLS**

Smoothest action volume controls we have seen. Highest quality. Popular compact size only 1 1/8" dia. Universal flattened 3" shaft, easily cut to desired length. Fine for replacement or construction. Linear taper. Switch rating. 3 amp @ 125 V. Avg. wt. 4 oz.

Ohms Resistance	Stk. No.	Less Switch Each	10 @ Each	With SPST Switch Each	10 @ Each
50,000	14A1138	59c	55c		
100,000	14A1139	59c	55c		
1/2 Meg.	14A1140	59c	55c	14A1144	79c 69c
1 Meg.	14A1141	59c	55c	14A1145	79c 69c

**ONLY 3/8 INCH DIAMETER**

Less Switch **49c** 10 Lots, Each

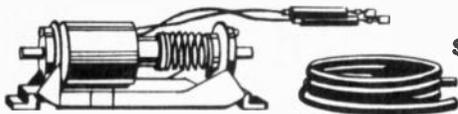
**55c** 10 Lots, Each

**FINEST QUALITY AMERICAN MADE**

## SPECIAL PURCHASE BARGAIN!

### SMALL 117 V. AC LIQUID PUMP

CORMAN RUPP #Z-12115



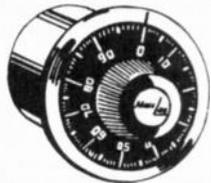
AT LEAST A  
\$20.00 VALUE

**\$5.95**

Very high quality precision made device for moving most any kind of liquid, even caustic solutions. Has no metal parts in liquid flow line. Would be ideal for fountains, for circulating lubricants, coolants, laboratory solutions, water, etc., where high volume and pressure are not required. Inlet and outlet are 1/4" ID, 3/8" OD. Electro mechanical drive operates with short but powerful stroke. Cast metal base 6" x 1 5/8" x 2" H. Wt. 1 lb. With 2- Two foot lengths of neoprene tubing.

No. 18A1419. Special Each..... **\$5.95**

## SAVE ON THESE B-A EXCLUSIVES!

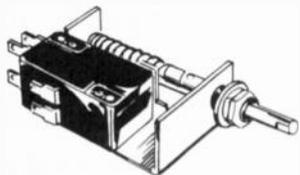


### COMBINATION ELECTRICAL LOCK DIAL ACTUATES INTERNAL SWITCH

FOR DOORS, ALARMS, ETC.  
Pick-proof—Made for Maximum Security.

"Locked" position holds circuit open. Dialing a 3 number combination closes circuit until dial is again turned to a random setting. Very well made, with black finished dial, white markings and chrome finished die-cast enclosure and 2 wire lead from rear. Overall diameter 2 1/2". Mounts in 1 3/4" hole, extending 1 1/4" deep. American made.

No. 18A1375. While Limited **\$4.95**  
Quantity Lasts, Each.....



### DPDT PUSH-PUSH SWITCH

Very high quality. Single plunger "push" for "on", push again for "off", etc. Built around two high quality snap action micro switches. Overall size 1 1/2 x 1 1/8 x 2" behind panel mounting bushing. Mounts in single 3/8" hole. Push shaft 1/4" dia. Rating 15 A. 250 V. AC.

No. 18A1351. Special Each..... **69c**

### 30 MINUTE SWITCH TIMER

**99c**



Provides up to 30 minutes "on" operation, then turns "off". 20 A. 1/2 HP 115 V. AC. 2 1/2" dia. x 1 1/2" deep behind panel. Worth at least \$5.00!

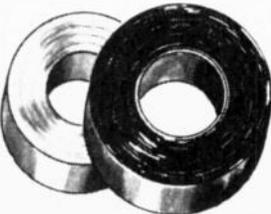
No. 18C598. While Limited **99c**  
Supply Lasts, Each.....

SAVE!

### 3/4-IN. WIDE PLASTIC ELECTRICAL TAPE

66 FT. ROLL

**57c**



Highest quality import value at far less than American made products. Specify Red or Black. Wt. 6 oz. 66 Ft. Roll.

17A7032—Black Choice **57c** <sup>6</sup> For... **\$2.99**  
17A7033—Red Each.....

### QUIET ACTION PUSH-BUTTON WALL SWITCHES

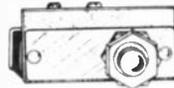
2 FOR **99c**



Convert toggle switch installations to convenient push-button. Fits standard outlet boxes and switch plates. Operates as SPST or SPDT for 3-way application. UL rated. Made by Rodale. Wt. 6 oz.

No. 18A1377 **99c** 10 For **\$3.99**  
Spec. 2 For

### SPDT SNAP ACTION PUSH BUTTON SWITCH



Very high quality, with metal plunger. Rated 15 A. 250 V. AC. Mounts in 3/8" hole. Shank 3/8" L. Body size 3/4 x 1 5/8 x 3/8" behind panel. Made by Robertshaw. Priced way below regular cost!

No. 18A1334. While They Last **49c** 10 @ **44c**  
Special Each..... Each.....

### CRL LEVER ACTION SWITCH



4PDT "TALK-LISTEN" WITH OFF POSITION

A real find for home built intercoms, audio systems, etc. Three position lever actuates all four poles of switch wafer. Up position "off", center position "positive", "on", down position "on" with spring return to middle. Size 2" x 7/8" x 1 5/8" behind panel. With black push-on knob. Regular price \$1.47.

No. 18A1309 **59c** 10 @ **53c**  
Special Each..... Each.....

### LOUD AC BUZZER

**\$1.69**

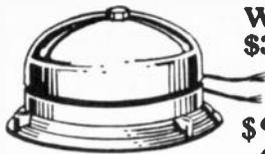


Works on 6 to 25 V. 60 cy. AC. Use wherever an attention getting signal is desired. Adjustable diaphragm action amplifies sound. 2" dia., 1 1/8" thick. Single screw mtg.

No. 18A1414. Each..... **\$1.69**

## NEW LOW PRICE!

### 3-INCH 117 V. AC ALARM BELL



WAS **\$3.49**

**\$2.49**

Produces loud, clear ring. Overcomes high background noises. Operates directly from any 117 VAC power source. Shpg. Wt. 8 ozs. Imported. No. 41A4045. **\$2.49**  
Special Each.....



# Bargains!

## EXPERIMENTERS AND BUILDERS

BRAND NEW FULLY GUARANTEED

## SAVE ON THIS POPULAR ELECTRICAL CONTROL CENTER

### 6 AC OUTLETS—PILOT—ON-OFF SWITCH **\$3.95**

Handles up to 1600 W. 120 V. AC power for shop, lab, kitchen, etc. Switch controls all outlets. Equipped with 8 ft. line cord and plug. Designed for bench top or wall mounting. Exceptionally well made. Ivory molded plastic. Size 6 3/4 X 3 1/2 X 1 1/2". Shpg. wt. 1 1/2 lbs.

Top Value Import. No. 41A350. Special..... **\$3.95**



## EX-TEN

### LIGHT BULB LIFE EXTENDER

### LIGHT BULB LIFE EXTENDER

Makes ordinary light bulbs last 30 times longer! Simply screw EX-TEN into any medium-base socket, then screw in an ordinary bulb of any size up to 200 watts. Bulb will burn at half power. Operates on a scientifically proven power reducing principle using a solid state diode assembled inside the adapter. Recommended for continuous burning safety lights, for hard to reach locations such as garages, post lights, stairways, closets, etc. Increases bulb height approximately 1 inch. Shpg. wt. 4 ozs.

No. 41A368 **\$1.49** 3 Lots. **\$1.34**  
Each..... Each.....



## BRITE N' DIM

### SOLID STATE ADAPTER

### ADAPTER

### ELIMINATES EXPENSIVE 3-WAY BULBS

Makes ordinary bulbs normally rated up to 200 watts into 2-way bulbs and extends bulb life many times. Regular lamp switch controls light "bright", "dim" and "off." Fits only standard medium based 3-way sockets. Max. rating 200 W. 120 V. AC. Shpg. wt. 4 ozs.

No. 41A369. **\$1.49** 6 Lots. **\$1.34**  
Each..... Each.....



Makes ordinary lamp a 2-way lamp. Makes 3-way lamp a 6-way lamp. Excellent half-power control for small soldering irons. Keep tip in condition by preventing overheating. Installs easily in AC power cord to any lamp using up to 300 watts, 120 V. AC. Switches from "bright" to "dim" and "off." Extends bulb life 30 times on dim position. Shpg. wt. 4 ozs.

No. 41A370. **\$1.69** 6 Lots. **\$1.52**  
Each..... Each.....



## B-A SUPER BARGAIN VALUE

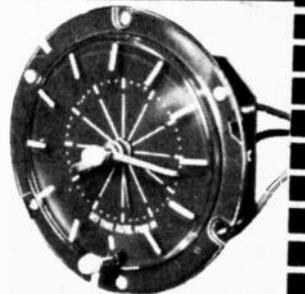
### WESTCLOX APPLIANCE CLOCK TIMER

WAS **\$2.95**

**\$2.49**

Turns on equipment up to 10 hours after setting. Switch rated at twenty amps, big enough to handle nearly any appliance, air conditioner, etc. Attractive 4 1/8" clock face with domed plastic cover. 2" deep behind cover. With 5" leads for easy connection. Shpg. wt. 1 lb.

No. 18A1282. Special Each... **\$2.49**



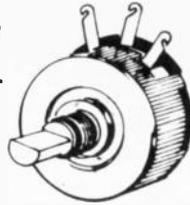


# Bargains!

## EXPERIMENTERS & BUILDERS

### BRAND NEW FULLY GUARANTEED

### SPEAKER FADER CONTROL



**39c**  
EACH

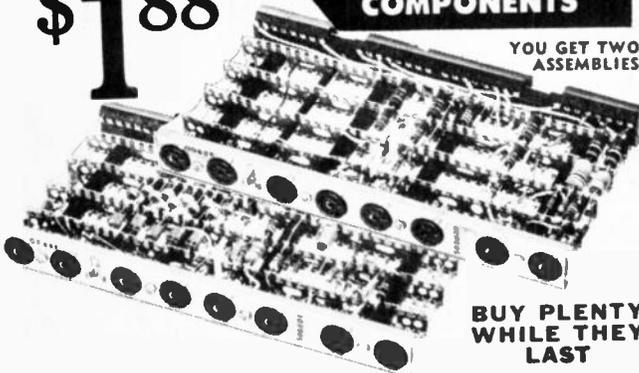
Excellent for rear seat speaker or for adjusting volume on remote extension. 20 ohms, 2 watts. Standard 3/8" dia. mtg. With diagram.  
No. 18A169. **39c** 10 Lots **35c**  
Each ..... Each .....

## BIG GRAB-BAG OF PARTS

OVER 200 PARTS FOR ONLY

# \$1.88

OVER \$25.00 WORTH OF BRAND NEW TOP QUALITY COMPONENTS

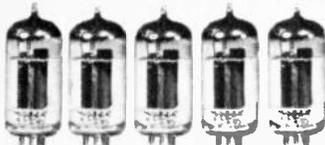


YOU GET TWO ASSEMBLIES

BUY PLENTY WHILE THEY LAST

Brand new top quality components easily removed. Perfect for experimenters, builders, etc. Over 200 of the most frequently used resistors, condensers, diodes, RF chokes, tube sockets assembled on slotted terminal strips... takes just a touch of the soldering iron to remove and use. Better buy plenty of this terrific parts value! Use of only a few components will more than pay the purchase price. wt. 2 lbs. **\$1.88**  
No. 18B262. Grab-Bag of Parts.....

## PACK OF FIVE MINIATURE TUBES



Fine Quality Import

### \$2.49

MOST COMMON TYPES IN AC-DC RECEIVERS

- 1-12AV6 1-50C5
- 1-12BA6 1-35W4
- 1-12BE6

OVER 80% DISCOUNT

Brand new and perfect, fully warranted by B-A at a tremendous savings. Just think, a whole set of 5 tubes for less than the retail price of one. Stock up now—Buy several packs at B-A's money saving law prices!  
No. 18A149. **3 Packs For \$7.00**  
Pack of Five Tubes..... **\$2.49**

## POPULAR OUTPUT TRANSFORMERS

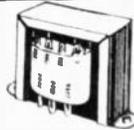


### 59c

For 50L6, 50B5, etc., 2500 ohms to 3-4 ohms V.C. 1 3/4" mtg. ctrs. x 1 1/4" H. 3/8" thick core. Wt. 1/2 lb. **18A888. 10 Lots, 49c**  
Special Each **59c** Each.....

Special Value! Heavy Duty 2500 Ohm to 3-4 Ohm V.C. Has 1/2" thick core. Mtg. centers 1 3/4" x 1 3/4" H. **No. 18A1380. 10 Lots, 49c**  
Each ..... **59c** Each .....

Special Value! Single 6V6 etc., to 3-4 Ohm V.C. Has 3/4" core stack. Mtg. ctrs. 2 x 2" H. **No. 18A1379. 10 Lots, 79c**  
Each ..... **89c** Each .....



Over \$3.25 Value  
**\$1.99**

### UNIVERSAL

Primary 4000-14,000 ohms. 8 watts. Matches 3.2, 8 or 16 ohm V.C. Size 1 3/8 x 2 1/2 x 1 1/2". Wt. 1 lb. Reg. value over \$3.25.

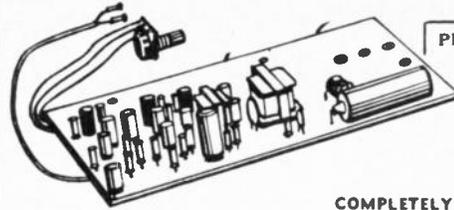
No. 13A237. **\$1.99** 10 Lots, **\$1.79**  
Special Ea... Each...

FOR P.P. 6V6, ECC82 10 W. CLASS AB1. Matches 4, 8, 16 ohm speakers. Open frame, size 2 5/16 x 1 3/4 x 1 3/8" H. Mtg. ctrs. 2 13/16". Shpg. wt. 2 lbs. **No. 13A862. Special Each... \$2.69**

## HERE'S A TERRIFIC BARGAIN BUY!

### MINIATURE 5 TRANSISTOR AMPLIFIER

100 MILLIWATT OUTPUT—9 V. BATTERY POWERED



PRICED LOW BECAUSE OF A BIG SPECIAL PURCHASE

ONLY **\$2.95**

COMPLETELY WIRED... CONTAINS OVER 40 HIGH QUALITY PARTS

SIZE 5 1/2 X 1 1/4 X 7/8" DEEP

**BUILD A MINIATURE PA—USE IT AS PHONO AMP**  
Just what you need for exciting audio experiments! Numerous construction projects have appeared in the various electronics experimenters handbooks calling for a miniature audio amplifier. Now you can own one for peanuts and save all the headaches of scrounging together all the matching parts. Works with any crystal, ceramic or high impedance dynamic mike or high impedance phono pick-up and will drive any speaker having 4 to 8 ohm voice coil.  
Made of high quality components throughout, neatly assembled on a small printed circuit board. Comes with miniature volume control which you can mount on your own panel. Requires regular 9 V. transistor battery for power. Shpg. Wt. 8 oz.  
No. 18A1435. Bargain Special, While They Last..... **\$2.95**

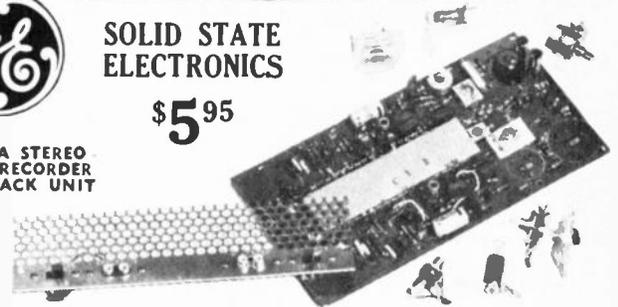
## FANTASTIC SPECIAL PURCHASE BARGAIN!



### SOLID STATE ELECTRONICS

### \$5.95

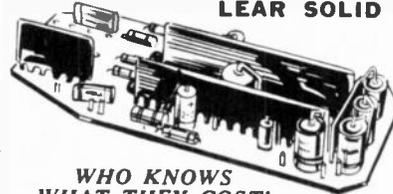
FOR A STEREO TAPE RECORDER PLAYBACK UNIT



A real treasure trove for the experimenter... complete with schematic. Consists of stereo recording amplifiers for microphone or phono input, recording amplifiers, bias erase oscillator and tape head playback pre-amp for a G.E. stereo tape recorder. On a printed circuit assembly 10 x 5", it's loaded with dozens and dozens of good usable components including transistors, resistors, capacitors, bias erase oscillator (which alone is valued at more than \$5), switches, input jacks, recording level meter, etc. Power supply and power amplifier not included.

We don't know the original cost, but it was many times our price! **\$5.95**  
No. 18A1339. Shpg. wt. 2 lbs. Special Each

## STEAL THESE FOR 99c LEAR SOLID STATE STEREO PREAMP



WHO KNOWS WHAT THEY COST!

Dual channel tape head playback pre-amp electronic from a high quality Lear auto stereo unit. Contains 6 transistors, 18 capacitors, several resistors assembled on printed circuit board 1 1/8 x 5 1/2" L. A dandy unit for all sorts of audio experimenting. Original cost many times our price! Wt. 4 czs. **No. 18A1346. Special Ea... 99c**

## MORE B-A SPECIALS

### HIGH QUALITY CARRYING HANDLES



HIGH QUALITY

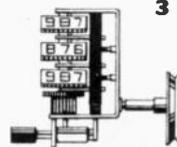
PRICED BELOW MFGRS. COST

2 FOR **79c**

Tough molded plastic handle with bright plated hardware for attachment to equipment cabinet, speaker case or anything that must be lifted or carried. Fasteners leave no exposed screws on surface, require four 6-32 nuts on inside of cabinet. Handle lays flat to surface when out of use. Size 6" long, 1" wide. Shpg. wt. 8 oz. per 2.

No. 18A1305. **79c** 4 For **\$1.49**  
2 For ..... For .....

### 3 DIGIT COUNTER WITH RESET



**99c**  
EACH

Very high quality 0 to 999 tape recorder readout device. Low friction drive, 1" dia. pulley, 16 revolutions turns first digit wheel 1 full revolution. Approx. 1 x 1 1/2 x 2" deep. **18A1371 Spec. Each 99c**

# POPULAR B-A AUDIO SPECIALS!

## SUB-MINIATURE 3-WATT TRANSISTOR AMPLIFIER

WAS \$8.95

**\$7.95**

HI-IMPEDANCE INPUT—8 OR 16 OHM OUTPUT

Push-pull 4 transistor amplifier. Power output sufficient for small PA systems and other audio applications. Specially designed shield eliminates hum pickup and serves as transistor heat sink. 2000 ohm input, 8 or 16 ohm output. 50-50,000 cps response, 6 mv in for 3 watt gain. Operates from 9 V. DC. Size 2 1/8" x 3 x 1 1/8" H.

No. 49A210. Shpg. wt. 10 oz.

Quality Import, Special

**\$7.95**

## TINY 3-TRANSISTOR AM TUNER

535 KC—1600 KC, 200 MV SENSITIVITY

**\$6.95**

Ideal for hobbyists, converting various objects for use as radio, etc. Works with 17B315 miniature amplifier or others with 500 to 2000 ohm input. Complete with easy-to-read dial. Uses 9 V. battery. Size 4 1/2" L. x 2 1/2" W. x 2 1/2" H. Shpg. wt. 8 oz.

No. 33A305.

Import Special

**\$6.95**



## SOLID STATE STEREO PREAMP

INPUT FOR MAG. PHONO & TAPE HEADS 30-20,000 CPS

Exceptional stereo pre-amp for use with Hi-Fi amplifiers not having low-level input. Handles all magnetic cartridges or tape heads. Input selector switch equalizes for phono or tape. Perfect impedance match at input and output. Signal to noise better than 45 db. Operates on 115 V. AC. Size 6x2 1/8x3 3/8" D. Shpg. wt. 4 lbs.

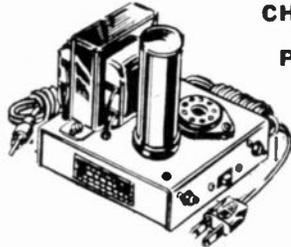
No. 33A304. Import Special

**\$12.95**

## CHROME PLATED HI-FI PHONO PREAMPLIFIER

IMPORT VALUE Compare at \$14.95

**\$7.95**



Provides extra stage of amplification for use with magnetic cartridges, tape players and microphones with amplifiers not having their own built-in preamplifier. Wide bandpass range (20-20,000 cps) insures perfect impedance match. Has slide switch for selection of proper equalization. RIAA (phono) or tape. Beautifully made, chrome plated. Surpasses units selling for considerably more. Self-powered for 110-125 volts AC. With 12AX7 tube. Shpg. wt. 2 lbs.

No. 33A361. Special Each

**\$7.95**

## STEREO PHONO PREAMPLIFIER

Similar to above but adds extra stage of amplification for using stereo magnetic cartridges and stereo tape players with stereo amplifiers not having built-in preamplifiers. Self-powered. With tubes. Wt. 4 lbs.

No. 33A22. Special Each

**\$11.95**



# Bargains!

**EXPERIMENTERS AND BUILDERS**

**BRAND NEW FULLY GUARANTEED**

8 OHM HEADSET MATCHES OUTPUT OF TV AND RADIO

**\$1.95**



Good quality light weight double earphone with metal headband. Made for direct connection to speaker voice coil leads. Provides proper impedance match for transistor radio when used in place of earset. With Plastic insulated cord, pin tips. Imported.

No. 32A9007.

Special Each

**\$1.95**

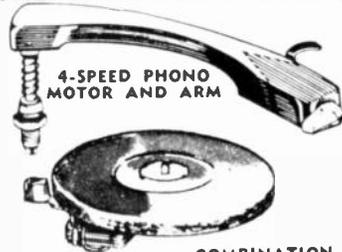
## GIANT SAVINGS ON PHONO COMPONENTS HAVE FUN & SAVE — BUILD YOUR OWN PHONO!



AMPLIFIER & SPEAKER

WITH TUBES

**\$7.99**



4-SPEED PHONO MOTOR AND ARM

COMBINATION OFFER

REGULAR NET FOR BOTH \$8.30

**\$6.95**

## TOP VALUE! 3 TUBE PHONO AMPLIFIER

• PLUS 4-INCH PM SPEAKER

• FINE FOR STEREO CONVERSIONS

A real sweet deal! Fine quality amplifier as used in the better record players. Compact, "L" shape, mounts in almost any position in smallest space. 3 tube (50C5, 12AV6, 35W4 rect.) for 2 watts output with excellent tone. Has separate volume and tone controls. 5 1/4" W. x 2 1/2" D. x 4 3/4" H. U/L AC-DC cord and plug. Includes heavy-duty 4" PM Alnico V Speaker and Output Transformer. Wt. 2 lbs.

No. 33A358 Complete with Tubes & Speaker

**\$7.99**

No. 33A359. Amplifier only (less tubes). Net Each

**\$3.99**

## 4-SPEED PHONO MOTOR & PHONO ARM

Turntable and 4-speed phono motor with retractable 45 RPM center adaptor plus fine import quality phono arm complete with turnover cartridge with sapphire standard and microgroove needles. Motor requires 2 1/2" below mtg. plate. 115 V. 60 cy. AC.

No. 24A6016. Shpg. wt. 5 lbs.

**\$6.95**

Both For

No. 24A6017 Phono Motor & Turntable Only

**\$5.95**

## 4 TUBE STEREO PHONO AMPLIFIER

**\$12.75**

COMPLETE WITH TUBES



Low cost way to stereo. Use with any record changer or player with crystal or ceramic stereo phono cartridge. Excellent tone quality with speakers of your choice, 5 in. to 12 in. Versatile L shape permits mounting vertically or horizontally. Tubes: 2-12AV6; 2-50C5. Separate volume and tone controls for each channel. For 3.2 ohm speakers. 6 1/2" L. 2 1/4" W., 1 3/8" D. Shpg. wt. 4 lbs.

No. 33A360.

Complete with Tubes

**\$12.75**

REMOTE SPEAKER EARPHONE VOLUME CONTROL 60 MINUTE TIMER

FOR TV—RADIO—HI-FI—CITIZENS RADIO



**\$9.95**

Unique combination of everything needed for remote control of speaker volume and AC power from your favorite listening spot. Small, well constructed table-top control unit contains a remote speaker, private earphone jack, volume control that adjusts either the local or remote unit speaker, or turns it off, and a 60 minute adjustable timer switch that allows up to 1 hour operation and then automatic "cuff." Control size 3 3/4 x 5 x 1 3/8" H. With 20 ft. extension and private earset. Shpg. Wt. 2 lbs.

No. 33A6617.

Net Each

**\$9.95**

## B-A's FAMOUS "MINY" TRANSISTOR TAPE RECORDER

**\$16.88**

WITH REMOTE CONTROL MIKE

• Records or plays in any position. • Two motors for positive tape handling.

Records and plays dual track with remarkable voice clarity and intelligibility because of push-pull 150 milliwatt output and 2 1/4" PM speaker. Separate rim drive record and rewind motors give positive start and stop action, with no tape spillage. Function control for Rewind, Stop, Play and Record and thumb-operated volume control are recessed.

Gorgeous molded plastic case is grey with white trim. Collapsible carrying handle folds into case. Clear plastic reel cover shows tape on reel, can be operated with cover closed. Switch control mike plugs in side of case. Records dual track approx. 45 min. (22 1/2 min. each track) on 560 ft. 3 1/4" tape. Supplied with 200 ft. tape and reel and take-up reel, one 9 volt battery and two size "C" flashlight cells. Miniature size 7 3/8 x 8 x 2 1/2". Shpg. wt. 4 lbs.

No. 31A401. B-A Import Special

**\$16.88**



# Bargains!

## AUDIO PLUGS AND JACKS

BRAND NEW FULLY GUARANTEED

PRICED FOR LESS!

### MIKE CONNECTORS

- Wt: 2 oz.
- ① Standard 3/8"-27 female cable type with universal ring.
  - 12A6032 **29c** 10 **26c**
  - Each ..... Each .....
  - ② Standard male chassis type.
  - 12A6033 **22c** 10 **20c**
  - Each ..... Each .....
  - MINIATURE TYPE. Same as used on many imported mikes. Wt. 1 oz.
  - ③ Female cable with universal ring.
  - 12A6034 **24c** 10 **21c**
  - Each ..... Each .....
  - ④ Min. male chassis type. Mounts in 1/4" hole.
  - 12A6035 **22c** 10 **20c**
  - Each ..... Each .....

### MICROPHONE EXTENSION CABLE KIT WITH TWO ADAPTORS



25 feet of heavy duty shielded microphone cable with standard microphone connectors on each end. Adaptors convert to 1/4" phone plug or 1/4" phone jack. Makes any PA system more flexible. Big Import Saving! Wt. 1 lb.

No. 33A6585. Special Each ..... \$2.95

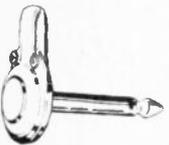
## BIG SAVINGS ON 1/4" PHONE PLUGS



**SLIM SHIELDED PLUG**  
Big savings on fine quality import. Two-way with solder, lugs and cable clamp. Standard 1/4" plug and slim style chrome shell. Compare at over 60c. Wt. 3 oz.

No. 12A6030. **39c** 10 Lots, **35c**

Each ..... Each .....



**SHIELDED FLAT PLUG**  
Best quality import. For 1/4" jacks where long plugs can't fit, solder terminals. Wt. 2 oz.

No. 12A6084 **59c** 10 **54c**

Spec. Each ..... Each .....



**3-WAY PHONE PLUG**  
Finest quality import at a savings. Standard 1/4" plug with solder lugs. Black bakelite shell 3/4" dia. x 2" long. Wt. 2 oz.

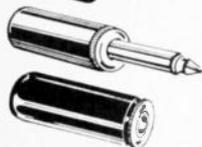
No. 12A6031. Special Each ..... **49c**



**3-WAY FLAT PLUG**  
Fits 1/4" jacks like 12A6027 above.

No. 12A6068 **59c** 10 **53c**

Spec. Each ..... Each .....

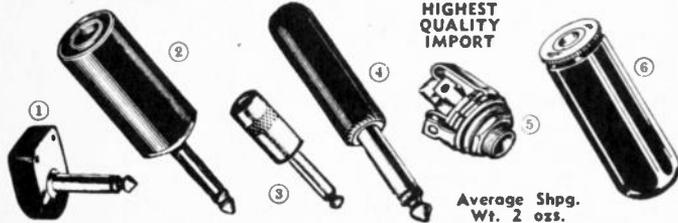


**PLUG AND JACK SET**  
Latest style slim design. Standard 1/4" plug and jack combination only 3 1/2 x 1 1/2" overall. Special import value. Wt. 4 oz.

No. 12A6029 **59c** 10 Sets **52c**

Per Set ..... Each .....

### HIGH QUALITY 1/4 INCH PHONE PLUGS & JACKS



① **FLAT TYPE PLUG**. Two conductor. Use where space is limited. Protrudes only 1/4". Bakelite shell screw connectors

10 Lots, **39c** Each ..... **34c**

12A6023. Ea. ....

② **STANDARD TWO-CONDUCTOR PLUG**. For 1 or 2 pairs of phones with either pin tip or lug type cords. Bakelite barrel.

10 Lots, **29c** Each ..... **27c**

12A6024. Ea. ....

③ **ALL METAL SHIELDED PLUG**. Another top quality import value. 1/2" x 1 1/8" nickel plate brass shell. Two-way with solder lug connections. 59c value.

10 Lots, **33c** Each ..... **29c**

12A6025. Ea. ....

④ **MODERN SLIM DESIGN PHONE PLUG AT BIG SAVINGS**. Top quality import made. Neat 1/2" dia. x 1 5/8" long bakelite shell. Two-way with solder lug connections. Red and Black, please specify. 45c value.

10 Lots, **29c** Each ..... **27c**

No. 12A6026. Net Each .....

⑤ **STANDARD PHONE JACKS**. Mates with 1/4" plugs. Fits 3/8" hole. Universal closed or open circuit design.

12A1764 **25c** 10 Lots, **22c**

Special Ea. .... Each .....

⑥ **3-WAY PHONE JACK**. For stereo headsets, etc. Mates with 1/4" 3-way plug as below.

No. 12A6027. **29c** 10 Lots, **25c**

Special Each ..... Each .....

⑦ **SLIM IN-LINE JACK**. Two circuit type for phone or mike extension use. Fits standard 1/4" phone plug. 1 3/4" long, 1/2" dia. Quality import.

No. 12A6028 **39c** 10 Lots **35c**

Each ..... Each .....

## SHIELDED AUDIO ADAPTOR BARGAINS

IMPORTED FOR BIG SAVINGS



- ① 12A6012 RCA Pin Jack to 1/4" Phone Plug. Each ..... 69c
- ② 12A6013 RCA Pin Jack to Miniature Phone Plug. Each ..... 59c
- ③ 12A6014 RCA Pin Jack to RCA Pin Jack. Each ..... 39c
- ④ 12A6015 1/4" Phone Jack to Miniature Phone Plug. Each ..... 88c
- ⑤ 12A6016 1/4" Phone Jack to RCA Pin Plug. Each ..... 69c
- ⑥ 12A6017 Y-Connector. 2 RCA Pin Jacks to RCA Pin Plug. Each ..... 69c
- ⑦ 12A6018 Y-Connector. 2 RCA Pin Jacks to RCA Pin Plug. Each ..... 88c
- ⑧ 12A6019 Universal Male or Female Mike to RCA Pin Plug. Each ..... 69c
- ⑨ 12A6020 Universal Male or Female Mike to 1/4" Phone Jack. Each ..... 88c
- ⑩ 12A6021 Universal Male or Female Mike to Miniature Phone Jack. Each ..... 88c
- ⑪ 12A6022 Male Mike to 1/4" Phone Plug. Each ..... 42c

### SHIELDED MINIATURE ADAPTERS

Converts miniature to sub-miniature and vice-versa. Allows earsets or mikes with one size of connector to plug into jacks of other size. Wt. 2 oz.

12A6069. Input .140" jack, output .097" plug. **49c**

12A6070. Input .097" jack, output .140" plug. Choice

Each ..... **49c**



### 3-PC. HANDY ADAPTER PLUG KIT



Easy way to convert patch cords to fit jacks on radios, recorders, amplifiers, etc. Adapts from miniature phone plug to standard RCA phone plug, from RCA phone plug to miniature phone plug and from miniature phone plug to standard 1/4" phone plug. Well made. Imported.

No. 12A6089. Wt. 4 oz. Special 3 pc. Kit. Each ..... **\$1.29**



### SHIELDED 9/64" MIN. IN-LINE JACK AND PLUG

Necessary for making your own cable extensions. Wt. 2 oz.

① Cable Connector to mate "miniature plug."

No. 12A6071. **39c** 10 **33c**

Special Each ..... Each .....

② Shielded "miniature plug."

No. 12A6088. **19c** 10 **17c**

Special Each ..... Each .....

### SUB-MINIATURE PLUG & JACK SET



**29c**

EA., 10 SETS

**WORTH AT LEAST DOUBLE**

No. 12A6036. **39c** 10 Sets, **29c**

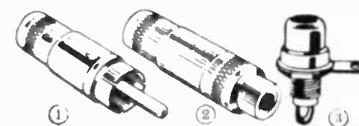
Spec. Per Set ..... Each .....

### RCA PHONO CONNECTORS



Stk. No.	Description	Each
① 12A1087	Phono Plug	6c
② 12A1088	Phono Jack	7c
③ 12A676	Double Jack	12c
④ 12A543	Easy Grip Plug	14c

### ALL-SHIELDED PHONO CONNECTORS



Mates with standard RCA pin plugs and receptacles. Completely shields circuit. Makes installation neat and easy. Cable plugs have shell 3/8" dia. 1 1/2" long. Chassis type mounts in 1/4" hole in panels up to 1/8" thick. Highest quality brass nickel plated construction. Av. Wt. 2 oz.

- ① No. 12A6085. Male Cable Plug. Each ..... 39c 10 Ea. .... 26c
- ② No. 12A6086. Female Extension Jack. Each ..... 39c 10 Ea. .... 34c
- ③ No. 12A6087. Chassis Jack. Each ..... 21c 10 Ea. .... 19c



### "OIN" SERIES PLUGS FOR EUROPEAN EQUIPMENT

Fits audio input and output jacks on many recorders, radios etc. made by Norelco, Wollensak, Uher, Telefunken, Korting, Dual, Kuba, Sony. Shielded metal shell, plastic cover, built-in strain relief.

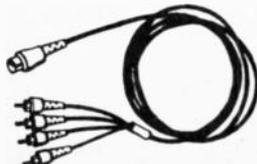
No. 12A6065. Male Plug. 3-Pins. Special Each ..... 59c

No. 12A6066. Male Plug. 5-Pins. Special Each ..... 65c

### PAIR 5 PRONG MALE AND FEMALE CABLE PLUGS

Handy for extending or adding to existing audio cables. Consists of 5 prong male cable plug above and mating female cable plug.

No. 12A6067. Pair For ..... **\$1.19**

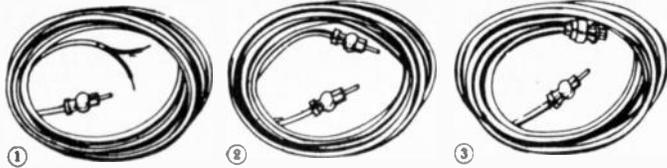


### STEREO PATCH CORD FOR NORELCO, WOLLENSAK, AND AMPLEX MICRO

Mates 3-pin European input-output socket on recorder. Provides 2 phono jacks on end of 36" shielded cables. Shpg. wt. 6 oz.

No. 33A6599. Special Each ..... **\$2.95**

## SAVE ON HIGH QUALITY HI-FI INTERCONNECTING CABLES



Finest quality featuring shielded silver-grey audio cable. Plugs and jacks molded directly with polyethylene for a more reliable trouble-free connection. Shpg. wt. 6 ozs. 30 ft. coils 1 lb.

### ① PHONO PIN PLUG ONE END, STRIPPED & TINNED OTHER END

No. 33A6565. 36". Each 49c No. 33A6567. 15 Ft. Each \$1.09  
No. 33A6566. 72". Each 69c No. 33A6568. 30 Ft. Each \$2.49

### ② PHONO PIN PLUG BOTH ENDS

No. 33A6569. 36" Each 59c No. 33A6571. 10 Ft. Each 95c  
No. 33A6570. 72" Each 75c No. 33A6572. 30 Ft. Each \$2.79

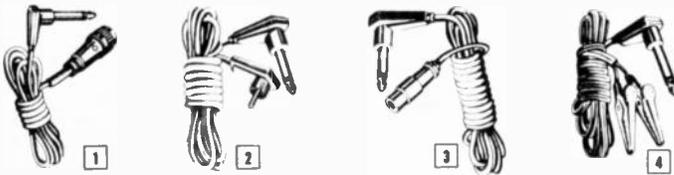
### ③ PHONO PIN PLUG ONE END, PHONO JACK OTHER END

No. 33A6573. 72". Each 79c No. 33A6574. 30 Ft. Each \$2.69

### PHONO PIN PLUG ONE END, PHONE PLUG OTHER (Not Illus.)

No. 33A6575. 72" Each \$1.09 No. 33A6576. 15 Ft. Each \$1.49

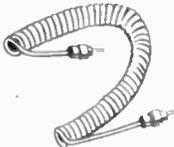
## RIGHT ANGLE PLUG HI-FI CABLES



All top quality silver-grey audio cable with molded plugs. Used on music instruments, many amplifiers and speaker systems. **ALL CABLES ARE 72" LONG.** Shpg. Wt. 6 oz.

① No. 33A6607. 1/4" Phone Plug to Mike Connector. Net Each \$1.19  
② No. 33A6608. 1/4" Phone Plug to Right Angle RCA Plug. Net Each 1.19  
③ No. 33A6609. 1/4" Phone Plug to RCA Phono Jack. Net Each 1.19  
④ No. 33A6610. 1/4" Phone Plug to Alligator Clips. Net Each 1.19

## COILED HI-FI CONNECTING CABLES



No more unsightly dangling cords. Coiled audio cables with RCA plugs each end. Quality import. Shpg. wt. 8 oz.

No. 33A6582-36" Long. Each 79c  
No. 33A6583-72" Long. Each 99c

## DUAL STEREO HI-FI CABLES



Neat single sheath encloses dual shielded cables. All cables have molded RCA phono plugs attached.

① No. 33A6611. 36"—RCA plugs one end, stripped other end. Net Each...\$ .99  
② No. 33A6612. 72"—RCA plugs one end, stripped other end. Net Each... 1.02  
③ No. 33A6613. 48"—RCA plugs both ends. Net Each... .99  
④ No. 33A6614. 72"—RCA plugs both ends. Net Each... 1.29



## 72 INCH AUDIO HI-FI CONNECTING CABLES WITH MINIATURE PLUGS

Finest quality shielded silver-grey audio cables, plastic covered. All quality imports. Works with most Japanese recorders and radios. Average shpg. wt. 1/2 lb.

① Miniature molded plug one end to molded RCA type jack other end. No. 33A6577. Each \$1.29  
② Miniature molded plug one end to standard molded phone plug other end. No. 33A6578. Each \$1.29  
③ Miniature molded plug one end to RCA type pin plug other end. No. 33A6579. Each \$1.29  
④ Miniature molded plug one end to standard shielded inline jack other end. No. 33A6580. Each \$1.49  
⑤ 9 ft. extension cable with miniature plug and jack. Use for speaker, earphone extensions, etc. No. 33A6581. Each \$1.29

## SMALL 2-COND. SPEAKER WIRE

Neat gray plastic insulated 2-wire parallel cable. Extra flexible with size 24 stranded copper conductors. Perfect for hi-fi and intercom installations. Easily concealed. Dia. only .058 x .115". Wt. per 1000 ft. 6 lbs.

No. 2C33 1000' \$1.49 For \$12.95 Per 100'

\$1.49



## TAPE RECORDER PATCH CORD

99c

For recording direct from Radio, Phono or TV. Flexible 72" two conductor cable with attached insulated alligator clips and RCA pin plug. Comes with pin plug to phone plug adaptor. Wt. 8 oz.

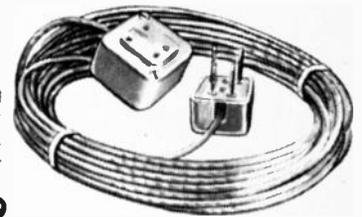
No. 33A6586. Special Each 99c

## NEW LOWER PRICES!

## 25 FT. TELEPHONE EXTENSION CABLE

Standard style 4 prong plug and socket as used with regular telephones. Fully assembled with durable resistant plastic 25 ft. 4-wire cord. Fine for telephone-intercoms, etc. Shpg. wt. 1 lb.

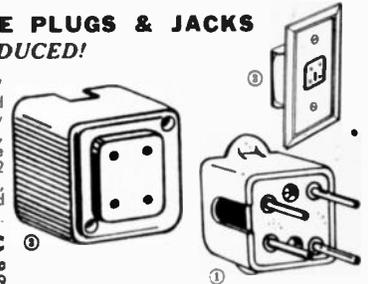
No. 32A4002. Special Each \$2.49



## STANDARD TELEPHONE PLUGS & JACKS PRICES REDUCED!

Patterned like popular "telephone plugs" and interchangeable with them. Standard 4 wire type, with code marked screw terminals. Perfect for extension speakers, intercom systems, phones, etc. Surface jack, for exposed wiring, mounts with 2 screws. Flush jack, for concealed wiring, has fittings and wall plate for standard electrical outlet box. (Box not supplied). Specify Ivory or Brown.

① 32A4003 Portable Plug. Ea. 65c  
② 32A4004 Surface Jack. Ea. 65c  
③ 32A4005 Flush Jack. Ea. \$1.79



## AC POWER CORD BARGAINS

## BELDEN 7 1/2-FT. HEAVY DUTY AC LINE CORD

WILL OUTLAST 6 ORDINARY CORDS



ONLY 44c Each 10 Lots

Heavy flexible, tinned copper conductors sheathed with liberal thickness of live rubber and attached to rugged rubber plug with durable spring contacts. Pearl gray. Shpg. wt. 8 oz. No. 41A372 10 Lots, 44c Special Each 49c Each

## U/L AC LINE CORDS

Extra flexible "zip-apart" size 18 POT plastic cords with molded attachment plug. Free end stripped. Avg. wt. 3 oz.

6 Ft. Brown or Gray, specify color. 41A332. 35c 10 For \$3.10 Choice Each

7 1/2 Ft. White 18A1397. Ea. 33c 10 For \$2.49

9 Ft. Brown 41A333. Ea. 45c 10 For \$4.00

SAVE! 18-2 SV POWER CORDS 18 Ft. Gray 49c 10 For \$3.99 18A1398. Ea.

## 25 & 50 Ft. Heavy Duty EXTENSION CORDS

Moisture-proof extra flexible vinyl cord sets with "molded-on" UL approved caps and connectors. For indoor and outdoor use with power tools, appliances, lighting equipment, etc. Specify Black or Red. #16-2 CONDUCTOR 41A373 25 FT. Wt. 1 lb. \$1.89 41A374 50 Ft. Wt. 3 lbs. Ea. \$3.79

25 FEET \$1.89

18/2 LAMP AND APPLIANCE CORD \$3.79 100 FT.

Highest grade, extra flexible plastic POT (SPT-1) zip cord with size 18 conductors. Fine for speaker hookups, AC extensions, etc. Brown or Ivory. Shpg. wt. 100' 1 lb.

2863. \$1.12 100 FT. \$3.79 25 Ft. For \$28.42 1000 Ft. For

Cord Retainers Wedge type fits 3/8 to 1/2" dia. holes. Grips two conductor zip cord firmly. Flexible black polyethylene. Import special No. 41A375 2 oz. Pkg. of 5 49c

247



**B-A SUPER BARGAIN VALUE**

**Save \$2<sup>00</sup>**

**BEST SELLING  
ALL PURPOSE  
MIKE**



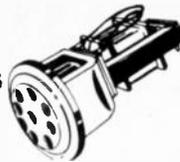
With Detachable Desk Stand

**REG. WAS  
\$7.95**

**NOW ONLY...  
\$5<sup>95</sup>**

For recorders, paging, ham and CB, etc. Dynamic, high impedance, non-directional. Comes with lavalier neck cord, desk stand. Slips out of stand for hand held use. Response 50-13,000 cps. Output -55db. 5 ft. cable. No. 29B350. **Special Each \$5.95**

**DYNAMIC  
MIKE  
ELEMENTS**



50,000 Ohm. -55 db. 50-12,000 Hz. 1 1/4" D. x 1 5/8".  
No. 29A327. **Special Each \$4.95**  
Hi and Lo Impedance. -52 db. 40-13,000 Hz. 1 1/8" D. x 1 5/8".  
No. 29A328. **\$5.95**  
**Special Each**  
Hi and Lo Impedance. -53 db. 40-14,000 Hz. 1 3/4" D. x 1 3/4".  
No. 29C260. **\$5.95**  
**Special Each**



**Bargains!**

**MICROPHONES**

**BRAND NEW  
FULLY GUARANTEED**

**FANTASTIC SAVINGS  
PRICE CUT \$5.00!**

**CARDIOID DYNAMIC  
MICROPHONE**

**SINGLE DIRECTION PICK-UP  
DUAL IMPEDANCE**

**WHILE LIMITED  
SUPPLY LASTS \$8<sup>95</sup>**

Was one of our best sellers at regular \$13.95 price! B-A bought the remaining warehouse quantity in order to pass along this terrific saving.

Fine for PA, recording, both voice and music. Will stop or greatly reduce feed-back howl on PA systems and allow greater working distance from mike. Quickly changed from regular high impedance to 50 ohm low impedance, allowing long mike lines without frequency loss. Has off-on switch and detachable cable. Flat response 60-12,000 cps. Output -62 db. Swivel mounting for 5/8"-27 stands. Shpg. wt. 1 1/2 lb. No. 29A604. **Spec. Ea. \$8.95**



**100's  
SOLD  
AT  
\$13<sup>95</sup>**

**FM WIRELESS MICROPHONES**

**BROADCAST OVER ANY FM RADIO  
UP TO 50 FT.**



**\$19.95  
MINIATURE**



**\$29.95  
DELUXE**

**MINIATURE FM WIRELESS MICROPHONE**

Effective and compact! Unlimited applications, wherever user must be free of attached microphone cords as normally used on PA systems. Ideal for auctioneers, ministers, etc. when used with an FM set to reproduce the sound. Sturdy all-metal compact case 3" x 1 1/8" x 2 3/4", weighs only 7 1/2 ozs. with case. Holds regular 9 V. battery. Wt. 8 ozs. Top quality import. No. 29A503. **\$19.95**  
**Special Each**

**DELUXE MODEL**

No cables necessary. Ideal for stage and sporting events. Mike broadcasts to any FM radio or FM tuner covering 88-108 MC connected to P.A. amplifier. Operates on one self-contained 9 V. battery. Frequency response 20-20,000 Hz ±2 db. Comes complete with standard 9 V. battery and operating instructions. No. 29A630. **Net Each \$29.95**

**NOW ELECTRIC GUITAR  
SOUND THE CORDLESS WAY!**

**GUITAR PLUG  
BROADCASTER \$12<sup>95</sup>**



Freq. Resp. 20 to 15,000 Hz. Provides faithful reproduction without wire connections. Plugs into guitar, broadcasting up to 50 feet to your FM radio or tuner and Hi-Fi amplifier system. Chrome plated brass case contains electronics encapsulated in epoxy. Standard 1/4" plug. Less battery. No. 40A5000. **High Quality Import. \$12.95**  
**Net Each**  
No. 21A5009. Battery for above. **Net Each \$43<sup>c</sup>**

**RUGGED  
DYNAMIC  
MICROPHONE**



Especially suited for hard usage. Beautifully proportioned for desk stand or floor stand. Instantly removable from swivel stand adaptor for hand held "stick" mike applications; plenty rugged for PA, paging, recording, conference setups, etc. Response 80-8,000 cps, output -56 db. High impedance. Has slide type on-off switch and detachable 6-ft. cable. Approx. 7 1/2" long, 1 1/4" dia. black and chrome finished. Very nice indeed. Shpg. wt. 1 lb. No. 29A409. **\$5.95**  
**Quality Import**

**VERSATILE DYNAMIC  
MICROPHONE**



WITH  
ADJUSTABLE  
MIKE  
STAND

A beautiful mike you will be proud to own. Perfect for recording, public address, paging and general use. Completely versatile. Use on its own adjustable desk stand, for hand-held applications or on standard 5/8"-27 floor stands. Excellent sound pickup from all sides. Rugged construction. Withstands heat and shock. Die cast all-metal body and base. Has convenient off-on switch. Output -52 db. Response 50-15,000 cps. 6 ft. detachable cord with standard 1/4" phone plug attached Black satin and brushed chrome. Imported to give you big savings! Shpg. wt. 2 1/2 lbs. No. 29B275. **Spec. Ea. \$12.95**

**LATEST DESIGN  
SLIM DYNAMIC MIKE**



Latest slim design for hand held applications or fits stand with instant slip-on swivel adapter supplied. Single direction pickup. Fine for PA, paging, recording, etc. Compact and rugged, will withstand lots of hard usage. Not affected by high temperature or humidity. Response 40-12,000 cps. Output -52 db. High impedance. Handy on-off slide switch. Only 6 1/4" long, 1 1/8" diameter. Black and chrome finish. 5 ft. detachable cord. High quality import. Shpg. Wt. 1 lb. 29B349. **Special Each \$8.95**

**SMALLEST  
WE'VE SEEN**



**NEW! MINIATURE  
LAVALIER DYNAMIC  
MIKE**

Very high quality... brushed chrome finished. Only 5/8" dia., 3 1/4" long and weighs less than 2 oz. Frequency response 50-15,000 cps. Output level -55 db, high impedance. Has detachable 10 ft. cable and lavalier neck cord. Mike slips out of clip for hand use if desired. Shpg. wt. 1 lb. No. 29A504. **\$9.95**  
**Special Each**

# BA

BARGAIN APPROVE  
SINCE 1947

## Bargains!

### MINIATURE COMPONENTS

#### BRAND NEW FULLY GUARANTEED

### MIKE COIL CORD

Quality Imports

3 Conductor  
1 Shielded

# 99c

1 Shielded—2 Unshielded conductors. Extends to 5 ft., retracts to 10". Tough, flexible grey vinyl jacket over vinyl insulated cadmium-bronze conductors. Ends stripped and tinned for easy installation. Wt. 4 oz.  
No. 29C157. Top Quality Import **99c**

## NEW! WONDERLOOP TELEPHONE PICKUP FOR RECORDING PHONE CALLS

SHOWN ON TELEPHONE

New design, extremely sensitive loop slips over listening piece of Bell system handset. Requires no special installation. Hum cancelling design for perfect operation. Makes phone recording quick and easy. With 6 ft. shielded cord and miniature plug to fit most recorders.  
No. 32A4014. Special Each **\$3.49**

### ADAPTOR CORD FOR EUROPEAN RECORDERS FITS 3 AND 5 PIN "DIN" STYLE CONNECTORS

For Norelco, Wollensak, VM, Grundig, Telefunken, Ampex and Bell & Howell Cassette recorders. Overall 6" long, with miniature jack and DIN plug.  
No. 32A4015 Special Each **\$1.95**



**CRYSTAL LAPEL MIKE**  
**\$2.39**

**SLIM HAND-HELD CRYSTAL MICROPHONE**  
**\$3.95**

THY... CONCEAL IN HAND OR CLIP TO CLOTHING

- ① **CRYSTAL LAPEL MIKE.** A natural for experimenters. Non-directional and gives crisp, clear speech reproduction. Hi-impedance, hi-output type with spring clip for attaching. Weighs only 2 oz. Brushed bright metal case 1 5/8" dia., 3/4" thick with 55" cable. Wt. 8 ozs.  
No. 29A610. **3 Lots \$2.19**  
Special Each
- ② **SLIM HAND-HELD CRYSTAL MICROPHONE.** With handy slide on-off switch and detachable 57" cable. Rugged and small, weighs only 6 oz. Tops for voice or music. Wide range response; output -65 db; high impedance. Beautiful satin finished bright cast metal housing 4 7/8" L., 1 1/8" max. dia. Supplied with swivel cradle holder for use of mike on floor or desk stand. Has standard 3/8-27 thread. Shpg. wt. 1 lb.  
No. 29A605. **3 Lots \$3.75**  
Special Each

### POPULAR COMPACT, LIGHTWEIGHT MIKES FOR TAPE RECORDERS, PA, ETC.

① Sits on desk  
② Fits in hand

- ① **SUB-MINIATURE "CLIP-MIKE"**  
Attaches anywhere! Works with every type of cassette or reel style tape recorder. Picks up sound clearly. Clip attaches to tie or clothing. Gold plated, size 1 5/8 x 3/8". Wt. 1 oz. With sub-miniature plug.  
No. 29A647. Net Each **\$5.95**
- ADAPTOR CORD AND PLUG.** For 3 and 5 pin European style connectors as used on Norelco 150, Wollensack 4100, 4200, etc.  
No. 32A4015. Net Each **\$1.95**
- ② **WIDE-RANGE RECORDER MIKE**  
Quality made by Euphonics expressly for recorder applications. Superior high output, wide range performance. Resp. 30-10,000 cps. Hi-impact grey and tan plastic case. Flexible 5 ft. cord. Wt. 8 ozs.  
No. 18C699. Special Each **\$1.99**
- ③ **ALL PURPOSE CRYSTAL MIKE**  
Bargain scoop! Fine for recording, paging, experimenting, etc. Wide range response. High output. 5 ft. cord. 1 1/8 x 2 3/4 x 1". Wt. 8 ozs. Priced below makers cost.  
No. 18A311. Special Each **99c**

**4-CHANNEL TRANSISTORIZED Audio Mixer Amplifier**

**FOR RECORDING, PA, AUDIO EXPERIMENTING**  
**\$7.95**

Adapts one to 4 high impedance sound sources, microphones, tuners, phonographs, recorders, etc., into a single high impedance input of your recorder or amplifier. Hum-free battery powered wide range transistor amplifier provides additional gain as desired. Separate gain controls for each channel allow mixing and fading without interaction. Input jacks are standard phone plug type; output, phono pin plug. In gold finished case 5 7/8 x 2 3/4 x 2" H. with brown and gold knobs and mar-proof rubber feet. Shpg. wt. 2 lbs.  
No. 29A411. Imported at Big Savings. Special Each **\$7.95**

**STEREO VERSION OF ABOVE.** Same basic principles as unit above but has dual stereo circuits. Adapts 2 separate sets of 2 high impedance sound sources, microphones, tuners, phono records, etc. into two single high impedance inputs at your stereo recorder or amplifier. Shpg. wt. 2 lbs.  
No. 29A3027. Import Special **\$10.95**

### JIFFY PHONE PICKUP COIL

Jiffy suction cup attaches to side of telephone or to back of handset. Does not interfere with telephone operation. With shielded cable. Giant import savings.  
No. 11A1057. Special **99c**

### UNIVERSAL REMOTE CONTROL MIKE

Replacement for cassette and small reel-to-reel transistorized recorders. Has remote control on-off switch and two individual pin plugs that may be used as dual plug, any spacing like on most cassette recorders. Comes with desk holder. Response 60-12,000 Hz. Wt. 8 ozs. Imported.  
No. 29A632. Special **\$3.95**

### FM WRIST RADIO BROADCASTER

**\$12.95**

**FUN FOR KIDS! HAS PRACTICAL USES IN HOME. KEEPS YOU IN TOUCH WITH PLAYROOM & SICKROOM**

A featherweight "wireless microphone" that broadcasts to your FM radio within 50 feet. Will pick up normal voice at 10 feet or less. Your radio reproduces the sound any place in your home. Great fun for the younger set, for parties and games. Lets you hear the play room or answer calls from the sick room. Audio range 300 to 6000 Hz. In watch style high impact styrene case with wrist strap. Electronics encapsulated in epoxy. Wt. 4 oz.  
No. 20A1213. Imported. **\$12.95**  
Net Each  
No. 21A5009. Battery for above. Net Each **43c**

### MAGNETIC MOBILE MIKE HOLDER

Powerful ceramic magnet secures bracket to any steel surface, on transceiver or auto dash. Fits all standard microphones equipped with hanger button.  
No. 29A3030. Special Each **95c**

## SAVE! CERAMIC MIKE

**IDEAL FOR CITIZENS BAND AND AMATEUR USE**  
**MADE IN U.S.A.**

**B-A BARGAIN SPECIAL \$6.95**

All the wanted features. Made to B-A specs by a leading American Microphone producer. Has coiled cord, press-to-talk relay switch, ceramic long-life cartridge. Best ever for replacement on CB and ham equipment. Fine for all the new mobile rigs. Response 80-7,000 cps. Output -54 db. 5 ft. coiled cord. Professional grey plastic case silver trim. Case only 3 5/8 x 2 1/2 x 1 1/2" T. With dash mtg. bracket. Wt. 1 lb.  
**Microphone and Magnetic Dash Mounting Bracket. \$6.95**  
No. 29A277. Special

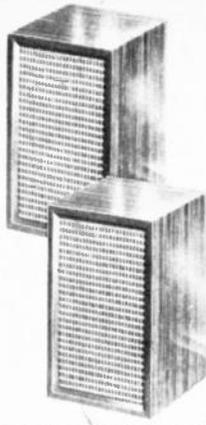
## VOLUMETRIC AIR SUSPENSION SPEAKERS

### MINI 2-WAY SPEAKER SYSTEM

EACH \$19<sup>95</sup> PAIR FOR \$38<sup>50</sup>

A new dimension in sound! Unsurpassed by compact speaker systems selling for over \$55.00. Beautiful oiled walnut finish with matching grille cloth. Fits anywhere . . . only 10" H. x 6" W. x 6<sup>5</sup>/<sub>8</sub>" D. Provides depth and brilliance never before possible in a system this small.

High efficiency requires small power to drive. Works with tube or solid state components. True bass response from specially designed heavy magnet woofer. Clear, crisp highs provided from highly efficient tweeter. Ideal for mono, perfect for compact stereo systems. Freq. resp. 40-20,000 cps. For 8 or 16 ohms input. Shpg. wt. 4 lbs. Imported for fantastic savings!  
No. 33A2025 Pair \$19.95 For \$38.50  
Each



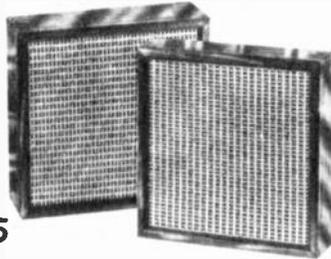
### MINIATURE 2-WAY SPEAKER SYSTEM

#### IN DELUXE WALNUT ENCLOSURE

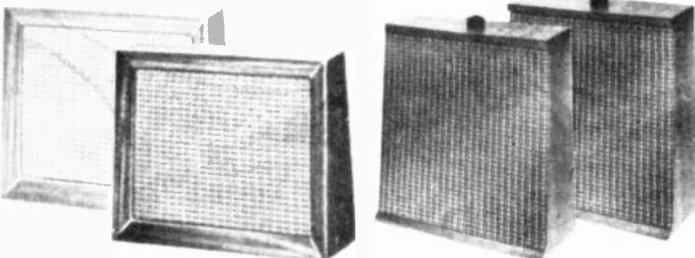
Response 40 to 18,000 cps—15 watts music rating. Small and mighty 9<sup>1</sup>/<sub>4</sub>" sq., 3<sup>1</sup>/<sub>4</sub>" D. Will improve performance of most music systems.

Excellent add-on for transistor radios and small recorders. Has high compliance woofer and super tweeter with powerful ferrite magnets. Solidly built. Impedance 8 ohms. Wt. 4 lbs.

High Quality Import  
No. 33A2041. Pair \$14.95 For \$27.95  
Special Each



### SLIM-LINE SPEAKER SYSTEM



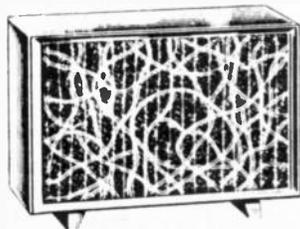
For use with hi-fi, intercom, background music or extra extension in the home. Compact sloping front enclosure has walnut picture frame molding with beautiful plastic grill cloth. Flat base will set on horizontal surface, or can be hung on wall. Contains heavy duty speaker with 2.15 oz. magnet, 8 ohm voice coil.

Size: 7<sup>1</sup>/<sub>2</sub> x 9<sup>3</sup>/<sub>4</sub>". Top 1<sup>3</sup>/<sub>8</sub>" tapering to 2<sup>1</sup>/<sub>2</sub>" at bottom. Wt. 5 lbs.  
No. 33A2043. Quality Import. Each \$6.95 For \$11.95

#### SLIMLINE SPEAKER WITH LEVEL CONTROL

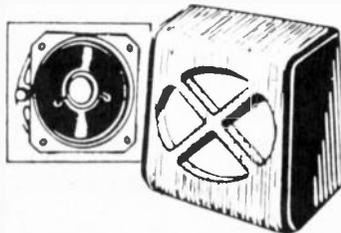
Excellent tone quality, fine appearance. Has volume control on outside of cabinet. Contains heavy duty speaker with 2.15 oz. magnet, 8 ohm voice coil. Walnut finished wood with neutral tone grill cloth. Size 9<sup>3</sup>/<sub>4</sub> x 9<sup>3</sup>/<sub>4</sub>" tapering from 3 to 4". Quality import.

No. 33A2042. Each \$8.95 For \$16.95



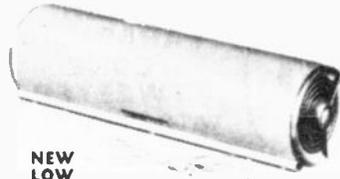
#### WIDE RANGE SPEAKER In Walnut Enclosure with BUILT-IN VOLUME CONTROL

Complete, ready to hook up to any radio, TV, phono, hi-fi, etc. Beautiful Walnut finished hardwood enclosure with attractive modern grille. Completely enclosed for finest baffling of heavy-duty 6<sup>1</sup>/<sub>2</sub>" PM speaker. Provides full wide-range tone. Built-in fader control-varies volume without affecting other speakers in system. 4-8 ohm V.C. Shpg. wt. 8 lbs.  
No. 33A3504. Import Special \$8.95



#### 4-INCH PM SPEAKER IN WOOD BAFFLE HANDY MIDGET SIZE—MOUNTED AND READY TO USE

Finished 2-tone natural wood miniature cabinet, closed at rear. Contains full 4" speaker with heavy magnet. 3.2 ohm V. C. Fine for intercom, remote or chairside TV-radio extension. A dandy speaker for code practice, short wave listening, audio experimenting of all kinds. Built-in two prong jack and plug for quick connection. 5<sup>1</sup>/<sub>8</sub>" W. 3<sup>1</sup>/<sub>4</sub>" D. 5<sup>1</sup>/<sub>2</sub>" H. Shpg. wt. 2 lbs.  
No. 49A4004. Import Special \$3.69



NEW LOW PRICE!

#### FANTASTIC TUBULAR ACOUSTICAL SPEAKER SOUND FLOWS FROM BOTH ENDS

Absolutely amazing sound reproduction . . . you must hear it! Perfect for hi-fi radio, auto rear seat, TV, etc. Midget plugs provided for transistor radios. 12" long, 3<sup>3</sup>/<sub>8</sub>" dia. With 12 ft. cord. Shpg. wt. 5 lbs. No. 49A4000. Import Special, Each \$2.98

# Bargains!

## SPEAKER SYSTEMS & STEREO PHONES

BRAND NEW FULLY GUARANTEED

### HI-FI PHONES AT BIG SAVINGS!



#### STEREO HEADPHONES WITH TWEETERS

Best looking, best performing stereo headset we've seen! Finely finished in light gray overall. Workmanship and appearance belie the exceptionally low B-A price! Fully adjustable with soft padded ear cushions, makes private listening a real pleasure. Room noises are shut out. Tweeter level controls on each phone. Response 30-15,000 cps. 8 ohm. 7 ft. cord with 3 circuit plug. High quality import. \$14.95  
33A6600 Wt. 2 lbs. Each



#### TERRIFIC LOW PRICE COMPARE ANYWHERE! STEREO HEADPHONES

Big soft ear cushions shut out room noises, are comfortable to wear. Full wide response. Adjust volume to listening pleasure without disturbing others. For stereo or mono. With 3-cond. plug. Import. 3 lbs. No. 33A6500. Each \$6.99

#### STEREO EXTENSION CORD

\$2.49



20 ft. gray extension cord with 3 circuit plug and jack. Use with stereo headphones for private listening. Shpg. wt. 10 oz. Quality Import. No. 33A6601. Each \$2.49

#### STEREO HEADPHONE JUNCTION BOX FINEST IMPORT



Connects to amplifier speaker terminals. Has change-over switch for speaker or phones, stereo phone jack, 36" leads. In gray plastic enclosure. Built-in attenuator prevents headphone overload. Finest import. No. 33A6508. Net Each \$2.69

#### REMOTE CONTROL STEREO LISTENING STATION

Stereophone control center for stereo or most music systems. Provides extra convenience of separate level control for each channel right at your easy chair. Has stereo jacks for two sets of stereophones and speaker off-on switch for private listening. In attractive gold finished cabinet with 20 ft. of cable and instructions. Size 5<sup>7</sup>/<sub>8</sub> x 2<sup>3</sup>/<sub>4</sub> x 2" H. No. 33A6615. Wt. 2 lbs. \$6.95 Each



#### STEREO SPEAKER WALL PLATE COMPLETE WITH TWO 1-INCH PLUGS

New Ivory wall plate with two 1/4" phone jacks mounted. Hardware supplied for use with standard outlet box or dry wall mounting. Two 1/4" phone plugs included. Size 2<sup>3</sup>/<sub>4</sub> x 4<sup>1</sup>/<sub>2</sub>". Wt. 1/2 lb. No. 33A6616. Special Each \$1.49



#### Y-CONNECTOR CORD FOR TWO STEREO PHONES

Use 2 pairs of stereo phones at the same time from a single amplifier output. High quality 3-way play and two 3-way jacks, 36" overall. No. 33A6598. Special \$2.99 Each



#### CLOSED CIRCUIT STEREO PHONE JACK ONLY

Fits 1/4" 2 or 3 circuit plug. Can be wired to disconnect speakers when plug is inserted. 10 Lots \$49c Each No. 12A6091. Each \$9c



# Bargains!

## HI-FI SPEAKERS AND TWEETERS

### BRAND NEW FULLY GUARANTEED



### 5-INCH PARABOLIC CONE TWEETER WITH CROSSOVER INCLUDED

Extends range of any 4 to 8 ohm speaker from 5000 cps to 20,000 cps. Features a hard parabolic cone to reproduce all high frequency ranges cleanly without cone "break-up". High efficiency from 1.64 oz. Alnico V magnet matches even the most efficient low-frequency speakers. Handles 15 watts average audio power. Includes capacitor crossover and diagram for connecting to existing speakers. Wt. 2 lbs. WORTH MANY TIMES OUR PRICE!

No. 34A412. Tweeter and Crossover ..... \$2.49

### SUPER VALUE! HEAVY DUTY 5-INCH PM

BIG IMPORT SAVINGS! \$1.39

Superior quality . . . worth twice the price! Perfect for sweet 16's, replacement, etc. 2 3/8" D. 8 ohm V.C. 2.15 oz. magnet. Wt. 1 lb.

No. 34A404 \$1.39 16 For..... \$19.95 Each



### CROSSOVER NETWORK CAPACITORS

15A5003-2 Mfd. Choice  
15A5004-4 Mfd. Each  
15A5005- 8 Mfd. 49c

## SPECIAL VALUE VOLUMETRIC SPEAKERS

HIGHEST QUALITY IMPORT



\$7.95

### 4-INCH HIGH COMPLIANCE SPEAKER

- Acoustic suspension.
- Full range 10 watt.
- Response: 35-16,000 cps.

Powerful ceramic magnet develops over 10,000 gauss. Recommended cabinet size 8 3/4 x 8 x 6 1/8". Impedance 8 ohms. Shpg. wt. 5 lbs. No. 34A403. Special Each ..... \$7.95

HIGHEST QUALITY IMPORT



\$9.88

### 6-INCH HIGH COMPLIANCE SPEAKER WITH WHIZZER CONE

- Ideal for solid state and tube amplifiers alike.
- Response: 35-18,000 cps.
- Power capacity 20 watts.

Large cone with flexible cloth edge provides more power in the low frequency range. Impedance 8 ohm. Recommended cabinet size is 7 7/8 x 11 3/4 x 6 1/2". Shpg. wt. 6 lbs. No. 34A408. Special Each ..... \$9.88

\$13.98

HIGHEST QUALITY IMPORT

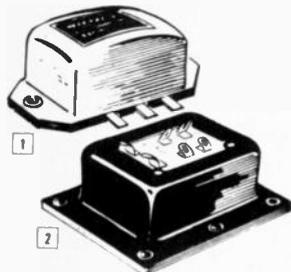


### 8-INCH HIGH COMPLIANCE VOLUMETRIC SPEAKER WITH WHIZZER CONE

- Power capacity 30 watts.
- Frequency response 30-20,000 cps.
- Ferrite magnet.

Latest design, powerful ferrite magnet, and soft cloth edge has made this speaker comparable to most speakers of larger size. Beautiful reproduction of the entire audio spectrum. Impedance 8 ohms. Extends 3 1/2" deep. Shpg. wt. 10 lbs. No. 34A409. Special Each ..... \$13.98

## SAVE ON COMPONENTS FOR 2, 3 AND 4-WAY SPEAKER SYSTEMS



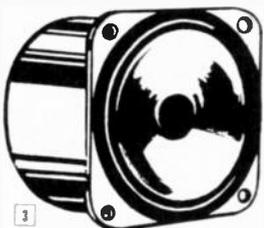
① and ② TWO-WAY LC CROSSOVER NETWORKS FOR 2 OR 3-WAY SPEAKER SYSTEMS

① Compact Inductive-Capacitive Network feeds frequencies above 2000 cycles to tweeter, below 2000 cps to woofer. Insertion loss only 1 db. Solder lug terminals for amplifier, woofer, tweeter. 8 ohms.

No. 33A6513. 3 1/2 x 2 x 1 3/8". Shpg. wt. 8 oz. Net Each ..... \$3.95

② Larger Inductive-Capacitive Network than above for lower 1000 cps crossover. Insertion loss only 1/2 db. Use with mid-range tweeter and woofer for 2-way speaker combination; or for woofer, mid-range, and tweeter 3-way system in combination with 2000 cps crossover above. Solder lug terminals. Complete instructions included. 3 1/2 x 4 1/4" base plate, 2" high.

No. 33A6512. Shpg. wt. 1 lb Net Each ..... \$4.95

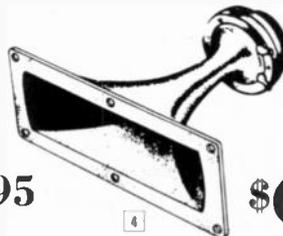


\$4.95

③ DELUXE EXTRA HEAVY MAGNET 3 1/2-INCH CONE TWEETER

Like used in expensive hi-fi speaker systems. Direct radiating cone type tweeter with damping to prevent peaking and metallic harshness. Enclosed back prevents interaction between the other speakers in multiple 2, 3 or 4-way systems. Heavy 3 oz. ferrite magnet provides 20-watts power handling capacity. Frequency response 2000-18,000 cps. 3/4 inch V.C. 8 ohms impedance. 3 1/2 x 3 1/2 x 2 1/8" deep. Shpg. wt. 1 lb.

No. 33A2040. Special Net Each ..... \$4.95



\$6.95

④ HORN LOADED COMPRESSION TWEETER

Actually the price belies the quality. Here is an exceptional value! Same acoustic design as used with the more expensive speaker systems

Long throat modified hyperbolic horn provides wide angle high frequency sound dispersion and is compression loaded to flatten the response curve. Handles 20 watts of power with a flat frequency response from 2000 to 20,000 cps. Full 1" V.C. Imp at 4000 cps. 8 ohm. 3x7 1/4" flange requires 2x6" baffle cutout. 6 1/8" deep. Low-lustre black and metallic gold.

Shpg. wt. 2 1/2 lbs. American made.

No. 33A2029. Special Net Each ..... \$6.95



\$7.95

⑤ EXPONENTIAL HORN TYPE MID-RANGE TWEETER

Fills the need for mid-range horn in 3-way speaker systems or mid-range and tweeter in 2-way systems. Same type as used in costly home and theatre systems . . . at a small fraction of their usual cost. Long 10" horn with 3x9 1/2" mouth reproduces 900-20,000 cps smoothly, cleanly, and efficiently . . . free of "humps" or "peaks" in the response curve, without distortion, and with high output to match even large woofers. 4x10 1/2" flange requires 3x9" cutout. 20 watt power rating. Low-lustre black and metallic gold. Overall length 11 1/2".

No. 33A2030. Shpg. wt. 4 lbs. Net Each ..... \$7.95

## BUILD YOUR OWN 2 OR 3-WAY SPEAKER SYSTEMS WITH THESE B-A STEP-UP KITS

REGULAR B-A LOW COST \$12.29

\$9.95



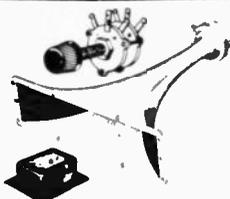
### HIGH FREQUENCY STEP-UP KIT NO. 1

Extends the range of single voice-coil speakers to beyond the range of audibility. Consists of Tweeter, 2-Way Crossover, and L-Pad for tweeter volume control.

No. 33A2031. Wt. 3 1/2 lbs. Special Each ..... \$9.95

REGULAR B-A LOW COST \$14.29

\$11.95



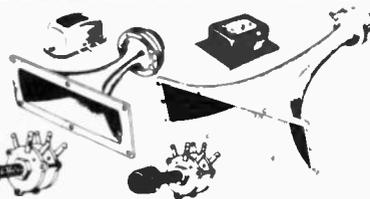
### MID-RANGE STEP-UP KIT NO. 2

Add to woofer-tweeter 2-way speaker system, or single speaker, to improve mid-range and lower high-freq. range. Consists of Mid-Range speaker, 2-Way Crossover, and Mid-Range volume control. Wt. 5 1/2 lbs.

No. 33A2032. Special Each ..... \$11.95

REGULAR B-A LOW COST \$26.58

\$19.95



### COMBINATION MID-RANGE AND HIGH FREQUENCY STEP-UP KIT NO. 3 FOR 3-WAY SPEAKER SYSTEM

Even more \$\$\$ savings for both middle and high-freq. step-up kits (left). Consists of Tweeter, Mid-Range speaker, Two Crossovers, and 2 L-Pads for mid-range and tweeter volume controls. Diagram included. Wt. 9 lbs.

No. 33A2033. Special Each ..... \$19.95

## SAVE! NORELCO HIGH-FIDELITY SPEAKERS



**BACK AGAIN BY POPULAR DEMAND!**  
**WORLD FAMOUS SUPER DELUXE 12-IN. TWIN CONE SPEAKER**

**COMPARE AT \$70 to \$100!**  
**\$29<sup>88</sup>**

**1 NORELCO 12-INCH SUPER DELUXE HI-FI SPEAKER**

Norelco's best—compare with speakers costing \$70 to \$100. Famous twin-cone design incorporating Ticonal VII, the most powerful of modern magnet alloys. Extra high flux density (11,000 gauss) for exceptional transient response, maximum efficiency (14% at 400 cps) and damping. Conservatively rated 35 to 18,000 cps with power handling capacity also conservatively rated 30 watts peak. V.C. 8 ohms. Shpg. wt. 10 lbs.

No. 34A204. **\$29.88** 2 For **\$54.50**  
 Special Each

**1 NORELCO 12-INCH TWIN SPEAKER**

Now better than ever. Special design extends the response curve a full octave above 10,000 cps. Employs two cones which are always in phase and complete harmony producing clean smooth wide range response 35 to 17,000 cps. Features new powerful Ticonal VII voice coil magnet for maximum efficiency and damping. Magnet wt. 15 oz. Flux density 8000 gauss. Power handling capacity 10 watts peak. Voice coil, 8 ohms. Compare at \$20.00. Shpg. wt. 7 lbs.

No. 33A2027. **\$16.88** 2 For **\$32.50**  
 Net Each

**1 NORELCO 12-INCH TWIN-CONE**

Amazing value! Performance surpasses speakers priced at over double B-A's low, low special purchase price! Provides unusually clean response over entire audio spectrum—deep bass and silky smooth highs . . . freq. response 40 to 15,000 cps. Powerful ferroxidure ceramic magnet produces 15 watts peak power. Extra high flux density of 42,600 maxwells. Will match 4-8 ohm amplifier output. Wt. 27 lbs.

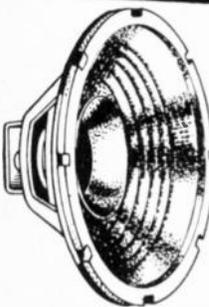
No. 33A2024. **\$12.88** 2 For **\$19.50**  
 Net Each

**2 NORELCO 8-INCH TWIN-CONE**

Same famous design as above. Specs. are: frequency response 55 to 18,000 cps. Heavy 13 oz. Ticonal VII magnet. Flux density 13,000 gauss. Power handling capacity 10 watts peak. Voice coil, 8 ohms. Compare at \$20.00. Wt. 4 lbs.

No. 33A2028. **\$11.88** 2 For **\$22.50**  
 Net Each

### SPECIAL VALUE! OUR LOWEST COST



**12-INCH TWIN CONE HI-FI SPEAKER**

Best buy ever for budget minded music lovers. Astonishingly smooth, wide-range reproduction. Top quality American made by leading speaker manufacturer. High efficiency, provides plenty of volume with low power amplifiers. Fine for low cost component systems, console replacement speakers and public address. Heavy Alnico V magnet handles 10 watts power with a frequency response of 40-15,000 cps. Full 1" voice coil, 8 ohms impedance. Shpg. wt. 4 lbs. Low price made possible by B-A's large special purchase quantity.

No. 33A2049 **\$6.88** Pair For **\$12.50**  
 Special Each

### B-A SUPER BARGAIN VALUE

**DELUXE 8-INCH HIGH FIDELITY SPEAKER**

AMERICAN MADE FOR MAGNAVOX

**\$4<sup>99</sup>**



- 15 WATTS PEAK POWER
- 40-20,000 CPS. FREQ. RESPONSE

Top quality by one of America's leading speaker makers. Exceptionally fine performance. Will provide much better sound quality than ordinarily found in record players, TV sets, radios, etc. Also exceptionally well suited for hi-fi and PA multiple speaker systems or for hi-fi component systems where space is limited. Heavy-duty 4 oz. ferrite ceramic magnet produces 15 watts peak power. Freq. response 40-20,000 cps. Full 1" V.C. Imp. 8 ohms. Only 2 7/8" deep, fine for in-wall installations. Shpg. wt. 2 lbs.

No. 18A1345 **\$4.99** 10 Lots **\$4.50** 25 Lots **\$4.25**  
 Special Each Each Each



**2-WAY CROSSOVER WITH LEVEL CONTROL**

**\$4<sup>95</sup>**

Fine appearance. Comes assembled on sturdy finished metal panel, ready to install on your speaker enclosure. Features high quality L/C type network with tweeter level control. Crossover point, 3000 Hz. Impedance 8 ohms. Convenient push type, spring-loaded binding posts. Size 4 x 5 1/2", black enameled, gold lettering. Attached 3 ft. leads. Wt. 1 lb.

No. 33A6597. **\$4.95**  
 Special Each

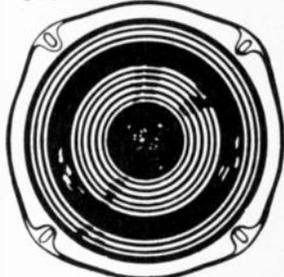
**HIGH EFFICIENCY 8 INCH SPEAKER**

**SPECIALLY DESIGNED AND LOW PRICED FOR MULTIPLE SPEAKER INSTALLATIONS**

Real good buy! Save over 50%. Perfect for restaurants, doctors offices, business establishments, homes . . . anywhere multiple speakers are used for background music, low level paging systems, etc. High efficiency design provides excellent response from even the lowest powered amplifiers. Shallow construction, only 2 1/8" deep. 2.4 oz. ferrite magnet. Impedance 8 ohm. Made in U.S.A. Shpg. wt. 1 1/4 lbs.

No. 34A401 **\$1.95** 10 Lots **\$1.79**  
 Spec. Ea. Each

COMPARE AT OVER \$4.00



**CEILING-WALL SPEAKER IN FLUSH MOUNTING BAFFLE**

Pipe music from radio, hi-fi, etc. to any room of the house, office, plant, etc. easily and economically. Heavy duty 6 1/2" speaker is premounted in beautiful gold finish baffle that flush mounts—no cutouts necessary—to ceiling or wall. 9 1/2" dia., 2 1/2" deep. 8 ohm imp. Special import value.

No. 49A4003. Wt. 4 lbs. **\$4.95**  
 Special Each

**\$4<sup>95</sup>**



**INTERCOM — OUTDOOR THEATRE SPEAKERS**

Weather resistant type with 1.47 oz. Alnico magnet. Square 4" frame. Perfect intercom or theatre replacement. Correct impedance for many transistorized devices. 45 ohm.

No. 18A1369—4-Inch. Wt. 1/2 lb.  
 No. 18A1370—6-Inch. Wt. 2 lbs.  
 Choice **\$1.99** 10 @ **\$1.79**  
 Each Each

**\$1<sup>99</sup>**



**GIANT 15-INCH FULL RANGE SPEAKER**

Absolutely amazing performance at surprising low cost. Outperforms speakers usually costing much, much more. Big power handling capacity of 25 watts with extra heavy duty 6.8 oz. Alnico V magnet. Faithfully reproduces clean rich bass tones to 30 cps with high frequency range extending to over 13,000 cps. Full 1" voice coil. 8 ohm imp. Depth 5 1/2". Wt. 6 lbs.

No. 34C211. **\$9.95**  
 Special Each  
 Pair **\$15.95**  
 For



**2 FOR \$15.95**

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

### ANOTHER FABULOUS BUY

**15-IN. TWIN-CONE HI-FI SPEAKER**

**BUILT FOR ELECTRONIC ORGANS BY TOP SPEAKER MANUFACTURER**

**WORTH AT LEAST \$30.00**

**AMERICAN MADE**

**HANDLES UP TO 30-WATTS MUSIC POWER**

**\$14<sup>95</sup>**

A terrific speaker at considerably less than its usual price! Built by quality conscious maker for the wide-range and high-power sound re-both woofer and tweeter cones, extra large 1 3/4" voice coil, huge 2 lb. Alnico V magnet and rugged frame. Sound response is smooth over entire tonal range. Provides unusually low bass response, sparkling crisp highs. Range 20-15,000 cps. V.C. imp. 8 ohms. 6 1/2" deep.

No. 33A2034. Wt. 12 lbs. Each **\$14.95**

2 Cones to Broaden Frequency Range



Powerful 2 Pound Magnet



# Bargains!

## SAVE ON SPEAKERS

BRAND NEW FULLY GUARANTEED

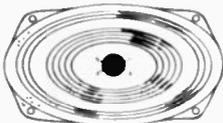
TOP QUALITY AT LOW, LOW PRICES!  
WITH ALNICO V HIGH EFFICIENCY SPEAKERS

The measuring stick for speaker efficiency and its value is the Magnet Weight. Be sure you check when you compare prices. All have 3.2 ohm voice coils (except 34A424 and 34A423 which are 6-8 ohm\* and 18A1401 which is 45 ohm† for intercams).

Size	Mag. Wt. oz.	Illus.	Shpg. Depth	Wt. Lbs.	Stk. No.	Each	10 @ Each
3"	1.47	3	2 1/4"	1/2	34A415	\$1.92	\$1.75
4"	.55	3	1 1/2"	1/2	18A1399	1.19	1.09
4"	1.00	3	2 1/4"	1/2	18A1400	1.39	1.29
4"†	1.00	3	2 1/4"	1/2	18A1401	1.95	1.78
4"	1.47	3	2 1/4"	1/2	34A416	1.93	1.75
5"	1.47	1	2 3/4"	3/4	34A417	2.30	2.12
5"	2.15	1	2 3/4"	1	34A418	2.60	2.34
6"	1.47	4	2 3/4"	1	34A419	2.39	2.15
6"	2.15	4	2 3/4"	1 1/4	34A420	2.79	2.51
8"	2.15	1	3 1/2"	1 1/2	34A421	2.99	2.79
8"	3.16	4	3 1/2"	1 3/4	34A422	4.19	3.89
8"*	6.8	4	4"	2	34A423	5.65	5.15
12"*	6.8	1	5 1/2"	3	34A424	6.95	6.35
4 x 6"	1.47	2	2 1/2"	3/4	34A425	2.69	2.42
5 x 7"	1.47	2	2 1/2"	1	34A426	2.77	2.51
6 x 9"	2.15	2	3 1/2"	1 1/2	34A427	3.29	2.99

May Now Be Assorted for Quantity Prices

### MULTIPLE IMPEDANCE SPEAKERS FOR TRANSISTOR AUTO RADIOS



PRICES FROM \$279 AND UP

For replacement or rear seat speaker installations. Readily adjusts for 10, 20 or 40 ohm impedance. 6 x 9" of shallow design only 2 1/4" deep. Heavy 2.18 oz. cup magnets, 1" voice coil. Average shpg. wt. 1 lb. No. 34A388. 6" Pin Cushion Net Each **\$2.79**

No. 34A389. 4 x 8". Net Each	<b>\$2.99</b>
No. 34A390. 4 x 10". Net Each	<b>3.49</b>
No. 34A428. 5 x 7". Net Each	<b>3.79</b>
No. 34A429. 6 x 9". Net Each	<b>3.49</b>

### POWERFUL 10-WATT MULTIPLE IMPEDANCE 6x9"



**\$4.99**

Big 6 oz. ceramic magnet for 10 watts of power. Whizzer cone for extended range tone. 3/4" V.C. Multiple imp. 10, 20 or 40 ohms. Shallow mtg., 2 3/4". Wt. 1 1/2 lb. No. 34C209. Special Ea. **\$4.99**

### WHOPPING BIG SAVINGS!

### TOP QUALITY AMERICAN MADE PM SPEAKERS

BUILT FOR A LEADING HANDCRAFTED CONSOLE & TV SET MANUFACTURER  
THE LOWEST PRICES EVER!

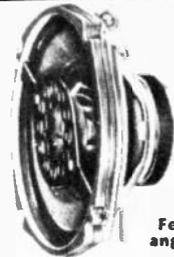
YOUR CHOICE IN 5 LOTS **99c EACH**

- (1) 2 x 6" PM Speaker with .68 oz. magnet, 3.2 ohm V.C. Wt. 1/2 lb. No. 18A1330 **\$1.19** 5 @ **99c** Each
- (2) 4 x 6" PM Speaker with .68 oz. magnet, 3.2 ohm V.C. Wt. 1/2 lb. No. 18A1331 **\$1.19** 5 @ **99c** Each
- (3) 3 1/2" PM Speaker with .68 oz. magnet, 3.2 ohm V.C. Wt. 1/2 lb. No. 18A1328 **\$1.19** 5 @ **99c** Each

### EXCEPTIONAL SPEAKER BARGAINS



WORLD FAMOUS NORELCO TWIN CONE HIGH FIDELITY SPEAKER



COAXIAL HI-FIDELITY 8-INCH SPEAKER

SHALLOW DESIGN

FULL RANGE 40-18,000 Hz

Features 110° wide-angle sound dispersion

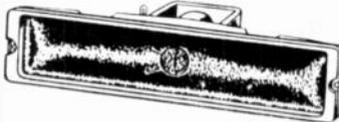
You would usually expect to pay 3 times as much for equal quality. Ideal replacement for older type speaker in record players, TV sets, radios, etc., or for hi-fi systems where space is limited. Handles up to 10 watts. Frequency response 60-18,000 cps. Impedance 8 ohms. No. 33A20 50 Special Each **\$4.99**

Real high quality. Full range, distortion-free, true coaxial speaker for Hi-Fi, public address, paging and background music. Only 3 1/4" deep, mounts in standard 4" wall. Mtg. bracket provided for 70 volt transformer. 20 watts power, freq. response 40-18,000 cps, crossover at 2000 cps, screw terminals. Wt. 3 lbs. No. 33A2039. Special Each **\$9.95**

### 12-INCH GUITAR SPEAKER



Special design for optimum performance with guitars and other musical instruments. High efficiency for clear distortion-free sound at high volume. Exceptionally well made. Heavy basket frame and special cone designed for bass note reproduction of guitars. Made for B-A by a top American manufacturer. 8 ohm impedance. 6.8 oz. magnet, 1 1/2" voice coil. Shpg. wt. 5 lbs. No. 34B224. Special Buy **\$8.95**



### AMAZING VALUE! 2 1/2" x 10" SPEAKER

FITS MOST UNUSUAL SPACES  
Nothing else like it to compare! Fits where no other speaker will fit while providing unusually fine performance. Mounts horizontally or vertically in bookcases, cabinets, drawers... tucks away conveniently anywhere. Top make with 1.47 oz. Alnico V magnet. 3.2 ohm V.C. No. 34A413. Wt. 1 lb. Special Each **\$3.49**

### 8-INCH OVAL HIGH FIDELITY SPEAKER

● 15 watts peak power.  
● 30 to 15,000 cps range.  
Extra good quality hi-fi speaker at B-A's special purchase savings! Just like speakers used in new expensive compact portable stereo systems. Big 4.7 oz. ferrite magnet 1" voice coil. Handles 15 watts peak. Only 2 1/4" D. x 4" W. Dust screen. Made in U.S.A. Shpg. wt. 1 1/2 lbs. No. 18A1317. Special Each **\$3.95**

### TRU-FIDELITY SPEAKER 6 x 9" TWIN-CONE

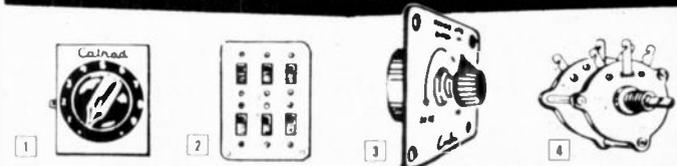
**\$4.99**  
3.16 oz. ALNICO V PM MAGNET

Powerful heavy duty, high quality twin-cone speaker. Perfect for improved tone in record players, radios, TV sets, automobile radio dash and rear seat installations, etc. Electronic design and principle same as found in the more expensive high-fidelity speakers. Inner cone carries the high notes, outer cone the lows. 3.2 ohm No. 34A400. **\$4.99** 10 Lots, **\$4.99** 1 1/4 lb. Each

### SPECIAL VALUE!

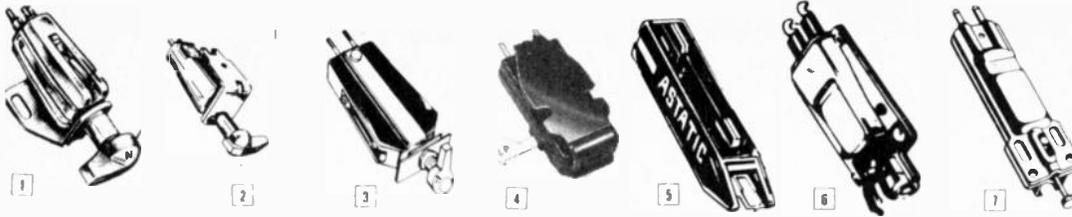
② 4x10 PM Speaker, 1.47 oz. magnet. 8 watts. 8 ohm V.C. 4 hole mounting. Shpg. wt. 1 lb. No. 18A1360 **\$1.99** 5 @ **\$1.79** Each

### LOW PRICES ON SPEAKER CONTROLS



- ① Level Controls (L-Pads). For adjusting and matching the listening levels of 2 or more speakers. Silver and black 2 1/2 x 2" plate, with black plastic knob. Mounts in panels to 3/4". Wt. 3 oz. No. 14A1137. 8 ohm. Import. Each **\$1.96**
- ② Multiple Speaker Switch. For centralized "on-off" control of up to 6 remote speakers. 3 1/2" W. x 2 5/8" H. Gold tone mtg. plate with 6 SPDT slide switches. Requires 3/16" behind panel. Wt. 4 oz. No. 19A7183. Special Each **\$1.39**
- ③ Remote Speaker Fader Control. Controls both speakers, main and remote from one location. 2 1/8 x 2 1/8" gold tone mounting plate. Requires 5/8" depth behind panel. Wt. 3 oz. No. 19A7184. Special Each **69c** 3 Lots, Each **59c**
- ④ 8 Ohm L-Pad. Insert in line between amplifier and speaker to adjust speaker volume independently of other speakers in the system. Handles speaker power to 6 watts. 1/4" shaft, 3/8" long, 3/8" bushing. Shpg. wt. 6 ozs. No. 14A1136. Special Each **\$1.39** 4 For **\$5.00**

# EXCEPTIONAL SAVINGS ON MOST POPULAR CARTRIDGES



## MONAURAL PHONO CARTRIDGES

- (1) **UNIVERSAL TURNOVER.** Fits most changers and players. Regular 1/2" mounting. 3 V. output. 40 to 13,000 cps. Sapphire needles. Wt. 3 oz.  
**No. 24A4052. Import Special, Each \$1.75** 10 Lots Each **\$1.59**
- (2) **RONETTE TURNOVER.** DC500 with 1/2" mtg. bracket for most record players and changers. 3 V. output. Sapphire needles. Wt. 3 oz.  
**No. 24A4053. Net Each \$2.85** 10 Lots Each **\$1.95**
- (3) **RONETTE TURNOVER.** Popular DC500 with single hole mounting for BSR, VM, etc. changers. 3 V. output. Sapph. needles. Wt. 2 ozs.  
**No. 18A1394. Special Each \$1.49** 10 Lots Each **\$1.29**
- (4) **VACO TURNOVER.** To-45 used in thousands of changers and players. Front clamp mounting. 3 V. output. Sapphire needles. Wt. 2 ozs.  
**No. 18A1395. Special Each \$2.19** 10 Lots Each **\$1.95**
- (6) **RCA TYPE 45 RPM.** Exact replacement for 45 RPM players. 1 V. output. 50-10,000 cps. 1 mil sapphire stylus. Quality import.  
**No. 24A4054. Special Each \$1.19** 10 Lots Each **99c**
- (7) **UNIVERSAL ALL-GROOVE.** Fits practically all small players. Standard 1/2" mtg. 3 to 5 V. output 50-8000 cps. Top import. Less needle.  
**No. 24A4055. Wt. 3 ozs. Net Each 99c** 10 Lots Each **90c**

## STEREO CARTRIDGES

- (1) **RONETTE TURNOVER.** Popular type 106 used in BSR, etc. changers. Standard 1/2" mtg. 1.5 V. output. 30 to 14,000 cps. Sapphire stylii. Wt. 4 ozs.  
**No. 24A4056. Special Each \$2.49**  
 With Diamond Stylus for stereo and LP. sapphire for 78 RPM. Wt. 4 ozs.  
**No. 24A4057. Special Each \$3.49**
- (4) **VACO FLIP-UNDER.** Exact replacement clip-in cartridge for many phonos. Comes complete with 1/2" bracket to fit most standard tone arms. Dual sapphire stylii. Wt. 3 oz.  
**No. 18A1319. CN75. 2 V. output. No. 18A1318. CN72. 9 V. Output. SPECIAL VALUE! Special Each \$2.49**
- (5) **ASTATIC 13TX CERAMIC** with Diamond Stylus for stereo and LP. sapphire for 78 RPM. One of the most popular American made cartridges. 5 V. output. 20-15,000 cps. Mfg. list \$8.95.  
**No. 24A4058. Wt. 2 oz. Special Each \$2.69**

# Bargains!

## PHONO NEEDLES & CARTRIDGES

**BRAND NEW FULLY GUARANTEED**

**\$2.35**

### PHONO ARM WITH TURNOVER CARTRIDGE

Gray hammertone finished arm with 24A4052 cartridge described at left.  
**No. 24A4049. Special Each \$2.35**

### STEREO ARM AND TURNOVER CARTRIDGE

For playing all records—monaural and stereo. Output 3 V. Ivory finish. Wt. 10 oz.  
**No. 24A4050. Special Each \$2.95**

## SAVE ON EXACT REPLACEMENT "45" RPM AUTOMATIC SPINDLE ADAPTORS

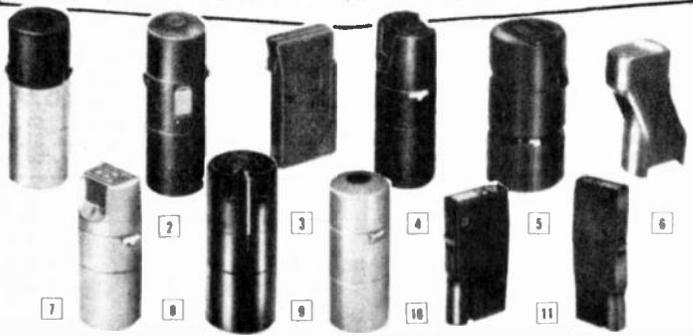


Fig.	Stk. No.	Mfg.	Part No.	Fits Changers & Notes	Hgt.	Each
1	24A6018	Admiral (Ensign)	400C-686 & (400B-645-2) (705C938)	Adm: Series RC6, 7, 600, 700, Old Ensign. Emerson	3 3/4"	\$4.59
2	24A6019	BSR	PS-444(SP4)	UA-8, 10, 12, 14, 16, 20, 24 Repl: Game 401S; BSR: PS180, 249, 250, 603, 605 (SP6)	3 7/8"	1.95
3	24A6020	BSR (Monarch) McDonald	PS-900 (SP20) (SP8)	Repl: Game 426S & BSR, PS-829 Superslim UA15-SS, UA15-SST, UA25, UA30, UA35, UA47, UA55, UA65, UA70, UA75; McDonald 300, 400, 500, 500A, 600, 1500 and 2500	2 7/8"	1.95
3	24A6021	BSR (Monarch) McDonald	PS-925 (SP21)	UA45, 4500, UA50 Mini-Changer	2 1/2"	1.95
4	24A6022	Collaro (Magnavox)	522963-1 (GSA)	522456-2, Collaro & Magnavox All 200 & 600 Series	3 3/4"	2.95
5	24A6023	Garrard	LRS-20	Replaces: LRS-5, LRS-6, LRS-7, LRS-10. Fits: AT-5, AT-5LM, AT-6, AT60 Autoslim, Autoslim P, 40MK11, 50, 50MK11, 60MK11, SL55, SL65, SLX, SLX2, 1000, 2000, 3000, 3500 and 4000	2 7/8"	3.80
6	24A6024	G.E.	RX400, RX408, RS6745, EA80X210	RD Series: 225, 300, 310, 311, 325, 326, 400, 410	2 3/4"	1.95
7	24A6025	Magnavox (Collaro)	523450-1	F, G, W 602-608, W 611, W 620—W 622 Series	3 1/2"	2.95
8	24A6026	RCA	110905	Series RP217, RP218, RP219	3 1/2"	3.25
9	24A6027	Telefunken	38L (KU38P)	TW501, 502, 504, 504 Deluxe, 506, 560, 561, 562, 571, 572, 582	3 5/8"	1.95
10	24A6028	V.M.	1116	New 1200 & 1500 Series with short centerpost	2 3/4"	1.95
11	24A6029	V.M.	1115	Late 1200, 1500 Series with long centerpost	4"	1.95

## BIG PRICE SLASH ON GENUINE DIAMOND NEEDLES

Daring B-A deep price slashes on finest quality hand cut polished diamond needles. Last far longer than regular needles with far less wear to records. Avg. wt. 3 ozs.

NOW ONLY **\$1.49**

**LOWEST PRICES IN B-A HISTORY**

- ① Used in all the following cartridges. Astatic. 64, 118, 120, 124, 310, 312, 414, 420, 422, 436, 456, 570, Stereo 70, 74, 76, 78, 80, 86, 320, 472, 474. BSR. TC8H, M, S, EV Cart, #119, 120, 121.  
 Ronette. Collaro, Fujii, Futura, PE DT-60, RA-284, RA-395, DC-04, TC-200, TO-222, 284, 400.  
 Varco. TO-55 Series, TO-35X, 45, SN-45, ST-45, ST-1, 2, 4, 5, 20, 40, 100, 200.  
**No. 24A681. Special Each \$1.49**  
 ③ For Astatic. 17, 17D, 17DA, 217D, 135DA. Also GE EA97X155.  
**No. 24A682. Special Each \$1.49**  
 ④ For Astatic. 133, 137, 138, 140, 142, 146, 148, 233, 237, 253, 450, 483, 485, 497. Also GE C-300.  
**No. 24A683. Special Each \$1.49**  
 ⑤ For Euphonics. U-8, 9, 10, 11, 88, 98.  
**No. 24A684. Special Each \$1.49**  
 ⑥ For General Electric. C-100A, C-200, C-400, EA 97-570, EA 97X497, EA 80X152.  
**No. 24A685. Special Each \$1.49**
- ⑦ For General Electric. VR-11 Series, 4C-040, 041, 050, 052, 053, 061, 063.  
**No. 24A686. Special Each \$1.49**  
 ⑧ For RCA. RMP-200-8, 9, 106770B-71B, 110021, 23, 11347, 48, 115062. Also Astatic 475, 477.  
**No. 24A687. Special Each \$1.49**  
 ⑨ For Ronette. DC-04, 122, 222, 284, 395, 400, 422, 500, BF40, OV, OV-1, TO-208, 291.  
 For Sonotone. 14T. For Electric-Voice 56, 87, 88. For Perpetum Ebner PE-30, 90.  
**No. 24A688. Special Each \$1.49**  
 ⑩ For Sonotone 2T, 5T, 7T & W9980.  
**No. 24A689. Special Each \$1.49**  
 ⑪ For Sonotone 8T, 8TA, 8T4 Series.  
**No. 24A690. Special Each \$1.49**  
 ⑫ For Sonotone 21T, 22T, 23T, 24T, 35T, 43T.  
**No. 24A691. Special Each \$1.49**  
 ⑬ For Varco CN-60, 62, 65, 67, 68, 70, 72, 75.  
**No. 24A692. Special Each \$1.49**

## B-A SUPER BARGAIN VALUE

### ASTATIC CERAMIC STEREO CARTRIDGE

WITH DIAMOND STYLUS

MFG. LIST \$13.75

# \$3.98

Popular American made Astatic 133D with .7 mil diamond stylus for stereo and LP. 3 mil sapphire for 78 RPM. Perfect high quality replacement for most changers and players. Fits standard 1/2" mtg. Ceramic element unaffected by temperature change. 5 volts output. High fidelity performance 20 to 15,000 cps. Tremendous savings made possible by B-A's special purchase. Wt. 4 ozs.  
**No. 18A1352. Special Each \$3.98**

**SAVE OVER 50%**



# GIANT \$\$\$ SAVINGS ON THESE FAMOUS RECORD CHANGERS!

## Bargains!

### BIG SAVINGS ON STEREO CHANGERS

### BRAND NEW FULLY GUARANTEED

### LOWEST PRICE ON



## LATEST DELUXE 4-SPEED RECORD CHANGER BY VM



WITH DIAMOND NEEDLE

FEATURING TUBULAR TONE ARM STREAMLINED DESIGN

# \$26<sup>95</sup>

PLAYS ALL RECORDS . . . MONAURAL AND STEREO

With Connecting Cables, Less Base



## NEW AUTOMATIC TURNTABLE

COMPLETE WITH CERAMIC STEREO CARTRIDGE

# \$29<sup>95</sup>

LESS BASE

High quality BSR automatic turntable now for less than the price of ordinary changers. Features low mass, light tracking, tubular aluminum tone arm with massive turntable. Automatic or manual play at 16, 33 $\frac{1}{3}$ , 45 or 78 RPM records. Automatic shut off after last record. Handles stack of 6 average records. Has vibration-free dynamically balanced motor. Comes complete with all cables, template and instructions. Dimensions 13 $\frac{1}{8}$ " W, 11 $\frac{1}{4}$ " D, 2 $\frac{7}{8}$ " from top of spindle to top of mounting board; 2" below.

- No. 33A679. Model 4700. Each **\$29.95**
- Molded Ebony Base for above. Model PB-3.
- No. 33A681. Each .....\$5.00
- 45 RPM Adaptor Spindle for above. Model PS-899. ....\$1.95
- No. 33A680. Each .....\$1.95
- Tinted Dust Cover for above. Model DC-2. ....\$5.00
- No. 33A653. Each .....

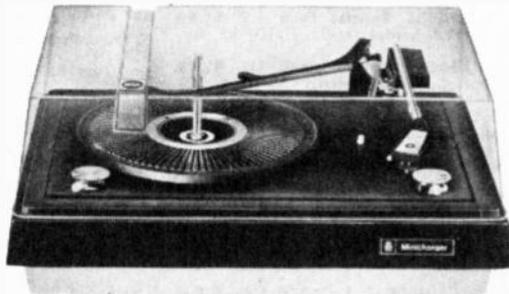


## WORLD FAMOUS BSR MINICHANGER

PERFECT COMPANION FOR SHELF COMPONENT SYSTEMS

4-SPEED AUTOMATIC OR MANUAL  
10" & 12" INTERMIXED

# \$39<sup>95</sup>



Complete-factory engineered, tested, and assembled "module" with stereo cartridge, base, and dust cover ready to use. Versatile! Only 13" wide, 9" deep, 6" high. Fits on the shelf along with other small components. Plays all record speeds, intermixes 10" and 12" of same speed, handles stack of 6 average records. Has automatic shut-off after last record. Low mass tubular tone arm is fitted with a high quality BSR ceramic stereo cartridge with sapphire/sapphire flip styli. Has vibration-free, dynamically balanced, 2 pole, 110-130 V. A.C. 60 Hz motor. Factory assembled on attractive molded base. Supplied with sturdy bronze-tone styrene dust cover, U/L approved, AC cord and audio cables. Shpg. Wt. 8 lbs.

- No. 33A625. **\$39.95**
- Net Each .....
- No. 33A626. 45 RPM Adapter. Net Each.....\$1.95

Same unit used in many top brand name phonographs! Completely automatic, plays all speeds, all sizes records. Intermixes 10 and 12" records of same speed. Automatically shuts-off after last record. Positive record protection assured by flat air-cushion drop of records to rubber matted turntable. Lightweight jam-proof tubular tone arm complete with stereo turnover cartridge with long-life diamond stereo needle and sapphire 78 RPM needle. Dimensions: 13 $\frac{1}{4}$ " W. x 11 $\frac{7}{8}$ " D. x 5 $\frac{3}{4}$ " above and 2 $\frac{5}{8}$ " below motor board. For 110-120 V. 60 cy. AC. Fully guaranteed. With AC cord and stereo connecting cables, less base.

- No. 33A629. Shpg. wt. 11 lbs. Net Each.....**\$26.95**
- No. 33A503. 45 RPM Spindle for above changer, wt. 6 ozs. Each.....\$1.75
- No. 33A504. Precut Mounting Board for above changer. Wt. 10 ozs. Ea. \$1.46
- No. 33A505. Precut Mounting Base for above changer. Wt. 2 lbs. Ea. \$3.95



## B-A EXCEPTIONAL VALUE! STEREO HI-FI 4-SPEED RECORD CHANGER

FAMOUS AMERICAN MAKE

FEATURES TUBULAR TONE ARM

# \$19<sup>95</sup>

Greatest value yet! It's the very famous, very popular Maestro . . . renowned for precision quality, and now at a price you just can't afford to miss. Perfect for the start of a new hi-fi system or as a replacement for outdated or wornout players in existing equipment. Requires only 3 $\frac{1}{2}$ " above motor board to allow mounting in tight spaces.

New design for the most trouble-free long life operation. Automatically plays all size, all speed records—monaural and stereo. Automatic shut-off after last record plays. Rubber mat on turntable protects records. New precision tubular tone arm. Vaco stereo turnover cartridge with long-life sapphire styli. Measures 13" W, 11 $\frac{1}{4}$ " D 3 $\frac{1}{2}$ " above and 2" below motor plate. 110-120 V. 60 cy. AC. Less cords and phono leads. Handsome grey finish. Shpg. wt. 11 lbs.

- No. 33A514. Special Each.....**\$19.95**
- No. 33A515. 45 RPM Spindle. Each.....\$1.88
- No. 33A516. Precut Mounting Board. Each.....\$1.69
- No. 33A517. Precut Mounting Base. Each.....\$3.95
- No. 33A518. Clear Plastic Dust Cover. Each.....\$4.95
- No. 33A510. Cord and Cable Kit. Each.....\$1.29

# B-A's EXCLUSIVE SPECIAL PURCHASE



## Bargains!

**STEREO RECEIVER  
AND AMPLIFIER**

**BRAND NEW  
FULLY GUARANTEED**

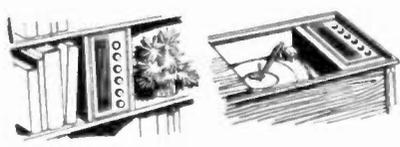
*Solid  
State*

## 50-WATT FM/AM FM/MPX STEREO RECEIVER

*NOW WITH TAPE INPUT  
AND TUNING METER*  
ALL SOLID STATE  
AFC FOR DRIFT-FREE FM

MADE ORIGINALLY FOR STEREO  
CONSOLES SELLING FOR \$400!

**SMALL SIZE: Only 8" Deep  
(Including Knobs) x 13" H. x 3 1/2" W.**



**BUILD INTO BOOKSHELF,  
WALL OR CONSOLE**

Outstanding value in FM-AM, FM-MPX receivers. Custom mounts easily in wall, bookshelf or console. Provides the heart of a fine quality stereo high fidelity music system. Just add speakers and a record changer to complete the system. Has stereo indicator light to let you know when receiver is in the FM stereo mode of operation. Functions include: AM, FM, FM-AFC, FM-Stereo, Phono. Has stereo inputs for crystal or ceramic phono cartridge and for tape decks that have built-in pre-amplifiers. Features an illuminated slide rule dial, set off by chrome front panel with attractive knobs and rich black front trim behind dial portion. Six controls include: Separate On-Off/Loudness, Balance, Function, Tuning, Bass and Treble controls. Adjust volume and tonal balance to every

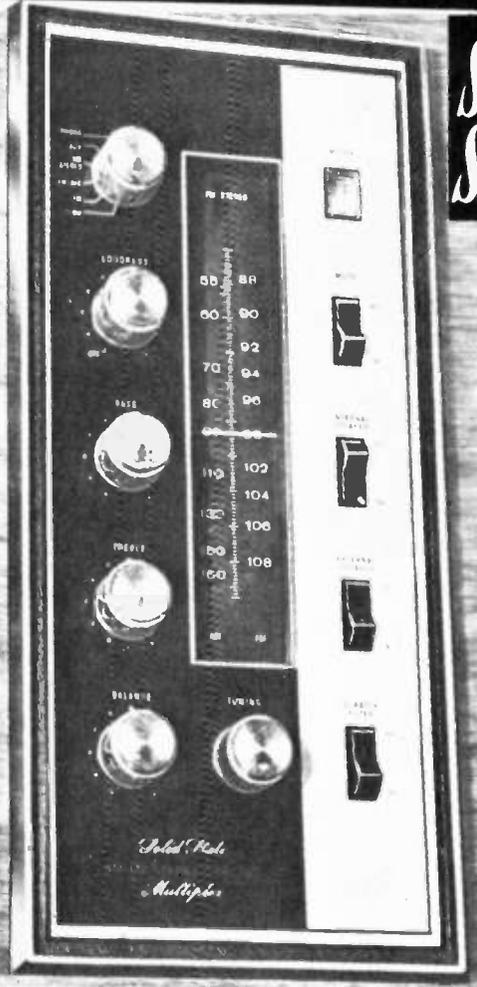
**QUANTITY LIMITED**  
**\$89<sup>95</sup>**

listening preference for stereo FM-AFC, FM/AM radio and phonograph. Four special rocker switches control mute, internal speaker, external speaker and scratch filter. Power output: 50 watts, music power, 25 watts per channel. Response 20-20,000 Hz. Operates on 110 to 120 volts, 60 cy. AC. Shpg. wt. 12 lbs. Highest quality import.

No. 33A436. **\$89.95**  
B-A Special

**Famous Garrard 4-Speed Automatic Stereo Changer with ceramic turnover cartridge. Ideal for use with above, connections mate perfectly.**  
No. 33A513. Each \$39.50

**Ebony and Walnut base for Changer.**  
No. 33A532. Each \$ 4.95



## 10 TRANSISTOR, 8-WATT STEREO AMPLIFIER

**ULTRA COMPACT SIZE... FITS ANYWHERE!**  
ONLY 8" WIDE, 4 1/2" DEEP, 2 1/8" HIGH

**B-A's  
FANTASTIC  
LOW  
PRICE**

**\$19<sup>95</sup>**

**FREQUENCY  
RESPONSE  
70-20,000  
Hz**



**EXPENSIVE POLISHED  
ALUMINUM KNOBS**

- Completely Solid-State—No Tubes To Replace
- Cool Operation. Build It In Anywhere.
- Plays Instantly—No Filaments To Warm-Up
- Separate Bass And Treble Controls
- Separate Volume Control For Each Channel



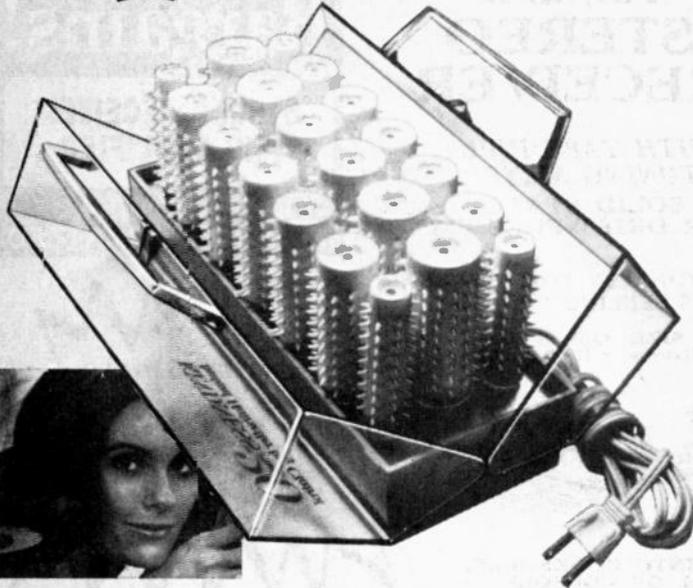
**MAY BE A CUSTOM INSTALLATION OR SET ON BOOKSHELF**

Now, you can have the superiority of solid state circuitry at less than 1/2 the price of comparable tube models. The buy of a lifetime! B-A's sweet deal with a factory, producing highest quality imported amplifiers, makes possible this money-saving offer. Identical to amplifiers used in stereo high fidelity phonographs... its specifications and performance are the finest we have ever seen at this low, low price.

be used monaurally for a musical instrument amplifier, PA, phono, etc. Two inputs for tuner, ceramic or crystal phono-musical instrument pick-ups, etc. Completely encased, ideally suited for bookshelf use or may be custom installed anywhere. Ultra-compact size only 8" W. x 2 1/4" H. x 4 3/8" D. Has brushed aluminum panel and knobs. Front switch controls auxiliary, phono, power on-off. Has auxiliary 115 V. outlet on rear. Operates on 115 V. 60 Hz. Shpg. wt. 4 lbs.  
No. 33A435. Each **\$19.95**

Extremely versatile... permitting use in stereo high fidelity system or may

# B-A's SIZZLING HOT SPECIALS CLAIROL BEAUTY AIDS



## KINDNESS® 20 INSTANT HAIRSETTER

MANUFACTURERS SUGGESTED RETAIL PRICE \$27.99 **\$16.88**  
B-A's LOW, LOW PRICE...

Most popular hairsetter on the market. Features 20 heat-at-once rollers in 3 sizes with matching clips to create any hairstyle desired. Comes in light-weight durable plastic carry-along case. Size 6 3/4" x 9 1/4" x 4 1/4". Just plug into any 115 V. 60 cycle A.C. household outlet. Has 6 jumbo, 10 large, 4 small rollers. Shpg. wt. 7 lbs. **\$16.88**  
No. 61A238. BA's Low Price.



## CLAIROL TRUE TO LIGHT MAKE-UP MIRROR

MANUFACTURERS SUGGESTED RETAIL PRICE \$29.99

**\$19.88**

ONLY CLAIROL HAS IT!



SEE YOURSELF AS OTHERS SEE YOU!

A twist of the dial switches on day, evening or office light to make sure your make-up is right in any light. A swing of the mirror switches from mirror to magnified reflection. A flick adjusts mirror to any angle. Size 9 1/2" x 2" x 11 3/4". Has 7 ft. cord; operates on 115 V. — 60 cycles A.C. Shpg. Wt. 7 lbs. **\$19.88**  
No. 61A237. Each.



## SHETLAND DELUXE 4-SPEED BLENDER

MANUFACTURERS SUGGESTED LIST PRICE \$24.99

B-A's LOW PRICE **\$18.77**

- Big 3/4 HP 575 Watt Motor.
- Crushes Ice Without Expensive Attachment.
- High Speed Up to 90 Revolutions Per Second.

Features 6-button panel with exclusive "hold" button for instantaneous on/off control; 4 speeds. Blends, whips, chops, purees and crushes ice. 3/4 H.P. 575 watt motor operates without strain even under the toughest of all tasks such as crushing ice. Has 56 oz. container with removable inner measuring lid; stainless-steel blades, pilot light, cord storage. Comes complete with 32 page special recipe book. In beautiful white. **\$18.77**  
No. 61A236. Each.



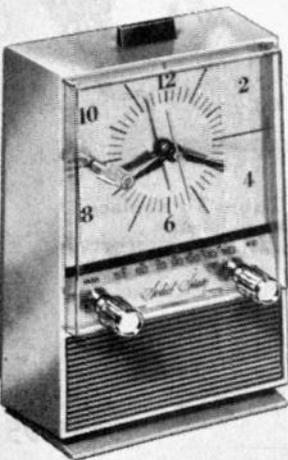
## SCM SHETLAND FAMOUS 2-SPEED BLENDER

MANUFACTURERS SUGGESTED LIST PRICE \$19.99

B-A's LOW PRICE **\$12.88**

- Big 3/4 H.P. Motor
- Crushes Ice Without An Attachment.

Fantastic quality at a low, low price. Features 2-speeds, big 56 oz. jar with measuring cap in lid. Performs all the functions most people require of a blender. Beautiful white with contrasting black lid and handle. **\$12.88**  
No. 61A235. Each.



## B-A's SENSATIONAL SPECIAL PURCHASE ON AM CLOCK RADIO

MANUFACTURERS SUGGESTED RETAIL WAS \$26.95

B-A's LOW PRICE **\$14.95**

- New Compact Upright Design Only 5 1/4" Wide.
- Snooze Button.
- Big Easy-To-Read Clock.
- Precision Slide Rule Tuning.

Deluxe vertical solid-state AM clock radio. Ultra-modern in beautiful high impact plastic cabinet. Illuminated clock with "doze" button. Fine tone AM radio features solid-state chassis, front mounted 4" speaker for room-filling sound. Transformer power supply AC line cord size 7 7/8" H, 5 1/4" W, 3 3/4" D. Approx. Shpg. wt. 3 lbs. **\$14.95**  
No. 36A8021 Each.

TAKES ONLY 120 SECONDS A DAY!



## NEW EFFORTLESS EXERCISER

GREAT FOR BOTH MEN & WOMEN... BUY 2... GET SLIM TOGETHER!

B-A's LOW, LOW PRICE... **\$3.97**

It's effortless, yet equal to 1/2 hour of conventional sit-ups. Takes inches off the hips and stomach in only 2 minutes a day! Squeeze away your hips and tummy! Straighten your posture, firm up stomach muscles, tone up all muscles, build a power packed body in just a few short weeks. Shpg. wt. 4 lbs. **\$3.97**  
No. 47A3501. B-A's Low Price

## CASH IN ON THE BOOM IN COLOR TELEVISION

The NRI TV-Radio Servicing course includes your choice of black and white or color TV training equipment. Color TV needs thousands of trained men to keep pace with millions of sets being sold every year. NRI prepares you quickly. Cash in on the boom.

**IF  
CARD IS  
MISSING  
MAIL  
THIS  
COUPON**

NATIONAL RADIO INSTITUTE  
Washington, D.C. 20016



80-099

Name \_\_\_\_\_

Address \_\_\_\_\_ Age \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Check for facts on GI Bill

# You get more for your money from NRI

NRI pioneered the idea of supplying home-study students with custom designed training kits to give practical on-the-job experience as you learn. Today, NRI's "3-Dimensional" training can't be equalled. You get more *value* — from the exclusive Achievement Kit sent the day you enroll, to "bite-size" texts and custom training equipment. Learning TV-Radio, Electronics or Communications at home is easy, exciting, the NRI simplified, dramatized way.

## BE A SKILLED TECHNICIAN IN AMERICA'S FASTEST GROWING INDUSTRY

Regardless of your educational background, you can learn the Electronics field of your choice the practical NRI way. The NRI color catalog, sent to you *free* and without obligation, tells you how you can qualify quickly to be a part of the fast growing Electronic Age; about engineering jobs in business, industry, broadcasting, government, now offered to men without college degrees. It will open your eyes to the great number of success opportunities available right now in the high-pay world of TV-Radio Servicing, Broadcasting-Communications and Industrial-Military Electronics. With NRI technical training, you can take your choice of a wide variety of career

openings or have a business of your own. And if you choose one of five NRI courses that include FCC License preparation, *you must earn your FCC License or NRI refunds your tuition!*

## MAKE \$4 TO \$6 AN HOUR EXTRA IN SPARE TIME STARTING SOON

Tens of thousands of NRI graduates are proof it is practical to train at home in your spare time. Keep your present job while preparing for a better one, and earn \$4 to \$6 an hour extra in spare time while you train, fixing sets for friends and neighbors. NRI shows you how. Equipment you build and keep becomes useful in your work.

## STEP UP TO BETTER PAY, A BRIGHTER FUTURE

NRI can help you, but the decision to act must come from you. Decide *now* to move ahead . . . mail the postage-free card. If missing, use coupon above for FREE NRI color catalog. No salesman will call. NATIONAL RADIO INSTITUTE, Electronics Division, Washington, D.C. 20016.

### APPROVED UNDER GI BILL

If you served since January 31, 1955, or are in service, check GI line on postage-free card or in coupon.

# NRI Programmed Equipment Gives You Priceless Confidence, Makes Learning TV-Radio, Electronics Fast and Fascinating

**BUILD • TEST • EXPLORE** All this is yours — from Achievement Kit, to solid state Radio, to training-engineered Color TV set — when you enroll for NRI's TV-Radio Servicing course. Other courses equally complete. Unique training methods, "bite-size" texts, many personal services have made NRI the leader in its field for over 50 years.



# YOU'LL LIKE B-A'S PERSONAL MAIL ORDER SERVICE!

## OUR MODERN KANSAS CITY DISTRIBUTION CENTER CAN SPEED YOUR SHIPMENT ANYWHERE!



Use The Handy B-A Order Blank . . . Whenever possible, it is designed for your convenience and it helps us speed your order through our plant. Most orders are ready for shipment and are on their way to you within 24 hours after received.

Tell Us How You Want Shipment Made. Indicate your choice, Regular Parcel Post, Express, Freight . . . or by Air . . . or simply depend on B-A to choose an economical shipping method.

When You Send Money . . . Best way is to use money order, bank draft or check. Many B-A Customers ask us to fill in the exact amount on their signed blank check . . . a most convenient and safe way to send remittance. Please do not use universal checks or "scratched" checks where the bank name has been deleted and/or written in. (Federal Reserve Bank Ruling). Avoid sending coins or currency, but when necessary, register your letter. Stamps are not acceptable payment for merchandise.

Include Postage and Guaranteed Safe Delivery Fee. Our Catalog gives shipping weights for almost all items. Where not shown, you can estimate weights. Total these weights to the next full pound, then check the parcel post rate table for your zone and rate. The Guaranteed Safe Delivery Fee is your protection against financial loss after your shipment leaves our plant. B-A refunds all excess remittance immediately by bank check.

Do Not Include Express or Freight Charges in your remittance. These charges will be collected upon delivery.

C.O.D. Orders . . . for economy's sake we suggest you send money order or check or use B-A's Revolving Charge Account. This will avoid your payment of post office C.O.D. and money order fees. If C.O.D. is unavoidable, your order should be for a minimum of \$5.00 with at least 20% deposit accompanying your order.

Open Accounts or Commercial Accounts are extended to well rated companies, schools, institutions and government agencies. If your company does not have a published Dun & Bradstreet rating of E2½ or better, please submit trade and bank references when you apply for a commercial account. Terms are net 30 days from date of invoice. Use your purchase order form or the handy B-A order blank.

When you order on B-A's Revolving Charge Account . . . Fill in the information on the back of B-A's Order Blank, as well as listing items wanted in the usual way on the front side of the blank. You need not figure shipping charges . . . these will be added to your account. For Add-On Orders show your account number and sign in space indicated on back of order blank. The minimum order for opening a new B-A Revolving Charge Account is \$35.00. For add-on orders the minimum is \$5.00.

### B-A'S CATALOG PRICES

Our Catalog Prices . . . are net FOB Kansas City. All trade and cash discounts have been deducted. B-A reserves the right to add any Federal, State or local taxes now in effect or which may be levied after this catalog is printed. Mo., Kans., Okla. and Colo. customers must add 3% sales tax. Each item on your order will be priced at the current price on date of shipment. All prices are subject to change without notice. At B-A you always have immediate benefit of price reductions.

Manufacturers List Price Shown . . . are suggested by our suppliers and are intended only as information for those purchasing for resale, not to indicate price savings.

### WHEN YOU WRITE

If Necessary to Write B-A Concerning Your Order . . . Please state whether the original order was Cash, C.O.D., Revolving Charge, or Open Account. Return order papers and correspondence with your letter. If you do not yet have order papers, give stock numbers and descriptions of items ordered and the name and address exactly as used on the original order. On open accounts refer to your purchase order number and our invoice number.

### HOW TO RETURN MERCHANDISE

All Shipping Damage should be reported directly to our Customer Service Dept. Express or truck shipments must have an inspection report included with your letter. We will advise you on how to return the damaged shipment. If for any other reason you find you are not satisfied with the merchandise you have received, and if you have not abused or changed it in any way, pack well, enclosing your order papers and complete explanation. Place an additional 6 cent stamp on the package and mark "First Class Mail Enclosed". Fully insure for safe arrival. Send to—  
Burststein-Applebee Co., Dept. ADJ.  
3199 Mercier  
Kansas City, Missouri 64111

ALWAYS RETURN THE ORIGINAL ORDER PAPERS WHEN WRITING ABOUT A SHIPMENT

### MINIMUM ORDER SIZE

Since it is not economical to process many small orders, a 50c service charge is necessary for any order under \$5.00. You avoid this charge entirely on orders over \$5.00. The minimum order for opening a new B-A Revolving Charge Account is \$35.00. The minimum "Add-On" Revolving Charge Order is \$5.00. The minimum C.O.D. Order is \$5.00, with 20% deposit.

### PARCEL POST ZIP / ZONE GUIDE

Find the first three digits of your Zip Code and your Parcel Post Zone from Kansas City in the table below. Then refer to the Parcel Post Rates below for Postage on your order.

Zip Code Prefixes	Zone								
006-009	8	308-326	5	498-499	4	620-623	3	725-731	3
010-046	6	327-339	6			624	4	734-736	4
047	7	350-359	4	500-507	3	625-634	3	737-738	3
048-098	6	360-368	5	508	2	635	2	739	4
		369-374	4	510-514	3	636-639	3	740-746	3
100-129	6	376-379	5	515-516	2	640-641	1	747	4
130-132	5	380-394	4	520-528	3	644-645	1	748-749	3
133-136	6	395	5	530-537	4	646	2	750-768	4
137-179	5	396-397	4	538	3	647	1	769-777	5
180-181	6			539-560	4	648-653	2	778	4
182	5	400-410	4	561	3	654-655	3	779-789	5
183	6	411-412	5	562-566	4	656-658	2	790-796	4
184-188	5	413-414	4	567	5	660-662	1	797-799	5
189-194	6	415-418	5	570-582	4	664-674	2		
195-199	5	420-432	4	583	5	675-676	3	800-812	4
		433	5	584-585	4	677	4	813-816	5
200-217	5	434-436	4	586-595	5	678	3	820-822	4
218	6	437-449	5	596-599	6	679	4	823-826	5
219-278	5	450-455	4			680-685	2	827	4
279	6	456-457	5	600-611	4	686-689	3	828-832	5
280-299	5	458-479	5	612	3	690-693	4	833	6
		480-487	5	613	4			834	6
300-306	5	488-496	4	614-616	3	700-708	5	835-838	6
307	4	497	5	617-619	4	710-724	4	840-847	5

### PARCEL POST RATES AND SIZE LIMITS

The table below and the chart above will help you estimate parcel post charges. Packages under 16 ounces are 6c for first 2 ounces and 2c for each additional ounce, any zone.

WEIGHT AND SIZE LIMITS: Size limits below are maximum combined length and girth. 40 Lbs., 72 inches to any 1st Class P.O. in Zones 3 to 8; 40 Lbs., 72 inches to any 1st Class P.O. in Zones 1 and 2; 70 Lbs., 100 inches to any 2nd, 3rd, 4th Class P.O., RFD, APO or FPO.

Alaska and Hawaii is 70 Lbs., 100 inches for any First Class Post Office.

AIR Parcel Post Rates vary per pound as distance increases; please check with your Postmaster for rate to your City.

GUARANTEED SAFE DELIVERY RATES: 20c for values to \$15.00, 30c for values \$15.01 to \$50.00, 40c for values \$50.01 to \$100.00, 50c for values \$100.01 to \$150.00, 60c for values \$150.01 to \$200.00.

Wt. In Lbs.	Local Delivery	Zones 1 & 2		Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
		Up to 150 Miles	150-300 Miles	300-600 Miles	600-1000 Miles	1000-1400 Miles	1400-1800 Miles	Over 1800 Miles	
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	

PARCEL POST COD FEES (In addition to charges above) 60c from .01 to \$10.00, 70c from \$10.01 to \$25.00, 80c from \$25.01 to \$50.00, 90c from \$50.01 to \$100.00, \$1.00 from \$100.01 to \$200.00.

**IF THERE IS QUESTION ON ANY POSTAL RATES PLEASE CONTACT YOUR LOCAL POSTMASTER!**

### REA SHIPMENTS ARE BEST FOR FRAGILE GOODS

Shipment via REA is often necessary when items you ordered (such as antennas) exceed Post Office limits for package size, explained above.

### EXPRESS CHARGES AND INSURANCE ARE COLLECTED ON DELIVERY DO NOT ADD THESE CHARGES TO YOUR REMITTANCE

If you wish home delivery be sure the Express Company offers this service; otherwise you will be expected to pick up your order at the closest station. Check your express agent for schedule of rates.



# IT'S EASY TO OPEN A B-A REVOLVING CHARGE ACCOUNT

The undersigned, hereinafter called customer, hereby agrees with Burstein-Applebee Co., hereinafter called creditor; that customer may from time to time make purchases of goods and services, as approved by creditor, that all said purchases will be charged to customer's revolving charge account, thereby increasing the amount owed; that customer will pay the full amount of any said purchases within 30 days of the first billing date thereafter without charge, or customer will pay in monthly installments to creditor, computed as to amount according to the revolving charge account payment table shown hereon (minimum payment \$5.00 in the event the balance of the account is less than \$100.00) until the full amount of all purchases and FINANCE CHARGE thereon, including the minimum FINANCE CHARGE of 50 cents per month, are paid in full. Customer agrees to pay a FINANCE CHARGE of 1½ per cent per month on all sums to \$500.00 and ¾ per cent per month on all sums in excess of \$500.00 each month (minimum FINANCE CHARGE of 50 cents per month). Customer further agrees to pay any late charges permitted by state law and all collection costs including reasonable attorney's fees if permitted by law. Customer grants creditor a security interest in all goods purchased until the purchase price and FINANCE CHARGE have been paid in full, and grants creditor the right to accelerate the balance in the event of default in the payment of any installment, and further grants creditor the right to repossess the merchandise in the event of any default. Customer acknowledges receipt of credit cost disclosure this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, and approves the ANNUAL PERCENTAGE RATES set out and the method of treating FINANCE CHARGE on existing outstanding balances as set out.

## IT'S EASY TO OPEN A NEW ACCOUNT . . .

Just answer questions shown below and sign the Agreement and the Application on the lines marked "X". You do not need to figure shipping charges; they are prepaid and will be added to your account.

Your first order should be at least \$35.00.

## TO "ADD-ON" AN ORDER TO YOUR CHARGE ACCOUNT

Put your account number in the space provided below and sign the contract on the lines marked "X". No need to fill in personal information unless your account has been closed over a year. Your "add-on" order should total \$5.00 or more.

ACCOUNT NUMBER

SEE DISCLOSURE OF CREDIT COST INFORMATION ON PAGE 258G.

## REVOLVING CHARGE ACCOUNT PAYMENT TABLE

USE IT TO EASILY DETERMINE YOUR SMALL MONTHLY PAYMENT

MONTHLY PAYMENT ONLY	UNPAID BALANCE TOTAL AMOUNT LESS ANY PAYMENT BUYS UP TO
\$ 5	\$ 20-100
\$ 6	\$101-120
\$ 7	\$121-140
\$ 8	\$141-160
\$ 9	\$161-180
\$10	\$181-200
\$11	\$201-220
\$12	\$221-240
\$13	\$241-260
\$14	\$261-280
\$15	\$281-300
\$16	\$301-320
\$17	\$321-340
\$18	\$341-360
\$19	\$361-380
\$20	\$381-400
\$21	\$401-420
\$22	\$421-440
\$23	\$441-460
\$24	\$461-480
\$25	\$481-500

ON ACCOUNTS OVER \$500 Monthly Payments are figured at \$1.00 additional for each \$20. (For instance: \$580 @ \$29.00 monthly).

PLEASE SIGN HERE X \_\_\_\_\_

## APPLICATION FOR THOSE WHO DO NOT HAVE A B-A REVOLVING CHARGE ACCOUNT

IF UNDER 21, PLEASE HAVE PARENT OR GUARDIAN SIGN AND FILL OUT APPLICATION

WHERE DO YOU LIVE?

PRINT FULL NAME \_\_\_\_\_ SOCIAL SECURITY NUMBER \_\_\_\_\_ YOUR AGE \_\_\_\_\_ TODAY'S DATE \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

HOME PHONE \_\_\_\_\_ HOW LONG AT PRESENT ADDRESS \_\_\_\_\_  OWN HOME  RENT RENT OR MORTGAGE PMT. \$ \_\_\_\_\_ PER MONTH

WIFE'S NAME \_\_\_\_\_ MARITAL STATUS  MARRIED  SINGLE  DIVORCED  SEPARATED NUMBER OF DEPENDENT CHILDREN \_\_\_\_\_

PREVIOUS ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ HOW LONG AT THIS ADDRESS \_\_\_\_\_

DO YOU HAVE A STEADY INCOME?

PRESENT EMPLOYER \_\_\_\_\_ POSITION \_\_\_\_\_ MONTHLY INCOME \$ \_\_\_\_\_

BUSINESS ADDRESS \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ HOW MANY YEARS ON PRESENT JOB \_\_\_\_\_

PREVIOUS EMPLOYER \_\_\_\_\_ NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ HOW LONG? \_\_\_\_\_

WIFE'S EMPLOYER \_\_\_\_\_ HOW LONG \_\_\_\_\_ MONTHLY INCOME \$ \_\_\_\_\_

AUTO OWNED \_\_\_\_\_ MAKE \_\_\_\_\_ FINANCED BY \_\_\_\_\_ ADDRESS \_\_\_\_\_ MONTHLY PAYMENT \_\_\_\_\_  OPEN  CLOSED

IF A FARMER \_\_\_\_\_ TYPE OF OPERATION \_\_\_\_\_ NUMBER OF ACRES \_\_\_\_\_ HOW MANY ACRES UNDER CULTIVATION \_\_\_\_\_

IF SELF EMPLOYED \_\_\_\_\_ GIVE TYPE & NAME OF BUSINESS \_\_\_\_\_ POSITION \_\_\_\_\_ MONTHLY INCOME \_\_\_\_\_

WHERE YOU BANK AND YOUR CREDIT REFERENCES

BANK ACCOUNT WITH \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  CHECKING  SAVING  LOAN

HOME MORTGAGE OR RENT \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  OPEN  CLOSED

CREDIT ACCOUNT WITH \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  OPEN  CLOSED

CREDIT ACCOUNT WITH \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  OPEN  CLOSED

NAME OF RELATIVE NOT LIVING WITH YOU \_\_\_\_\_ NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ RELATIONSHIP \_\_\_\_\_

TOTAL OF ALL MONTHLY PAYMENTS INCLUDING CAR AND MORTGAGE PAYMENTS \$ \_\_\_\_\_

MILITARY SERVICE INFORMATION

SELECTIVE SERVICE CLASS \_\_\_\_\_ MILITARY ADDRESS \_\_\_\_\_ RANK \_\_\_\_\_ PAY GRADE \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_ COMMANDING OFFICER \_\_\_\_\_ YOUR TIME IN SERVICE \_\_\_\_\_ YRS. \_\_\_\_\_ MOS. \_\_\_\_\_



# IT'S EASY TO OPEN A B-A REVOLVING CHARGE ACCOUNT

## AGREEMENT FOR B-A's REVOLVING CHARGE ACCOUNT

The undersigned, hereinafter called customer, hereby agrees with Burstein-Applebee Co., hereinafter called creditor; that customer may from time to time make purchases of goods and services, as approved by creditor, that all said purchases will be charged to customer's revolving charge account, thereby increasing the amount owed; that customer will pay the full amount of any said purchases within 30 days of the first billing date thereafter without charge, or customer will pay in monthly installments to creditor, computed as to amount according to the revolving charge account payment table shown hereon (minimum payment \$5.00 in the event the balance of the account is less than \$100.00) until the full amount of all purchases and FINANCE CHARGE thereon, including the minimum FINANCE CHARGE of 50 cents per month, are paid in full. Customer agrees to pay a FINANCE CHARGE of 1½ per cent per month on all sums to \$500.00 and ¾ per cent per month on all sums in excess of \$500.00 each month (minimum FINANCE CHARGE of 50 cents per month). Customer further agrees to pay any late charges permitted by state law and all collection costs including reasonable attorney's fees if permitted by law. Customer grants creditor a security interest in all goods purchased until the purchase price and FINANCE CHARGE have been paid in full, and grants creditor the right to accelerate the balance in the event of default in the payment of any installment, and further grants creditor the right to repossess the merchandise in the event of any default. Customer acknowledges receipt of credit cost disclosure this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, and approves the ANNUAL PERCENTAGE RATES set out and the method of treating FINANCE CHARGE on existing outstanding balances as set out.

## IT'S EASY TO OPEN A NEW ACCOUNT . . .

Just answer questions shown below and sign the Agreement and the Application on the lines marked "X". You do not need to figure shipping charges; they are prepaid and will be added to your account.

Your first order should be at least \$35.00.

## TO "ADD-ON" AN ORDER TO YOUR CHARGE ACCOUNT

Put your account number in the space provided below and sign the contract on the lines marked "X". No need to fill in personal information unless your account has been closed over a year. Your "add-on" order should total \$5.00 or more.

ACCOUNT NUMBER

SEE DISCLOSURE OF CREDIT COST INFORMATION ON PAGE 258G.

## REVOLVING CHARGE ACCOUNT PAYMENT TABLE

USE IT TO EASILY DETERMINE YOUR SMALL MONTHLY PAYMENT

MONTHLY PAYMENT ONLY	UNPAID BALANCE TOTAL AMOUNT LESS ANY PAYMENT BUYS UP TO
\$ 5	\$ 20-100
\$ 6	\$101-120
\$ 7	\$121-140
\$ 8	\$141-160
\$ 9	\$161-180
\$10	\$181-200
\$11	\$201-220
\$12	\$221-240
\$13	\$241-260
\$14	\$261-280
\$15	\$281-300
\$16	\$301-320
\$17	\$321-340
\$18	\$341-360
\$19	\$361-380
\$20	\$381-400
\$21	\$401-420
\$22	\$421-440
\$23	\$441-460
\$24	\$461-480
\$25	\$481-500

ON ACCOUNTS OVER \$500 Monthly Payments are figured at \$1.00 additional for each \$20. (For instance: \$580 @ \$29.00 monthly).

PLEASE SIGN HERE X \_\_\_\_\_

## APPLICATION FOR THOSE WHO DO NOT HAVE A B-A REVOLVING CHARGE ACCOUNT

IF UNDER 21, PLEASE HAVE PARENT OR GUARDIAN SIGN AND FILL OUT APPLICATION

WHERE DO YOU LIVE?

PRINT FULL NAME \_\_\_\_\_ SOCIAL SECURITY NUMBER \_\_\_\_\_ YOUR AGE \_\_\_\_\_ TODAY'S DATE \_\_\_\_\_  
 HOME ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_  
 HOME PHONE \_\_\_\_\_ HOW LONG AT PRESENT ADDRESS \_\_\_\_\_  OWN HOME  RENT RENT OR MORTGAGE PMT. \$ \_\_\_\_\_ PER MONTH  
 WIFE'S NAME \_\_\_\_\_ MARITAL STATUS  MARRIED  SINGLE  DIVORCED  SEPARATED NUMBER OF DEPENDENT CHILDREN \_\_\_\_\_  
 PREVIOUS ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ HOW LONG AT THIS ADDRESS \_\_\_\_\_

DO YOU HAVE A STEADY INCOME?

PRESENT EMPLOYER \_\_\_\_\_ POSITION \_\_\_\_\_ MONTHLY INCOME \$ \_\_\_\_\_  
 BUSINESS ADDRESS \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ HOW MANY YEARS ON PRESENT JOB \_\_\_\_\_  
 PREVIOUS EMPLOYER \_\_\_\_\_ NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ HOW LONG? \_\_\_\_\_  
 WIFE'S EMPLOYER \_\_\_\_\_ NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ HOW LONG \_\_\_\_\_ MONTHLY INCOME \$ \_\_\_\_\_  
 AUTO OWNED \_\_\_\_\_ MAKE \_\_\_\_\_ FINANCED BY \_\_\_\_\_ ADDRESS \_\_\_\_\_ MONTHLY PAYMENT  OPEN  CLOSED  
 IF A FARMER \_\_\_\_\_ TYPE OF OPERATION \_\_\_\_\_ NUMBER OF ACRES \_\_\_\_\_ HOW MANY ACRES UNDER CULTIVATION \_\_\_\_\_  
 IF SELF EMPLOYED \_\_\_\_\_ GIVE TYPE & NAME OF BUSINESS \_\_\_\_\_ POSITION \_\_\_\_\_ MONTHLY INCOME \_\_\_\_\_

WHERE YOU BANK AND YOUR CREDIT REFERENCES

BANK ACCOUNT WITH \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  CHECKING  SAVING  LOAN  
 HOME MORTGAGE OR RENT \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  OPEN  CLOSED  
 CREDIT ACCOUNT WITH \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  OPEN  CLOSED  
 CREDIT ACCOUNT WITH \_\_\_\_\_ NAME \_\_\_\_\_ STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_  OPEN  CLOSED  
 NAME OF RELATIVE NOT LIVING WITH YOU \_\_\_\_\_ NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ RELATIONSHIP \_\_\_\_\_ TOTAL OF ALL MONTHLY PAYMENTS INCLUDING CAR AND MORTGAGE PAYMENTS \$ \_\_\_\_\_

MILITARY SERVICE INFORMATION

SELECTIVE SERVICE CLASS \_\_\_\_\_ MILITARY ADDRESS \_\_\_\_\_ RANK \_\_\_\_\_ PAY GRADE \_\_\_\_\_  
 SERIAL NUMBER \_\_\_\_\_ COMMANDING OFFICER \_\_\_\_\_ YOUR TIME IN SERVICE \_\_\_\_\_ YRS. \_\_\_\_\_ MOS. \_\_\_\_\_

# YOU SHOP EASIER...FASTER...BETTER WITH A B-A E-Z PAY CHARGE ACCOUNT



**TAKE ADVANTAGE OF OUR MANY WONDERFUL BUYS!  
IT COSTS SO LITTLE FOR CONTINUOUS BUYING POWER**

## DISCLOSURE OF CREDIT COST

*For Burstein-Applebee Revolving Charge Account*

### IT'S SO EASY TO OPEN YOUR NEW ACCOUNT . . .

Just fill in the application on the back of the B-A Order Blank. Be sure to sign the Agreement. Then make out your first order for \$35 or more. There's no need to figure shipping costs. B-A prepays the shipment, adds the charges to your account. Your reserve buying power sum is set up in your name allowing you to spend up to a definite amount. All or any part may be used as you like.

### TAKE MONTHS TO PAY . . .

painlessly, because your monthly payments are so low. See B-A's payment table on the application. You pay only a small finance charge of 1½% on each monthly balance (¾% for portion of balance which is over \$500.) The minimum monthly charge is 50c.

### . . . or Just Say "CHARGE IT" . . . No Finance Charge

If you pay, within 30 days, the full amount of your purchase under your B-A Revolving Charge Account, there is No Finance Charge. It's as easy as filling in the Application on the back of the B-A Order Blank.

### TO "ADD ON" AN ORDER AT ANY TIME

Here's continuous buying power to bring you year around electronic enjoyment. Use the handy B-A Order Blank, fill in your Revolving Charge Account Number and sign the Agreement on the back of the order. The Minimum "add on" is just \$5.00.

Best of all . . . you pay the same low monthly payment on "Add-Ons" if your new purchase does not exceed the difference between your balance and the original purchase. To illustrate: an \$80 balance on a \$240 purchase permits you to buy up to \$160 more for the same monthly payment of \$12.00. Or, if you order more than \$160, your payments will be simply adjusted according to the Payment Table.

1. If full cash price is paid within 30 days of receipt of merchandise or within 30 days of first billing date, whichever is later, NO FINANCE CHARGE will be imposed.
2. The FINANCE CHARGE will be imposed initially on the outstanding balance of the account 30 days after receipt of the merchandise or 30 days after the first billing date, whichever is later. Any subsequent FINANCE CHARGE will be imposed on the outstanding balance of the account as of the last previous billing date without deducting current payments and/or credits.
3. The FINANCE CHARGE will be determined by multiplying the balance due at the last billing date by 1½% on all sums to \$500.00 and ¾% on all sums in excess of \$500.00. A minimum FINANCE CHARGE of 50c per cycle will be charged.
4. A periodic rate of 1½% will be charged on all balances to \$500.00, yielding an ANNUAL PERCENTAGE RATE of 18%.
5. A periodic rate of ¾% will be charged on all balances over \$500.00, yielding an ANNUAL PERCENTAGE RATE of 9%.
6. Any late charges or delinquency charges or collection charges permitted by the law of your state will be added to the balance, in the event that you fail to make your monthly installments.
7. Burstein-Applebee retains title and a security interest in all merchandise purchased on the Revolving Charge Plan until the entire balance, including FINANCE CHARGES, is paid in full.
8. The minimum monthly payment is 5% of the highest original balance of the account, and in the event that the highest original balance is \$100.00 or less, then the minimum monthly payment is \$5.00 or the balance of the account, whichever is less. The amount of any greater minimum required payment may be determined from the Revolving Charge Account Payment Table in this catalog.
9. The cash price of each item is as listed in the catalog. No discount is given to any consumer from catalog price. No down payment is required. Twelve payments per year, payable monthly, are required.

## 3-CONVENIENT WAYS TO SHOP B-A CATALOGS!

### ★ BY MAIL . . .

Our ALL NEW high speed Kansas City plant is geared to process your order in just a few working hours. In most instances, it will be on its way back to you within 24 hours after receipt.

### ★ BY PHONE . . .

From your home, local or long distance, you can phone your order. Call Area Code 816-531-5614. Tell our salesman you want to pick up your order from our plant or have it shipped.

### ★ IN PERSON . . .

Visit the exciting, well stocked, fully staffed B-A store nearest you. There you will find the ultimate in displayed merchandise, low prices and wonderful, helpful personal service.

## B-A...SERVING MIDWEST AMERICA WITH 9 CONVENIENT STORES

- Kansas City, Missouri. 1012 McGee. (816) 221-6444
- Kansas City, Missouri. 3199 Mercier. (816) 531-5614
- Kansas City, Missouri. 301 E. 55th. (816) 363-8700
- Kansas City, Missouri, Antioch Shopping Ctr.  
Vivion Rd. & Chouteau Trfy. (816) 454-3200 (January '70 Opening)
- Tulsa, Oklahoma, 6353 E. 41st St. (918) 622-2520  
(October '69 Opening)
- Overland Park, Kansas. 6808 W. 75th. (913) 262-9535
- Overland Park, Kansas. 95th Metcalf Shpg. Ctr. (913) 381-0700
- Denver, Colorado. 800 Lincoln St. (303) 222-8986
- Springfield, Missouri. 1904 S. Glenstone. (417) 883-2324



**SATISFACTION GUARANTEED!**  
WE GUARANTEE EVERY ITEM IN OUR CATALOGS TO BE HONESTLY DESCRIBED AND ILLUSTRATED . . . TO BE THE QUALITY REPRESENTED . . . TO PERFORM IN THE MANNER DESCRIBED; AND TO GIVE THE SERVICE WARRANTED BY THE MAKER . . . OR RETURN AT ONCE FOR EXCHANGE, REPAIR OR YOUR MONEY BACK!

Merchandise returned must not have been abused or altered.  
\*Wherever period of time is not otherwise specified in the listing, material and workmanship Guaranteed free of defects for 90 days.



**SHOP AT HOME  
FOR CONVENIENT SERVICE**

**CALL  
561-5460**

**KANSAS CITY, MISSOURI  
METROPOLITAN AREA**

**PICK UP MERCHANDISE AT  
STORE OF YOUR CHOICE!**

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